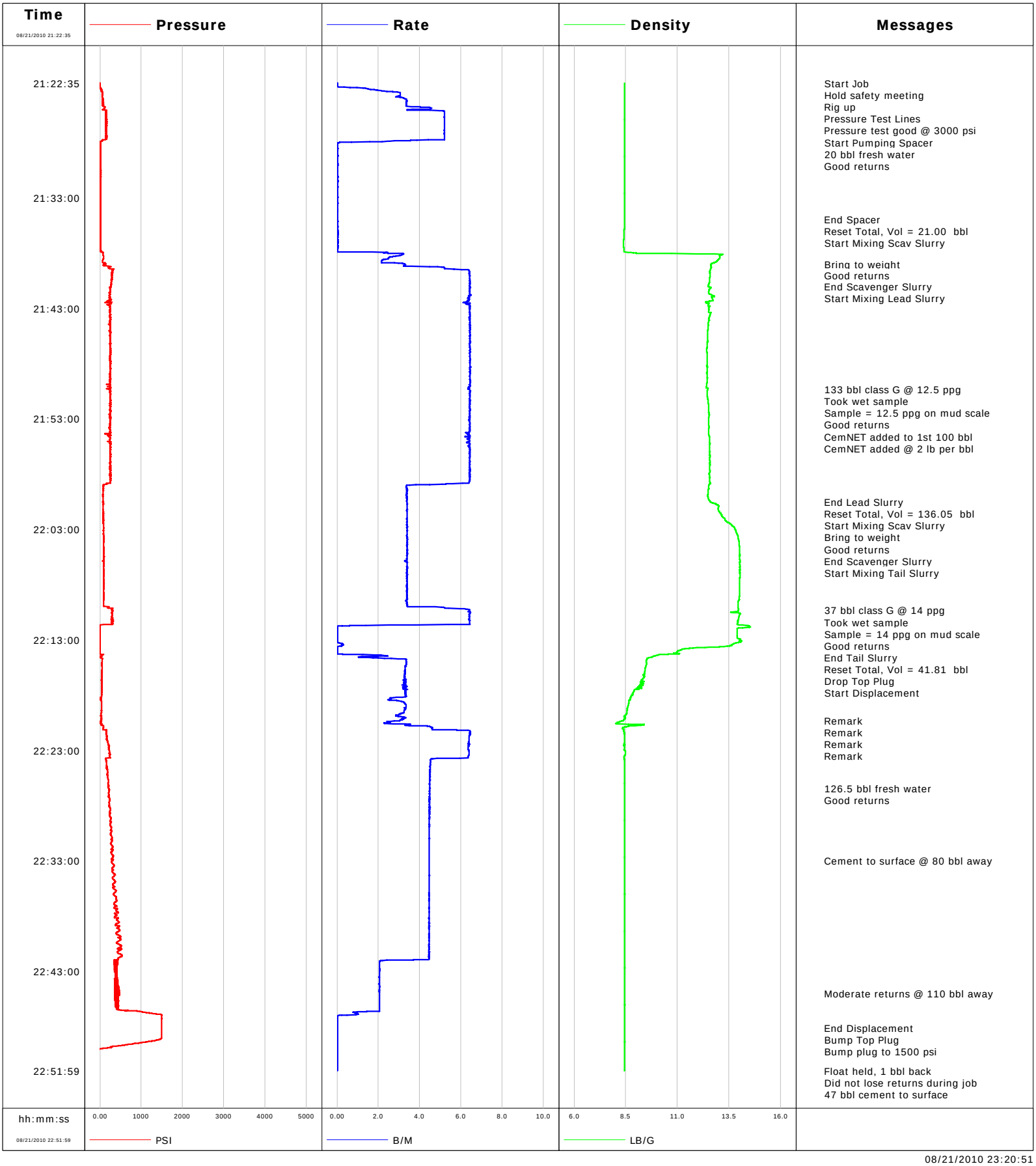
Schlumberger

Cementing Job Report

Well	WF06C-22 K22 596	**Client**	Encana
Field	N Parachute	**SIR No.**	BAD4-00146
Engineer	Dave Wanczyk	**Job Type**	9 5/8" Surface Casing
Country	United States	**Job Date**	08-21-2010



