

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

Form O-172
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special						Test Date 11-19-81		NOV 23 1981	
Company Hondo Oil and Gas Company				Connection					
Pool North Illinois Camp				Formation Morrow Gas		Unit O. C. D.		ARTESIA, OFFICE	
Completion Date 5-1-81		Total Depth 10790		Plug Back TD 10718		Elevation 3590 G.L.		Farm or Lease Name Exxon "A" State Com	
Csg. Size 5.5	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 Sec. Twp. Rge. H 16 18S 28E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10,449		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 .636	% CO ₂ .61	% N ₂ .46	% H ₂ S 0	Prover	Meter Run 3	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							1901		Pkr.		67 Hrs.
1.	3 x 1.250			483	4.75"	83	1725	65			1
2.	3 x 1.250			485	8.75"	83	1625	66			1
3.	3 x 1.250			491	16.90"	84	1472	67			1
4.	3 x 1.250			498	27.00"	84	1279	68			1
5.											

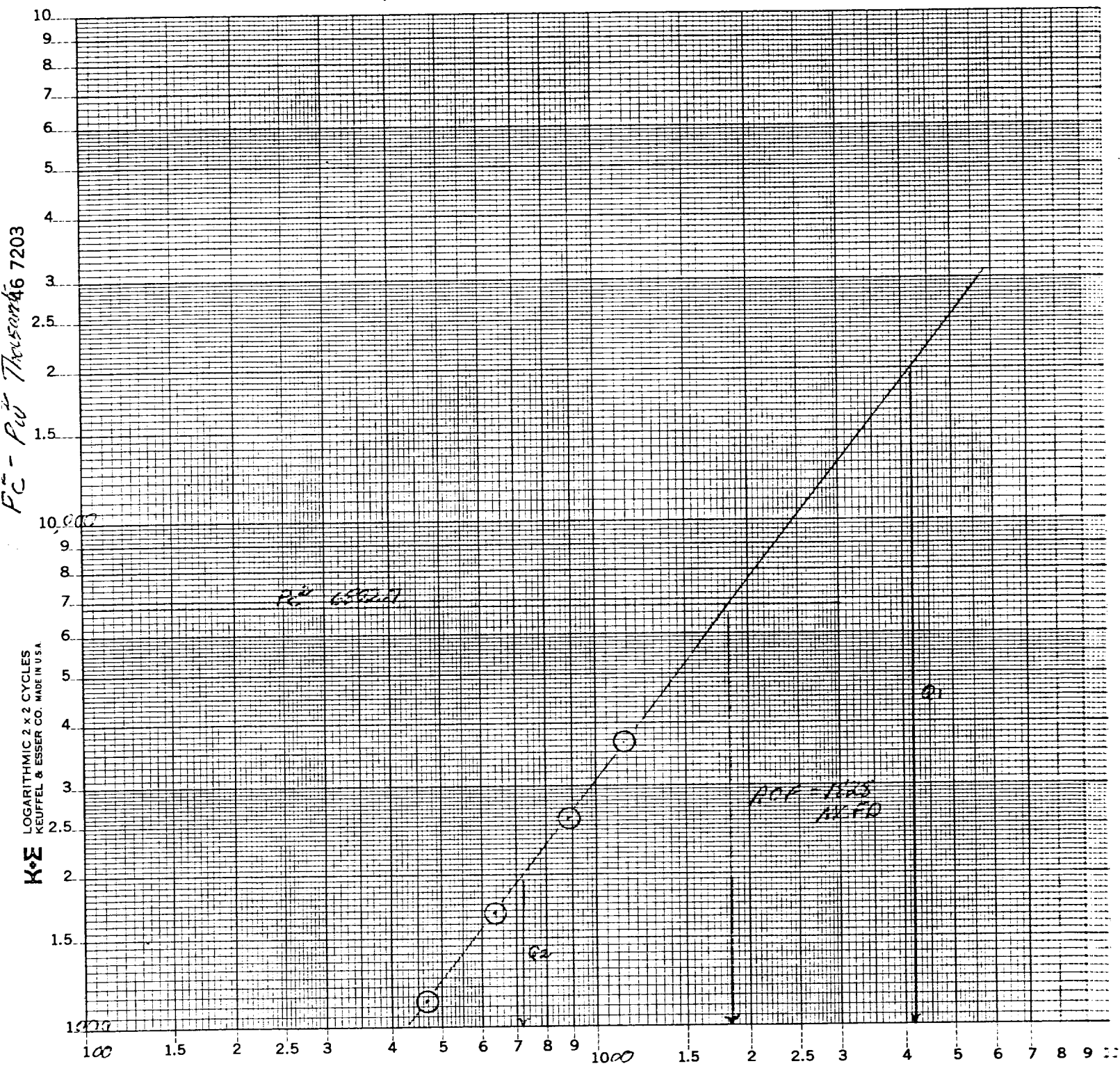
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.577	48.55	496.2	.9786	1.254	1.040	469.49
2	7.577	66.02	498.2	.9786	1.254	1.040	638.42
3	7.577	92.31	504.2	.9777	1.254	1.041	892.69
4	7.577	117.48	511.2	.9777	1.254	1.041	1136.10
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.72	543	1.48	.924	A.P.I. Gravity of Liquid Hydrocarbons .54 @ 60° _____ Deg.
2.	.72	543	1.48	.924	Specific Gravity Separator Gas .636 _____ X X X X X X X X
3.	.73	544	1.48	.923	Specific Gravity Flowing Fluid X X X X X _____
4.	.74	544	1.48	.922	Critical Pressure 673 _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 368 _____ R _____ R

* P _c 2608.2 P _c ² 6802.7					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.865$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.609$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1828$			
1		*2381.2	5670.1	1132.6				
2		*2364.2	5126.6	1676.1				
3		*2053.2	4215.6	2587.1				
4		*1776.2	3154.9	3647.8				
5								

Absolute Open Flow 1828 _____ Mcfd @ 15.025		Angle of Slope @ 52° 39'	Slope, n .763
Remarks: BHP measurements at mid-perfs. 10,526 Produced 2 bbls. distillate			
Approved By Commission:	Conducted By: Cecil L. Johnson	Calculated By: Larry Henson	Checked By: James D. Cogburn

Lando Oil & Gas Co.
 Exxon "R" State #1
 Unit H-16-185-28E
 Eddy County
 11-19-81



$$Q = MCFD$$

$$Q_1 = 4180 \text{ MCFD}$$

$$\log Q_1 = 3.621176$$

$$Q_2 = 722 \text{ MCFD}$$

$$\log Q_2 = 2.858537$$

$$N = .7626368 = .763$$