

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

Form C-122
Revised 9-1-63

c/sf
File

RECEIVED

Type Test: ☒ Initial 4 POINT ☐ Annual ☐ Special				Test Date: 1-22-83		JAN 28 1983	
Company: DEPCO INC.				Connection: AIR NEW WELL		O. C. D. ARTESIA OFFICE	
Well: PECOS SLOPE				Formation: ABO		Unit: 5	
Completion Date: 1-18-83		Total Depth: 4250		Plug Hole: 1193 4225		Elevation: 3922	
Perforations: From 3717 To 3868		Form or Lease Name: ROSE FEDERAL		Well No. 5			
Perforations: From 0 To 0		Unit: 18		Sec. 55		Twp. 25E	
Type Well - Single - (Wardenhead - O.O. or O.O. Multiple): SINGLE				Packer Set At: 0		County: CHAVES	
Producing thru: TUBING		Reservoir Temp. °F: 100 3792		Mean Annual Temp. °F: 60		Base Press. - P _g : 13.2	
State: NEW MEXICO							
L: 3792	M: 3792	Og: 0.683	% CO ₂ : 3.86	% N ₂ : 6.33	% H ₂ S: 0	Proven: 0	Meter Run: 2.1
Type: FLANGE							

FLOW DATA							TUBING DATA		B.H.P. DATA		Duration of Flow
NO.	Flow Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. Hg	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	CHOKE	
1	2.07	X	1.500	445	8.0	70	987		1101		91.5 HR.
2	2.07	X	1.500	450	28.0	71	952	60	1078	5.5/64	1 HRS.
3	2.07	X	1.500	450	48.0	71	914	60	1053	8.5/64	1 HRS.
4	2.07	X	1.500	450	51.2	72	868	60	1022	29/64	1 HRS.
5	2.07	X	1.500	450			855	60	1010	48/64	1 HRS.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_1 - P_2}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow O. McM
1	12.76	60.54	458.2	0.9905	1.2100	1.0391	962
2	12.76	113.88	463.2	0.9896	1.2100	1.0392	1808
3	12.76	149.11	463.2	0.9896	1.2100	1.0392	2367
4	12.76	154.07	463.2	0.9887	1.2100	1.0389	2443

NO.	P ₁	Temp. °F	T _g	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	0.68	530	1.47	0.926		0.683			674	361
2	0.69	531	1.47	0.926						
3	0.69	531	1.47	0.926						
4	0.69	532	1.47	0.926						

NO.	P ₁	P ₂	P ₁ ²	P ₂ ²	P ₁ ² - P ₂ ²
1	1191.	982.	965.	40.	
2	1137.	960.	922.	84.	
3	1072.	932.	859.	136.	
4	1047.	922.	850.	155.	

(1) $\frac{P_1^2}{P_2^2 - P_1^2} = 6.4695$ (2) $\left[\frac{P_1^2}{P_2^2 - P_1^2} \right]^n = 3.6243$

