

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS
 1957 DEC 5 PM 2:08
 Revised 12-1-55

Pool Jalnet Formation Tates County Lee

Initial _____ Annual _____ Special X Date of Test 1-14 to 1-18-57

Company Southern California Pet. Lease Martin B Well No. 1

Unit F Sec. 31 Twp. 24 S Rge. 37 E Purchaser El Paso Natural Gas Company

Casing 5 1/2 Wt. 14 I.D. 5.012 Set at 2852 Perf. Open Hole To _____

Tubing None Wt. ✓ I.D. _____ Set at _____ Perf. _____ To _____

Gas Pay: From 2880 To 3150 L 2852 xG .655 -GL 1868 Bar.Press. 13.2

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

Date of Completion: 10-6-47 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through UNKNOWN (UNKNOWN) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								458		72
1.	4	.750	369	25.0	89			371		24
2.	4	.750	338	40.9	88			340		24
3.	4	.750	318	53.3	95			319		24
4.	4	.750	290	75.7	97			291		24
5.										

FLOW CALCULATIONS

No.	Coefficient Flange (24-Hour)	$\sqrt{h_{wPf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	3.515	97.73		.9732	.9571	1.032	330
2.	3.515	119.90		.9741	.9571	1.029	404
3.	3.515	132.81		.9680	.9571	1.025	443
4.	3.515	151.44		.9662	.9571	1.024	504
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

c .9002 (1-e^{-s}) .120

Specific Gravity Separator Gas _____

Specific Gravity Flowing Fluid _____

P_c 471.2 P_c 222.0

No.	P_w (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	P _w /P _c
1.	304.2	147.6	.297	.088	.011	147.6	75.5		
2.	311.2	124.8	.364	.133	.014	124.8	97.2		
3.	332.2	110.4	.399	.159	.019	110.4	111.6		
4.	304.2	92.5	.454	.206	.025	92.5	129.5		
5.									

Absolute Potential: 760 MCFPD; n .759

COMPANY Southern California Petroleum Corporation

ADDRESS Box 1071, Midland, Texas

AGENT and TITLE Joe A. Coleman, P.E., New Mexico, Cert. No. 2208

WITNESSED Well tested by El Paso Natural Gas Company

COMPANY Real-Coleman Engineering Company

REMARKS

X

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} = Supercompressibility 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 .