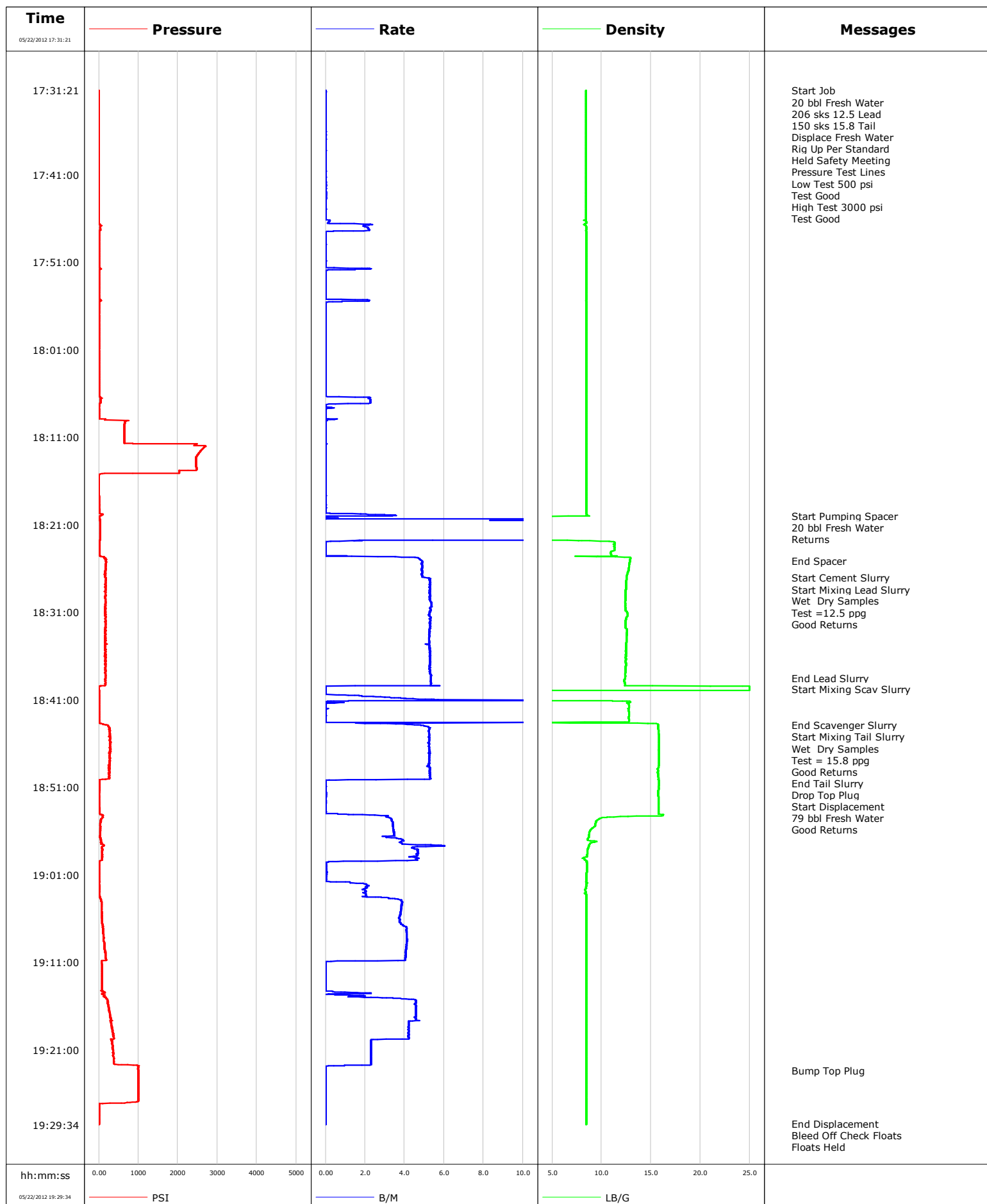


Well Federal 29-2B
Field Parachute
Engineer
Country United States

Client Encana
