

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: ☒ Initial ☐ Annual ☐ Special					Test Date 5-5-81		MAY 11 1981		
Company Hondo Oil & Gas Company /				Connection None			O. C. D. ARTESIA, OFFICE		
Pool Undesignated No. Illinois Camp				Formation Morrow			Unit		
Completion Date 5-1-81		Total Depth 10790		Plug Back TD 10718		Elevation 3590 G.L.		Farm or Lease Name Exxon "A" State	
Cng. Size 5 1/2	Wt. 17	d 4.892	Set At 10790	Perforations: From 10522 To 10530			Well No. 1		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 10449	Perforations: From 10452 To 10455			Unit H	Sec. 16	Twp. 18S
Type Well - Single - Bradenhead - G.G. or C.O. Multiple Single				Packer Set At 10449			County Eddy		
Producing Thru Tbg.		Reservoir Temp. °F 160 @ 10776		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 10452	H 10452	Gg .646	% CO ₂ .61	% N ₂ .46	% H ₂ S -0-	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							3056		Pkr.		114.5 Hrs.
1.	4 x 1.250			493	9	94	2446	69	Pkr.		1 Hr.
2.	4 x 1.250			490	12	83	2273	71	Pkr.		1 Hr.
3.	4 x 1.250			491	21	70	1987	72	Pkr.		1 Hr.
4.	4 x 1.250			495	38	76	1641	73	Pkr.		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcld
1	7.469	67.50	506.2	.9688	1.244	1.041	633
2	7.469	77.71	503.2	.9786	1.244	1.043	737
3	7.469	102.90	504.2	.9905	1.244	1.047	992
4	7.469	138.97	508.2	.9850	1.244	1.047	1332
5							

NO.	F _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	.75	554	1.49	.923	A.P.I. Gravity of Liquid Hydrocarbons 54 @ 60°	Deg.
2	.75	543	1.47	.920	Specific Gravity Separator Gas .646	XXXXXX
3	.75	530	1.43	.912	Specific Gravity Flowing Fluid XXXXX	
4	.76	536	1.44	.913	Critical Pressure 673 P.S.I.A.	P.S.I.A.
5					Critical Temperature 371 R	R

*F _c 4114.2	P _c ² 16926.6	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.877$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.656$	
NO.	F _c	P _w	P _w ²	P _c ² - P _w ²	
1		*3431.2	11773.1	5153.5	
2		*3214.2	10331.1	6595.5	
3		*2812.2	7908.5	9018.1	
4		*2343.2	5490.6	11436.0	
5					

Absolute Open Flow 1643 Mcld @ 15.025		Angle of Slope 51° 19'		Slope, n .801	
Remarks: BHP at mid point of perforations 10526					
Via bottom hole bomb					
Produced 2 bbl. distillate					
Approved By Division		Conducted By: Ross Trevino		Calculated By: J. D. Cogburn	
				Checked By: J. V. Curfew	

HONDO OIL & GAS CO.

EXXON A STATE NO. 1

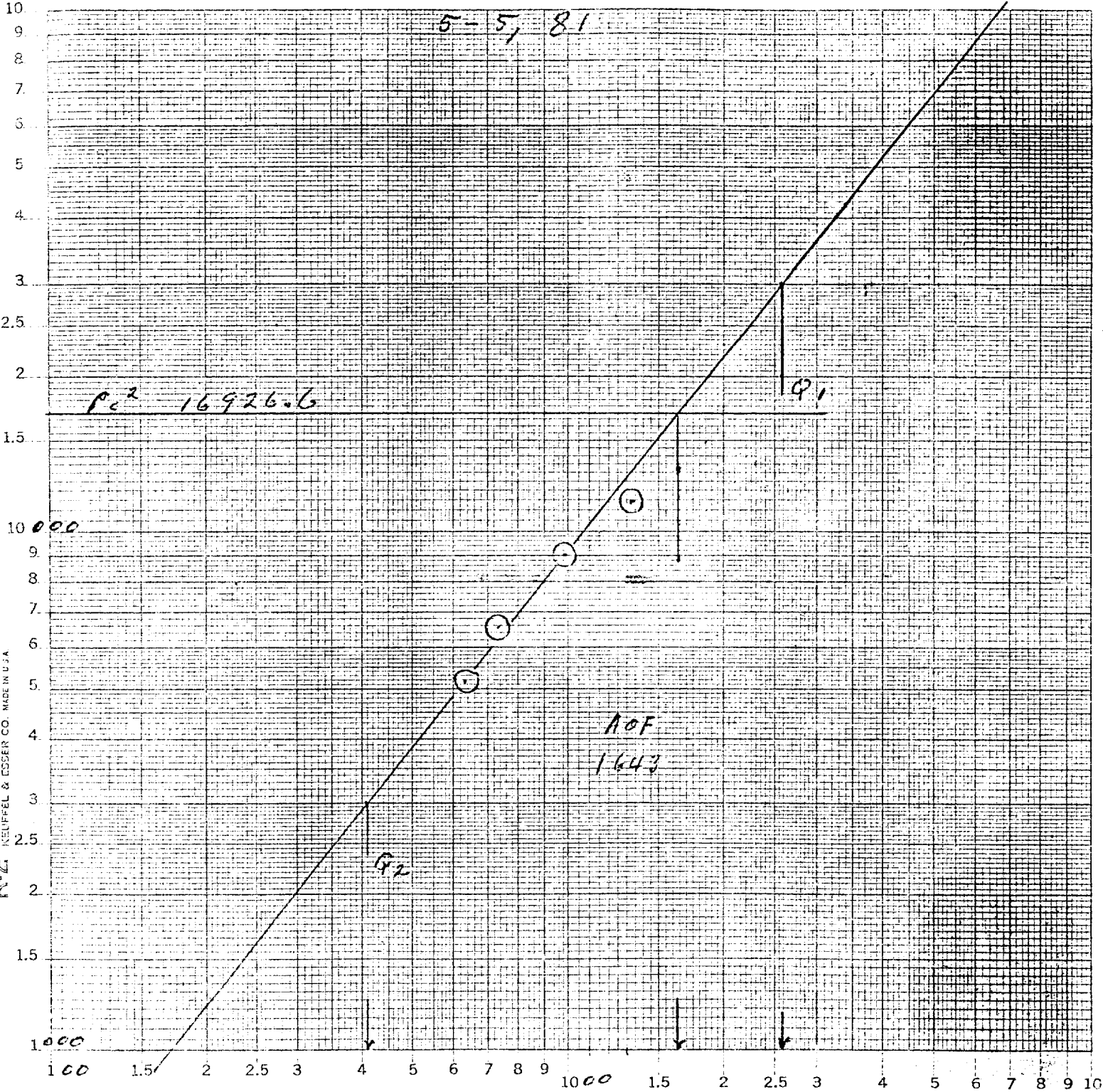
UNIT H 16 185 28E

EDDY COUNTY N. MEXICO

5-5, 81

467203
THOUSANDS
 $P_c^2 - P_w^2$

LOGARITHMIC 2 X 2 CYCLES
NEUFEL & ESSER CO. MADE IN U.S.A.



$$Q_1 = 2590, \quad \log 3.4132998$$

$$Q_2 = 410, \quad \log 2.6127839$$

$$n = .8005159 = .801$$