

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

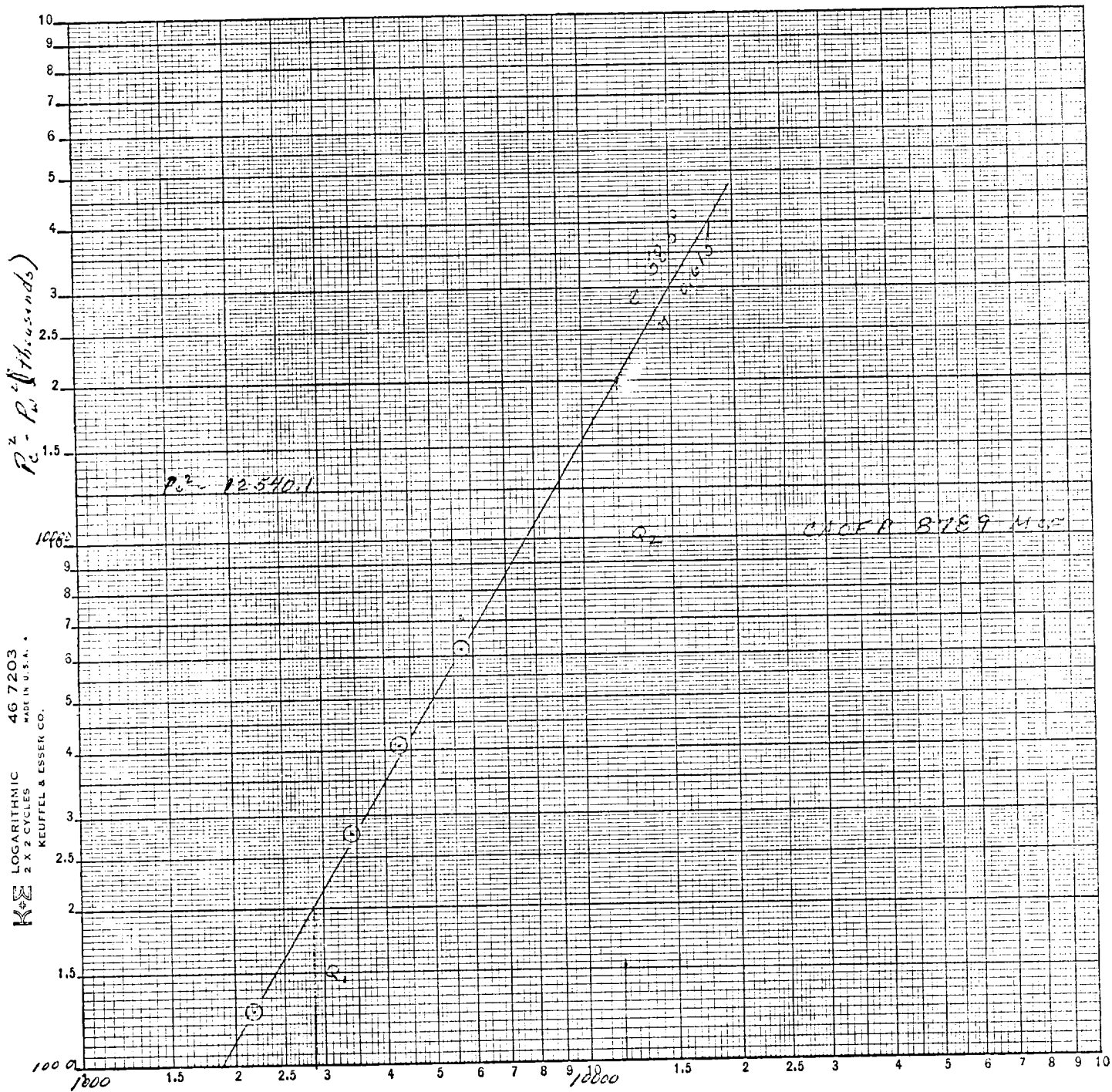
Form C-122
Revised 9-1-65

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C-122*

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Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 1-6-75		JAN 13 1975							
Company Atlantic Richfield Company			Connection El Paso Natural Gas Company								
Pool Undesignated			Formation Morrow								
Completion Date 6-23-74		Total Depth 11,130	Plug Back TD 11,075	Elevation DF 3239	Farm or Lease Name St. BQ Com.						
Csg. Size 5 1/2	Wt. 17	Set At 4,892	Set At 11,130	Perforations: From 10,775 To 10,830	Well No.						
Tbg. Size 2 3/8	Wt. 4.7	Set At 1,995	Set At 10,666	Perforations: From open To end	Unit Sec. 1 Twp. 21 S Rge. 26 E						
Type Well - Single - Braidedhead - G.G. or G.O. Multiple Single				Packer Set At 10,666	County Eddy						
Producing Thru Tbg.		Reservoir Temp. *F 182 @ 10,806	Mean Annual Temp. *F 60	Baro. Press. - P _a 13.2	State New Mexico						
L 10666	H 10666	G _g .585	% CO ₂ ---	% N ₂ ---	% H ₂ S ---						
Prover ---	Meter Run 4.0"	Taps Flg.									
FLOW DATA			TUBING DATA		CASING DATA						
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. *F	Press. p.s.i.g.	Temp. *F	Press. p.s.i.g.	Temp. *F	Duration of Flow
SI							3528		Pkr.		96 Hrs.
1.	4	x	2.00	703	9.0	73	3320				1 hr.
2.	4	x	2.00	712	22.1	73	3052				1 hr.
3.	4	x	2.00	690	36.0	74	2794				1 hr.
4.	4	x	2.00	723	60.1	72	2300				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, Mcfd				
1	19.81	80.29	716.2	.9877	1.307	1.055	2166				
