

Precipitation This Year _____

Area in Acres at Normal Elevation _____

Lake JOSEPHINE Year _____

Normal Precipitation _____

Gallons Equiv. to One Foot on Lake _____

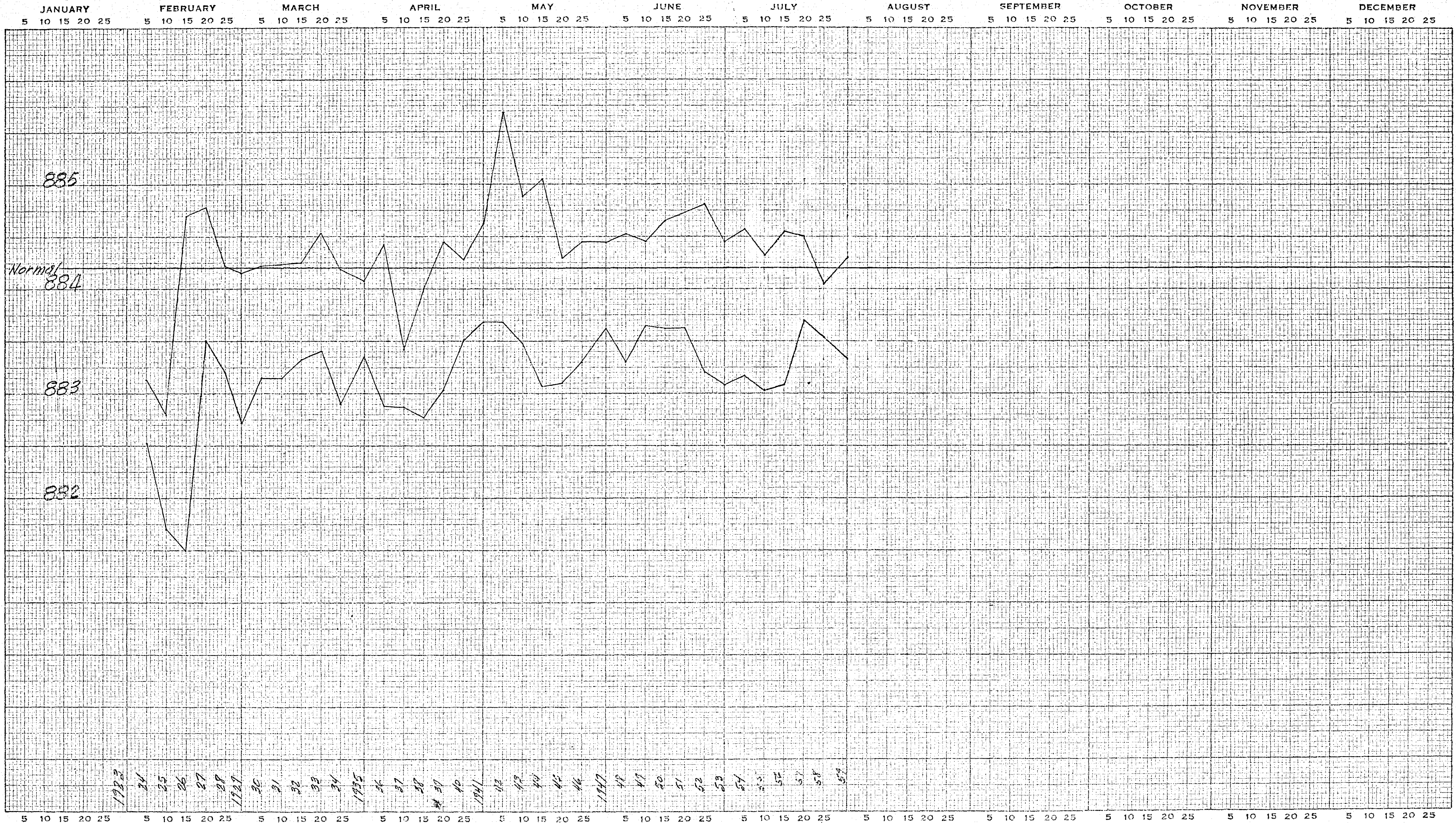
OFFICE OF
RAMSEY COUNTY ENGINEER

Cum. Excess-Deficiency _____
(Since 1924)

Ratio: Watershed to Lake Area _____

Sheet No. _____

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-1414
One Year by Days. Calendar Year.
Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 _____

