

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-13-78		AUG 16 1978	
Company Yates Petroleum Corporation				Connection El Paso Natural Gas Co.				O. C. C. ARTESIAL OFFICE	
Pool Eagle Creek				Formation Permo- Penn				Unit	
Completion Date 4-5-77		Total Depth 8560' KB		Plug Back TD 6653' KB		Elevation 3574' KB		Farm or Lease Name Pipkin "HE" Com	
Csq. Size 4 1/2"	Wt. 11.6#	d 4.000	Set At 8518'	Perforations: From 6618 To 6640' KB			Well No. 1		
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 6550'	Perforations: From To			Unit Sec. Twp. Rye. M 4 18S 25E		
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single						Packer Set At 6550' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 124 @ 6630		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 6620	H 6620	G _g .663	% CO ₂ Nil	% N ₂ 1.04	% H ₂ S Nil	Prover -	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							1860	90			Months
1.	4.026 x 0.500			690	12	90	1767	91			1 hr
2.				690	32	90	1676	92			1 hr
3.				690	54	90	1606	93			1 hr
4.				690	83	90	1519	94			1 hr
5.											

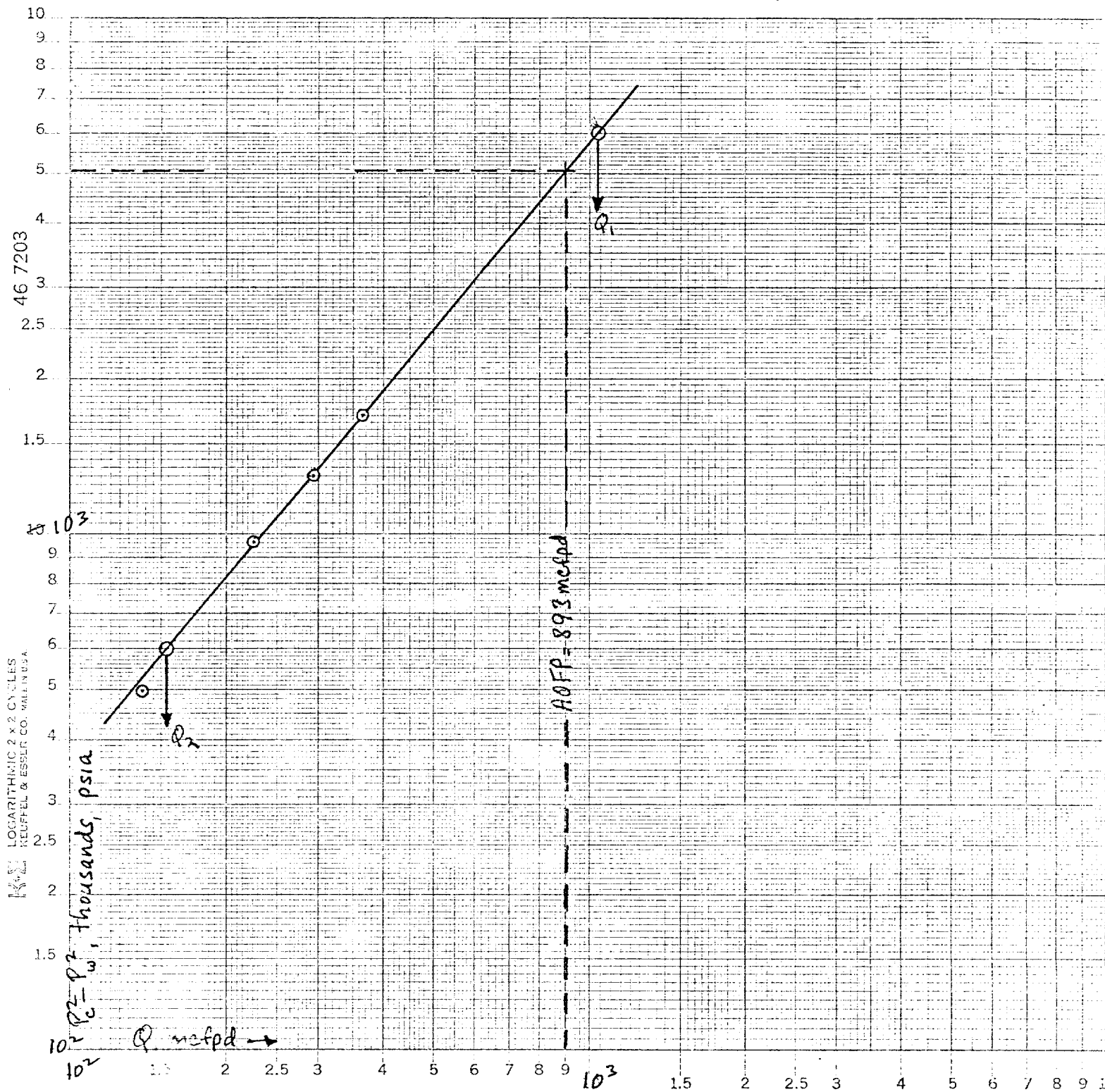
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.182	91.85	703	.9723	1.234	1.060	138
2	1.182	149.99	703	.9723	1.234	1.060	225
3	1.182	194.84	703	.9723	1.234	1.060	293
4	1.182	241.56	703	.9723	1.234	1.060	363
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	1.0508	550	1.4706	.890	469.7	59	.657	XXXXXX	669	669
2										
3										
4										
5										

P _c 2048	P _c 5053	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.9689$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.4605$	
NO	P _t	P _w	P _w ²
1			4556
2			4091
3			3753
4			3351
5			

Absolute Open Flow		893		Mcfd @ 15.025		Angle of Slope @		50.4		Slope, n		0.8274	
Remarks: All pressures by dead weight tester. Calculations worksheet C-122D attached.													
Approved By Commission:				Conducted By: Hal Elless				Calculated By: Eddie Mahfood				Checked By:	

YPC - Pipkin HE Com No. 1.
M-4-18s-25E, Eagle Creek Permo-Penn, Eddy Co., N.M.



$$Q_1 = 1035 \text{ mcfpd}$$

$$Q_2 = 154 \text{ mcfpd}$$

$$\log Q_1 = 3.0149$$

$$\log Q_2 = 2.1875$$

$$n = 0.8274$$

