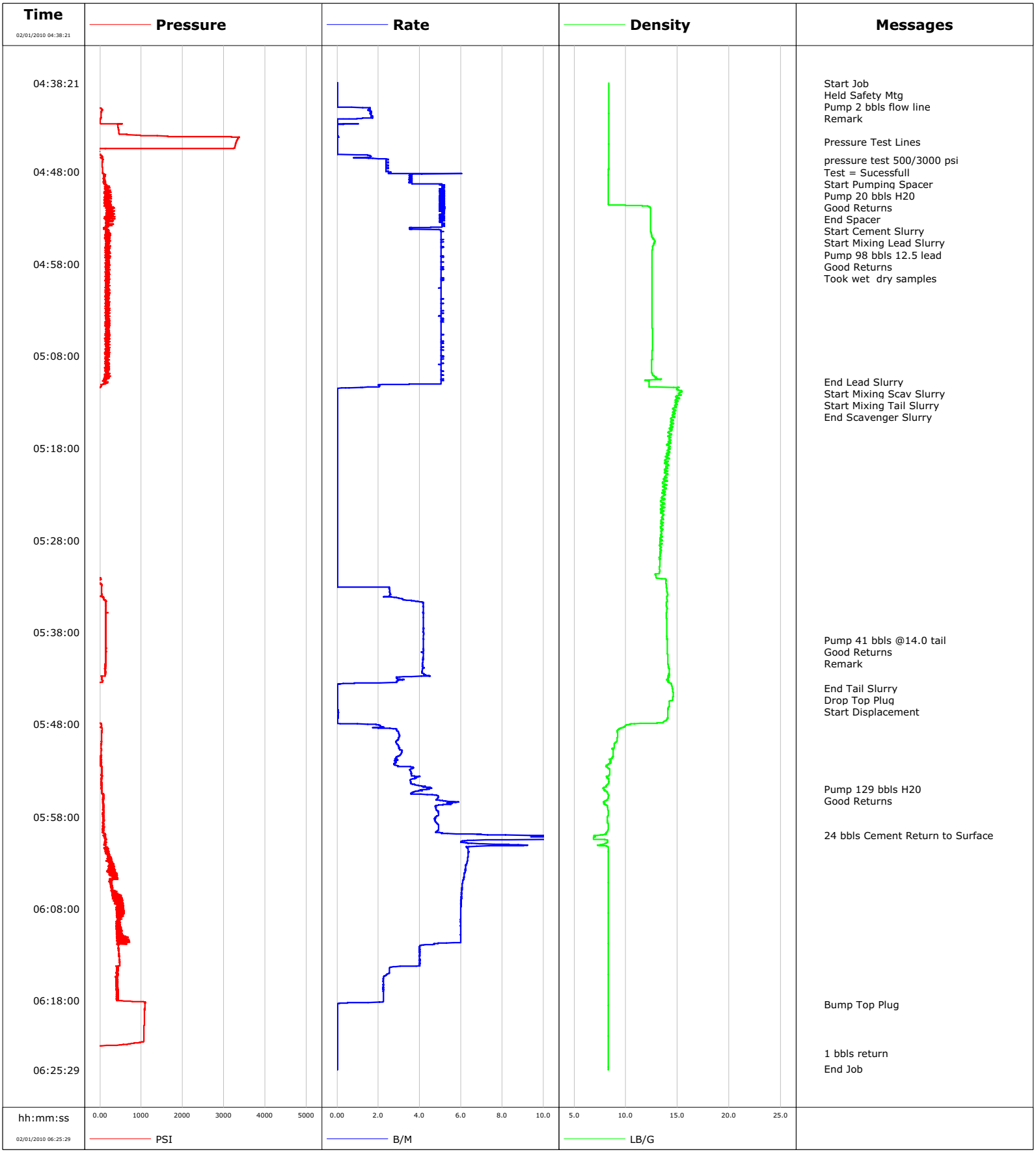
Schlumberger

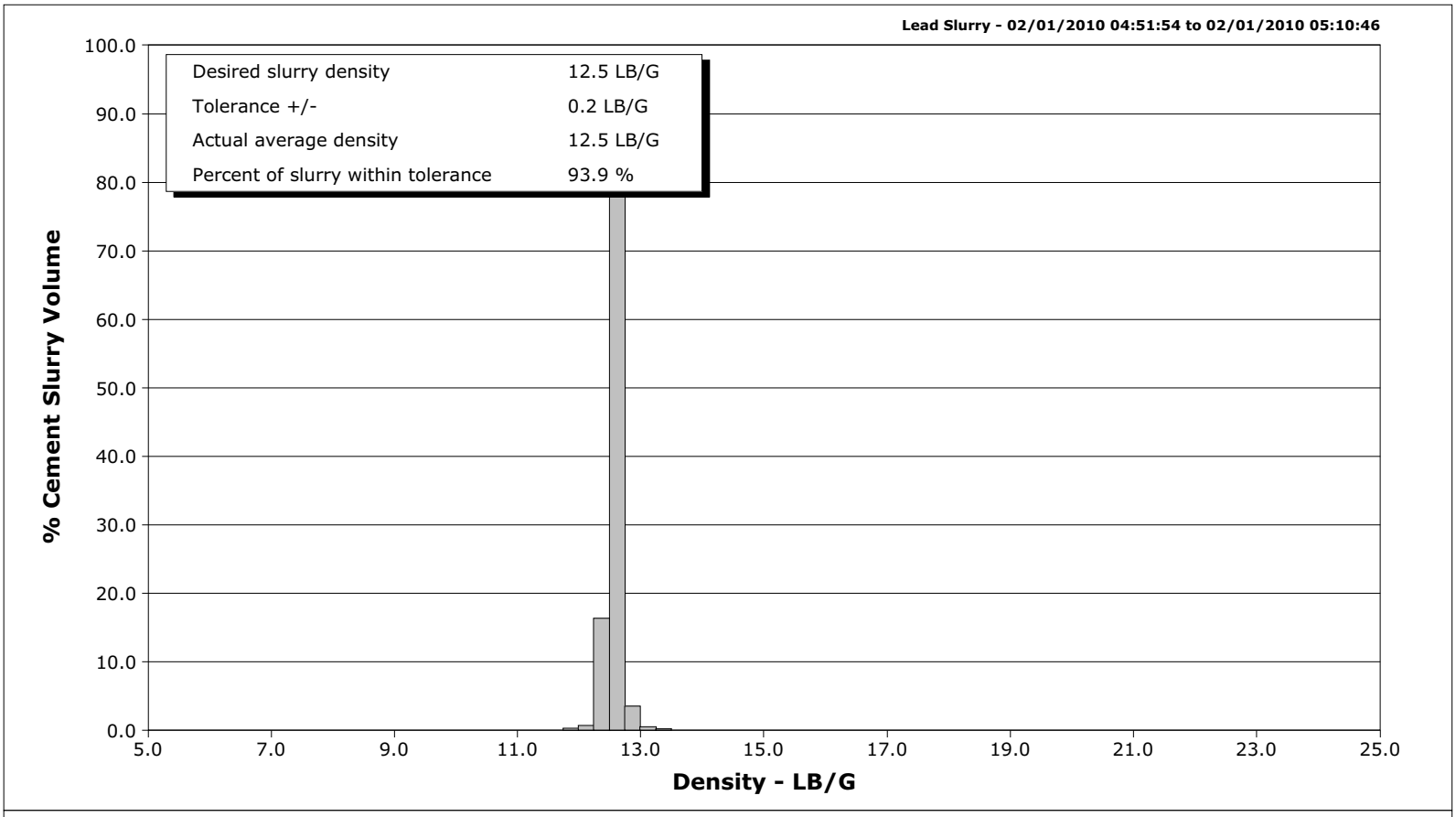
Cementing Job Report

