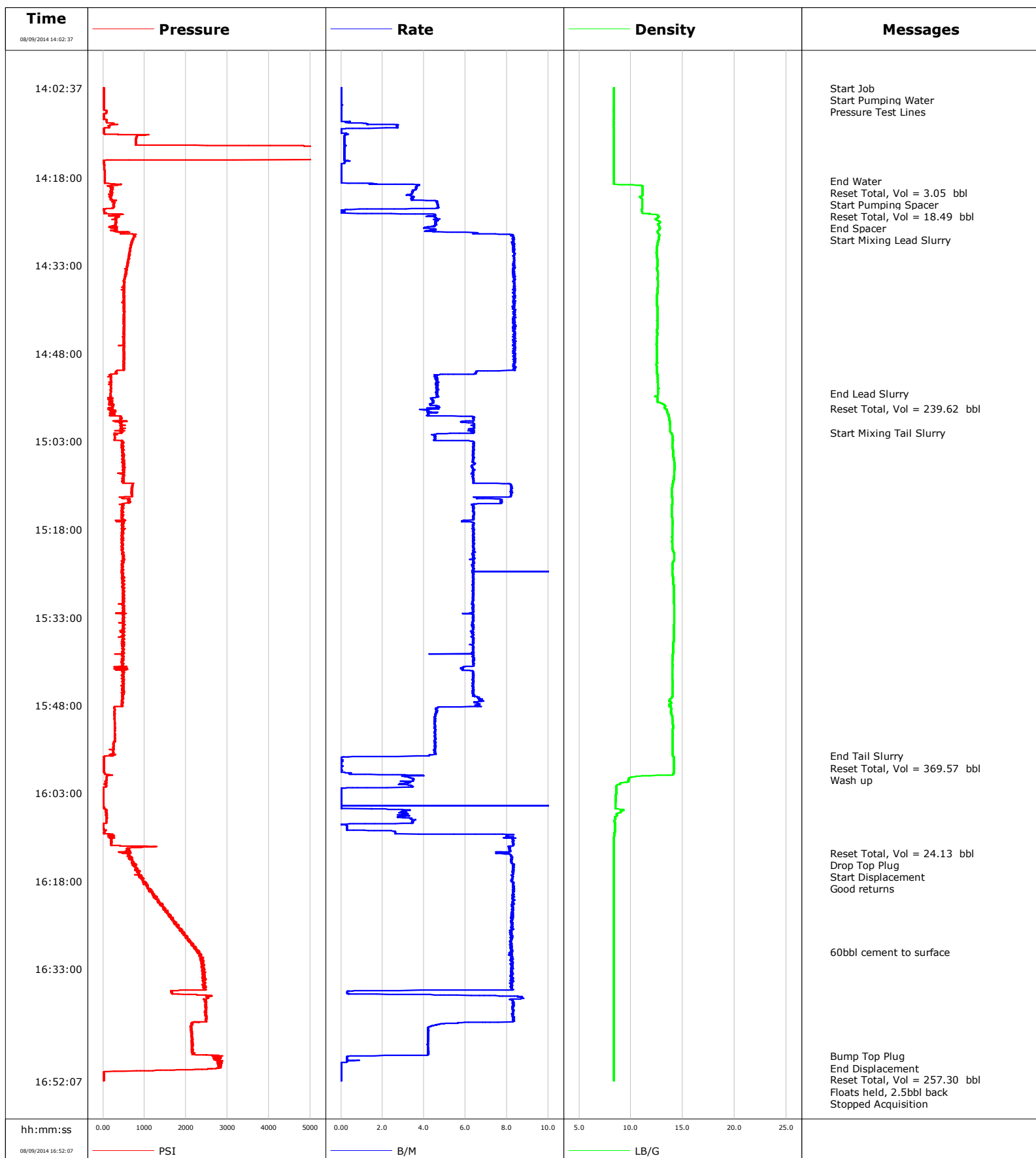


Well Hiner 36NB-23W
Field Podjom-Mikhaylovskoe
Engineer Michael Simon/ Morrow
Country United States

