

BJ Cementing Treatment Report

| | | | |
|--------------------|---------------|------------------|---------|
| SERVICE SUPERVISOR | Richard White | RIG | True 38 |
| DISTRICT | Cheyenne, WY | COUNTY | WELD |
| SERVICE | Cementing | STATE / PROVINCE | CO |

WELL GEOMETRY

| TYPE | ID (in) | OD (in) | WEIGHT (lb/ft) | MD (ft) | TVD (ft) | EXCESS (%) |
|-----------------|---------|---------|----------------|-----------|----------|------------|
| Previous Casing | 8.92 | 9.63 | 36.00 | 1,543.00 | 1,543.00 | |
| Casing | 4.78 | 5.50 | 20.00 | 15,947.00 | 7,344.00 | |
| Open Hole | 8.50 | 0.00 | 0.00 | 15,957.00 | 7,344.00 | 10.00 |

HARDWARE

| | | | |
|---------------------------|-----------|--------------------------------------|--------------|
| Bottom Plug Used? | No | Tool Type | Float Collar |
| Top Plug Used? | Yes | Tool Depth (ft) | 15,924.27 |
| Top Plug Provided By | Non BJ | Max Casing Pressure - Rated (psi) | 12,630.00 |
| Top Plug Size | 5.500 | Max Casing Pressure - Operated (psi) | 3,500.00 |
| Centralizers Used | Yes | Pipe Movement | None |
| Centralizers Quantity | 68.00 | Job Pumped Through | Manifold |
| Centralizers Type | Rigid | Top Connection Thread | BTC |
| Landing Collar Depth (ft) | 15,924.00 | Top Connection Size | 5.5 |

CIRCULATION PRIOR TO JOB

| | | | |
|--------------------------------------|--------|--|----|
| Well Circulated By | Rig | PV Mud In | 22 |
| Circulation Prior to Job | Yes | YP Mud In | 9 |
| Circulation Time (min) | 180.00 | Solids Present at End of Circulation | No |
| Circulation Rate (bpm) | 10 | 10 sec SGS | 10 |
| Circulation Volume (bbls) | 1800 | 10 min SGS | 17 |
| Lost Circulation Prior to Cement Job | No | 30 min SGS | 20 |
| Mud Density In (ppg) | 10.00 | Flare Prior to / during the Cement Job | No |
| Mud Density Out (ppg) | 10.00 | Gas Present | No |

TEMPERATURE

| | | | |
|----------------------------|-------|--------------------------------|-------|
| Ambient Temperature (°F) | 60.00 | Slurry Cement Temperature (°F) | 65.00 |
| Mix Water Temperature (°F) | 65.00 | Flow Line Temperature (°F) | 60.00 |

Client: Bayswater Exploration & Production, LLC

Well: COT WEST #P-30-25HN

Well API: 05-123-50419

Start Date: 3/31/2020

End Date: 4/1/2020



FLUID DETAILS

| FLUID TYPE | FLUID NAME | DENSITY (ppg) | YIELD (Cu Ft/sk) | H ₂ O REQ (gals/sk) | PLN TOP FLD (ft) | LENGTH (ft) | VOL (sk) | VOL (Cu Ft) | VOL (bbls) |
|----------------------------|---|---------------|------------------|--------------------------------|------------------|-------------|----------|-------------|------------|
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | 12.0000 | | | 0.00 | | | | 28.0000 |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | 11.5000 | | | 0.00 | | | | 26.0000 |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | 11.0000 | | | 0.00 | | | | 26.0000 |
| Lead Slurry | BJCem P100.3.01C | 13.2000 | 1.8290 | 9.86 | 0.00 | 6,989.00 | 980 | 1793.0000 | 319.2000 |
| Tail Slurry | BJCem P50.6.02C | 13.5000 | 1.4769 | 7.45 | 6,091.00 | 8,967.00 | 1530 | 2260.0000 | 402.4000 |
| Displacement 2 | Retarded Water w/ Clay Protection & Biocide | 8.3331 | | | | 0.00 | 0 | 0.0000 | 10.0000 |
| Displacement Final | Water w/ Clay Protection & Biocide | 8.3331 | | | 0.00 | | | 0.0000 | 343.0000 |

