

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan
 Initial X Annual _____ Special _____ Date of Test 10-2-64
 Company PAN AMERICAN PETROLEUM CORP. Lease McDaniel Gas Unit "B" Well No. 1
 Unit B Sec. 26 Twp. 29N Rge. 10W Purchaser El Paso Natural Gas Company
 Casing 4-1/2 Wt. 10.5 I.D. 4.032 Set at 6472 Perf. 6306/19 To 6430-44
6331/42
 Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6305 Perf. 6345 To 6276
 Gas Pay: From 6300 To 6446 L _____ xG .700 -GL _____ Bar.Press. 12
 Producing Thru: Casing _____ Tubing X Type Well Single
 Single-Bradenhead-G. G. or G.O. Dual
 Date of Completion: 9-22-64 Packer Head Reservoir Temp. _____

OBSERVED DATA

Tested Through (removed) (Choke) (removed) Type Taps Flange

| No. | Flow Data | | | | | Tubing Data | | Casing Data | | Duration of Flow Hr. |
|-----|------------------------------------|-------------------------------------|-------------|----------------------|-----------|-------------|------------|-------------|------------|----------------------|
| | (removed) (Line) Size | (Choke) (removed) Size | Press. psig | Diff. h _w | Temp. °F. | Press. psig | Temp. °F. | Press. psig | Temp. °F. | |
| SI | <u>10 Days</u> | | | | | <u>2048</u> | | <u>2048</u> | | |
| 1. | <u>2 inch</u> | <u>.730</u> | <u>347</u> | | | <u>347</u> | <u>60°</u> | <u>1299</u> | <u>60°</u> | <u>3 Hr.</u> |
| 2. | | | | | | | | | | |
| 3. | | | | | | | | | | |
| 4. | | | | | | | | | | |
| 5. | | | | | | | | | | |

FLOW CALCULATIONS

| No. | Coefficient (24-Hour) | $\sqrt{h_w P_f}$ | Pressure psia | Flow Temp. Factor F _t | Gravity Factor F _g | Compress. Factor F _{pv} | Rate of Flow Q-MCFPD @ 15.025 psia |
|-----|-----------------------|------------------|---------------|----------------------------------|-------------------------------|----------------------------------|------------------------------------|
| 1. | <u>12.3490</u> | | <u>330</u> | <u>1.000</u> | <u>.9230</u> | <u>1.101</u> | <u>7043</u> |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

PRESSURE CALCULATIONS

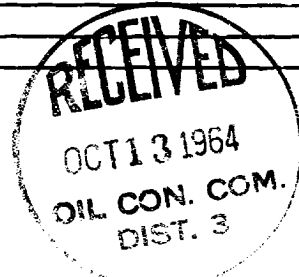
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 F_c _____ (1-e^{-S})
 Specific Gravity Separator Gas _____
 Specific Gravity Flowing Fluid _____
 P_c 2040 P_c² 4,243,600

| No. | P _w P _t (psia) | P _t ² | F _c Q | (F _c Q) ² | (F _c Q) ² (1-e ^{-S}) | P _w ² | P _c ² -P _w ² | Cal. P _w | P _w /P _c |
|-----|--------------------------------------|-----------------------------|------------------|---------------------------------|--|-----------------------------|--|---------------------|--------------------------------|
| 1. | | | | | | <u>1,710,721</u> | <u>2,304,679</u> | | |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 10,300 MCFPD; n .75

COMPANY PAN AMERICAN PETROLEUM CORPORATION
 ADDRESS Box 400, Farmington, New Mexico
 AGENT and TITLE By: ORIGINAL SIGNED BY
 WITNESSED _____
 COMPANY F. W. Fossil

REMARKS



INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

- Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.
- P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia
- P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia
- P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if
flowing through casing.) psia
- P_f = Meter pressure, psia.
- h_w = Differential meter pressure, inches water.
- F_g = Gravity correction factor.
- F_t = Flowing temperature correction factor.
- F_{pv} = Supercompressibility factor.
- n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .