

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 8-1-77			
Company ARDEN OIL COMPANY				Connection EPNG					
Pool Jalmat				Formation Yates 7 Rivers				Unit	
Completion Date 7-8-77		Total Depth 3750		Plug Back TD 3735		Elevation 3353 KB		Farm or Lease Name Eunice Cooper	
Csg. Size 4 1/2	Wt. 10.5	d 	Set At 3750	Perforations: From 3051 To 3374		Well No. 1			
Tbg. Size 2 3/8	Wt. 4.7	d 	Set At 2975	Perforations: From open To end		Unit P 11 24 36			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At None		County Lea	
Producing Thru Tbg.		Reservoir Temp. °F 8		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 2975	H 2975	Gg .673	% 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							247		235		72 hr.
1.	4 X 1.250			42	4.84	80°	200	78°	220		60 min.
2.	4 X 1.250			44	14.44	82°	170	80°	212		60 min.
3.	4 X 1.250			44	30.25	82°	150	83°	201		60 min.
4.	4 X 1.250			45	68.89	75°	111	85°	182		60 min.
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	7.469	16.35	55.2	.9813	1.219	nil	146
2	7.469	28.74	57.2	.9795	1.219	nil	256
3	7.469	41.60	57.2	.9795	1.219	nil	371
4	7.469	63.32	58.2	.9859	1.219	nil	568
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio <u>dry gas</u> Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons ----- Duq.
2					Specific Gravity Separator Gas <u>.673</u> X X X X X X X X
3					Specific Gravity Flowing Fluid X X X X X -----
4					Critical Pressure <u>669</u> P.S.I.A. --- P.S.I.A.
5					Critical Temperature <u>382</u> R ---- R

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²
1	260.2	67.7	233.2	54.4
2			225.2	50.7
3			214.2	45.9
4			195.2	38.1
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.287$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.287$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.299$

Absolute Open Flow <u>1.299</u> Mcfd @ 15.625	Angle of Slope θ <u>45</u>	Slope, n <u>1.000</u>
---	-----------------------------------	-----------------------

Remarks: Slope was flat 45 drawn through high rate of flow.

Approved By Commission: <i>R.W. Runyan</i>	Conducted By: Starley Lenamon	Calculated By: Starley Lenamon	Checked By:
---	----------------------------------	-----------------------------------	-------------

RECEIVED

APR 17 1977

OIL COMBUSTION COMM.
HOBBS, N. M.

ARDEN OIL COMPANY

EUNICE COOPER NO. 1

P-11-24-36

LEA COUNTY, NEW MEXICO

8-1-77

DIETZGEN CORPORATION

MADE IN U.S.A.

NO. 341-L22 DIETZGEN GRAPH PAPER

LOGARITHMIC

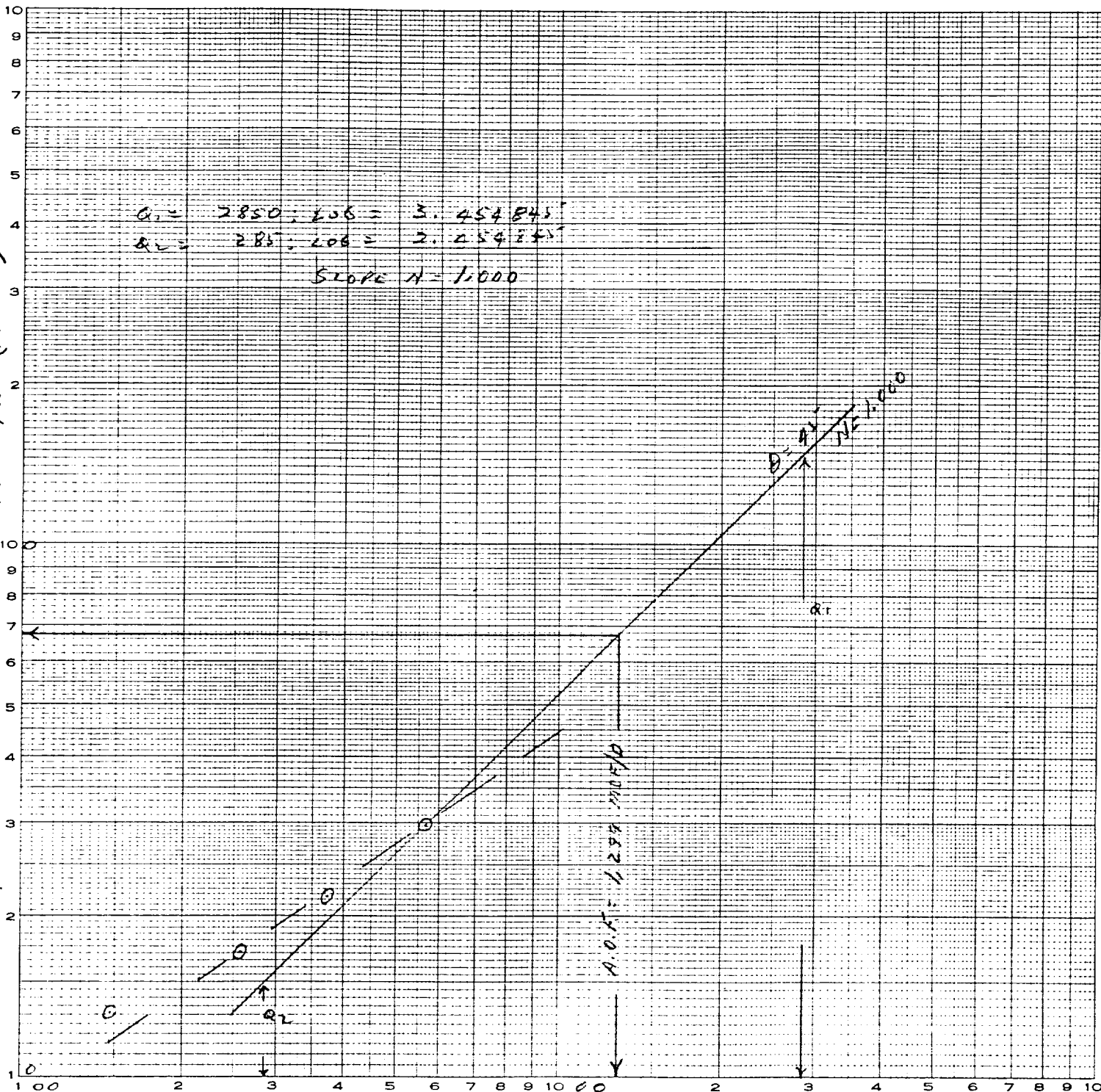
2 CYCLES X 2 CYCLES

$P_e - P_w$ (IN INCHES)

$$Q_1 = 2850; \log = 3.454845$$

$$Q_2 = 285; \log = 2.454845$$

$$\text{SLOPE } H = 1.000$$



$Q - \text{MCF/DAY}$

RECEIVED

MAY 17 1977

CIL COMBUSTIBLES COMM.
HOBBS, N. M.