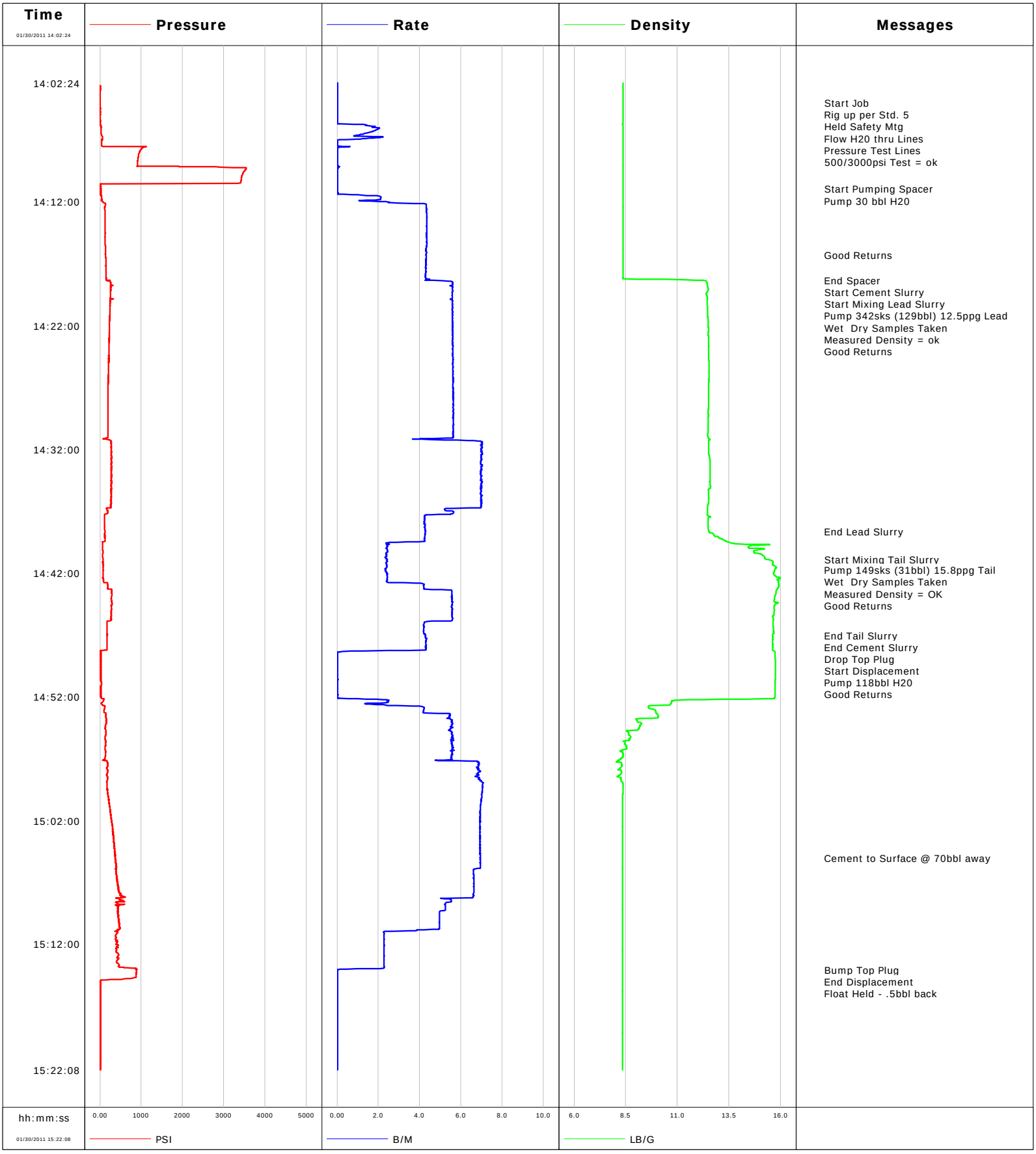
Schlumberger

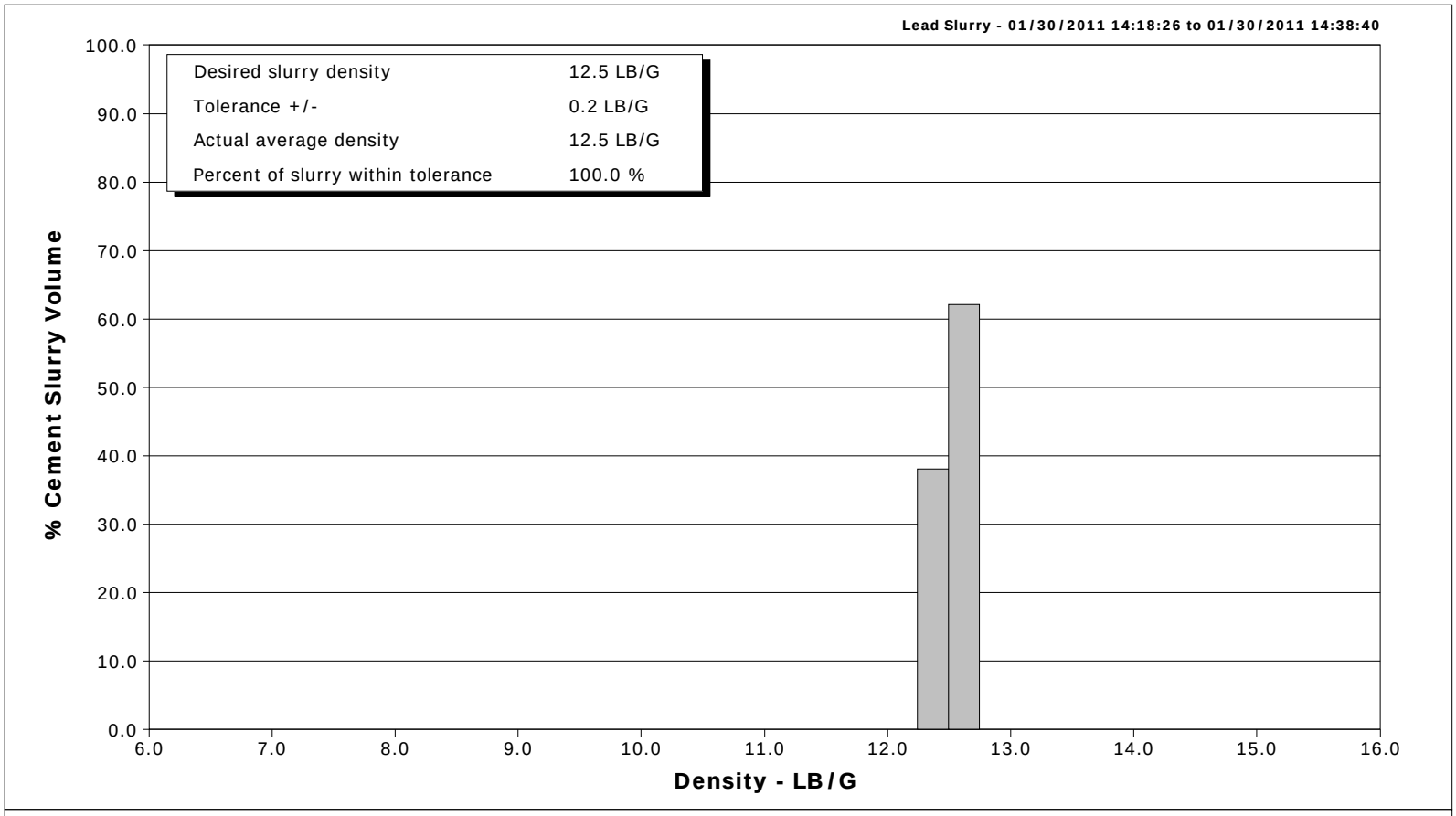
Cementing Job Report

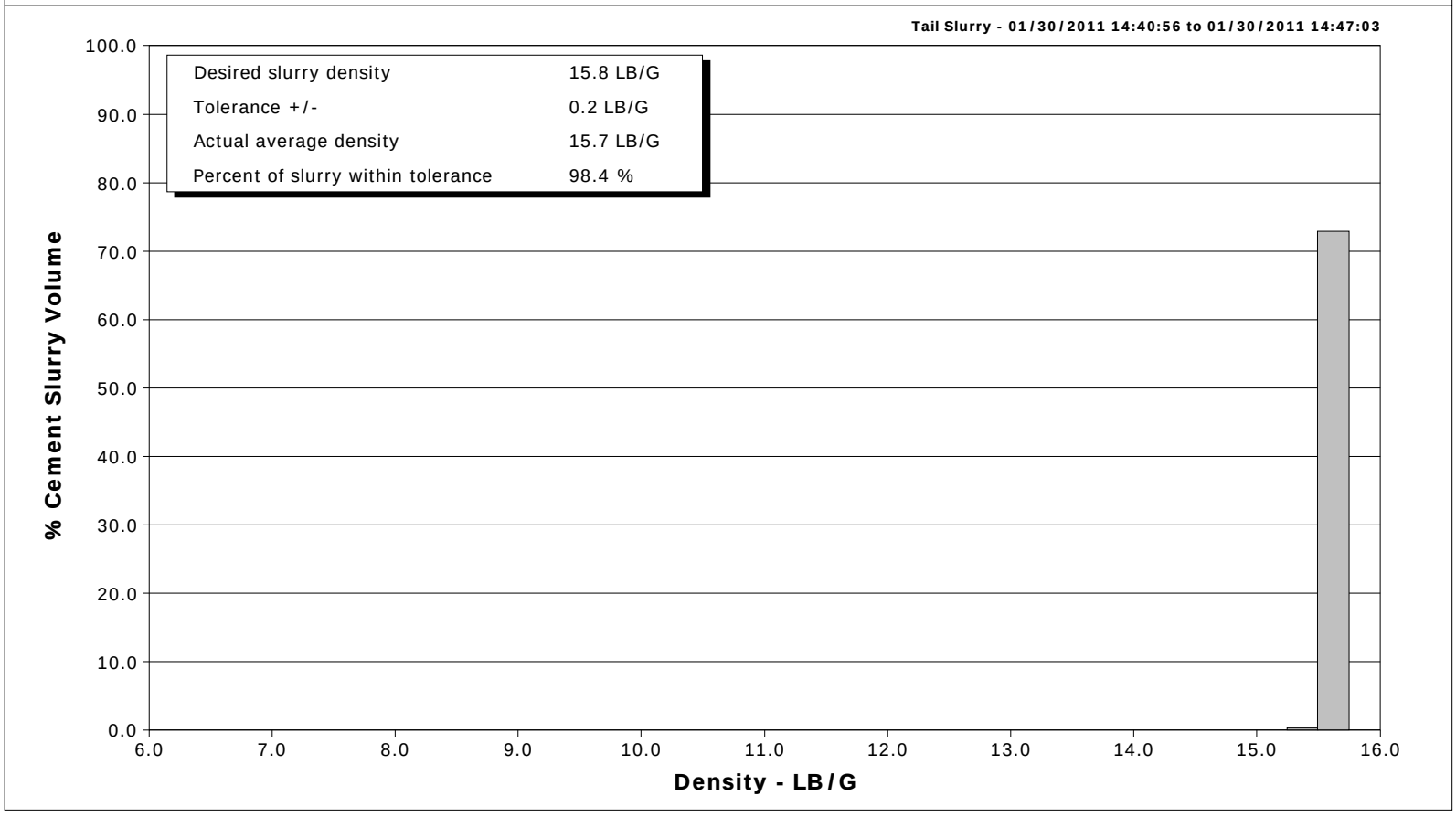
Well	Benj. Fed. 33-3BC2 K2	**Client**	Encana Oil Gas
Field	Mamm Creek	**SIR No.**	471060
Engineer	B. Farnham	**Job Type**	9 5/8" Surface
Country	United States	**Job Date**	1-30-2011



Schlumberger Cementing Qa/Qc Density Report

Well	Benj. Fed. 33-3BC2 K2	**Client**	Encana Oil Gas
Field	Mamm Creek	**SIR No.**	471060
Engineer	B. Farnham	**Job Type**	9 5/8" Surface
Country	United States	**Job Date**	1-30-2011





