NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool SOUTH BLANCO Formation PICTURED CLIFFS County RIO ARRIBA

Initial X Annual _____ Special _____ Date of Test 10-26-60

Company CAULKINS OIL COMPANY Lease STATE "B" Well No. PD-233

Unit D Sec. 16 Twp. 26N Rge. 6W Purchaser SOUTHERN UNION GAS COMPANY

Casing 7" Wt. 20# I.D. _____ Set at 3038 Perf. 3038 To 3053

Tubing 1½" Wt. 2.4# I.D. 1.38 Set at 2905 Perf. ~~XXXX~~ 2905 To _____

Gas Pay: From 3038 To 3053 L 2905 xG .660 -GL 1917 Bar.Press. _____

Producing Thru: Casing No Tubing Yes Type Well Gas-Gas Dual
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 9-29-60 Packer 7159 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						711	60°	711		14 day S.I.
1.		3/4"	93			93	60°	361		3 hr. Flow
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.	14.1605		105	1.000	0.9535	1.012	1435
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 _____
P_c 24.62 $(1-e^{-s})$ 0.131 P_c 723 P_c^2 522.729

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.	373					139.1	383.6		0.517
2.									
3.									
4.									
5.									

Absolute Potential: 1863 MCFPD; n $(1.36)^{.85}$ 1.2986

COMPANY CAULKINS OIL COMPANY
ADDRESS BOX 780, FARMINGTON, NEW MEXICO
AGENT and TITLE Frank Irby FIELD SUPERINTENDENT
WITNESSED _____
COMPANY _____

REMARKS

OCT 28 1960
OIL CON. COM.
DIST. 3

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.