DUPLICATE

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Tates-7 Rivers County Lea

Initial ____ Annual ____ Special X Date of Test 3/15-19/1960

Company El Paso Natural Gas Company Lease Wells Well No. 13

Unit L Sec. 5 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company

Casing 5.5 Wt. 15.5 I.D. ____ Set at 3369 Perf. 3000 To 3155

Tubing 2.0 Wt. 4.7 I.D. 1.995 Set at 3127 Perf. 3123 To 3127

Gas Pay: From 3000 To 3155 L 3123 xG .654 -GL ____ Bar.Press. ____

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

Date of Completion: 3-6-1950 Packer None Reservoir Temp. ____

FRACED: 2-10-1960

OBSERVED DATA

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

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										
1.						212		465		72
2.	4	1.500	362	5.29	67	364		417		24
3.	4	1.500	304	17.22	66	310		387		24
4.	4	1.500	266	25.00	68	275		367		24
5.	4	1.500	236	33.64	68	243		352		24

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.							
2.	13.99	44.55		.9933	.9578	1.037	614.8
3.	13.99	73.91		.9933	.9578	1.030	1,014
4.	13.99	83.84		.9928	.9578	1.026	1,144
5.	13.99	91.56		.9928	.9578	1.023	1,245

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____

Gravity of Liquid Hydrocarbons DRY deg. Specific Gravity Flowing Fluid .654

F_c Measured $(1-e^{-s})$ ____ P_c 478.2 P_c^2 228.7

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.	SI								
2.	430.2					185.1	43.6		.8966
3.	400.2			MEASURED		160.2	68.5		.8369
4.	380.2					144.5	84.2		.7952
5.	365.2					133.4	95.3		.7640

Absolute Potential: 2,800 MCFPD; n .913

COMPANY El Paso Natural Gas Company

ADDRESS P. O. Box 1364 - Jal, New Mexico

AGENT and TITLE P. T. Wright R. T. Wright - Petroleum Engineer

WITNESSED ____

COMPANY Earl G. Smith
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.