

Ptasnik 1-35 – Bradenhead Procedure

- 1 Call Foreman or Lead Operator at least 24 hr prior to rig move. If not already completed, request that they catch and remove plunger, isolate production equipment and remove any automation equipment prior to the rig showing up. Install perimeter fence as needed.
- 2 MIRU Slick line. Fish plunger if necessary and tag for PBTD (should be at 7367').
- 3 Prepare location for base beam rig.
- 4 Spot 12 jts of 2-3/8" 4.7# J-55 8RD EUE tbg.
- 5 Spot 162 jts of 1-1/4" 2.33# J-55 10rd IJ tbg.
- 6 MIRU WO rig. Kill well with fresh water with biocide. ND wellhead, NU BOPs.
- 7 Run two 2" or one 3" line(s) from starting head to return tanks
- 8 PU 8-10' landing joint with TIW safety valve on top and screw into the tbg hanger. Back out the lock down pins and pull up on the tbg string to break any possible sand bridges. Do not exceed 80% of tubing tensile strength, or 57,384-lb.
- 9 Unseat tbg hanger and LD tbg hanger and landing joint. Install rubber wiper in stripping head.
- 10 MIRU EMI equipment. TOOH with 2-3/8" tbg. EMI tbg while TOOH. Lay down joints with wall loss or penetrations >35%. Replace joints as necessary. Keep yellow and blue band tubing. Note joint number and depth of tubing leak(s) on production equipment failure report in OpenWells. Clearly mark all junk (red band) tubing sent to yard.
- 11 TIH with 2-3/8" tbg and 4.5" RBP. Set RBP at +/- 6770' (Collars at 6751' and 6805').
- 12 Pressure test RBP to 1,000 psi for 15 minutes. (Pressure test to make sure plug is set correctly)
- 13 Spot 2 sx sand on top of RBP and TOOH. SB tbg.
- 14 ND bop, ND tubing head. Un land 4-1/2" csg string. NU double entry flange, NU BOP.
- 15 PU and TIH with 162 jts of 1-1/4" 2.33# J-55 10rd IJ tbg outside 4 1/2" csg to +/- 4850'. Circulate while TIH to condition hole.
- 16 MIRU Cement company.
- 17 Commence pumping cement job consisting 5 bbl fresh water, 5 bbl sodium meta silicate and 5 bbl fresh water; 53 bbl (260 sx) of G" w/ 0.25 pps cello-flake, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cuft/sk blended for a 6 hr pump time (Cement from +/- 4850' to 3977').
- 18 TOOH with 39 jts of 1-1/4" tbg to 3677' and circulate 2x tbg volume or until cement cleans up.
- 19 TOOH with 72 jts of 1-1/4" tbg to 1500'.
- 20 Commence pumping cement consisting of 5 bbl fresh water, 20 bbl sodium meta silicate and 5 bbl fresh water; 51 bbl (185 sx) of Type III + with CaCl₂ and 2 lb/sk PS Flake mixed at 14.0 ppg and 1.53 cuft/sk blended for a 3 hr pump time (Cement from 1500' to 679').
- 21 TOOH with 37 jts of 1-1/4" tbg to 397' and circulate 2x tubing volume or until cement cleans up. TOOH remaining 1-1/4" tbg and LD all 1-1/4" tbg.
- 22 Break lines and clean up with fresh water. RMDO cement company.
- 23 ND bop, ND dual entry flange. NU 2-3/8" tbg head and BOP.
- 24 Leave well shut overnight.
- 25 Circulate gas out of hole with fresh water with biocide.
- 26 MIRU wire line and run CCL-GR-CBL-VDL from 4900' to 100'. If cement is not above 679', contact engineering for further instructions. RDMO wire line.

- 27 TIH with 2 3/8" tbg and retrieving head and tag sand above RBP. Circulate sand off RBP. Latch onto RBP at +/- 6770' and release RBP. TOOH standing back all 2 3/8" tbg and LD RBP.
- 28 TIH with 2-3/8" XN SN and 2-3/8" 4.7# J55 EUE tbg. Land tbg @ +/- 7194' (1 jt above top Codell perf). Broach tbg to XN nipple.
- 29 ND BOP, NU master valve and hydrotest tubing head to 5,000 psi for 15 minutes.
- 30 RMDO WO rig.
- 31 Clean location and swab well back to production. Notify field foreman/field coordinator of finished work and turn well back over to production team.

Existing

KB=10'

Ptasnik 1.35

API #0512321832

8-5/8" 24#/ft 1.55 STC
12-1/4"

Surface casing 779

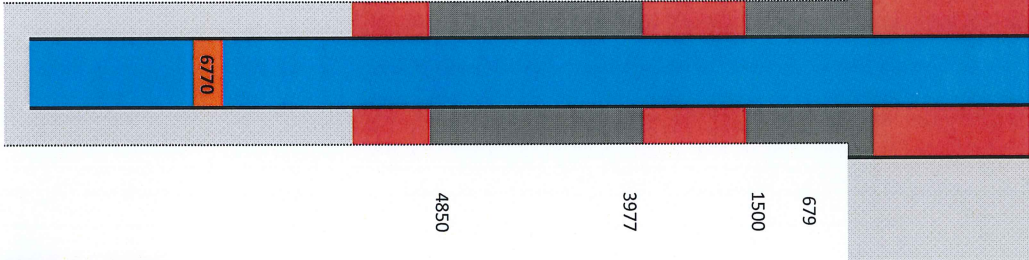
Fox Hills Base 134

| | |
|---------|----------|
| Sussex | No perfs |
| Top | 4177 |
| Shannon | No perfs |
| Base | 4800 |

TOC 6411

| | |
|----------|-----------|
| Niobrara | 6920-7108 |
| Top | 6904 |
| Codell | 7224-7237 |
| Top | 7223 |

4-1/2" 11.6#/ft 1.80 LTC 7381



Type III

Fox Hill Plug

| | |
|-----------------------------|-------|
| Wellbore Diameter (in) | 8.50 |
| Hole/Csg Capacity (ft3/ft) | 0.28 |
| Cement Coverage Height (ft) | 821 |
| Cement Volume (ft3) | 233 |
| 20% Excess (ft3) | 279 |
| Cement Vol (bbf) | 51 |
| Sx | 188 |
| TFV (bbf) | 23.31 |
| AFV (bbf) | 21.76 |
| CIC (ft) | 100 |
| Under Disp Vol (bbf) | 1.55 |

G"

Shannon/Sussex Plug

| | |
|----------------------------|--------|
| Wellbore Diameter (in) | 8.50 |
| Hole/Csg Capacity (ft3/ft) | 0.28 |
| Cement Coverage (ft) | 873.00 |
| Cement Volume (ft3) | 247.60 |
| 20% Excess (ft3) | 297.12 |
| Cement Vol (bbf) | 52.92 |
| Sx | 258.36 |
| TFV (bbf) | 75.38 |
| AFV (bbf) | 73.83 |
| CIC (ft) | 100.00 |
| Under Disp Vol (bbf) | 1.55 |

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|--------------------|
| Mud |
| Existing cement |
| CBP |
| RBP |
| New Cement |
| Fresh Water w/ Bio |