

NEW MEXICO OIL CONSERVATION COMMISSION

HOODS OFFICE 000

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

1957 APR 1 PM 1:07

Pool Julmont Formation Yutan County LeaInitial _____ Annual _____ Special X Date of Test 2-18-57Company Humble Oil & Refining Co. Lease Ada Thomas Well No. 1Unit 0 Sec. 23 Twp. 24S Rge. 34E Purchaser EPNOCasing 7 Wt. 24 I.D. 6.366 Set at 3100 Perf. 2925 To 2995Tubing 2 Wt. 4.7 I.D. 1.995 Set at 3042 Perf. 3000 To 3080Gas Pay: From 2925 To 3080 L 3042 xG 0.665 -GL 2023 Bar.Press. 11.2Producing Thru: Casing _____ Tubing X Type Well Single

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

Date of Completion: Nov., 1954 Packer 2915 Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Orifice) (Abandon) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Orifice) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						375				72
1.	2	0.125	345		59	345				3
2.	2	0.127	243		54	243				3
3.	2	0.218	200		48	200				3
4.	2	0.250	160		44	160				3
5.	2	0.250	134		44	134				24

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	0.3418		358.2	1.0000	0.9498	1.028	121
2.	0.7851		256.2	1.0000	0.9498	1.028	197
3.	1.0834		213.2	1.0117	0.9498	1.025	227
4.	1.4030		173.2	1.0157	0.9498	1.029	239
5.	1.4830		147.2	1.0157	0.9498	1.024	202

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.936 (1-e^{-S}) 0.130

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 308.2 P_c² 150.7

No.	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	P _w P _c
1.	358.2	128.3	1.2	1.4	0.14	128.5	22.2	358.5	0.998
2.	256.2	65.6	1.9	3.6	0.47	64.1	64.6	277.1	0.742
3.	213.2	45.4	2.2	4.8	0.62	46.0	104.7	214.5	0.592
4.	173.2	30.0	2.9	8.3	0.69	30.7	129.0	173.2	0.443
5.	147.2	21.6	2.0	4.0	0.52	22.1	186.6	148.7	0.343

Absolute Potential: 221 MCFPD; n 0.560COMPANY Humble Oil & Refining Co.ADDRESS Box 2347, Hobbs, New MexicoAGENT and TITLE Mr. Mr. No. 1 Dist. Rep.WITNESSED FromCOMPANY El Paso Natural Gas Co.

REMARKS

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} = Supercompressibility 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 .

HUMBLE OIL AND REFINING COMPANY

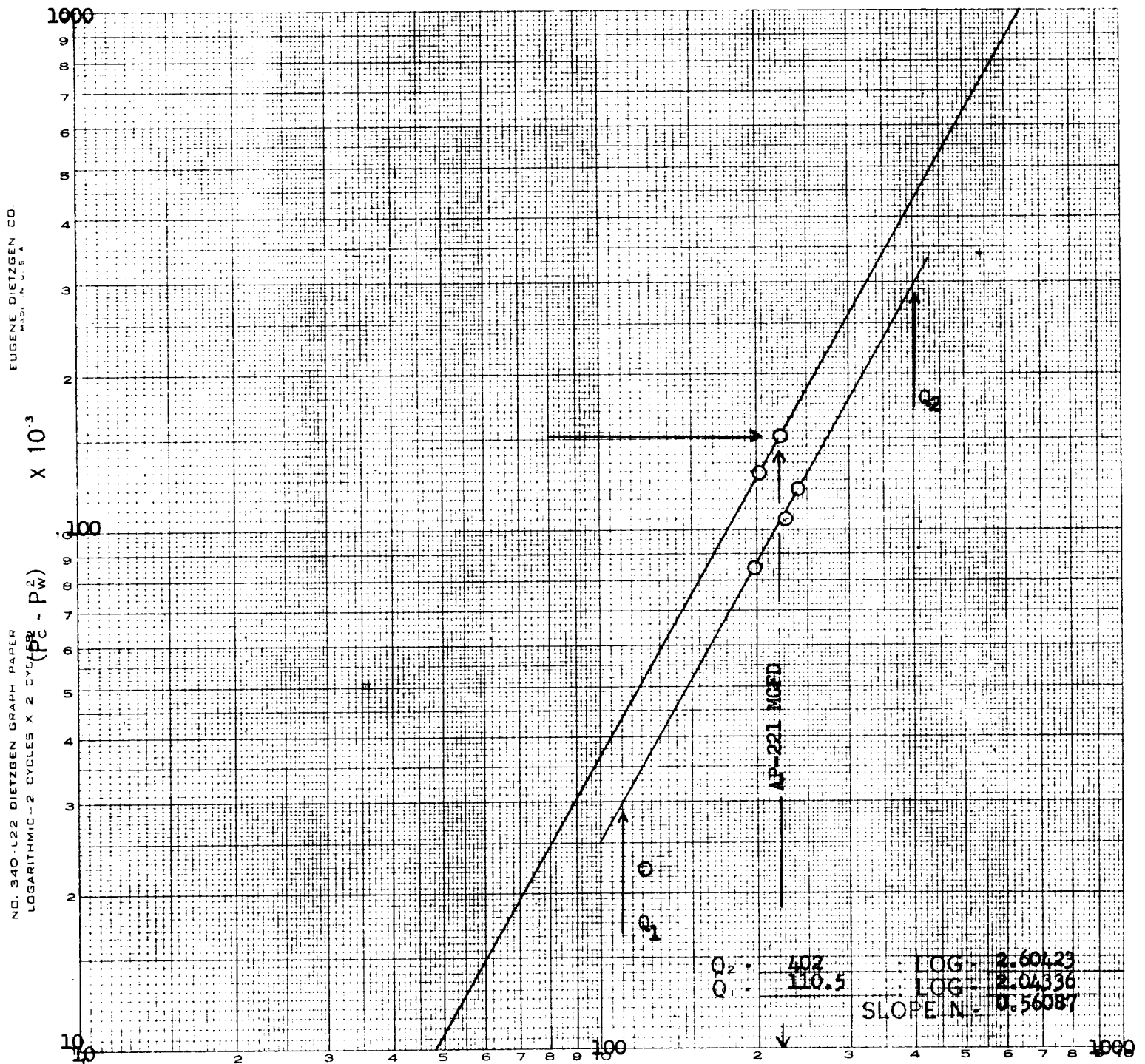
MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Well Ada E. Thomas No. 1

Location Unit 0, Sec 23-24S-36E

County Lea

Date 2-18-57



Q - MCFD - 15.025 PSI