HIGH ISLAND BLOCK 24-L FIELD

JEFFERSON COUNTY

AUTHORS: JESSE FOWLER, JIM HOUSTON & DAVID MITCHELL WITH NORTHWIND EXPLORATION;
J. A. SLATER WITH ARCO OIL AND GAS COMPANY - RESERVOIR DATA

LOCATION
Approximately 20 miles Southwest of Sabine Pass, Texas. Planar CO:ORD: X = 3,547,014 feet
Y = 652,160 feet

DISCOVERY METHOD: Seismic Survey

DISCOVERY WELL
Arco Blk 24-L #1 TD 9,600
Completed: 5/18/69
Dual oil well in the "HC" and "HF" with a selective to "HD".
Arco Blk 24-L #2 TD 9,113 Disc. FLT. BLK. "C"
Completed: 7/14/69
Well penetrated 10 sands capable of production with 225 feet of pay, 207 feet gas and 18 feet oil.
Other Reservoirs: CM 11, GK, GL, GP, HC, HD, HF, HH, HI, IG, JG, JS, J-SER., KC, KG, KL

DEEPEST STRATIGRAPHIC UNIT PENETRATED
Lower Miocene Planulina at 12,711 feet subsea in the Arco Blk 23-L #2, completed 3/27/71.

Water Depth: 38 feet

NATURE OF TRAP
The field is highly faulted with abnormally pressured sands found below 10,000 feet subsea. Traps are anticlinal fault traps.

RESERVOIR DATA
The field consists of many varying reservoir sandstones which have been or will be produced. The age of the area is primarily Miocene, and the largest single sand produced is the "HC" which is responsible for more than half of the fields production to date. The following is a descriptive table of that sand:

"HC" SAND (FB-C)
Lithology: Sandstone, VG, LMY, SH Streaks, CLN
Porosity: 29-35%
Permeability: 50-2500 MD
Reservoir Drive: Slight Water Drive Gas Sand
Original Reservoir Pressure: 3700 PSI
Original Reservoir Temperature: 160 deg. F
OOIP or OGIP: 182 BCF
Recovery Factor*: 95% (w/60 PSIG compression)
GOR: 500,000 SCF/STB
Saturation Pressure: NA
Productive Acreage: 500 ac "HC" sand
1,935 acres - total field
Well Spacing: 80 ac
*This is very high here. Normally, gas sand recovery factors are in the 60-70% area.

FLUIDS DATA "HC" SAND (FB-C)
SW: 12%
Salinity: 9500 ppm
Resistivity: 0.3 (from logs)
Oil Quality: 51-54 deg. API Condensate
Gas Quality: 60.6, 94% Methane, 1080 BTU/CF

PRODUCTION DATA
Completion Method: Normal completion methods included using "Sanfix" on the zones following 2-4 spf perforations. Most wells were dually completed w/ 2-3/8" and 2-7/8" N-80 plastic coated TOG. No gravel packs or screens used.
Stimulation Treatment: Several acid jobs have been tried on various sands w/ long term poor results. The high lime content in the sands found in this field has proven to be a major problem when using acid.
Total Wells Drilled: 20 wells drilled and completed (13 duals).
Currently Productive: 10 wells (6 duals, 2 of the dual wells have only 1 string producing)

PRODUCTION STATISTICS
(See Table.)