

West Loco Hills Unit Tract 1-2

## Repair Well

This well is being repaired to be used as a producing well in the

CO<sub>2</sub> pilot project.

We believe that the 7" casing will not survive exposure to CO<sub>2</sub> and water when CO<sub>2</sub> breaks through to this well. We plan to run 5 1/2" casing inside the 7" casing to protect against further deterioration of the well.

### PROCEDURE

- 1) Run in hole with 7" cast iron bridge plug and set at bottom of 7" casing at 2690'.
- 2) Run in hole with 7" packer and set 50' above the base of the salt at 1085'.
- 3) Pressure up the interval from 1035' to 2690' to 500 psi and record the pressure after 15 minutes.
- 4) If the pressure is not greater than 450 psi after 15 minutes then contact Mike Williams with Artesia NMOCD.

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### Repair Well

- 5) Pull out of hole with tubing and packer
- 6) Run in hole with perforating guns and perforate with two holes at 1150'
- 7) Pull out of hole with wire line tools and run in hole with 7" retainer on tubing
- 8) Set retainer above perforations at 1150' and pump enough cement to cover 100' of formation behind the 7" casing.
- 9) Pull out of hole with tubing and run in hole with 7" packer on tubing.
- 10) Set packer 100' above the top of the salt at 405'.
- 11) Pressure up the interval from 300' to the retainer at 1150' to 500 psi and record the pressure after 15 minutes.
- 12) If the pressure is not greater than 450 psi after 15 minutes then contact Mike Williams with Artesia NMOC.

## West Loos Hills Unit Tract 1-2.

### Repair Well

- 13.) Pull out of hole with packer and tubing.
- 14.) Run in hole with perforating guns and perforate with two holes at 350'.
- 15.) Pull out of hole with wire line tools and run in hole with 7" retainer on tubing.
- 16.) Set retainer above perforations at 350' and pump enough cement to cover 100' of formation behind 7" casing.
- 17.) Pull out of hole with tubing and wait on cement to harden.

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Repair Well

- 18) Run in hole with 7" bit and scraper.
- 19) Drill out retainer and cement at 350'.
- 20) Drill out retainer and cement at 1150'.
- 21) Run bit and scraper to top of CIBP at 2690' and circulate debris.  
— DO NOT DRILL OUT CIBP —
- 22) Run Bond Log from top of CIBP to surface.
- 23) If Bond log does not show good bond above and below salt then contact Mike Williams Artesia NMOC.D.
- 24) Run 5½" casing to top of CIBP at 2690' and circulate cement back to surface.
- 25) If cement does not circulate or falls back then run temperature survey to determine cement top and contact Mike Williams Artesia NMOC.D.

West Loop Hills Unit Tract 1-2

## Repair Well

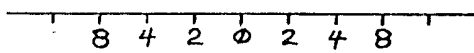
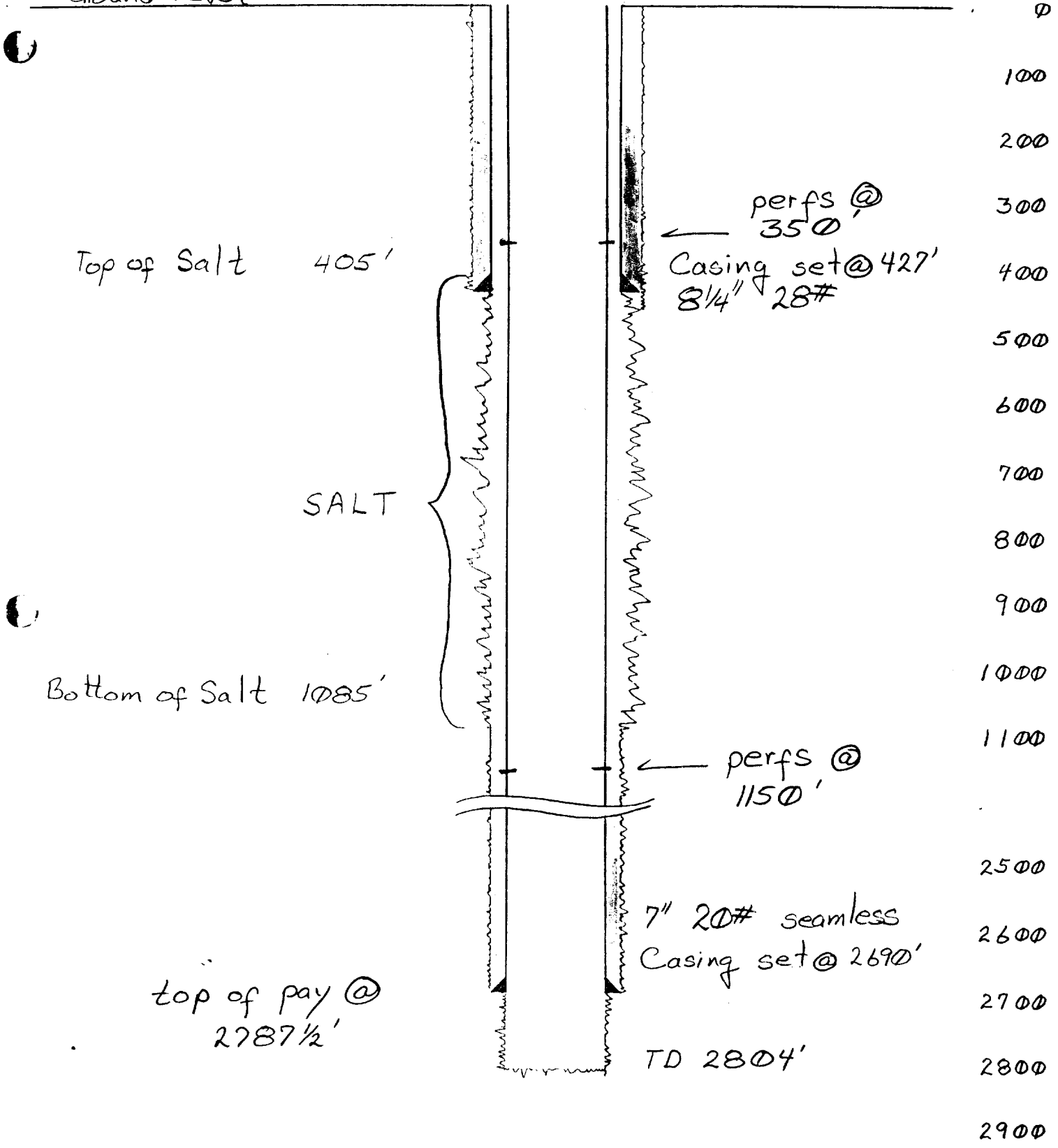
- 26) Run in hole with 7" bit and drill out CIBP at 2690'
- 27) Pull out of hole with 7" bit and install well head on 5 1/2" casing.
- 28) Install 4' tubing sub with 2" full opening valve in well head.
- 29) Shut-in well and rig down. Clean-up and move off location.

WEST LOW HILLS DRILL

F

1000' FNL & 330' FWL 7-189-30E

Ground Level



F

Ground level.