SIR No.
Job Type 9 5/8 Surface
Job Date 05-22-2012

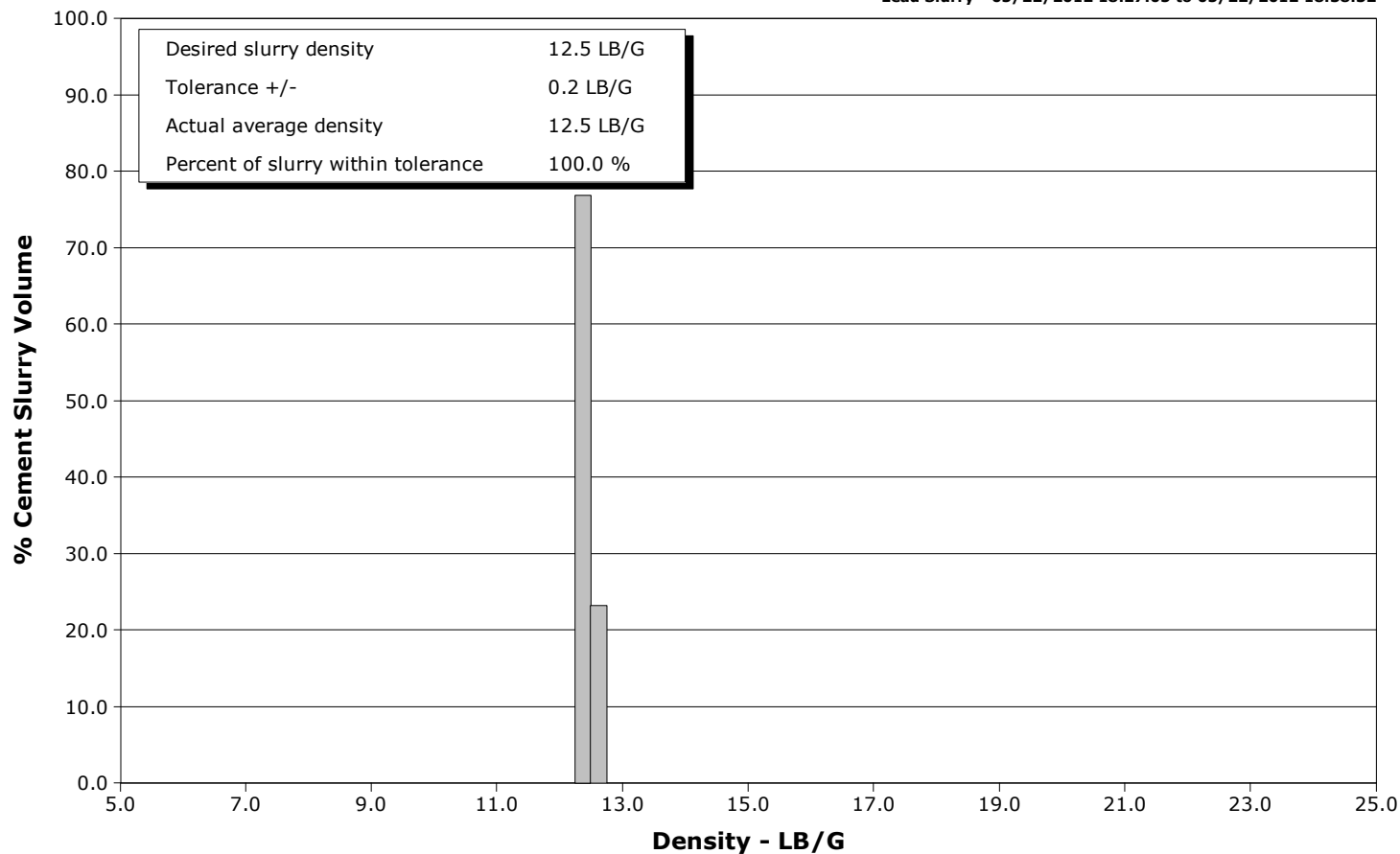


Schlumberger Cementing Qa/Qc Density Report

