

NEW MEXICO OIL CONSERVATION COMMISSION

MAIN OFFICE OCC

ELVIS A. O'NEAL
GAS ENGINEER

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Permian Formation Yates-Sewer River-Queen County LeeInitial 8 Annual _____ Special _____ Date of Test 7-25 to 8-1-56Company Gulf Oil Corporation Lease Arnett-Bansay "D" Well No. 3Unit F Sec. 33 Twp. 21S Rge. 36E Purchaser Permian Basin PL Co.Casing 5.5 Wt. 14 I.D. 5.012 Set at 3792 Perf. 3215 To 3620Tubing 2.375 Wt. 4.7 I.D. 1.995 Set at 3879 Perf. _____ To _____Gas Pay: From 3215 To 3620 L 3215 xG .665 -GL 2138 Bar.Press. 13.2Producing Thru: Casing 8 Tubing _____ Type Well CO DualDate of Completion: 12-28-55 Packer 3755 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps Pipe

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								997.8		72
1.	1/2	2.90	1467.8	20.1	68			925.7		24
2.	1/2	2.90	1471.1	20.2	68			868.0		24
3.	1/2	2.90	1480.7	22.6	68			828.6		24
4.	1/2	2.90	1480.7	24.1	68			785.7		24
5.										

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.	98.14	70.68	1480.1	.9982	.9490	1.047	382.9
2.	98.14	109.70	1481.6	.9990	.9490	1.048	541.1
3.	98.14	126.80	1493.9	.9990	.9490	1.049	697.9
4.	98.14	145.10	1493.9	.9990	.9490	1.047	784.7
5.							

COR 0.064
W2 3.142

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons 0.837 deg.
F_c 1.712 (1-e^{-s})Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid 1.021
P_c 1021.0 P_c 1021.1

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
1.	862.2	862.2	6.538	42.75	5.9	862.2	157.1	922.1	922.1
2.	862.2	776.5	9.611	92.37	12.7	789.2	212.9	906.1	906.1
3.	862.2	696.9	11.948	142.75	19.6	716.5	205.6	846.5	846.5
4.	797.9	639.8	13.134	172.47	24.7	624.5	257.6	815.1	815.1
5.									

19,000

0.03

Absolute Potential: _____ MCFPD; n _____

COMPANY Gulf Oil CorporationADDRESS Box 2167, Hobbs, N.M.AGENT and TITLE W. L. Smith

WITNESSED _____

COMPANY _____

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.

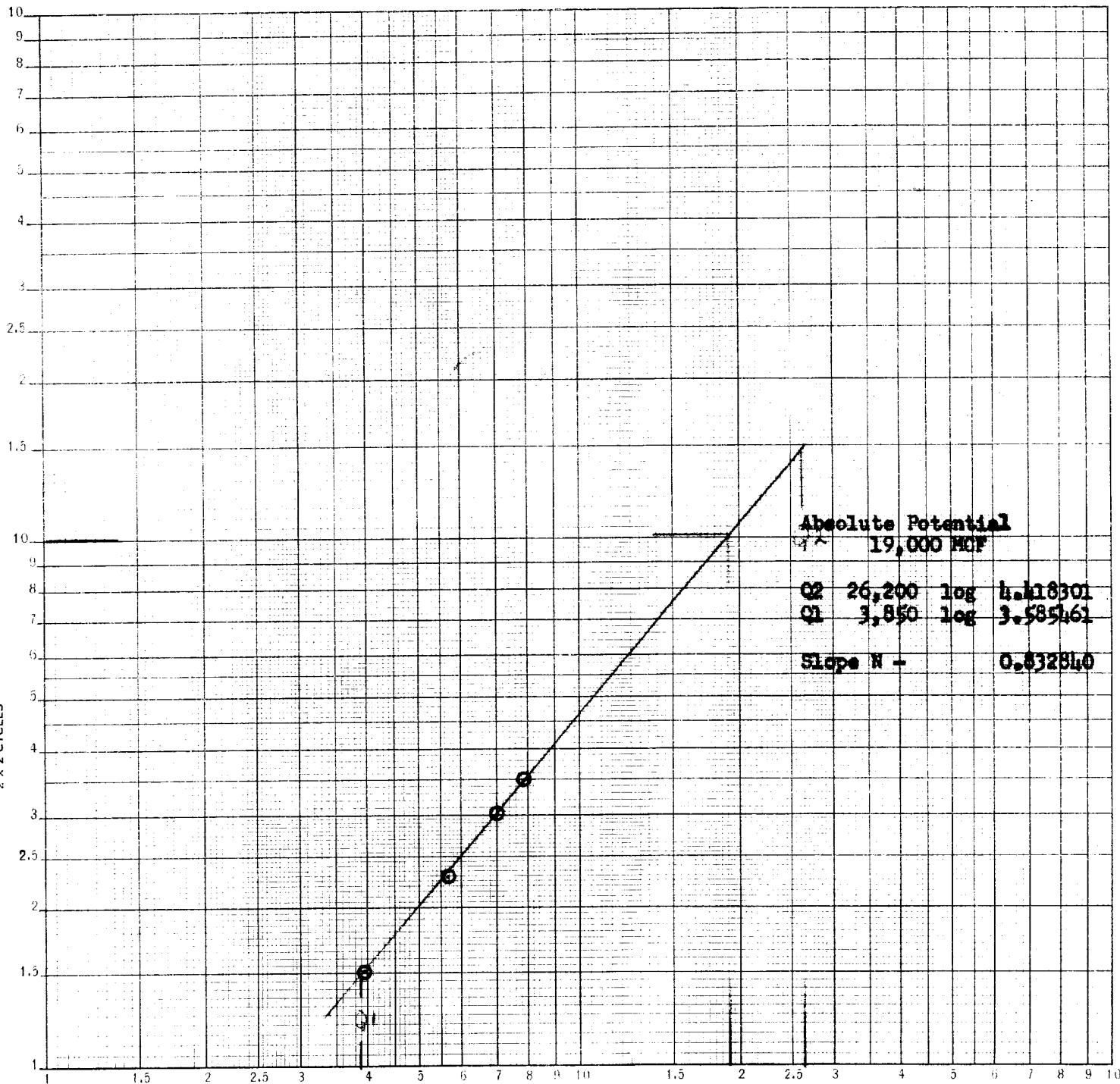
F_{pv} = Supercompressability factor.

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 .

Gulf Oil Corporation
 Arnott-Ramsay "D" No. 3
 F-33-21S-36E, Lea Co.
 8-1-56

LOGARITHMIC 359-110
 KEUFFEL & ESSER CO. MADE IN U.S.A.
 2 X 2 CYCLES



Absolute Potential
 19,000 MCF

Q2 26,200 log 4.418301
 Q1 3,850 log 3.585461

Slope N = 0.832840