Cementing Service Report

Customer	Job Number
Encana Oil & Gas	471060

Well	Location (legal)	Schlumberger Location	Job Start
Benj. Fed. 33-3BC2 K2 33-3B	Nabors M15	Grand Junction	Jan/30/2011

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Mamm Creek	shale		12.3 in	1570.0 ft	1570.0 ft

County	Garfield	State/Province	Colorado
Well Master	0631240418	API/UWI	-

BHP	BHST	BHCT	Pore Press. Gradient
	98 degF	90 degF	

Rig Name	Drilled For	Service Via
Nabors M15	Gas	Land

Offshore Zone	Well Class	Well Type
	New	New Well Completion

Drilling Fluid Type	Max. Density	Plastic Viscosity
Bentonite	9.50 lb/gal	

Service Line	Job Type
Cementing	9 5/8" Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
1500 psi	500 psi	Single Cement head

Service Instructions

Cement 9 5/8" Surface Casing at 1451ft
20bbls Water
342sks 12.5ppg Lead
149sks 15.8ppg Tail
80% Annular Excess

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
40.0	16.000	65.0	N/A	N/A
1570.0	9.630	36.0		8RD

Tubing/Drill Pipe

Depth,	Size,	Weight,	Grade	Thread

Perforations/Open Hole

Top,	Bottom,		No. of Shots	Total Interval
				Diameter

Treat Down	Displacement	Packer Type	Packer Depth
Casing	118.0 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	129.0 bbl	91.0 bbl	215.0 bbl

Casing/Tubing Secured	x	1 Hole Vol. Circulated prior to Cement	x
Lift Pressure	777 psi		
Pipe Rotated	☐	Pipe Reciprocated	☐
No. Centralizers		Top Plugs	1
Bottom Plugs			
Cement Head Type	Single		

Job Scheduled For	Arrived on Location	Leave Location
Jan/30/2011 08:00	Jan/30/2011 08:00	Jan/30/2011 16:00

Casing Tools		Squeeze Job	
Shoe Type	Guide	Squeeze Type	
Shoe Depth	1570.0 ft	Tool Type	
Stage Tool Type		Tool Depth	
Stage Tool Depth		Tail Pipe Size	
Collar Type	Other	Tail Pipe Depth	
Collar Depth	1525.0 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/30/2011	14:02:18					Started Acquisition
01/30/2011	14:02:24	-126	0.0	8.38	0.0	
01/30/2011	14:02:48	-0	0.0	8.38	0.0	
01/30/2011	14:03:18	-0	0.0	8.38	0.0	
01/30/2011	14:03:48	-0	0.0	8.38	0.0	
01/30/2011	14:04:01					Start Job
01/30/2011	14:04:01	-0	0.0	8.38	0.0	
01/30/2011	14:04:05					Rig up per Std. 5
01/30/2011	14:04:05					Held Safety Mtg
01/30/2011	14:04:05	-0	0.0	8.38	0.0	
01/30/2011	14:04:11					Flow H20 thru Lines
01/30/2011	14:04:11	-0	0.0	8.38	0.0	
01/30/2011	14:04:18	-0	0.0	8.38	0.0	
01/30/2011	14:04:48	0	0.0	8.38	0.0	
01/30/2011	14:05:18	1	0.0	8.38	0.0	
01/30/2011	14:05:48	9	1.4	8.35	0.1	
01/30/2011	14:06:18	35	1.8	8.38	1.0	
01/30/2011	14:06:48	66	2.2	8.37	1.7	
01/30/2011	14:07:18	38	0.0	8.37	2.0	
01/30/2011	14:07:34					Pressure Test Lines
01/30/2011	14:07:34	1094	0.4	8.37	2.0	

Well	Field	Job Start	Customer	Job Number
Benj. Fed. 33-3BC2 K2 33-3B	Mamm Creek	Jan/30/2011	Encana Oil & Gas	471060

