NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 2-26-76	
Company: Phillips Petroleum		Connection: shut in			
Pool: Undesignated-Atoka Gas		Formation: Atoka		Unit: —	
Completion Date: 7-24-75	Total Depth: 10951	Plug Back TD: 10890	Elevation: 4341' Gr. 4353' DF	Farm or Lease Name: Marg-C "Com"	
Csg. Size: 5½ / Wt.: 17&15.5 / d: / Set At: 10,951		Perforations: From 10,580 To 10,813		Well No.: 1	
Tbg. Size: 2-7/8 / Wt.: 6.5 / d: 2.441 / Set At: 10,500		Perforations: From — To —		Unit: N / Sec.: 24 / Twp.: 9-S / Rge.: 32E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 10,450		County: Lea	
Producing Thru: Tubing	Reservoir Temp. °F: 168 @ 10,900	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10,500	10,500	.712	1.2	1.8	0		4 X 2	Flange

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI						2312	68	Packer		7 days
1.	4.00	2.00	22.8	2.2	79	2075	66			1 hr
2.	4.00	2.00	24.0	10.2	64	1852	66			1 hr
3.	4.00	2.00	24.0	21.2	47	1517	68			1 hr
4.	4.00	2.00	25.2	56.3	33	1029	69			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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	19.81	8.90	36.0	.9822	1.185	1.014	208
2.	19.81	19.48	37.2	.9962	1.185	1.015	462
3.	19.81	28.08	37.2	1.013	1.185	1.016	678
4.	19.81	46.50	38.4	1.027	1.185	1.017	1140
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	.05	539	1.39	.973
2.	.06	524	1.35	.971
3.	.06	507	1.30	.969
4.	.06	493	1.27	.966
5.				

Gas Liquid Hydrocarbon Ratio 29.885 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 56 Deg.
Specific Gravity Separator Gas .712 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .807
Critical Pressure 669 P.S.I.A. 665 P.S.I.A.
Critical Temperature 389 R 428 R

P_c 2325.2 P_c^2 5406

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	4360	2088.5	4362	1044
2	3479	1865.6	3481	1925
3	2341	1530.6	2343	3063
4	1086	1086.3	1086	4320
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{5406}{4320}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.25$

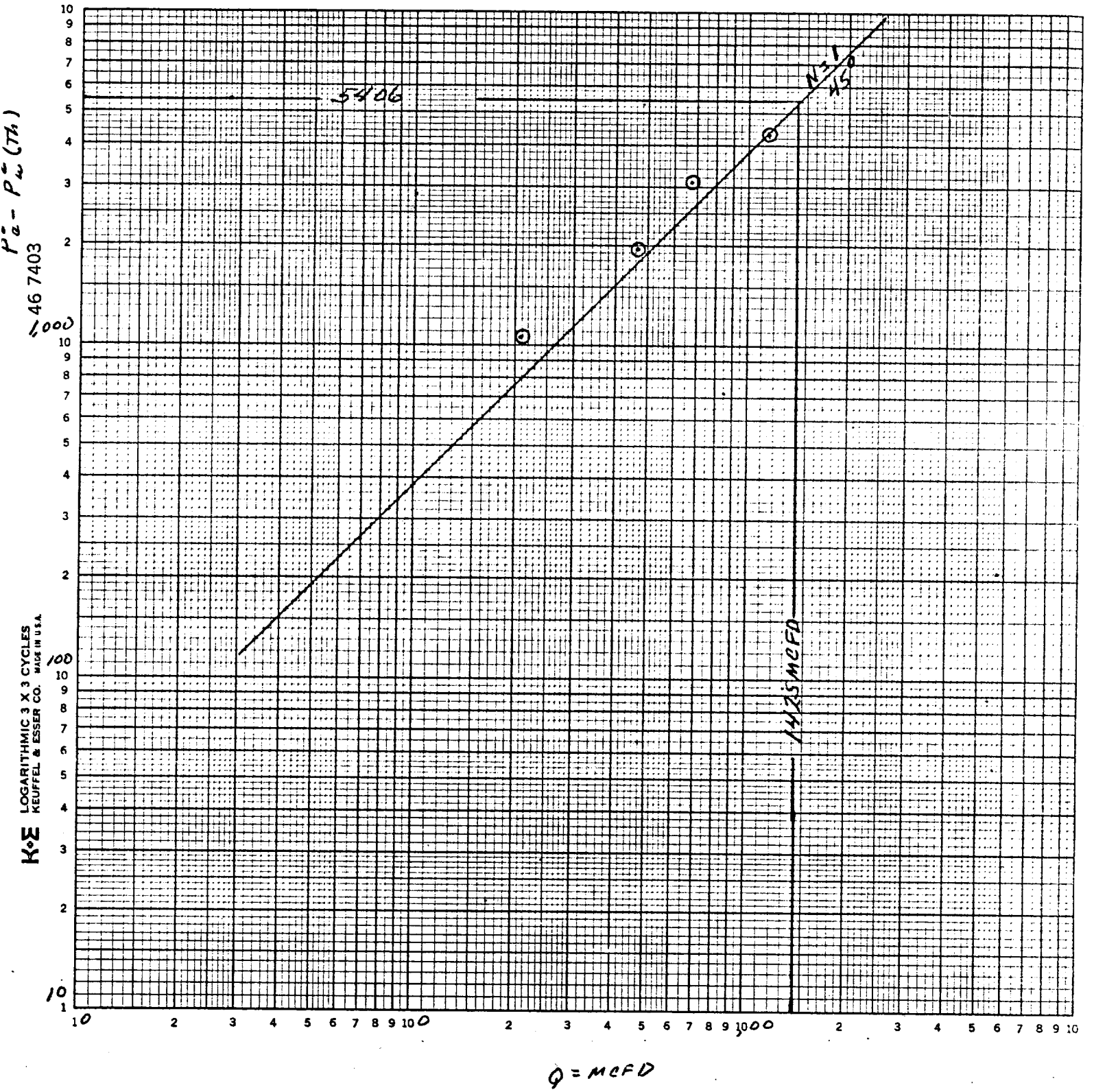
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1425$

Absolute Open Flow 1425 Mcfd @ 15.025 | Angle of Slope θ 45 | Slope, n 1

Remarks: Calculation made by computor. Program based on New Mexico Manual for Back-Pressure testing of gas wells.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Throp & B.W. Winn	D. E. Simpson	

Phillips Petroleum Company
Marg-C "COM" No. 1
Undesignated-Atoka Gas
N-24-9S-32E
Lea County
2-26-76



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