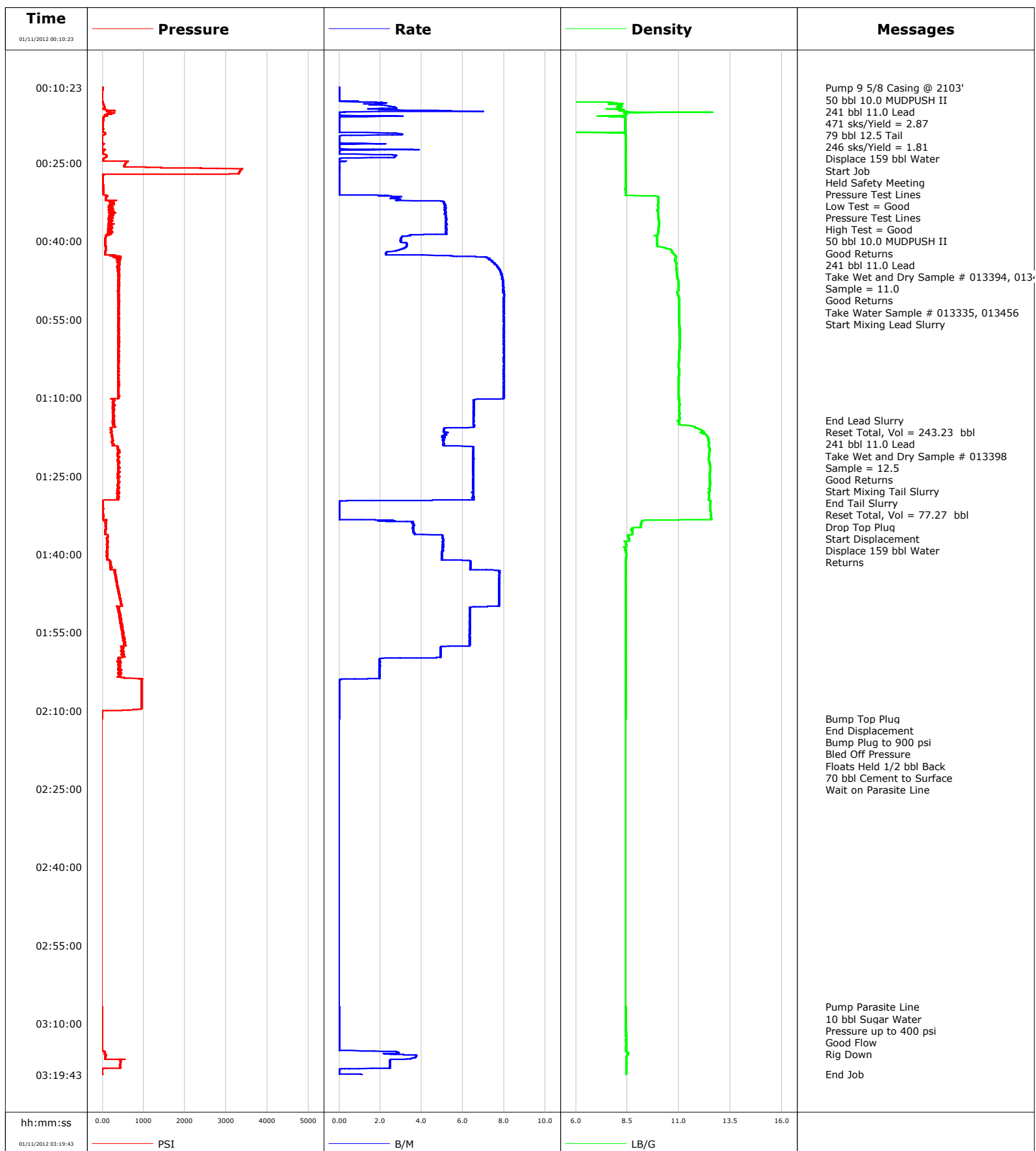


Well DW 8609F-28
Field N PARACHUTE
Engineer Tom Leduc
Country United States

Client ENCANA
SIR No.
