NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation M. V. County Rio Arriba

Initial x Annual Special Date of Test 9-25-58

Company Honolulu Oil Corporation Lease Jicarilla Well No. 6 M

Unit K Sec. 3 Twp. 26 N Rge. 4 W Purchaser Southern Union Gas Co.

Casing 3 1/2 Wt. 9.2 I.D. 3" Set at 6075 Perf. 5540 To 5906

Tubing 2 Wt. 4.7 I.D. Set at 5876 Perf. None - open end To

Gas Pay: From 5340 To 5950 L 5871 xG .715 -GL 4197 Bar.Press. 12.00

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

Date of Completion: Packer 3733 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						1160	52	—	—	—
1.	2"	.750	133	—	58	133	58	—	—	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.	12.3650	—	145	1.0019	.9161	1.018	1,675
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
F_c 9.402 $(1-e^{-s})$ .263

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid .715
P_c 1172 P_c^2 1373.584

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.	145	210.250	15.748	247.999	65.223	275.473	1098.111	524	.447
2.									
3.									
4.									
5.									

Absolute Potential: 1981 MCFPD; n .75
COMPANY Honolulu Oil Corporation
ADDRESS Drawer 1391, Midland, Texas
AGENT and TITLE G. B. Evans G. B. Evans, Division Gas Engineer
WITNESSED
COMPANY Southern Union Gas Co.

REMARKS

$$AOF = 1675 \left(\frac{1373.584}{1098.111}\right)^{.75} = 1675 \times 1.1827 = 1981$$

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.