

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 5-23-61
Company PUBCO PETROLEUM CORPORATION Lease _____ State _____ Well No. 28
Unit B Sec. 36 Twp. 29N Rge. 10W Purchaser El Paso Natural Gas Company
Casing 5 1/4 Wt. 154 I.D. 4.950 Set at 6604 Perf. 6570 To 6376
Tubing 2 3/8 Wt. 4.7 I.D. 1.992 Set at 6551 Perf. 6551 To _____
Gas Pay: From 6576 To 6378 L 6477 xG 0.650 -GL 4210 Bar. Press. 12.025
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 5-20-61 Packer No Reservoir Temp. 154

OBSERVED DATA

Tested Through (200000) (Choke) (200000) 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	<u>2</u>	<u>0.750</u>				<u>1951</u>	<u>80</u>	<u>1951</u>	<u>80</u>	<u>81</u>
1.						<u>412</u>		<u>1042</u>		<u>1</u>
2.						<u>333</u>		<u>928</u>		<u>2</u>
3.						<u>309</u>		<u>928</u>		<u>3</u>
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>12.365</u>		<u>321</u>	<u>0.9813</u>	<u>0.9608</u>	<u>1.025</u>	<u>3836</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 0.650
Specific Gravity Flowing Fluid _____
P_c 1963 P_c² 3,853,369

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>920</u>					<u>846,400</u>	<u>3,006,967</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 4620 MCFPD; n 0.75
COMPANY PUBCO PETROLEUM CORPORATION
ADDRESS 106 West Glasha
AGENT and TITLE B. H. Wayshoff, Jr., Dist. Mgr.
WITNESSED Ben Jensen
COMPANY Pubco Petroleum Corp

REMARKS

$$CAQF = 3836 \frac{(3,853,369)^{.75}}{(3,006,967)} = 3836(1.2815)^{.75} = 3836(1.2043) = 4620$$



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 .