

**Proposed Plugging Procedure
Marathon Oil Company
Featherstone State Com #1**



Surface casing: 13-3/8" 48# @ 409' w/ 400 sx, circulated
Intermediate csg: 8-5/8" 24# @ 2,500', cmt'd w/ 1,000 sx, circulated
Production csg: 4 1/2" 11.6# @ 11,200' cmt'd w/ 1,425 sx, TOC 4,471' calculated
Open perms: 10,935 - 42' (Morrow)
10,984 - 92' CIBP set @ 10,980'
Tubing/packer: 2-3/8" 4.7# EUE with packer 10,884'.

1. Dig, line, and fence 250 bbl earthen work pit and flow well down as needed.
2. MIRU plugging equipment. NU BOP. Release packer and POOH standing back 2-3/8" tubing, lay down packer.
3. RIH w/ tbg-set CIBP on production tubing to 10,884'.
4. Set CIBP @ 10,884'. RU cementer and circulate hole w/ plugging mud. Cap CIBP w/ 15 sx cmt.
5. POOH w/ tubing to 8,800'. Pump 25 sx C cmt @ 8,800'. **Wolfcamp plug**
6. POOH w/ tbg standing back 5,500' and laying down remainder.
7. RIH w/ wireline and cut casing @ 5,800'. POOH w/ wireline. ND wellhead and BOP, POOH w/ 4 1/2" casing. If casing is not free, RIH w/ AD-1 packer to 5,500' and squeeze casing cut w/ 40 sx C cmt. If unable to establish rate at 1,000 psi or less, pump 25 sx C cmt balanced plug.
8. If casing not recovered in #7, cut casing based on stretch measurements (estimated @ +/- 4,500') and POOH w/ 4 1/2" casing. RIH w/ tubing to 50' inside csg stub & pump 40 sx C cmt w/ 2% CaCl₂. WOC and tag this plug at least 50' above casing stub. **Casing stub plug** *Tag*
9. POOH w/ tbg to 3,480' and load hole w/ mud, pump 40 sx C cmt 3,480 -- 3,380'. **Bone Springs plug**
10. POOH w/ tbg to 2,550' and load hole w/ mud, pump 60 sx C cmt w/ 2% CaCl₂ @ 2,550'. WOC and tag this plug no deeper than 2,450'. **Intermediate casing shoe plug** *Tag*
11. POOH w/ tbg to 459'. Load hole w/ mud and pump 40 sx C cmt w/ 2% CaCl₂ @ 459'. WOC and tag this plug no deeper than 359'. **Surface casing shoe plug** *Tag*
12. ND BOP and wellhead. RIH w/ tubing to 60' and pump 20 sx C cmt 60' to surface. **Surface casing shoe and surface plug**
13. Close working pit. Cut off wellhead and install dryhole marker. Cut off anchors and level location.

Featherstone.doc

*Called Tim Chase - told him ok to use this
procd. - w/ the added tags -*

2-14-02 JS