Cementing Service Report

Customer	Job Number
Encana	BAD4-00146

Well	Location (legal)	Schlumberger Location	Job Start
WF06C-22 K22 596		Grand Junction, CO	Aug/21/2010

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
N Parachute	Shale			1689.0 ft	1689.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Garfield	Colorado		100 degF	87 degF	

Well Master	API/UWI
0631203047	

Rig Name	Drilled For	Service Via
	Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
Bentonite	9.50 lb/gal	14.000 cP

Service Line	Job Type
Cementing	9 5/8" Surface Casing

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
3520 psi	2030 psi	Single Cement head

Service Instructions

Cement 9 5/8" casing @ 1689 FT
12 1/4 Open hole with
20 bbl water
100% excess on lead
358 sks 12.5 ppg NPR lead (TOL 0ft)
20% excess on tail
134 sks 14.0 ppg NPR tail (TOT 1170 ft)
Displace with water

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
120.0	16.000	65.0	J55	8RD
1689.0	9.630	36.0	J55	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	127.1 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	130.5 bbl	104.0 bbl	271.0 bbl

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

Lift Pressure	Pipe Rotated	Pipe Reciprocated
835 psi	☐	☐

No. Centralizers	Top Plugs	Bottom Plugs

Cement Head Type
Single

Job Scheduled For	Arrived on Location	Leave Location
Aug/21/2010	Aug/21/2010	Aug/21/2010

Casing Tools		Squeeze Job	
Shoe Type	Guide	Squeeze Type	
Shoe Depth	1689.0 ft	Tool Type	
Stage Tool Type		Tool Depth	
Stage Tool Depth		Tail Pipe Size	
Collar Type	Diff-Fill	Tail Pipe Depth	
Collar Depth	1644.0 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
08/21/2010	20:41:44					Started Acquisition
08/21/2010	21:22:35	-7	0.0	8.44	0.0	
08/21/2010	21:22:36					Start Job
08/21/2010	21:22:36					Hold safety meeting
08/21/2010	21:22:36	-7	0.0	8.44	0.0	
08/21/2010	21:22:37					Rig up
08/21/2010	21:22:37	-8	0.0	8.44	0.0	
08/21/2010	21:22:39					Pressure Test Lines
08/21/2010	21:22:39	-7	0.0	8.44	0.0	
08/21/2010	21:22:41					Pressure test good @ 3000 psi
08/21/2010	21:22:41					Start Pumping Spacer
08/21/2010	21:22:41	-7	0.0	8.44	0.0	
08/21/2010	21:23:24	65	2.7	8.44	0.7	
08/21/2010	21:25:04	155	4.5	8.45	6.4	
08/21/2010	21:25:51					20 bbl fresh water
08/21/2010	21:25:51	163	5.2	8.44	10.5	
08/21/2010	21:25:52					Good returns
08/21/2010	21:25:52	141	5.2	8.44	10.6	
08/21/2010	21:26:44	153	5.2	8.44	15.1	
08/21/2010	21:28:24	8	0.0	8.44	20.9	
08/21/2010	21:30:04	8	0.0	8.44	20.9	

Well	Field	Job Start	Customer	Job Number
WF06C-22 K22 596	N Parachute	Aug/21/2010	Encana	BAD4-00146

