

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Summit Gas Formation Queen County LeaInitial _____ Annual _____ Special X Date of Test 12/18/63Company Texas Pacific Oil Company Lease Walden Well No. 6Unit D Sec. 15 Twp. 23 Rge. 37 Purchaser El Paso Natural GasCasing 5-1/2 Wt. 17 I.D. _____ Set at 7690 Perf. 3425 To 3480Tubing 2" Wt. 4.7 I.D. _____ Set at 3602 Perf. 3602 To _____Gas Pay: From 3425 To 3480 L _____ msc 0.680 -GL 2330 Bar.Press. 13.2Producing Thru: Casing _____ Tubing X Type Well SingleDate of Completion: 12/11/63 Re-None Single-Bradenhead-G. G. or G.O. Dual
Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Line)Type Taps Flg.

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press.	Diff.	Temp.	Press.	Temp.	Press.	Temp.	
			psig	h _w	°F.	psig	°F.	psig	°F.	
SI						250		252		72
1.	2"	0.500	19		30	244		247		2.5
2.	2"	0.500	43		34	234		239		2.5
3.	2"	0.750	32		37	210		222		3.0
4.	2"	0.750	43		40	157		208		3.0
5.	2"	0.750	19		47	190		214		20.0

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.	5.523		32.2	1.0302	0.9393		172.1
2.	5.523		56.2	1.0260	0.9393		299.2
3.	12.2023		45.2	1.0229	0.9323		529.8
4.	12.2023		56.2	1.0198	0.9323		656.9
5.	12.2023		32.2	1.0127	0.9323		373.7

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/sbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c Measured (1-e^{-S}) _____Specific Gravity Separator Gas Dry
Specific Gravity Flowing Fluid _____
P_c 265.2 P_c 70.3

No.	P _w /14 (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.	260.2					67.7	2.6		0.9811
2.	252.2					63.6	6.7		0.9509
3.	235.2					55.3	15.0		0.8868
4.	221.2					48.9	21.4		0.8340
5.	227.2					51.6	18.7		0.8567

Absolute Potential: 880 MCFPD; n 0.633COMPANY Texas Pacific Oil Company
ADDRESS Box 1069 Hobbs, New MexicoAGENT and TITLE L. D. Southern Petroleum EngineerWITNESSED L. D. Southern
COMPANY El Paso Natural Gas Co.

REMARKS

* Test After Workover.

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those in 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.

ABBREVIATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/day. @ 15.025 psia and 60°F

P_c = 72 hour wellhead static pressure (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 casing or tubing or flowing thru casing.) psia

P_t = Flowing wellhead pressure (casing or tubing) if flowing through tubing, casing if flowing through casing.
psia

P_f = Meter pressure, psia.

h_w = Differential meter reading, ft. of 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 in the normal manner of completion or condition of well, then P_c shall be used, corrected by adding the pressure drop due to friction within the well casing to P_c .

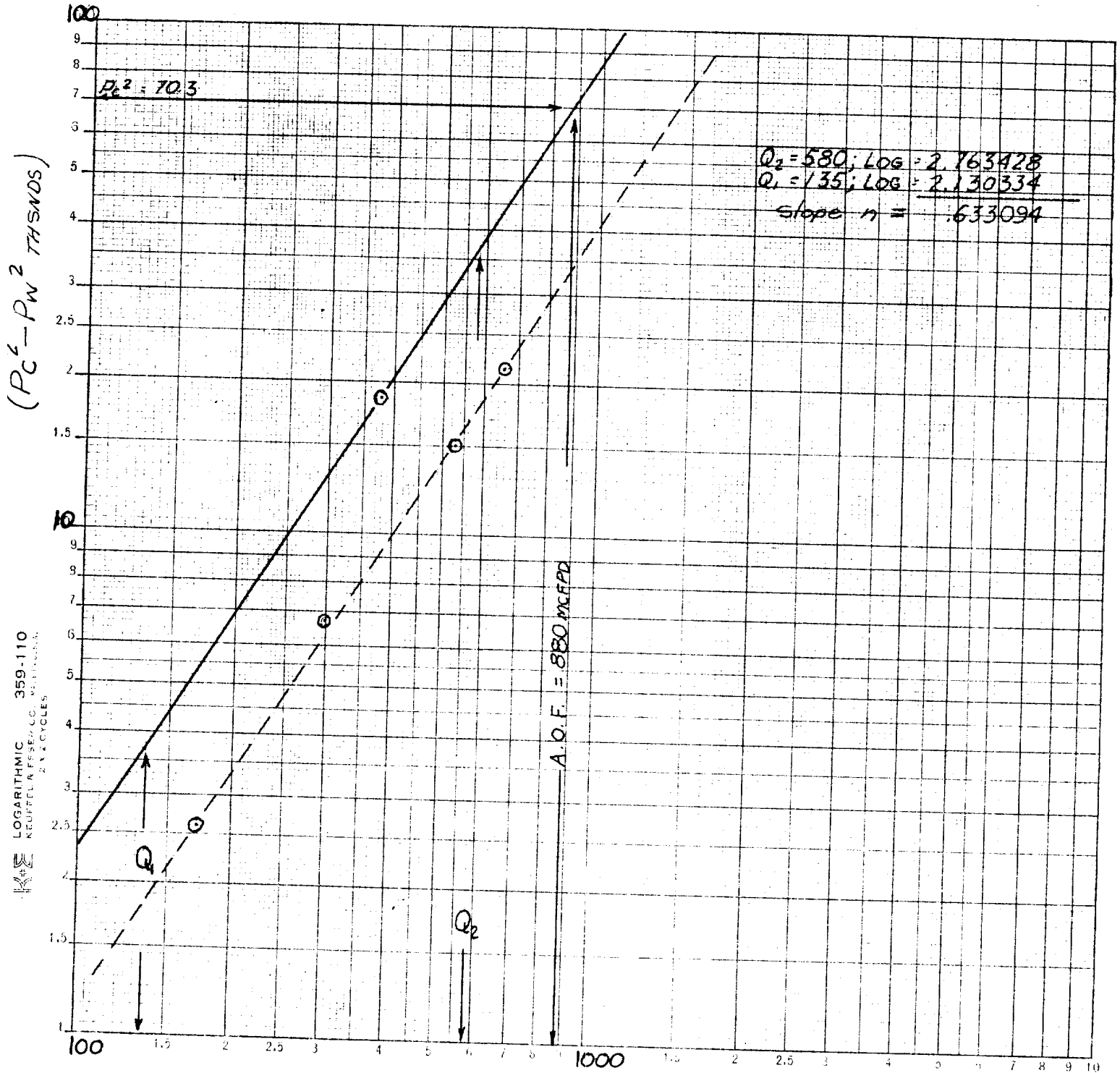
TEXAS PACIFIC OIL COMPANY

E. W. WALDEN, Well NO. 6

D-15-22-37

LEA

12-18-63



$Q - \text{MCFPD}$