Job Type 9 5/8 SURFACE
Job Date 01-10-2012



Cementing Service Report

| | | | | Customer | | Job Number | |
|-----------------------------------------------------------|------------------------|----------------------------------------------------------------------------|-------------------------------------|---------------------------|-----------------------------------------|---------------------------|----------------------------|
| | | | | ENCANA | | BQMF-00621 | |
| Well DW 8609F-28 DW 8609F-28 | | | Location (legal) N PARACHUTE | | Schlumberger Location Grand Junction | | Job Start Jan/10/2012 |
| Field N PARACHUTE | | Formation Name/Type Shale | | Deviation 0 deg | Bit Size 14.8 in | Well MD 2103.0 ft | Well TVD 2103.0 ft |
| County GARFIELD | | State/Province Colorado | | BHP | BHST | BHCT | Pore Press. Gradient |
| Well Master 0631292205 | | API/UWI | | | | | |
| Rig Name PATTERSON 308 | | Drilled For Gas | Service Via Land | Casing/Liner | | | |
| | | | | Depth, ft | Size, in | Weight, lb/ft | Grade |
| Offshore Zone | | Well Class New | Well Type Development | 2103.0 | 9.630 | 36.0 | K55 |
| | | | | 0.0 | 0.000 | 0.0 | |
| Drilling Fluid Type Bentonite | | Max. Density 9.20 lb/gal | Plastic Viscosity 45.000 cP | Tubing/Drill Pipe | | | |
| | | | | Depth, | Size, | Weight, | Grade |
| Service Line Cementing | | Job Type 9 5/8 SURFACE | | | | | |
| | | | | | | | |
| Max. Allowed Tub. Press 3000 psi | | Max. Allowed Ann. Press 500 psi | WH Connection Single Cement head | Perforations/Open Hole | | | |
| | | | | Top, | Bottom, | | No. of Shots |
| | | | | | | | Total Interval |
| | | | | | | | Diameter |
| | | | | | | | |
| | | | | Treat Down Casing | Displacement 159.0 bbl | Packer Type | Packer Depth |
| | | | | Tubing Vol. | Casing Vol. 160.0 bbl | Annular Vol. 257.0 bbl | Openhole Vol. 421.0 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 1041 psi | | | | Shoe Type Float | | Squeeze Type | |
| Pipe Rotated <input type="checkbox"/> | | Pipe Reciprocated <input type="checkbox"/> | | Shoe Depth 2103.0 ft | | Tool Type | |
| No. Centralizers | | Top Plugs | Bottom Plugs | Stage Tool Type | | Tool Depth | |
| Cement Head Type Single | | | | Stage Tool Depth | | Tail Pipe Size | |
| Job Scheduled For Jan/10/2012 23:00 | | Arrived on Location Jan/10/2012 23:00 | Leave Location Jan/11/2012 05:00 | Collar Type Float | | Tail Pipe Depth | |
| | | | | Collar Depth 2056.0 ft | | Sqz. Total Vol. | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | |
| 01/11/2012 | 00:10:23 | -0 | 0.0 | 0.42 | 0.0 | | |
| 01/11/2012 | 00:10:29 | | | | | Pump 9 5/8 Casing @ 2103' | |
| 01/11/2012 | 00:10:29 | | | | | 50 bbl 10.0 MUDPUSH II | |
| 01/11/2012 | 00:10:29 | | | | | 241 bbl 11.0 Lead | |
| 01/11/2012 | 00:10:29 | 0 | 0.0 | 0.42 | 0.0 | | |
