Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

1957 FEB 26 AM 10:32

Pool __Jalmat__ Formation __Yates - 7 Rivers__ County __Lea__

Initial _____ Annual _____ Special __X__ Date of Test __2-4 to 2-8-57__

Company __El Paso Natural Gas Company__ Lease __Bates__ Well No. __1__

Unit __L__ Sec. __10__ Twp. __26 S__ Rge. __37 E__ Purchaser __EPNG__

Casing __5½__ Wt. __15.5__ I.D. _____ Set at __2608__ Perf. _____ To _____

Tubing __2__ Wt. __4.7__ I.D. _____ Set at __3134__ Perf. _____ To _____

Gas Pay: From __2608__ To __3140__ L __3134__ xG __.655__ —GL __2053__ Bar.Press. __13.2__

Producing Thru: Casing _____ Tubing __X__ Type Well __Single__
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: __3-11-53__ Packer __None__ Reservoir Temp. _____

OBSERVED DATA

Tested Through (~~Bottom~~) (~~Static~~) (Meter)   Type Taps __Flange__

No.	Flow Data (Line) Size	(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						715				72
1.	4"	1.500	565	9.0	93	667				24
2.	4"	1.500	567	14.92	68	667				24
3.	4"	1.500	574	27.56	87	650				24
4.	4"	1.500	579	39.60	84	627				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.	13.99	69.13		.9697	.9571	1.051	944
2.	13.99	104.76		.9741	.9571	1.052	1438
3.	13.99	127.20		.9756	.9571	1.052	1748
4.	13.99	153.20		.9759	.9571	1.052	2107
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio __Dry__ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c __9.936__ $(1-e^{-s})$ __.132__

Specific Gravity Separator Gas __.655__
Specific Gravity Flowing Fluid _____
P_c __728.2__ P_c^2 __530.3__

No.	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.	700.2	490.3	9.38	87.98	11.61	501.9	28.4	708.4	.96
2.	680.2	462.7	14.29	204.20	26.95	489.7	40.6	699.8	.95
3.	662.2	438.1	17.37	301.72	39.88	478.0	50.7	692.5	.91
4.	640.2	409.9	20.94	438.48	57.90	467.8	62.5	684.0	.87
5.									

Absolute Potential: __13,600__ MCFPD; n __.875__
COMPANY __El Paso Natural Gas Company__
ADDRESS __P. O. Box 1994, Jal, New Mexico__
AGENT and TITLE __R. T. Wright__ R. T. Wright - Petroleum Engineer
WITNESSED __Earl G. 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.