

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

FORM O-2
 8-7-58

Sub. 9" phlo Water

TYPE TEST: Deliverability Open Flow TEST DATE: 2-14-81

COMPANY: Murphy Drilling Co LEASE: Leach WELL NO.: 1-29

COUNTY: Cheyenne LOCATION: SECTION 29 TWP 4 RNG 39 ACRES 640

FIELD: Cherry Creek RESERVOIR: Neoharaw PIPELINE CONNECTION: Cheyenne Nat Pipe Line

COMPLETION DATE: 1-15-80 PLUG BACK TOTAL DEPTH: 1380 PACKER SET AT

CASING SIZE: 4 1/2" WT. I.D. SET AT 1558 PERF. TO 1310

TUBING SIZE: 1 1/2" WT. I.D. SET AT 1327 PERF. TO open end

TYPE COMPLETION (Describe): TYPE FLUID PRODUCTION

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

GAS GRAVITY - G_g .580 % CARBON DIOXIDE % NITROGEN API GRAVITY OF LIQUID

VERTICAL DEPTH (H) TYPE METER CONN. (METER RUN) (METER) SIZE

SHUT-IN PRESSURE: SHUT IN 2-14 1981 AT (AM)(PM) TAKEN 2-17 1981 AT (AM)(PM)

FLOW TEST: STARTED 2-17 1981 AT (AM)(PM) TAKEN 2-18 1981 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 _i)(P _c) psia	psig	(P _w)(P _i)(P _c) psia		
SHUT-IN						179.0	193.4				
FLOW	1/2	70.0	12.0			153.4	167.8				

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _b)(F _p) 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
1.219	84.4	31.825	1.313	1.000	1.000	51.0		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 37.4 (P_w)² = 28.2 P_d = _____ % (P_c - 14.4) + 14.4 = _____ (P_w)² = 0.207 (P_d)² = _____

(P _c) ² - (P _w) ² or (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
37.2	9.2	4.0435	.6068	.820	.4975	3.1444	160

OPEN FLOW 160 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)
[Signature]
 For Commission

For Company
 Checked by

FEB 21 1981
 CORPORATION DIVISION
 TOPEKA, KANSAS