

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Pictured Cliffs County Rio Arriba
Initial X Annual - Special - Date of Test 10/15/58
Company Magnolia Petroleum Company Lease Jicarilla "G" Well No. 8 UT-PC
Unit A Sec. 26 Twp. 27 N Rge. 3 W Purchaser Pacific Northwest Pipe Line Company
Casing 7 5/8" Wt. 25.40# I.D. 6.969" Set at 4170' Perf. 3870' To 3896
Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 3893' Perf. - To -
Gas Pay: From 3870' To 3896' 3893' xG 0.680(Est) GL 2647 Bar. Press. 12 PSIA
Producing Thru: Casing - Tubing X Type Well GG Dual
Date of Completion: 9/20-58 Packer None Single-Bradenhead-G. G. or G.O. Dual
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) (Line) Size | Press. psig | Diff. h _w | Temp. °F. | Press. psig | Temp. °F. | Press. psig | Temp. °F. | |
| SI | | | | | | 625 | - | 912 | - | |
| 1. | 2" | 0.750" | 47 | - | 67 | 47 | 67 | 196 | - | 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 | - | 59 | 0.9933 | 0.9393 | | 680 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas -
Specific Gravity Flowing Fluid 0.680E
P_c 924 P_c 853.8

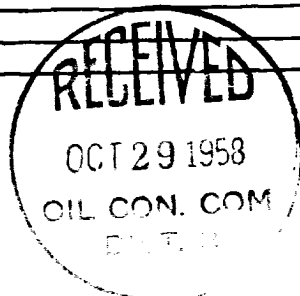
| No. | P _w P _t (psia) | P _t ² | F _c Q | (F _c Q) ² | (F _c Q) ² (1-e ^{-s}) | P _w ² | P _c ² -P _w ² | Cal. P _w | P _w / P _c |
|-----|---|-----------------------------|------------------|---------------------------------|---|-----------------------------|--|------------------------|------------------------------------|
| 1. | 208 | | | | | 43.3 | 810.5 | - | - |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 709 MCFPD; n 0.85COMPANY Magnolia Petroleum Company
ADDRESS Box 2406, Hobbs, New MexicoAGENT and TITLE William A. Morgan

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} = 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 .

| OIL CONSERVATION COMMISSION | | |
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