| 01/11/2012 | 00:10:30 | | | | | 471 sks/Yield = 2.87 | |
| 01/11/2012 | 00:10:30 | | | | | 79 bbl 12.5 Tail | |
| 01/11/2012 | 00:10:30 | | | | | 246 sks/Yield = 1.81 | |
| 01/11/2012 | 00:10:30 | | | | | Displace 159 bbl Water | |
| 01/11/2012 | 00:10:30 | 1 | 0.0 | 0.42 | 0.0 | | |
| 01/11/2012 | 00:10:32 | | | | | Start Job | |
| 01/11/2012 | 00:10:32 | 0 | 0.0 | 0.42 | 0.0 | | |
| 01/11/2012 | 00:10:33 | | | | | Held Safety Meeting | |
| 01/11/2012 | 00:10:33 | 0 | 0.0 | 0.42 | 0.0 | | |
| 01/11/2012 | 00:10:34 | | | | | Pressure Test Lines | |
| 01/11/2012 | 00:10:34 | 0 | 0.0 | 0.42 | 0.0 | | |
| 01/11/2012 | 00:10:35 | | | | | Low Test = Good | |
| 01/11/2012 | 00:10:35 | 0 | 0.0 | 0.42 | 0.0 | | |
| 01/11/2012 | 00:10:36 | | | | | Pressure Test Lines | |
| 01/11/2012 | 00:10:36 | 0 | 0.0 | 0.42 | 0.0 | | |
| 01/11/2012 | 00:10:37 | | | | | High Test = Good | |

| Well DW 8609F-28 DW 8609F-28 | | | Field N PARACHUTE | | Job Start Jan/10/2012 | | Customer ENCANA | | Job Number BQMF-00621 | |
|---------------------------------|------------------------|-----------------------------|----------------------|-----------------|--------------------------|------------------------------------------|--------------------|--|--------------------------|--|
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | |
| 01/11/2012 | 00:10:38 | | | | | 50 bbl 10.0 MUDPUSH II | | | | |
| 01/11/2012 | 00:10:38 | 0 | 0.0 | 0.42 | 0.0 | | | | | |
| 01/11/2012 | 00:10:39 | | | | | Good Returns | | | | |
| 01/11/2012 | 00:10:39 | 0 | 0.0 | 0.42 | 0.0 | | | | | |
| 01/11/2012 | 00:12:03 | -1 | 0.0 | 0.42 | 0.0 | | | | | |
| 01/11/2012 | 00:13:43 | 24 | 2.0 | 7.60 | 1.0 | | | | | |
| 01/11/2012 | 00:15:23 | 290 | 0.0 | 8.32 | 4.9 | | | | | |
| 01/11/2012 | 00:17:03 | 5 | 0.0 | 8.40 | 5.4 | | | | | |
| 01/11/2012 | 00:18:43 | 1 | 0.0 | 8.40 | 5.4 | | | | | |
| 01/11/2012 | 00:20:23 | -2 | 0.0 | 8.42 | 6.8 | | | | | |
| 01/11/2012 | 00:22:03 | -5 | 0.0 | 8.41 | 7.0 | | | | | |
| 01/11/2012 | 00:23:43 | 96 | 2.7 | 8.41 | 8.7 | | | | | |
| 01/11/2012 | 00:25:23 | 538 | 0.0 | 8.41 | 9.4 | | | | | |
| 01/11/2012 | 00:27:03 | 3298 | 0.0 | 8.41 | 9.4 | | | | | |
| 01/11/2012 | 00:28:43 | 9 | 0.0 | 8.41 | 9.4 | | | | | |
| 01/11/2012 | 00:30:23 | 17 | 0.0 | 8.40 | 9.4 | | | | | |
| 01/11/2012 | 00:32:03 | 80 | 2.9 | 10.00 | 11.9 | | | | | |
| 01/11/2012 | 00:33:43 | 227 | 5.1 | 9.99 | 20.1 | | | | | |
| 01/11/2012 | 00:35:23 | 200 | 5.2 | 10.00 | 28.7 | | | | | |
| 01/11/2012 | 00:37:03 | 212 | 5.2 | 10.03 | 37.3 | | | | | |
| 01/11/2012 | 00:38:43 | 94 | 3.7 | 9.97 | 45.9 | | | | | |
| 01/11/2012 | 00:40:06 | | | | | 241 bbl 11.0 Lead | | | | |
| 01/11/2012 | 00:40:06 | | | | | Take Wet and Dry Sample # 013394, 013419 | | | | |
| 01/11/2012 | 00:40:06 | | | | | Sample = 11.0 | | | | |
