

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapiete Pictured Cliffs Formation Pictured Cliffs County El Arriba  
Initial A Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 10-5-57  
Company PAN AMERICAN TITANIUM CORPORATION Lease Fred Phillips "C" Well No. 1  
Unit H Sec. 15 Twp. 25N Rge. 2E Purchaser El Paso Natural Gas Company  
Casing 5 1/2" Wt. 16 1/2 I.D. 5.012 Set at 3891 Perf. 3818 To 3858  
Tubing 2 3/8" Wt. 4.7 I.D. 1.775 Set at 3845 Perf. 3839 To 3845  
Gas Pay: From 3818 To 3858 L 3838 xG 0.700 -GL 2687 Bar.Press. 12  
Producing Thru: Casing A Tubing \_\_\_\_\_ Type Well Gas - Single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 9-10-57 Packer ND Reservoir Temp. 103° F

## OBSERVED DATA

Tested Through (Pressure) (Choke) (Bottom) Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>Shut-in 25 days</u>					<u>1050</u>		<u>1049</u>		
1.		<u>3/4" ODM</u>	<u>877</u>	<u>60</u>		<u>894</u>	<u>60</u>	<u>879</u>	<u>60</u>	<u>3 hours</u>
2.										
3.										
4.										
5.										

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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.	<u>14.160 (ODM)</u>		<u>889</u>	<u>1.000</u>	<u>0.9258</u>	<u>1.121</u>	<u>13.065</u>
2.							
3.							
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-S</sup>)

Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid 0.700  
P<sub>c</sub> 1062 P<sub>c</sub><sup>2</sup> 1,127,844

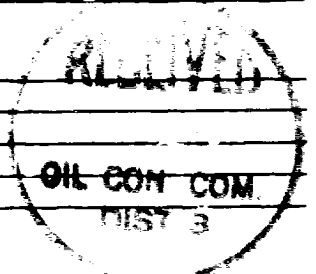
No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-S</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> /P <sub>c</sub>
1.						<u>820.816</u>	<u>307.064</u>		<u>0.853</u>
2.									
3.									
4.									
5.									

Absolute Potential: 39,522 MCFPD; n 0.65COMPANY PAN AMERICAN TITANIUM CORPORATIONADDRESS Box 487, Farmington, New MexicoAGENT and TITLE E. M. Hamer, Jr., Field Engineer

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  $P_t$ .

OIL CONSERVATION COMMISSION	
AZTEC DISTRICT OFFICE	
No. 12345	Received 3
DATE 1/1/50	
FILED	