

**WORKOVER PROCEDURE**

WELL NAME: FARMERS 2-14HZ DATE: 4/29/2014  
 LOCATION: \_\_\_\_\_  
 Qtr/Qtr: NE/NE Section: 14 Township: 3N Range: 65W  
 Footages: 150' FNL: & 650' FEL: \_\_\_\_\_  
 COUNTY: WELD STATE: CO API #: 05-123-26793

ENGINEER: JONATHAN POMERANTZ 7 Day Notice Sent: \_\_\_\_\_  
 (Please notify Engineer of any major Do not start operations until: \_\_\_\_\_  
 changes prior to work) Notice Expires: \_\_\_\_\_

OBJECTIVE: CEMENT SQUEEZE - Pierre C & D and Gas Producing Zone below Fox Hills

WELL DATA: Surface Csg: 9 5/8" ?# @ 869' KB Elevation: 4839'  
 Surface Cmt: 530 sx GL Elevation: 4819'  
 Long St Csg: 7" ?# @ 7153' TD: 9600'  
 Long St Cmt: 370 sx PBTD: 9600'  
 Long St Date: 7/28/2008

Plug Back (Sand or CIBP): \_\_\_\_\_  
 Perforation Interval (1): Niobrara Frac thru Slotted Liner in Open Hole 7263' - 9466'  
 Perforation Interval (2): \_\_\_\_\_  
 Perforation Interval (3): \_\_\_\_\_  
 Tubing: 2 3/8" 4.7# J-55 tbg @ 6692' Rods: \_\_\_\_\_  
 Pump: \_\_\_\_\_  
 Misc.: 4 1/2" Slotted Production Liner @ 6068' - 9580'

PRODUCTION STATUS: Producing 17 BOEPD  
 COMMENTS: Gas Producing Zone below Fox Hills 890' - 990'; Pierre C & D Sand 1089' - 1460'

- PROCEDURE:
- 1) MIRU Workover rig, pump & tank.
  - 2) Blow down, and if necessary, kill well.
  - 3) POOH w/ 2 3/8" tubing and stand back in derrick.
  - 4) RIH w/ bit and scraper. Tag fill if any. Run and clean out to top of liner @ 6068'. POOH w/ bit and scraper.
  - 5) RIH w/ workstring and RBP. Set RBP @ 6018'. Load hole.
    - a) If casing pressure holds, continue with procedure below.
    - b) If casing pressure bleeds off, contact office for further orders (970-304-5157 or 970-304-5222)
  - 6) RU WL. RIH w/ perf gun. Perforate 7" casing @ 1700'.
  - 7) RIH w/ workstring and packer. Set packer @ 1400'.
  - 8) Pump 240 sx (1000 ft in annulus) 15.8 ppg cmt w/ gas check and displace. SI, WOC. Stage squeeze job to 3000 psi.
  - 9) Release packer. Reverse out. TOOH w/ workstring and packer.
  - 9) Pressure up on the casing to 2000 psi for 15 minutes (Verify pressure is within MAOP, decrease if necessary).
    - a) If casing pressure holds, bleed off and continue with procedure below.
    - b) If casing pressure bleeds off, contact office for further orders (970-304-5157 or 970-304-5222)
  - 10) RIH w/ 6 3/4" bit and drill out cement until fall out. Circulate clean. TOOH w/ 6 3/4" bit.
  - 11) RU WL. RIH w/ CBL tool. Run full CBL log. POOH w/ CBL tool.
  - 12) Pressure test casing to 500 psi.
    - a) If casing pressure holds, bleed off and continue with procedure below.
    - b) If casing pressure doe not hold, re-squeeze and re-test.
  - 13) RIH w/ workstring and retrieving head. Latch on to RBP @ 6018'. POOH w/ workstring and RBP.
  - 14) TIH w/ 2 3/8" tubing and hydro test in to the lateral at original depth (@ 6692').
  - 15) Clean up location. RDMO. RWTP.