AOF = O $\left[\frac{P_1^2}{P_2^2 - P_1^2} \right]^n = 8855$

Post FD-2
2-4-83
Emery BK

Absolute Open Flow: 8855	McM @ 15.025	Angle of Slope: 55.4	Slope, n: 0.690
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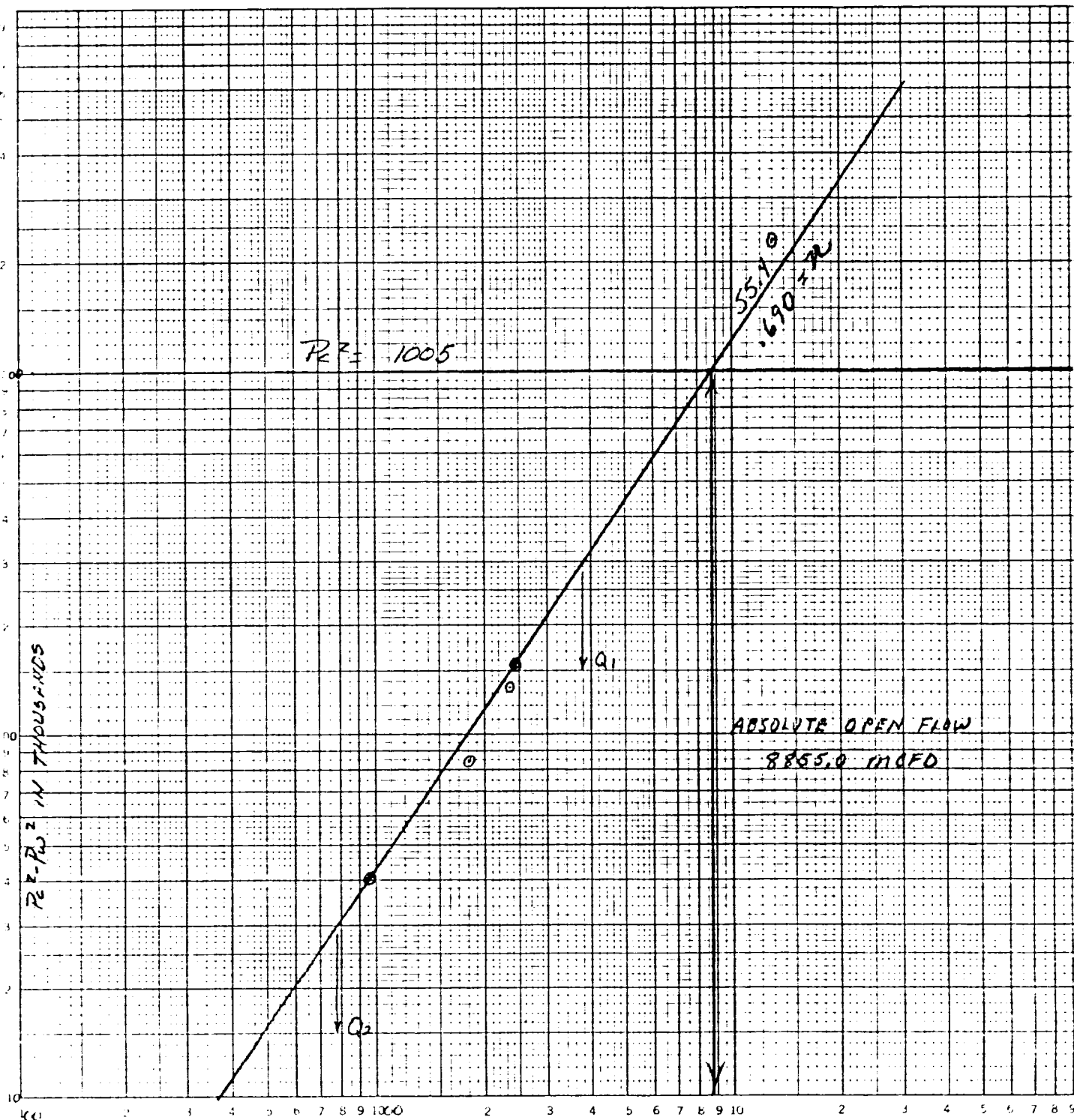
Remarks: **BOTTOM HOLE PRESSURE MEASURED WITH AMARADA PRESSURE ELEMENT.**

Designed By Commission:	Conducted By: DOH BENNETT	Calculated By: BENNETT CATHER	Checked By:
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DEPCO
 ROSE FIDELITY #5
 18 55 25E
 CHAVES COUNTY
 1-22-83

46 7400

LOGARITHMIC 3 X 3 CYCLES
 KEUFFEL & ESSER CO. MADE IN U.S.A.



$$\overline{\Delta P}_1 \quad P_2 - P_w^2 = 300$$

$$\overline{\Delta P}_2 \quad P_2 - P_w^2 = 30$$

$$Q_1 = 3800$$

$$Q_2 = 776$$

Q, Mcfd

$$\log Q_1 = 3.5798$$

$$\log Q_2 = 0.8898$$

$$n = .6900$$