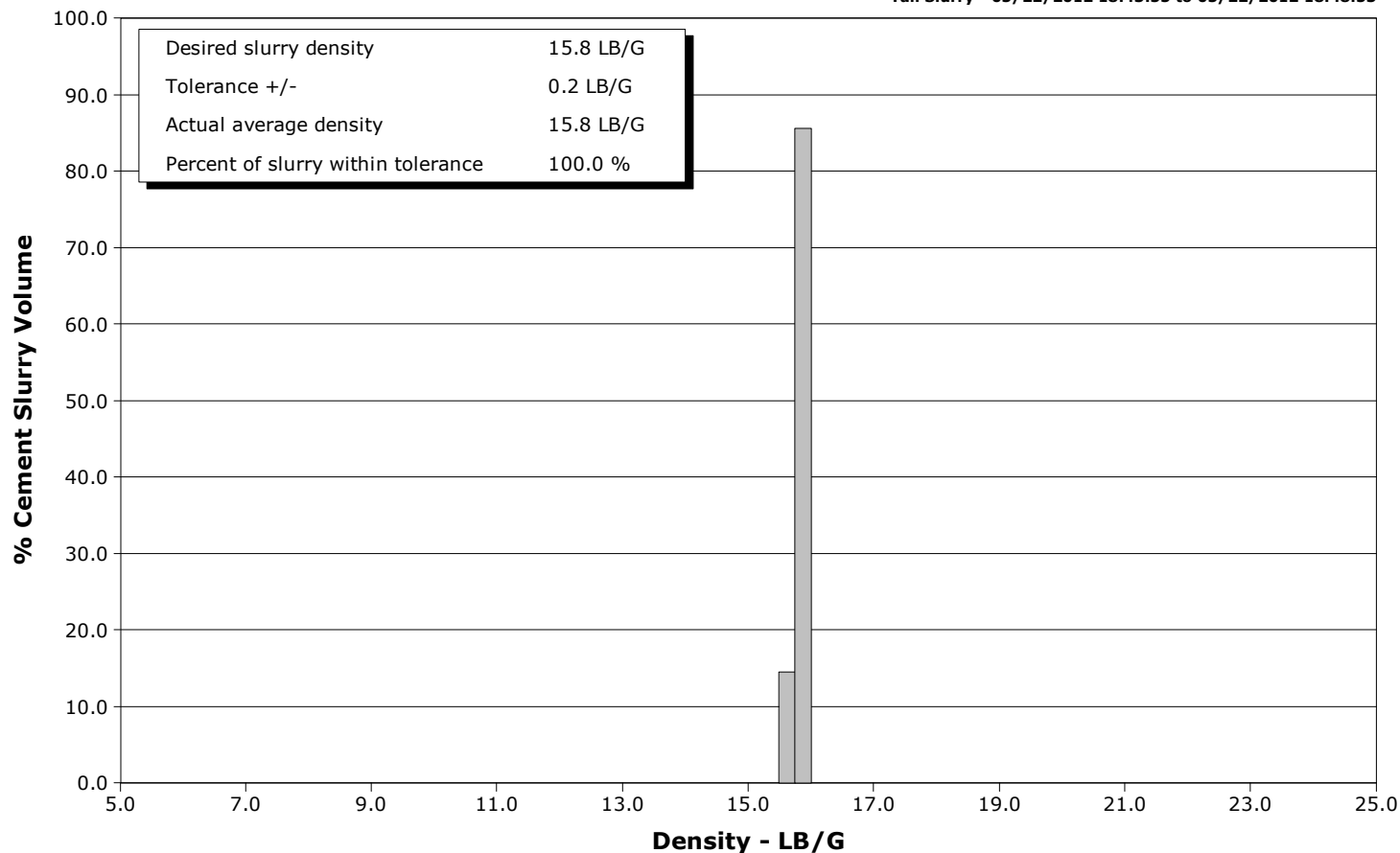
Well Federal 29-2B
Field Parachute
Engineer
Country United States

