WORKOVER PROCEDURE

DATE: 8/10/89

WELL & JOB: Empire Abo Unit G-342				DRILLED: January, 1977		
LAST WORKOVER: 3/26/89 Pull rods and pump - TA well			FIELD: Empire Abo	COUNTY: Eddy		
BY: D.C. Bretches		TD: 6376'		PBD: 6325'	DATUM: RKB	
CASING: SURFACE: PROD:	<u>SIZE</u> 8-5/8" 5-1/2" 5-1/2"	<u>WEIGHT</u> 24# 15.5# 14.0#	<u>GRADE</u> K55 K55 K55	<u>SET @</u> 600' 6376'-6086' 6086'-Surface	<u>SX CMT</u> 150 1700	TOC Surf (Circ) Surf (Circ Both Stages)
PERFORATIONS: Abo perfs 6240 - 6260'						
TUBING: BTM'D@ 6263	SIZE: 2-3/8"	WEI JOINTS: 201	HT: 4.7#	GRADE: J-55 MISC: SN @ 6264' w/ 3'	THREAD: 8RD EUE w/3' perforated sub below	

PACKER AND MISC: No TAC in this well

HISTORY AND BACKGROUND: The Empire Abo Unit G-342 was drilled and completed as a flowing Abo producer in January, 1977. The well flowed until November, 1985 at which time it was converted to Jet Pump. In September, 1986, the G-342 was converted to Rod Pump and produced until it was TA'd in March, 1989 due to high water production. The last production test yielded 0 BO, 122 BW, and 9 MCFGPD.

SCOPE OF WORK: The objectives of this workover are to: 1) plug back the present Abo interval, 2) complete in the Upper Abo Reef, and 3) make an oil well out of this unproductive hole in the ground.

PROCEDURE

- 1. MIRU PU. ND WH. NU BOP. POH w/ 2-3/8" Prod TBG.
- RU WL and run GR/JB to 6220'. Run GR/CCL f/ 5500 6220' (Use to correlate to Schlumberger's GR/N 1/27/77). Set CIBP @ 6200'. Test CSG to 500 psi for 15 min w/ produced water. If CSG does not hold, RIH w/ PKR and isolate CSG leak.
- 3. Perf the 5-1/2" CSG w/ 2 JSPF using a 4" CSG gun f/ 6140 6150' (22 .42" holes).

If well goes on vacuum, swab test. If well does not go on vacuum, proceed to Step #4.

- 4. RIH w/ RET PKR on 2-3/8" Prod TBG to 6152' testing to 4000# above slips. Spot 100 gal 15% NEFE HCl acid across perfs 6140 6150'. PU, RVS 5 BBLS, and set PKR @ ±6040'. PA TO 500#.
- 5. Acidize Abo perfs 6140 6150' w/ 1000 gal 15% NEFE HCl acid @ 1 BPM. Flush to bottom perf w/ clean produced water. MAXP: 1000#.
- 6. SI for 30 minutes, recording surf press every 10 minutes.
- 7. Swab/flow back and evaluate. If zone is productive, proceed to step #21, otherwise go to next step.
- 8. POH w/ TBG and PKR. WL set CIBP @ 6120'. Test to 500#.