

West Farms 3-14A Bradenhead Prognosis

- 1 This well has a directional survey filed on the state website so no gyro is needed.
- 2 Call Wattenberg IOC (970-506-5980) 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.
- 3 MIRU Slick line. Fish plunger if necessary and tag for PBDT (should be at **8033'**).
- 4 Prepare location for base beam rig.
- 5 Notify mud company to have 10.0 ppg mud on standby.
- 6 Spot 25 jts of 2-3/8" 4.7# J-55 8RD EUE tbg.
- 7 Spot 57 jts 1-1/4" 2.33# tbg
- 8 MIRU WO rig. Kill well with fresh water with biocide. ND wellhead, NU BOPs.
- 9 Run two 2" lines from starting head to return tanks.
- 10 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.
- 11 Unseat tbg hanger and LD tbg hanger and landing joint. Install rubber wiper in stripping head.
- 12 MIRU EMI equipment. TOO H with 2-3/8" tbg. EMI tbg while TOO H. 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.
- 13 TIH with 2-3/8" tbg and 4.5" RBP (4.5" 11.6# I-80). Set RBP at +/- **7100'** (Collars at **7090'** and **7120'**). Spot 2 sx sand on top of RBP. TOO H, LD tbg.
- 14 Pressure test RBP/csg to 3,000 psi for 15 minutes. (Pressure test to make sure plug is set correctly)
- 15 ND BOP, un-land 4-1/2" csg, NU dual entry flange, NU BOP.
- 16 TIH with 57 jts 1-1/4" 2.33# tbg to 1700'. Circulate at least 120 bbls (1.5x annular volume from 1700') of drilling mud with 10.0 ppg sweep at the end.
- 17 TOO H with 7 jts of 1-1/4" tbg to 1500'.
- 18 MIRU Cement company.
- 19 Commence pumping cement job consisting of 30 bbls fresh water and **63 bbl (265 sx)** of Type III and 1/4 lb/sk cello-flake mixed at 14.8 ppg and 1.33 cuft/sk blended for a 3 hour pump time (Cement from **1500'** to **455'**)
- 20 Break lines and clean up with fresh water. RMDO cement company.
- 21 TOO H with 1-1/4" tbg and circulate clean.
- 22 ND BOP, ND dual entry flange, re-land 4-1/2" csg, NU BOP.
- 23 Leave well shut in overnight.
- 24 MIRU wire line and run CCL-GR-CBL-VDL-Sector map from **1600'** to **100'**. Email logs to engineering and DJVendors@anadarko.com RDMO wire line.

Crop (Not Hay)

NPV: \$301M

Bradenhead –Annular Fill – 1500' to 455'

TOC: 3905'

- 25 TIH with 2 3/8" tbg and retrieving head and tag sand above RBP at +/- 7100'. Circulate sand off RBP. Latch onto RBP and release RBP. TOOH standing back all 2 3/8" tbg and LD RBP.
- 26 TIH with 2-3/8" XN SN and 2-3/8" tbg.
- 27 Land tbg @ +/- 7885' (1 jt above top J-Sand perf). Broach tbg to XN nipple.
- 28 ND BOP, NU master valve and hydrotest tubing head to 5,000 psi for 15 minutes.
- 29 RMDO WO rig.
- 30 Clean location and swab well back to production. Notify field foreman/field coordinator of finished work and turn well back over to production team.

Crop (Not Hay)

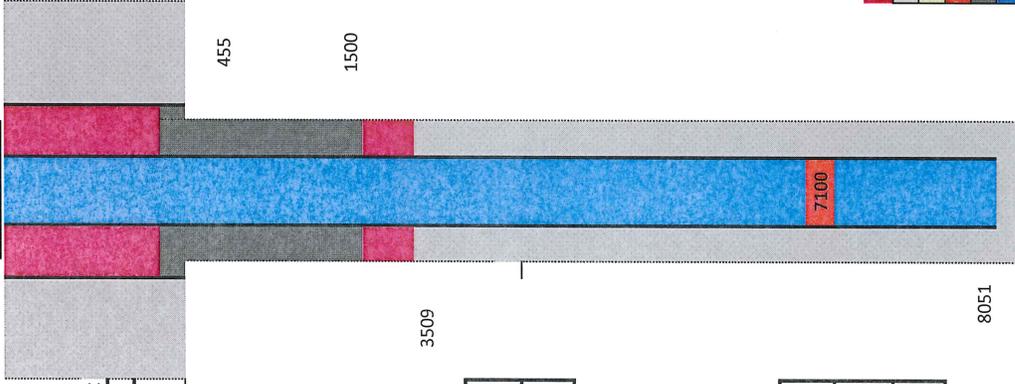
NPV: \$301M

Bradenhead –Annular Fill – 1500' to 455'

TOC: 3905'

Existing

KB-10'
West Farms 3-14A
API #0512321293



8-5/8" 24#/ft. J-55 STC
12-1/4"

Surface casing 555
Fox Hills Base 164

TOC 3509

| | |
|---------|----------|
| Sussex | No perfs |
| Top | 4266 |
| Shannon | No perfs |
| Base | BHP |

| | |
|----------|-----------|
| Niobrara | 7192-7340 |
| Top | 7176 |
| Codell | 7456-7474 |
| Top | 7466 |
| J Sand | 7904-7944 |
| Top | 7904 |

4-1/2" 11.6 #/ft I-80 LTC 8051

Type III

Sh/Sx Cement
Wellbore Diameter (in) 8.25
Hole/Csg Capacity (ft³/ft) 0.26
Cement Coverage Height (ft) 1045
Cement Volume (ft³) 273
30% Excess (ft³) 354
Cement Vol (bbl) 63
Sx 266

Circ Volume (bbbls) 118