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/30/2011	14:07:35	1054	0.4	8.37	2.0	
01/30/2011	14:07:48	990	0.0	8.37	2.1	
01/30/2011	14:08:18	932	0.0	8.37	2.1	
01/30/2011	14:08:48	913	0.0	8.37	2.1	
01/30/2011	14:09:18	3547	0.0	8.37	2.1	
01/30/2011	14:09:48	3451	0.0	8.37	2.1	
01/30/2011	14:10:18	3416	0.0	8.37	2.1	
01/30/2011	14:10:48	12	0.0	8.37	2.1	
01/30/2011	14:10:58					Start Pumping Spacer
01/30/2011	14:10:58	13	0.0	8.37	2.1	
01/30/2011	14:10:59					Pump 30 bbl H20
01/30/2011	14:10:59	13	0.0	8.37	2.1	
01/30/2011	14:11:18	13	0.0	8.37	2.1	
01/30/2011	14:11:48	49	2.1	8.37	2.8	
01/30/2011	14:12:18	127	4.3	8.37	4.2	
01/30/2011	14:12:48	123	4.3	8.37	6.4	
01/30/2011	14:13:18	127	4.3	8.37	8.5	
01/30/2011	14:13:48	124	4.3	8.37	10.7	
01/30/2011	14:14:18	126	4.3	8.37	12.9	
01/30/2011	14:14:48	126	4.3	8.37	15.1	
01/30/2011	14:15:18	126	4.3	8.36	17.2	
01/30/2011	14:15:48	136	4.3	8.36	19.4	
01/30/2011	14:16:16					Good Returns
01/30/2011	14:16:16	137	4.3	8.36	21.4	
01/30/2011	14:16:18	140	4.3	8.36	21.5	
01/30/2011	14:16:48	146	4.3	8.36	23.7	
01/30/2011	14:17:18	145	4.3	8.36	25.9	
01/30/2011	14:17:48	146	4.3	8.36	28.0	
01/30/2011	14:18:18	155	4.3	11.29	30.2	
01/30/2011	14:18:21					End Spacer
01/30/2011	14:18:21	153	4.3	12.14	30.4	
01/30/2011	14:18:22					Start Cement Slurry
01/30/2011	14:18:22	240	4.7	12.28	30.5	
01/30/2011	14:18:26					Start Mixing Lead Slurry
01/30/2011	14:18:26	256	5.5	12.40	30.8	
01/30/2011	14:18:33					Pump 342sks (129bbl) 12.5ppg Lead
01/30/2011	14:18:33					Wet Dry Samples Taken
01/30/2011	14:18:33	257	5.6	12.42	31.5	
01/30/2011	14:18:34					Measured Density = ok
01/30/2011	14:18:34					Good Returns
01/30/2011	14:18:34	263	5.6	12.43	31.5	
01/30/2011	14:18:48	261	5.5	12.47	32.8	
01/30/2011	14:19:18	256	5.6	12.45	35.6	
01/30/2011	14:19:48	255	5.6	12.45	38.4	
01/30/2011	14:20:18	246	5.6	12.44	41.2	
01/30/2011	14:20:48	245	5.6	12.47	44.0	
01/30/2011	14:21:18	239	5.6	12.48	46.8	
01/30/2011	14:21:48	237	5.6	12.48	49.6	
01/30/2011	14:22:18	231	5.6	12.50	52.4	
01/30/2011	14:22:48	231	5.6	12.50	55.2	
01/30/2011	14:23:18	223	5.6	12.51	58.0	
01/30/2011	14:23:48	220	5.6	12.52	60.8	
01/30/2011	14:24:18	215	5.6	12.50	63.6	
01/30/2011	14:24:48	214	5.6	12.52	66.4	

Well	Field	Job Start	Customer	Job Number
Benj. Fed. 33-3BC2 K2 33-3B	Mamm Creek	Jan/30/2011	Encana Oil & Gas	471060

