

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

TEST: Deliverability Open Flow TEST DATE: FLOW TEST 5-27-87

COMPANY: GOODLAND GAS COMPANY LEASE: Schwendener WELL NO.: 1-26

COUNTY: Sherman LOCATION: SW 1/4 SW 1/4 SECTION: 26 TWP: 7S RNG: 39W ACRES:

FIELD: Goodland RESERVOIR: Niobrara PIPELINE CONNECTION: KN Energy

COMPLETION DATE: 10-13-83 PLUG BACK TOTAL DEPTH: 1217 PACKER SET AT:

CASING SIZE: 4 1/2" WT. I.D. SET AT 1253 PERF. TO 1045

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

TYPE COMPLETION (Describe): Frac 100,000# sd 937 Bbls H2O TYPE FLUID PRODUCTION: Gas

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

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 5-15 19 87 AT 11:17 (AM)(PM) TAKEN 5-18 19 87 AT 11:38 (AM)(PM)

FLOW TEST: STARTED 5-26 19 87 AT 11:56 (AM)(PM) TAKEN 5-27 19 87 AT 11:40 (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	--	--	--	--	--	23.9	38.30	--	---	72	--
FLOW	0.375	21.5	6.0	60	--	21.8	36.20	--	---	24	--

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _b)(F _d) Mcd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m \times h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcd	GOR	G _m
28.4	35.90	14.68	1.31	1.00	1.0004	13	--	--

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 1466.89 ; (P_w)² = 1310.44 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_d)² = _____ ; (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 Mcd
1259.53	156.45	8.05	0.91	0.8732	0.79	6.18	80

OPEN FLOW 79 Mcd @ 14.65 psia DELIVERABILITY STATE CORPORATION COMMISSION Mcd @ 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 29 day of May, 1987.

RECEIVED
MAY 12 1987
Conservation Division
Wichita, Kansas
For Company

Witness (if any)

Checked by