

**NEW XICO OIL CONSERVATION COMMISSIC
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-12-73			
Company Sun Oil Company				Connection None					
Pool Undersigned				Formation ABO				Unit N	
Completion Date 8-28-73		Total Depth 7398		Plug Back TD 7369		Elevation 3350 G.L.		Farm or Lease Name Annie Christmas	
Csg. Size	Wt.	d	Set At	Perforations: From 6833 To 6927				Well No. 1	
Tbg. Size 2-3/8	Wt. 4.6	d	Set At 4829	Perforations: From Open To Ended				Unit N Sec. 1 Twp. 22 Rge. 37	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Gas-Oil Dual						Packer Set At 4829		County Lea	
Producing Thru Tbg.		Reservoir Temp. °F 115 @ 6793		Mean Annual Temp. °F		Baro. Press. - P _a 13.2		State New Mexico	
L 6793	H 6793	Gg .698	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 4"	Taps Flg.	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1797				40 Hrs.
1.	4 x 1.750			500	10"	83	1711	80			1.75
2.	4 x 1.750			500	20"	76	1627	80			1 Hr.
3.	4 x 1.750			510	30"	73	1580	87			1 Hr.
4.	4 x 1.750			510	37"	67	1507	90			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	14.93	71.64	513.2	.9786	1.197	1.052	1318
2	14.93	101.31	513.2	.9850	1.197	1.056	1883
3	14.93	125.28	523.2	.9877	1.197	1.059	2342
4	14.93	139.13	523.2	.9933	1.197	1.061	2620
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 11.1 Mcf/bbl.		
					A.P.I. Gravity of Liquid Hydrocarbons 70.9 @ 60 Deg.		
1.	.77	543	1.40	.903	Specific Gravity Separator Gas .698		X X X X X X X X
2.	.77	536	1.38	.897	Specific Gravity Flowing Fluid X X X X X		.912
3.	.78	533	1.37	.892	Critical Pressure 669 P.S.I.A.		662 P.S.I.A.
4.	.78	527	1.36	.889	Critical Temperature 388 R		461 R
5.							

P _c 1810.2	P _c ² 3276.8		
NO.	P _t ²	P _w	P _w ²
1			2992.4
2			2729.3
3			2597.8
4			2384.6
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.672$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.186$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5.726$$

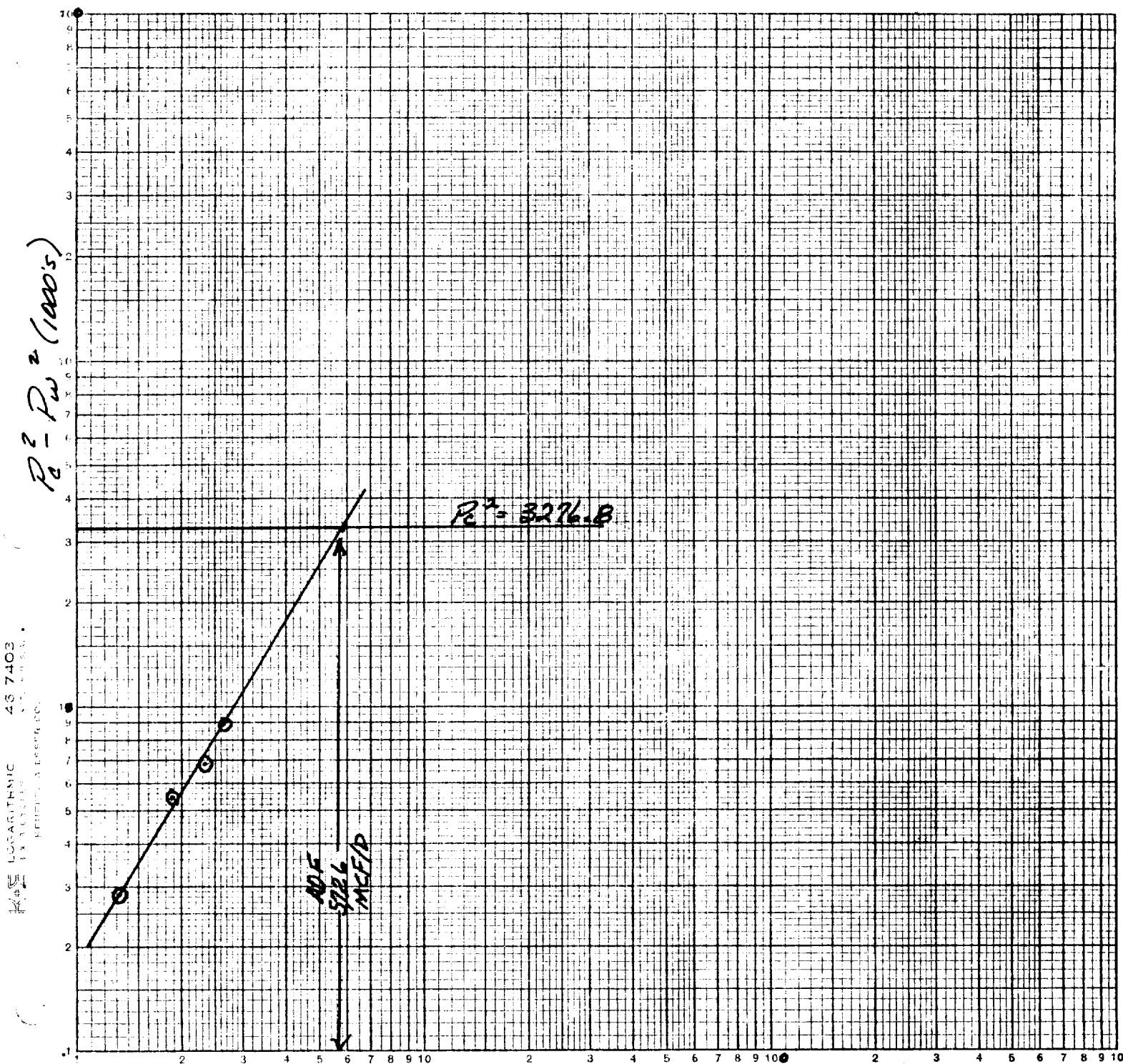
Absolute Open Flow 5726 Mcfd @ 15.025	Angle of Slope 59	Slope, n .601
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Remarks: **Made a total of 34.5 bbls. of A.P.I. 70.9 @ 60 degree Condensate. Only light trace of water was evident.**

Approved By Commission:	Conducted By: Ray Fleeman	Calculated By: Randy Kiker	Checked By:
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Metering & Testing Serv. Inc.

SUN Oil Co.
 ANNIE CHRISTMAS #1
 Sec 1, T22S, R37E Lea County, New Mexico
 SEPTEMBER 12, 1973



$$Q_2 \text{ MCF PER DAY}$$

$$Q_2 \log 5430 = 2.73454$$

$$Q_1 \log 1360 = 2.13354$$

$$N = .601$$