

NEW MEXICO OIL CONSERVATION COMMISSION

ELVIS A. UZZ
GAS ENGINEER

HOBBS OFFICE OCC

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

3:05 PM 10-11-55

Pool Eumont Gas Formation Queen County LeaInitial _____ Annual _____ Special x Date of Test 8-24-56Company Schermmerhorn Oil Corp. Lease Linam "A" Well No. 1Unit J Sec. 32 Twp. 18S Rge. 37E Purchaser Permian Basin Pipeline Co.Casing 5 1/2" Wt. 14.0# I.D. 5.012" Set at 4002' Perf. _____ To _____Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 3970' Perf. _____ To _____Gas Pay: From 3610' To 3880' L 3970' xG 0.675 -GL 2680' Bar.Press. 13.2Producing Thru: Casing _____ Tubing x Type Well Single

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

Date of Completion: _____ Packer _____ Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Globe) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI						871.5	890.9	72 Hr. S.I.
1.	4"	1.50	443.0	2.1	84	795.5	832.4	24
2.	4"	1.50	445.0	9.4	62	729.4	747.0	24
3.	4"	1.50	445.0	21.9	69	586.0	640.7	28 3/4
4.	4"	1.50	443.9	28.5	67	529.5	595.4	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.	15.26	80.95		0.9777	0.9427	1.041	453
2.	15.26	65.38		0.9981	0.9427	1.048	988
3.	15.26	100.2		0.9915	0.9427	1.046	1495
4.	15.26	103.6		0.9933	0.9427	1.046	1543
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

F_c 0.936 (1-e^{-s}) 0.168

Specific Gravity Separator Gas _____

Specific Gravity Flowing Fluid _____

P_c 904.1 P_c 817.4

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.	808.7	654.0				715.0	102.4	845.6	93.5
2.	742.6	551.5				577.9	239.5	760.2	84.1
3.	599.2	359.0				427.6	389.8	653.9	72.3
4.	542.7	294.5				370.4	447.0	608.6	67.3
5.									

Absolute Potential: 2,511 MCFPD; n .76COMPANY SCHERMERHORN OIL CORPORATIONADDRESS P. O. BOX 1587, HOBBS, NEW MEXICOAGENT and TITLE J. H. MOORE, GEOLOGISTWITNESSED R. L. WestCOMPANY Permian Basin Pipeline 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 .

