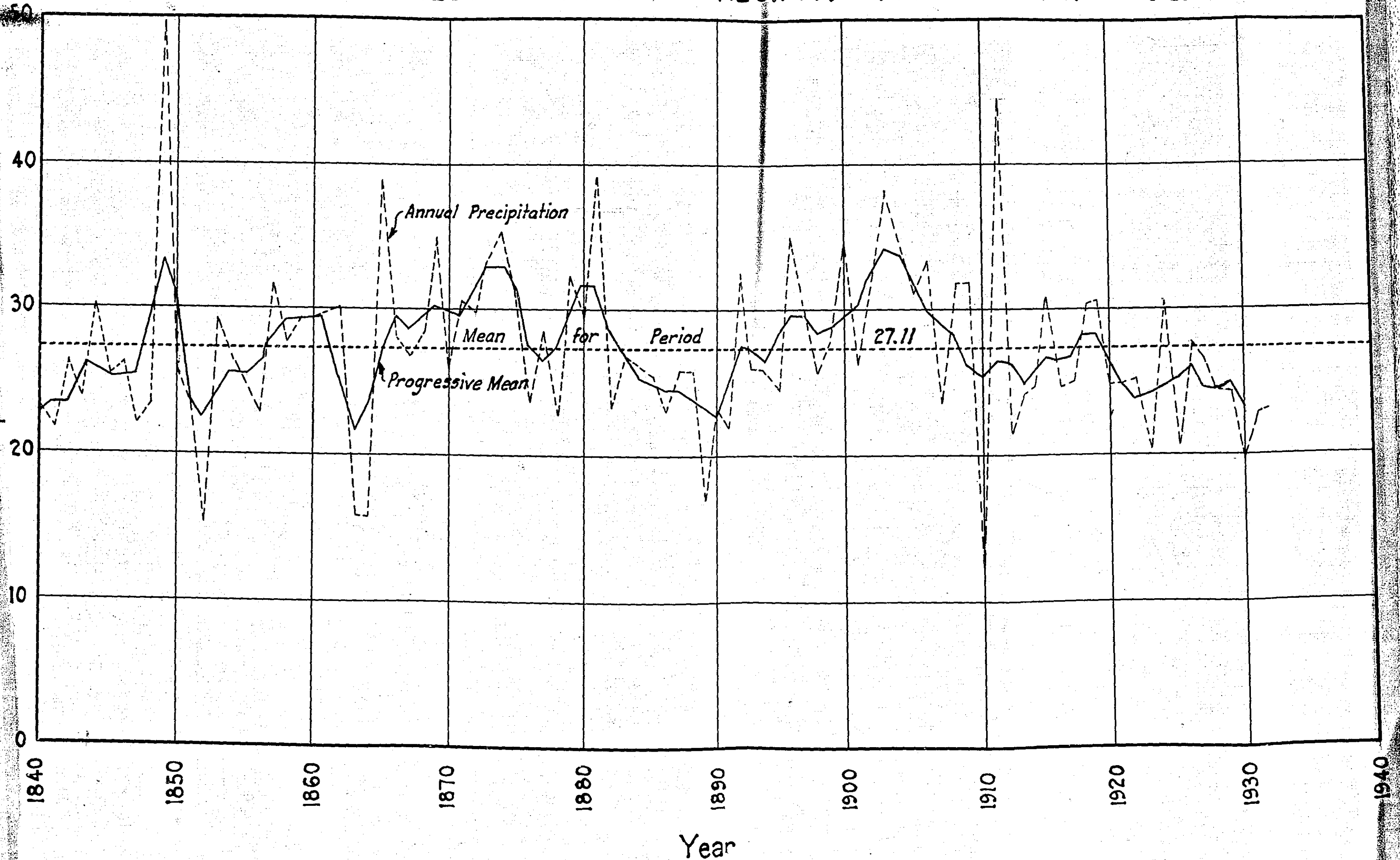
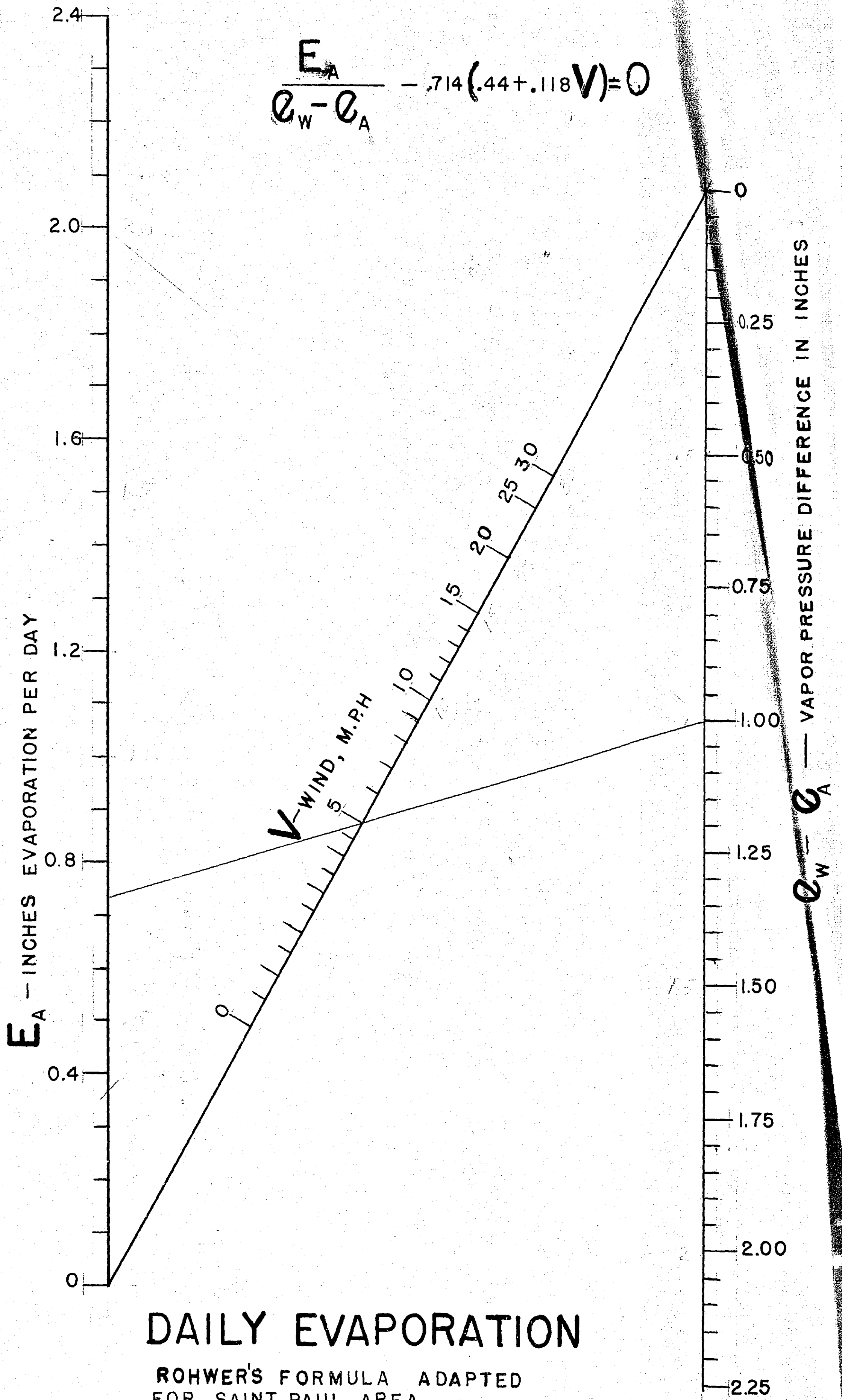


OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.
PAUL N. COATES
COUNTY ENGINEER

5 YEAR PROGRESSIVE MEAN PRECIPITATION AT ST. PAUL



$$\frac{E_A}{Q_W - Q_A} = .714 (.44 + .118 V) = 0$$



DAILY EVAPORATION

ROHWER'S FORMULA ADAPTED
FOR SAINT PAUL AREA

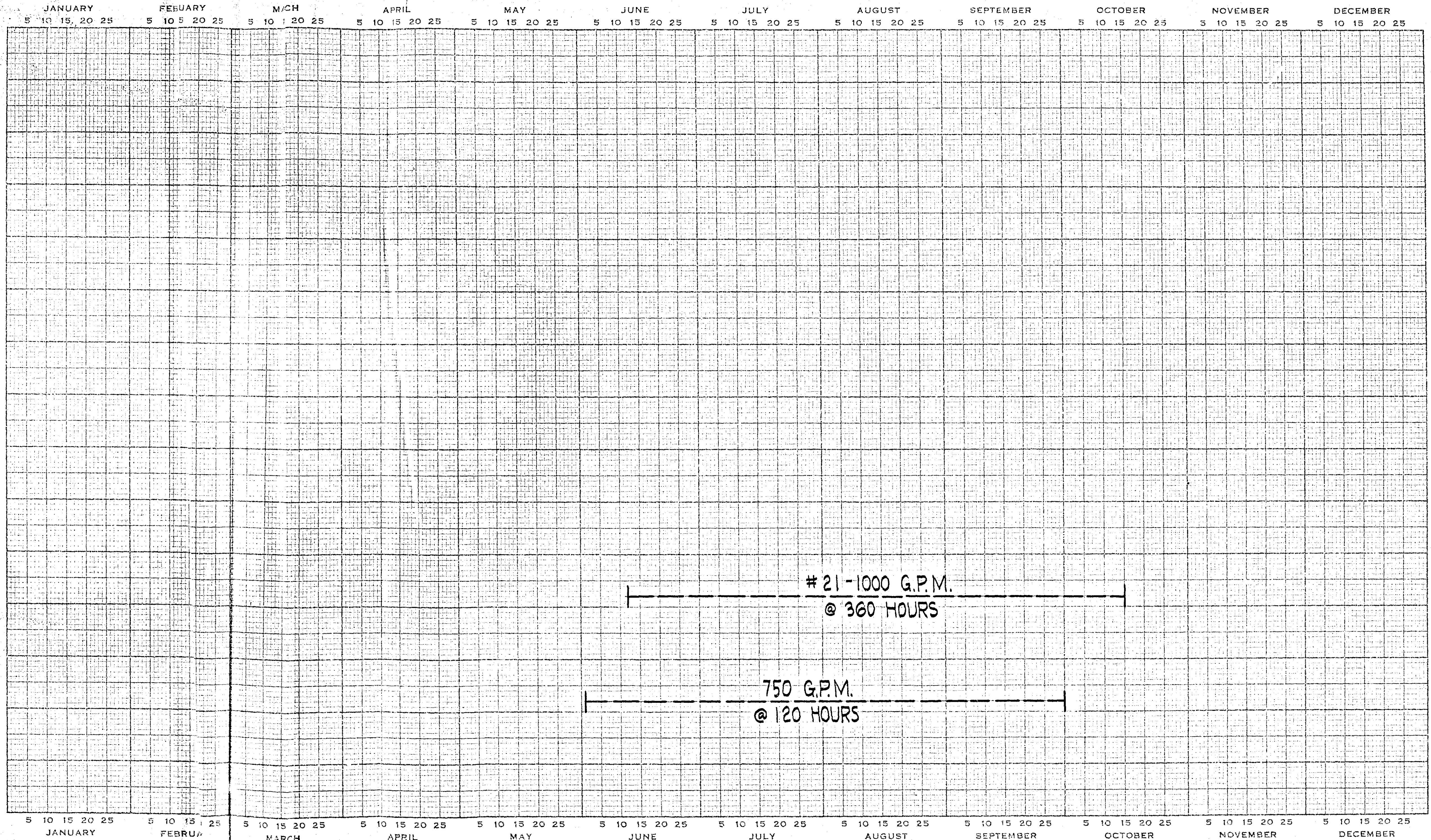
Precipitation This Year 25.74
 Normal Precipitation 24.71
 Cum. Excess-Deficiency -36.80
 (Since 1924)

Area in Acres at Normal Elevation _____
 Gallons Equiv. to One Foot on Lake _____
 Ratio: Watershed to Lake Area _____

KELLER GOLF COURSE
 Lake GOLF COURSE # 2 Year 1961

OFFICE OF
RAMSEY COUNTY ENGINEER

Sheet No. _____



1 YEAR BY DAYS X 180 DIVNS.
 KEUFFEL & ESSER CO. MADE IN U.S.A.
 CALENDAR YEAR

SEA LEVEL ELEVATION

PUMP NO. _____

Month	K.W. Demand	K.W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMP NO. 21 (KELLER)

Month	K.W. Demand	K.W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE		841.31	24.17
JULY		2786.85	80.05
AUG.		3207.51	92.13
SEPT.		1419.73	40.78
OCT.		1209.39	34.74
NOV.			
DEC.			
TOTAL		9464.79	271.87

PUMP NO. COURSE # 2

Month	K.W. Demand	K.W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

Pumping Costs This Year _____ Cum. Pumping Cost _____
 Mil. Gals. Pumped This Year 27.0 Cum. M. G. Pumped _____
 Equiv. on Lake in Ft. This Year _____ Cum. Equiv. on Lake in Ft. _____
 K. W. H. Consumed This Year _____ Cum. K. W. H. _____
 Av. Costs Per K. W. H. This Year _____ Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year _____ Cum. Av. Costs Per M. G. Pumped _____