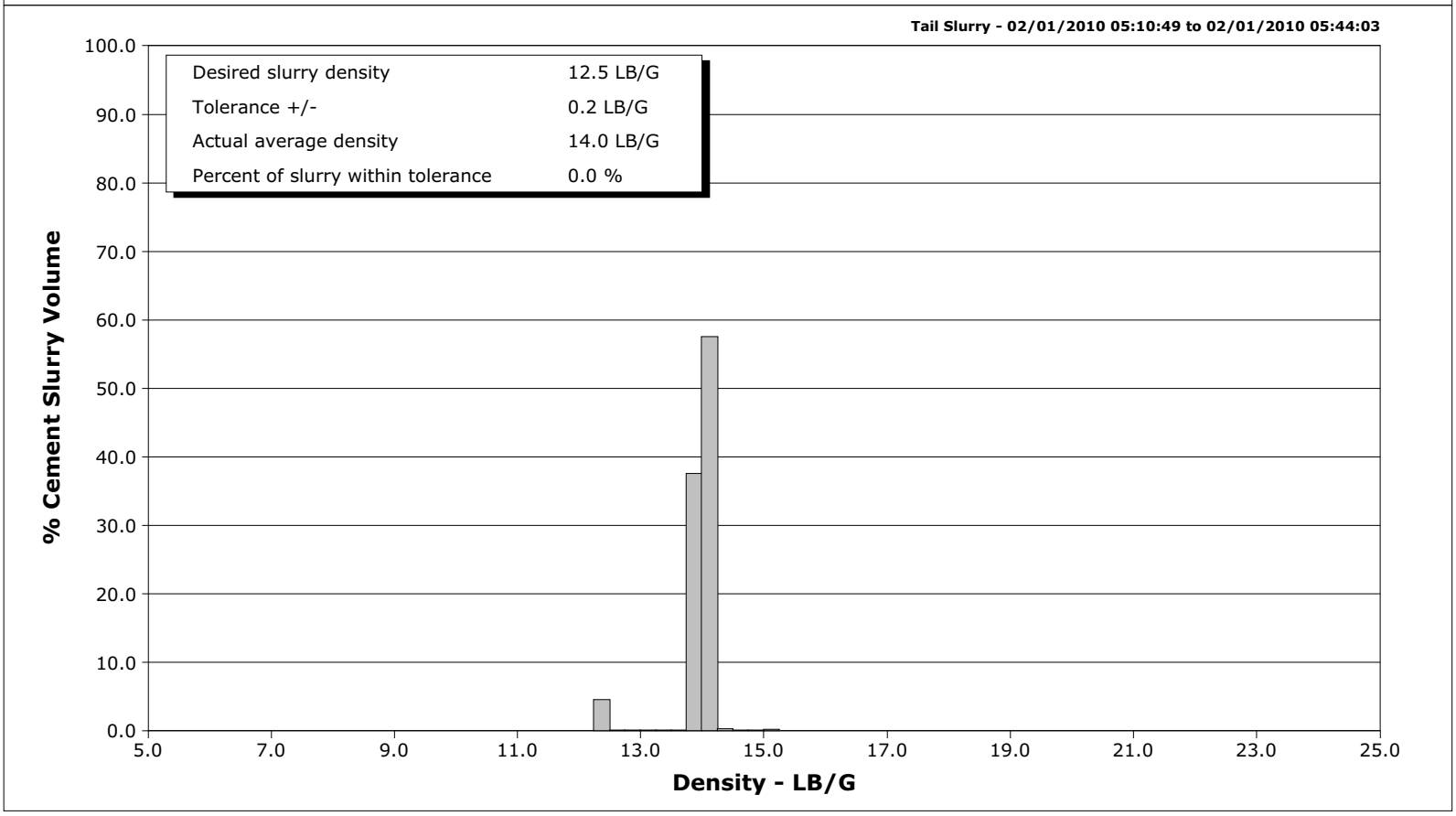
Well	WF09D-21 K22 596	**Client**	Encana
Field	N. Parachute	**SIR No.**	322060
Engineer	Dustin C Krueger	**Job Type**	9 5/8" Surface
Country	United States	**Job Date**	02-1-2010



