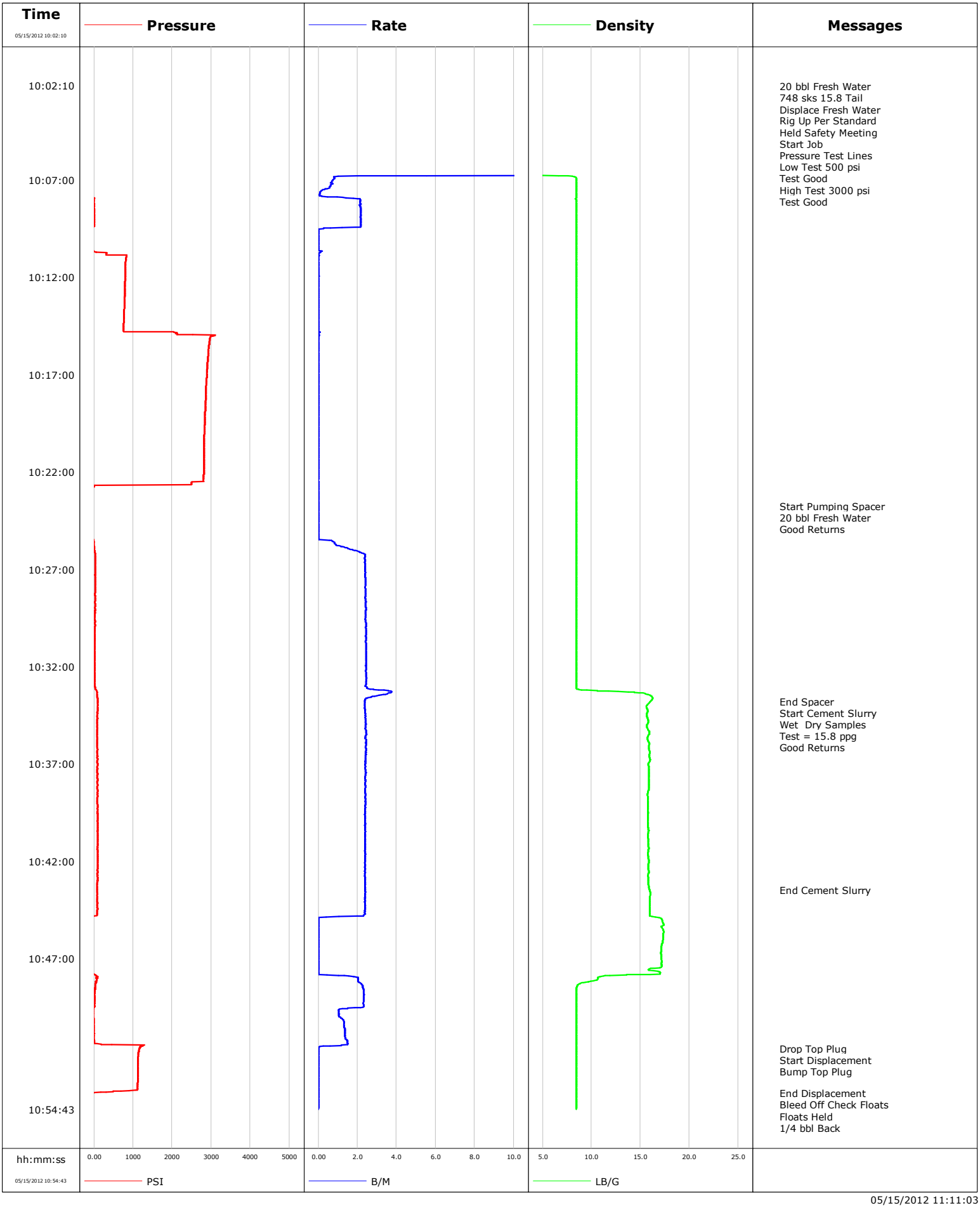
Schlumberger Cementing Job Report

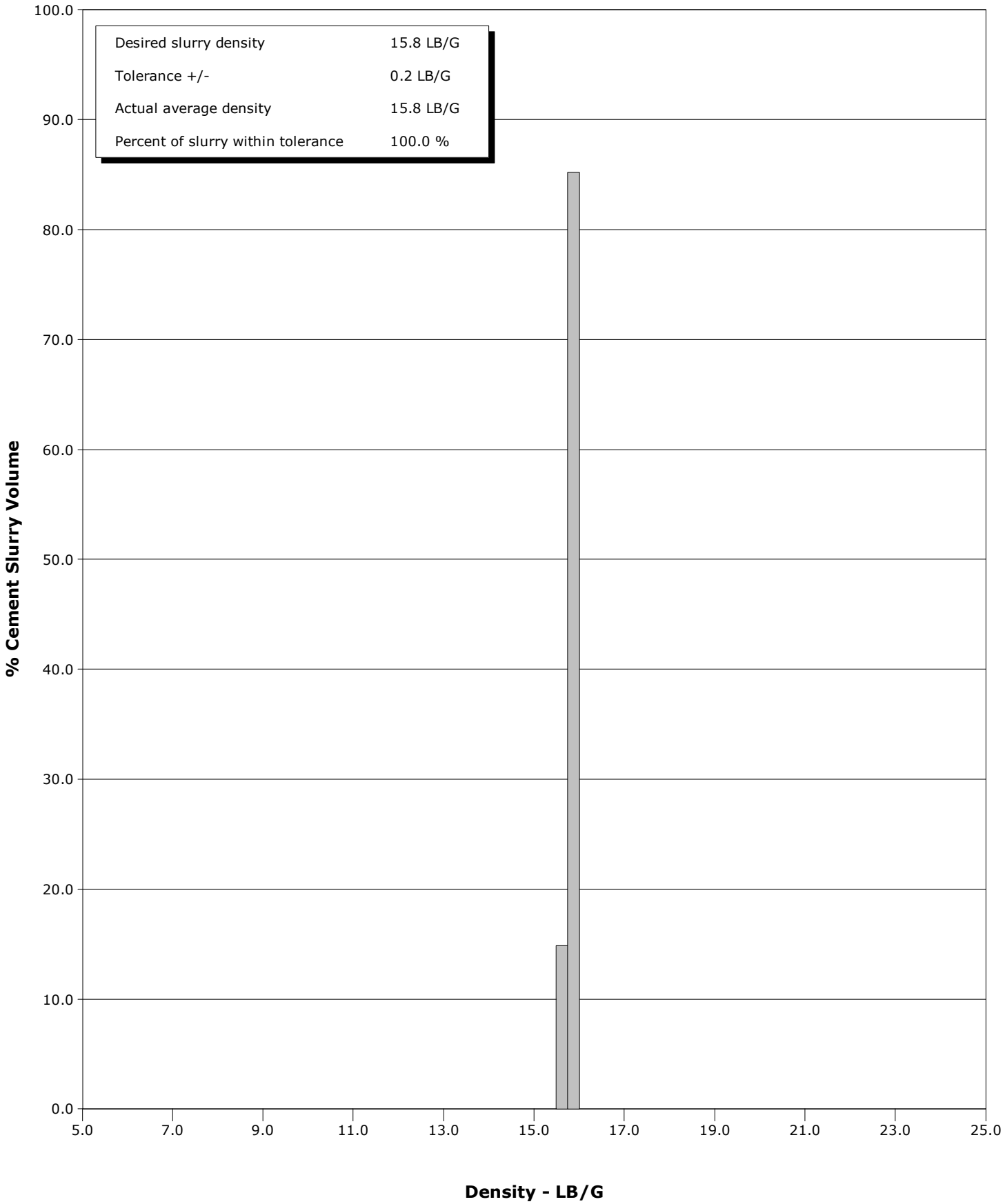
Well	Gardner Federal 28-2B	**Client**	Encana
Field	Parachute	**SIR No.**	
Engineer		**Job Type**	9 5/8 Surface
Country	United States	**Job Date**	05-15-2012



Schlumberger Cementing Qa/Qc Density Report

Well	Gardner Federal 28-2B	**Client**	Encana
Field	Parachute	**SIR No.**	
Engineer		**Job Type**	9 5/8 Surface
Country	United States	**Job Date**	05-15-2012

Cement Slurry - 05/15/2012 10:33:50 to 05/15/2012 10:43:27



Cementing Service Report

Customer	Job Number
Encana	C4HD-00260

Well	Location (legal)	Schlumberger Location	Job Start
Gardner Federal 28-2B		GCO	May/15/2012

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Parachute			12.3 in		

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Garfield	Colorado		81 degF	81 degF	

Well Master	API/UWI
0631334541	

Rig Name	Drilled For	Service Via
Nabors M13	Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity