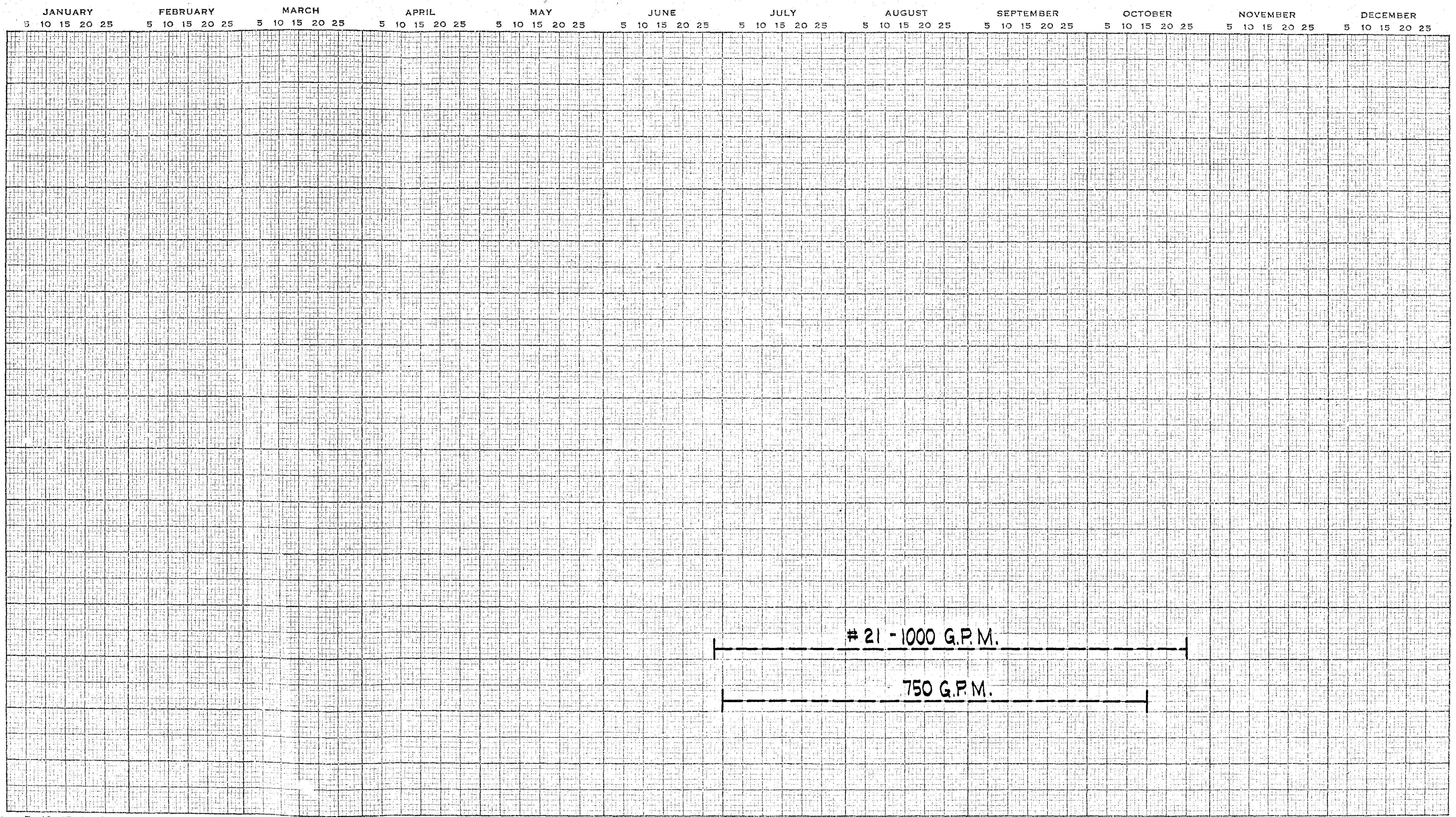
Precipitation This Year 21.46
 Normal Precipitation 24.75
 Cum. Excess-Deficiency - 37.83
 (Since 1924)

Area in Acres at Normal Elevation _____
 Gallons Equiv. to One Foot on Lake _____
 Ratio: Watershed to Lake Area _____

