NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-58

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 6/6/80

Company: Anadarko — Connection: to air

Pool: E Chaves Yates Gas Area Assoc — Formation: — Unit:

Completion Date — Total Depth: 2750 — Plug Back T.D.: 2735 — Elevation: — Farm or Lease Name: Friend Fed. #1

O.D. Size	Wt.	d	Set At	Perforations	Well No.
4 1/2	10			From 2638 To 2650	1

Tbg. Size	Wt.	d	Set At	Perforations	Unit	Sec.	Twp.	Rge.
2 3/8			2675	From open To end	E	21	13 S	31E

Type well – Single – Bradenhead – G.G. or G.O. Multiple: Single — Packer Set At: None — County: Chaves

Producing Thru — Reservoir Temp. °F — Mean Annual Temp. °F — Baro. Press. – P_a — State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.941	.74			2"		

FLOW DATA / TUBING DATA / CASING DATA

NO	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							480		525		
1.	2	X	3/16	192		78	196		230		1 hr
2.	2	X	7/32	133		84	137		190		1 hr
3.	2	X	1/4	105		84	108		180		1 hr
4.	2	X	5/16	63		86	68		125		1 hr
5.											

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	.6082		205.2	.9831	1.031	1.009	128
2	.8393		146.2	.9777	1.031	nil	124
3	1.087		118.2	.9777	1.031	nil	130
4	1.672		76.2	.9759	1.031	nil	128
5							

NO	P_t	Temp. °R	T_t	Z
1	.21	538	1.59	.983
2	.15	544	1.60	nil
3	.12	544	1.60	nil
4	.08	546	1.61	nil
5				

P_c 538.2 P_c^2 289.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		243.2	59.1	230.6
2		203.2	41.3	248.4
3		193.2	37.3	252.4
4		138.2	19.1	270.6
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator Gas _____ XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX _____

Critical Pressure 970 P.S.I.A. _____ P.S.I.A.

Critical Temperature 339 R _____ R

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.159$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.077$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = .133$

Absolute Open Flow 133 Mcfd @ 15.025 — Angle of Slope θ 63.5 — Slope, n .500

Remarks:

Approved By Commission: Orig. Signed by Jerry Sexton Dist. I, Supv. — Conducted By: Mike Burch — Calculated By: Reggie Reston — Checked By: