NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTIPLE POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County San Juan

Initial X Annual Special Date of Test 11-2-60

Company PUBCO PETROLEUM CORPORATION Lease Federal Well No. 6-B

Unit B Sec. 6 Twp. 29N Rge. 11W Purchaser El Paso Natural Gas Company

Casing 5½ Wt. 15½ I.D. 4.950 Set at 6682 Perf. 6523 6458 To 6560 6472

Tubing 2 3/8 Wt. 4.7 I.D. 1.992 Set at 6557 Perf. To 6557

Gas Pay: From To L 6557 xG 0.650 =GL 4262 Bar.Press. 12.025

Producing Thru: Casing Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 10-18-60 Packer No Reservoir Temp. 146

OBSERVED DATA

Tested Through (~~Choke~~ Choke) ~~Meter~~ Type Taps

No.	Flow Data (Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Temp. °F.	Casing Data Press. psig	Casing Temp. °F.	Duration of Flow Hr.
SI	2"	3/4				2027		2065		
1.						930	80	375		3 hour
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_m}$	Pressure p_m psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.365		387	0.9813	0.9608	1.025	4624
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 0.65
Specific Gravity Flowing Fluid _____
P_c 2039 P_c^2 4,157,521

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	942					887,364	3270157		
2.									
3.									
4.									
5.									

Absolute Potential: 5536 MCFPD; n 0.75
COMPANY PUBCO PETROLEUM CORPORATION
ADDRESS 108 West Chuska, Aztec, New Mexico
AGENT and TITLE B. H. Waychoff, Jr., Production Engineer B H Waychoff Jr
WITNESSED Glen O. Rhodes
COMPANY Pubco Petroleum Corp.

REMARKS

NOV 4

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

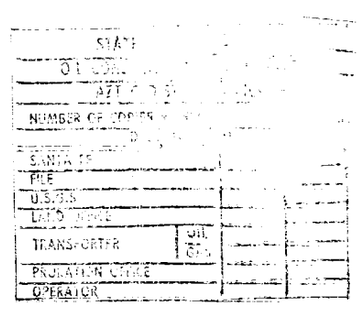
P_f = Meter pressure, psia.

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.