FORM 470 2-57

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
September 23, 1964

File: F-1168-501.77

Subject: Communication Test
USG Section 19, Well No. 17

19-29-16

Mr. E. C. Arnold
NMOCC
1000 Rio Brazos Road
Aztec, New Mexico

Dear Sir:

We are submitting data for your information on the communication test for USG Section 19 Well No. 17.

On September 18, 1964, a sonolog test was taken on subject well, and the enclosed attachment shows the results and are submitted for your approval.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

L. D. Speer, Jr.
Area Superintendent

JFE:bg

Attachment

USG Section 19 Well No. 17
Communication Test

Injection Interval:
Top: 2157--9-5/8" csg. seat
Base: 3100--Top of cement behind 7" csg.

Observed data:
Specific gravity of gas -- .700 (est)
Specific gravity of oil -- .788
Measured wellhead pressure--1379 psia
Wellhead temperature -- 60° (520° Rankine)
Reservoir temperature -- 150° (610° Rankine)
Gravity of Crude -- 48°
Fluid level -- 2119

Sonolog Results:
Joints to fluid -- 69
Depth of fluid -- 2119
Average Joint -- 30.71

Summation of Calculation:
Pressure at fluid level -- 1468 psia
H -- 2157 injection depth
h -- 2157 - 2119 = 38'
BHP @ 2157 = pressure at fluid level + .788 x .433 x 38 = 1468 + 13 = 1481 psia
BHP @ 3100 = 1468 + (3100 - 2119) (.788) (.433) = 1468 + 334 = 1802 psia

Injection Interval:
Specific Gravity = 1.0635 (Salt Water)
2157 x 433 x 1.0635 = 994 psig @ 2157
3100 x .433 x 1.0635 = 1429 psig @ 3100

Therefore pressure on inside of 7" casing at both top and bottom of injection interval is greater than pressure of interval being used for injection

USG Section 19 Well No. 17
Sketch of Casing and
Producing intervals