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 3-24/4-1-60

Company El Paso Natural Gas Company Lease Moberly Elliott Well No. 2

Unit D Sec. 21 Twp. 26 Rge. 37 Purchaser El Paso Natural Gas Company

Casing 5½ Wt. 14 I.D. ____ Set at 3236 Perf. ____ To ____

Tubing 2 Wt. 4.7 I.D. ____ Set at 3024 Perf. ____ To ____

Gas Pay: From 3018 To 3036 L 3024 xG .631 -GL ____ Bar.Press. 13.2

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

Date of Completion: Rel 8-18-49 Packer None Reservoir Temp. ____

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						733		733		72
1.	4	1.250	534	5.29	59	713		717		24
2.	4	1.250	525	9.00	57	689		705		24
3.	4	1.250	532	15.21	65	667		687		24
4.	4	1.250	545	18.49	60	648		660		24
5.										

FLOW CALCULATIONS

No.	Coefficient Flg. (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	53.80		1.0010	.9752	1.054	533.7
2.	9.643	69.60		1.0029	.9752	1.054	691.6
3.	9.643	91.06		.9952	.9752	1.050	894.7
4.	9.643	101.6		1.0000	.9752	1.053	1,006
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 746.2 P_c^2 556.8

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.	730.2					533.2	23.6		97.8
2.	718.2					515.8	41.0		96.2
3.	700.2					490.3	66.5		93.8
4.	673.2					453.2	103.6		90.2
5.									

Absolute Potential: 2,560 MCFPD; n ~~.625~~ .500

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 J. B. Murray
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.