NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County San Juan

Initial X Annual ____ Special ____ Date of Test 10-10-60

Company PUBCO PETROLEUM CORP Lease Federal Well No. 5-B

Unit B Sec. 5 Twp. 29N Rge. 12W Purchaser El Paso Natural Gas Co.

Casing 5½" Wt. 15½ I.D. 4.950 Set at 6496 Perf. 6218 6280 To 6233 6343

Tubing 2 3/8 Wt. 4.7# I.D. 1.995 Set at 6317 Perf. 6317 To ____

Gas Pay: From 6218 To 6343 L 6317 xG 0.650 -GL ____ Bar.Press. 12.025

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

Date of Completion: 9-25-60 Packer No Reservoir Temp. 138

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI	2"	0.750				2097		2100		
1.		"				405		946		1
2.		"				335		837		2
3.		"				302	80	784		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.	12.365		314	0.9813	0.9608	1.025	3,747
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 2109 P_c^2 4,447,881

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	796					633,616	3,814,265		
2.									
3.									
4.									
5.									

Absolute Potential: 4,205 MCFPD; n 0.75

COMPANY PUBCO PETROLEUM CORPORATION
ADDRESS 108 West Chuska, Aztec, New Mexico
AGENT and TITLE B. H. Wayhoff, Jr. Prod. Engr. B H Wayhoff
WITNESSED Jack Dunning
COMPANY Pubco Petroleum Corp.

REMARKS

RECEIVED
OCT 11 1960
OIL CON. COM.
DIST. 3

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.