15-181-20232-00-00

STATE OF KANSAS – CORPORATION COMMISSION

FORM C-2
8-7-58

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

P 2 3 84

TYPE TEST: [X] Deliverability [ ] Open Flow TEST DATE: 6-2-86

COMPANY	LEASE	WELL NO.
GOODLAND GAS CO.	Schwendener	2-36

COUNTY	LOCATION	SECTION	TWP	RNG	ACRES
Sherman	SW¼ SW¼	36	7S	39W	

FIELD	RESERVOIR	PIPELINE CONNECTION
Goodland	Niobrara	KN Energy

COMPLETION DATE	PLUG BACK TOTAL DEPTH	PACKER SET AT
1-26-83	1081	

CASING SIZE	WT.	I.D.	SET AT	PERF.	TO
4½"	9.5		1081	962	982

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

TYPE COMPLETION (Describe)	TYPE FLUID PRODUCTION
Frac w/100,000# SD, 40 tons CO_2, 800 Bbls H_2O	Gas

PRODUCING THRU	RESERVOIR TEMPERATURE °F	BAR. PRESS – P_a
Casing		13.2 ~~14.4~~ Psia

GAS GRAVITY – G_g	% CARBON DIOXIDE	% NITROGEN	API GRAVITY OF LIQUID
0.5837	1.98	2.79	--

VERTICAL DEPTH (H)	TYPE METER CONN.	(METER) (PROVER) SIZE
	Orifice	2.067

SHUT-IN PRESSURE: SHUT IN 5-19 19 86 AT ____ (AM)(PM) TAKEN 5-30 19 86 AT ____ (AM)(PM)

FLOW TEST: STARTED 5-30 19 86 AT ____ (AM)(PM) TAKEN 6-2 19 86 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	CASING WELLHEAD PRESS. psig	CASING WELLHEAD PRESS. (P_w)(P_t)(P_c) psia	TUBING WELLHEAD PRESS. psig	TUBING WELLHEAD PRESS. (P_w)(P_t)(P_c) psia	DURATION HOURS	LIQUID PROD. Bbls.
SHUT-IN	--	--	--	--	--	30.5	43.7	--	--	72+	--
FLOW	.750	--	--	69	--	21.8	35	--	--	72	--

RATE OF FLOW CALCULATIONS

COEFFICIENT (F_b)(F_c) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F_g	FLOWING TEMP. FACTOR F_t	DEVIATION FACTOR F_{pv}	RATE OF FLOW R Mcfd	GOR	Q_m
115.1	--	--	1.3089	.9915	1.0013	37	--	--

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2$= ____ ____ ; $(P_w)^2$= ____ ; P_d= ____ % $(P_c - 14.4) + 14.4$ = ____ ; $(P_d)^2$= $(P_d)^2$=0.207 ____

$(P_c)^2-(P_a)^2$ or $(P_c)^2-(P_d)^2$	$(P_c)^2-(P_w)^2$	$\left[\frac{P_c^2-P_a^2}{P_c^2-P_d^2}\right]$ / $\left[\frac{P_c^2-P_d^2}{P_c^2-P_w^2}\right]$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
1.735	0.685	2.535	0.404	.982	0.397	2.493	92

OPEN FLOW 92 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 25th day of NOV, 19 86

Robert M Richardson
For Company

Witness (if any)

For Commission

DEC 5 1986

Checked by DEC 1 1986