MATTIX NO 1 PLUG AND ABANDONMENT

INTRODUCTION:

This well was TSI on February 25, 1994 due to a tubing leak. The well is depleted and should be permanently plugged and abandoned.

WELL DATA:

Location: 660' FSL & 1830' FEL, Sec 10, T-24-S, R-37E, Lea County, New Mexico G.L. Elevation: 3244'

EQUIPMENT:

Lufkin 320D w/ 25 HP motor. Rods and 2 7/8" tubing are still in the hole.

REGULATORY:

This well is completed in the Fowler Upper Yeso Pool. Regulatory approval is required for this work.

CASING & TUBING SPECS:

OD (inches)	WT (ppf)	Grade	Drift ID (inches)	Depth	Collapse @ 100% (psi)	Burst @ 100% (psi)	Capacity (bpf)	Capacity (cfpf)
8 5/8	24	K-55	7.972	970'	1,370	2,950	*	*
5 1/2	14	J-55	4.887	5800'	3,120	4,270	.0244	.1370
2 7/8	6.5	J-55	2.347	5720'	7,680	7,260	.00579	.0325

RECOMMENDED PROCEDURE:

- 1. MIRU workover rig. Kill well if necessary. POOH with rods & pump. ND WH & NU BOPE. TFF and POOH with tubing.
- 2. RIH with 4 3/4" bit & 5 1/2" casing scrapers on tubing to 5230'. POOH.

NOTE: 1. Use Class C cement mixed at 14.8 ppg with 2% CaCL₂ for all cement work except final surface plug which will contain 18% CaCl₂. Yield = 1.32 ft³/sx.
2. For remainder of procedure use P&A brine - 10 ppg brine with 25 lbs/bbl of salt gel.

- 3. RIH with 5 1/2" CIBP & set at 5200'. Pick up tubing and circulate hole with P&A brine. Spot 30 sx (289') cement cap on CIBP to cover the squeezed Paddock perforations.
- 4. Slowly PUH well above top of cement @ +/- 4911' and reverse cement out of tubing.
- 5. POOH laying down tubing to 3290'. Spot 50 sx plug (482') to cover top of Langlie Mattix waterflood interval (Meyers Langlie Mattix Unit).

- 6. Slowly PUH well above top of cement @ +/- 2809' and reverse cement out of tubing.
- 7. POOH laying down tubing to 2500'. Spot 25 sx (241') cement plug 2500'-2259' across base of salt section.
- 8. POOH laying down tubing to 1250'. Spot 25 sx (241') cement plug 1250'-1009' across top of salt section. POOH with tubing.
- 9. RU wireline. RIH and perforate 5 1/2" casing at 980' at 4 JSPF. RD wireline.
- 10. RIH to 980' with tubing. Establish injection rate through perfs and up 5 1/2" X 8 5/8" annulus. Pump 370 sxs (50% excess) Class C cement mixed at 14.8 ppg with 18% CaCl₂ taking returns through casing valve. When cement circulates to surface, close valve and fill 5 1/2" casing to surface with cement (105 sxs).
- 11. If cement does not circulate to surface, pump 100 sxs down 5 1/2" X 8 5/8" annulus.
- 12. Cut off casing 3' below surface. Weld 1/4" thick metal plate on wellbore. Install P&A marker with well name and location inscribed on marker.

13. Restore location.

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