Schlumberger Cementing Qa/Qc Density Report

Well	WF09D-21 K22 596	**Client**	Encana
Field	N. Parachute	**SIR No.**	322060
Engineer	Dustin C Krueger	**Job Type**	9 5/8" Surface
Country	United States	**Job Date**	02-1-2010





Cementing Service Report

Customer	Job Number
Encana	322060

Well	Location (legal)	Schlumberger Location	Job Start
WF09D-21 K22 596 WF09D-21 K22 596	Patterson 303	Grand Junction	Feb/01/2010

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
N. Parachute	shale		12.3 in	1724.0 ft	1724.0 ft

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

Well Master	API/UWI
0631155470	

Rig Name	Drilled For	Service Via
patterson 303	Gas	Land

Offshore Zone	Well Class	Well Type
	New	New Well Completion

Drilling Fluid Type	Max. Density	Plastic Viscosity
Bentonite	8.90 lb/gal	14.000 cP

Service Line	Job Type
Cementing	9 5/8" Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
3000 psi	500 psi	Single Cement head

Service Instructions

Cement 9 5/8" casing @ 1700ft in 12.25" OH with:
20 bbl water
260sks 12.5 ppg NPR lead
149 sks 14.0 ppg NPR tail
Displace with water

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
120.0	16.000	65.0		
1723.0	9.630	36.0	j-55	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	129.6 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	129.6 bbl	106.0 bbl	249.0 bbl

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

Lift Pressure	Pipe Rotated	Pipe Reciprocated
853 psi	☐	☐

No. Centralizers	Top Plugs	Bottom Plugs
22	1	0

Cement Head Type
Single

Job Scheduled For	Arrived on Location	Leave Location
Feb/01/2010 03:00	Feb/01/2010 03:00	Feb/01/2010 07:00

Casing Tools		Squeeze Job	
Shoe Type	Guide	Squeeze Type	
Shoe Depth	1724.0 ft	Tool Type	
Stage Tool Type		Tool Depth	
Stage Tool Depth		Tail Pipe Size	
Collar Type	Float	Tail Pipe Depth	
Collar Depth	47.0 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/01/2010	04:37:40					Started Acquisition
02/01/2010	04:38:21	-31	0.0	8.35	0.0	
02/01/2010	04:38:22					Start Job
02/01/2010	04:38:22	-31	0.0	8.35	0.0	
02/01/2010	04:38:25					Held Safety Mtg
02/01/2010	04:38:25	-31	0.0	8.35	0.0	
02/01/2010	04:38:26					Pump 2 bbls flow line
02/01/2010	04:38:26	-31	0.0	8.35	0.0	
02/01/2010	04:38:32					Remark
02/01/2010	04:38:32	-31	0.0	8.35	0.0	
02/01/2010	04:42:40	-11	0.0	8.34	2.0	
02/01/2010	04:44:45					Pressure Test Lines
02/01/2010	04:44:45	3305	0.0	8.34	2.0	
02/01/2010	04:46:46					pressure test 500/3000 psi
02/01/2010	04:46:46	61	2.4	8.34	3.1	
02/01/2010	04:46:47					Test = Sucessfull
02/01/2010	04:46:47	64	2.4	8.34	3.2	
02/01/2010	04:47:40	66	2.4	8.33	5.3	
02/01/2010	04:48:50					Start Pumping Spacer
02/01/2010	04:48:50	90	3.5	8.33	8.9	
02/01/2010	04:48:52					Pump 20 bbls H20

Well	Field	Job Start	Customer	Job Number
WF09D-21 K22 596 WF09D-21 K22 596	N. Parachute	Feb/01/2010	Encana	322060