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/30/2011	14:25:48	204	5.6	12.53	72.0	
01/30/2011	14:26:18	204	5.6	12.52	74.8	
01/30/2011	14:26:48	197	5.6	12.52	77.6	
01/30/2011	14:27:18	197	5.6	12.51	80.4	
01/30/2011	14:27:48	193	5.6	12.50	83.2	
01/30/2011	14:28:18	197	5.6	12.51	86.1	
01/30/2011	14:28:48	199	5.6	12.50	88.9	
01/30/2011	14:29:18	196	5.6	12.50	91.7	
01/30/2011	14:29:48	198	5.6	12.50	94.5	
01/30/2011	14:30:18	195	5.6	12.49	97.3	
01/30/2011	14:30:48	198	5.6	12.47	100.1	
01/30/2011	14:31:18	269	6.6	12.52	102.8	
01/30/2011	14:31:48	277	7.0	12.51	106.3	
01/30/2011	14:32:18	284	7.0	12.52	109.8	
01/30/2011	14:32:48	284	7.0	12.57	113.3	
01/30/2011	14:33:18	278	7.0	12.58	116.8	
01/30/2011	14:33:48	277	6.9	12.58	120.3	
01/30/2011	14:34:18	284	7.0	12.58	123.7	
01/30/2011	14:34:48	276	7.0	12.58	127.2	
01/30/2011	14:35:18	283	7.0	12.50	130.7	
01/30/2011	14:35:48	275	7.0	12.52	134.2	
01/30/2011	14:36:18	265	7.0	12.51	137.7	
01/30/2011	14:36:48	162	5.3	12.45	141.1	
01/30/2011	14:37:18	117	4.4	12.45	143.8	
01/30/2011	14:37:48	116	4.2	12.48	145.9	
01/30/2011	14:38:18	116	4.2	12.49	148.1	
01/30/2011	14:38:40					End Lead Slurry
01/30/2011	14:38:40	124	4.3	12.54	149.6	
01/30/2011	14:38:48	114	4.3	12.73	150.2	
01/30/2011	14:39:18	121	4.2	13.19	152.3	
01/30/2011	14:39:48	66	2.5	14.52	153.9	
01/30/2011	14:40:18	77	2.5	14.69	155.1	
01/30/2011	14:40:48	75	2.3	15.24	156.3	
01/30/2011	14:40:56					Start Mixing Tail Slurry
01/30/2011	14:40:56	76	2.4	15.41	156.6	
01/30/2011	14:41:18	79	2.4	15.60	157.5	
01/30/2011	14:41:45					Pump 149sks (31bbl) 15.8ppg Tail
01/30/2011	14:41:45	84	2.3	15.71	158.6	
01/30/2011	14:41:46					Wet Dry Samples Taken
01/30/2011	14:41:46					Measured Density = OK
01/30/2011	14:41:46	84	2.4	15.71	158.6	
01/30/2011	14:41:47					Good Returns
01/30/2011	14:41:47	78	2.3	15.70	158.7	
01/30/2011	14:41:48	76	2.4	15.70	158.7	
01/30/2011	14:42:18	72	2.4	15.79	159.9	
01/30/2011	14:42:48	185	3.2	15.89	161.1	
01/30/2011	14:43:18	189	4.2	15.83	163.2	
01/30/2011	14:43:48	286	5.6	15.74	165.9	
01/30/2011	14:44:18	289	5.6	15.68	168.7	
01/30/2011	14:44:48	277	5.6	15.69	171.5	
01/30/2011	14:45:18	277	5.6	15.67	174.3	
01/30/2011	14:45:48	272	5.6	15.64	177.1	
01/30/2011	14:46:18	168	4.2	15.64	179.3	
01/30/2011	14:46:48	171	4.2	15.67	181.4	

Well	Field	Job Start	Customer	Job Number
Benj. Fed. 33-3BC2 K2 33-3B	Mamm Creek	Jan/30/2011	Encana Oil & Gas	471060

