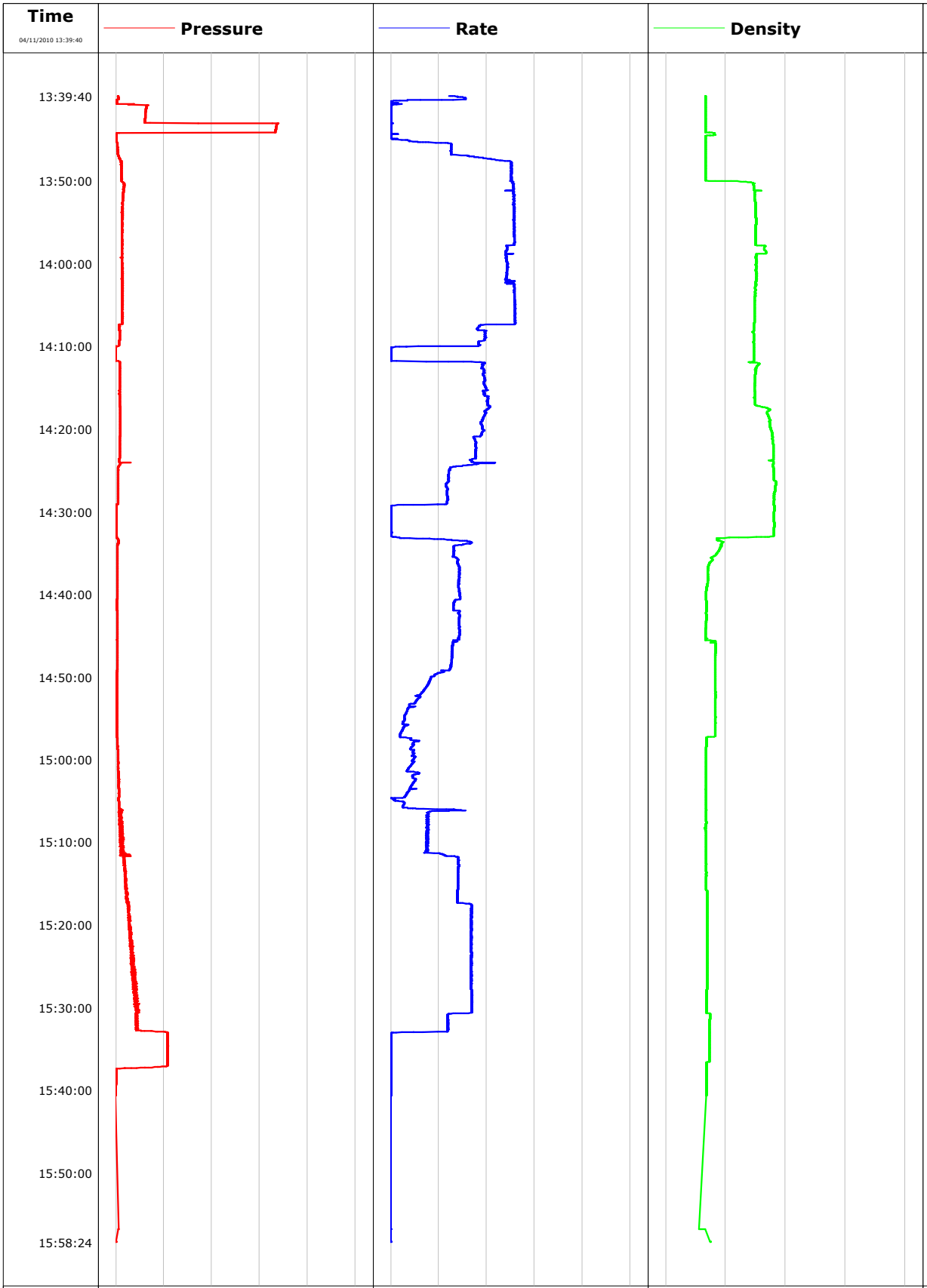
Schlumberger Cementing Job Report

CemCAT v1.3

Well	WF04B-27 K22 596,1	**Client**	ENCANA
Field	N Parachute	**SIR No.**	B2K7-00053
Engineer	Terry Borg	**Job Type**	9 5/8 Surface
Country	United States	**Job Date**	04-11-2010



Messages

Start Job
Held safty meeting
Pressure Test Lines
500 psi test good
Pressure Test Lines
3000 psi test good
Start Pumping Water
20 bbl water
No returns
End Water
Start Cement Slurry
Start Mixing Scav Slurry
Bring to weight 8.34 to 12.5 ppg
End Scavenger Slurry
Start Mixing Lead Slurry
120 bbl @ 12.5 ppg
Adding CemNET in all slury 2 lbs per bbl
no returns
sample = 12.5 ppg

End Lead Slurry
Start Mixing Scav Slurry
Bring to weight 12.5 to 14.0 ppg
End Scavenger Slurry
Start Mixing Tail Slurry
38 bbl @ 14.0 ppg
No returns
Sample = 14.0 ppg
End Tail Slurry
End Cement Slurry
Drop Top Plug
Start Displacement
132 bbl water displacement
No returns