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
08/21/2010	21:33:24	9	0.0	8.44	21.0	
08/21/2010	21:34:56					End Spacer
08/21/2010	21:34:56	9	0.0	8.43	21.0	
08/21/2010	21:34:57					Reset Total, Vol = 21.00 bbl
08/21/2010	21:34:57	9	0.0	8.43	21.0	
08/21/2010	21:35:04					Start Mixing Scav Slurry
08/21/2010	21:35:04	9	0.0	8.43	21.0	
08/21/2010	21:36:44	10	0.0	8.40	21.0	
08/21/2010	21:38:24	85	2.5	13.06	22.5	
08/21/2010	21:39:00					Bring to weight
08/21/2010	21:39:00	131	3.2	12.63	24.0	
08/21/2010	21:40:00					Good returns
08/21/2010	21:40:00	285	6.4	12.58	29.4	
08/21/2010	21:40:04	285	6.4	12.58	29.9	
08/21/2010	21:41:00					End Scavenger Slurry
08/21/2010	21:41:00	272	6.4	12.48	35.9	
08/21/2010	21:41:44	235	6.4	12.60	40.6	
08/21/2010	21:41:48					Start Mixing Lead Slurry
08/21/2010	21:41:48	235	6.5	12.71	41.0	
08/21/2010	21:43:24	249	6.4	12.62	51.2	
08/21/2010	21:45:04	258	6.4	12.47	61.9	
08/21/2010	21:46:44	251	6.4	12.42	72.7	
08/21/2010	21:48:24	251	6.5	12.45	83.4	
08/21/2010	21:50:04	260	6.5	12.41	94.1	
08/21/2010	21:50:19					133 bbl class G @ 12.5 ppg
08/21/2010	21:50:19	241	6.4	12.47	95.7	
08/21/2010	21:50:20					Took wet sample
08/21/2010	21:50:20					Sample = 12.5 ppg on mud scale
08/21/2010	21:50:20					Good returns
08/21/2010	21:50:20	253	6.4	12.47	95.9	
08/21/2010	21:50:21					CemNET added to 1st 100 bbl
08/21/2010	21:50:21	256	6.4	12.46	96.0	
08/21/2010	21:50:22					CemNET added @ 2 lb per bbl
08/21/2010	21:50:22	256	6.4	12.46	96.1	
08/21/2010	21:51:44	252	6.4	12.52	104.9	
08/21/2010	21:53:24	243	6.4	12.52	115.6	
08/21/2010	21:55:04	243	6.4	12.56	126.2	
08/21/2010	21:56:44	255	6.4	12.57	136.9	
08/21/2010	21:58:24	259	6.4	12.56	147.6	
08/21/2010	22:00:04	75	3.4	12.48	154.8	
08/21/2010	22:00:30					End Lead Slurry
08/21/2010	22:00:30	71	3.4	12.59	156.3	
08/21/2010	22:00:44					Reset Total, Vol = 136.05 bbl
08/21/2010	22:00:44	84	3.4	12.89	157.0	
08/21/2010	22:00:48					Start Mixing Scav Slurry
08/21/2010	22:00:48	79	3.4	12.96	157.3	
08/21/2010	22:01:00					Bring to weight
08/21/2010	22:01:00	82	3.4	12.98	158.0	
08/21/2010	22:01:44	81	3.4	13.14	160.4	
08/21/2010	22:02:00					Good returns
08/21/2010	22:02:00	79	3.4	13.29	161.3	
08/21/2010	22:03:24	93	3.4	13.88	166.1	
08/21/2010	22:03:52					End Scavenger Slurry
08/21/2010	22:03:52	89	3.4	13.96	167.7	

