NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

4/58

RECEIVED
SEP 7 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [xx] Initial [ ] Annual [ ] Special				Test Date: 7/2/82	
Company: Yates Petroleum Corp			Connection: Transwestern Pipeline		
Pool: Pecos Slope - Abo Gas			Formation: Abo		Unit:
Completion Date: 3/12/82	Total Depth: 4275		Plug Back TD: 4201	Elevation: 3734 GL	Farm or Lease Name: Federal HJ
Csg. Size: 4 1/2" / Wt.: 9.5# / d: 4.090 / Set At: 4271			Perforations: From 3860 To 3912		Well No.: #5
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: 1.995 / Set At: 3830			Perforations: From To		Unit: E / Sec.: 30 / Twp.: 6S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: None		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 96° @ 3830		Mean Annual Temp. °F: 62°	Baro. Press. – P_a: 13.2 PSI	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3830	3830	.665	3.07	5.16	0	--	2"	Flanged

FLOW DATA

NO.	Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI					1013				
1.	2.067 x .750	220	14.4	82°	916	62°			24 hr
2.	2.067 x .750	220	19.4	82°	888	62°			24 hr
3.	2.067 x .750	220	33.2	75°	841	62°			24 hr
4.	2.067 x .750	230	55.0	75°	760	62°			24 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	2.709	57.9	233.2	0.9795	1.226	1.019	192
2	2.709	67.3	233.2	0.9795	1.226	1.019	223
3	2.709	88.0	233.2	0.9859	1.226	1.020	294
4	2.709	115.7	243.2	0.9859	1.226	1.021	387
5							

NO.	P_t	Temp. °R	T_r	Z
1	.35	542	1.49	.963
2.	.35	542	1.49	.963
3.	.35	535	1.47	.961
4.	.36	535	1.47	.960
5				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: -- Deg.
Specific Gravity Separator Gas: .665 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX .665
Critical Pressure: 672 P.S.I.A. 672 P.S.I.A.
Critical Temperature: 363 R 363 R

P_c 1026.2 P_c^2 1053.1

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	863.4		863.9	189.2
2	812.2		812.8	240.3
3	729.7		730.8	322.3
4	597.8		599.9	453.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.324$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.932$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 748$

Absolute Open Flow: 748 Mcfd @ 15.025 | Angle of Slope θ: | Slope, n: .781

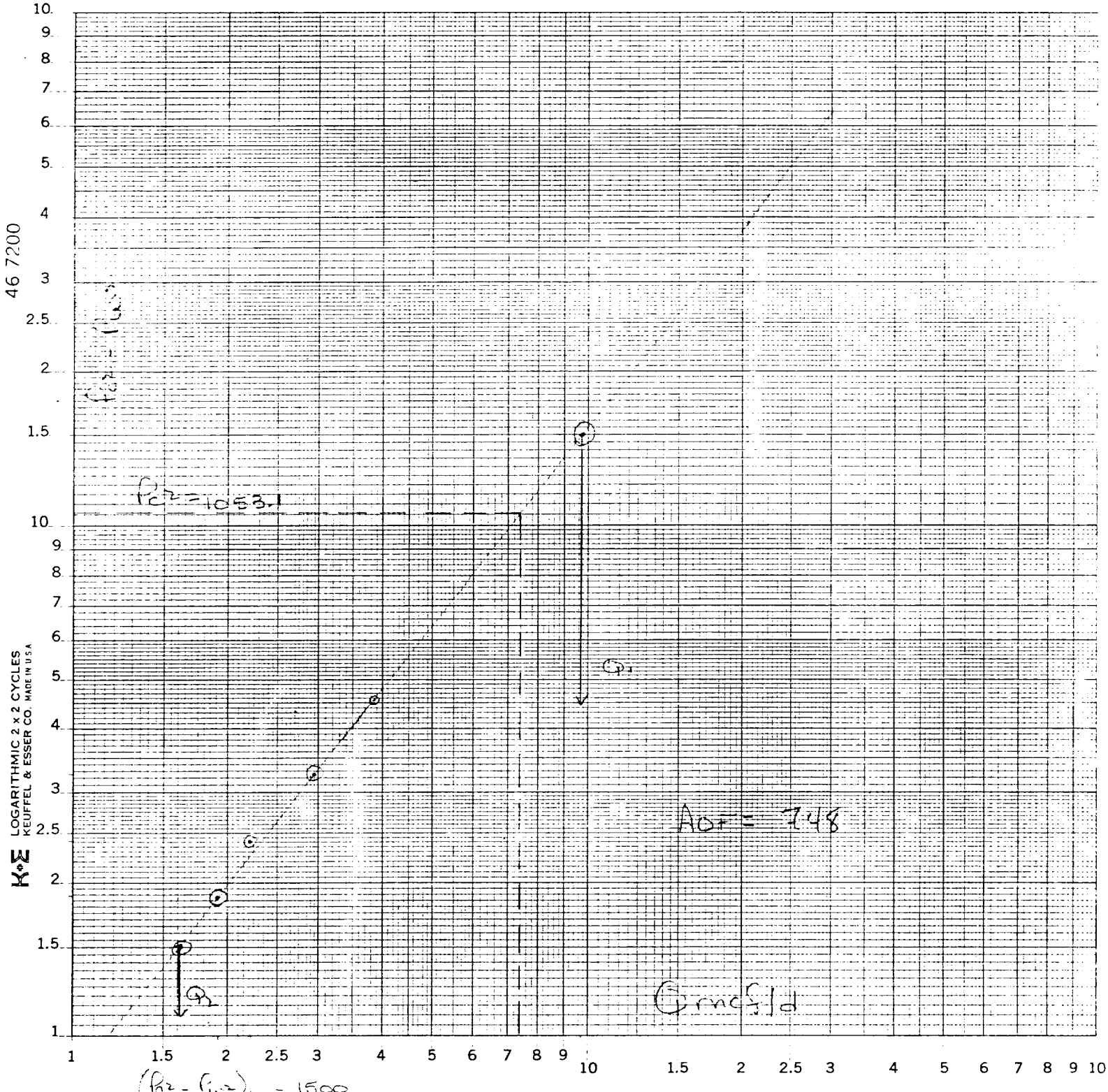
Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	David Weaver	Andie Alderson	

T-65-26E

Unit E

Owens County



$(r_{c2} - r_{w2})_1$ = 1500

$(r_{c2} - r_{w2})_2$ = 150

S_1 = 978

S_2 = 162

log S_1 = 2.99034

log S_2 = 2.20952

n = .78082 = .781