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NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

C-122

Form C-122
Revised 9-1-65

RECEIVED
MAY 4 1976
O. C. C.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 4/28/76	
Company: Penroc Oil Corporation		Connection: None			
Pool: ~~Winchester~~		Formation: Atoka		Unit: J	
Completion Date: 4/28/76	Total Depth: 11240	Plug Back TD: 10860	Elevation:	Farm or Lease Name: Arco Federal	
Csg. Size: 4½ / Wt.: 13.5 / d: / Set At: 11240		Perforations: From 10374 To 10392		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 10255		Perforations: From open To end		Unit: J / Sec.: 33 / Twp.: 19 / Rge.: 28	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 10255		County: Eddy	
Producing Thru: Tbg.	Reservoir Temp. °F: 178 @ 10383	Mean Annual Temp. °F:	Baro. Press. – P_a:	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10383	10383	.659					3"	Flg.

NO.	FLOW DATA: Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					3457				24 hr.
1.	4 x 2.000	610	5.0	108	3232				30 Min.
2.	4 x 2.000	610	22.0	72	2952				1 hr.
3.	4 x 2.000	640	41.0	70	2760				1 hr.
4.	4 x 2.000	710	55.0	70	2552				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	21.32	55.82	623.2	.9568	1.232	1.049	1472
2.	21.32	117.09	623.2	.9887	1.232	1.062	3229
3.	21.32	163.65	653.2	.9905	1.232	1.067	4543
4.	21.32	199.44	723.2	.9905	1.232	1.075	5578
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.93	568	1.50	.908
2.	.93	532	1.41	.886
3.	.97	530	1.40	.879
4.	1.08	530	1.40	.865
5.				

Gas Liquid Hydrocarbon Ratio 69.049 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 53 @ 60° Deg.
Specific Gravity Separator Gas .659 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .702
Critical Pressure 670 P.S.I.A. 668 P.S.I.A.
Critical Temperature 378 R 392 R

P_c 3470.2 P_c^2 12042.3

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1		3257.8	10613.3	1429.0
2		3024.9	9150.0	2892.3
3		2892.4	8366.0	3676.3
4		2752.6	7576.8	4465.5
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.697$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.697$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 15.042$

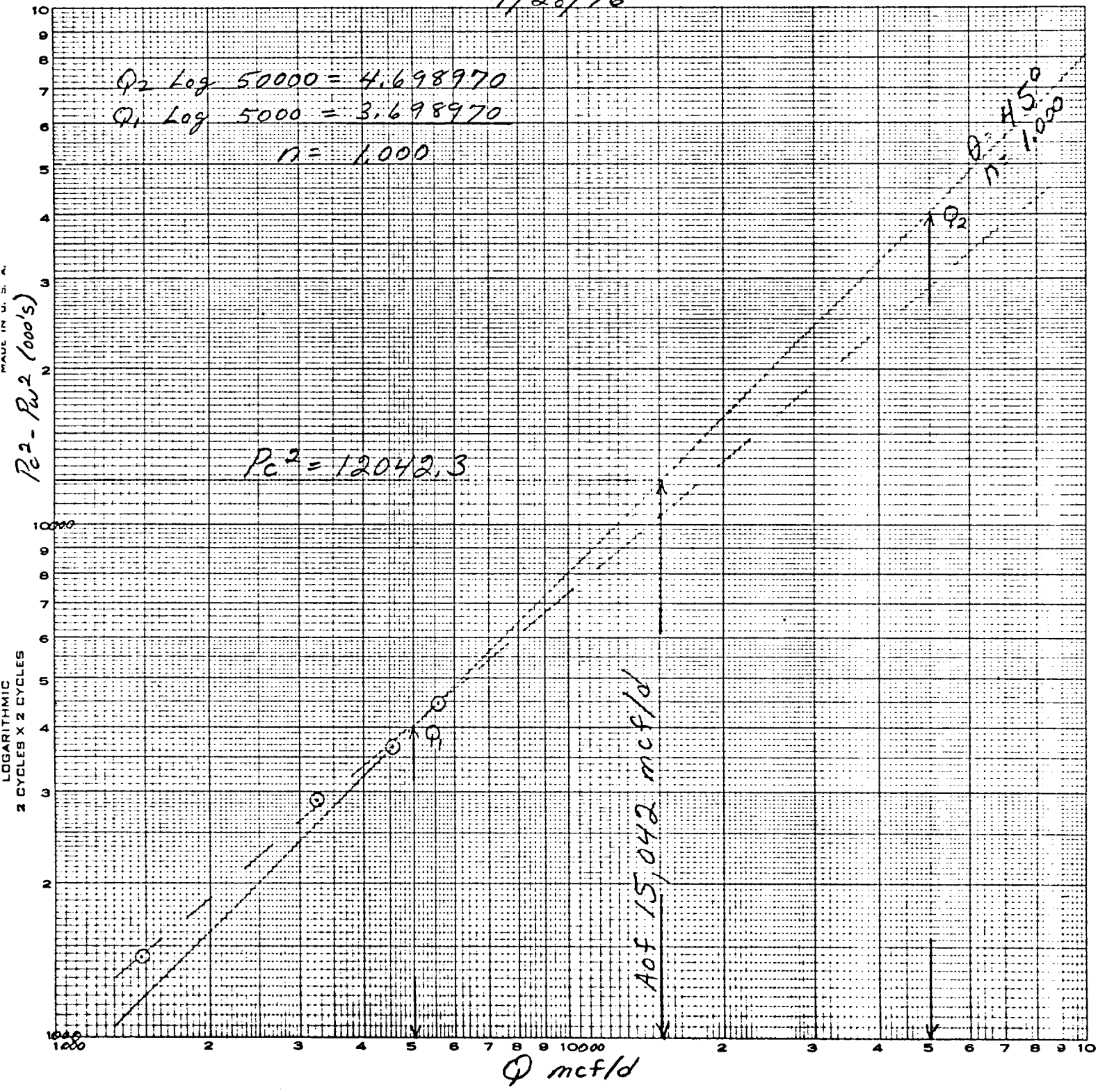
Absolute Open Flow 15,042 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.000

Remarks: 8.5 Bbls. of Distilate made during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Rick Pagan	Rick Pagan	

Penroc Oil Co.
Arco Fed. #1 (Atoka)
J 33-19-28 Eddy Co.
Aof 15,042 mcf/d n=1.000

4/28/76



Aof 15,042 mcf/d