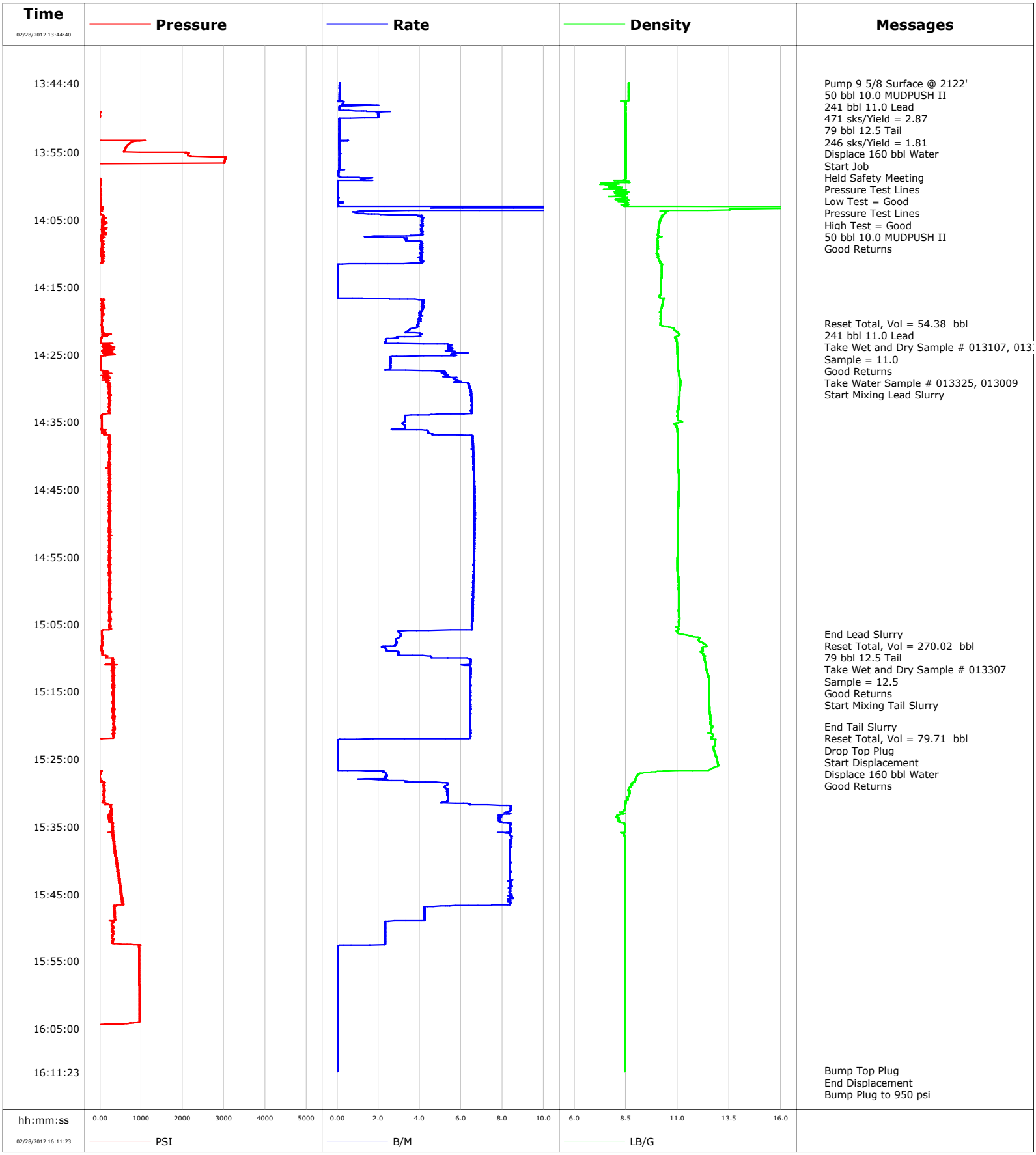
Schlumberger Cementing Job Report

CemCAT v1.3

Well	SGU 8509B-21	**Client**	ENCANA
Field	STORY GULCH	**SIR No.**	
Engineer	Tom Leduc	**Job Type**	9 5/8 SURFACE
Country	United States	**Job Date**	02-28-2012