Client Encana
SIR No.
Job Type 9 5/8 Surface
Job Date 05-22-2012

Lead Slurry - 05/22/2012 18:27:05 to 05/22/2012 18:38:32



Tail Slurry - 05/22/2012 18:43:55 to 05/22/2012 18:48:53





Cementing Service Report

| | | | | | | | | | | | | | | | | |
|--|------------------------|--|---------------------|-------------------------------------|-------------------|------------------------------|--------------------------|----------------------------|--------------------------|---------------|----------------------|--------------|-------|----------------|--------|--|
| | | | | Customer Encana | | | Job Number C4HD-00276 | | | | | | | | | |
| Well Federal 29-2B | | | Location (legal) | | | Schlumberger Location GCO | | | Job Start May/22/2012 | | | | | | | |
| Field Parachute | | Formation Name/Type | | | Deviation | | Bit Size 12.3 in | | Well MD | | Well TVD | | | | | |
| County Garfield | | State/Province Colorado | | | BHP | | BHST 93 degF | | BHCT 81 degF | | Pore Press. Gradient | | | | | |
| Well Master 0631338842 | | API/UWI | | | | | | | | | | | | | | |
| Rig Name Nabors M11 | | Drilled For Gas | | Service Via Land | | Casing/Liner | | | | | | | | | | |
| Offshore Zone | | Well Class New | | Well Type Development | | Depth, ft | | Size, in | | Weight, lb/ft | | Grade | | Thread | | |
| | | | | | | 60.0 | | 16.000 | | 65.0 | | K55 | | 8RD | | |
| | | | | | | 1066.0 | | 9.630 | | 36.0 | | K55 | | 8RD | | |
| Drilling Fluid Type | | | Max. Density | | Plastic Viscosity | | Tubing/Drill Pipe | | | | | | | | | |
| | | | | | | | Depth, | | Size, | | Weight, | | Grade | | Thread | |
| Service Line Cementing | | Job Type 9 5/8 Surface | | | | | | | | | | | | | | |
| Max. Allowed Tub. Press 3000 psi | | Max. Allowed Ann. Press | | WH Connection Single Cement head | | Perforations/Open Hole | | | | | | | | | | |
| | | | | | | Top, | | Bottom, | | | | No. of Shots | | Total Interval | | |
| Service Instructions Rate And Density Checked 206 sks 12.5 Lead 150 sks 15.8 Tail Displace Fresh Water | | | | | | | | | | | | | | Diameter | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Treat Down Casing | | | | Displacement 79.0 bbl | | Packer Type | | Packer Depth | | | | | | | | |
| Tubing Vol. | | | | Casing Vol. 80.0 bbl | | Annular Vol. 64.0 bbl | | Openhole Vol. 151.0 bbl | | | | | | | | |
