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 __4-18-58__

Company __SOUTHERN CALIFORNIA PETROLEUM CORPORATION__   Lease __Mosley__   Well No. __2__

Unit __L__   Sec. __34__ Twp. __24__   Rge. __37__   Purchaser __El Paso Nat'l Gas Co.__

Casing __7__ Wt. __23.0__ I.D. __6.366__ Set at __3297__ Perf. __2952__ To __3040__

Tubing __2½__ Wt. __6.5__ I.D. __2.441__ Set at __2946__ Perf. __Open end__ To_____

Gas Pay: From __2952__ To __3040__ L __2946__ xG __.655__ ─GL __1959__ Bar.Press. __13.2__

Producing Thru: Casing_____ Tubing __X__   Type Well __Single__

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: __3-26-53__ Packer __2915__ Reservoir Temp._____

OBSERVED DATA

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

No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Flow Data *50#-50" recorder Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Temp. °F.	Casing Data Press. psig	Temp. °F.	Duration of Flow Hr.
SI						596				72
1.	4	.750	10	12.50*	60	10				24
2.										
3.	Low pressure-low volume well									
4.	Unable to obtain test data during multi-point test schedule. Data for this									
5.	test was obtained during deliverability test schedule 4-11-58 and average									

Jalmat slope of .771 drawn thru one point.

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.	3.435	16.95		.9498	1.000	neg.	55
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio __Dry__ cf/bbl.
Gravity of Liquid Hydrocarbons_____ deg.
F_c __5.866__ $(1-e^{-s})$ __0.126__

Specific Gravity Separator Gas __.655__
Specific Gravity Flowing Fluid_____
P_c __609.2__ P_c^2 __371.1__

No.	P_w P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$\dfrac{(F_c Q)^2}{(1-e^{-s})}$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\dfrac{P_w}{P_c}$
1.	23.2	.54	neg.	neg.	neg.	.54	370.6		
2.									
3.									
4.									
5.									

Absolute Potential: __56__ MCFPD; n __.771__

COMPANY __SOUTHERN CALIFORNIA PETROLEUM CORPORATION__
ADDRESS __Box 1071, Midland, Texas__
AGENT and TITLE _____ __Division Engineer__ __5-2-58__
WITNESSED __Tested by E. G. Smith__
COMPANY __El Paso Natural Gas Co.__

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.