NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

1957 FEB 11 AM 9:48

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Y-SR-Q County Lea

Initial ______ Annual x Special ______ Date of Test 6-13-56

Company Me-Tex Lease Wallace State Well No. 3

Unit ___ Sec. 3 Twp. 21 Rge. 36 Purchaser Southern Union Gas Company

Casing 7 5/8" Wt. ______ I.D. ______ Set at ______ Perf. ______ To ______

Tubing None Wt. ______ I.D. ______ Set at ______ Perf. ______ To ______

Gas Pay: From 2940 To 3590 L 2940 xG .668 -GL 1963.9 Bar.Press. 13.2

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

Date of Completion: ______ Packer ______ Reservoir Temp. ______

OBSERVED DATA

Tested Through ~~(Prover)~~ ~~(Choke)~~ (Meter) Type Taps Flange

	Flow Data					Tubing Data		Casing Data		
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
								1011		72 hr.
1.	4"	1.750	510	3	55			855		24 hr.
2.	4"	1.750	510	5	59			825		24 hr.
3.	4"	1.750	520	8	59			716		24 hr.
4.	4"	1.750	510	11	60			662		24 hr.
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure 13.2 psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	19.27	39.6160	523.2	1.0048	0.9477	1.061	771.3
2.	19.27	51.1440	523.2	1.0010	0.9477	1.059	990.1
3.	19.27	65.3013	533.2	1.0010	0.9477	1.059	1264.2
4.	19.27	75.8697	523.2	1.0000	0.9477	1.059	1467.3
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl. Specific Gravity Separator Gas .668
Gravity of Liquid Hydrocarbons None deg. Specific Gravity Flowing Fluid ______
F_c P_w Measured $(1-e^{-s})$ ______ P_c 1024.2 P_c^2 1049.0

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2 (1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	868.2					753.8	295.2		84.7
2.	828.2					702.6	346.4		[illegible]
3.	729.2					531.7	517.3		71.2
4.	675.2					455.9	593.1		65.9
5.									

Absolute Potential: 3550 MCFPD; n 0.96
COMPANY Me-Tex Supply Co.
ADDRESS Box 2037 Hobbs N.M.
AGENT and TITLE [illegible] Vice-Pres.
WITNESSED [illegible]
COMPANY Me-Tex Supply Co.

REMARKS

ELVIS A. UTZ
GAS ENGINEER

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.