

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

FORM G-2
8-7-58

Pg
6-12 27

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

COMPANY: GOODLAND GAS COMPANY LEASE: Lovelace WELL NO.: 1-5

COUNTY: Sherman LOCATION: NW 1/4 SECTION: 5 TWP: 8S R9G: 38W ACRES: .

FIELD: Goodland RESERVOIR: Niobrara PIPELINE CONNECTION: KNEnergy

COMPLETION DATE: 10-25-78 PLUG BACK TOTAL DEPTH: 953 PACKER SET AT: None

CASING SIZE: 4 1/2" WT. I.D. SET AT PERFORM. 888 TO 892

TUBING SIZE: None WT. I.D. SET AT PERFORM. 908 TO 915

TYPE COMPLETION (Describe): Frac 30,000# Sd., 152,760 SCF N₂ 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 1:55 (AM)(PM) TAKEN 6-1 19 87 AT 11:56 (AM)(PM) TAKEN
 FLOW TEST: STARTED 6-1 19 87 AT 11:58 (AM)(PM) TAKEN 6-2 19 87 AT 11:37 (AM)(PM) TAKEN

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	CASING 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	--	--	--	--	--	36.2	50.6	--	--	72	--
FLOW	0.50	22.3	11.68	60	--	22.4	36.8	--	--	24	--

RATE OF FLOW CALCULATIONS

COEFFICIENT (P _c) ² / (P _w) 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
50.521	36.7	20.70	1.31	1.00	1.0005	33	--	--

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 2560.36 ; (P_w)² = 1354.24 ; 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	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
2353.00	1206.12	1.95	0.29	0.718	0.21	1.62	53

OPEN FLOW 52 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.

CURTIS D. CARLMARK
 Conservation Director
 Wichita, Kansas

Witness (if any)

For Commission

Checked by