

15-181-20097-00-00

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

FORM G-2
8-7-58

29
6-2-87

TYPE TEST: Deliverability Open Flow TEST DATE: Flow Test 6-2-87

COMPANY: GOODLAND GAS COMPANY LEASE: Nemechek WELL NO.: 1-3

COUNTY: Sherman LOCATION: SW 1/4, NE 1/4, NW 1/4 SECTION: 3 TWP: 8S R9G: 39W ACRES:

FIELD: Goodland RESERVOIR: Niobrara PIPELINE CONNECTION: KNEnergy

COMPLETION DATE: 8-27-80 PLUG BACK TOTAL DEPTH: 1,037 PACKER SET AT: None

CASINO SIZE: 4 1/2" WT. L.D. SET AT: 1,037 PERF. TO: 1,000

TUBING SIZE: None WT. L.D. SET AT: PERF. TO:

TYPE COMPLETION (Describe): Frac 40,000# Sc., 20,000 Gal. 70 quality foam TYPE FLUID PRODUCTION: Gas

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

GAS GRAVITY - G_g: 0.5827 % CARBON DIOXIDE: 1.28 % NITROGEN: 2.635 API GRAVITY OF LIQUID: --

VERTICAL DEPTH (H): TYPE METER CONN.: Orifice-Flange (METER RUN)(PROVER) SIZE: 2.067

SHUT-IN PRESSURE: SHUT IN 5-29 19 87 AT 10:54 (AM)(PM) TAKEN 6-1 19 87 AT 10:53 (AM)(PM)

FLOW TEST: STARTED 6-1 19 87 AT 10:55 (AM)(PM) TAKEN 6-2 19 87 AT 10:41 (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN 72 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 _i)(P _c) psia	psig	(P _w)(P _i)(P _c) psia		
SHUT-IN	--	--	--	--	--	29.9	44.3	--	--	72	--
FLOW	0.375	19.4	43.4	60	--	19.6	34.0	--	--	24	--

RATE OF FLOW CALCULATIONS

COEFFICIENT (P _w) ² / (P _c) ² Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √P _m h _w	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	Q _m
28.4	33.8	38.3	1.31	1.00	1.0011	34	--	--

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 1962.49 ; (P_w)² = 1156.00 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_w)² = 0.207 ; (P_d)² = _____

(P _c) ² - (P _w) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	$\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
1755.13	806.49	2.18	0.34	0.718	0.24	1.75	59

OPEN FLOW 58 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 4 day of June, 1987.

RECEIVED
CORPORATION COMMISSION
JUNE 1987
For Company
CONSERVATION DIVISION
Wichita, Kansas
Checked by

Witness (if any)

For Commission