

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

1-7-78
1-C-1227-16
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4/11/78		APR 18 1978	
Company Aminoil LISA, Inc. ✓				Connection		O. C. C. ARTERIA. OFFICE	
Pool Malaga Morrow				Formation upper Morrow		Unit Willow Lake	
Completion Date 4/6/78		Total Depth 12807		Plug Back TD 12740		Elevation 3007 G.L.	
Csg. Size 9 5/8		Wt. 43.5		Set At 9805		Well No. 3	
Tbg. Size 2 3/8		Wt. 4.7		Set At 12,112		Perforations: From 12,274' To 12,487	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single string gas well				Packer Set At 12102		County Eddy	
Producing Thru 2 3/8" tubing		Reservoir Temp. °F 230° 12380		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico		L 12380		H 12380		G _g .574	
CO ₂ .91		N ₂ .78		H ₂ S 0		Prover 0	
Meter Run 4		Taps flange					

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							4536	70			72
1.	4	x	2.5	450	2	60	4335	90	0	0	.5
2.	4	x	2.5	460	6	70	3805	120	0	0	.5
3.	4	x	2.5	480	20	75	3256	120	0	0	.5
4.	4	x	2.5	480	50	80	2426	120	0	0	.5
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	32.71	30.144	463.2	1.0	1.3194	1.0361	1361
2	32.71	53.28	473.2	.9905	1.3194	1.0344	2357
3	32.71	99.32	493.2	.9859	1.3194	1.0346	4373
4	32.71	157.03	493.2	.9813	1.3194	1.0333	6878
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.68	520	1.5	.931	0	0
2.	.70	530	1.53	.935	0	0
3.	.73	535	1.54	.934	.574	XXXXXXX
4.	.73	540	1.56	.937	XXXXX	.574
5.					676	676
					347	347

NO.	P _t ²	P _w	P _w ²	P _t ² - P _w ²
1	18907	43.20	18667	1935
2	14579	3776.	14256	6346
3	10688	3306.	10930	9672
4	5950	2696.	7269	13333
5				

(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 1.5452$

(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.4415$

AOF = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 9808$

Handwritten: 4/20/78 ST

Absolute Open Flow 9808 Mcfd @ 15.025	Angle of Slope ϕ 45	Slope, n 1
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Remarks: **All calculations made by Garrett Computer of Dallas, Texas as agreed to by previous conversation with New Mexico Oil Conservation Commission Santa Fe Office.**

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
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LTR



Job separation sheet

County Eddy Field

Operator Aminoil Well

Lease Willow Lake UniNo. 3

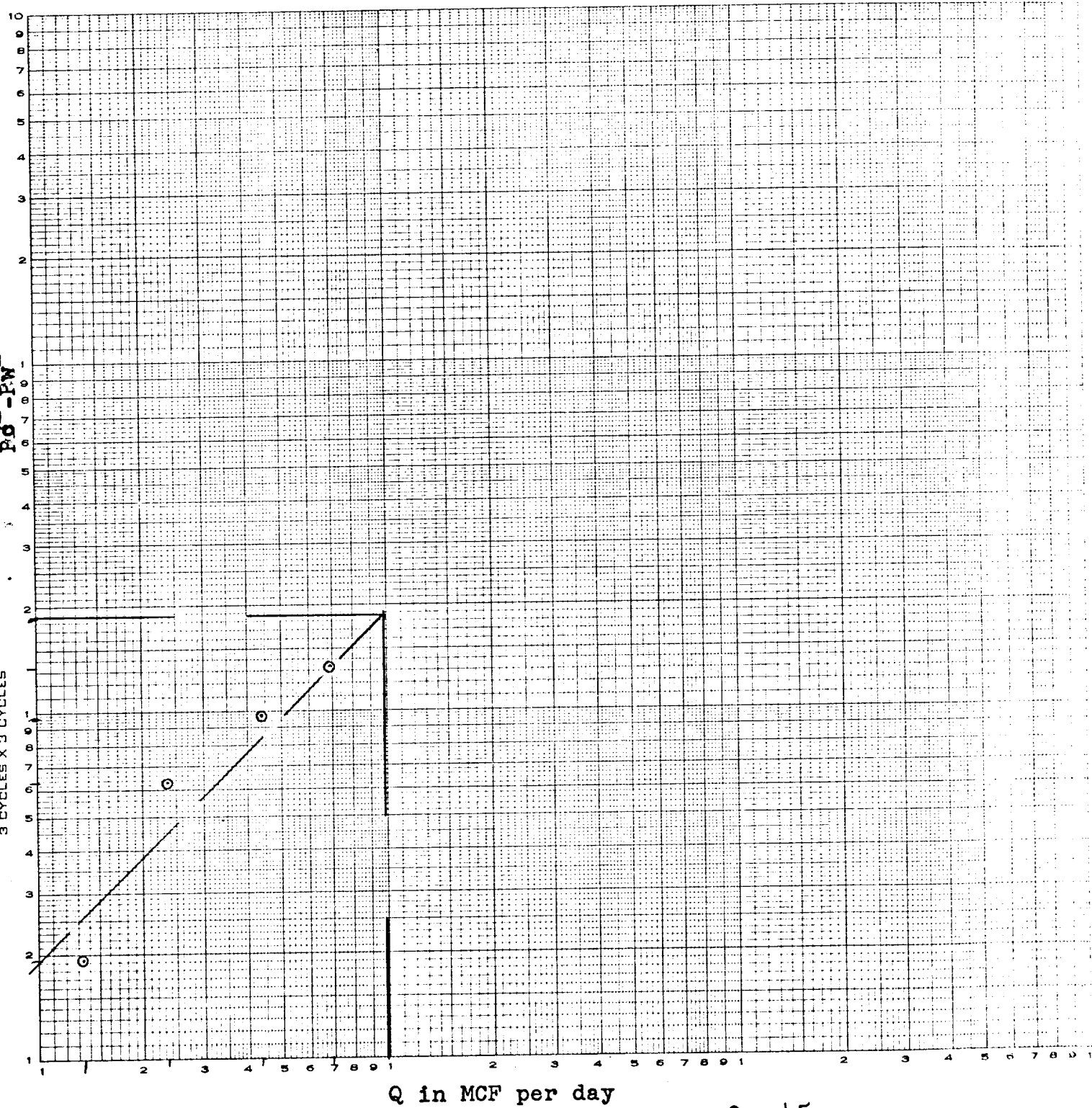
Volume 9808 MCF/24 Hr

Date 4/11/78

EUGENE DIETZGEN CO.
MADE IN U. S. A.

Pd 2 - PW 2

NO. 340R-L33 DIETZGEN GRAPH PAPER
LOGARITHMIC
3 CYCLES X 3 CYCLES



$\theta =$ 45

$N =$ 1

$Q =$ 9808 MCF.