

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 12-8-59
Company International Oil Corporation Lease D. A. Martin Well No. 1-3
Unit # B Sec. 3 Twp. 29N Rge. 11W Purchaser No Connection
Casing 5 1/2" Wt. 15 1/2" I.D. 4.892 Set at 6783 Perf. 6457 To 6584
Tubing 2 3/8" Wt. 4.7# I.D. 1.995 Set at 6459 Perf. 6451 To 6455
Gas Pay: From 6457 To 6584 L 6451 xG 0.660 -GL 3597 Bar.Press. 12
Producing Thru: Casing No Tubing Yes Type Well Single Gas-Distillate
Date of Completion: 11-24-59 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 189°

OBSERVED DATA

Tested Through XXXX (Prover) XXXX (Choke) XXXX (Meter) 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.		<u>3/4"</u>	<u>505</u>		<u>86</u>	<u>2000</u>		<u>2020</u>		<u>10 day SI</u>
2.								<u>1180</u>		<u>3 hr test</u>
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.	<u>14.1605</u>		<u>517</u>	<u>0.9759</u>	<u>0.9535</u>	<u>1.049</u>	<u>7146</u>
2.							
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 0.66
Specific Gravity Flowing Fluid _____
P_c 2032 P_s 4,129,004
P_w 1192 P_w² 1,420,864

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 9806 MCFPD; n (1.525)^{0.75} = 1.3723
COMPANY International Oil Corporation
ADDRESS % Caulkins Oil Company, Box 967, Farmington, New Mexico
AGENT and TITLE Authorized Agent
WITNESSED _____
COMPANY _____

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 .

OIL CONSERVATION COMMISSION	
APPROVED FOR FILING	DATE
No. Copies	
Operator	
Santa Fe	
Production	