NEW MEXICO OIL CONSERVATION COMMISSION

ELVIS A. UTZ
GAS ENGINEER

Form C-122
Revised 12-1-55

MAIN OFFICE OCC

HOBBS OFFICE OCC

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

[illegible] JUL [illegible] AM 8:17 — [illegible] 8 PM 2:21

Pool [illegible] Formation [illegible] County Lea

Initial X Annual ______ Special ______ Date of Test [illegible]

Company Sinclair Oil & Gas Company Lease [illegible] J. Barber Well No. 7

Unit E Sec. 8 Twp. 20 S Rge. 37 E Purchaser El Paso Natural Gas Company

Casing 7" Wt. [illegible] I.D. [illegible] Set at [illegible] Perf. None To ______

Tubing [illegible] Wt. 6.70 I.D. [illegible] Set at [illegible] Perf. [illegible] To [illegible]

Gas Pay: From [illegible] To [illegible] L [illegible] xG .660 -GL [illegible] Bar.Press. 13.2

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

Date of Completion: [illegible] Packer [illegible] Reservoir Temp. [illegible]

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps ______

No.	Flow Data: (Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data: Press. psig	Temp. °F.	Casing Data: Press. psig	Temp. °F.	Duration of Flow Hr.
SI						[illegible]	80	Packer		72
1.	4	1.500	[illegible]	[illegible]	75	[illegible]	75			[illegible]
2.	4	1.500	[illegible]	[illegible]	[illegible]	[illegible]	75			[illegible]
3.	4	1.500	[illegible]	[illegible]	66	[illegible]	75			[illegible]
4.	4	1.500	605	[illegible]	66	[illegible]	75			[illegible]
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.	13.99	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2.	13.99	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3.	13.99	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4.	13.99	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.
Gravity of Liquid Hydrocarbons - deg.
F_c [illegible] $(1-e^{-s})$ .136

Specific Gravity Separator Gas .660
Specific Gravity Flowing Fluid -
P_c [illegible] P_c^2 [illegible]

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.	[illegible]	969	[illegible]	58.87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2.	[illegible]	943	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5.									

Absolute Potential: [illegible] MCFPD; n [illegible]

[illegible] alignment.

COMPANY [illegible]
ADDRESS [illegible]
AGENT and TITLE [illegible] Gas Analyst [signature]
WITNESSED [illegible]
COMPANY El Paso Natural Gas Company

REMARKS

Orig. & 2 cc: New Mexico Oil Conservation Commission
cc: [illegible]

30 % pressure drop could not be maintained on this test due to the line capacity of the purchaser being inadequate and high line pressures on their system would not permit the volume to be produced.

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.