

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

FORM O-2  
8-7-58

15-091-21168-0000

TYPE TEST:  Deliverability  Open Flow TEST DATE: 1/4/89

COMPANY: OLATHE JOINT VENTURE LEASE WELL NO. #4  
 R.J. Baudendistel Baudendistel

COUNTY: Johnson LOCATION: 2454' fsl 990' fel NW, NE, SE 8 TWP: 14S. RNG: 23E ACRES: 40

FIELD: Olathe RESERVOIR: Bartlesville Sd. PIPELINE CONNECTION: Brock Explrtn, Inc. (Cottonwood J.V.)

COMPLETION DATE: 3/7/86 PLUG BACK TOTAL DEPTH: Packer Set At 800ft

CASINO SIZE: 2 7/8" WT. I.D. SET AT 800 ft PERF. TO open hole to 830ft

TUBING SIZE: I.D. SET AT PERF. TO

TYPE COMPLETION (Deliverability): single casing TYPE FLUID PRODUCTION: dry - traces of salt water

PRODUCING THRU casing RESERVOIR TEMPERATURE F BAR. PRESS - P<sub>s</sub> 14.4 Psia

GAS GRAVITY - G<sub>g</sub> .5763 CARBON DIOXIDE .77% NITROGEN 3.56% API GRAVITY OF LIQUID

VERTICAL DEPTH (H) 815 TYPE METER CONN. flange (METER RUN) (PROVER) SIZE 2"

SHUT-IN PRESSURE: SHUT IN 1/3/89 AT 5:10 (AM)(PM) TAKEN 1/4/89 AT 8:20 (AM)(PM)

FLOW TEST: STARTED 1/4/1989 AT 8:23 (AM)(PM) TAKEN 1/4/1989 AT 8:52 (AM)(PM)

OBSERVED DATA DURATION OF SHUT-IN 15.2 HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h <sub>w</sub> )(h <sub>d</sub> )	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASINO WELLHEAD PRESS		TUBING WELLHEAD PRESS		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) psia	psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) psia		
SHUT-IN	----	107					121.65			15.2	*
FLOW		67		@60°			81.65			.5	fluid in hole shut-in

RATE OF FLOW CALCULATIONS \*-tried to blow before test/soa

COEFFICIENT (F <sub>D</sub> )(F <sub>D</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. FACTOR F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	GOR	Q <sub>m</sub>
.2716	81.65		1.318	1.000	1.005	29.37	NOTE-	Table III for orifice well tester shows 34.9mc

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 14,798.7 (P<sub>w</sub>)<sup>2</sup> = 6,666.7 P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ (P<sub>d</sub>)<sup>2</sup> = 0.207

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
14,584.1	8,132	1.7934		1.0		1.7934	52.7

OPEN FLOW 52.7 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 5<sup>TH</sup> day of JANUARY, 1989.

Gary P. Glenn Witness (if any) James T. Stegeman For Company

For Commission My Appl. Exp. 1-28-92 Checked by