

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blinebry Formation Blinebry County Lea
Initial X Annual _____ Special _____ Date of Test 2-19-59
Company Carl J. Westlund, Inc. Lease Danglade Well No. 1
Unit B Sec. 24 Twp. 22S Rge. 37E Purchaser Permian Basin Pipe Line Co.
Casing 7-5/8 Wt. 23.0 I.D. 6.276 Set at 5359 Perf. 5470 To 5594
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 5583 Perf. 5580 To 5583
Gas Pay: From 5580 To 5583 L 5580' xG mix 1.434 GL 8001.7 Bar.Press. 13.2
Producing Thru: Casing No Tubing Yes Type Well Gas-Gas Dual
Date of Completion: 2-19-59 Packer 6000' Reservoir Temp. 90

OBSERVED DATA

Tested Through (Prover) (XXXX) (XXXX) Type Taps None

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (XXXX) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1820.0				72.0
1.	2	.375	199.4		26	984.7	56			3.00
2.	2	.375	167.0		41	750.0	58			6.00
3.	2	.375	169.2		42	715.0	57			8.00
4.										
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.	3.0691		212.6	1.0344	.9258	1.026	641
2.	3.0691		180.2	1.0188	.9258	1.022	533
3.	3.0691		182.4	1.0178	.9258	1.022	539
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 2,647 cf/bbl.
Gravity of Liquid Hydrocarbons 51.3 deg.
P_c 9.936 (1-e^{-s}) 0.433

Estimated
Specific Gravity Separator Gas 0.700
Specific Gravity Flowing Fluid 0.774
P_c 1833.2 P_c² 3,360.6 x 10³

No.	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.	997.9	995.8	6.369	40.563	17.563	1013.36	2348	1007	0.549
2.	763.2	582.5	5.296	28.048	12.145	594.65	2766	771	0.421
3.	728.2	530.3	5.356	28.687	12.421	542.72	2818	737	0.402
4.									
5.									

Absolute Potential: 632 MCFPD; n .90COMPANY Carl J. Westlund, Inc.ADDRESS Box 197, Midland, TexasAGENT and TITLE A. B. Horton AgentWITNESSED *COMPANY *

REMARKS

* Tested by J.B. Horton, Permian Basin Pipe Line Co.
Witnessed by J.B. Thompson, Carl J. Westlund, Inc.

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} = Supercompressibility 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 .

WESTLUND, CARL J., INC.

DANGLADE # 1-C

TUBS GAS POOL

NW NE 24-228-37E

Date of Test 2-19-59

Slope (m) = 0.90 = Average Blincoy Gas Pool Slope

3 Hr. Abs. Pot. = $641 \left(\frac{3361}{2318} \right)^{0.90} = 641(1.381) = 885 \text{ Mcf/d.}$

6 Hr. Abs. Pot. = $533 \left(\frac{3361}{2785} \right)^{0.90} = 533(1.191) = 635 \text{ Mcf/d.}$

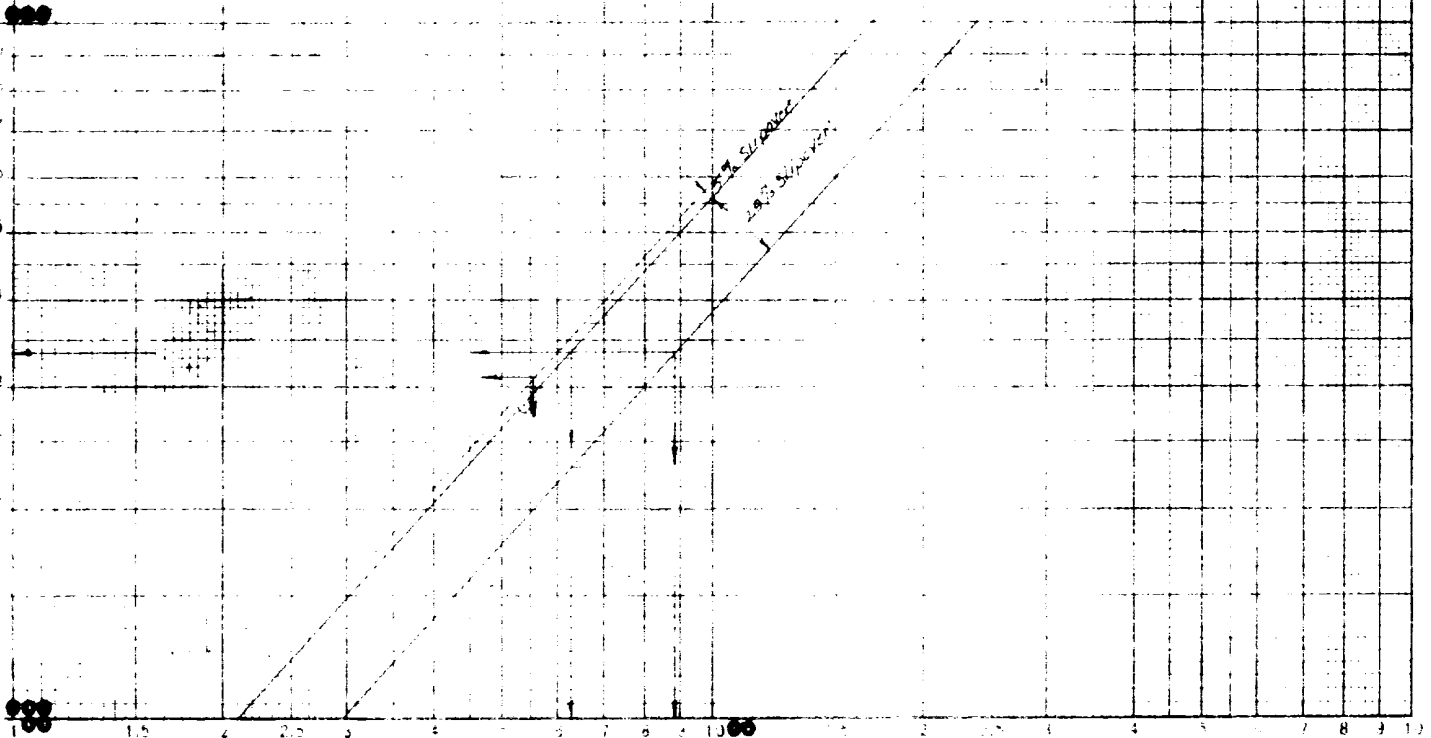
8 Hr. Abs. Pot. = $539 \left(\frac{3361}{2818} \right)^{0.90} = 539(1.172) = 632 \text{ Mcf/d.}$

8 Hr. W.H. Pot. = $539 \left(\frac{3361}{2831} \right)^{0.90} = 539(1.167) = 629 \text{ Mcf/d.}$

Estimated ability to produce @ 500 psig = 555 Mcf/d.

$P_0^2 - P_w^2$

LOGARITHMIC 358-110
MUFFEL & EBBEL CO. MADE IN U.S.A.
2 X 2 CYCLES



Q = Mcf/d