

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special										Test Date 1-16-79		RECEIVED MAR 15 1979	
Company MADDOX ENERGY CORPORATION ✓					Connection EL PASO NATURAL GAS					Unit O.C.C. ARTEGIA, OFFICE			
Pool Undesignated					Formation MORROW					Farm or Lease Name PARDUE FARMS 27			
Completion Date 12-22-78			Total Depth 13100'			Plug Back TD 12800'			Elevation 3056KB-20			Well No. 1	
Csg. Size 4 1/2"		Wt. 13.5	d 3.920	Set At 13100'	Perforations: From 12480 To 12661			Unit H			Sec. 27	Twp. 23s	Rge. 28e
Tub. Size 7"		Wt. 26.0	d 6.276	Set At 12275'	Perforations: OPEN ENDED From To			Unit H			Sec. 27	Twp. 23s	Rge. 28e
Tub. Size 2 3/8"		Wt. 6.50	d 2.441	Set At 11901'	Perforations: OPEN ENDED From To			Unit H			Sec. 27	Twp. 23s	Rge. 28e
2 3/8"		4.70	1.995	11901-12336									
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE										Packer Set At 12342'		County EDDY	
Producing Thru TUBING			Reservoir Temp. °F 198 @ 12517		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2			State NEW MEXICO			
L 1.2571		H -	G _g 0.5947	% CO ₂ 3.258	% N ₂ 0.317	% H ₂ S -	Prover -		Meter Run 4"		Taps F		

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							3952		PACKER		21.0 Days
1.	4"	6/64	1.500	564	2.25	88	3648				1.0 Hrs.
2.	4"	8/64	1.500	564	11.56	90	3225				1.0 "
3.	4"	10/64	1.500	572	22.09	88	2700				1.0 "
4.	4"	12/64	1.500	572	30.25	91	2115				1.0 "
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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	10.84	36.03	577.2	0.9741	1.296	1.035	510.32
2	10.84	81.67	577.2	0.9723	1.296	1.034	1153.50
3	10.84	113.69	585.2	0.9741	1.296	1.035	1610.28
4	10.84	133.05	585.2	0.9715	1.296	1.034	1877.64
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1	0.84	548	1.59	0.934	A.P.I. Gravity of Liquid Hydrocarbons	-	Deq.
2	0.84	550	1.60	0.936	Specific Gravity Separator Gas	0.5947	XXXXXX
3	0.85	548	1.59	0.933	Specific Gravity Flowing Fluid	XXXXXX	
4	0.85	551	1.60	0.935	Critical Pressure	688	P.S.I.A.
5					Critical Temperature	344	R

P _c 5096.2 P _c ² 25971.3				
NO.	P _r	P _w *	P _w ²	P _c ² - P _w ²
1		4755.2	22611.9	3359.4
2		4132.2	17075.1	8896.2
3		3566.2	12717.8	13253.5
4		3096.2	9586.5	16384.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.585$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.458$

ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2738$

Absolute Open Flow 2738		Mcf @ 15.025	Angle of Slope 50° 56'	Slope, n 0.819
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Remarks: * BHP @ (-9515) 12571' used for pressure calculations
 9 5/8" Casing from 0' to 10375', 7" Liner from 10086' to 12275', 4 1/2" Liner from 12002' to 13100'