Cementing Service Report

Customer	Job Number
ENCANA	C0BA-00253

Well	Location (legal)	Schlumberger Location	Job Start
SGU 8509B-21 8509B	N22	Grand Junction	Feb/28/2012

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
STORY GULCH	Shale	0 deg	14.8 in	2122.0 ft	2122.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
GARFIELD	Colorado		110 degF	91 degF	

Well Master	API/UWI
0631363325	

Rig Name	Drilled For	Service Via
PATTERSON 306	Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
Bentonite	9.00 lb/gal	20.000 cP

Service Line	Job Type
Cementing	9 5/8 SURFACE

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
3000 psi	1000 psi	Single Cement head

Service Instructions

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
2122.0	9.630	36.0	K55	8rd
0.0	0.000	0.0		

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	160.0 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	164.0 bbl	259.0 bbl	425.0 bbl

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

Lift Pressure	Pipe Rotated	Pipe Reciprocated
1050 psi	☐	☐

No. Centralizers	Top Plugs	Bottom Plugs
20	1	0

Cement Head Type
Single

Job Scheduled For	Arrived on Location	Leave Location
Feb/28/2012 11:00	Feb/28/2012 11:00	Feb/28/2012 19:00

Casing Tools		Squeeze Job	
Shoe Type	Float	Squeeze Type	
Shoe Depth	2122.0 ft	Tool Type	
Stage Tool Type		Tool Depth	
Stage Tool Depth		Tail Pipe Size	
Collar Type	Float	Tail Pipe Depth	
Collar Depth	2076.0 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/28/2012	13:44:40					Pump 9 5/8 Surface @ 2122'
02/28/2012	13:44:40					50 bbl 10.0 MUDPUSH II
02/28/2012	13:44:40	-52	0.1	8.64	0.0	
02/28/2012	13:44:41					241 bbl 11.0 Lead
02/28/2012	13:44:41					471 sks/Yield = 2.87
02/28/2012	13:44:41					79 bbl 12.5 Tail
02/28/2012	13:44:41					246 sks/Yield = 1.81
02/28/2012	13:44:41					Displace 160 bbl Water
02/28/2012	13:44:41	-52	0.1	8.64	0.0	
02/28/2012	13:44:43					Start Job
02/28/2012	13:44:43					Held Safety Meeting
02/28/2012	13:44:43	-52	0.1	8.64	0.0	
02/28/2012	13:44:44					Pressure Test Lines
02/28/2012	13:44:44	-52	0.1	8.64	0.0	
02/28/2012	13:44:45					Low Test = Good
02/28/2012	13:44:45	-52	0.1	8.64	0.0	
02/28/2012	13:44:47					Pressure Test Lines
02/28/2012	13:44:47	-52	0.1	8.64	0.0	
02/28/2012	13:44:48					High Test = Good
02/28/2012	13:44:48	-52	0.1	8.64	0.0	
02/28/2012	13:44:49					50 bbl 10.0 MUDPUSH II

Well	Field	Job Start	Customer	Job Number
SGU 8509B-21 8509B	STORY GULCH	Feb/28/2012	ENCANA	C0BA-00253