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/30/2011	14:47:03	174	4.3	15.61	182.5	
01/30/2011	14:47:05					End Cement Slurry
01/30/2011	14:47:05	177	4.3	15.61	182.6	
01/30/2011	14:47:18	176	4.3	15.61	183.5	
01/30/2011	14:47:48	170	4.3	15.62	185.7	
01/30/2011	14:48:18	15	1.3	15.67	187.7	
01/30/2011	14:48:20					Drop Top Plug
01/30/2011	14:48:20					Start Displacement
01/30/2011	14:48:20	17	0.3	15.71	187.8	
01/30/2011	14:48:23					Pump 118bbl H20
01/30/2011	14:48:23					Good Returns
01/30/2011	14:48:23	17	0.0	15.72	187.8	
01/30/2011	14:48:48	16	0.0	15.73	187.8	
01/30/2011	14:49:18	16	0.0	15.75	187.8	
01/30/2011	14:49:48	16	0.0	15.75	187.8	
01/30/2011	14:50:18	21	0.0	15.74	187.8	
01/30/2011	14:50:48	35	0.0	15.74	187.8	
01/30/2011	14:51:18	23	0.0	15.73	187.8	
01/30/2011	14:51:48	23	0.0	15.73	187.8	
01/30/2011	14:52:18	88	2.5	10.84	188.1	
01/30/2011	14:52:48	120	4.1	9.60	189.3	
01/30/2011	14:53:18	126	4.2	9.96	191.4	
01/30/2011	14:53:48	163	5.5	8.99	194.1	
01/30/2011	14:54:18	134	5.6	9.18	196.9	
01/30/2011	14:54:48	149	5.5	8.56	199.6	
01/30/2011	14:55:18	125	5.5	8.73	202.4	
01/30/2011	14:55:48	142	5.5	8.45	205.2	
01/30/2011	14:56:18	119	5.6	8.31	208.0	
01/30/2011	14:56:48	136	5.5	8.35	210.7	
01/30/2011	14:57:18	187	6.8	8.20	213.6	
01/30/2011	14:57:48	169	6.9	8.21	217.1	
01/30/2011	14:58:18	166	6.8	8.19	220.5	
01/30/2011	14:58:48	172	7.0	8.27	223.9	
01/30/2011	14:59:18	174	7.0	8.36	227.4	
01/30/2011	14:59:48	185	7.0	8.36	230.9	
01/30/2011	15:00:18	219	7.0	8.35	234.4	
01/30/2011	15:00:48	238	6.9	8.35	237.9	
01/30/2011	15:01:18	249	6.9	8.35	241.4	
01/30/2011	15:01:48	278	6.9	8.35	244.9	
01/30/2011	15:02:18	298	6.9	8.35	248.3	
01/30/2011	15:02:48	312	6.9	8.35	251.8	
01/30/2011	15:03:18	334	6.9	8.35	255.2	
01/30/2011	15:03:48	340	6.9	8.35	258.7	
01/30/2011	15:04:18	363	6.9	8.35	262.2	
01/30/2011	15:04:48	371	6.9	8.35	265.6	
01/30/2011	15:05:03					Cement to Surface @ 70bbl away
01/30/2011	15:05:03	371	6.9	8.35	267.4	
01/30/2011	15:05:18	381	6.9	8.35	269.1	
01/30/2011	15:05:48	399	6.9	8.35	272.6	
01/30/2011	15:06:18	405	6.6	8.35	275.9	
01/30/2011	15:06:48	411	6.6	8.35	279.2	
01/30/2011	15:07:18	449	6.6	8.35	282.5	
01/30/2011	15:07:48	460	6.6	8.35	285.8	
01/30/2011	15:08:18	444	5.0	8.35	289.1	

Well	Field	Job Start	Customer	Job Number
Benj. Fed. 33-3BC2 K2 33-3B	Mamm Creek	Jan/30/2011	Encana Oil & Gas	471060

