

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesa Verde County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 9-25-58
Company Honolulu Oil Corporation Lease Jicarilla Well No. 4 M
Unit K Sec. 4 Twp. 26 N Rge. 4 W Purchaser Southern Union Gas Co.
Casing 3 1/2 Wt. 9.2 I.D. 3" Set at 6341 Perf. 6074 To 6170
Tubing 2 Wt. _____ I.D. _____ Set at 6156 Perf. None - open end To _____
Gas Pay: From 6074 To 6170 L 6156 xG .710 -GL 4370 Bar.Press. 12.00
Producing Thru: Casing _____ Tubing xx Type Well G.G. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: _____ Packer 3982 Reservoir Temp. G.G. Dual

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.	
1.	<u>2</u>	<u>.750</u>	<u>221</u>	<u>—</u>	<u>57</u>	<u>221</u>	<u>57</u>	<u>—</u>	<u>—</u>	<u>3 hours</u>
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>12.3650</u>	<u>—</u>	<u>233</u>	<u>1.0029</u>	<u>.9193</u>	<u>1.030</u>	<u>2,736</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio — cf/bbl.
Gravity of Liquid Hydrocarbons — deg.
F_c 9.402 (1-e^{-s}) .272
Specific Gravity Separator Gas —
Specific Gravity Flowing Fluid .710
P_c 1154 P_c² 1331.716

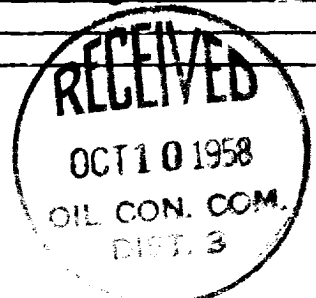
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w / P _c
1.	<u>233</u>	<u>54.289</u>	<u>25.723</u>	<u>661.672</u>	<u>179.974</u>	<u>234.263</u>	<u>1097.453</u>	<u>484</u>	<u>.419</u>
2.									
3.									
4.									
5.									

Absolute Potential: 3.163 MCFPD; n .75

COMPANY Honolulu Oil Corporation
ADDRESS Drawer 1391, Midland, Texas
AGENT and TITLE G. B. Evans, Division Gas Engineer
WITNESSED G. B. Evans
COMPANY Southern Union Gas Company

REMARKS

$$AOF = 2,736 \frac{(1331.716) \cdot .75}{(1097.453)} = (2,736)(1.1561) = 3,163$$



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 .

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