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 **3-25-57**

Company **El Paso Natural Gas Company** Lease **Parker** Well No. **1**

Unit **D** Sec. **29** Twp. **26** Rge. **37** Purchaser **El Paso Natural Gas Co.**

Casing **7** Wt. **20** I.D. **6.456** Set at **3012** Perf. **2950** To **3008**

Tubing **2** Wt. **4.7** I.D. **1.995** Set at **2848** Perf. ____ To ____

Gas Pay: From **2950** To **3008** L **2848** xG **.655** -GL **1865** Bar.Press. **13.2**

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

Date of Completion: **4-14-35** Packer **None** 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						629		630		72
1.	4	1.250	528	16.81	65	593		602		24
2.	4	1.250	530	26.01	67	583		597		24
3.	4	1.250	529	34.81	74	559		586		24
4.	4	1.250	512	44.89	70	518		578		24
5.										

FLOW CALCULATIONS

No.	Coefficient Flange (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.	9.643	95.36		.9952	.9571	1.053	923
2.	9.643	118.84		.9933	.9571	1.053	1,147
3.	9.643	137.36		.9868	.9571	1.051	1,316
4.	9.643	153.52		.9905	.9571	1.048	1,470
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio **Dry** cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c ____ $(1-e^{-s})$ ____

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c **643.2** P_c^2 **413.7**

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.	606.2	367.2				378.5	35.2		.9413
2.	596.2	355.5				372.3	41.4		.9254
3.	572.2	327.4				359.0	54.7		.8873
4.	531.2	282.2				349.5	64.2		.8222
5.									

Absolute Potential: **6,650** MCFPD; n **.75** = .805

COMPANY **El Paso Natural Gas Company**
ADDRESS **P. O. Box 1384, Jal, New Mexico**
AGENT and TITLE R. T. Wright **R. T. Wright, Petroleum Engineer**
WITNESSED **Jack T. Littlefield**
COMPANY **El Paso Natural Gas Company**

REMARKS

ELVIS A. UTZ
GAS ENGINEER

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.