Service Line	Job Type
Cementing	9 5/8 Surface

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

Service Instructions

Rate And Density Checked
20 bbl Fresh Water
748 sks 15.8 Tail

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
60.0	16.000	65.0	J55	8RD
116.0	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	6.0 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	7.0 bbl	11.0 bbl	25.0 bbl

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

Lift Pressure	57 psi	Shoe Type	Guide	Squeeze Type	
Pipe Rotated	☐	Pipe Reciprocated	☐	Shoe Depth	116.0 ft	Tool Type	
No. Centralizers		Top Plugs	1	Bottom Plugs	Stage Tool Type		Tool Depth	
Cement Head Type	Single				Stage Tool Depth		Tail Pipe Size	
Job Scheduled For	Arrived on Location	Leave Location			Collar Type	Float	Tail Pipe Depth	
May/15/2012	May/15/2012	May/15/2012			Collar Depth	72.0 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
05/15/2012	09:37:28					Started Acquisition
05/15/2012	10:02:10	-25	25.0	0.00	0.4	
05/15/2012	10:02:12					20 bbl Fresh Water
05/15/2012	10:02:12					748 sks 15.8 Tail
05/15/2012	10:02:12					Displace Fresh Water
05/15/2012	10:02:12					Rig Up Per Standard
05/15/2012	10:02:12	-25	25.0	0.00	1.2	
05/15/2012	10:02:13					Held Safety Meeting
05/15/2012	10:02:13	-25	25.0	0.00	1.7	
05/15/2012	10:02:15					Start Job
05/15/2012	10:02:15	-25	25.0	0.00	2.5	
05/15/2012	10:02:17					Pressure Test Lines
05/15/2012	10:02:17	-25	25.0	0.00	3.3	
05/15/2012	10:02:18					Low Test 500 psi
05/15/2012	10:02:18					Test Good
05/15/2012	10:02:18					High Test 3000 psi
05/15/2012	10:02:18	-25	25.0	0.00	3.7	
05/15/2012	10:02:19					Test Good
05/15/2012	10:02:19	-25	25.0	0.00	4.2	
05/15/2012	10:03:28	-24	25.0	0.00	32.9	
05/15/2012	10:05:28	-25	25.0	0.00	82.9	

Well	Field	Job Start	Customer	Job Number
Gardner Federal 28-2B	Parachute	May/15/2012	Encana	C4HD-00260

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
05/15/2012	10:09:28	-30	1.2	8.45	119.9	
05/15/2012	10:11:28	805	0.0	8.45	119.9	
05/15/2012	10:13:28	776	0.0	8.45	120.0	
05/15/2012	10:15:28	2942	0.0	8.45	120.0	
05/15/2012	10:17:28	2871	0.0	8.45	120.0	
05/15/2012	10:19:28	2835	0.0	8.45	120.0	
05/15/2012	10:21:28	2808	0.0	8.45	120.1	
05/15/2012	10:23:28	-23	0.0	8.45	120.1	
05/15/2012	10:23:45					Start Pumping Spacer
05/15/2012	10:23:45	-24	0.0	8.45	120.1	
05/15/2012	10:23:47					20 bbl Fresh Water
05/15/2012	10:23:47					Good Returns
05/15/2012	10:23:47	-23	0.0	8.45	120.1	
05/15/2012	10:25:28	-21	0.0	8.45	120.1	
05/15/2012	10:27:28	28	2.4	8.45	124.1	
05/15/2012	10:29:28	23	2.4	8.45	128.9	
05/15/2012	10:31:28	23	2.4	8.45	133.8	
05/15/2012	10:33:28	85	3.1	15.99	139.0	
05/15/2012	10:33:46					End Spacer
05/15/2012	10:33:46	94	2.4	16.09	139.8	
05/15/2012	10:33:50					Start Cement Slurry
05/15/2012	10:33:50	95	2.4	15.98	139.9	
05/15/2012	10:33:52					Wet Dry Samples
05/15/2012	10:33:52	91	2.4	15.90	140.0	
05/15/2012	10:33:53					Test = 15.8 ppg
05/15/2012	10:33:53	97	2.4	15.86	140.0	
05/15/2012	10:33:54					Good Returns
05/15/2012	10:33:54	96	2.4	15.86	140.1	
05/15/2012	10:35:28	83	2.5	15.89	143.9	
05/15/2012	10:37:28	84	2.4	15.87	148.7	
05/15/2012	10:39:28	85	2.4	15.78	153.5	
05/15/2012	10:41:28	90	2.4	15.80	158.3	
05/15/2012	10:43:27					End Cement Slurry
05/15/2012	10:43:27	83	2.4	15.93	163.0	
05/15/2012	10:43:28	83	2.4	15.94	163.1	
05/15/2012	10:45:28	-25	0.0	17.31	166.3	
05/15/2012	10:47:28	-29	0.0	17.02	166.3	
05/15/2012	10:49:28	15	2.3	8.44	169.9	
05/15/2012	10:51:28	1243	0.6	8.44	172.5	
05/15/2012	10:51:36					Drop Top Plug
05/15/2012	10:51:36	1171	0.0	8.44	172.6	
05/15/2012	10:51:37					Start Displacement
05/15/2012	10:51:37	1155	0.0	8.44	172.6	
05/15/2012	10:51:39					Bump Top Plug
05/15/2012	10:51:39	1160	0.0	8.44	172.6	
05/15/2012	10:53:28	1114	0.0	8.44	172.6	
05/15/2012	10:53:53					End Displacement
05/15/2012	10:53:53	-24	0.0	8.44	172.6	
05/15/2012	10:53:54					Bleed Off Check Floats
05/15/2012	10:53:54					Floats Held
05/15/2012	10:53:54	-24	0.0	8.44	172.6	
05/15/2012	10:53:55					1/4 bbl Back
05/15/2012	10:53:55					10 bbl Cement To Surface
05/15/2012	10:53:55					Rig Down

