OIL CONSERVATION COMMISSION

BOX 2045

HOBBS, NEW MEXICO

NOTICE OF GAS CONNECTION

DATE May 28, 1959

THIS IS TO NOTIFY THE OIL CONSERVATION COMMISSION THAT CONNECTION FOR THE PURCHASE OF GAS FROM THE Oil Well Drilling Company (OPERATOR), Wood State "A" (LEASE), #2 J (WELL UNIT), 16-20-37 (S.T.R.), Eumont (POOL), El Paso Natural Gas Company (NAME OF PURCHASER), WAS MADE ON May 26, 1959 (DATE).

El Paso Natural Gas Company
PURCHASER

Alton F. Fuller
REPRESENTATIVE

Alton F. Fuller

Ass't. Chief Field Dispatcher
TITLE

CC: TO OPERATOR

OIL CONSERVATION COMMISSION - SANTA FE

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

1959 APR 15 PM 1:41

Pool EUMONT Formation QUEEN County LEA

Initial x Annual ____ Special ____ Date of Test 3-24-59

Company OIL WELL DRILLING COMPANY Lease Wood State A Well No. 2

Unit F Sec. 16 Twp. 20 Rge. 37E Purchaser El Paso Natural Gas Co.

Casing 5½" Wt. 17# I.D. 4.892 Set at 3466 Perf. 3311 To 3403

Tubing 2 3/8 Wt. 6.5 I.D. ____ Set at 3266 Perf. 3310 To 3420

Gas Pay: From 3310 To 3420 L 3266 xG Mix .672 GL 166 Bar.Press. 13.2

Producing Thru: Casing ____ Tubing x Type Well Single

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

Date of Completion: 3-4-59 Packer 3290 Reservoir Temp. ____

OBSERVED DATA

ILLEGIBLE

Tested Through (Prover) (Choke) (Meter) Choke Nipple(1)

Type Taps ____

No.	Flow Data (Line) Size	(Choke) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Temp. °F.	Casing Data Press. psig	Casing Temp. °F.	Duration of Flow Hr.
SI						946				72
1.	2" x.250		917		79	917				3
2.	2" x.375		880		79	880				3
3.	2" x.500		797		75	797				3
4.	2" x.625		691		68	691				3
5.	2" x.500		763		65	763				23

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.	1.3309		930.2	.9822	.9463	1.098	1.264
2.	3.0300		893.2	.9822	.9463	1.094	2.751
3.	5.4315		810.2	.9859	.9463	1.083	4.447
4.	8.5417		704.2	.9924	.9463	1.078	6.088
5.	5.4315		776.2	.9952	.9463	1.087	4.316

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 1,101.5 Mcf/bbl.

Gravity of Liquid Hydrocarbons 31.2 @ 60 deg.

F_c 5.866 $(1-e^{-s})$ ~~0.108~~ .140

Specific Gravity Separator Gas .670

Specific Gravity Flowing Fluid .8697

P_c 959.2 P_c^2 920.1

No.	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	P_w
1.	930.2	865.3	7.41	54.9	~~5.9~~ 7.7	~~871.2~~ 873.	~~48.9~~ 47.1		.973
2.	893.2	797.8	16.14	260.5	~~28.1~~ 36.5	~~825.9~~ 834.3	~~94.2~~ 85.8		.932
3.	810.2	656.4	26.09	680.7	~~73.5~~ 95.3	~~729.9~~ 751.7	~~190.2~~ 168.4		.904
4.	704.2	495.9	35.71	1275.2	~~137.7~~ 178.5	~~633.6~~ 674.4	~~286.5~~ 245.7		.856
5.	776.2	602.5	25.32	641.1	~~69.2~~ 89.8	~~671.7~~ 692.3	~~248.4~~ 227.8		.867

Absolute Potential: 14,500 MCFPD; n ~~.475~~ ~~.916~~ .773

COMPANY OIL WELL DRILLING COMPANY

ADDRESS 614-617 Adolphus Tower, Dallas 2, Texas

AGENT and TITLE L. R. Massey, Lease Pumper

WITNESSED J. B. Murray

COMPANY El Paso Natural Gas Co. conducted by Jack T. Littlefield

(1) 934.3
(2) 913.4
(3) 867.0
(4) 821.2
(5) 832.0

REMARKS

Carried in Eumont pool as gas well in oil pool

El Paso Nat'l Test Dated June 11-19/59

G.O.P. Now - N = .499 = 12,200 A.O.P.

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.