

STATE OF KANSAS - CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2
8-7-58

TYPE TEST: Deliverability Open Flow TEST DATE: May 11, 1965

COMPANY: Ferguson Oil Company LEASE: Friesen WELL NO.: 1

COUNTY: Meade LOCATION: SECTION 3 TWP 33 RND 28 ACRES

FIELD: Borchers RESERVOIR: Morrow PIPELINE CONNECTION: Panhandle Eastern Pipe Line Company

COMPLETION DATE: PLUG BACK TOTAL DEPTH: 5649 PACKER SET AT:

CASING SIZE: 4 1/2 WT. 10.5 I.D. SET AT 5722 PERF. 5618 TO 5625

TUBING SIZE: 2" EUE WT. 4.70 I.D. 1.995 SET AT 5618 PERF. Open TO

TYPE COMPLETION (Describe): Single TYPE FLUID PRODUCTION:

PRODUCING THRU: Tubing RESERVOIR TEMPERATURE F: BAR. PRESS - P_a: 14.4 Psia

GAS GRAVITY - G_g: .645 % CARBON DIOXIDE: .07 % NITROGEN: 1.57 API GRAVITY OF LIQUID:

VERTICAL DEPTH (H): 5618 TYPE METER CONN.: Pipe (METER RUN) (PROVER) SIZE: 4

SHUT-IN PRESSURE: SHUT IN 5-11 19 65 AT 9:45 (AM)(PM) TAKEN 5-14 19 65 AT 2:30 (AM)(PM)

FLOW TEST: STARTED 5-10 19 65 AT 9:00 (AM)(PM) TAKEN 5-11 19 65 AT 9:30 (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN 76 3/4

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h _w)(h _d)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _t)(P _c) psia	psig	(P _w)(P _t)(P _c) psia		
SHUT-IN						1241.0	1255.4	1240.0	1254.4	76 3/4	
FLOW	2.00	765.0	19.8	70		1087.0	1101.4	927.0	941.4	24 1/2	40

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _p)(F _d) / Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW R / Mcfd	GOR	G _m
23.77	779.4	15430	1.245	.9905	1.075	3913		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 1576.0 ; (P_w)² = 1213.1 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_d)² = 0.207

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_w^2}{P_c^2 - P_d^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
1575.8	362.9	4.342	.6377	.753	.4802	3.022	11 830

OPEN FLOW 11 830 Mcfd @ 14.65 psia DELIVERABILITY Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Executed this the 19th day of May, 1965.

GA Lindsay
Witness (if any)

KAB
For Commission

For Company

Checked by