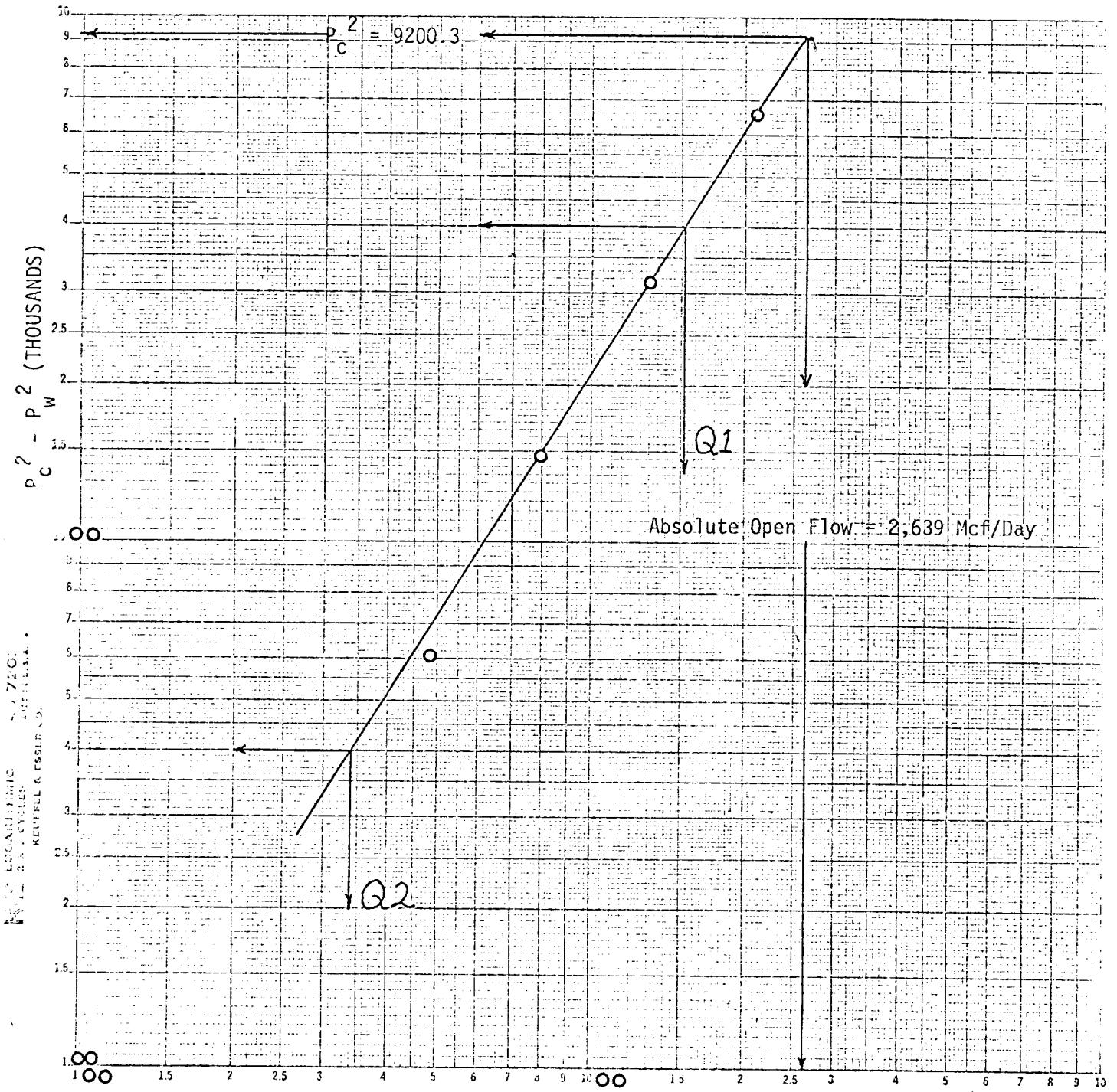


OPERATOR : Hilliard Oil & Gas Company
 WELL : Gulf Federal No. 1
 LOCATION : F, 35-19S-25E
 COUNTY : Eddy
 DATE : May 21, 1974



Q1 = 1,525 Mcfd
 Q2 = 340 Mcfd

Log Q1 = 3.18327
 Log Q2 = 2.53148
 N = .65179 = .652

LOGARITHMIC
 CYCLES
 KEYPLE & ESSER CO.