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/30/2011	15:09:18	426	5.1	8.35	294.4	
01/30/2011	15:09:48	449	5.0	8.35	296.9	
01/30/2011	15:10:18	464	5.0	8.35	299.4	
01/30/2011	15:10:48	423	4.6	8.35	301.8	
01/30/2011	15:11:18	376	2.3	8.35	303.2	
01/30/2011	15:11:48	434	2.3	8.35	304.3	
01/30/2011	15:12:18	384	2.3	8.35	305.5	
01/30/2011	15:12:48	453	2.3	8.35	306.6	
01/30/2011	15:13:18	421	2.3	8.35	307.8	
01/30/2011	15:13:48	450	2.3	8.35	308.9	
01/30/2011	15:14:03					Bump Top Plug
01/30/2011	15:14:03					End Displacement
01/30/2011	15:14:03	901	0.1	8.35	309.3	
01/30/2011	15:14:18	883	0.0	8.35	309.3	
01/30/2011	15:14:48	583	0.0	8.35	309.3	
01/30/2011	15:14:52					Float Held - .5bbl back
01/30/2011	15:14:52	122	0.0	8.35	309.3	
01/30/2011	15:15:18	4	0.0	8.35	309.3	
01/30/2011	15:15:48	5	0.0	8.35	309.3	
01/30/2011	15:16:18	5	0.0	8.35	309.3	
01/30/2011	15:16:48	5	0.0	8.35	309.3	
01/30/2011	15:17:18	6	0.0	8.35	309.3	
01/30/2011	15:17:48	5	0.0	8.35	309.4	
01/30/2011	15:18:18	5	0.0	8.35	309.4	
01/30/2011	15:18:48	5	0.0	8.35	309.4	
01/30/2011	15:19:18	5	0.0	8.35	309.4	
01/30/2011	15:19:48	6	0.0	8.35	309.4	
01/30/2011	15:20:18	5	0.0	8.35	309.4	
01/30/2011	15:20:48	6	0.0	8.35	309.4	
01/30/2011	15:21:18	5	0.0	8.35	309.4	

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
6.0			7.0	160.0		20.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3000	900	150	900		FreshWater	300.0 bbl	8.34 lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
	160.0 bbl		70 degF	Cement Circulated to Surface? [X]	Volume 48.0 bbl
				Washed Thru Perfs [ ]	To

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Tim Phillips	B. Farnham	-	- [X]

Service Quality Evaluation

Client:	Encana Oil & Gas
Field:	Mamm Creek
Rig:	Nabors M15
Well:	Benj. Fed. 33-3BC2 K2
Service Line:	Cementing
Job Type:	9 5/8" Surface

Service Order #:	
Date:	Feb/19/2010
Operating Time:	0.0
Client Rep:	Encana Oil & Gas
Schlumberger Engineer:	B. Farnham
Schlumberger FSM:	

Main Objective:

To be completed by Company Rep. Please answer Y (Yes) or N (No) and add any comments below.

		Score	Yes / No	Result
1	**HSE**			
1a	Free of lost time injury and compliance with SLB and loc. spec. HSE practice	5	yes ☐ no ☒	0
1b	Free of environmental spill or non-compliant discharge	5	yes ☐ no ☒	0
1c	Free of RIRs	5	yes ☐ no ☒	0
1d	Wellsite left clean	4	yes ☐ no ☒	0
			Sub-total	0%
2	**Design / Preparation**			
2a	Program incl. job simulation (CemCADE) & pump schedule / tool hydraulic calcs	3	yes ☐ no ☒	0
2b	Equipment maintenance schedule completed / Green tagged	2	yes ☐ no ☒	0
2c	All materials and equipment required for job/contingency checked & on location	2	yes ☐ no ☒	0
2d	Safety / pre-job meeting conducted with all involved present	2	yes ☐ no ☒	0
			Sub-total	0%
3	**Execution**			
3a	Lost time < 30 mins	3	yes ☐ no ☒	0
3b	Equipment pressure tested succesfully	3	yes ☐ no ☒	0
3c	All key parameters monitored and recorded accurately (Pressure, Rate, Density)	2	yes ☐ no ☒	0
3d	Plugs / darts released and tested succesfully	2	yes ☐ no ☒	0
3e	Density variation met expectations	2	yes ☐ no ☒	0
3f	Personnel performed as per expectations	2	yes ☐ no ☒	0
3g	Equipment performed as per expectations	2	yes ☐ no ☒	0
3h	Job pumped per design	3	yes ☐ no ☒	0
3i	Did job start on time	2	yes ☐ no ☒	0
3j	Free of Operational failures (screen out, Cementing Example, etc.)	3	yes ☐ no ☒	0
			Sub-total	0%
4	**Evaluation**			
4a	Main job objective achieved with no consequential non-productive time	10	yes ☐ no ☒	0
			Sub-total	0%

Total 0%

Comments: (Please include a brief explanation for a "NO" response and summarize any innovations attempted on this well.)

Client:	**Schlumberger:**
Client Signature:	**Schlumberger Signature:**