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/28/2012	13:44:49	-52	0.1	8.64	0.0	
02/28/2012	13:46:45	-51	0.1	8.64	0.3	
02/28/2012	13:48:50	-41	0.5	8.48	0.9	
02/28/2012	13:50:55	-33	0.1	8.48	3.1	
02/28/2012	13:53:00	-33	0.1	8.49	3.3	
02/28/2012	13:55:05	2067	0.1	8.48	3.5	
02/28/2012	13:57:10	-30	0.1	8.48	3.7	
02/28/2012	13:59:15	-32	0.0	8.10	4.4	
02/28/2012	14:01:20	-12	0.0	8.11	4.4	
02/28/2012	14:03:25	41	11.8	13.86	7.4	
02/28/2012	14:05:30	167	4.1	10.12	15.9	
02/28/2012	14:07:35	-22	2.1	10.16	24.0	
02/28/2012	14:09:40	22	4.1	10.01	32.0	
02/28/2012	14:11:45	-7	0.0	10.24	39.6	
02/28/2012	14:13:50	-36	0.0	10.21	39.6	
02/28/2012	14:15:55	-34	0.0	10.20	39.6	
02/28/2012	14:18:00	36	4.1	10.23	44.9	
02/28/2012	14:20:05	39	4.0	10.18	53.3	
02/28/2012	14:20:21					Reset Total, Vol = 54.38 bbl
02/28/2012	14:20:21					241 bbl 11.0 Lead
02/28/2012	14:20:21					Take Wet and Dry Sample # 013107, 013312
02/28/2012	14:20:21	40	3.9	10.16	54.4	
02/28/2012	14:20:22					Sample = 11.0
02/28/2012	14:20:22					Good Returns
02/28/2012	14:20:22					Take Water Sample # 013325, 013009
02/28/2012	14:20:22	40	3.9	10.17	54.4	
02/28/2012	14:21:34					Start Mixing Lead Slurry
02/28/2012	14:21:34	54	3.4	10.93	58.9	
02/28/2012	14:22:10	68	4.0	11.06	61.2	
02/28/2012	14:24:15	138	5.4	10.99	69.1	
02/28/2012	14:26:20	11	2.6	11.01	77.5	
02/28/2012	14:28:25	196	5.8	11.08	85.6	
02/28/2012	14:30:30	225	6.5	11.09	98.5	
02/28/2012	14:32:35	239	6.5	11.05	112.0	
02/28/2012	14:34:40	42	3.3	11.02	123.1	
02/28/2012	14:36:45	106	4.6	11.01	130.5	
02/28/2012	14:38:50	217	6.6	11.02	143.8	
02/28/2012	14:40:55	212	6.6	11.01	157.5	
02/28/2012	14:43:00	235	6.6	11.06	171.3	
02/28/2012	14:45:05	244	6.6	11.05	185.1	
02/28/2012	14:47:10	212	6.7	11.03	199.0	
02/28/2012	14:49:15	211	6.7	11.01	212.8	
02/28/2012	14:51:20	239	6.6	11.02	226.7	
02/28/2012	14:53:25	239	6.6	11.02	240.5	
02/28/2012	14:55:30	224	6.6	11.00	254.3	
02/28/2012	14:57:35	227	6.6	11.02	268.1	
02/28/2012	14:59:40	227	6.6	11.05	281.8	
02/28/2012	15:01:45	229	6.6	11.06	295.5	
02/28/2012	15:03:50	257	6.5	11.07	309.2	
02/28/2012	15:05:55	62	3.8	11.01	322.7	
02/28/2012	15:06:26					End Lead Slurry
02/28/2012	15:06:26	40	3.1	11.10	324.3	
02/28/2012	15:06:28					Reset Total, Vol = 270.02 bbl
02/28/2012	15:06:28					79 bbl 12.5 Tail

Well	Field	Job Start	Customer	Job Number
SGU 8509B-21 8509B	STORY GULCH	Feb/28/2012	ENCANA	C0BA-00253

