NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Queens County Lea

Initial ____ Annual ____ Special X Date of Test 7-27-56

Company The Superior Oil Company Lease State A Well No. 6

Unit A Sec. 2 Twp. 20S Rge. 36E Purchaser El Paso Natural Gas Company

Casing 7" Wt. 20# I.D. 6.456 Set at 4000 Perf. 3342 To 3394

Tubing 2 1/2" Wt. 6.5# I.D. 2.441 Set at 3397 Perf. ____ To ____

Gas Pay: From 3342 To 3394 L 3397 xG 0.670 -GL 2276 Bar.Press. 13.2

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

Date of Completion: 8-26-54 Packer None Reservoir Temp. ____

OBSERVED DATA

Tested Through (~~Prover~~) (~~Choke~~) (Meter) Type Taps Flange

No.	Flow Data (~~Prover~~) (Line) Size	(~~Choke~~) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						873		874		72
1.	4	1.250	594	12.3	65	809		812		24
2.	4	1.250	594	25.0	69	765		771		24
3.	4	1.250	606	33.6	71	735		743		24
4.	4	1.250	651	48.3	75	685		697		24
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.	9.643	86.42		0.9952	0.9463	1.066	837
2.	9.643	123.8		0.9915	0.9463	1.064	1186
3.	9.643	144.24		0.9896	0.9463	1.064	1386
4.	9.643	179.11		0.9859	0.9463	1.068	1721
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
F_c ____ $(1-e^{-s})$ ____ P_c 887.2 P_c^2 787.1

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.	805.2					681	106		
2.	784.2					615	172		
3.	756.2					572	215		
4.	710.2					504	283		
5.									

Absolute Potential: 3750 MCFPD; n .77
COMPANY The Superior Oil Company
ADDRESS Midland, Texas
AGENT and TITLE James M. Butler (Gas Engineer)
WITNESSED ____
COMPANY ____

REMARKS

Test conducted by El Paso Natural Gas Company and calculated by The Superior Oil Company.

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.

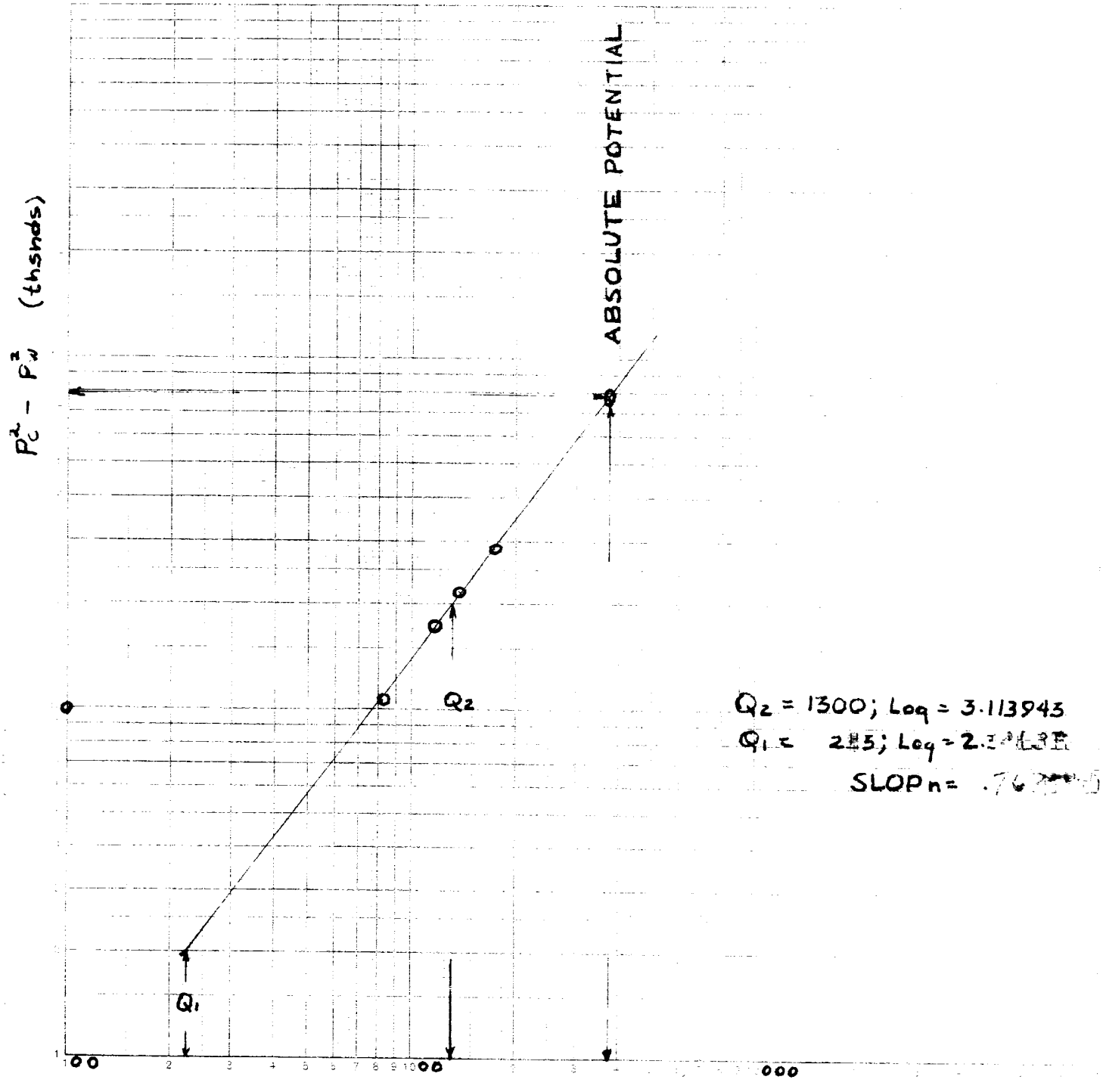
F_t = Flowing temperature correction factor.

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.

COMPANY: The Superior Oil Company
WELL: State A No. 6
LOCATION: A 2-20S-36E
COUNTY: Lea
DATE: 7-27-56



Q - MCF - 15.025 psia