NEW MEXICO OIL CONSERVATION COMMISSION

EK - 3528

HOBBS OFFICE OCC

MULTI-POINT [illegible] TEST FOR GAS WELLS

Form C-122

Revised 12-1-55

Pool **Eumont** Formation **Queen** County **Lea**

Initial **—** Annual **X** Special **—** Date of Test **9-30-56**

Company **General Crude Oil Company** Lease **State G** Well No. **1**

Unit **D** Sec. **16** Twp. **20-S** Rge. **37-E** Purchaser **Permian Basin Pipe Line Company**

Casing **7** Wt. **26.0#** I.D. **6.276** Set at **3764** Perf. **3294** To **3360**

Tubing **2⅛** Wt. **6.5#** I.D. **2.441** Set at **3684** Perf. **None** To

Gas Pay: From **3294** To **3360** L **3294** xG **0.670** GL **2207** Bar.Press. **13.2**

Producing Thru: Casing **X** Tubing **—** Type Well **G. O. Dual**

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: **July 25, 1955** Packer **Yes** Reservoir Temp. **130° F**

CO_2 - 3.08% **N_2 - 1.73%**

OBSERVED DATA

Tested Through ~~(Prover)~~ ~~(Choke)~~ (Meter) Type Taps **Pipe**

No.	Flow Data ~~(Prover)~~ (Line) Size	~~(Choke)~~ (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1014.1				72
1.	4"	1.25	466.8	5.8	61	940.8				23 3/4
2.	4"	1.25	471.2	12.6	60	887.0				23 3/4
3.	4"	1.25	473.2	20.9	61	834.9				24 1/4
4.	4"	1.25	457.8	41.0	61	750.5				24
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.	10.24	52.76	480.0	0.9990	0.9463	1.046	534
2.	10.24	78.12	484.4	1.0000	0.9463	1.047	793
3.	10.24	100.8	486.4	0.9990	0.9463	1.047	1022
4.	10.24	139.0	471.0	0.9990	0.9463	1.045	1406
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio **Dry Gas** cf/bbl.

Gravity of Liquid Hydrocarbons deg.

Specific Gravity Separator Gas **.670**

Specific Gravity Flowing Fluid

F_c **0.911** $(1-e^{-s})$ **0.141**

P_c P_c^2 **1055.3**

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	$\frac{P_w}{P_c}$
1.	954.0	910.1	0.4865	0.2367	0.0334	910.1	145.2	954.0	.93
2.	900.2	810.4	0.7224	0.5219	0.0736	810.5	244.8	900.3	.88
3.	848.1	719.3	0.9310	0.8668	0.1222	719.4	335.9	848.2	.83
4.	763.7	583.2	1.281	1.6410	0.2314	583.4	471.9	763.8	.74
5.									

Absolute Potential: **3000** 2600 MCFPD; n **.87**

COMPANY **General Crude Oil Company**

ADDRESS **Route 2, Hamlin, Texas**

AGENT and TITLE J. F. Hulsey **J. F. Hulsey, Superintendent**

WITNESSED

COMPANY **Test conducted by R. L. West**
Permian Basin Pipe Line Company

REMARKS

This is a retest and as such we are submitting this test to the Commission. Point alignment is not exact but there is good point spread and drawdown.

ELVIS A. U.
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.