

NEW MEXICO OIL CONSERVATION COMMISSION

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat

Formation Yates

County Lee

Initial _____

Annual _____

Special IX

Date of Test 11-12/11-16-56

Company Skelly Oil Company

Lease King "C"

Well No. 1

Unit 0

Sec. 1

Twp. 23 S

Rge. 36 E

Purchaser El Paso Natural Gas Company

Casing 7"

Wt. 20#

I.D. 6.456"

Set at 2885'

Perf. _____

To _____

Tubing None

Wt. _____

I.D. _____

Set at _____

Perf. _____

To _____

Gas Pay: From 2980

To 3485

L 2885

xG 0.665

-GL 1919

Bar.Press. 13.2

Producing Thru: Casing IX

Tubing _____

Type Well Single

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

Date of Completion: 12-12-49

Packer None

Reservoir Temp. _____

OBSERVED DATA

Tested Through (Brown) (Choke) (Meter)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Brown) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	4	1.500	818	19.36	70			876		
2.	4	1.500	809	36.00	71			839		
3.	4	1.500	791	50.41	69			810		
4.	4	1.500	749	84.64	70			794		
5.	4	1.500	749	84.64	70			755		

*Not enough draw down because of high line pressure.

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp.		Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
				Factor F _t	°F.			
1.	13.99	126.04		0.9905		0.9498	1.083	1,808
2.	13.99	172.03		0.9396		0.9498	1.083	2,450
3.	13.99	201.32		0.9915		0.9498	1.085	2,877
4.	13.99	253.96		0.9905		0.9498	1.075	3,593
5.								

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.

Specific Gravity Separator Gas _____

Gravity of Liquid Hydrocarbons _____ deg.

Specific Gravity Flowing Fluid _____

F_c 0.4682 (1-e^{-s}) 0.124

P_c 889.2 P_c 790.7

No.	P _w 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.	832.2	692.6	0.25	0.7	0.09	692.7	98.0		
2.	823.2	677.7	1.15	1.3	0.16	677.4	112.8		
3.	807.2	651.6	1.35	1.8	0.23	651.8	138.9		
4.	668.2	590.1	1.66	2.8	0.35	590.5	200.2		
5.									

Absolute Potential: 3,900

MCFPD; n 0.659

COMPANY Skelly Oil Company

ADDRESS Box 38, Hobbs, New Mexico

AGENT and TITLE _____

WITNESSED _____

COMPANY _____

REMARKS

FILED
(5116)

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.

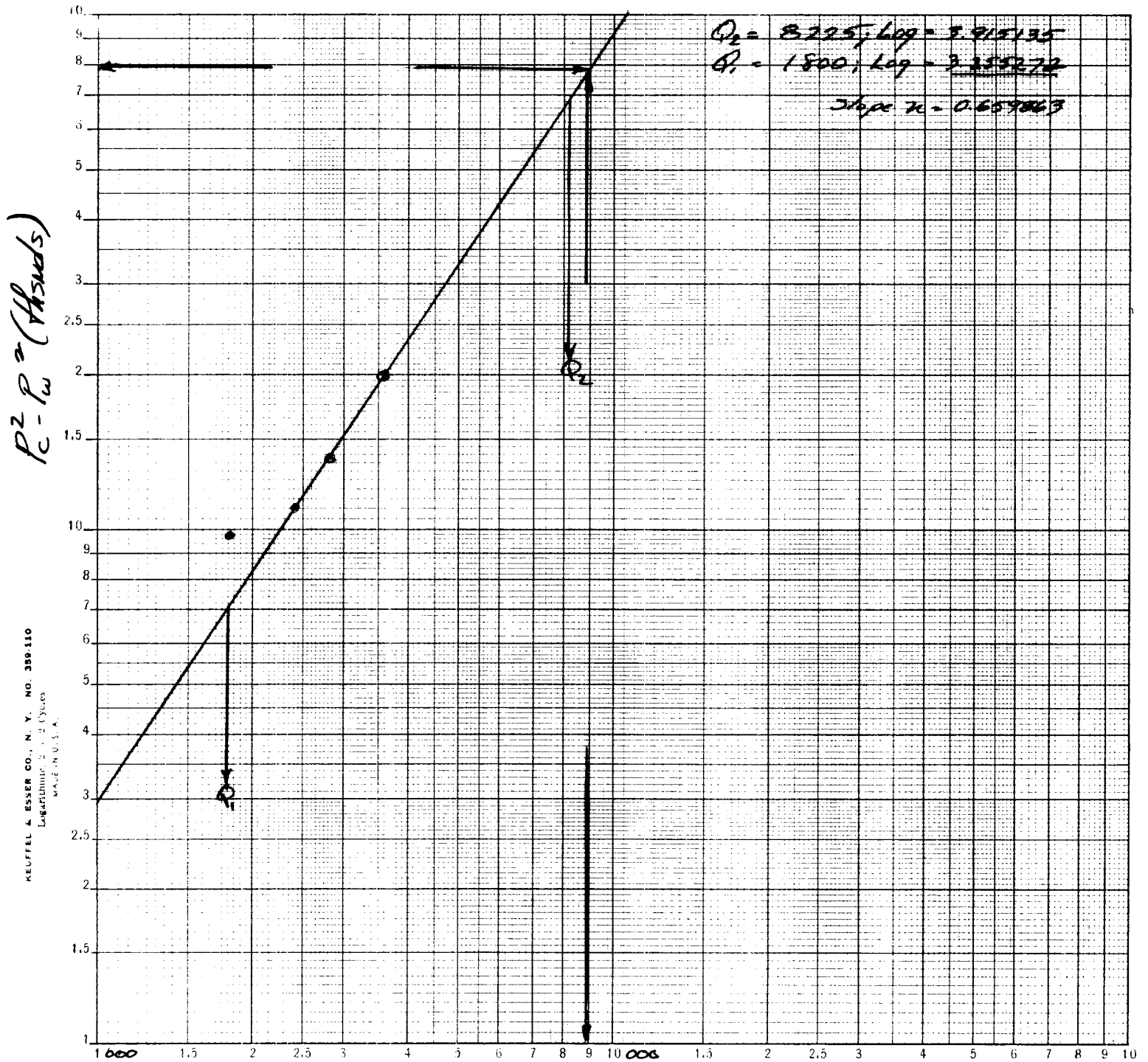
F_t = Flowing temperature correction factor.

