

NEW MEXICO OIL CONSERVATION COMMISSION

1957 FEB 11 AM 10 C4

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Furnace Formation Queen County Lee
Initial Annual X Special Date of Test July 5, 1956
Company Anderson-Prichard Oil Corp. Lease Britt Well No. 3
Unit 4 Sec. 7 Twp. 208 Rge. 37E Purchaser Permian Basin Pipe Line Co.
Casing 7" Wt. 24.04 I.D. 6.336 Set at 3300 Perf. 3155' To 3415'
Tubing 2 7/8" Wt. 6.54 I.D. 2.442 Set at 3430' Perf. To
Gas Pay: From 3135 To 3415 L 3430' xG 0.665 -GL 22.81 Bar.Press. 13.2
Producing Thru: Casing Tubing X Type Well Single
Date of Completion: 12-5-54 Packer None 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	4"	2.25"				979.1		979.7		71 1/2
1.	4"	2.25"	457.7	5.8	76	891.7		903.5		23 3/4
2.	4"	2.25"	460.0	14.6	72	806.9		840.4		24 1/2
3.	4"	2.25"	463.0	18.1	65	762.6		809.2		24
4.	4"	2.25"	464.2	31.6	69	625.3		729.7		23 1/2
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.	40.53	52.25	470.9	.9850	.9535	1.094	1927
2.	40.53	83.10	473.2	.9887	.9535	1.089	3039
3.	40.53	92.81	476.2	.9952	.9535	1.091	3420
4.	40.53	122.75	477.4	.9915	.9535	1.080	4469
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons deg.
F_c No Friction (1-e^{-s})

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 992.9 P_c 985.9

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	XXX	XXXX P _w ² P _c ²	XXXX P _w ² P _c ²	P _w P _c
1.	916.7						840.0	145.5	.923
2.	853.6						729.0	257.2	.859
3.	802.4						676.0	309.5	.828
4.	742.9						552.5	433.9	.748
5.									

Absolute Potential: 8055 MCFPD; n .840299COMPANY Anderson-Prichard Oil Corp.ADDRESS Box 196, Midland, TexasAGENT and TITLE WITNESSED NoneCOMPANY Permian Basin Pipe Line Co.

REMARKS

THIS IS A
GAS RECORD

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 .