

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Pictured Cliffs County Rio Arriba  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 10-22-60  
Company August & Wagnerseller Lease Jicarilla Apache Well No. 38-17 C-1  
Unit D Sec. 17 Twp. 23N Rge. 2W Purchaser El Paso Natural Gas Co.  
Casing 4 1/2 Wt. 9.5 I.D. 4.090 Set at 3071 Perf. 3004 To 3014  
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 3029 Perf. 3029 To -  
Gas Pay: From 3004 To 3014 L 3029 xG 0.65 -GL 1969 Bar. Press. 12.0  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 10-13-60 Packer \_\_\_\_\_ Reservoir Temp. 125

## OBSERVED DATA

Tested Through (Pressure) (Choke) (Meter)

Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	<u>(Pressure)</u> (Line) Size	<u>(Choke)</u> (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						909		946		SI
1.										
2.										
3.	<u>2</u>	<u>3/4</u>	<u>72</u>		<u>56</u>			<u>179</u>		<u>3 hrs.</u>
4.										
5.										

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.							
2.							
3.	<u>14.1605</u>		<u>84</u>	<u>1.0039</u>	<u>0.9608</u>	<u>1.0000</u>	<u>1,148</u>
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.

Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.

P<sub>c</sub> 9402 (1-e<sup>-s</sup>) 0.133

Specific Gravity Separator Gas \_\_\_\_\_

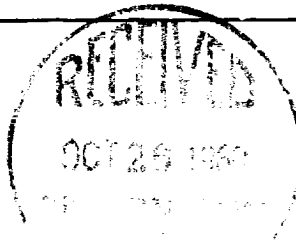
Specific Gravity Flowing Fluid \_\_\_\_\_

P<sub>c</sub> 958 P<sub>c</sub> 927,764

No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> P <sub>c</sub>
1.									
2.									
3.						<u>36,841</u>	<u>880,923</u>		<u>1.042</u>
4.									
5.									

Absolute Potential: 1,189 MCFPD; n 0.85/1.0356COMPANY August & WagnersellerADDRESS 170 So. Beverly Drive, Beverly Hills, CaliforniaAGENT and TITLE Morris B. Jones, Consulting Engineer M. B. JONESWITNESSED John J. AugustCOMPANY August & Wagnerseller

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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