

PLUG AND ABANDON WORK PROCEDURE

A.F.E. NO. 257

ARCO "4" MATLOCK NO. 1

1. Move in and rig up deep well servicing unit.
2. Release packer, pull tubing and stand in derrick.
3. Lay down Kobe bottom hole assembly and packer.
4. Set 4½" C.I.B.P. at 7725'.
5. Spot 35' cement on top of bridge plug with dump bailer.
6. Run 2-3/8" tubing to 7680' and displace fluid out of well with mud laden fluid (25 sxs. Zeogel per 100 bbls. of 9.5#/gal. brine or approx. 125 bbls. required).
7. Pull tubing and stand in derrick.
8. Set hydraulic jacks over well head.
9. Remove tubing head and weld on 4½" pick-up nipple.
10. Locate free point of 4½" casing (top of cement at 6710 with anticipated free point above 5900'). Joint strength is 132,000 lbs., therefore limit maximum pull to 112,000 lbs., or 85%.
11. Cut casing with wireline cutter at casing free point - jack casing until free.
12. Repeat step 11 at higher point until casing is free.
13. Pull and lay down 4½" casing, dope threads and install thread protectors.
14. Run tubing in hole and spot plugs as follows:

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|-------------------------------|---------------------|---------|
| 4½" pipe stub | 50' in & 50' out | 35 sxs. |
| 4450'-4350' | 100' plug | 35 sxs. |
| 3100'-3000' | 100' plug | 35 sxs. |
| 2200'-2100' | 100' plug | 35 sxs. |
| 1070-1170 8-5/8" shoe @ 1129' | 100' plug 1070-1170 | 35 sxs. |
| Top 8-5/8" & 13-3/8" | surface plug | 10 sxs. |

Total 185 sxs.

15. Lay down tubing, dope threads and install thread protectors.
16. Remove well head and install dry hole marker.
17. Rig down casing pulling equipment and pulling unit.
18. Clean up pits and location.