

STATE OF KANSAS - CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM NO. 1
8-7-58

TYPE TEST: Initial Annual Special TEST DATE:

COMPANY: **Loop - Ferguson** LEASE: **Ferguson** WELL NO.: **1**

COUNTY: **Harmon** LOCATION: **20** SECTION: **27** TWP: **6** RNO: **6** ACRES:

FIELD: **Wildcat** PIPELINE CONNECTION: **None**

COMPLETION DATE: **7/14/60** PLUG BACK TOTAL DEPTH: **3860** PACKER SET AT: **None**

CASING SIZE: **14** ID: **2.012** SET AT: **3893** PERF. TO: **3832**

TUBING SIZE: **2" E.V.E.** ID: **1.7** SET AT: **3832** PERF. TO: **Open End**

TYPE COMPLETION (Gas/Water): **Single** TYPE FLUID PRODUCTION: **50% Oily Condensate and 50% Salt Water**

PRODUCING THRU: **Tubing** RESERVOIR TEMPERATURE: **F** BAR PRESS - **P₁** **14.4 Ppsi**

GAS GRAVITY - G: **0.640 (Est.)** % CARBON DIOXIDE: % NITROGEN: API GRAVITY OF LIQUID:

VERTICAL DEPTH (H): **3832** TYPE METER CONN.: (MEASURED - (PROVER) SIZE) **2"**

REMARKS: **Best Scanned Copy**

OBSERVED DATA

DURATION OF SHUT-IN **72 hr.**

RATE No.	ORIFICE SIZE in.	(PROVER) PRESSURE psig	DIFF. (h _w)(ft)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Ebln.
						psig	(P _w)(E.V.P.) psia	psig	(P _w)(P ₁)(P ₂) psia		
SHUT IN						1322	1336.4	1285	1299.4		
1	5/16	257.2		88		1203	1217.4	1163	1177.4	1.75	Trace
2	5/16	347.2		88		1137	1151.4	1073	1087.4	1.75	Trace
3	5/16	485.1		84		1024	1038.4	965	979.4	1.75	1
4	5/16	562.1		80		926	940.4	870	884.4	1.75	1
5											

RATE OF FLOW CALCULATIONS

RATE NO.	COEFFICIENT (F ₁)(F ₂) Mod	(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 Q Mod	QDR	G ₁
1	1.714	271.6		1.250	.9741	1.023	580		
2	1.714	361.6		1.250	.9741	1.031	778		
3	1.714	489.5		1.250	.9777	1.044	1092		
4	1.714	576.5		1.250	.9813	1.052	1275		
5									

PRESSURE CALCULATIONS

RATE NO.	P ₁ psia	P ₂ psia	P _w psia	(P ₂) ² THOUSANDS	(P _w) ² THOUSANDS	PLOTTING POINTS		100 $\frac{P_w - P_2}{P_2 - P_1}$
						(P ₂) ² - (P _w) ² THOUSANDS	Q Mod	
1	1177.4	1336.4	1217.4	1786.0	1482.1	303.9	580	91.0
2	1087.4	1336.4	1151.4	1786.0	1325.7	460.3	778	86.0
3	979.4	1336.4	1038.4	1786.0	1078.3	707.7	1092	77.5
4	884.4	1336.4	940.4	1786.0	884.4	901.6	1275	70.0
5								

INDICATED WELLHEAD OPEN FLOW **2,097**

Mod @ 14.65 psia

$\mu_{sp} = 0.728$

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 _____ day of _____, 1960

Paul A. Tucker
Witness (if any)

[Signature]
Company