

C. S. Alves #1

RECOMMENDED PLUG AND ABANDON PROCEDURE

1. Notify Railroad Commission of intent to plug and abandon.
2. Pull the 90 joints of 2-3/8" tubing left in the well.
3. Run an 8-5/8" cement retainer on tubing. Set the retainer @ approximately 2500'.
4. Load the 8-5/8" - 13-3/8" casing-casing annulus with produced water just prior to squeeze cementing under retainer. Maintain slight pump-in rate during squeeze operation.
5. With workstring stung into retainer, pressure up on the casing-tubing annulus to 1000 psi.
6. Squeeze cement interval under retainer with 500 sxs cement. Do not exceed 1000 psi surface pressure. Pull out and cap retainer with 25' of cement. Reverse out any excess cement.
7. Circulate hole with 9.5#/gal. mud laden brine.
8. Establish free point of 8-5/8" casing.
9. If free point is above 1750', then perforate @ 1800'. Run workstring and pump 75 sxs. of cement inside and outside of casing. Displace with sufficient volume to leave cement plug @ 1750' inside 8-5/8" casing. Cut off 8-5/8" casing and pull.
10. If free point is below 1750', then cut off 8-5/8" casing and pull. Spot a 100' cement plug from 1750'-1850' with 75 sxs.
11. Spot additional cement plugs through tubing as follows:
  - a. 100' plug below the Ogallala and across the surface casing shoe from 345'-445' with 75 sxs.
  - b. 10' plug at the surface.
- NOTE: a) Pump all cement plugs down with 9.5#/gal. mud laden brine.  
b) Tag all plugs with tubing string to verify placement.
12. Rig wellhead for abandonment and install marker.

  
S. E. Barker