

15-103-20742-00-00
 STATE OF KANSAS - CORPORATION COMMISSION
 MULTIPOINT BACK PRESSURE TEST

FORM 5-1
 8-58

TYPE TEST: Initial Annual Special TEST DATE: Dec. 31, 1987

COMPANY MID-GULF, INC. LEASE EWERT WELL NO. 1

COUNTY Leavenworth LOCATION NW-SE-NE SECTION 11 TWP 8S RNG 21E ACRES

FIELD RESERVOIR PIPELINE CONNECTION
 McLouth Mid-Gulf

COMPLETION DATE Jan 6, 1987 PLUG BACK TOTAL DEPTH PACKER SET AT

CASING SIZE 4.50" WT. ID 11.6# SET AT 1495' PERF. TO 1404-10 & 1415-25

TUBING SIZE 2-3/8" WT. ID. SET AT 1369' PERF. TO

TYPE COMPLETION (Describe) Single TYPE FLUID PRODUCTION

PRODUCING THRU Tubing RESEVOIR TEMPERATURE F 91°F BAR PRESS - P_a 14.4 Psia

GAS GRAVITY - G_g 0.5675 % CARBON DIOXIDE 0.0 % NITROGEN 4.0 API GRAVITY OF LIQUID

VERTICAL DEPTH (H) TYPE METER CONN. Flange (METER RUN) (Packer) SIZE 2"

REMARKS

OBSERVED DATA DURATION OF SHUT-IN HR.

RATE NO.	ORIFICE SIZE In.	(METER) (PROVER) PRESSURE psig	DIFF. (h _w) (in)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _c) psia P _c	psig	(P _w)(P _c) psia P _c		
SHUT IN						398.0	412.4	372.0	386.4		
1	1.00	54	19	52	60	388.0	402.4	312.0	326.4		
2	1.00	55	24	54	60	384.0	398.4	298.0	312.4		
3	1.00	71	56	55	60	358.0	372.4	288.0	302.4		
4	1.00	75	79	53	60	335.0	349.4	282.0	296.4		
5											

RATE OF FLOW CALCULATIONS

RATE NO.	COEFFICIENT (F _o)(F _p) 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 Q Mcfd	GOR	Q _m
1	5.073	68.4	36.05	1.327	1.008	1.003	245		
2	5.073	69.4	40.81	1.327	1.008	1.003	277		
3	5.073	85.4	69.15	1.327	1.008	1.005	470		
4	5.073	89.4	84.04	1.327	1.008	1.005	573		
5									

PRESSURE CALCULATIONS

RATE NO.	P _t psia	P _c psia	P _w psia	(P _c) ² THOUSANDS	(P _w) ² THOUSANDS	PLOTING POINTS		% SHUT-IN [P _w -P _a] / [P _c -P _a]
						(P _c) ² - (P _w) ² THOUSANDS	Q Mcfd STATE	
1		412.4	402.4	170.1	161.9	8.1	245	
2		412.4	398.4	170.1	158.7	11.4	277	
3		412.4	372.4	170.1	138.7	31.4	470	
4		412.4	349.4	170.1	122.1	48.0	573	
5								

INDICATED WELLHEAD OPEN FLOW 1135 Mcfd @ 14.65 psia "n" = 0.522

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 6th day of January, 1988.

Dwayne M. Cune
 For Company

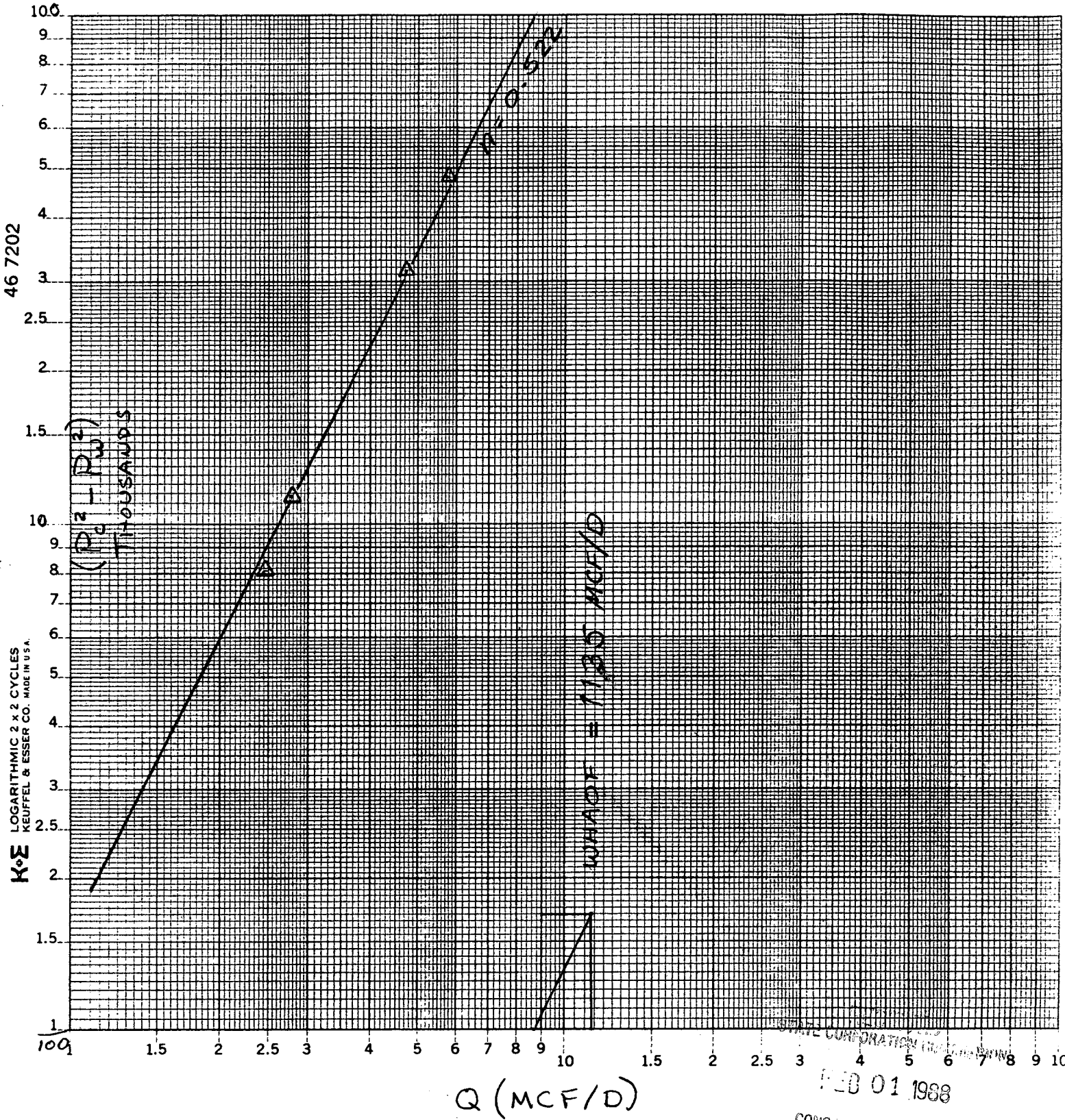
Witness (if any)

For Commission

Checked by

FEB 01 1988
 2-1-88
 CONSERVATION DIVISION
 Wichita, Kansas

MID-GULF, INC. EWERT #1



STATE CORPORATION

FEB 01 1988

CONSERVATION DIVISION
Wichita, Kansas