

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 I Annual _____ Special _____ Date of Test March 1, 1965
Company Tenneco Oil Co. Lease Florance Well No. 29
Unit K Sec. 25 Twp. 30N Rge. 8W Purchaser No connection EL Paso NG
Casing 4.5 Wt. 10.5 I.D. _____ Set at 7600 Perf. 7360 To 7541
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 7320 Perf. _____ To _____
Gas Pay: From 7360 To 7541 L _____ xG _____ -GL .650 Bar.Press. _____
Producing Thru: Casing _____ Tubing I Type Well G. G.
Date of Completion: _____ Packer 7320 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 196

OBSERVED DATA

Tested Through (Prover) (Choke) (MANUAL)1000000

| 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 | | | | | | <u>2400</u> | | <u>Phr.</u> | | <u>Since Completion</u> |
| 1. | | <u>3/4</u> | | | | <u>212</u> | <u>66</u> | <u>"</u> | | <u>1 hour</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>123.650</u> | | <u>224</u> | <u>9943</u> | <u>.9608</u> | <u>1.022</u> | <u>2.708</u> |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

PRESSURE CALCULATIONS

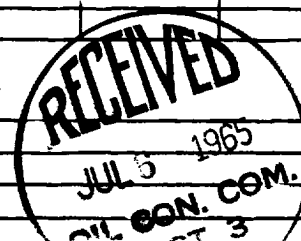
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c .9402 (1-e^{-S}) 0.292

Specific Gravity Separator Gas .650
Specific Gravity Flowing Fluid _____
P_c 2432 P_c² 581744

| 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>224</u> | <u>50.176</u> | <u>25.461</u> | <u>648.263</u> | <u>189.239</u> | <u>239.121</u> | <u>5578623</u> | <u>489</u> | |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 2.794 MCFPD; n. 75 (1.0319)
COMPANY _____ (1.043)
ADDRESS _____
AGENT 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 .