

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Ballard Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test May 6, 1960
Company Arizona Explorations, Inc. Lease Hearilla H Well No. 7
Unit M Sec. 6 Twp. 23N Rge. 5W Purchaser Southern Union Gas Company
Casing 5 1/4 Wt. 15.5 I.D. 4.950 Set at 2160 Perf. 2050 To 2068
Tubing 1 1/4 Wt. 2.40 I.D. 1.380 Set at 2062 Perf. 2062 To _____
Gas Pay: From 2050 To 2068 L 2050 xG 0.650 -GL 1332 Bar.Press. 12.0
Producing Thru: Casing X Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: _____ Packer - Reservoir Temp. -

OBSERVED DATA

Tested Through (Fraser) (Choke) (Meter) Type Taps _____

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Fraser) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI						599	600	SI
1.								
2.								
3.	2	3/4	54		64	117		3 hrs.
4.								
5.								

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.							
2.							
3.	12.365		66	0.9962	0.9608	1.010	744
4.							
5.							

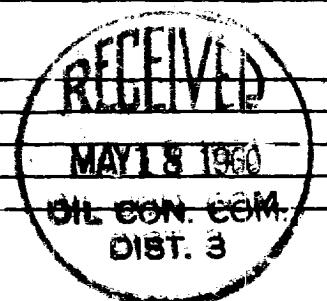
PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 1.311 (1-e^{-s}) 0.092
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 611 P_c² 373.321

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.									
2.									
3.	66	4.356	0.975	0.9506	87	14.161	359.160		1.039
4.									
5.									

Absolute Potential: 769 MCFPD; n 0.85/1.0330
COMPANY Arizona Explorations, Inc.
ADDRESS 417 Meadows Bldg., Dallas 6, Texas
AGENT and TITLE Marria E. Jones, Consulting Engineer M. B. JONES
WITNESSED George Credicott
COMPANY Arizona Explorations, Inc.

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 .