

MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-75

RECEIVED

JUN 1 1982

O. C. D.
ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-17-82	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline	
Pool Pecos Slope				Formation Abo	
Completion Date 1-27-82		Total Length 4300'		Plug Back TD 4286'	
				Elevation 3952.8'	
Csg. Size 4 1/2	Wt. 9.5	d 4.090	Set At 4298	Perforations: From 3755 To 4079	
Tubg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 4028	Perforations: From To	
Type Well - Single - Provenhead - G.C. or G.O. Multiple Single				Packer Set At -----	
Producing Thru Tubing		Reservoir Temp. °F 95 @ 4026		Mean Annual Temp. °F 62°	
				Baro. Press. - P _a 13.2	
L 4028	H 4028	G _g .628	% CO ₂ 0.42	% N ₂ 3.97	% H ₂ S -----
Prover -----				Meter Run 2'	
				Pipe Flanged	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1000				
1.	2.067	X	1.250	150	45	59	820	62			24 hrs.
2.	2.067	X	1.250	170	55	59	754	62			24 hrs.
3.	2.067	X	1.250	180	70	60	700	62			24 hrs.
4.	2.067	X	1.250	180	84	59	640	62			24 hrs.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Comp. res. Factor, F _{pv}	Rate of Flow Q, Mcf/d
1	8.120	85.70	163.2	1.001	1.262	1.014	891
2	8.120	100.8	183.2	1.001	1.262	1.016	1050
3	8.120	116.29	193.2	1.000	1.262	1.016	1210
4	8.120	117.08	193.2	1.001	1.262	1.016	1217
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio Dry	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.25	519	1.47	.973			.628		664	354
2.	.28	519	1.47	.969						
3.	.29	520	1.47	.968						
4.	.29	519	1.47	.968						
5.										

P _c 1013.2 P _c ² 1026.6				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.1922$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0000$	
NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1782 \text{ mcf/d}$		
1	694.2		705.0	321.6			
2	767.2		610.6	416.0			
3	508.7		528.8	497.8			
4	426.67		447.3	579.3			
5							

Absolute Open Flow 1782 mcfpd		Mcf/d @ 15.025		Angle of Slope θ		Slope, n 597	
Remarks:							
Approved By Consultant:		Conducted By: David Weaver		Calculated By: Al Springer		Checked By:	

DATE 6-1-82

25

354

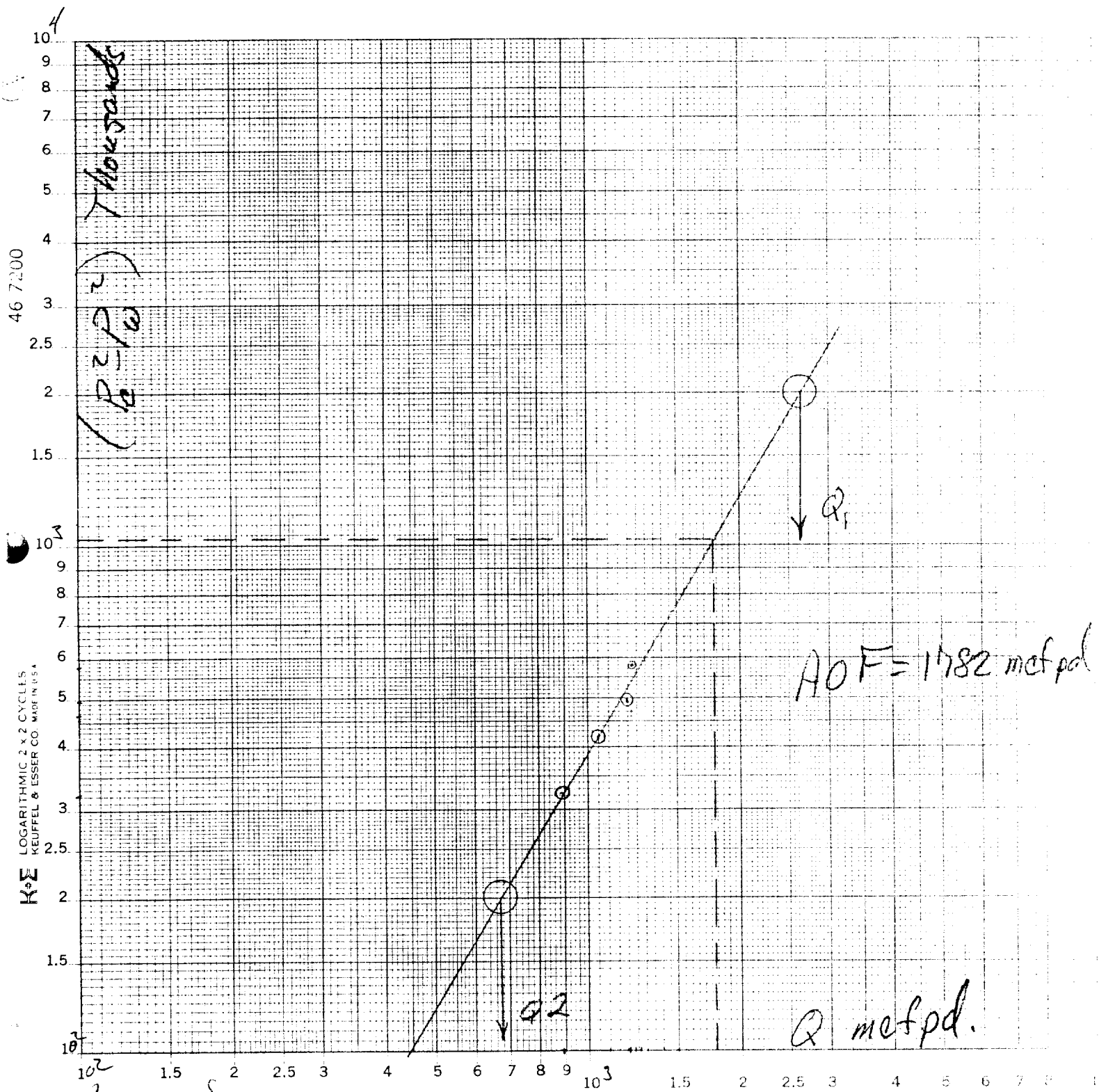
[illegible]

Red Rock

C-15-6S-29E

Chaves

New Mexico



$$(P_c^2 - P_w^2)_1 = 2,000$$

$$(P_c^2 - P_w^2)_2 = 200$$

$$Q_1 = 2,650$$

$$\log Q_1 = 3.42325$$

$$\log Q_2 = 2.82607$$

$$n = .59719$$

$$n = .597$$