| FLUID TYPE | FLUID NAME | COMPONENT | CONCENTRATION | UOM |
|----------------------------|---|---------------------------|---------------|------|
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | RETARDER, R-7C | 2.0000 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | WEIGHTING ADDITIVE, W-11 | 242.6900 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | IntegraGuard GW-86 | 1.2000 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | SPACER SURFACTANT, SS-267 | 1.0000 | GPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | RETARDER, R-31 | 0.5000 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | WEIGHTING ADDITIVE, W-11 | 242.6900 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | RETARDER, R-31 | 0.5000 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | RETARDER, R-7C | 2.0000 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | IntegraGuard GW-86 | 1.2000 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | SPACER SURFACTANT, SS-267 | 1.0000 | GPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | RETARDER, R-31 | 0.5000 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | SPACER SURFACTANT, SS-267 | 1.0000 | GPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | RETARDER, R-7C | 2.0000 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | WEIGHTING ADDITIVE, W-11 | 242.6900 | PPB |
| Spacer / Pre Flush / Flush | IntegraGuard EZ Spacer II | IntegraGuard GW-86 | 1.2000 | PPB |
| Lead Slurry | BJCem P100.3.01C | RETARDER, SR-20 | 0.7000 | BWOB |
| Lead Slurry | BJCem P100.3.01C | IntegraCare EC-2 | 3.0000 | BWOB |
| Lead Slurry | BJCem P100.3.01C | FOAM PREVENTER, FP-24 | 0.3000 | BWOB |
| Lead Slurry | BJCem P100.3.01C | FLUID LOSS, FL-66 | 0.5000 | BWOB |
| Lead Slurry | BJCem P100.3.01C | CEMENT, ASTM TYPE III | 100.0000 | PCT |
| Lead Slurry | BJCem P100.3.01C | IntegraGuard GW-86 | 0.1000 | BWOB |
| Tail Slurry | BJCem P50.6.02C | IntegraGuard GW-86 | 0.1000 | BWOB |
| Tail Slurry | BJCem P50.6.02C | FOAM PREVENTER, FP-24 | 0.3000 | BWOB |
| Tail Slurry | BJCem P50.6.02C | FLUID LOSS, FL-66 | 0.2000 | BWOB |
| Tail Slurry | BJCem P50.6.02C | CEMENT, CLASS G | 50.0000 | PCT |
| Tail Slurry | BJCem P50.6.02C | CEMENT, FLY ASH (ROCKIES) | 50.0000 | PCT |
| Tail Slurry | BJCem P50.6.02C | EXTENDER, BENTONITE | 2.0000 | BWOB |
| Tail Slurry | BJCem P50.6.02C | RETARDER, SR-20 | 0.1000 | BWOB |
| Displacement 2 | Retarded Water w/ Clay Protection & Biocide | ResCare CS-2 | 0.0800 | GPB |
| Displacement 2 | Retarded Water w/ Clay Protection & Biocide | BIOCIDE, BIOC11139W | 0.0100 | GPB |
| Displacement 2 | Retarded Water w/ Clay Protection & Biocide | RETARDER, SR-61L | 0.1000 | GPB |
| Displacement Final | Water w/ Clay Protection & Biocide | BIOCIDE, BIOC11139W | 0.0100 | GPB |
| Displacement Final | Water w/ Clay Protection & Biocide | ResCare CS-2 | 0.0800 | GPB |

DISPLACEMENT AND END OF JOB SUMMARY

| | | | |
|------------------------------------|----------|------------------------------------|----------|
| Displaced By | BJ | Amt of Cement Returned / Reversed | 58.00 |
| Calculated Displacement Vol (bbls) | 353.00 | Method Used to Verify Returns | Visual |
| Actual Displacement Vol (bbls) | 353.00 | Amt of Spacer to Surface | 80.00 |
| Did Float Hold? | Yes | Pressure Left on Casing (psi) | 0.00 |
| Bump Plug | Yes | Amt Bled Back After Job | 4.00 |
| Bump Plug Pressure (psi) | 2,500.00 | Total Volume Pumped (bbls) | 1,160.00 |
| Were Returns Planned at Surface | Yes | Top Out Cement Spotted | No |
| Cement Returns During Job | Full | Lost Circulation During Cement Job | No |

