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 **10-20-59**

Company **International Oil Corporation** Lease **02758** Well No. **E.E.Fogelson#1**

Unit **P** Sec. **27** Twp. **30N** Rge. **11W** Purchaser **Unknown**

Casing **5½"** Wt. **15.5# 17#** I.D. ____ Set at **7071** Perf. **6768** To **6934**

Tubing **2 3/8** Wt. **4.7** I.D. **1.995** Set at **6769'** Perf. **6765'** To **6769'**

Gas Pay: From **6768'** To **6934'** L **6765'** xG **.660** -GL **4465'** Bar.Press. **12#**

Producing Thru: Casing **No** Tubing **Yes** Type Well **Single Gas**
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: **10-4-59** Packer **-** Reservoir Temp. **-**

OBSERVED DATA

Tested Through ~~(Casing)~~ (Choke) ~~(Meter)~~ Type Taps ____

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1850		1865		116 S.I.
1.		10/64	1730		70	1730	70	1770		24
2.		12/64	1610		70	1610	70	1670		24
3.		14/64	1500		70	1500	70	1550		24
4.		20/64	980		70	980	70	1050		24
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.	.5133		1742	.9905	.9535	1.104	932
2.	.7741		1622	.9905	.9535	1.104	1256
3.	1.0155		1512	.9905	.9535	1.104	1601
4.	2.0930		992	.9905	.9535	1.104	2165
5.							

PRESSURE CALCULATIONS

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

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						3034.5	488.6		
2.						2630.8	892.3		
3.						2286.1	1237.0		
4.						984.0	2539.1		
5.									

Absolute Potential: **2550** MCFPD; n **.51532**

COMPANY **International Oil Corporation**

ADDRESS **Republic Bank Building, Dallas 1, Texas**

AGENT and TITLE Elmo Dave Stubble **Authorized Agent**

WITNESSED ____

COMPANY ____

REMARKS

RECEIVED
OCT 29 1959
OIL CON. COM.
DIST. 3

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.