

3-MMOCC  
 1-Murphy  
 1-Lloyd  
 1-International  
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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Formation Dakota County San Juan  
 Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test \_\_\_\_\_  
 Company International Oil Corp. Lease Fogelson Well No. 1-2  
 Unit J Sec. 2 Twp. 29N Rge. 11W Purchaser \_\_\_\_\_  
 Casing 4-1/2 Wt. 10.5 I.D. \_\_\_\_\_ Set at 6815 Perf. 6630 To 6697  
 Tubing 1-1/4 Wt. 2.4 I.D. \_\_\_\_\_ Set at 6648 Perf. 6648 To 6646  
 Gas Pay: From 6630 To 6697 L \_\_\_\_\_ xG .68 -GL \_\_\_\_\_ Bar.Press. \_\_\_\_\_  
 Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single-Gas  
 Date of Completion: \_\_\_\_\_ Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_  
 Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through 18229 (Choke) 18229 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	
1.						1829		1872	
2.		3/4"	192		61°				3 hours
3.									
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.	12.365		204	.9990	.9393	1.022	2419
4.							
5.							

PRESSURE CALCULATIONS

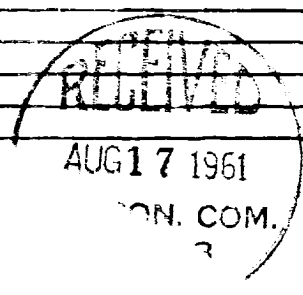
Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
 Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
 F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)  
 Specific Gravity Separator Gas \_\_\_\_\_  
 Specific Gravity Flowing Fluid \_\_\_\_\_  
 P<sub>c</sub> 1884 P<sub>c</sub> 3549.456

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.	1492					2226.064	1323.392		
4.									
5.									

Absolute Potential: 5069 MCFPD; n (2.6821) <sup>.75</sup> 2.0957

COMPANY International Oil Corp.  
 ADDRESS 2010 Republic Bank Building, Dallas, Texas  
 AGENT and TITLE Original signed by T. A. Dugan 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  $P_t$ .