Mil. Gals. Pumped This Year _____

Equiv. on Lake in Ft. This Year _____

Av. Costs Per K. W. H. This Year _____

Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost _____

Cum. M. G. Pumped _____

Cum. Equiv. on Lake in Ft. _____

Cum. Av. Cost Per K. W. H. _____

Cum. Av. Costs Per M. G. Pumped _____

Precipitation This Year 29.30 30.57
 Normal Precipitation 27.43 27.27
 Cum. Excess-Deficiency +1.87 +3.30
 (Since 1924)

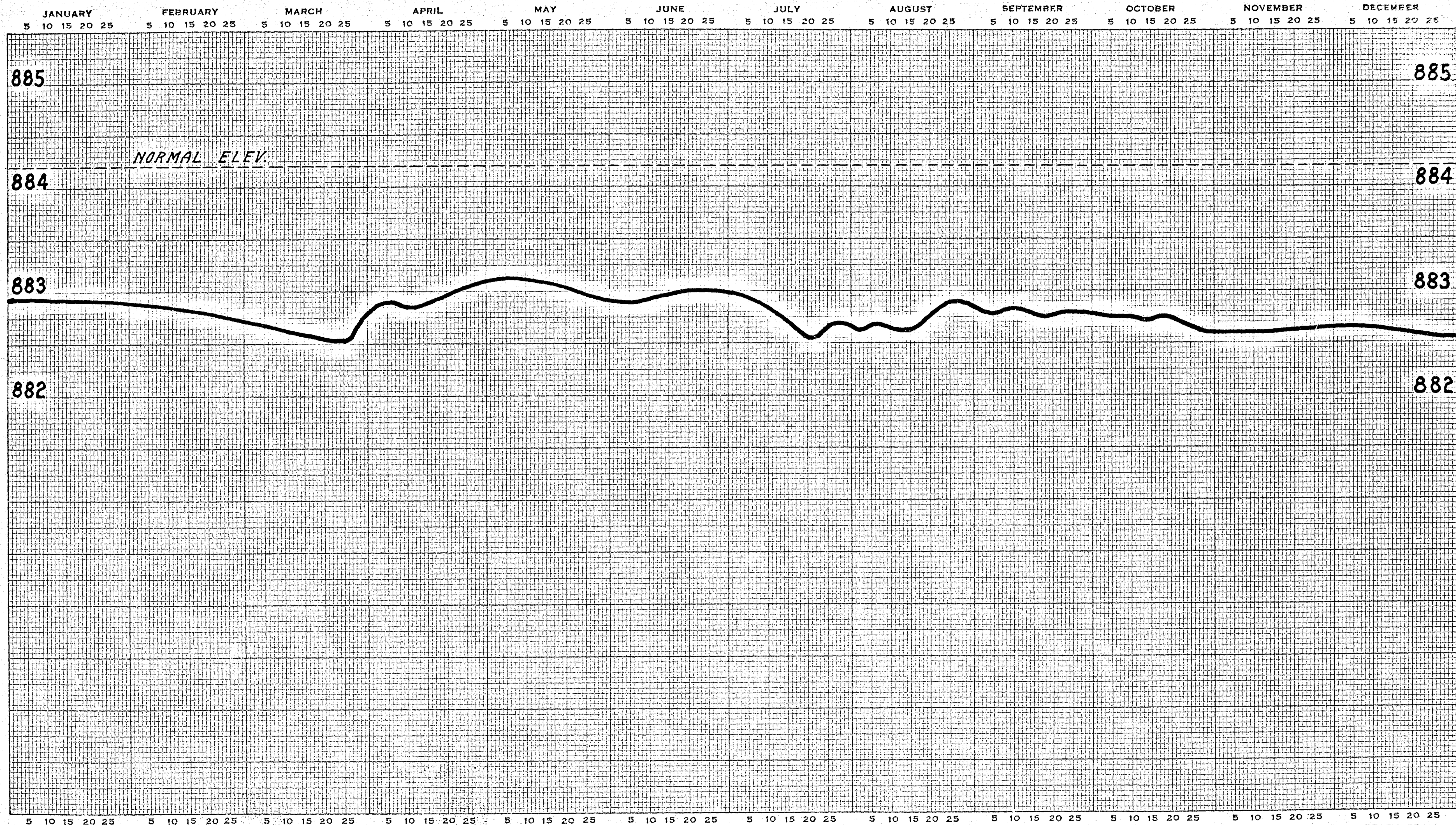
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 to .93

Lake JOSEPHINE Year 1924

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



REUFFEL & ESSER CO., N. Y. NO. 359-141 L
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 _____ Cum. M. G. Pumped _____
 Equiv. on Lake in Ft. This Year _____ Cum. Equiv. on Lake in Ft. _____
 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 19.51 20.87
 Normal Precipitation 27.35 27.24
 Cum. Excess-Deficiency -5.97 -3.07
 (Since 1924)

