

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 7-22-61
Company International Oil Corp. Lease Fogalsen Well No. 1-35
Unit 0 Sec. 35 Twp. 30N Rge. 11W Purchaser _____
Casing 4-1/2 Wt. 10.5 I.D. _____ Set at 6825 Perf. 6514 To 6730
Tubing 1-1/4 Wt. 2.4 I.D. _____ Set at 6650 Perf. 6648 To 6650
Gas Pay: From 6514 To 6730 L _____ xG .680 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Date of Completion: 7-11-61 Packer _____ Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through 100000 (Choke) 100000 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.	
SI						<u>2105</u>		<u>2091</u>		
1.						<u>12</u>		<u>12</u>		
2.						<u>2117</u>		<u>2105</u>		
3.	<u>2"</u>	<u>3/4"</u>	<u>182</u>		<u>62</u>			<u>1465</u>		<u>3 hours</u>
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.							
3.	<u>12.3650</u>		<u>194</u>	<u>0.9981</u>	<u>0.9393</u>	<u>1.022</u>	<u>2298</u>
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
 P_c _____ ($1-e^{-s}$) _____
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
 P_c 2117 P_c^2 4481.7

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	$\frac{P_w}{P_c}$
1.	<u>1477</u>					<u>2181.5</u>	<u>2300</u>		<u>1.9484</u>
2.									
3.									
4.									
5.									

Absolute Potential: 3790 MCFPD; n .75 1.6492

COMPANY International Oil Corp.
ADDRESS 1007 North Dustin, Farmington, New Mexico
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} = Supercompressibility 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 .