STATE OF KANSAS – CORPORATION COMMISSION

FORM G-2
8-7-58

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

15-119-20348-0000

TYPE TEST: ☐ Deliverability ☒ Open Flow TEST DATE: April 15, 1981

COMPANY	LEASE	WELL NO.
Mesa Petroleum Co	Barragree	1-25

COUNTY	LOCATION	SECTION	TWP	RNG	ACRES
Meade		25	~~48~~ 34	29W	ANBKCC

FIELD	RESERVOIR	PIPELINE CONNECTION
	Morrow	KP&L

COMPLETION DATE	PLUG BACK TOTAL DEPTH	PACKER SET AT
		5988 - 6082

CASING SIZE	WT.	I.D.	SET AT	PERF.	TO
5 1/2			6379		5924 - 5960

TUBING SIZE	WT.	I.D.	SET AT	PERF.	TO
1 1/4	2.4	1.380	5850		

TYPE COMPLETION (Describe)	TYPE FLUID PRODUCTION
Triple (Gas)	

PRODUCING THRU	RESERVOIR TEMPERATURE F	BAR. PRESS – P_a
Tubing	127	14.4 Psia

GAS GRAVITY – G_g	% CARBON DIOXIDE	% NITROGEN	API GRAVITY OF LIQUID
.698			

VERTICAL DEPTH (H)	TYPE METER CONN.	(METER RUN) (~~PROVER~~) SIZE
5850	Pipe	4.026

SHUT-IN PRESSURE: SHUT IN 4-12 19 81 AT 8:00 (AM)(~~PM~~) TAKEN 4-15 19 81 AT 11:00 (AM)(~~PM~~)

FLOW TEST: STARTED 4-15 19 81 AT 11:00 (AM)(~~PM~~) TAKEN 4-16 19 81 AT 9:00 (AM)(~~PM~~)

OBSERVED DATA

DURATION OF SHUT-IN 72 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. psig	CASING WELLHEAD PRESS. $(P_w)(P_t)(P_c)$ psia	TUBING WELLHEAD PRESS. psig	TUBING WELLHEAD PRESS. $(P_w)(P_t)(P_c)$ psia	DURATION HOURS	LIQUID PROD. Bbls.
SHUT-IN								339	353.4	72	-0-
FLOW	.750	86	1"	60				87	101.4	24	-0-

RATE OF FLOW CALCULATIONS

Pcr 670 Tcr 378

COEFFICIENT $(F_b)(F_p)$ Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m x h_w}$	GRAVITY FACTOR F_g	FLOWING TEMP. FACTOR F_t	DEVIATION FACTOR F_{pv}	RATE OF FLOW R Mcfd	GOR	G_m
2.793	100.4	10.2	1.197	1.000	1.014	34		

RECEIVED
STATE CORPORATION COMMISSION
MAY – 6 1981
CONSERVATION DIVISION
Wichita, Kansas

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2$= 124.9 ; $(P_w)^2$= 10.4 ; P_d= ____ % $(P_c - 14.4) + 14.4$ = ____ ; $(P_a)^2$=0.207 $(P_d)^2$= ____

$(P_c)^2-(P_a)^2$ or $(P_c)^2-(P_d)^2$	$(P_c)^2-(P_w)^2$	$\frac{P_c^2-P_a^2}{P_c^2-P_w^2}$ or $\frac{P_c^2-P_d^2}{P_c^2-P_w^2}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
124.7	114.5	1.0891	.03706	.810	.03002	1.07157	36

OPEN FLOW 36 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 27 day of April, 1981.

Witness (if any)

Thurmond-McGlothlin
For Company

For Commission

Checked by

FORM WS-1
Rev. 58

WORK SHEET FOR CALCULATING EQUIVALENT STATIC WELLHEAD PRESSURE

LEASE Barragree WELL NO. 1-25 FIELD (Morrow) COUNTY Meade DATE 4-15-81

% CO_2 ____ Q_m .698 P_{cr} 670 T_{cr} 378 FLOW STRING 1 1/4

% N_2 ____ H 5850 Q_mH 4083 L/H 1.000 I.D. 1.380

LINE	TRIAL	RATE										
1	Q_m, M²cfd	.034										
2	T_w	520										
3	T_s	587										
4	T_e	554										
5	Z_e	.990										
5a	$T_s Z_e$	547.9										
6	$Q_m H/T_e Z_e$	7.451										
7	e^s	1.322										
8	$(1-e^{-s})$	0.243										
9	P_t or P_s	101.4										
10	P_t^2 or P_s^2 (thous.)	10.3										
11	F_c	25.13										
12	$F_t = F_c T_s Z_e / 340$	25.50										
13	$F_t Q_m$	.87										
14	$Y = (F_t Q_m)^2 L/H$	.75										
15	$R^2 = Y(1-e^{-s})$	.18										
16	$P_w^2 = P_t^2 + R^2$	10.4										
17	$P_s^2 = e^s P_w^2$ (thous.)	13.8										
17a	—or— $P_f^2 = e^s P_c^2$ (thous.)											
18	P_s or P_f	117.6										
19	P_s	109.5										
20	P_f	1.16										
21	T_f	1.46										
22	Z_e	.990										