BJ Cementing Event Log

Long String - Cheyenne, WY - Richard White

| SEQ | START DATE / TIME | EVENT | DENSITY (ppg) | PUMP RATE (bpm) | PUMP VOL (bbls) | PIPE PRESSURE (psi) | COMMENTS |
|-----|-------------------|---------------------|---------------|-----------------|-----------------|---------------------|---|
| 1 | 03/31/2020 10:49 | Callout | | | | | Called out crew check and verify equipment and materials |
| 2 | 03/31/2020 12:00 | Depart for Location | | | | | Steacs briefing and depart for location |
| 3 | 03/31/2020 14:00 | Arrive on Location | | | | | Arrive on location |
| 4 | 03/31/2020 14:05 | STEACS Briefing | | | | | Safety briefing about spotting trucks and rigging up treating equipment |
| 5 | 03/31/2020 14:15 | Rig Up | | | | | Rig up treating equipment |
| 6 | 03/31/2020 15:30 | Other (See comment) | | | | | Wait for rig to finish running casing and circulating |
| 7 | 03/31/2020 16:45 | STEACS Briefing | | | | | Safety meeting with rig crew and customer |
| 8 | 03/31/2020 17:06 | Prime Up | 8.3300 | 4.00 | 5.00 | 900.00 | Prime lines with 5 bbl water |
| 9 | 03/31/2020 17:08 | Pressure Test | | | | | Pressure test lines to 5000 psi |
| 10 | 03/31/2020 17:10 | Pump Spacer | 12.0000 | 4.00 | 28.00 | 700.00 | Pump 28 bbl spacer @ 12ppg from rb ctf-004 wet and dry samples taken and verified |
| 11 | 03/31/2020 17:16 | Pump Spacer | 11.5000 | 4.00 | 26.00 | 500.00 | Pump 26 bbl spacer @ 11.5 ppg from rb ctf-004 wet and dry samples taken and verified |
| 12 | 03/31/2020 17:22 | Pump Spacer | 11.0000 | 4.00 | 26.00 | 500.00 | Pump 26 bbl spacer @ 11ppg from rb ctf-004 wet and dry samples taken and verified |
| 13 | 03/31/2020 17:29 | Pump Lead Cement | 13.2000 | 5.00 | 32.50 | 400.00 | Pump 32.5 bbl lead cmt @ 13.2ppg 100sks 1.829y 9.86gps from fb ctf-004 wet and dry samples taken and verified |
| 14 | 03/31/2020 17:33 | Pump Lead Cement | 13.2000 | 7.00 | 72.60 | 500.00 | Pump 72.6 bbl lead cmt@13.2ppg 220sks 1.829y 9.86gps from tier 1 ctf-012wet and dry samples taken and verified increased rate to 7bpm |
| 15 | 03/31/2020 17:44 | Pump Lead Cement | 13.2000 | 7.00 | 72.60 | 400.00 | Pump 72.6 bbl lead cmt@13.2ppg 220sks 1.829y 9.86gps from tier 2 ctf-012wet and dry samples taken and verified |
| 16 | 03/31/2020 17:55 | Pump Lead Cement | 13.2000 | 7.00 | 72.60 | 700.00 | Pump 72.6 bbl lead cmt@13.2ppg 220sks 1.829y 9.86gps from tier 3 ctf-012wet and dry samples taken and verified |
| 17 | 03/31/2020 18:05 | Pump Lead Cement | 13.2000 | 7.00 | 72.60 | 750.00 | Pump 72.6 bbl lead cmt@13.2ppg 220sks 1.829y 9.86gps from tier 4 ctf-012wet and dry samples taken and verified |
| 18 | 03/31/2020 18:15 | Pump Lead Cement | 13.2000 | | 319.00 | | Pump a total of 319 bbl lead cmt @13.2ppg 1.829y 980sks 9.86gps samples taken and verified |
| 19 | 03/31/2020 18:16 | Pump Tail Cement | 13.5000 | 7.00 | 72.00 | 500.00 | Pump 72 bbl tail cmt @ 13.5ppg 1.4769y 273.8sks 7.45gps from tier 1 of field bin ctf-014 |

Client: Bayswater Exploration & Production, LLC

Well Name / API: COT WEST #P-30-25HN / 05-123-50419

Well 15957 MD:



Quote #: QUO-44231-B8M1D4

Plan #: ORD-25539-Q7H6P7

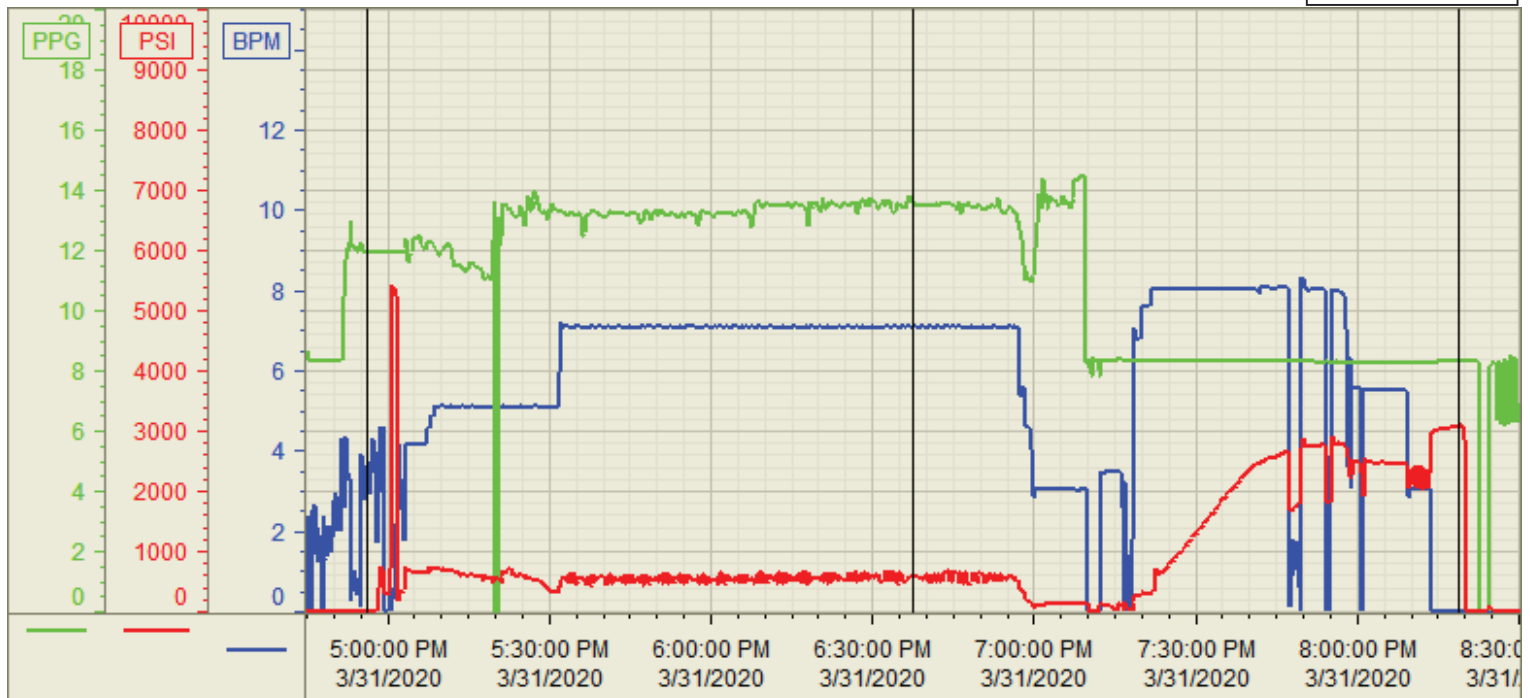
Execution #: EXC-25539-Q7H6P702

| | | | | | | | |
|----|------------------|----------------------|---------|------|--------|---------|---|
| | | | | | | | wet and dry samples taken and verified |
| 20 | 03/31/2020 18:25 | Pump Tail Cement | 13.5000 | 7.00 | 72.00 | 500.00 | Pump 72 bbl tail cmt @ 13.5ppg 1.4769y 273.7sks 7.45gps from tier 2 of field bin ctf-014 wet and dry samples taken and verified |
| 21 | 03/31/2020 18:35 | Pump Tail Cement | 13.5000 | 7.00 | 72.00 | 500.00 | Pump 72 bbl tail cmt @ 13.5ppg 1.4769y 273.8sks 7.45gps from tier 3 of field bin ctf-014 wet and dry samples taken and verified |
| 22 | 03/31/2020 18:42 | Pump Tail Cement | 13.5000 | 7.00 | 72.00 | 500.00 | Pump 72 bbl tail cmt @ 13.5ppg 1.4769y 273.8sks 7.45gps from tier 4 of field bin ctf-014 wet and dry samples taken and verified |
| 23 | 03/31/2020 18:54 | Pump Tail Cement | 13.5000 | 7.00 | 57.20 | 450.00 | Pump 57.2 bbl tail cmt @13.5ppg 1.4769y 217.5sks 7.45gps from fb of ctf-338 wet and dry samples taken and verified |
| 24 | 03/31/2020 19:01 | Pump Tail Cement | 13.5000 | 7.00 | 57.20 | 450.00 | Pump 57.2 bbl tail cmt @13.5ppg 1.4769y 217.5sks 7.45gps from bb of ctf-338 wet and dry samples taken and verified |
| 25 | 03/31/2020 19:05 | Pump Tail Cement | | 5.50 | | 200.00 | Slowed rates having delivery issues out of last bottle |
| 26 | 03/31/2020 19:07 | Pump Tail Cement | | 3.00 | | 200.00 | Slowed rates again still having delivery issues |
| 27 | 03/31/2020 19:17 | Pump Tail Cement | 13.5000 | | 402.40 | | Pump a total of 402.4 bbl tail cmt @ 13.5ppg 1.4769y 1530sks 7.45gps wet and dry samples taken and verified |
| 28 | 03/31/2020 19:18 | Wash Pumps and Lines | | | | | Wash pumps and lines to pit |
| 29 | 03/31/2020 19:22 | Drop Top Plug | | | | | Drop top plug |
