Engineering
Dist. Engineer
Drilling Eng
Dist Drlg Supt

UNION OIL COMPANY OF CALIFORNIA SOUTHWEST REGION CONDITION OF HOLE & PROCEDURE

DATE: 11-19-90

FIELD: Gem, East

AREA: Andrews

LSE/UNIT: Laguna Deep Federal Unit

WELL NO. 4

REASON FOR WORK: To add additional pay

CONDITION OF HOLE:

ETD or Drillers'

TOTAL DEPTH: 13,560 PBTD: KB DATUM IS 18' ABOVE: G.L.

CASING RECORD: 20" 94 & 106.5# K-95 BT&C ERW csg at 1483'. Circ cmt.

13-3/8" 61 & 68# N-80 8rd ST&C csg at 3232'. Circ Cmt. 9-5/8" 40# N-80 8rd LT&C smls csg at 5430' w/DV tool

at 3231;. Circ cmt both stages

5-1/2" 17# S-95 & N-80 8rd LT&C & BT&C smls csg at 13,560'

w/DV tool at 10,488'. Circ cmt off DV tool.

PERFORATIONS: Middle Morrow: 13,194-204' at 4 SPF

Lower Morrow: 13,312-26' at 4 SPF Lower Morrow: 13,414-24' at 4 SPF

TUBING DETAIL: 422 jts 2-7/8" 6.5# N-80 AB Mod. 8rd tbg w/Baker F13-1

pkr at 13,080', SN at 13,044'. Landed tbg in 13,000#

compression

REGULATORY AGENCY REQUIREMENTS: File 3160-5 Form to BLM

PROCEDURE:

- 1. Shut-well in and allow tbg pressure to increase to 1500 psi.
- 2. Rig up Mast Unit. Perforate Middle Morrow w/2-1/8 decentralized tbg gun at 4 SPF f/13140-50' and 13162-70' (Total 18'/72 holes).
- 3. Flow well back & evaluate.
- 4. If stimulation required, contact Charles Pietsch in Reservoir Dept.
- 5. Place well back on production.