

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Albany County San Juan
Initial X Annual _____ Special _____ Date of Test 12-9-60
Company Adobe Oil Company Lease McCarthy Well No. 1
Unit _____ Sec. 14 Twp. 31 Rge. 13 Purchaser El Paso Natural Gas Company
Casing 5 1/2 Wt. 15.5 I.D. 4.990 Set at 6627 Perf. 6482 To 6596
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 6604 Perf. ---- To 6604
Gas Pay: From 6482 To 6596 L 6604 xG 64 -GL 4226.5 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well single-gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11-22-60 Packer _____ Reservoir Temp. _____

OBSERVED DATA

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

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						2000		2040		7 days
1.		3/4	138		76	138	76	400		3 hour
2.										
3.										
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.	12.3650		150	.9850	.9469	1.015	1,678
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_w 2052 P_c 4210.7
P_w 112 P_w 169.7

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.						169.7	4049		1007
2.									
3.									
4.									
5.									

Absolute Potential: 1,728 MCFPD; n .75

COMPANY Adobe Oil Company
ADDRESS 1229 Petroleum Life Bldg., Midland, Texas
AGENT and TITLE C.L. Huffman, Agent
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} = 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 .