2	19.81	126.60	725.2	.9877	1.307	1.056	3419				
3	19.81	159.11	703.2	.9868	1.307	1.055	4289				
4	19.81	210.35	736.2	.9887	1.307	1.058	5697				
5											
NO.	P _r	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>dry</u> Mcf/bbl.			A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
1.	1.07	533	1.51	.898	Specific Gravity Separator Gas <u>.585</u> X X X X X X X X			Specific Gravity Flowing Fluid X X X X X			
2.	1.08	533	1.51	.897	Critical Pressure <u>672</u> P.S.I.A. <u>672</u> P.S.I.A.			Critical Temperature <u>354</u> R <u>354</u> R			
3.	1.05	534	1.51	.898							
4.	1.10	532	1.50	.893							
5.											
NO.	P _r	P _w	P _r	P _w	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.024$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.543$				
1	3541.2	12540.10	3357.7	11274.2	1265.9						
2			3127.0	9778.1	2762.0						
3			2909.7	8466.4	4073.7	ADP = 0	$\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 8.789$				
4			2518.7	6343.8	6196.2						
5											
Absolute Open Flow <u>8,789</u> Mcfd @ 15.025			Angle of Slope θ <u>58.5</u> ^o			Slope, n <u>.615</u>					
Remarks: <u>No fluid made during test.</u>											
Approved By Commission:			Conducted By: Rick Pagan			Calculated By: Rick Pagan			Checked By: L. C. Hudry		

ATLANTIC RICHFIELD
 STATE BQ COM. #1
 EDDY COUNTY
 F-9-215-26E
 1-6-75



KE LOGARITHMIC 46 7203
 2 X 2 CYCLES
 MADE IN U.S.A.
 KEUFFEL & ESSER CO.

$$\begin{aligned}
 Q_2 - \text{Log } 11750 &= 4.070038 \\
 Q_1 - \text{Log } 2850 &= 3.454845 \\
 \hline
 n &= 0.615193 \\
 &= 0.615
 \end{aligned}$$