NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 6-18-85

Company: MWJ PRODUCING COMPANY — Connection: TO AIR — Unit:

Pool: Wildcat — Formation: ATOKA

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
5-18-85	13,406'	13,200'	4114 GL 4132 KB	ELKAN 6 COM

Csg. Size	Wt.	d	Set At	Perforations	Well No.
5½"	17#	4.892	11,789'	From 11642 To 11648	1

Tbg. Size	Wt.	d	Set At	Perforations	Unit	Sec.	Twp.	Rge.
2 3/8"	4.7#	1.995	11,503'	From OPEN-ENDED To	J	6	13S	35E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
SINGLE	11,472'	Lea

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
Tubing	194° @ 11,645'	60°	13.2	New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11,645	11,645	.7085	.491	1.654			4.026	Flange

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							PKR	CHOKE	72 Hrs
1.	3.826 X .750	420	3	90	1596	70°		4/64	1 Hr.
2.	3.826 X .750	400	8	97	1355	72		4 ½/64	1 Hr.
3.	3.826 X .750	405	5	92	1156	78		6/64	1 Hr.
4.	3.826 X .750	420	22	85	1014	79		9/64	1 Hr.
5.		430	40	80	692	80		12/64	1 Hr.

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	2.662	36.05	433.2	.9723	1.188	1.043	115.62
2.	2.662	57.45	413.2	.9662	1.188	1.039	182.52
3.	2.662	45.73	418.2	.9706	1.188	1.041	146.26
4.	2.662	97.62	433.2	.9768	1.188	1.042	314.22
5.	2.662	133.15	443.2	.9813	1.188	1.046	432.15

NO.	P_t	Temp. °R	T_r	Z
1	.66	550	1.42	.920
2.	.62	557	1.44	.927
3.	.63	552	1.42	.923
4.	.65	545	1.40	.921
5.	.66	540	1.39	.914

Gas Liquid Hydrocarbon Ratio 7.08 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58.7 @ 60° Deg.
Specific Gravity Separator Gas .7085 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 669 P.S.I.A. ____ P.S.I.A.
Critical Temperature 388 R ____ R

P_c 3636 P_c^2 13220.5

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3340	11155.6	2064.9
2		3084	9511.1	3709.4
3		2858	8168.2	5052.3
4		2485	6175.2	7045.3
5		1871	3500.6	9719.9

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.360$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.360$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 587.79$

Absolute Open Flow 587.79 Mcfd @ 15.025 — Angle of Slope θ 45° — Slope, n 1.000

Remarks: Calculated from known BHP well loaded up in 3rd Rate & made 7.5 BBLS. Distillate in 4th & 5th Rates.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W.S. & J.D.	J.D.	J.D.

MWJ PRODUCING CO. ELKAN ST. COM 6 NO. 1-K JUNE 18, 1985

Q1 = 700 = Log 2.845098

Q2 = 70 = Log $\frac{1.845098}{1.000}$

CAOF = 432.15 $\frac{(13220.5)}{9719.9}$ 1.000 = 587.79