| Casing/Tubing Secured <input checked="" type="checkbox"/> | | 1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/> | | | | Casing Tools | | | Squeeze Job | | | | | | | |
| Lift Pressure 527 psi | | | | Shoe Type Guide | | Squeeze Type | | | | | | | | | | |
| Pipe Rotated <input type="checkbox"/> | | Pipe Reciprocated <input type="checkbox"/> | | Shoe Depth 1066.0 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 May/22/2012 | | Arrived on Location May/22/2012 | | Leave Location May/22/2012 | | Collar Type Float | | | Tail Pipe Depth | | | | | | | |
| | | | | | | Collar Depth 1022.0 ft | | | Sqz. Total Vol. | | | | | | | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | | | | | | | |
| 05/22/2012 | 16:18:20 | | | | | Started Acquisition | | | | | | | | | | |
| 05/22/2012 | 17:31:21 | -5 | 0.0 | 8.43 | 0.0 | | | | | | | | | | | |
| 05/22/2012 | 17:31:22 | | | | | Start Job | | | | | | | | | | |
| 05/22/2012 | 17:31:22 | -4 | 0.0 | 8.43 | 0.0 | | | | | | | | | | | |
| 05/22/2012 | 17:31:31 | | | | | 20 bbl Fresh Water | | | | | | | | | | |
| 05/22/2012 | 17:31:31 | -4 | 0.0 | 8.43 | 0.0 | | | | | | | | | | | |
| 05/22/2012 | 17:31:32 | | | | | 206 sks 12.5 Lead | | | | | | | | | | |
| 05/22/2012 | 17:31:32 | | | | | 150 sks 15.8 Tail | | | | | | | | | | |
| 05/22/2012 | 17:31:32 | | | | | Displace Fresh Water | | | | | | | | | | |
| 05/22/2012 | 17:31:32 | | | | | Rig Up Per Standard | | | | | | | | | | |
| 05/22/2012 | 17:31:32 | | | | | Held Safety Meeting | | | | | | | | | | |
| 05/22/2012 | 17:31:32 | -5 | 0.0 | 8.43 | 0.0 | | | | | | | | | | | |
| 05/22/2012 | 17:31:37 | | | | | Pressure Test Lines | | | | | | | | | | |
| 05/22/2012 | 17:31:37 | -4 | 0.0 | 8.43 | 0.0 | | | | | | | | | | | |
| 05/22/2012 | 17:31:38 | | | | | Low Test 500 psi | | | | | | | | | | |
| 05/22/2012 | 17:31:38 | | | | | Test Good | | | | | | | | | | |
| 05/22/2012 | 17:31:38 | -5 | 0.0 | 8.43 | 0.0 | | | | | | | | | | | |
| 05/22/2012 | 17:31:39 | | | | | High Test 3000 psi | | | | | | | | | | |
| 05/22/2012 | 17:31:39 | | | | | Test Good | | | | | | | | | | |
| 05/22/2012 | 17:31:39 | -5 | 0.0 | 8.43 | 0.0 | | | | | | | | | | | |
| 05/22/2012 | 17:32:20 | -4 | 0.0 | 8.43 | 0.0 | | | | | | | | | | | |

| Well | | | Field | | Job Start | Customer | Job Number |
|---------------|------------------------|-----------------------------|---------------------|-----------------|---------------|--------------------------|------------|
| Federal 29-2B | | | Parachute | | May/22/2012 | Encana | C4HD-00276 |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | |
| 05/22/2012 | 17:36:20 | -4 | 0.0 | 8.43 | 0.1 | | |
| 05/22/2012 | 17:38:20 | -4 | 0.0 | 8.43 | 0.1 | | |
| 05/22/2012 | 17:40:20 | -4 | 0.0 | 8.43 | 0.2 | | |
| 05/22/2012 | 17:42:20 | -4 | 0.0 | 8.43 | 0.2 | | |
| 05/22/2012 | 17:44:20 | -8 | 0.0 | 8.43 | 0.2 | | |
| 05/22/2012 | 17:46:20 | -7 | 0.2 | 8.43 | 0.3 | | |
| 05/22/2012 | 17:48:20 | 7 | 0.0 | 8.44 | 2.1 | | |
| 05/22/2012 | 17:50:20 | 6 | 0.0 | 8.44 | 2.1 | | |
| 05/22/2012 | 17:52:20 | 9 | 0.0 | 8.44 | 2.6 | | |
| 05/22/2012 | 17:54:20 | 9 | 0.0 | 8.44 | 2.6 | | |
| 05/22/2012 | 17:56:20 | 8 | 0.0 | 8.44 | 3.1 | | |
| 05/22/2012 | 17:58:20 | 0 | 0.0 | 8.44 | 3.1 | | |
| 05/22/2012 | 18:00:20 | 0 | 0.0 | 8.44 | 3.2 | | |
| 05/22/2012 | 18:02:20 | 1 | 0.0 | 8.44 | 3.2 | | |
| 05/22/2012 | 18:04:20 | 2 | 0.0 | 8.44 | 3.2 | | |
| 05/22/2012 | 18:06:20 | 3 | 0.0 | 8.44 | 3.2 | | |
| 05/22/2012 | 18:08:20 | 11 | 0.0 | 8.45 | 5.1 | | |
| 05/22/2012 | 18:10:20 | 644 | 0.0 | 8.44 | 5.1 | | |
| 05/22/2012 | 18:12:20 | 2626 | 0.0 | 8.44 | 5.1 | | |
| 05/22/2012 | 18:14:20 | 2463 | 0.0 | 8.44 | 5.2 | | |
| 05/22/2012 | 18:16:20 | -1 | 0.0 | 8.45 | 5.2 | | |
| 05/22/2012 | 18:18:20 | 8 | 0.0 | 8.45 | 5.2 | | |
| 05/22/2012 | 18:19:57 | | | | | Start Pumping Spacer | |
| 05/22/2012 | 18:19:57 | 50 | 3.2 | 8.47 | 5.8 | | |
| 05/22/2012 | 18:19:59 | | | | | 20 bbl Fresh Water | |
| 05/22/2012 | 18:19:59 | | | | | Returns | |
| 05/22/2012 | 18:19:59 | 37 | 3.0 | 8.52 | 5.9 | | |
| 05/22/2012 | 18:20:20 | 16 | 0.0 | 0.01 | 6.0 | | |
| 05/22/2012 | 18:22:20 | 29 | 25.0 | 0.00 | 53.3 | | |
| 05/22/2012 | 18:24:20 | 21 | 0.0 | 10.92 | 64.5 | | |
| 05/22/2012 | 18:25:06 | | | | | End Spacer | |
| 05/22/2012 | 18:25:06 | 170 | 4.9 | 12.86 | 66.6 | | |
| 05/22/2012 | 18:26:20 | 169 | 4.9 | 12.69 | 72.6 | | |
| 05/22/2012 | 18:27:04 | | | | | Start Cement Slurry | |
| 05/22/2012 | 18:27:04 | 181 | 5.1 | 12.53 | 76.2 | | |
| 05/22/2012 | 18:27:05 | | | | | Start Mixing Lead Slurry | |
| 05/22/2012 | 18:27:05 | 172 | 5.2 | 12.53 | 76.3 | | |
| 05/22/2012 | 18:27:07 | | | | | Wet Dry Samples | |
| 05/22/2012 | 18:27:07 | 178 | 5.2 | 12.53 | 76.4 | | |
| 05/22/2012 | 18:27:08 | | | | | Test =12.5 ppg | |
| 05/22/2012 | 18:27:08 | | | | | Good Returns | |
| 05/22/2012 | 18:27:08 | 172 | 5.3 | 12.52 | 76.5 | | |
| 05/22/2012 | 18:28:20 | 168 | 5.3 | 12.45 | 82.9 | | |
| 05/22/2012 | 18:30:20 | 167 | 5.4 | 12.39 | 93.5 | | |
| 05/22/2012 | 18:32:20 | 168 | 5.3 | 12.44 | 104.0 | | |
| 05/22/2012 | 18:34:20 | 154 | 5.2 | 12.52 | 114.6 | | |
| 05/22/2012 | 18:36:20 | 161 | 5.3 | 12.45 | 125.1 | | |
| 05/22/2012 | 18:38:20 | 165 | 5.3 | 12.42 | 135.7 | | |
| 05/22/2012 | 18:38:32 | | | | | End Lead Slurry | |
| 05/22/2012 | 18:38:32 | 165 | 5.3 | 12.38 | 136.8 | | |
| 05/22/2012 | 18:39:47 | | | | | Start Mixing Scav Slurry | |
| 05/22/2012 | 18:39:47 | -5 | 0.0 | 25.00 | 141.4 | | |
| 05/22/2012 | 18:40:20 | 6 | 0.0 | 0.12 | 141.4 | | |
| 05/22/2012 | 18:42:20 | 8 | 0.0 | 12.75 | 144.4 | | |

| Well | | | Field | | Job Start | | Customer | | Job Number | |
|---------------|------------------------|-----------------------------|---------------------|-----------------|---------------|--------------------------|----------|--|------------|--|
| Federal 29-2B | | | Parachute | | May/22/2012 | | Encana | | C4HD-00276 | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | |
| 05/22/2012 | 18:43:53 | 175 | 4.6 | 15.72 | 145.6 | | | | | |
| 05/22/2012 | 18:43:55 | | | | | Start Mixing Tail Slurry | | | | |
| 05/22/2012 | 18:43:55 | 209 | 4.8 | 15.71 | 145.8 | | | | | |
| 05/22/2012 | 18:43:56 | | | | | Wet Dry Samples | | | | |
| 05/22/2012 | 18:43:56 | | | | | Test = 15.8 ppg | | | | |
| 05/22/2012 | 18:43:56 | | | | | Good Returns | | | | |
| 05/22/2012 | 18:43:56 | 223 | 4.8 | 15.71 | 145.9 | | | | | |
| 05/22/2012 | 18:44:20 | 267 | 5.2 | 15.73 | 147.9 | | | | | |
| 05/22/2012 | 18:46:20 | 291 | 5.2 | 15.82 | 158.4 | | | | | |
| 05/22/2012 | 18:48:20 | 281 | 5.2 | 15.80 | 168.9 | | | | | |
| 05/22/2012 | 18:48:53 | | | | | End Tail Slurry | | | | |
| 05/22/2012 | 18:48:53 | 281 | 5.3 | 15.68 | 171.8 | | | | | |
| 05/22/2012 | 18:48:58 | | | | | Drop Top Plug | | | | |
| 05/22/2012 | 18:48:58 | 260 | 5.3 | 15.66 | 172.2 | | | | | |
| 05/22/2012 | 18:48:59 | | | | | Start Displacement | | | | |
| 05/22/2012 | 18:48:59 | 260 | 5.3 | 15.68 | 172.3 | | | | | |
| 05/22/2012 | 18:49:00 | | | | | 79 bbl Fresh Water | | | | |
| 05/22/2012 | 18:49:00 | | | | | Good Returns | | | | |
| 05/22/2012 | 18:49:00 | 257 | 5.3 | 15.69 | 172.4 | | | | | |
| 05/22/2012 | 18:50:20 | 17 | 0.0 | 15.81 | 178.4 | | | | | |
| 05/22/2012 | 18:52:20 | 12 | 0.0 | 15.74 | 178.5 | | | | | |
| 05/22/2012 | 18:54:20 | 112 | 3.1 | 13.55 | 179.1 | | | | | |
| 05/22/2012 | 18:56:20 | 34 | 3.5 | 8.73 | 185.8 | | | | | |
| 05/22/2012 | 18:58:20 | 83 | 4.7 | 8.56 | 194.1 | | | | | |
| 05/22/2012 | 19:00:20 | 8 | 0.0 | 8.49 | 199.3 | | | | | |
| 05/22/2012 | 19:02:20 | 17 | 2.1 | 8.43 | 200.2 | | | | | |
| 05/22/2012 | 19:04:20 | 69 | 3.9 | 8.47 | 205.5 | | | | | |
| 05/22/2012 | 19:06:20 | 84 | 3.7 | 8.44 | 213.1 | | | | | |
| 05/22/2012 | 19:08:20 | 122 | 4.1 | 8.45 | 221.2 | | | | | |
| 05/22/2012 | 19:10:20 | 165 | 4.1 | 8.45 | 229.3 | | | | | |
| 05/22/2012 | 19:12:20 | 76 | 0.0 | 8.45 | 231.5 | | | | | |
| 05/22/2012 | 19:14:20 | 86 | 0.4 | 8.45 | 231.5 | | | | | |
| 05/22/2012 | 19:16:20 | 249 | 4.6 | 8.45 | 238.1 | | | | | |
| 05/22/2012 | 19:18:20 | 322 | 4.2 | 8.45 | 247.0 | | | | | |
| 05/22/2012 | 19:20:20 | 332 | 2.3 | 8.45 | 254.4 | | | | | |
| 05/22/2012 | 19:22:20 | 377 | 2.3 | 8.45 | 259.0 | | | | | |
| 05/22/2012 | 19:23:24 | | | | | Bump Top Plug | | | | |
| 05/22/2012 | 19:23:24 | 994 | 0.0 | 8.45 | 260.1 | | | | | |
| 05/22/2012 | 19:24:20 | 994 | 0.0 | 8.45 | 260.1 | | | | | |
| 05/22/2012 | 19:26:20 | 994 | 0.0 | 8.45 | 260.1 | | | | | |
| 05/22/2012 | 19:28:20 | 7 | 0.0 | 8.45 | 260.2 | | | | | |
| 05/22/2012 | 19:29:27 | | | | | End Displacement | | | | |
| 05/22/2012 | 19:29:27 | 7 | 0.0 | 8.45 | 260.2 | | | | | |
| 05/22/2012 | 19:29:29 | | | | | Bleed Off Check Floats | | | | |
| 05/22/2012 | 19:29:29 | | | | | Floats Held | | | | |
| 05/22/2012 | 19:29:29 | | | | | 1/2 bbl Back | | | | |
| 05/22/2012 | 19:29:29 | | | | | 65 bbl Cement To Surface | | | | |
| 05/22/2012 | 19:29:29 | 7 | 0.0 | 8.45 | 260.2 | | | | | |
| 05/22/2012 | 19:29:30 | | | | | Rig Down | | | | |
| 05/22/2012 | 19:29:30 | 7 | 0.0 | 8.45 | 260.2 | | | | | |
| 05/22/2012 | 19:29:31 | | | | | End Job | | | | |
| 05/22/2012 | 19:29:31 | 7 | 0.0 | 8.45 | 260.2 | | | | | |

| | | | | |
|------------------------------|---------------------------|---------------------------------|---------------------------|---------------------------------|
| Well Federal 29-2B | Field Parachute | Job Start May/22/2012 | Customer Encana | Job Number C4HD-00276 |
|------------------------------|---------------------------|---------------------------------|---------------------------|---------------------------------|

Post Job Summary

| | | | | | | | | |
|--|------------|------------------------|--|---------------------------|--|--|--|--|
| Average Pump Rates, bbl/min | | | | | Volume of Fluid Injected, bbl | | | |
| Slurry 2.3 | N2 | Mud 0.0 | Maximum Rate 25.0 | Total Slurry 260.2 | Mud 0.0 | Spacer 66.5 | N2 | |
| Treating Pressure Summary, psi | | | | | Breakdown Fluid | | | |
| Maximum 2707 | Final 7 | Average 230 | Bump Plug to 1000 | Breakdown | Type | Volume | Density | |
| Avg. N2 Percent | | Designed Slurry Volume | Displacement 87.9 bbl | Mix Water Temp 62 degF | Cement Circulated to Surface? <input checked="" type="checkbox"/> | Volume | | |
| | | | | | Washed Thru Perfs <input type="checkbox"/> | To | | |
| Customer or Authorized Representative Jeffery Johnson | | | Schlumberger Supervisor Jordan Moreland | | | Circulation Lost <input type="checkbox"/> | Job Completed <input checked="" type="checkbox"/> | |
| | | | | | - | | - | |



Service Quality Evaluation

| | |
|----------------------|---------------|
| Client: | Encana |
| Field: | Parachute |
| Rig: | Nabors M11 |
| Well: | Federal 29-2B |
| Service Line: | Cementing |
| Job Type: | 9 5/8 Surface |

| | |
|-------------------------------|-----------------|
| Service Order #: | |
| Date: | May/22/2012 |
| 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 | <input checked="" type="checkbox"/> | no | <input type="checkbox"/> | 5 |
| 1b | Free of environmental spill or non-compliant discharge | 5 | yes | <input checked="" type="checkbox"/> | no | <input type="checkbox"/> | 5 |
| 1c | Free of RIRs | 5 | yes | <input checked="" type="checkbox"/> | no | <input type="checkbox"/> | 5 |
| 1d | Wellsite left clean | 4 | yes | <input checked="" type="checkbox"/> | no | <input type="checkbox"/> | 4 |
| Sub-total | | | | | | | 100% |

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

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

| 4 | Evaluation | | | | |
|-----------|---|----|---|-----------------------------|------|
| 4a | Main job objective achieved with no consequential non-productive time | 10 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 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: |