| 30 | 03/31/2020 19:26 | Pump Displacement | 8.3300 | 8.00 | 330.00 | 2500.00 | Pump 330 bbl disp. |
| 31 | 03/31/2020 19:55 | Pump Displacement | 8.3300 | | | | Shutdown to swap return tanks to separate mud and spacer returns then kept pumping |
| 32 | 03/31/2020 20:02 | Pump Displacement | 8.3300 | | | | Shutdown to swap return tanks returns then kept pumping |
| 33 | 03/31/2020 20:07 | Pump Displacement | 8.3300 | 5.50 | | | Had to slow to 5.5 bpm ps deck overheated and shutdown |
| 34 | 03/31/2020 20:09 | Pump Displacement | 8.3300 | | | | Shutdown to swap return tanks returns then kept pumping |
| 35 | 03/31/2020 20:15 | Pump Displacement | 8.3300 | 8.00 | 23.00 | 2300.00 | Slowed rate to 3 bpm to land plug |
| 36 | 03/31/2020 20:20 | Pump Displacement | 8.3300 | | 253.00 | | Pump a total of 353 bbl disp. First 10 with sr-61l and rescare and biocide throughout disp. Got 80 bbl spacer and 58 bbl cmt to surface |
| 37 | 03/31/2020 20:21 | Land Plug | | | | 3100.00 | Landed plug @2500 psi took to 3100 psi |
| 38 | 03/31/2020 20:27 | Check Floats | | | | | Floats held 4 bbl back |
| 39 | 03/31/2020 20:30 | STEACS Briefing | | | | | Rig down safety brief |
| 40 | 03/31/2020 20:45 | Rig Down | | | | | Rig down all treating equipment |
| 41 | 03/31/2020 21:30 | Leave Location | | | | | Pre convoy safety meeting and depart location |

Customer: Bayswater
 Well Number: P-30-25HN
 Lease Info: COT WEST



Print Date/Time
 3/31/2020 8:33:36 PM



| | Name | Y value | X value/time stamp | Tag name Y |
|---|---------------------|----------|-------------------------|----------------------------------|
| 1 | DS - Press (PSI) | 596.7 | 3/31/2020 6:37:25 PM | Cementer\DS_DISCHARGE_PRESS_DIAL |
| 2 | Den - Density (PPG) | 13.61 i. | 3/31/2020 6:37:30 PM i. | Cementer\DENSITY_ACTUAL_RATE |
| 3 | Combined Rate (BPM) | 7.11 | 3/31/2020 6:37:25 PM | Cementer\Flow_Combined |
| 4 | | | | |
| 5 | | | | |

Source: Control1 8:33:30 PM