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 3-15-65

Company PUBCO PETROLEUM CORP. Lease State Well No. 32

Unit O Sec. 36 Twp. 30N Rge. 11W Purchaser El Paso Natural Gas Company

Casing 5½ Wt. 15.5&17 I.D. 4.892 Set at 6947 Perf. 6761 To 6960

Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 6703 Perf. ------ To ------

Gas Pay: From 6822 To 6967 L ____ xG ____ -GL ____ Bar.Press. 12.025

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

Date of Completion: 3-7-65 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						2084		2082		
1.	2"	.750	357			357	T1	1188		1 hour
2.			307			307	T3	1041		2 hours
3.			873			873	74	969		3 hours
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor 74° F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.365		885	.9868	.9608	1.017	
2.			398h.08	3877.50	3341.18	3397.98	3,397.98
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 2084 P_c^2 4,343,056

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.						998,961	3,344,095		
2.									
3.									
4.									
5.									

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DIST. 3

Absolute Potential: 4,079 MCFPD; n .75

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

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.