

STATE OF KANSAS - CORPORATION COMMISSION

FORM O-2
8-7-58

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

15-023-20028-0000

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

COMPANY: Murphy Drilling Co. LEASE: Waly WELL NO.: A1-35

COUNTY: Cherokee LOCATION: 3 SECTION: 5 TWP: 42 RNG: 640 ACRES: 640

HEAD: Cherry Creek RESERVOIR: Hesperian PIPELINE CONNECTION: Cons. Test. Not Log

COMPLETION DATE: 1-10-80 PLUG BACK TOTAL DEPTH: 1444 PACKER SET AT: _____

CASING SIZE: 4 1/2 WT. _____ I.D. _____ SET AT: 1490 PERF. 1285 TO: 1316

TUBING SIZE: 1 1/2 WT. _____ I.D. _____ SET AT: 1366 PERF. open end TO: _____

TYPE COMPLETION (Describe): Single Gas TYPE FLUID PRODUCTION: _____

PRODUCING THRU: tubing RESERVOIR TEMPERATURE F: _____ BAR. PRESS - P_a: 14.4

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

VERTICAL DEPTH (H): _____ TYPE METER CONN.: fly. (METER RUN)(PROVER) SIZE: 2"

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 _t)(P _c) psia	psig	(P _w)(P _t)(P _c) psia		
SHUT-IN						192.3	206.7				
FLOW	1/2	49.0	17.5			133.9	148.3				

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _b)(F _d) 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	G _m
1.219	63.4	28.151	1.313	1.000	1.000	45.0		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 42.7 ; (P_w)² = 22.0 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_w)² = 0.207 ; (P_d)² = _____

(P _c) ² - (P _a) ² or (P _c) ² - (P _d) 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
42.5	20.7	2.0531	.3124	.820	.2562	1.8038	81

OPEN FLOW 81 Mcfd @ 14.65 psia DELIVERABILITY 81 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)
John Wiley
For Commission

For Company _____
Checked by _____