| 01/11/2012 | 00:40:06 | | | | | Good Returns | | | | |
| 01/11/2012 | 00:40:06 | 64 | 3.0 | 9.95 | 50.2 | | | | | |
| 01/11/2012 | 00:40:07 | | | | | Take Water Sample # 013335, 013456 | | | | |
| 01/11/2012 | 00:40:07 | 63 | 3.0 | 9.95 | 50.3 | | | | | |
| 01/11/2012 | 00:40:23 | 71 | 3.3 | 9.95 | 51.1 | | | | | |
| 01/11/2012 | 00:42:03 | 62 | 2.3 | 10.66 | 56.2 | | | | | |
| 01/11/2012 | 00:42:49 | | | | | Start Mixing Lead Slurry | | | | |
| 01/11/2012 | 00:42:49 | 246 | 5.5 | 10.85 | 58.5 | | | | | |
| 01/11/2012 | 00:43:43 | 374 | 7.4 | 10.81 | 64.9 | | | | | |
| 01/11/2012 | 00:45:23 | 408 | 7.8 | 10.88 | 77.6 | | | | | |
| 01/11/2012 | 00:47:03 | 402 | 7.9 | 10.94 | 90.7 | | | | | |
| 01/11/2012 | 00:48:43 | 384 | 8.0 | 10.98 | 103.9 | | | | | |
| 01/11/2012 | 00:50:23 | 392 | 8.0 | 10.96 | 117.2 | | | | | |
| 01/11/2012 | 00:52:03 | 384 | 8.0 | 11.01 | 130.5 | | | | | |
| 01/11/2012 | 00:53:43 | 379 | 8.0 | 11.02 | 143.8 | | | | | |
| 01/11/2012 | 00:55:23 | 384 | 8.0 | 11.02 | 157.1 | | | | | |
| 01/11/2012 | 00:57:03 | 391 | 8.0 | 11.03 | 170.4 | | | | | |
| 01/11/2012 | 00:58:43 | 394 | 8.0 | 11.03 | 183.7 | | | | | |
| 01/11/2012 | 01:00:23 | 383 | 8.0 | 11.03 | 197.0 | | | | | |
| 01/11/2012 | 01:02:03 | 385 | 8.0 | 11.01 | 210.3 | | | | | |
| 01/11/2012 | 01:03:43 | 391 | 8.0 | 11.00 | 223.6 | | | | | |
| 01/11/2012 | 01:05:23 | 389 | 8.0 | 11.00 | 236.9 | | | | | |
| 01/11/2012 | 01:07:03 | 383 | 8.0 | 10.99 | 250.2 | | | | | |
| 01/11/2012 | 01:08:43 | 391 | 8.0 | 10.99 | 263.5 | | | | | |
| 01/11/2012 | 01:10:23 | 262 | 6.5 | 11.00 | 276.6 | | | | | |
| 01/11/2012 | 01:12:03 | 270 | 6.5 | 11.01 | 287.5 | | | | | |
| 01/11/2012 | 01:13:43 | 253 | 6.5 | 11.03 | 298.3 | | | | | |
| 01/11/2012 | 01:14:17 | | | | | End Lead Slurry | | | | |
| 01/11/2012 | 01:14:17 | 264 | 6.5 | 11.01 | 302.0 | | | | | |
| 01/11/2012 | 01:14:18 | | | | | Reset Total, Vol = 243.23 bbl | | | | |

| Well | | | Field | | Job Start | | Customer | | Job Number | |
|-------------------------|------------------------|-----------------------------|---------------------|-----------------|---------------|----------------------------------|----------|--|------------|--|
| DW 8609F-28 DW 8609F-28 | | | N PARACHUTE | | Jan/10/2012 | | ENCANA | | BQMF-00621 | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | |
| 01/11/2012 | 01:14:18 | | | | | Take Wet and Dry Sample # 013398 | | | | |
| 01/11/2012 | 01:14:18 | 268 | 6.5 | 11.01 | 302.1 | | | | | |
| 01/11/2012 | 01:14:19 | | | | | Sample = 12.5 | | | | |
| 01/11/2012 | 01:14:19 | | | | | Good Returns | | | | |
| 01/11/2012 | 01:14:19 | 245 | 6.5 | 11.01 | 302.2 | | | | | |
| 01/11/2012 | 01:15:23 | 275 | 6.5 | 11.60 | 309.2 | | | | | |
| 01/11/2012 | 01:17:03 | 234 | 5.1 | 12.32 | 318.2 | | | | | |
| 01/11/2012 | 01:17:04 | | | | | Start Mixing Tail Slurry | | | | |