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/28/2012	15:06:28					Sample = 12.5
02/28/2012	15:06:28					Good Returns
02/28/2012	15:06:28	41	3.1	11.17	324.4	
02/28/2012	15:08:00	51	2.8	12.33	328.9	
02/28/2012	15:08:01					Start Mixing Tail Slurry
02/28/2012	15:08:01	52	2.8	12.33	328.9	
02/28/2012	15:10:05	327	6.4	12.32	335.3	
02/28/2012	15:12:10	301	6.5	12.44	348.7	
02/28/2012	15:14:15	348	6.5	12.52	362.2	
02/28/2012	15:16:20	312	6.4	12.51	375.6	
02/28/2012	15:18:25	340	6.4	12.57	389.1	
02/28/2012	15:20:10					End Tail Slurry
02/28/2012	15:20:10	323	6.5	12.69	400.3	
02/28/2012	15:20:30	329	6.5	12.63	402.5	
02/28/2012	15:20:45					Reset Total, Vol = 79.71 bbl
02/28/2012	15:20:45	361	6.4	12.61	404.1	
02/28/2012	15:20:46					Drop Top Plug
02/28/2012	15:20:46					Start Displacement
02/28/2012	15:20:46	356	6.5	12.61	404.2	
02/28/2012	15:20:47					Displace 160 bbl Water
02/28/2012	15:20:47					Good Returns
02/28/2012	15:20:47	356	6.5	12.61	404.3	
02/28/2012	15:22:35	-37	0.0	12.79	412.2	
02/28/2012	15:24:40	-38	0.0	12.86	412.2	
02/28/2012	15:26:45	45	1.8	10.34	412.3	
02/28/2012	15:28:50	82	5.3	8.77	418.4	
02/28/2012	15:30:55	96	5.4	8.57	429.5	
02/28/2012	15:33:00	260	8.2	8.30	444.4	
02/28/2012	15:35:05	294	8.4	8.44	461.2	
02/28/2012	15:37:10	318	8.4	8.44	478.7	
02/28/2012	15:39:15	370	8.4	8.44	496.1	
02/28/2012	15:41:20	427	8.4	8.44	513.6	
02/28/2012	15:43:25	494	8.4	8.44	531.0	
02/28/2012	15:45:30	533	8.4	8.44	548.5	
02/28/2012	15:47:35	358	4.2	8.44	562.4	
02/28/2012	15:49:40	311	2.3	8.44	569.9	
02/28/2012	15:51:45	339	2.3	8.44	574.7	
02/28/2012	15:53:50	946	0.0	8.44	576.7	
02/28/2012	15:55:55	948	0.0	8.44	576.8	
02/28/2012	15:58:00	952	0.0	8.45	576.8	
02/28/2012	16:00:05	954	0.0	8.44	576.8	
02/28/2012	16:02:10	958	0.0	8.45	576.8	
02/28/2012	16:04:15	649	0.0	8.45	576.9	
02/28/2012	16:06:20	-39	0.0	8.45	576.9	
02/28/2012	16:08:25	-40	0.0	8.45	576.9	
02/28/2012	16:10:30	-41	0.0	8.45	576.9	
02/28/2012	16:11:10					Bump Top Plug
02/28/2012	16:11:10	-41	0.0	8.45	576.9	
02/28/2012	16:11:11					End Displacement
02/28/2012	16:11:11	-42	0.0	8.45	576.9	
02/28/2012	16:11:12					Bump Plug to 950 psi
02/28/2012	16:11:12	-41	0.0	8.45	576.9	
02/28/2012	16:11:13					Bled Off Pressure
02/28/2012	16:11:13					0.5 bbl Back

Well	Field	Job Start	Customer	Job Number
SGU 8509B-21 8509B	STORY GULCH	Feb/28/2012	ENCANA	C0BA-00253

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/28/2012	16:11:13					70 bbl Cement to Surface
02/28/2012	16:11:13					Wait On Parasite Line
02/28/2012	16:11:13	-41	0.0	8.45	576.9	
02/28/2012	17:11:13					Pump 10 bbl Sugar Water Through Parasite Line
02/28/2012	17:11:13					Rig Down

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
4.3		0.0	12.0	576.9	0.0	58.9	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3042	0	334	800				

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
	320.0 bbl	172.8 bbl	65 degF	[x]	
				Washed Thru Perfs [ ]	To

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
RICHARD MITCHELL	Tom Leduc	-	[x] -