

NEW MEXICO OIL CONSERVATION COMMISSION

Corrected Report

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin-Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 2-4-61
Company Adobe Oil Company Lease Elliott Well No. 1
Unit G Sec. 20 Twp. 31N Rge. 13W Purchaser El Paso Natural Gas Co.
Casing 5.5 Wt. 15.5 I.D. 5.012 Set at 6650 Perf. 6518 To 6640
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 6615 Perf. Open To _____
Gas Pay: From 6518 To 6640 L _____ xG .675 -GL _____ Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single-Tubing
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 1-26-61 Packer None 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						2059	22	2063	22	SI 7 days
1.		3/4	223		44	223	44	611	22	3 hrs.
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.							
2.	12.365		235	1.0158	.9359	1.028	2795
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 2075 P_c 4306

No.	$\frac{P_w}{P_t}$ (psia)	P_t^2	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P _w ²	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.									
2.						388	3918		
3.									
4.									
5.									

Absolute Potential: 2,999 MCFPD; n .75COMPANY Adobe Oil CompanyADDRESS 1223 Petroleum Life Building, Midland, TexasAGENT and TITLE A.T. Sindel, Vice-PresidentWITNESSED Lonnie Kramer

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 .