Copy C-105

N MEXICO OIL CONSERVATION COMM. ON

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

C-122

RECEIVED

JAN 22 1975

O. C. C.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special					Test Date: 11/25/74				
Company: Penroc Oil Corporation				Connection: None				Unit: K	
Pool				Formation: Morrow					
Completion Date		Total Depth: 11,050		Plug Back TD: 10,960		Elevation: 3224 gr.		Farm or Lease Name: Allied B COM	
Csg. Size: 4½	Wt.: 11.6	d	Set At	Perforations: From 10,718 To 10,880				Well No.: 1	
Tbg. Size: 2 3/8	Wt.: 4.7	d	Set At: 10,670	Perforations: From open To end				Unit: K	Sec.: 27	Twp.: 20	Rge.: 27
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: G. G. Dual				Packer Set At: 10,670				County: Eddy	
Producing Thru: Tbg.	Reservoir Temp. °F: 181 @ 10,718			Mean Annual Temp. °F		Baro. Press. – P_a		State: New Mexico	
L	H	Gg: .615	% CO_2: 1.7	% N_2	% H_2S	Prover	Meter Run: 3	Taps: Flg.	

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI							3230		2180		72 Hr. S.I.
1.	3	x	1.250	500	1.7	80	3058		2180		45 Min.
2.	3	x	1.250	500	3.0	70	2964		2180		60 Min.
3.	3	x	1.250	510	25.0	68	2651		2180		60 Min.
4.	3	x	1.250	515	42.0	68	2410		2180		60 Min.
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	7.577	29.54	513.2	.9813	1.275	1.041	292
2.	7.577	39.24	513.2	.9905	1.275	1.044	392
3.	7.577	114.37	553.2	.9924	1.275	1.046	1147
4.	7.577	148.94	528.2	.9924	1.275	1.047	1495
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.76	540	1.49	.922
2.	.76	530	1.46	.917
3.	.78	528	1.46	.914
4.	.79	528	1.46	.913
5.				

Gas Liquid Hydrocarbon Ratio 24.555 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.7 @ 60 Deg.
Specific Gravity Separator Gas xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx G-Mix = .734
Critical Pressure 671 P.S.I.A. 668 P.S.I.A.
Critical Temperature 362 R 401 R

P_c 3243.2 P_c^2 10,518.3

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3071.2	9432.3	1086.0
2		2977.6	8866.1	1652.2
3		2672.1	7140.1	3378.2
4		2438.3	5945.3	4573.0
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.3001$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.3001$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.439$

Absolute Open Flow 3,439 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.000

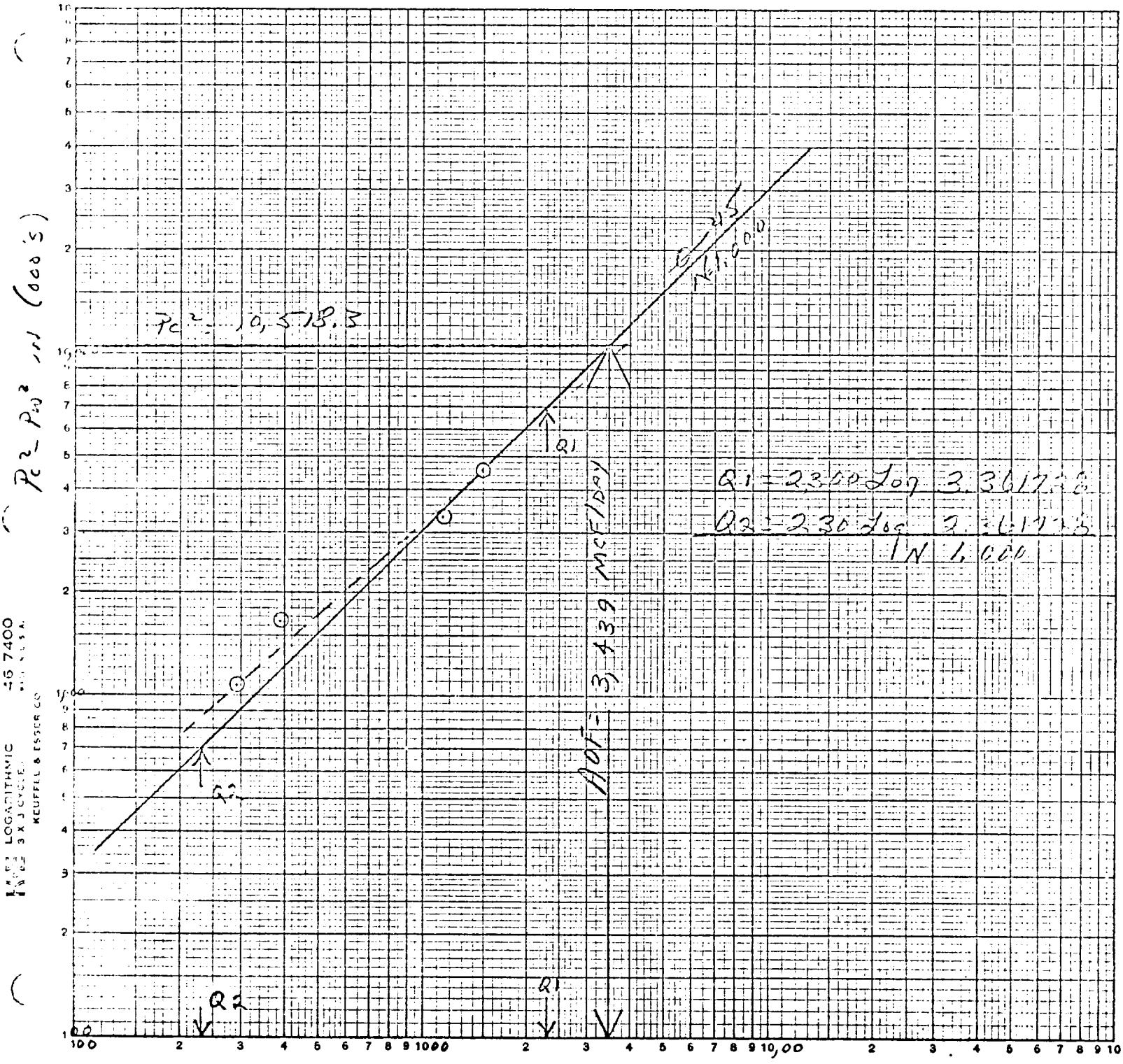
Remarks: Point alignment too flat. a 45° line was drawn through high rate of test. Well made 5.52 Bbl. of 54.7 condensate during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Rick Pagan & Reggie Reston	Reston & Pagan	

Penroc Oil Co.

Allied "B" Com. 1

Unit K-Sec.27-Twp. 20-Rge. 27



AOF= 3,439 Mcfd