Well	Field	Job Start	Customer	Job Number
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Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
08/21/2010	22:03:54	93	3.4	13.96	167.8	
08/21/2010	22:05:04	102	3.4	14.01	171.7	
08/21/2010	22:06:44	95	3.4	14.02	177.4	
08/21/2010	22:08:24	99	3.4	14.02	183.0	
08/21/2010	22:10:04	213	5.2	13.95	188.8	
08/21/2010	22:10:18					37 bbl class G @ 14 ppg
08/21/2010	22:10:18					Took wet sample
08/21/2010	22:10:18					Sample = 14 ppg on mud scale
08/21/2010	22:10:18	291	6.4	13.97	190.2	
08/21/2010	22:10:19					Good returns
08/21/2010	22:10:19	291	6.4	13.96	190.3	
08/21/2010	22:11:23					End Tail Slurry
08/21/2010	22:11:23	308	6.4	13.92	197.1	
08/21/2010	22:11:44	-11	0.3	14.46	198.8	
08/21/2010	22:11:46					Reset Total, Vol = 41.81 bbl
08/21/2010	22:11:46	-9	0.0	14.49	198.9	
08/21/2010	22:11:48					Drop Top Plug
08/21/2010	22:11:48	-9	0.0	14.49	198.9	
08/21/2010	22:11:51					Start Displacement
08/21/2010	22:11:51	-9	0.0	14.49	198.9	
08/21/2010	22:13:24	-3	0.2	13.65	198.9	
08/21/2010	22:15:04	45	3.3	9.50	200.9	
08/21/2010	22:16:44	54	3.3	9.28	206.4	
08/21/2010	22:18:24	19	2.5	8.71	211.7	
08/21/2010	22:20:04	40	3.3	8.48	217.0	
08/21/2010	22:20:18					Remark
08/21/2010	22:20:18	31	3.0	8.39	217.7	
08/21/2010	22:20:20					Remark
08/21/2010	22:20:20	27	2.9	8.33	217.8	
08/21/2010	22:20:26					Remark
08/21/2010	22:20:26	19	2.5	8.19	218.1	
08/21/2010	22:20:27					Remark
08/21/2010	22:20:27	13	2.5	8.15	218.1	
08/21/2010	22:21:44	174	6.4	8.43	224.6	
08/21/2010	22:23:24	240	6.4	8.47	235.2	
08/21/2010	22:25:04	187	4.5	8.44	243.3	
08/21/2010	22:26:26					126.5 bbl fresh water
08/21/2010	22:26:26	217	4.5	8.44	249.4	
08/21/2010	22:26:27					Good returns
08/21/2010	22:26:27	219	4.5	8.44	249.5	
08/21/2010	22:26:44	221	4.5	8.44	250.8	
08/21/2010	22:28:24	253	4.5	8.44	258.3	
08/21/2010	22:30:04	285	4.5	8.44	265.7	
08/21/2010	22:31:44	304	4.5	8.44	273.2	
08/21/2010	22:33:00					Cement to surface @ 80 bbl away
08/21/2010	22:33:00	297	4.5	8.44	278.8	
08/21/2010	22:33:24	335	4.5	8.44	280.6	
08/21/2010	22:35:04	333	4.5	8.44	288.0	
08/21/2010	22:36:44	368	4.5	8.44	295.5	
08/21/2010	22:38:24	421	4.5	8.44	302.9	
08/21/2010	22:40:04	488	4.5	8.44	310.3	
08/21/2010	22:41:44	478	4.4	8.44	317.7	
08/21/2010	22:43:24	373	2.1	8.44	321.7	
08/21/2010	22:45:00					Moderate returns @ 110 bbl away

Well	Field	Job Start	Customer	Job Number
WF06C-22 K22 596	N Parachute	Aug/21/2010	Encana	BAD4-00146

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
08/21/2010	22:45:04	471	2.1	8.44	325.2	
08/21/2010	22:46:44	1128	0.9	8.44	328.5	
08/21/2010	22:48:09					End Displacement
08/21/2010	22:48:09	1491	0.0	8.44	328.7	
08/21/2010	22:48:11					Bump Top Plug
08/21/2010	22:48:11	1491	0.0	8.44	328.7	
08/21/2010	22:48:12					Bump plug to 1500 psi
08/21/2010	22:48:12	1491	0.0	8.44	328.7	
08/21/2010	22:48:24	1491	0.0	8.44	328.7	
08/21/2010	22:50:04	-13	0.0	8.45	328.8	
08/21/2010	22:51:44	-15	0.0	8.45	328.8	
08/21/2010	22:51:59	-13	0.0	8.45	328.8	
08/21/2010	22:51:59					Float held, 1 bbl back
08/21/2010	22:51:59					Did not lose returns during job
08/21/2010	22:51:59					47 bbl cement to surface
08/21/2010	22:51:59					End Job

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
3.8		0.0	6.5	170.0	0.0	20.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3000	0	237	1500				

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
	170.0 bbl	126.5 bbl	74 degF	Cement Circulated to Surface? [X]	Volume 47.0 bbl
				Washed Thru Perfs [ ]	To

Customer or Authorized Representative	Schlumberger Supervisor		
Randy Burke	Dave Wanczyk	Circulation Lost [ ]	Job Completed [X]
		-	-