

15-103-20520-00-00
 STATE OF KANSAS - CORPORATION COMMISSION

FORM O-3
 8-7-83

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

TYPE TEST: Deliverability Open Flow TEST DATE: 2/16/86

COMPANY: Billy Oil, Inc. LEASE: John Fitzgerald WELL NO.: 2

COUNTY: Leavenworth LOCATION: SW NW SW SECTION: 31 TWP: 8 RNG: 22 E ACRES: N/A

FIELD: Possum Hollow, NE RESERVOIR: Burgess Sand PIPELINE CONNECTION: Laggs/Leavenworth Joint Venture

COMPLETION DATE: 10-30-85 PLUG BACK TOTAL DEPTH: 1510' PACKER SET AT: None

CASING SIZE: 4 1/2" WT. I.D. SET AT: 1510' PERF. TO: 1422' 1428'

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

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

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

GAS GRAVITY - G_g: .584 % CARBON DIOXIDE: N/A 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	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _c)(P _e) psia	psig	(P _w)(P _c)(P _e) psia		
SHUT-IN						470	484.4	—		4 mos.	
FLOW	.500	157.2	N/A	78		350	364.4	—		24	0

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _L)(F _D) Mafd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mafd	GOR	G _m
4.388	171.6	—	1.309	0.9831	1.019	987.5	None	.584

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 234.6 ; (P_w)² = 132.8 ; P_d² = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_e)² = 0.207 ; (P_d)² = _____

$\frac{(P_c)^2 - (P_e)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_e^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mafd
234.4	101.8	2.3026	0.3622	0.850	0.3079	2.032	2006.6

OPEN FLOW Mafd @ 14.65 psia DELIVERABILITY Mafd @ 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 Commission

 For Company

 Checked by

October, 1986

2
P9
12-17-86

Fitzgerald #2

Operator-- L. V. Gas, Inc.
Operator License Number-- 4898
Operator Address-- 222 W. Main; Chanute, KS 66720
Operator Phone Number-- (316) 431-3141
Lease-- Fitzgerald
Location-- SW NW 31
Township-- 8S
Range-- 22E
County-- Leavenworth
Gas Purchaser-- LAGGS
Gas BTU's--

INITIAL OPEN FLOW CALCULATION

Flowing Pressure on Prover (psi)--	275
Shut-In Pressure on Prover (psi)--	350
Orifice Size (3/4 inch) and Coefficient--	224.9
Specific Gravity--	.5919
Temperature of Gas (+459.69F)--	537.69
Open Flow (MCF/D)	3,466.8
One-Quarter of Open Flow (MCF/D)--	866.7
Adjusted State Allowable (MCF/D)--	866.7

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)--	105.2

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