

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesaverde County Rio Arriba
Initial x Annual - Special - Date of Test 10-30-58
Company Magnolia Petroleum Company Lease Jicarilla "F" Well No. 7 MV-LT
Unit M Sec. 24 Twp. 27N Rge. 3W Purchaser Pacific Northwest
Casing 5" Wt. 15# I.D. 4.408" Set at 6230' Perf. 5645' To 6012'
Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 6011' Perf. - To -
Gas Pay: From 5645' To 6012' L 6011' x 0.680(est) -GL 4087 Bar.Press. 12 psia
Producing Thru: Casing - Tubing x Type Well G. G. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10-3-58 Packer yes Reservoir Temp. -

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps -

| Flow Data | | | | | | Tubing Data | | Casing Data | | Duration of Flow Hr. |
|-----------|----------------------------|------------------------------|----------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------------------|
| No. | (Prover) (Line) Size | (Choke) (Orifice) Size | Press. psig | Diff. h_w | Temp. °F. | Press. psig | Temp. °F. | Press. psig | Temp. °F. | |
| SI | | | | | | 1584 | - | - | - | |
| 1. | 2" | 0.750" | 189 | - | 57 | 189 | 57 | - | - | 3 Hrs. |
| 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. | 12.3650 | - | 201 | 1.0029 | 0.9393 | 1.022 | 2393 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

PRESSURE CALCULATIONS

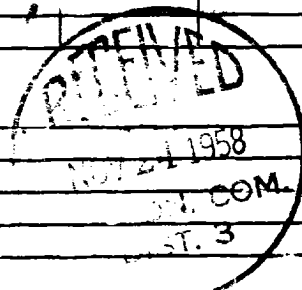
Gas Liquid Hydrocarbon Ratio - cf/bbl.
Gravity of Liquid Hydrocarbons - deg.
 F_c 9.402 $(1-e^{-s})$ 0.257

Specific Gravity Separator Gas -
Specific Gravity Flowing Fluid 0.680
 P_c 1596 P_c^2 2547.2 (est)

| No. | P_t 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. | 201 | 40401 | 22.5 | 506.2 | 130.1 | 170.5 | 2376.7 | - | - |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 2517 MCFPD; n 0.75COMPANY MAGNOLIA PETROLEUM COMPANYADDRESS P. O. Box 2406, Hobbs, New MexicoAGENT and TITLE -WITNESSED -COMPANY -

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} = Supercompressability 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 .

| | |
|-----------------------------|---|
| OIL CONSERVATION COMMISSION | |
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