

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: 2/16/86

COMPANY: LV Gas Corp. LEASE: Gergick WELL NO.: 2

COUNTY: Leavenworth LOCATION: SW SE SE SECTION: 36 TWP: 8 RNG: 21E ACRES: N/A

FIELD: Possum Hollow, NE RESERVOIR: Burgess Sand PIPELINE CONNECTION: The Chartered Line

COMPLETION DATE: 11-13-85 PLUG BACK TOTAL DEPTH: 1500' PACKER SET AT: None

CASINO SIZE: 4 1/2" WT. L.D. SET AT: 1475' PERF. TO: 1428' 1433'

TUBING SIZE: N/A WT. L.D. SET AT: PERF. TO:

TYPE COMPLETION (Describe): Single (Gas) TYPE FLUID PRODUCTION: None

PRODUCING THRU: Casing RESERVOIR TEMPERATURE F: BAR. PRESS - P_a: 14.4 Psia

GAS GRAVITY - G_g: .586 % CARBON DIOXIDE: % NITROGEN: API GRAVITY OF LIQUID: N/A

VERTICAL DEPTH (H): TYPE METER CONN.: N/A (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 _i)(P _c) psia	psig	(P _w)(P _i)(P _c) psia		
SHUT-IN						470	484.4	—		3 mos.	
FLOW	0.500	170.1	N/A	69		320	334.4	—		24	0

RATE OF FLOW CALCULATIONS

Coefficient (F _p)(F _d) Mcfd	(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 Mcfd	GOR	G _m
4.388	184.5	—	1.306	0.9915	1.008	1056.9	None	.586

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 234.6 ; (P_w)² = 111.8 ; 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 Mcfd
234.4	122.6	1.9119	0.2813	0.850	0.2391	1.7345	1833.2

OPEN FLOW 1833 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 _____ day of _____, 19__.

Witness (if any) _____ For Company _____
For Commission _____ Checked by _____

October, 1986

Gergick #2

D
P 9
12-1206

Operator-- L. V. Gas, Inc.
Operator License Number-- 4898
Operator Address-- 222 W. Main; Chanute, KS 66720
Operator Phone Number-- (316) 431-3141
Lease-- Gergick
Location-- SE SE 36
Township-- 8S
Range-- 21E
County-- Leavenworth
Gas Purchaser-- LAGGS
Gas BTU's--

INITIAL OPEN FLOW CALCULATION

Flowing Pressure on Prover (psi)--	175
Shut-In Pressure on Prover (psi)--	280
Orifice Size (3/4 inch) and Coefficient--	224.9
Specific Gravity--	.5874
Temperature of Gas (+459.69F)--	538.69
Open Flow (MCF/D)	2,122.3
One-Quarter of Open Flow (MCF/D)--	553.1
Adjusted State Allowable (MCF/D)--	553.1

CURRENT OPEN FLOW CALCULATION

Flowing Pressure on Prover (psi)--	
Shut-In Pressure on Prover (psi)--	
Orifice Size (inch) and Coefficient--	
Specific Gravity--	
Temperature of Gas (+459.69F)--	
Open Flow (MCF/D)--	
One-Quarter of Open Flow (MCF/D)--	
Adjusted State Allowable (MCF/D)--	
Current Production Rate (MCF/D)--	72.6

TESTER--Larry Culbertson--LAGGS, INC.--913-773-8514

COMMENTS-- Erratic heavy oil flow makes test somewhat difficult. Oil quantities negligible.