

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 2-4-61
Company Adobe Oil Co. Lease Elliott Well No. 1
Unit G Sec. 20 Twp. 31 N Rge. 13 W Purchaser El Paso Natural Gas Co.
Casing 5.5 Wt. 15.50 I.D. 5.012 Set at 6650 Perf. 6610 To 6640
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 66.15 Perf. 6518 To 6640
Gas Pay: From 6518 To 6640 L _____ xG .84 -GL _____ Bar. Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 1-26-61 Packer _____ Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

X

Tested Through (Prover) (Choke) (Meter)

Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI		<u>3/4</u>	<u>223</u>		<u>44</u>	<u>2059</u>	<u>22</u>	<u>2063</u>	<u>22</u>	
1.						<u>223</u>	<u>44</u>	<u>611</u>	<u>22</u>	
2.										<u>3 hr.</u>
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.	<u>12.3650</u>		<u>223</u>	<u>1.0158</u>	<u>0.8452</u>	<u>1.048</u>	<u>2481</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2063 P_w 4256

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.									
4.									
5.									

Absolute Potential: 2659 MCFPD; n .75

COMPANY Adobe Oil Co.

ADDRESS 1223 Petroleum Life Bldg., Midland, Texas

AGENT and TITLE _____

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 .