

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: 2-28-86

COMPANY: F.M.P. Operating LEASE: Harbins WELL NO.: 1-29

COUNTY: Cheyenne LOCATION: SECTION: 29 TWP: 4 RNO: 41 ACRES:

FIELD: Reservoir PIPELINE CONNECTION: K.H. Energy

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

CASING SIZE: WT. I.D. SET AT PERF. TO

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

TYPE COMPLETION (Describe): TYPE FLUID PRODUCTION:

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

GAS GRAVITY - G_g: 589 % CARBON DIOXIDE: % NITROGEN: API GRAVITY OF LIQUID:

VERTICAL DEPTH (H): TYPE METER CONN.: (METER RUN) (METER) SIZE: 2"

SHUT-IN PRESSURE: SHUT IN 2-28 1986 AT (AM)(PM) TAKEN 3-3 1986 AT (AM)(PM)

FLOW TEST: STARTED 3-3 1986 AT (AM)(PM) TAKEN 3-4 1986 AT (AM)(PM)

OBSERVED DATA DURATION OF SHUT-IN 22HR.

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 _i)(P _c) psia	psig	(P _w)(P _i)(P _c) psia		
SHUT-IN						197.0	211.4				
FLOW	3/8	69.0	25.0			184.0	198.4				

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _b)(F _o) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √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
6860	83.4	45.662	1.303	1.000	1.000	41.0		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 44.7 (P_w)² = 39.4 P_d = _____ % (P_c - 14.4) + 14.4 = _____ (P_a)² = 0.207 (P_d)² = _____

(P _c) ² - (P _a) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	$\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
44.5	5.3	8.3962	.9241	.765	.7069	5.0924	209.0

OPEN FLOW 209 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 _____ day of _____, 1986.

Witness (if any)
Glyde L. Wiley
For Commission

MAR 13 1986

CONSERVATION DIVISION
Wichita, Kansas

For Company
Checked by