NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool __Undesignated__ Formation __Dakota__ County __Rio Arriba__

Initial __x__ Annual _____ Special _____ Date of Test __7-16-59__

Company __Skelly Oil Company__ Lease __Marion-Fed "A"__ Well No. __1__

Unit __I__ Sec. __10__ Twp. __24N__ Rge. __6W__ Purchaser _____

Casing __7"__ Wt. __23.0#__ I.D. __6.336"__ Set at __6749__ Perf. __6477__ To __6561__

Tubing __2"__ Wt. __4.7#__ I.D. __1.995"__ Set at __6560__ Perf. __6554__ To __6558__

Gas Pay: From __6477__ To __6700__ L __6535__ xG __0.490__ -GL __4509__ Bar.Press. __12.0__

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

Date of Completion: __7-16-59__ Packer __6425__ Reservoir Temp. _____

OBSERVED DATA

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

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						2204				
1.		3/4"	66			66				3 hours
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.	12.3450		78.0	1.000	0.9325	1.000	899
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl. Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____
F_c _____ $(1-e^{-s})$ _____ P_c __2216__ P_c^2 __4910.7__

No.	P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	78.0	6.08		71.44	0.290	26.2	4,884.5	152	0.073
2.									
3.									
4.									
5.									

Absolute Potential: __903__ MCFPD; n __0.75__

COMPANY __Skelly Oil Company__

ADDRESS __Box 426, Farmington, New Mexico__

AGENT and TITLE __John B. Chambers District Engineer__

WITNESSED __D. A. Strickling, Jr.__

COMPANY __Skelly Oil 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.