

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesaverde Formation Mesaverde County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 10/19/57
Company Magnolia Petroleum Company Lease Jicarilla "G" Well No. 4 M.V. LT
Unit M Sec. 26 Twp. 27N Rge. 3W Purchaser Pacific Northwest Pipeline Corp.
Casing 5 1/2" Wt. 14 I.D. 5.012 Set at 6360 Perf. 5726 To 6249
Tubing 2 3/8" Wt. 4.74 I.D. 1.995 Set at 5702 Perf. - To -
Gas Pay: From 5726 To 6249 L 5702 xG (.68) (ent) -GL 3877 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: 10/6/57 Packer yes Reservoir Temp. _____

OBSERVED DATA

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

| No. | Flow Data | | | | | Tubing Data | | Casing Data | | Duration of Flow Hr. |
|-----|----------------------|------------------------|-------------|----------------------|-----------|-------------|-----------|-------------|-----------|----------------------|
| | (Prover) (Line) Size | (Choke) (Orifice) Size | Press. psig | Diff. h _w | Temp. °F. | Press. psig | Temp. °F. | Press. psig | Temp. °F. | |
| SI | | | | | | 1673 | | | | |
| 1. | 2" | 3/4" | 354 | - | 67 | 354 | 67 | - | - | 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 | - | 366 | .9933 | .9393 | - | 4,222 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
T_c 9.402 (1-e^{-s}) 0.246

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1685 P_c 2839.2

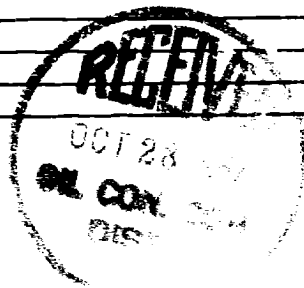
| No. | P _w P _t (psia) | P _t ² | F _c Q | (F _c Q) ² | (F _c Q) ² (1-e ^{-s}) | P _w ² | P _c ² -P _w ² | Cal. P _w | P _w P _c |
|-----|--------------------------------------|-----------------------------|------------------|---------------------------------|--|-----------------------------|--|---------------------|-------------------------------|
| 1. | 366 | 134 | 39.70 | 1575.7 | 387.6 | 521.6 | 2317.6 | 722.5 | 428 |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 4,915 MCFPD; n .75COMPANY MAGNOLIA PETROLEUM COMPANYADDRESS P.O. Box 2106, Hobbs, New MexicoAGENT and TITLE George L. Fowler, Gas Engineer

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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