NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool FULCHER-KUTZ FX. Formation PICTURED CLIFFS County SAN JUAN

Initial XXX Annual _____ Special _____ Date of Test 5/15/59

Company AZTEC OIL & GAS COMPANY Lease McCLANAHAN Well No. 10

Unit C Sec. 24 Twp. 28N Rge. 10W Purchaser SOUTHERN UNION GAS COMPANY

Casing 4.5 Wt. 9.5 I.D. 4.090 Set at 1969 Perf. 1910 To 1948

Tubing 1 Wt. 1.7 I.D. 1.049 Set at 1932 Perf. 1907 To 1917

Gas Pay: From 1910 To 1948 L _____ xG _____ -GL _____ Bar.Press. _____

Producing Thru: Casing XXX Tubing _____ Type Well Single - Gas
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 5/15/59 Packer _____ Reservoir Temp. _____

RDB: 5770'
Total Depth : 1971'
PBD: 1962'

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						617	79	617	79	7 days
1.		.750				305		287	70	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		299	.9905	.9608	1.027	3,613
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid .650
P_c 629 P_c^2 395,641

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.	317					100,489	295152		
2.									
3.									
4.									
5.									

Absolute Potential: 4,633 MCFPD; n .85

COMPANY _____
ADDRESS ~~AZTEC OIL & GAS COMPANY~~ BOX 786, FARMINGTON, NEW MEXICO
AGENT and TITLE ORIGINAL SIGNED BY D. K. BRYANT, ENGINEER
WITNESSED _____
COMPANY _____

REMARKS

RECEIVED
MAY 22 1959
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.

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