| 01/11/2012 | 01:17:04 | 234 | 5.1 | 12.32 | 318.3 | | | | | |
| 01/11/2012 | 01:18:43 | 244 | 5.1 | 12.45 | 326.6 | | | | | |
| 01/11/2012 | 01:20:23 | 389 | 6.5 | 12.48 | 336.7 | | | | | |
| 01/11/2012 | 01:22:03 | 367 | 6.5 | 12.46 | 347.6 | | | | | |
| 01/11/2012 | 01:23:43 | 381 | 6.5 | 12.52 | 358.4 | | | | | |
| 01/11/2012 | 01:25:23 | 392 | 6.5 | 12.50 | 369.2 | | | | | |
| 01/11/2012 | 01:27:03 | 389 | 6.5 | 12.49 | 380.1 | | | | | |
| 01/11/2012 | 01:27:57 | | | | | End Tail Slurry | | | | |
| 01/11/2012 | 01:27:57 | 377 | 6.5 | 12.48 | 385.9 | | | | | |
| 01/11/2012 | 01:28:00 | | | | | Reset Total, Vol = 77.27 bbl | | | | |
| 01/11/2012 | 01:28:00 | 370 | 6.5 | 12.48 | 386.2 | | | | | |
| 01/11/2012 | 01:28:01 | | | | | Drop Top Plug | | | | |
| 01/11/2012 | 01:28:01 | | | | | Start Displacement | | | | |
| 01/11/2012 | 01:28:01 | 370 | 6.5 | 12.48 | 386.4 | | | | | |
| 01/11/2012 | 01:28:02 | | | | | Displace 159 bbl Water | | | | |
| 01/11/2012 | 01:28:02 | | | | | Returns | | | | |
| 01/11/2012 | 01:28:02 | 389 | 6.5 | 12.47 | 386.5 | | | | | |
| 01/11/2012 | 01:28:43 | 365 | 6.5 | 12.47 | 390.9 | | | | | |
| 01/11/2012 | 01:30:23 | 6 | 0.0 | 12.51 | 397.0 | | | | | |
| 01/11/2012 | 01:32:03 | 7 | 0.0 | 12.53 | 397.0 | | | | | |
| 01/11/2012 | 01:33:43 | 81 | 3.3 | 9.20 | 397.8 | | | | | |
| 01/11/2012 | 01:35:23 | 64 | 3.6 | 8.70 | 403.8 | | | | | |
| 01/11/2012 | 01:37:03 | 122 | 5.0 | 8.57 | 411.0 | | | | | |
| 01/11/2012 | 01:38:43 | 123 | 5.0 | 8.37 | 419.4 | | | | | |
| 01/11/2012 | 01:40:23 | 105 | 5.0 | 8.43 | 427.7 | | | | | |
| 01/11/2012 | 01:42:03 | 196 | 6.4 | 8.42 | 437.3 | | | | | |
| 01/11/2012 | 01:43:43 | 306 | 7.8 | 8.42 | 448.9 | | | | | |
| 01/11/2012 | 01:45:23 | 343 | 7.8 | 8.42 | 461.8 | | | | | |
| 01/11/2012 | 01:47:03 | 391 | 7.8 | 8.42 | 474.8 | | | | | |
| 01/11/2012 | 01:48:43 | 427 | 7.8 | 8.42 | 487.7 | | | | | |
| 01/11/2012 | 01:50:23 | 379 | 6.3 | 8.42 | 500.1 | | | | | |
| 01/11/2012 | 01:52:03 | 413 | 6.3 | 8.41 | 510.7 | | | | | |
| 01/11/2012 | 01:53:43 | 480 | 6.3 | 8.41 | 521.3 | | | | | |
| 01/11/2012 | 01:55:23 | 518 | 6.3 | 8.41 | 531.8 | | | | | |
| 01/11/2012 | 01:57:03 | 539 | 6.3 | 8.41 | 542.4 | | | | | |
| 01/11/2012 | 01:58:43 | 519 | 4.9 | 8.41 | 551.4 | | | | | |
| 01/11/2012 | 02:00:23 | 363 | 2.0 | 8.41 | 558.0 | | | | | |
| 01/11/2012 | 02:02:03 | 423 | 2.0 | 8.41 | 561.3 | | | | | |
| 01/11/2012 | 02:03:43 | 539 | 2.0 | 8.41 | 564.6 | | | | | |
| 01/11/2012 | 02:05:23 | 945 | 0.0 | 8.42 | 565.0 | | | | | |
| 01/11/2012 | 02:07:03 | 943 | 0.0 | 8.42 | 565.0 | | | | | |
| 01/11/2012 | 02:08:43 | 943 | 0.0 | 8.42 | 565.0 | | | | | |
| 01/11/2012 | 02:10:23 | -3 | 0.0 | 8.42 | 565.0 | | | | | |
| 01/11/2012 | 02:11:30 | | | | | Bump Top Plug | | | | |
| 01/11/2012 | 02:11:30 | -3 | 0.0 | 8.42 | 565.0 | | | | | |
| 01/11/2012 | 02:11:31 | | | | | End Displacement | | | | |

| Well | | | Field | | Job Start | Customer | Job Number |
|-------------------------|------------------|-----------------------|---------------|--------------|-------------|--------------------------|------------|
| DW 8609F-28 DW 8609F-28 | | | N PARACHUTE | | Jan/10/2012 | ENCANA | BQMF-00621 |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | |
| 01/11/2012 | 02:11:32 | | | | | Bump Plug to 900 psi | |
| 01/11/2012 | 02:11:32 | | | | | Bled Off Pressure | |
| 01/11/2012 | 02:11:32 | | | | | Floats Held 1/2 bbl Back | |
| 01/11/2012 | 02:11:32 | | | | | 70 bbl Cement to Surface | |
| 01/11/2012 | 02:11:32 | | | | | Wait on Parasite Line | |
| 01/11/2012 | 02:11:32 | -3 | 0.0 | 8.42 | 565.0 | | |
| 01/11/2012 | 03:06:43 | | | | | Pump Parasite Line | |
| 01/11/2012 | 03:06:43 | | | | | 10 bbl Sugar Water | |
| 01/11/2012 | 03:06:43 | | | | | Pressure up to 400 psi | |
| 01/11/2012 | 03:06:43 | -3 | 0.0 | 8.43 | 565.0 | | |
| 01/11/2012 | 03:06:44 | | | | | Good Flow | |
| 01/11/2012 | 03:06:44 | | | | | Rig Down | |
| 01/11/2012 | 03:06:44 | -2 | 0.0 | 8.43 | 565.0 | | |
| 01/11/2012 | 03:07:03 | -6 | 0.0 | 8.43 | 565.0 | | |
| 01/11/2012 | 03:08:43 | -5 | 0.0 | 8.43 | 565.0 | | |
| 01/11/2012 | 03:10:23 | -5 | 0.0 | 8.43 | 565.0 | | |
| 01/11/2012 | 03:12:03 | -5 | 0.0 | 8.43 | 565.0 | | |
| 01/11/2012 | 03:13:43 | -5 | 0.0 | 8.43 | 565.0 | | |
| 01/11/2012 | 03:15:23 | 59 | 2.8 | 8.44 | 565.4 | | |
| 01/11/2012 | 03:17:03 | 428 | 2.5 | 8.44 | 570.6 | | |
| 01/11/2012 | 03:18:43 | 0 | 0.0 | 8.45 | 574.4 | | |
| 01/11/2012 | 03:19:41 | | | | | End Job | |

Post Job Summary

| | | | | | | | | |
|--------------------------------------------------|-------------------------------------|----------------|--------------------------------------|---------------------------|----------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------|--|
| Average Pump Rates, bbl/min | | | | | Volume of Fluid Injected, bbl | | | |
| Slurry 5.7 | N2 | Mud 0.0 | Maximum Rate 8.0 | Total Slurry 574.5 | Mud 0.0 | Spacer 58.5 | N2 | |
| Treating Pressure Summary, psi | | | | | Breakdown Fluid | | | |
| Maximum 3392 | Final 0 | Average 332 | Bump Plug to 900 | Breakdown | Type | Volume | Density | |
| Avg. N2 Percent | Designed Slurry Volume 320.0 bbl | | Displacement 178.7 bbl | Mix Water Temp 60 degF | Cement Circulated to Surface? <input checked="" type="checkbox"/> | Volume | | |
| | | | | | Washed Thru Perfs <input type="checkbox"/> | To | | |
| Customer or Authorized Representative IRA COX | | | Schlumberger Supervisor Tom Leduc | | | Circulation Lost <input type="checkbox"/> | Job Completed <input checked="" type="checkbox"/> | |
| | | | | | | - | - | |