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 __4-15/4-19-1957__

Company __El Paso Natural Gas Co.__ Lease __Wells Federal__ Well No. __1__

Unit __I__ Sec. __5__ Twp. __25__ Rge. __37__ Purchaser __EPNG__

Casing __7"__ Wt. __23.0__ I.D. _____ Set at __3548__ Perf. __3100__ To __3195__

Tubing __2"__ Wt. __4.7__ I.D. _____ Set at __3195__ Perf. _____ To _____

Gas Pay: From __3100__ To __3195__ L __3100__ xG __0.645__ -GL __2000__ Bar.Press. __13.2__

Producing Thru: Casing _____ Tubing __X__ Type Well __Single__
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: __12-15-1955__ Packer __None__ Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						666		666		72
1.	4	1.250	534	31.92	78	651		658		24
2.	4	1.250	534	51.84	68	647		654		24
3.	4	1.250	549	67.24	68	643		651		24
4.	4	1.250	564	72.25	72	636		648		24
5.										

FLOW CALCULATIONS

No.(FLO)	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.	9.643	132.14		.9833	.9445	1.050	1,248
2.	9.643	168.39		.9924	.9445	1.050	1,497
3.	9.643	194.40		.9924	.9445	1.053	1,898
4.	9.643	204.36		.9898	.9445	1.055	1,986
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas __0.645__
Specific Gravity Flowing Fluid _____
P_c __672.2__ P_c^2 __461.3__

No.	P_w P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2$ $(1-e^{-s})$	$P_w 2$	$P_c^2 - P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						450.5	10.8		.98
2.						445.2	16.1		.97
3.			Measured			441.2	20.1		.96
4.						437.2	24.1		.95
5.									

Absolute Potential: __13,500__ MCFPD; n __0.631__
COMPANY __El Paso Natural Gas Company__
ADDRESS __Box 1384 - Jal, New Mexico__
AGENT and TITLE __R. T. Wright__   *R.T.Wright*
WITNESSED __Earl G. Smith__
COMPANY _____

REMARKS

ELVIS A. U
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.