Approved by Commission:	Conducted By: Jarrel Services, Inc.	Calculated By: Joe A. Coleman	Checked By: Joe A. Coleman
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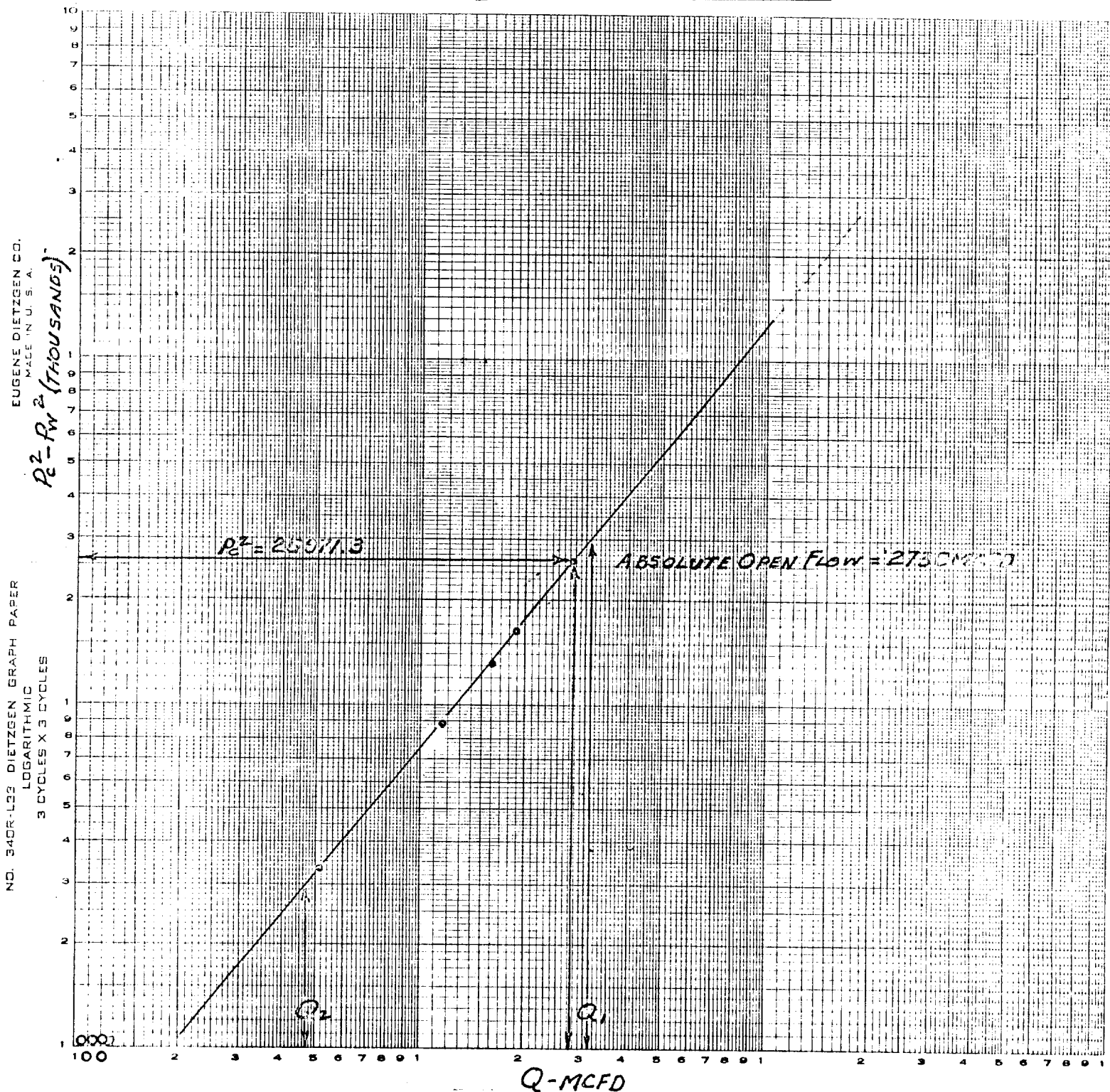
COMPANY: MADDOX ENERGY CORP ON

WELL: PARDUE FARMS 27, NO.1

LOCATION: H 27 23s 28e

COUNTY: EDDY

DATE: JANUARY 16, 1979



$$Q_1 = 3100 \text{ MCFD}; \text{LOG } Q_1 = 3.49136$$

$$Q_2 = 470 \text{ MCFD}; \text{LOG } Q_2 = 2.67210$$

$$\eta = 0.81926 = 0.819$$