Returns @ 35 bbl into returns

Lost returns @ 45 bbl away
Returns back @125 away very slow return
End Displacement
Bump Top Plug
1 bbl back water

End Job
Stopped Acquisition

Cementing Service Report

Customer	Job Number
ENCANA	B2K7-00053

Well	Location (legal)	Schlumberger Location	Job Start
WF04B-27 K22 596,1 K22 596,1	K22 596,1	GCO	Apr/11/2010

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
N Parachute	Shale	0 deg	12.3 in	1768.0 ft	1768.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Garfield	Colorado		110 degF	88 degF	

Well Master	API/UWI
0631174121	

Rig Name	Drilled For	Service Via
Patterson 303	Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
Bentonite		

Service Line	Job Type
Cementing	9 5/8 Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
		9 5/8

Service Instructions

Cement 1768ft of 9 5/8" Surface Casing75% Excess
20bbls Water
320 sks 12.5ppg G (TOL @ surface)+ 2 lbs / bbl CemNET
139 sks 14.0ppg G (TOT @ 1150ft)
Displace with wate

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
1768.0	9.630	36.0	J55	8RD
0.0	0.000	0.0		

Tubing/Drill Pipe

Depth,	Size, in	Weight, lb/ft	Grade	Thread
	0.000	0.0		
	0.000	0.0		

Perforations/Open Hole

Top,	Bottom,		No. of Shots	Total Interval
				Diameter

Treat Down	Displacement	Packer Type	Packer Depth
Casing	132.0 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	137.0 bbl	142.0 bbl	255.0 bbl

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

Lift Pressure	Pipe Rotated	Pipe Reciprocated
866 psi	[ ]	[ ]

No. Centralizers	Top Plugs	Bottom Plugs
22	1	

Cement Head Type
Single

Job Scheduled For	Arrived on Location	Leave Location
Apr/11/2010 05:00	Apr/11/2010 08:00	Apr/11/2010 15:00

Casing Tools		Squeeze Job	
Shoe Type	Guide	Squeeze Type	
Shoe Depth	1768.0 ft	Tool Type	
Stage Tool Type		Tool Depth	
Stage Tool Depth		Tail Pipe Size	
Collar Type	Diff-Fill	Tail Pipe Depth	
Collar Depth	1726.0 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/01/1970	00:13:05					Started Acquisition
04/11/2010	11:03:00					Started Acquisition
04/11/2010	13:39:40	36	2.4	8.33	0.0	
04/11/2010	13:39:41					Start Job
04/11/2010	13:39:41	39	2.4	8.33	0.1	
04/11/2010	13:39:42					Held safty meeting
04/11/2010	13:39:42	42	2.5	8.33	0.1	
04/11/2010	13:41:05					Pressure Test Lines
04/11/2010	13:41:05	635	0.0	8.32	1.7	
04/11/2010	13:41:06					500 psi test good
04/11/2010	13:41:06	633	0.0	8.31	1.7	
04/11/2010	13:43:05	3365	0.0	8.32	1.7	
04/11/2010	13:43:20					Pressure Test Lines
04/11/2010	13:43:20	3351	0.0	8.32	1.7	
04/11/2010	13:43:22					3000 psi test good
04/11/2010	13:43:22	3349	0.0	8.32	1.7	
04/11/2010	13:44:58					Start Pumping Water
04/11/2010	13:44:58	4	0.2	8.32	1.7	
04/11/2010	13:45:00					20 bbl water
04/11/2010	13:45:00	8	0.5	8.31	1.7	
04/11/2010	13:48:05	111	5.0	8.32	11.2	

Well	Field	Job Start	Customer	Job Number
WF04B-27 K22 596,1 K22 596,1	N Parachute	Apr/11/2010	ENCANA	B2K7-00053