F_{pv} = Supercompressability factor.

n = Slope of back pressure curve.

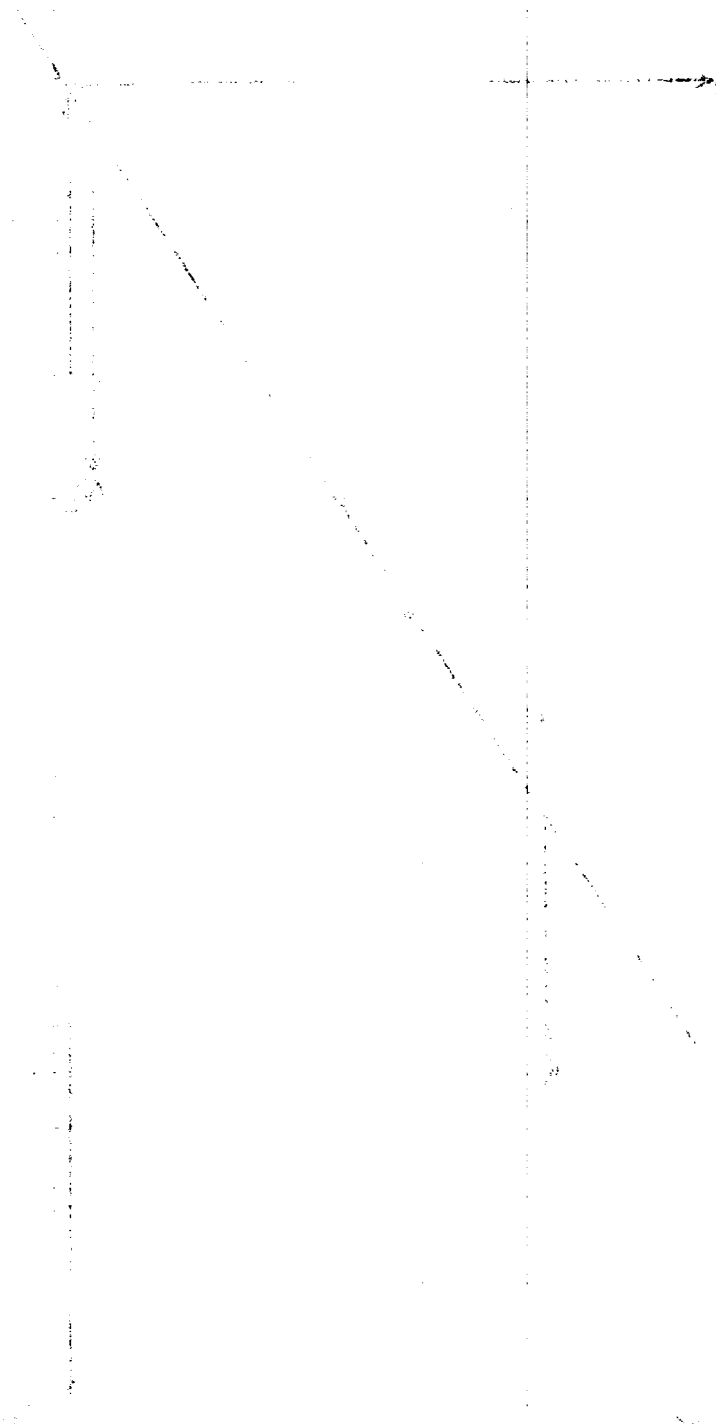
Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

SKELLY OIL CO.
KING "C" #1
1-23-36 Lea, N.M.



Q - MCFPD - 15.025 psia 60° F

100-100000
100-100000
100-100000



100-100000
100-100000
100-100000