## WORKOVER PROCEDURE

## DATE:8/21/92

WELL & JOB: Empire Abo Unit N-6/ P&A				<b>DRILLED:</b> 1960			
LAST WORKOVER: 3/13/92			FIELD: Empire Abo		COUNTY: Eddy, NM		
BY: B.G. Voigt		<b>TD:</b> 5703'	<b>PBD:</b> 5565'		DATUM: 10' KB		
TUBINGHEAD: ?			SIZE:		PRESS RATING:		
CASING: SURFACE: INTER: PROD:	<u>SIZE</u> 8-5/8" 4-1/2"	<u>WEIGHT</u> 24 lb. 9.5 lb.	<u>GRADE</u> J-55 J-55	<u>SET @</u> 1481' 5703'	<u>SX CMT</u> 700 350	<u>TOC</u> circ. 3820'	
LINER:	<u>SIZE</u>	<u>WEIGHT</u>	<u>GRADE</u>	TOP	<u>BTM</u>	<u>T0</u>	

PERFORATIONS: 5475-5490', 5534-5558', and 5586-5608' (plugged in 1960)

TUBING:	SIZE:	WEIGHT:	GRADE:	THREAD:
BTM'D @		JOINTS:	MISC:	

PACKER AND MISC: CIBP at 5415'.

**HISTORY AND BACKGROUND:** The EAU N-6 was drilled in 1960. The two intervals (5534-5558' and 5586-5608') were the first zones tested. The entire interval was plugged back, but the interval from 5534-5558' was re-perforated. The zone from 5475-5490' was also perforated, acidized, and fraced. The well continued to be a flowing oil producer until it was converted to a rod pumped well in September of 1989. In March of 1992, production rigged up to run a packer on the well. When they pumped water down the casing to kill the well, oil started coming up around the wellhead (below the 8-5/8" tie in). The leak was believed to be a hole in either the 8-5/8" casing or the 4-1/2" casing. The 4-1/2" casing between 5430' and 5465' appeared to be corroded while running a gauge ring and collar locator. A CIBP was then set in the 4-1/2" casing at 5415'.

SCOPE OF WORK: P&A

## PROCEDURE

- 1. Notify BLM in Carlsbad, NM (505) 887-6544 of intent to P&A.
- 2. MIRU. ND WLHD. NU BOP.
- 3. TIH with tension set packer and isolate casing leaks. POOH with the packer. If leaks exist, they will have to be squeezed.
- 4. RIH with open ended tubing to top of CIBP at 5415'. Spot 5 sx Cl C neat cement on top of CIBP. Displace the hole with 10 ppg MLF.
- 5. PUH to 3880' and spot 10 sx. Cl C neat balanced plug from 3880' to 3735'. POOH.
- 6. RIH and perforate squeeze holes at 2720'. RIH with CICR on workstring and set at 2470'. Squeeze 78 sx Cl C neat plug across Glorieta from 2720'-2470'. Displace hole with 10 ppg MLF. POOH.
- RIH and perforate squeeze holes at 1550'. POOH. Close blind rams and attempt to break circulation to surface. ND BOP and NU cementing head on 4-1/2" casing. Pump 440 sx Cl C neat cement down 4-1/2" casing and out annulus. Do not displace cement.

3. Out sto as & Install in vole marker