

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

FORM O-2
 8-7-58

15-005-20054-0090

TYPE TEST: Deliverability Open Flow TEST DATE: 9/15/89

COMPANY: Theodore I. Leben & Associates LEASE: Childress WELL NO.: #2

COUNTY: Atchison LOCATION: N/2 SW/4 SECTION: 2 TWP: 7S RNG: 18E ACRES:

FIELD: Wehking RESERVOIR: Lower McLouth PIPELINE CONNECTION: Atchison Pipeline Co.

COMPLETION DATE: 11/21/87 PLUG BACK TOTAL DEPTH: 1795 PACKER SET AT:

CASINO SIZE	WT.	I.D.	SET AT	PERF.	TO
4 1/2"	9.5#		1835	1746	1754
TUBING SIZE	WT.	I.D.	SET AT	PERF.	TO
2 3/8"	4.7#		1715		

TYPE COMPLETION (Describe): Single Gas TYPE FLUID PRODUCTION: None

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

GAS GRAVITY - G_g: 0.592 % CARBON DIOXIDE: 0.35 % NITROGEN: 6.4 API GRAVITY OF LIQUID:

VERTICAL DEPTH (H): 1750 TYPE METER CONN.: Flange/Down (METER RUN)(PROVER) SIZE: 2.067

SHUT-IN PRESSURE: SHUT IN _____ 19____ AT _____ (AM)(PM) TAKEN 8/7 19 89 AT 8:00 (AM)(PM)

FLOW TEST: STARTED 9/14 19 89 AT 8:00 (AM)(PM) TAKEN 9/15 19 89 AT 8:00 (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN _____ HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h _w)(h _d)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASINO 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						321	335.4			528	
FLOW	0.750	275	8.5	60 ^o		285	299.4	280	294.4	24	0

RATE OF FLOW CALCULATIONS

COEFFICIENT (F ₁)(F ₂) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
2.778	289.4	49.6	1.300	1.000	1.026	184		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 112,493 ; (P_w)² = 89,640 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_c)² = 0.207 ; (P_d)² = _____

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	(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 OR DELIVERABILITY EQUALS R x ANTILOG Mcfd
112,285	22,852	4.91	0.6911	1.0000	0.6911	4,9102	903

OPEN FLOW 921 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 2nd day of October, 1989.

Witness (if any)

For Company

Checked by