FOWLER PADDOCK GAS POOL
LEA COUNTY, NEW MEXICO

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Pan Am's EXHIBIT NO. 13
CASE NO. 2742-2743-2744

GENERAL

The Fowler Paddock Gas Pool was discovered by the recompletion of the Pan American South Mattix Unit Well No. 10, located 1980' FNL and 810' FEL of Section 15, T-24-S, R-37-E. This well was completed in February 1960 with a CAOF of 1097 MCFPD from perforations 4878-4894' after stimulation with 550 gallons of acid. Initial Paddock perforations in the SMU No. 10, 4878-4882', 4908-4912', and 4920-2924', were squeeze cemented after testing 250 MCF of gas and 173 barrels of water daily. Three successful completions located on South Mattix Unit acreage are currently connected and producing. A fourth completion, Gulf's Plains-Knight No. 3 located 1980' FSL and 760' FWL of Section 23, T-24-S, R-37-E, was shut-in after testing at a rate of 366 MCFPD with 4 BWPD in April 1962. This well was connected to sales in December 1962.

Pertinent data for the individual wells are attached.

STRUCTURAL INFORMATION

The Fowler Paddock structure is defined as a doubly plunging assymmetrical anticline, the major axis of which trends northwest-southeast. The pay closure is approximately 150 feet.

CHARACTERISTICS OF THE RESERVOIR ROCK AND FLUID

The Paddock pay is a tan to light brown sucrosic to very fine granular dolomite, interbedded with light grey silt stringers, cemented with micro-crystalline dolomite.

Gas produced from the Paddock is dry, with no lease liquid hydrocarbon recovery. Hydrogen sulfide content is approximately 900 grains per 100 cubic feet of gas.

PERFORMANCE DATA

An original bottom hole pressure of 2000 psi was measured on drill-stem testing the Paddock formation in 1949 in the Pan American SMU Well No. 1. The most recent BHP on the SMU No. 11 was 1925 psi on August 28, 1962, after a cumulative recovery from this well of 320 MMCF of gas.

Bottom hole pressures in the SMU No. 10 well have not been reliable due to poor buildup apparently resulting from formation damage associated with squeeze cementing the initial perforations to shut-off water production. The most recent pressure on this well was 1402 psi on August 28, 1962, after a cumulative recovery of 234MMCF of gas.

An extrapolated shut-in surface pressure taken in conjunction with a packer leakage test in the SMU No. 14 on October 7, 1962, indicates a BHP

on this well of 1876 psi, 124 psi below the original pressure of 2000 psi in SMU No. 1. This pressure difference indicates drainage in the vicinity of SMU No. 14 by production from SMU Nos. 10 and 11, located one-half mile and one mile, respectively, from the SMU No. 14.

FOWLER PADDOCK FIELD
PAN AMERICAN SMU NO. 14

1980' FSL and 1980' FWL
Section 15, T-24-S, R-37-E

TD: 6403'
PBD: 6155'
Casing: 9 5/8" CSA 1068'
7" CSA 6403'
Triple Completion in Paddock, Blinebry, Tubb
Paddock Perf: 4849-4885'
Paddock CAOF: 8000 MCFPD
Dry gas, sour
Stimulation: 500 Gallons Acid

Paddock Completion Date: 7-16-62
Date Connected to Pipeline: November, 1962

FOWLER PADDOCK FIELD
PAN AMERICAN SMU NO. 11

2310' FNL and 330' FEL
Section 22, T-24-S, R-37-E

TD: 7901'
PBD: 4865'
Casing: 13 3/8" CSA 315'
9 5/8" CSA 4375'
5 1/2" CSA 7960'
Perf: 4810-4835'
CAOF: 2100 MCFPD
Dry Gas, Sour
Stimulation: 3000 gallons 15% Reg. Acid

Paddock Completion Date: 11-9-60
Date Connected to Pipeline: March, 1961

FOWLER PADDOCK FIELD
PAN AMERICAN SMU NO. 10

1980' FNL and 810' FEL
Section 15, T-24-S, R-37-E

TD: 10525'
PBD: 4920'
Casing: 13 3/8" CSA 323'
9 5/8" CSA 3825'
7" CSA 10,510'
Perf: 4878-4894'
CAOF: 1097 MCFPD
Dry gas, sour
Stimulation: 5500 Gallons 15% Reg. Acid

Paddock Completion Date: 2-5-60
Date Connected to Pipeline: May, 1960

FOWLER PADDOCK FIELD
GULF OIL CORPORATION PLAINS KNIGHT NO. 3

1980' FSL and 4760' FWL
Section 23, T-24-S, R-37-E

TD: 7668'
PBD: 7324'
Casing: 13 3/8" CSA 305'
8 5/8" CSA 3799'
Oil string NA
Paddock Perfs: 4839-45'
CAOF: NA
Test: Flowed 366 MCFPD and 4 BW
15/64" Choke
TPF 360 psi
Stimulation: 1000 gallons acid

Date Completed: 4-24-62
Status: Connected to sales, December 1962