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
04/11/2010	13:49:27	114	5.0	8.31	18.0	
04/11/2010	13:49:49					End Water
04/11/2010	13:49:49	119	5.0	8.31	19.9	
04/11/2010	13:49:51					Start Cement Slurry
04/11/2010	13:49:51	117	5.0	8.31	20.0	
04/11/2010	13:49:52					Start Mixing Scav Slurry
04/11/2010	13:49:52	118	5.0	8.31	20.1	
04/11/2010	13:49:54					Bring to weight 8.34 to 12.5 ppg
04/11/2010	13:49:54	122	5.0	8.31	20.3	
04/11/2010	13:50:20					End Scavenger Slurry
04/11/2010	13:50:20	168	5.1	12.32	22.5	
04/11/2010	13:50:21					Start Mixing Lead Slurry
04/11/2010	13:50:21	177	5.1	12.31	22.6	
04/11/2010	13:50:24					120 bbl @ 12.5 ppg
04/11/2010	13:50:24	171	5.1	12.30	22.8	
04/11/2010	13:50:25					Adding CemNET in all slury 2 lbs per bbl
04/11/2010	13:50:25	169	5.1	12.31	22.9	
04/11/2010	13:50:26					no returns
04/11/2010	13:50:26	165	5.1	12.31	23.0	
04/11/2010	13:50:30					sample = 12.5 ppg
04/11/2010	13:50:30	167	5.1	12.34	23.4	
04/11/2010	13:53:05	136	5.1	12.49	36.6	
04/11/2010	13:58:05	127	4.9	13.22	62.2	
04/11/2010	14:03:05	133	5.1	12.50	86.7	
04/11/2010	14:08:05	87	4.0	12.36	111.5	
04/11/2010	14:13:05	81	3.9	12.48	123.7	
04/11/2010	14:17:24					End Lead Slurry
04/11/2010	14:17:24	85	4.1	13.30	140.7	
04/11/2010	14:17:27					Start Mixing Scav Slurry
04/11/2010	14:17:27	87	4.1	13.45	140.9	
04/11/2010	14:17:28					Bring to weight 12.5 to 14.0 ppg
04/11/2010	14:17:28	87	4.1	13.45	141.0	
04/11/2010	14:18:05	85	4.0	13.48	143.5	
04/11/2010	14:19:31					End Scavenger Slurry
04/11/2010	14:19:31	85	3.8	13.70	149.0	
04/11/2010	14:19:33					Start Mixing Tail Slurry
04/11/2010	14:19:33	89	3.8	13.69	149.1	
04/11/2010	14:19:35					38 bbl @ 14.0 ppg
04/11/2010	14:19:35	88	3.8	13.70	149.2	
04/11/2010	14:19:36					No returns
04/11/2010	14:19:36					Sample = 14.0 ppg
04/11/2010	14:19:36	89	3.8	13.70	149.3	
04/11/2010	14:23:05	80	3.5	13.99	162.0	
04/11/2010	14:28:05	44	2.4	14.04	175.5	
04/11/2010	14:29:13					End Tail Slurry
04/11/2010	14:29:13	2	0.3	14.05	178.0	
04/11/2010	14:29:14					End Cement Slurry
04/11/2010	14:29:14	2	0.2	14.06	178.0	
04/11/2010	14:29:20					Drop Top Plug
04/11/2010	14:29:20	2	0.0	14.06	178.0	
04/11/2010	14:29:22					Start Displacement
04/11/2010	14:29:22	2	0.0	14.06	178.0	
04/11/2010	14:29:23					132 bbl water displacement
04/11/2010	14:29:23	2	0.0	14.06	178.0	

Well	Field	Job Start	Customer	Job Number
WF04B-27 K22 596,1 K22 596,1	N Parachute	Apr/11/2010	ENCANA	B2K7-00053

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
04/11/2010	14:29:25	1	0.0	14.06	178.0	
04/11/2010	14:33:05	9	0.2	12.98	178.1	
04/11/2010	14:38:05	27	2.9	8.53	191.6	
04/11/2010	14:43:05	27	2.9	8.38	205.5	
04/11/2010	14:45:58					Returns @ 35 bbl into returns
04/11/2010	14:45:58	25	2.6	9.18	213.7	
04/11/2010	14:48:05	28	2.5	9.12	219.1	
04/11/2010	14:53:05	19	1.0	9.14	227.7	
04/11/2010	14:58:05	33	0.9	8.41	230.9	
04/11/2010	15:03:05	60	0.9	8.38	235.5	
04/11/2010	15:08:05	122	1.5	8.34	240.7	
04/11/2010	15:13:05	194	2.8	8.37	250.4	
04/11/2010	15:18:05	267	3.4	8.45	264.7	
04/11/2010	15:23:05	329	3.4	8.45	281.5	
04/11/2010	15:28:05	432	3.4	8.40	298.3	
04/11/2010	15:33:05	1075	0.1	8.64	312.4	
04/11/2010	15:35:42					Lost returns @ 45 bbl away
04/11/2010	15:35:42	1081	0.0	8.64	312.4	
04/11/2010	15:36:18					Returns back @125 away very slow returns
04/11/2010	15:36:18	1080	0.0	8.65	312.4	
04/11/2010	15:37:35					End Displacement
04/11/2010	15:37:35	4	0.0	8.39	312.4	
04/11/2010	15:37:36					Bump Top Plug
04/11/2010	15:37:36	3	0.0	8.39	312.4	
04/11/2010	15:37:47					1 bbl back water
04/11/2010	15:37:47	3	0.0	8.39	312.4	
04/11/2010	15:38:05	3	0.0	8.39	312.4	
04/11/2010	15:56:52					End Job
04/11/2010	15:56:52	56	0.0	8.32	312.4	

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
3.0		0.0	5.2	158.0	0.0	19.9	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3000	1000	180093	1000				

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
	158.0 bbl	132.0 bbl	70 degF	Washed Thru Perfs ☐	To

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Floyd Roberts	Terry Borg	-	-