

15-181-20256-00-00  
**STATE OF KANSAS - CORPORATION COMMISSION**  
**ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST**

FORM O-2  
8-7-58

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

COMPANY: Goodland Gas Co. LEASE: city of Goodland WELL NO.: 1-8

COUNTY: Sherman LOCATION: C NW NW SECTION: 8 TWP: 8 RNG: 39 W ACRES:

FIELD: Goodland Gas RESERVOIR: Niobrara Chalk PIPELINE CONNECTION: K N ENERGY

COMPLETION DATE: 10-12-83 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<sub>a</sub>: 14.4 Psia

GAS GRAVITY - G<sub>g</sub>: .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**

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>i</sub> )(P <sub>c</sub> ) psia	psig	(P <sub>w</sub> )(P <sub>i</sub> )(P <sub>c</sub> ) psia		
SHUT-IN						28.7	43.1				
FLOW	.500	15.3	5.5	60		15.6	30.0				

**RATE OF FLOW CALCULATIONS**

COEFFICIENT (F <sub>p</sub> )(F <sub>d</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m \cdot h_w}$	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	G <sub>m</sub>
1.219	29.7	12.78	1.31	1.0	1.011	20.63		

**(OPEN FLOW) (DELIVERABILITY) CALCULATIONS**

(P<sub>c</sub>)<sup>2</sup> = 1857.61, (P<sub>w</sub>)<sup>2</sup> = 900.00, P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_, (P<sub>a</sub>)<sup>2</sup> = 0.207, (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	$\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
1650.25	957.61	1.723	.2362	.822	.1942	1.564	32.27

OPEN FLOW 32 Mcfd @ 14.65 psia DELIVERABILITY 32.27 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. JUN 12 1987

Executed this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

Witness (if any)  
 Dale F. Balthazor  
 For Commission

STATE CORPORATION COMMISSION  
 CONSERVATION DIVISION  
 Wichita, Kansas  
 Checked by \_\_\_\_\_