

NEW MEXICO OIL CONSERVATION COMMISSION

1957 FEB 11 AM 9:58

Form C-122.

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Jalnet Formation Yates County Lea
Initial Annual X Special Date of Test 12-7-56
Company Anderson-Prichard Oil Corp. Lease State A-32 Well No. 1
Unit R Sec. 32 Twp. 24S Rge. 37E Purchaser Permian Basin Pipe Line
Casing 7 Wt. 22.0# I.D. 6.398" Set at 3132' Perf. 2906' To 3074'
Tubing 2 7/8" Wt. 6.5# I.D. 2.441" Set at 3077' Perf. 3074' To 3077'
Gas Pay: From 2906' To 3074' L 3074' xG 0.655 -GL 2013' Bar. Press. 13.2
Producing Thru: Casing Tubing X Type Well Single
Date of Completion: 2-11-56 Packer None Reservoir Temp. Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

CO₂ 0.00% N₂ 2.03 %Tested Through (ROCKET) (ORIFICE) (Meter)Type Taps Pipe

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
1.	4	1.50	510.7	3.8	105	709.5	710.6	73 1/4 hr. SI
2.	"	"	510.2	9.4	83	669.7	673.3	23 hrs.
3.	"	"	509.0	19.9	66	630.2	634.4	23 3/4 hrs.
4.	"	"	485.0	28.8	69	564.0	575.8	24 hrs.
5.	"	"				516.3	548.5	24 1/4 hrs.

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.	15.26	44.62	523.9	0.9592	0.9571	1.036	648
2.	"	70.14	523.4	0.9786	0.9571	1.046	1049
3.	"	101.9	522.2	0.9943	0.9571	1.047	1549
4.	"	119.8	498.2	0.9915	0.9571	1.046	1815
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas deg.
Specific Gravity Flowing Fluid deg.
P_c 723.8 P_c 523.9

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.	682.9	466.4				471.3	52.6		.95
2.	643.4	414.0				419.4	104.5		.89
3.	577.2	333.2				346.9	177.0		.81
4.	529.5	280.4				315.5	208.4		.78
5.									

Absolute Potential: 3496 MCFPD; n 0.727846COMPANY Anderson-Prichard Oil Corp.ADDRESS Box 196, Midland, TexasAGENT and TITLE R.L. WestWITNESSED NoneCOMPANY Permian Basin Pipe Line Co.

REMARKS

ELVIS A. GUY
JAN 22 1957

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 .