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 5-15-58

Company SOUTHERN CAL. PET. CORP. Lease Dabbs Well No. 2

Unit E Sec. 34 Twp. 25 Rge. 37 Purchaser El Paso Nat'l Gas Co.

Casing 7 Wt. 24 I.D. 6.366 Set at 2920 Perf. 2742 To 2828

Tubing 2 Wt. 4.7 I.D. 1.995 Set at 2868 Perf. ____ To ____

Gas Pay: From 2742 To 2828 L 2868 xG .665 -GL 1907 Bar.Press. 13.2

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

Date of Completion: ____ Packer none Reservoir Temp. ____

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						478*				
1.	4	.550	127.2	22.09	80	129.2				24
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	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.	1.525	52.96		.9813	.9498	1.011	76
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas .665

Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____

P_c 9.936 $(1-e^{-s})$ .123 P_c 478.2 P_c^2 228.7

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.	129.2	16.7				16.2	212.5		
2.									
3.									
4.									
5.									

Absolute Potential: 80 MCFPD; n .771

COMPANY SOUTHERN CALIFORNIA PETROLEUM CORPORATION

ADDRESS P. O. Box 1071, Midland, Texas

AGENT and TITLE J. A. Warren Division Engineer 5-20-58

WITNESSED H. H. Kerby

COMPANY El Paso Nat'l Gas Co.

REMARKS

*Unable to shut in well for shut-in pressure. Shut-in pressure for this test taken from the Deliverability test on the John M. Kelly, Shahan #3 dated 4-18-58.
** Average Jalmat slope of .771.

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.