

## STATE B-19 #2 7 RIVERS COMPLETION

**Perform pre-job safety assessment prior to beginning daily procedural tasks.**

### Procedure

1. MIRU POOL well servicing rig. NU 6" Frac Valve/Spool/BOP's and test BOP's per SOP. Release the packer and POOH. RIH with CIBP for 5-1/2", 17# and set at + 5480' to abandon the Bone Spring. POOH to 3640'.
2. RU Pool to pump acid and inhibited packer fluid. Circulate a balanced plug comprised of the following:
  - a) 2% KCL containing BJ adds
  - b) 200 gals of inhibited 15% NEFE HCL acid from 3640-3440'
  - c) POOH.

Spot acid additives from Chemplex:

3 gpt	Plexhib 164 inhibitor
2 gpt	Plexbreak 145 breaker
0.5gpt	Clayplex 302 Clay stabilizer

**NOTE:** Test the casing to 4700 psig by isolating the 3000 psig BOP's using the Frac valve.

3. RU Baker Atlas pack-off to BOP's. PU cement bailer and dump 25' of cement on top of CIBP. RU packoff and lubricator to the BOP's. RIH w/CCL /4" HSC casing guns with 19 gm charges loaded 2 JSPF at 120' phasing (0.48" diam.; 19" Pen). Perforate 3564-74, 3604-14, 3632-42 (63 holes). RD Baker Atlas.
4. RIH w/8,000 psi differential treating packer on 2-7/8", 6.5# workstring. Set packer at + 3500'. Test backside to 1000 psig.
5. RU test 3-phase separator, flare stack, and a 500 bbl unlined flowback tank. Test equipment to 2000 psig.
6. RU BJ's 3" frac valve to the 2-7/8" EUE 8rd tubing. Install treating line with manual ball launcher and nitrogen relief valve. Open the backside during the treatment and monitor. Open treating valve after testing and perform breakdown using 2000 gallons of 15% HCL with the additives noted on the attached BJ procedure. Maximum anticipated treating pressure will be 2000 PSIG at an expected rate of 5 BPM. Inject 80, 7/8", 1.3 SG ball sealers evenly through the middle 1600 gallons. Obtain ISIP, 5, 10, & 15 minute shut-in pressures. Surge balls and allow to fall 15 minutes.

<b>TREATING LINE TEST PRESSURE</b>	<b>6000 PSIG</b>
<b><u>N<sub>2</sub> POP OFF SETTING</u></b>	<b>5000 PSIG</b>
<b>ELECTRONIC THROTTLE KILL TRIPS</b> (Applicable with Frac jobs only)	<b>NA</b>
<b>MAXIMUM ALLOWABLE TREATING PRESSURE</b>	<b>4000 PSIG</b>
<b>MAXIMUM ANTICIPATED TREATING PRESSURE</b>	<b>2500 PSIG</b>