MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Crosby Devonian** Formation **Devonian** County **Lea**

Initial **X** Annual _____ Special _____ Date of Test **10-21 63**

Company **Union Texas Petr. Corporation** Lease **Greg Fed-El Paso** Well No. **1**

Unit **O** Sec. **33** Twp. **25-S** Rge. **37 E** Purchaser **El Paso Nat'l Gas Company**

Casing **5 1/2** Wt. **23** I.D. _____ Set at **8460** Perf. **8308** To **8378**

Tubing **2-3/8** Wt. **4.7** I.D. _____ Set at **8392** Perf. _____ To _____

Gas Pay: From **8308** To **8378** L **8392** xG **0.634** -GL _____ Bar.Press. **13.2**
Assumed

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

Date of Completion: **Oct. 21,1963** Packer **None** Reservoir Temp. _____

OBSERVED DATA

Tested Through (X 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						2215		2260		64
1.	2	1.125	89		78	1960		2121		3
2.	2	1.150	87		76	1838		2051		1-1/2
3.	2	1.375	83		74	1732		1996		1-1/2
4.	2	1.500	78		64	1685		1925		3
5.	2	1.500	78		64	1695		1956		24

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.	28.2569		102.2	0.9831	0.9728	1.000	2,762
2.	35.6738		100.2	0.9850	0.9728	1.000	3,425
3.	43.8286		96.2	0.9868	0.9728	1.000	4,047
4.	54.3653		91.2	0.9962	0.9728	1.000	4,805
5.	54.3653		91.2	0.9962	0.9728	1.000	4,805 *

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio **158,790** cf/bbl. Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons **58.6** deg. Specific Gravity Flowing Fluid _____
F_c **Measured** $(1-e^{-s})$ _____ P_c **2273.2** P_c^2 **5167.4**

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.	1973.2	3893.5	1273.9	Measured		4554.8	612.6	2134.2	.13[illegible]
2.	1851.2	3426.9	1740.5	"	"	4260.9	906.5	2064.2	.40[illegible]
3.	1745.2	3045.7	2121.7	"	"	4036.9	1130.5	2009.2	.84[illegible]
4.	1698.2	2883.9	2883.5	"	"	3756.6	1410.8	1938.2	.8526
5.	1708.2	2917.9	2249.5	"	"	3877.7	1289.7	1969.2	.9[illegible]

Absolute Potential: **13,800** MCFPD; n **0.757**

COMPANY **Union Texas Petroleum Corporation**
ADDRESS **P. O. Box 1859 - Midland, Texas**
AGENT and TITLE **E. R. Wilkerson Petroleum Engineer**
WITNESSED **R. A. Mikel**
COMPANY **El Paso Natural Gas Company**

REMARKS

NOV 15 3 15 PM '63
HOBBS OFFICE O. C. C.

* **THE WELL PRODUCED 30.26 BBLS. CONDENSATE PLUS 6.69 BBLS. OF WATER DURING 24 HR. POINT.**

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.