WORKOVER PROCEDURE

DATE: May 5, 1989

WELL & JOB: Empire Abo Unit # H-33 Plugback to Upper Abo Interval

DRILLED: 1960

LAST WORKOVER: 2-89			FIELI	: Empire Abo	COUNTY: Eddy, NM	
BY: Janet Harris		TD: 6337'	PBD:	6303'	DATUM: RKB 13'	
TUBINGHEAD: 6" - 600			SIZE: 7-1/16"		PRESS RATING: 3000	
CASING: SURFACE:	<u>SIZE</u> 8-5/8"	<u>WEIGHT</u> 22.7	<u>GRADE</u> J-55	<u>SET @</u> 1228	<u>SX CMT</u> 500	<u>TOC</u> surf
INTER: PROD:	4-1/2"	9.5	J-55	6337'	850	2780 (TS)
LINER:	<u>SIZE</u>	WEIGHT	GRADE	TOP	<u>BTM</u>	<u>TO</u>

PERFORATIONS: Current 6236'-6266', Proposed 6172'-6190',6133'-6158' & 6082'-6100'

TUBING:	SIZE: 2-3/8"	8" WEIGHT: JOINTS: 201	WEIGHT: 4.7#	r: 4.7# MISC:	GRADE: J-55	THREAD: EUE 8rd
BTM'D@ 6287'			201			

PACKER AND MISC: Baker Model "B" T.A.C. with 15 pts. tension @6280' (201 jts.)

HISTORY AND BACKGROUND: Converted from Unidraulic to Rod Pump in December of 1986. 2/2/89 well had all sucker rods removed and was shut in. Pumping unit was also removed from the site.

SCOPE OF WORK: Recomplete in upper Abo zone.

PROCEDURE

- 1. Notify NMOC Commission of intention to recomplete the well.
- 2. Test anchors. MIRUPU. Check well for pressure and bleed off. ND wellhead and NU BOP.
- 3. Release Baker Model "B" TAC, POH w / 2-3/8" production tbg. Visually inspect the tbg for workover use.
- 4. RU WL and set CIBP @ 6220'. Test csg to 500 psi w/ produced water for 15 minutes. If csg does not hold RIH w/ Pkr and isolate leak for squeeze work.
- 5. Perforate Abo with 2 JSPF f/ 6172'-6190' (correlate with Schlumberger's GR-N dated 6/12/60). If well goes on vacuum, swab test .
- 6. RIH w/ Pkr and 2-3/8" tbg, hydro-testing tbg to 4000 psi, to 6192'. Spot 100 gals across perfs. Pull packer to 6090'or approx. 100' above perfs. Reverse 5 bbls water up tbg and set Pkr.
- 7. Load and test annulus to 500 psi and acidize perfs w/ 1000 gals 15% NEFE HCL acid at 1 BPM with maximum treating pressure of 1000 psi. Flush to bottom perf. with clean produced water.
- 8. SI for 30 minutes. Record surface pressure every 10 minutes. Swab/flow back and evaluate.
 - If zone is productive skip to step 12, otherwise, continue with step 9.

- 9. POH w/ Tbg & Pkr. W. IBP @ 6165' & test to 500 psi. P Repeat acidizing and swab evaluations in steps 5, 6, 7 and 8.
 - If zone is productive skip to step 12, otherwise, continue with step 10.
- POH w/ tbg & Pkr. WL set CIBP @ 6120 & test to 500 psi. Perforate f/ 6082'-6100' w/ 2 JSPF. Repeat acidizing and swab evaluations in steps 5, 6, 7 and 8.
 - If zone is productive skip to step 12, otherwise, continue with step 11.
- 11. POH w/tbg and pkr. WL set CIBP @ 6044' (Top of ABO Reef) to TA well pending engineering Evaluation.
- 12. POH w/ tbg & Pkr. RIH w/ completion assembly as per Production Department specifications. TOTP.

1Di

Empire Abo Unit No. H-33

Drilled 1960 RKB 13'

