

15-181-20233-0000
 STATE OF KANSAS - CORPORATION COMMISSION

FORM O-2
 8-7-58

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

TYPE TEST: Deliverability Open Flow TEST DATE: 5-29-87

COMPANY: Goodland Gas Co. LEASE: Nemechek WELL NO.: 1-4

COUNTY: Sherman LOCATION: C NE NE SECTION: 4 TWP: 8 RNG: 39 W. ACRES:

FIELD: Goodland Gas RESERVOIR: Niobrara Chalk PIPELINE CONNECTION: KN ENERGY

COMPLETION DATE: 1-23-83 PLUG BACK TOTAL DEPTH: Packer set at

CASINO 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_s 0.5827 % CARBON DIOXIDE % NITROGEN API GRAVITY OF LIQUID

VERTICAL DEPTH (H) TYPE METER CONN. F. (METER RUN)(PROVER) SIZE 2

SHUT-IN PRESSURE: SHUT IN 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM) FLOW TEST: STARTED 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN 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 _t)(P _c) psia	psig	(P _w)(P _t)(P _c) psia		
SHUT-IN						25.0	39.4				
FLOW	.875	19.4	10.0	60		20.3	34.7				

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _p)(F _d) Mafd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mafd	GOR	Q _m
3.824	33.80	18.38	1.31	1.0	1.011	93.09		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 1552.36 (P_w)² = 1204.09 P_d² = _____ % (P_c - 14.4) + 14.4 = _____ (P_a)² = 0.207 (P_d)² = _____

(P _c) ² - (P _d) ² or (P _c) ² - (P _w) 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 Mafd
1345.00	348.27	3.862	.5868	.748	.4389	2.747	255.72

OPEN FLOW 256 Mafd @ 14.65 psia DELIVERABILITY Mafd @ 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 _____, 19____. JUN 12, 1987.

Witness (if any)
 Dale F. Baltazor
 For Commission

For Company
 CONSERVATION DIVISION
 Wichita, Kansas
 Checked by