

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

FORM O-2
8-7-58

13
10-16-89

15-005-20064-0000

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

COMPANY: Theodore I. Leben & Associates **LEASE:** Sheeley **WELL NO.:** 1-2
COUNTY: Atchison **LOCATION:** N/2 NE **SECTION:** 2 **TWP:** 7S **RNG:** 18E **ACRES:**
FIELD: Wildcat **RESERVOIR:** U. McLouth **PIPELINE CONNECTION:** Atchison Pipeline Co.

COMPLETION DATE: 10/11/88 **PLUG BACK TOTAL DEPTH:** 1807' **PACKER SET AT:**

CASINO SIZE: 4 1/2" **WT.:** 10.5# **I.D.:** **SET AT:** 1810' **PERF.:** 1696 **TO:** 1704

TUBING SIZE: 2 3/8" **WT.:** 4.7# **I.D.:** **SET AT:** 1752 **PERF.:** **TO:**

TYPE COMPLETION (Describe): Single Gas **TYPE FLUID PRODUCTION:** Gas

PRODUCING THRU: Tubing **RESERVOIR TEMPERATURE F:** 97°F **BAR. PRESS - P_a:** 14.4 Psia

GAS GRAVITY - G_g: 0.576 **% CARBON DIOXIDE:** 0.79 **% NITROGEN:** 2.82 **API GRAVITY OF LIQUID:**

VERTICAL DEPTH (ft): **TYPE METER CONN.:** Flange **(METER RUN)(PROVER) SIZE:** 2"

SHUT-IN PRESSURE: SHUT IN: 8/26 19 89 AT 8:00 (AM)(PM) TAKEN 8/29 19 89 AT 8:00 (AM)(PM)

FLOW TEST: STARTED: 9/14 19 89 AT 7:00 (AM)(PM) TAKEN 9/15 19 89 AT 7:00 (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN 72 HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h ₁)(h ₂)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASINO WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _c)(P _e) psia	psig	(P _w)(P _c)(P _e) psia		
SHUT-IN						526	540.4				
FLOW	0.75	280	30	66		368	382.4	284	298.4	24.0	light to med mist oil & water

RATE OF FLOW CALCULATIONS

COEFFICIENT (F ₁)(F ₂) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_{mh}h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
2.779	294.4	93.98	1.318	0.9943	1.020	349		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 292,032, (P_w)² = 146,229, P_d = _____ % (P_c - 14.4) + 14.4 = _____, (P_c)² = 0.207, (P_d)² = 0.207

$\frac{(P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	(P _c) ² - (P _w) ²	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
291,825	145,803	2.00	0.3014	0.937	.2824	1.916	668

OPEN FLOW 668 **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, 19 89

Witness (if any)

[Signature]
For Company
Checked by