

45 File

4 POINT ☒ Initial ☐ Annual ☐ Special		Date 7-2-82	
Company BERG EXPLORATION		Connection AIR NEW WELL	
Well UNDESIGNATED, PECOS SLOPE		Formation ABO	
Completion Date 6-24-82		Total Depth 4,700	
Plug Back TD 4650		Elevation 2748 SL	
Form or Lease Name DALE FEDERAL		Well No. 14	
Pipe Size 4 1/2	Wt. 10.5	Set At 4,700	Perforations: From 4261 To 4370
Pipe Size 2 3/8	Wt. 4.7	Set At 4161	Perforations: From OPEN To
Type Well - Single - Bradenhead - G.C. or G.O. Multiple		Packer Set At NONE	
SINGLE		NOV 3 1982	
Producing thru TUBING		Reservoir Temp. °F 100	
Mean Annual Temp. °F 60		Boro. Press. - P _a 13.2	
L 4315		H 4315	
Cg .8206		% CO ₂ 22.395	
% N ₂ 2.998		% H ₂ S	
2"		Meter Run	
State NEW MEXICO		County CHAVES	
ARTESIA OFFICE		State	

FLOW DATA						TUBING DATA		B.H.P. DATA		Duration of Flow	
NO	Travel 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.	CHOKE	Duration of Flow
51							979	78	1128		202 1/2
1	2.00	X	3/16	300		68	923	77	1122	5/64	1 HR.
2	2.00	X	3/16	920		66	910	73	1108	64/64	1 HR.
3	2.00	X	3/8	520		62	855	70	1078	14/64	1 HR.
4	2.00	X	3/8	710		62	710	71	1029	32/64	1 HR.

RATE OF FLOW CALCULATIONS							
NO	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super. Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	.6237	.00	313.2	.9924	1.1036	1.0287	220
2	.6237	.00	933.2	.9943	1.1036	1.0950	699
3	2.4390	.00	533.2	.9981	1.1036	1.0547	1511
4	2.4390	.00	723.2	.9981	1.1036	1.0752	2089

NO	P _h	Temp. °F	T _h	Z	Gas Liquid Hydrocarbon Ratio Mcf/LbL	A.P.L. Gravity of Liquid Hydrocarbons Lb/L	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure P.S.I.A.	Critical Temperature °F
1	.41	528	1.38	.945			.8210			
2	1.23	526	1.37	.834						
3	.71	522	1.36	.899						
4	.96	522	1.36	.865						

NO	P _h	P _c	P _w	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	1141.2	1302.3			11.6280	9.7823
2	1135.2	1288.7	14.0			
3	1121.2	1257.1	45.0			
4	1091.2	1190.7	112.0			
5	1042.2	1086.2	216.0			

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 14,781.0$			
Estimate open flow 14,781.0	Mcfd @ 15.025	Angle of Slope @ 47.1	Slope, n .9295

REMARKS: BOTTOM HOLE PRESSURE MEASURED WITH AMARADA PRESSURE ELEMENTS.

Approved By: JOHN SIEGWEIN	Conducted By: BENNETT & CATHEY	Calculated By:	Checked By:
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NOV 3 1982

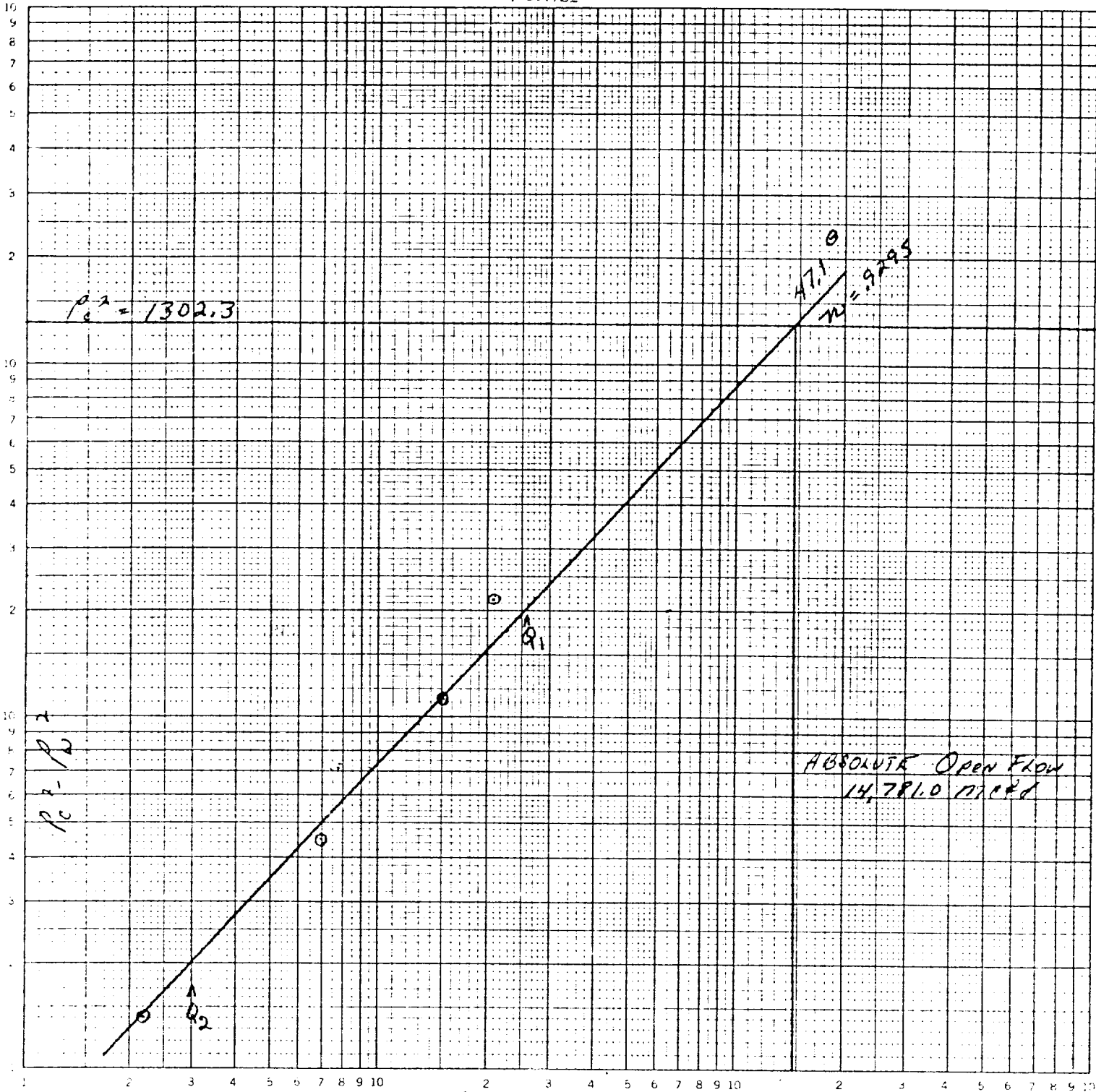
O. C. D.
ARTESIA, OFFICE

Sec 27, Twp 7S, Rge 26E

Charles County
7-2-82

46 7400

LOGARITHMIC 2 X 3 CYCLES
KEUFEL & ESSER CO. MINN. U.S.A.



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NOV 3 1982
O. C. D.
ARTESIA, OFFICE

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