

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County San Juan
Initial E Annual _____ Special _____ Date of Test 3-15-60
Company International Oil Corp. Lease E. E. Fogelson Well No. 1-25
Unit P Sec. 25 Twp. 30N Rge. 11W Purchaser No Connection
Casing 5 1/8" Wt. 15.8# I.D. 4.892 Set at 7150 Perf. 6792 To 7015
Tubing 2 3/8" Wt. 4.7# I.D. 1.995 Set at 6860 Perf. 6852 To 6856
Gas Pay: From 6792 To 7015 L 6852 xG 0.660 -GL 4522 Bar.Press. 12
Producing Thru: Casing No Tubing Yes Type Well Single Gas-Distillate
Single-Bradenhead-3. G. or G.O. Dual
Date of Completion: 2-29-60 Packer None Reservoir Temp. 189°

OBSERVED DATA

Tested Through (~~Packer~~) (~~Choke~~) (~~Valve~~) 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										
1.		<u>3/4"</u>	<u>205</u>		<u>70</u>	<u>1885</u>		<u>1912</u>		<u>7 day SI</u>
2.								<u>802</u>		<u>3 hr test</u>
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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.	<u>14.1605</u>		<u>217</u>	<u>0.9905</u>	<u>0.9535</u>	<u>1.023</u>	<u>2969</u>
3.							
4.							
5.							

PRESSURE CALCULATIONS

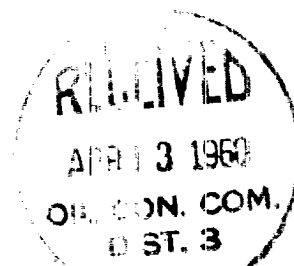
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas 0.660
Specific Gravity Flowing Fluid _____
P_c 1922 P_c² 3,694,084
P_w = 814 P_w² = 662,596

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	P _w / P _c
1.									
2.									
3.									
4.									
5.									

Absolute Potential: 3444 MCFPD; n (1.218) ^{0.75} = 1.16

COMPANY International Oil Corporation
ADDRESS % Caulkins Oil Company, Box 967, Farmington, New Mexico
AGENT and TITLE E. L. Hubbs Petroleum 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 .