

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

TYPE TEST: Deliverability Open Flow TEST DATE: 1-14-90

COMPANY: Lobo Production Inc LEASE: Rueb-Farms WELL NO.: 1-2

COUNTY: Cheyenne LOCATION: SECTION 2 TWP 5 S RNO 42 W. ACRES

FIELD: Benhelman RESERVOIR: Nidbrara PIPELINE CONNECTION: KNE

COMPLETION DATE: Comp. 11-24-77 FLUG BACK TOTAL DEPTH: 10,1870 Packer set at: CS TO 1380

CASING SIZE: 4 1/2" WT. 10.5 I.D. 1380 SET AT 1232 TO 1264 PERF. TO

TUBING SIZE WT. I.D. SET AT PERF. TO

TYPE COMPLETION (Describe): Single TYPE FLUID PRODUCTION: NONE

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

GAS GRAVITY - G_g: .594 % CARBON DIOXIDE % NITROGEN API GRAVITY OF LIQUID

VERTICAL DEPTH (H): Same TYPE METER CONN.: (METER RUN) (PROVER) SIZE: 2" Flange

SHUT-IN PRESSURE: SHUT IN 1-4-90 1920 AT (AM)(PM) TAKEN 1-10 1990 AT (AM)(PM)

FLOW TEST: STARTED 1-14 1990 AT (AM)(PM) TAKEN 2-7 1990 AT (AM)(PM)

OBSERVED DATA DURATION OF SHUT-IN 144 HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h _w)	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		120				206	220.4			144	
FLOW	.3125	98	3"			105	119.4			24	

RATE OF FLOW CALCULATIONS

COEFFICIENT (F ₁)(F ₂) 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
4752	112.4	$\frac{18.36}{\sqrt{112.4 \times 7}}$	1.2975	1.00	1.00	11.32		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 48.58, (P_w)² = 14.26, P_d = _____ % (P_c - 14.4) + 14.4 = _____ (P_w)² = 0.207 (P_d)² = _____

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_w^2}{P_c^2 - P_d^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
48.373	34.32	1.40947	0.149056	0.95	0.126697	1.33874	15.2

OPEN FLOW Mcfd @ 14.65 psia DELIVERABILITY Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to report to the STATE CORPORATION COMMISSION that he has knowledge of the facts stated therein, and that said report is true and correct.

Executed this the 20 day of March, 1990

JAN 11 2000
For Commissioner
Wichita, Kansas

Witness (if any)

For Commission

Checked by



Kansas Corporation Commission

MIKE HAYDEN GOVERNOR
KEITH R. HENLEY CHAIRMAN
RICH KOWALEWSKI COMMISSIONER
MARGALEE WRIGHT COMMISSIONER
JUDITH McCONNELL EXECUTIVE DIRECTOR
FRANK A. CARO, JR. GENERAL COUNSEL

CONSERVATION DIVISION
SHARI FEIST ALBRECHT, DIRECTOR
200 Colorado Derby Bldg.
202 W. 1st Street
Wichita, KS 67202-1286
(316) 263-3238

March 29, 1990

John Sanders
Lobo Production Company
P.O. Box 218
Cortez, CO 81321-0218

Re: One-Point Open Flow Test Reports
for Cheyenne County Gas Wells
Belonging to Lobo.

Dear John:

Congratulations are in order. You did a fine job of figuring the wellhead open flow potentials of your gas wells.

Now that official open flow test reports are on file with the Conservation Division which demonstrate each of these wells to have an open flow of less than the 65 Mcf/Day KCC threshold value, you will not have to retest these wells in future unless and until you either stimulate them, thereby increasing each well's production capacity and presumably also increasing the wellhead open flow, possibly back up above 65 Mcf/Day, or recomplete them in an entirely different gas zone.

This letter will be the only official acknowledgement from the Conservation Division of the fact that these Niobrara gas wells are exempt from further open flow testing in future years subject to the conditions described above, so hang on to this letter.

Good luck in your future endeavors and if I can be of any assistance in any way in the future, please don't hesitate to call upon me.

Sincerely,

Jim Hemmen
Research Analyst

RECEIVED
STATE CORPORATION COMMISSION

JAN 11 2000

CONSERVATION DIVISION
Wichita, Kansas