Client Extraction
SIR No. D2IK-00070
Job Type 5 1/2 Production
Job Date 08-09-2014

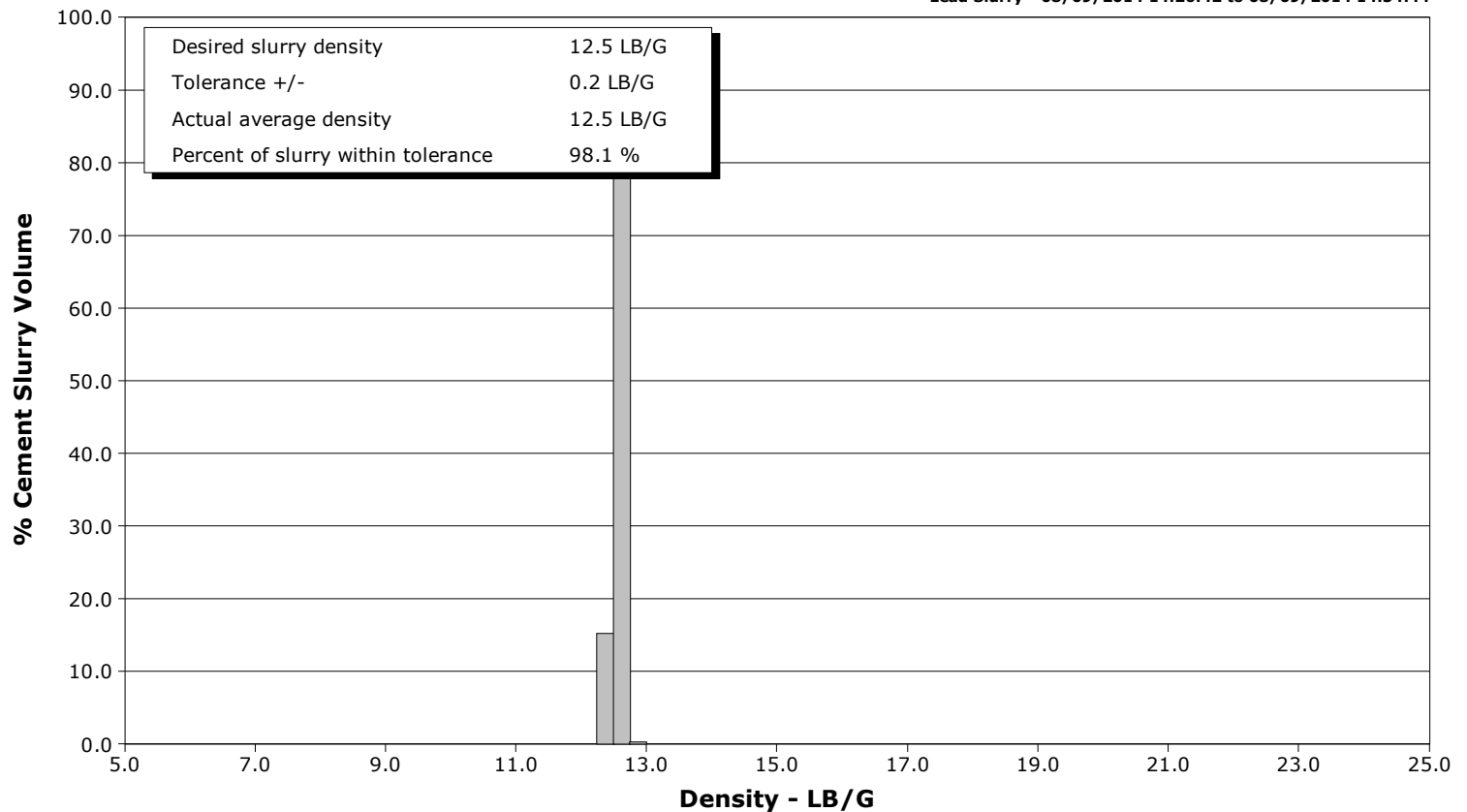


Schlumberger Cementing Qa/Qc Density Report

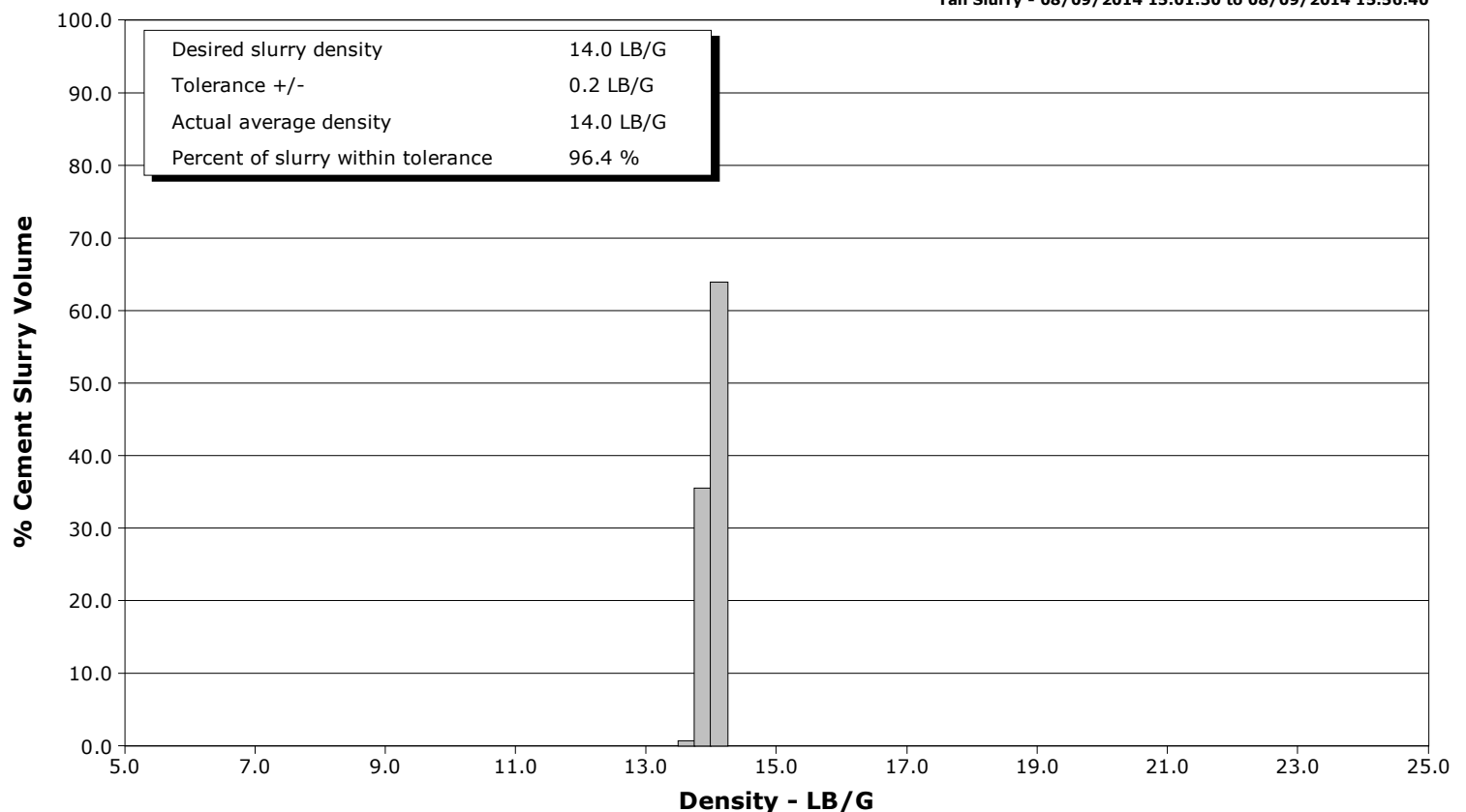
Well Hiner 36NB-23W
Field Podjom-Mikhaylovskoe
Engineer Michael Simon/ Morrow
Country United States

Client Extraction
SIR No. D2IK-00070
Job Type 5 1/2 Production
Job Date 08-09-2014

