

15-181-20093-00-00

19
6-8-87

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

FORM O-2
8-7-58

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

COMPANY: GOODLAND GAS COMPANY LEASE: Briney WELL NO.: 1-33

COUNTY: Sherman LOCATION: SW/SW/SE SECTION: 33 TWP: 7S RNG: 39W ACRES: .

FIELD: Goodland RESERVOIR: Niobrara PIPELINE CONNECTION: KN Energy

COMPLETION DATE: 8-30-80 PLUG BACK TOTAL DEPTH: 1050 PACKER SET AT: None

CASING SIZE: 4 1/2" WT. I.D. SET AT: 934 PERF. TO: None

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

TYPE COMPLETION (Describe): Open Hole 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 10:55 (AM)(PM) TAKEN 5-18 19 87 AT 11:18 (AM)(PM)

FLOW TEST: STARTED 5-26 19 87 AT 11:10 (AM)(PM) TAKEN 5-27 19 87 AT 10:55 (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	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	--	--	--	--	--	28.3	42.7	--	--	72	--
FLOW	0.625	25.8	1.24	60	--	25.9	40.3	--	--	24	--

RATE OF FLOW CALCULATIONS

COEFFICIENT (F ₁)(F ₂) / Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √P _m h _w	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
79.3	40.20	7.06	1.31	1.00	1.0008	18	--	--

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 1823.29 ; (P_w)² = 1624.09 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_d)² = 0.207

(P _c) ² - (P _a) ² or (P _c) ² - (P _d) 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 Mcfd
1615.93	199.20	8.11	0.91	0.718	0.65	4.50	81

OPEN FLOW 80 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 29 day of May, 1987

Conservation Director
Wichita, Kansas
For Company

Witness (if any)

Checked by