KELLER GOLF COURSE
 Lake GOLF COURSE NO. 2 Year 1960

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. _____



1 YEAR BY DAYS X 150 DIVS. 359-141L
 KEUFFEL & ESSER CO. MADE IN U.S.A.
 CALENDAR YEAR

SEA LEVEL ELEVATION

PUMP NO. _____

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

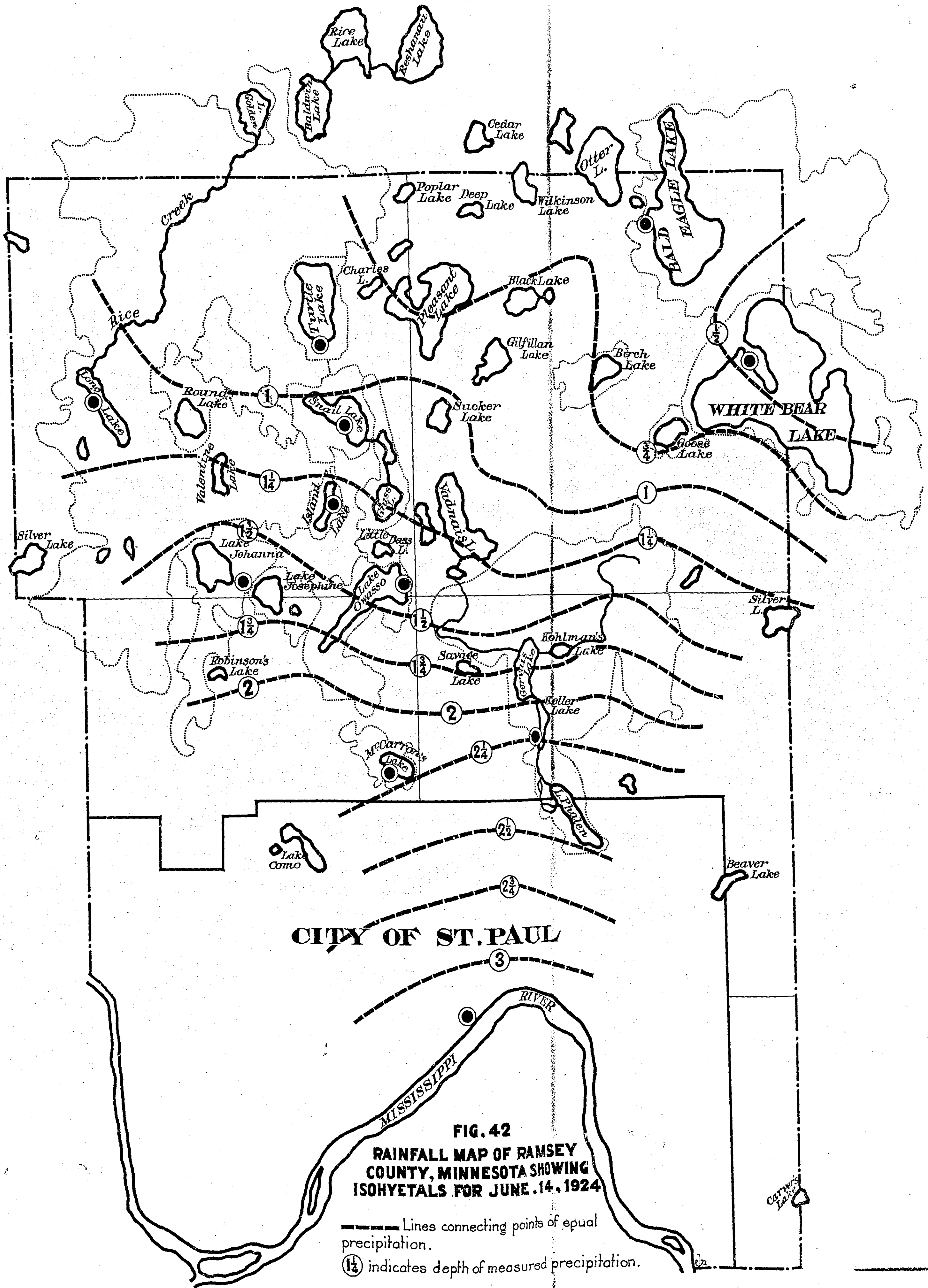
PUMP NO. 21 (KELLER)

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE		1934	40.97
JULY		1934	40.97
AUG.		1935	40.98
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		5803	122.92

PUMP NO. (COURSE #2)

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

Pumping Costs This Year _____ Cum. Pumping Cost _____
 Mil. Gals. Pumped This Year 13.50 Cum. M. G. Pumped _____
 Equiv. on Lake in Ft. This Year _____ Cum. Equiv. on Lake in Ft. _____
 K. W. H. Consumed This Year _____ Cum. K. W. H. _____
 Av. Costs Per K. W. H. This Year _____ Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year _____ Cum. Av. Costs Per M. G. Pumped _____



10"