Lead Slurry - 08/09/2014 14:26:42 to 08/09/2014 14:54:44



Tail Slurry - 08/09/2014 15:01:30 to 08/09/2014 15:56:40





Cementing Service Report

| | | | | | | | | | | |
|---|------------------------|--|------------------------------|-------------------------------------|---------------------------------------|-----------------------------|--------------------------|---------|-----------------|----------------|
| | | | | Customer Extraction | | Job Number D2IK-00070 | | | | |
| Well Hiner 36NB-23W 36NB-23W | | | Location (legal) Cheyenne | | Schlumberger Location Rock Springs | | Job Start Aug/09/2014 | | | |
| Field Podjom-Mikhaylovskoe | | Formation Name/Type | | Deviation | Bit Size 8.8 in | Well MD 11630.0 ft | Well TVD | | | |
| County Weld | | State/Province Colorado | | BHP | BHST 210 degF | BHCT 206 degF | Pore Press. Gradient | | | |
| Well Master 0631573164 | | API/UWI | | | | | | | | |
| Rig Name Xtreme 7 | | Drilled For Oil & Gas | | Service Via Land | | Casing/Liner | | | | |
| | | | | Depth, ft | Size, in | Weight, lb/ft | Grade | Thread | | |
| Offshore Zone | | Well Class New | | Well Type Development | | 11630.0 | 5.500 | 20.0 | P105 | BUTT |
| | | | | 0.0 | 0.000 | 0.0 | | | | |
| Drilling Fluid Type | | Max. Density | | Plastic Viscosity 10.500 cP | | Tubing/Drill Pipe | | | | |
| | | | | | | Depth, | Size, | Weight, | Grade | Thread |
| Service Line Cementing | | Job Type 5 1/2 Production | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Max. Allowed Tub. Press 5000 psi | | Max. Allowed Ann. Press | | WH Connection Single Cement head | | Perforations/Open Hole | | | | |
| | | | | | | Top, | Bottom, | | No. of Shots | Total Interval |
| Service Instructions | | | | | | | | | | Diameter |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Treat Down Casing | | Displacement 257.0 bbl | | Packer Type | | Packer Depth | | | | |
| Tubing Vol. | | Casing Vol. 257.5 bbl | | Annular Vol. 526.0 bbl | | Openhole Vol. 787.0 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 9776 psi | | Shoe Type Float | | Squeeze Type | | | | | | |
| Pipe Rotated <input type="checkbox"/> | | Pipe Reciprocated <input type="checkbox"/> | | Shoe Depth 11630.0 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 Aug/09/2014 | | Arrived on Location Aug/09/2014 | | Leave Location Aug/09/2014 | | Collar Type Float | | | Tail Pipe Depth | |
| | | | | | | Collar Depth 11567.9 ft | | | Sqz. Total Vol. | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | |
| 08/09/2014 | 02:00:00 | | | | | 60bbl cement to surface | | | | |
| 08/09/2014 | 14:00:50 | | | | | Started Acquisition | | | | |
| 08/09/2014 | 14:02:37 | 14 | 0.0 | 8.34 | 0.0 | | | | | |
| 08/09/2014 | 14:02:38 | | | | | Start Job | | | | |
| 08/09/2014 | 14:02:38 | 15 | 0.0 | 8.34 | 0.0 | | | | | |
| 08/09/2014 | 14:02:42 | | | | | Start Pumping Water | | | | |
| 08/09/2014 | 14:02:42 | 15 | 0.0 | 8.34 | 0.0 | | | | | |
| 08/09/2014 | 14:02:43 | | | | | Pressure Test Lines | | | | |
| 08/09/2014 | 14:02:43 | 15 | 0.0 | 8.34 | 0.0 | | | | | |
| 08/09/2014 | 14:03:00 | 15 | 0.0 | 8.34 | 0.0 | | | | | |
| 08/09/2014 | 14:06:00 | 16 | 0.0 | 8.33 | 0.0 | | | | | |
| 08/09/2014 | 14:09:00 | 222 | 2.7 | 8.33 | 0.6 | | | | | |
| 08/09/2014 | 14:12:00 | 792 | 0.2 | 8.34 | 2.4 | | | | | |
| 08/09/2014 | 14:15:00 | 133 | 0.2 | 8.34 | 2.9 | | | | | |
| 08/09/2014 | 14:18:00 | 38 | 0.0 | 8.33 | 3.1 | | | | | |
| 08/09/2014 | 14:18:32 | | | | | End Water | | | | |
| 08/09/2014 | 14:18:32 | 39 | 0.0 | 8.34 | 3.1 | | | | | |
| 08/09/2014 | 14:18:34 | | | | | Reset Total, Vol = 3.05 bbl | | | | |
| 08/09/2014 | 14:18:34 | 39 | 0.0 | 8.34 | 3.1 | | | | | |
| 08/09/2014 | 14:18:39 | | | | | Start Pumping Spacer | | | | |
| 08/09/2014 | 14:18:39 | 39 | 0.0 | 8.33 | 3.1 | | | | | |

