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 XX Annual _____ Special _____ Date of Test 10-16-64

Company PUBCO PETROLEUM CORP. Lease State Well No. 33

Unit M Sec. 32 Twp. 27N Rge. 9W Purchaser El Paso Natural Gas Company

Casing 4½ Wt. 10.5 I.D. _____ Set at 6932 Perf. 6686 To 6812

Tubing 2.3/8 Wt. 4.7 I.D. _____ Set at 6605 Perf. Blow out plug To _____

Gas Pay: From 6686 To 6812 L 6605 xG .650 =GL _____ Bar.Press. 12.025

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

Date of Completion: 10-9-64 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps Flange

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						2015		2015		
1.	2"	3/4	575		77	575		1210	77	1 hour
2.	2"	3/4	520		79	520		1105	79	2 hours
3.	2"	3/4	467		84	467		1120	84	3 hours
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		479	.9777	.9698	1.042	5797.43
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 _____
Specific Gravity Flowing Fluid _____
P_c 2027 P_c^2 4,108,729

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.									
2.						1,065,021			
3.									
4.									
5.									

Absolute Potential: 7,260 MCFPD; n _____

COMPANY PUBCO PETROLEUM CORP.
ADDRESS P.O. Box P, Aztec, New Mexico
AGENT and TITLE Glen O. Rhodes, Field Foreman
WITNESSED Jack Dunning
COMPANY Pubco Petroleum Corp.

RECEIVED
OCT 29 1964
OIL CON. COM
DIST. 3

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.