

ATTACHMENT TO
OGCC FORM 4
PYLES #1, KIOWA COUNTY, COLORADO



14. Describe Proposed or Completed Operations

The following procedure is proposed to plug and abandon the subject TA'd well:

1. Freepoint tubing, cut off and pull. Note: when well was shut-in in December, 1991, tubing was 100% stuck at 1900', 100% free at 1725'. Estimate recovery from 1700'.
2. Freepoint 4-1/2" casing. If free to 1700', cut off and pull. If unable to recover 1700', see alternate procedure to perforate squeeze holes.
3. Spot a 100 sack plug from 1350-1700' down tubing. Tag TOC.
4. Spot a 30 sack plug from 1050-1150' down tubing. Tag TOC.
5. Spot a 125 sack plug from 450-100' (13-3/8" surface casing at 150'). Tag TOC.
6. Spot up between plugs with 9.5# mud.
7. Spot 10 sack surface plug.
8. Cut off 13-3/8" casing 3' below ground level and weld steel plate across top with well name and plugging date.
9. Clean up location.

Note: Cement plugs calculated using neat Class "C" cement (1.32 cu ft/sx) with 10% excess over 7-7/8" hole.

Alternate plugging procedure if unable to recover 4-1/2" production casing:

1. Freepoint tubing, cut off and pull.
2. Set CIBP at tubing stub (estimated at 1700') and top with 10' cement. Pressure test 4-1/2" casing to +/-500 psi.
3. Perforate 4-1/2" casing @ 1700' with 2' of perforations, 4 holes per foot.
4. RIH with tubing and cement retainer. Set retainer at +/- 1350'. Establish injection rate into squeeze holes and squeeze with total of 100 sacks for an annular plug and casing plug from 1350-1700'. Sting out of retainer, reverse out, and pull out of hole with tubing.

5. Perforate 4-1/2" casing @ 1150' with 2' of perforations, 4 holes per foot.
6. RIH with tubing and cement retainer. Set retainer @ +/- 1050'. Establish injection rate into squeeze holes and squeeze with total of 30 sacks for an annular plug and casing plug from 1050-1150'. Sting out of retainer, reverse out, and pull out of hole with tubing.
7. Perforate 4-1/2" casing at 450' with 2' of perforations, 4 holes per foot. ^{900 - 1000}
8. RIH with tubing and cement retainer. Set retainer at +/- 100'. Establish injection rate into squeeze holes and attempt to break circulation in 13-3/8" x 7-7/8" x 4-1/2" annulus. Squeeze with 125 sacks for an annular plug and casing plug from 100-450' (if circulation is established, increase cement volume and attempt to circulate cement to surface in 13-3/8" x 4-1/2" annulus). Sting out of retainer, reverse out, and pull out of hole with tubing.
9. Spot up between plugs with 9.5# mud.
10. Spot 10 sacks surface plugs in 4-1/2" and 13-3/8" casing strings.
11. Cut off 4-1/2" and 13-3/8" casing strings 3' below ground level and weld steel plate across top with well name and plugging date.
12. Clean up location.