NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial ____ Annual ____ Special X Date of Test 6-13-58

Company El Paso Natural Gas Company Lease Prichard Well No. 1-A

Unit G Sec. 9 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company

Casing 5 1/2" Wt. 15.5 I.D. ____ Set at 3169 Perf. ____ To ____

Tubing 2" Wt. 4.7 I.D. ____ Set at 3112 Perf. ____ To ____

Gas Pay: From 2962 To 3109 L 3112 xG .665 -GL 2069 Bar.Press. 13.2

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

Date of Completion: 6-10-57 Packer None Reservoir Temp. ____

OBSERVED DATA

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

No.	Flow Data ~~(Prover)~~ (Line) Size	~~(Choke)~~ (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						596		596		72
1.	4"	1.750	232	26.40	67	510		557		24
2.	4"	1.750	225	29.16	65	482		539		24
3.	4"	1.750	225	29.09	65	417		519		24
4.	4"	1.750	227	32.56	67	365		501		24
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.	19.27	63.39		.9933	.9498	1.004	1181
2.	19.27	69.31		.9952	.9498	1.023	1352
3.	19.27	97.19		.9952	.9498	1.009	1811
4.	19.27	112.32		.9933	.9498	1.003	2089
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 107.9 cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
P_c Measured $(1-e^{-s})$ ____ P_c 609.2 P_c^2 371.1

No.	P_w or 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.	523.2	273.7				325.1	46.0	570.2	93.6
2.	479.2	229.6				306.9	66.2	552.2	90.6
3.	438.2	192.1	- Measured -			283.2	87.9	532.2	87.4
4.	398.2	143.8				266.4	106.7	516.2	84.4
5.									

Absolute Potential: 4,750 MCFPD; n .662

COMPANY El Paso Natural Gas Company
ADDRESS P.O. Box 1364 - Jal, New Mexico
AGENT and TITLE Herbert M. Levy, Gas Tester
WITNESSED Joe B. Murray and Earl C. Smith
COMPANY El Paso Natural Gas Company

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.