| Well | | | Field | | Job Start | | Customer | | Job Number | |
|-------------------------|------------------------|-----------------------------|----------------------|-----------------|---------------|-------------------------------|------------|--|------------|--|
| Hiner 36NB-23W 36NB-23W | | | Podjom-Mikhaylovskoe | | Aug/09/2014 | | Extraction | | D2IK-00070 | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | |
| 08/09/2014 | 14:24:00 | 27 | 0.0 | 11.06 | 19.8 | | | | | |
| 08/09/2014 | 14:24:32 | | | | | Reset Total, Vol = 18.49 bbl | | | | |
| 08/09/2014 | 14:24:32 | 319 | 4.3 | 12.63 | 21.5 | | | | | |
| 08/09/2014 | 14:24:35 | | | | | End Spacer | | | | |
| 08/09/2014 | 14:24:35 | 316 | 4.1 | 12.66 | 21.8 | | | | | |
| 08/09/2014 | 14:26:42 | | | | | Start Mixing Lead Slurry | | | | |
| 08/09/2014 | 14:26:42 | 334 | 4.3 | 12.76 | 31.3 | | | | | |
| 08/09/2014 | 14:27:00 | 259 | 4.5 | 12.65 | 32.6 | | | | | |
| 08/09/2014 | 14:30:00 | 651 | 8.3 | 12.50 | 55.7 | | | | | |
| 08/09/2014 | 14:33:00 | 587 | 8.3 | 12.55 | 80.7 | | | | | |
| 08/09/2014 | 14:36:00 | 521 | 8.4 | 12.61 | 105.8 | | | | | |
| 08/09/2014 | 14:39:00 | 503 | 8.4 | 12.50 | 130.8 | | | | | |
| 08/09/2014 | 14:42:00 | 504 | 8.4 | 12.54 | 155.9 | | | | | |
| 08/09/2014 | 14:45:00 | 518 | 8.4 | 12.52 | 180.9 | | | | | |
| 08/09/2014 | 14:48:00 | 515 | 8.4 | 12.51 | 206.0 | | | | | |
| 08/09/2014 | 14:51:00 | 332 | 6.6 | 12.52 | 231.0 | | | | | |
| 08/09/2014 | 14:54:00 | 191 | 4.6 | 12.67 | 245.9 | | | | | |
| 08/09/2014 | 14:54:44 | | | | | End Lead Slurry | | | | |
| 08/09/2014 | 14:54:44 | 188 | 4.6 | 12.61 | 249.3 | | | | | |
| 08/09/2014 | 14:57:00 | 242 | 4.7 | 13.30 | 259.5 | | | | | |
| 08/09/2014 | 14:57:22 | | | | | Reset Total, Vol = 239.62 bbl | | | | |
| 08/09/2014 | 14:57:22 | 225 | 4.6 | 13.27 | 261.2 | | | | | |
| 08/09/2014 | 15:00:00 | 443 | 6.4 | 13.72 | 274.8 | | | | | |
| 08/09/2014 | 15:01:30 | | | | | Start Mixing Tail Slurry | | | | |