Well	Field	Job Start	Customer	Job Number
Gardner Federal 28-2B	Parachute	May/15/2012	Encana	C4HD-00260

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
3.5		0.0	25.0	172.6	0.0	137.5	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3110	-47	798					

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
		0.0 bbl	60 degF	X	
				Washed Thru Perfs ☐	To

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Charlie Brown	Jordan Moreland	☐	X
		-	-

Schlumberger

Service Quality Evaluation

Client:	Encana
Field:	Parachute
Rig:	Nabors M13
Well:	Gardner Federal 28-2B
Service Line:	Cementing
Job Type:	9 5/8 Surface

Service Order #:	
Date:	May/15/2012
Operating Time:	0.0
Client Rep:	Encana
Schlumberger Engineer:	Jordan Moreland
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** [X] **no** [ ]	5
1b	Free of environmental spill or non-compliant discharge	5	**yes** [X] **no** [ ]	5
1c	Free of RIRs	5	**yes** [X] **no** [ ]	5
1d	Wellsite left clean	4	**yes** [X] **no** [ ]	4
			Sub-total	100%

2	**Design / Preparation**			
2a	Program incl. job simulation (CemCADE) & pump schedule / tool hydraulic calcs	3	**yes** [X] **no** [ ]	3
2b	Equipment maintenance schedule completed / Green tagged	2	**yes** [X] **no** [ ]	2
2c	All materials and equipment required for job/contingency checked & on location	2	**yes** [X] **no** [ ]	2
2d	Safety / pre-job meeting conducted with all involved present	2	**yes** [X] **no** [ ]	2
			Sub-total	100%

3	**Execution**			
3a	Lost time < 30 mins	3	**yes** [X] **no** [ ]	3
3b	Equipment pressure tested succesfully	3	**yes** [X] **no** [ ]	3
3c	All key parameters monitored and recorded accurately (Pressure, Rate, Density)	2	**yes** [X] **no** [ ]	2
3d	Plugs / darts released and tested succesfully	2	**yes** [X] **no** [ ]	2
3e	Density variation met expectations	2	**yes** [X] **no** [ ]	2
3f	Personnel performed as per expectations	2	**yes** [X] **no** [ ]	2
3g	Equipment performed as per expectations	2	**yes** [X] **no** [ ]	2
3h	Job pumped per design	3	**yes** [X] **no** [ ]	3
3i	Did job start on time	2	**yes** [X] **no** [ ]	2
3j	Free of Operational failures (screen out, Cementing Example, etc.)	3	**yes** [X] **no** [ ]	3
			Sub-total	100%

4	**Evaluation**			
4a	Main job objective achieved with no consequential non-productive time	10	**yes** [X] **no** [ ]	10
			Sub-total	100%

Total 100%

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

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