

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool BLANDING Formation SAN JUAN County SAN JUAN
Initial XX Annual Special Date of Test April 22, 1959
Company AMERICAN OIL & GAS CO. Lease Well No. 10
Unit Sec. 23 Twp. 20N Rge. 10E Purchaser
Casing 1.5 Wt. 9.5 I.D. 4.000 Set at 2111 Perf. 2096 To 2112
Tubing 1 Wt. 1.7 I.D. 1.049 Set at 2138 Perf. 2113 To 2123
Gas Pay: From 2096 To 2112 L xG -GL Bar.Press.
Producing Thru: Casing XXX Tubing Type Well Single - ss
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 4/22/59 Packer Reservoir Temp.

OBSERVED DATA

Tested Through 2173' (Prover) (Choke) (Meter) Type Taps
2154' 5752'

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						663		663		7 days
1.		.750			68	300		278	68	3 hours
2.										
3.										
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.	12.350		290	.9921	.9608	1.027	3511
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

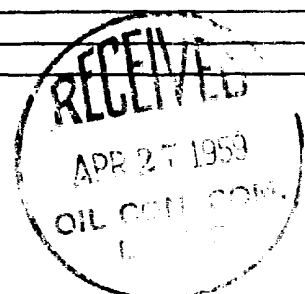
Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
P_c (1-e^{-s})
Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 675 P_c 1024.625

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.	320					102,400	353,225		
2.									
3.									
4.									
5.									

Absolute Potential: 4,350 MCFPD; n .35

COMPANY AMERICAN OIL & GAS CO.
ADDRESS 716, Farmington, New Mexico
AGENT and TITLE Engineer ORIGINAL SIGNED BY D. K. BRYANT
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 .

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