| 08/09/2014 | 15:01:30 | 446 | 6.4 | 13.86 | 284.4 | | | | | |
| 08/09/2014 | 15:03:00 | 458 | 6.4 | 14.04 | 291.7 | | | | | |
| 08/09/2014 | 15:06:00 | 460 | 6.4 | 14.13 | 310.8 | | | | | |
| 08/09/2014 | 15:09:00 | 491 | 6.4 | 14.14 | 329.9 | | | | | |
| 08/09/2014 | 15:12:00 | 702 | 8.2 | 13.93 | 352.4 | | | | | |
| 08/09/2014 | 15:15:00 | 474 | 6.4 | 13.93 | 373.6 | | | | | |
| 08/09/2014 | 15:18:00 | 500 | 6.4 | 13.99 | 392.6 | | | | | |
| 08/09/2014 | 15:21:00 | 454 | 6.4 | 13.96 | 411.8 | | | | | |
| 08/09/2014 | 15:24:00 | 473 | 6.4 | 14.00 | 430.7 | | | | | |
| 08/09/2014 | 15:27:00 | 486 | 6.4 | 14.08 | 457.0 | | | | | |
| 08/09/2014 | 15:30:00 | 496 | 6.4 | 14.13 | 476.1 | | | | | |
| 08/09/2014 | 15:33:00 | 503 | 6.4 | 14.16 | 495.2 | | | | | |
| 08/09/2014 | 15:36:00 | 486 | 6.4 | 14.12 | 514.2 | | | | | |
| 08/09/2014 | 15:39:00 | 478 | 6.3 | 14.07 | 533.3 | | | | | |
| 08/09/2014 | 15:42:00 | 570 | 5.9 | 13.99 | 552.1 | | | | | |
| 08/09/2014 | 15:45:00 | 494 | 6.4 | 14.00 | 571.2 | | | | | |
| 08/09/2014 | 15:48:00 | 453 | 6.5 | 13.82 | 590.7 | | | | | |
| 08/09/2014 | 15:51:00 | 281 | 4.5 | 14.04 | 605.0 | | | | | |
| 08/09/2014 | 15:54:00 | 280 | 4.5 | 14.04 | 618.6 | | | | | |
| 08/09/2014 | 15:56:40 | | | | | End Tail Slurry | | | | |
| 08/09/2014 | 15:56:40 | 252 | 4.2 | 14.04 | 630.6 | | | | | |
| 08/09/2014 | 15:56:42 | | | | | Reset Total, Vol = 369.57 bbl | | | | |
| 08/09/2014 | 15:56:42 | 44 | 3.7 | 14.05 | 630.7 | | | | | |
| 08/09/2014 | 15:56:53 | | | | | Wash up | | | | |
| 08/09/2014 | 15:56:53 | 19 | 0.1 | 14.13 | 630.9 | | | | | |
| 08/09/2014 | 15:57:00 | 17 | 0.0 | 14.13 | 630.9 | | | | | |
| 08/09/2014 | 16:00:00 | 205 | 4.0 | 12.58 | 631.6 | | | | | |
| 08/09/2014 | 16:03:00 | 9 | 0.0 | 8.58 | 638.4 | | | | | |
| 08/09/2014 | 16:06:00 | 65 | 3.2 | 9.25 | 649.8 | | | | | |
| 08/09/2014 | 16:09:00 | 9 | 0.3 | 8.45 | 657.1 | | | | | |