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/01/2010	04:48:52	86	3.5	8.33	9.0	
02/01/2010	04:51:29					End Spacer
02/01/2010	04:51:29	243	5.1	8.32	21.7	
02/01/2010	04:51:30					Start Cement Slurry
02/01/2010	04:51:30	110	5.2	8.32	21.8	
02/01/2010	04:51:54					Start Mixing Lead Slurry
02/01/2010	04:51:54	308	5.2	12.35	23.8	
02/01/2010	04:52:40	247	5.1	12.39	27.7	
02/01/2010	04:54:53					Pump 98 bbls 12.5 lead
02/01/2010	04:54:53	215	5.0	12.50	38.6	
02/01/2010	04:54:54					Good Returns
02/01/2010	04:54:54	215	5.0	12.52	38.7	
02/01/2010	04:54:59					Took wet dry samples
02/01/2010	04:54:59	211	5.0	12.51	39.1	
02/01/2010	04:57:40	147	5.0	12.56	52.7	
02/01/2010	05:02:40	187	5.0	12.53	77.9	
02/01/2010	05:07:40	199	5.0	12.54	103.1	
02/01/2010	05:10:46					End Lead Slurry
02/01/2010	05:10:46	118	5.0	12.25	118.7	
02/01/2010	05:10:47					Start Mixing Scav Slurry
02/01/2010	05:10:47	128	5.0	12.25	118.8	
02/01/2010	05:10:49					Start Mixing Tail Slurry
02/01/2010	05:10:49	108	5.0	12.25	119.0	
02/01/2010	05:12:39					End Scavenger Slurry
02/01/2010	05:12:39	-25	0.0	14.99	121.0	
02/01/2010	05:12:40	-25	0.0	14.93	121.0	
02/01/2010	05:17:40	-27	0.0	13.97	121.0	
02/01/2010	05:22:40	-25	0.0	13.69	121.0	
02/01/2010	05:27:40	-27	0.0	13.51	121.0	
02/01/2010	05:32:40	-28	0.0	13.89	121.0	
02/01/2010	05:37:40	137	4.2	13.96	137.9	
02/01/2010	05:38:47					Pump 41 bbls @14.0 tail
02/01/2010	05:38:47					Good Returns
02/01/2010	05:38:47	137	4.2	14.00	142.6	
02/01/2010	05:38:48					Remark
02/01/2010	05:38:48	146	4.2	14.00	142.6	
02/01/2010	05:42:40	128	4.3	14.15	158.7	
02/01/2010	05:44:03					End Tail Slurry
02/01/2010	05:44:03	-29	0.0	14.52	161.4	
02/01/2010	05:44:05					Drop Top Plug
02/01/2010	05:44:05	-30	0.0	14.52	161.4	
02/01/2010	05:44:07					Start Displacement
02/01/2010	05:44:07	-30	0.0	14.53	161.4	
02/01/2010	05:47:40	-21	0.0	13.76	161.5	
02/01/2010	05:52:40	49	3.7	8.21	175.0	
02/01/2010	05:55:02					Pump 129 bbls H20
02/01/2010	05:55:02					Good Returns
02/01/2010	05:55:02	47	4.4	7.87	183.9	
02/01/2010	05:57:40	66	4.9	8.31	196.4	
02/01/2010	06:00:00					24 bbls Cement Return to Surface
02/01/2010	06:00:00	137	8.2	7.77	208.0	
02/01/2010	06:02:40	185	6.3	8.32	227.9	
02/01/2010	06:07:40	530	6.0	8.32	258.4	
02/01/2010	06:12:40	455	4.0	8.32	286.6	

Well	Field	Job Start	Customer	Job Number
WF09D-21 K22 596 WF09D-21 K22 596	N. Parachute	Feb/01/2010	Encana	322060

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/01/2010	06:18:22					Bump Top Plug
02/01/2010	06:18:22	1087	0.0	8.32	302.1	
02/01/2010	06:22:40	732	0.0	8.32	302.1	
02/01/2010	06:23:41					1 bbls return
02/01/2010	06:23:41	-35	0.0	8.32	302.1	
02/01/2010	06:25:25					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
4.0		0.0	6.5	139.0	0.0	20.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3300	1100	350	1085		FreshWater	333.0 bbl	8.34 lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
	139.0 bbl	129.0 bbl	60 degF	[x]	24.0 bbl
				Washed Thru Perfs [ ]	To

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Steve Record	Bryan Farnham	-	[x] -