

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Basin Formation Dakota County San Juan
Initial X Annual Special Date of Test 6-23-61
Company International Oil Corp. Lease Fifiold Well No. 1-5
Unit N Sec. 5 Twp. 29N Rge. 11W Purchaser
Casing 4-1/2 Wt. 9.5# I.D. Set at 6689 Perf. 6402 To 6580
Tubing 2-3/8 Wt. 4.70 I.D. Set at 6550 Perf. 6548 To 6550
Gas Pay: From 6402 To 6580 L 6548 xG .680 -GL 4453 Bar.Press.
Producing Thru: Casing X Tubing Type Well Single Gas
Date of Completion: 6-11-61 Packer Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 60°

OBSERVED DATA

Tested Through (Prover) (Choke) (Orifice) 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.	
1.						1922		2105		
2.		3/4"	190		60°					3 hours
3.										
4.										
5.										

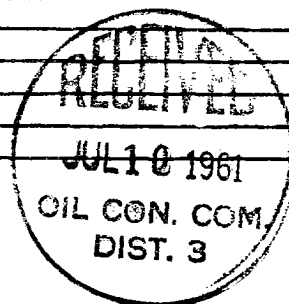
FLOW CALCULATIONS

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		202	1.000	.9393	1.022	2398
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bol.
Gravity of Liquid Hydrocarbons deg.
F_c 9.936 (1-e^{-s}) .277
Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 2117 P_c² 4481.689

No.	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.									
3.	202	40,804	23.8265	567.702	157.253	198.057	4283.632	445	1.0462
4.									
5.									

Absolute Potential: 2481 MCFPD; n = .75 1.0346COMPANY International Oil Corp.ADDRESS 2010 Republic Bank Building, Dallas, TexasAGENT and TITLE Original signed by T. A. Consulting EngineerWITNESSED 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 .