| Well | | | Field | | Job Start | | Customer | | Job Number | |
|-------------------------|------------------|-----------------------|----------------------|--------------|-------------|-------------------------------|------------|--|------------|--|
| Hiner 36NB-23W 36NB-23W | | | Podjom-Mikhaylovskoe | | Aug/09/2014 | | Extraction | | D2IK-00070 | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | |
| 08/09/2014 | 16:13:12 | | | | | Reset Total, Vol = 24.13 bbl | | | | |
| 08/09/2014 | 16:13:12 | 613 | 8.1 | 8.35 | 684.9 | | | | | |
| 08/09/2014 | 16:13:17 | | | | | Drop Top Plug | | | | |
| 08/09/2014 | 16:13:17 | 487 | 7.5 | 8.35 | 685.5 | | | | | |
| 08/09/2014 | 16:13:20 | | | | | Start Displacement | | | | |
| 08/09/2014 | 16:13:20 | 580 | 7.5 | 8.35 | 685.9 | | | | | |
| 08/09/2014 | 16:15:00 | 718 | 8.2 | 8.34 | 699.6 | | | | | |
| 08/09/2014 | 16:18:00 | 967 | 8.2 | 8.34 | 724.4 | | | | | |
| 08/09/2014 | 16:18:32 | | | | | Good returns | | | | |
| 08/09/2014 | 16:18:32 | 1005 | 8.3 | 8.34 | 728.8 | | | | | |
| 08/09/2014 | 16:21:00 | 1259 | 8.2 | 8.34 | 749.3 | | | | | |
| 08/09/2014 | 16:24:00 | 1629 | 8.3 | 8.34 | 774.2 | | | | | |
| 08/09/2014 | 16:27:00 | 1915 | 8.2 | 8.34 | 798.9 | | | | | |
| 08/09/2014 | 16:30:00 | | | | | 60bbl cement to surface | | | | |
| 08/09/2014 | 16:30:00 | 2323 | 8.2 | 8.34 | 823.5 | | | | | |
| 08/09/2014 | 16:33:00 | 2417 | 8.3 | 8.34 | 848.2 | | | | | |
| 08/09/2014 | 16:36:00 | 2432 | 8.2 | 8.34 | 872.8 | | | | | |
| 08/09/2014 | 16:39:00 | 2467 | 8.3 | 8.34 | 891.6 | | | | | |
| 08/09/2014 | 16:42:00 | 2497 | 8.3 | 8.34 | 916.5 | | | | | |
| 08/09/2014 | 16:45:00 | 2158 | 4.2 | 8.34 | 930.0 | | | | | |
| 08/09/2014 | 16:47:53 | | | | | Bump Top Plug | | | | |
| 08/09/2014 | 16:47:53 | | | | | End Displacement | | | | |
| 08/09/2014 | 16:47:53 | 2646 | 0.4 | 8.34 | 941.8 | | | | | |
| 08/09/2014 | 16:48:00 | 2687 | 0.3 | 8.34 | 941.9 | | | | | |
| 08/09/2014 | 16:50:38 | | | | | Reset Total, Vol = 257.30 bbl | | | | |
| 08/09/2014 | 16:50:38 | 9 | 0.0 | 8.34 | 942.2 | | | | | |
| 08/09/2014 | 16:51:00 | 13 | 0.0 | 8.34 | 942.2 | | | | | |
| 08/09/2014 | 16:51:57 | | | | | Floats held, 2.5bbl back | | | | |
| 08/09/2014 | 16:51:57 | 14 | 0.0 | 8.34 | 942.2 | | | | | |
| 08/09/2014 | 16:52:07 | 14 | 0.0 | 8.34 | 942.2 | | | | | |

Post Job Summary

| Average Pump Rates, bbl/min | | | | | Volume of Fluid Injected, bbl | | | |
|--|-------------|-------------------------------------|--|---------------------------|--|--|--|----|
| Slurry 6.3 | N2 | Mud 0.0 | Maximum Rate 628.7 | | Total Slurry 580.0 | Mud 0.0 | Spacer 21.7 | N2 |
| Treating Pressure Summary, psi | | | | | Breakdown Fluid | | | |
| Maximum 5374 | Final 14 | Average 773 | Bump Plug to | Breakdown | Type | Volume | Density | |
| Avg. N2 Percent | | Designed Slurry Volume 578.0 bbl | Displacement 257.0 bbl | Mix Water Temp 68 degF | Cement Circulated to Surface? <input checked="" type="checkbox"/> | Volume 60.0 bbl | | |
| | | | | | Washed Thru Perfs <input type="checkbox"/> | To | | |
| Customer or Authorized Representative Brandon Patch | | | Schlumberger Supervisor Michael Simon/ Morrow | | | Circulation Lost <input type="checkbox"/> | Job Completed <input checked="" type="checkbox"/> | |
| | | | | | | - | - | |