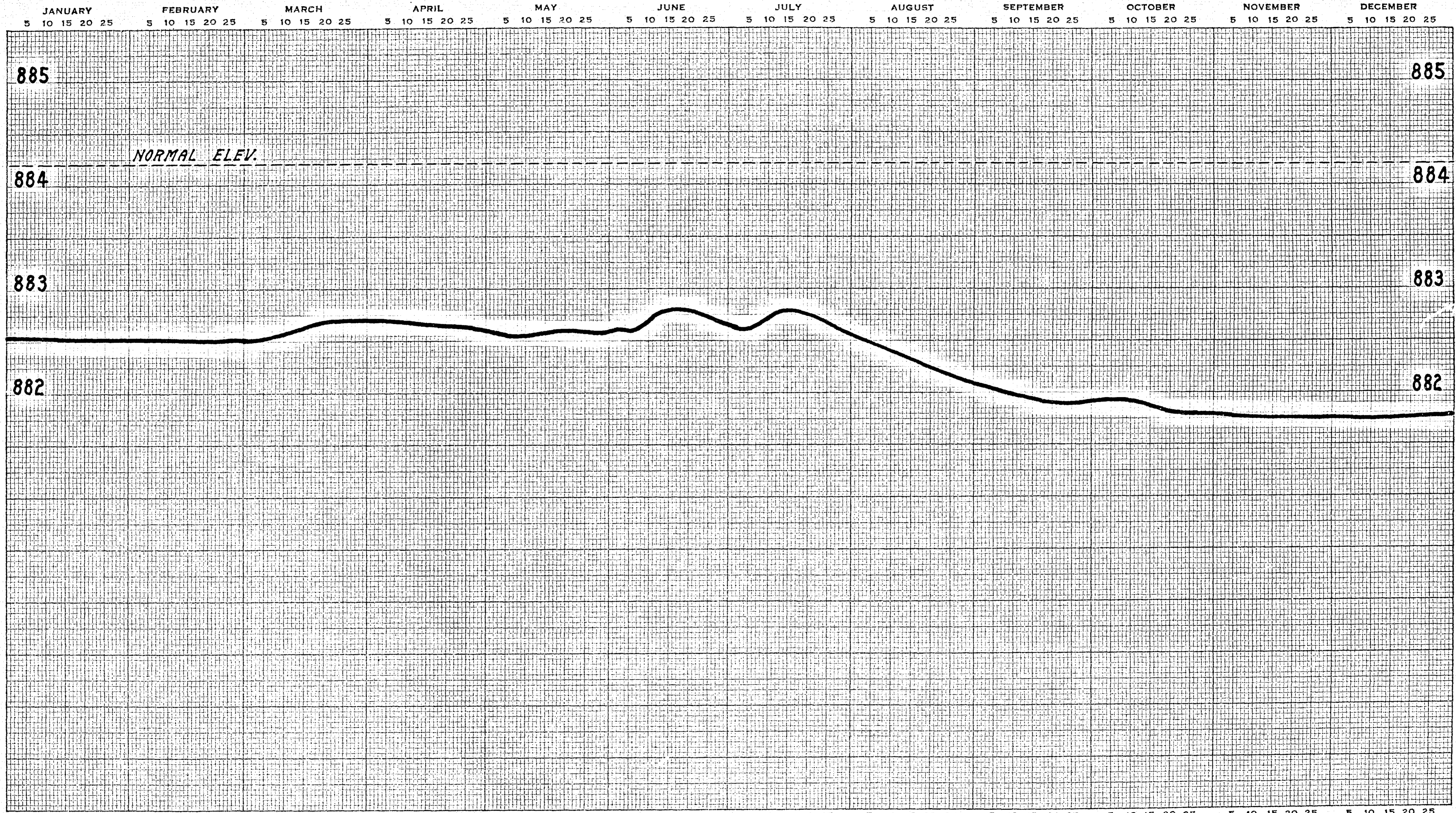
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 to .93

Lake JOSEPHINE Year 1925

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



SEA LEVEL ELEVATION

KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 _____ Cum. M. G. Pumped _____
 Equiv. on Lake in Ft. This Year _____ Cum. Equiv. on Lake in Ft. _____
 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 22.81 27.34
 Normal Precipitation 27.35 27.24
 Cum. Excess-Deficiency -10.51 -2.97
 (Since 1924)

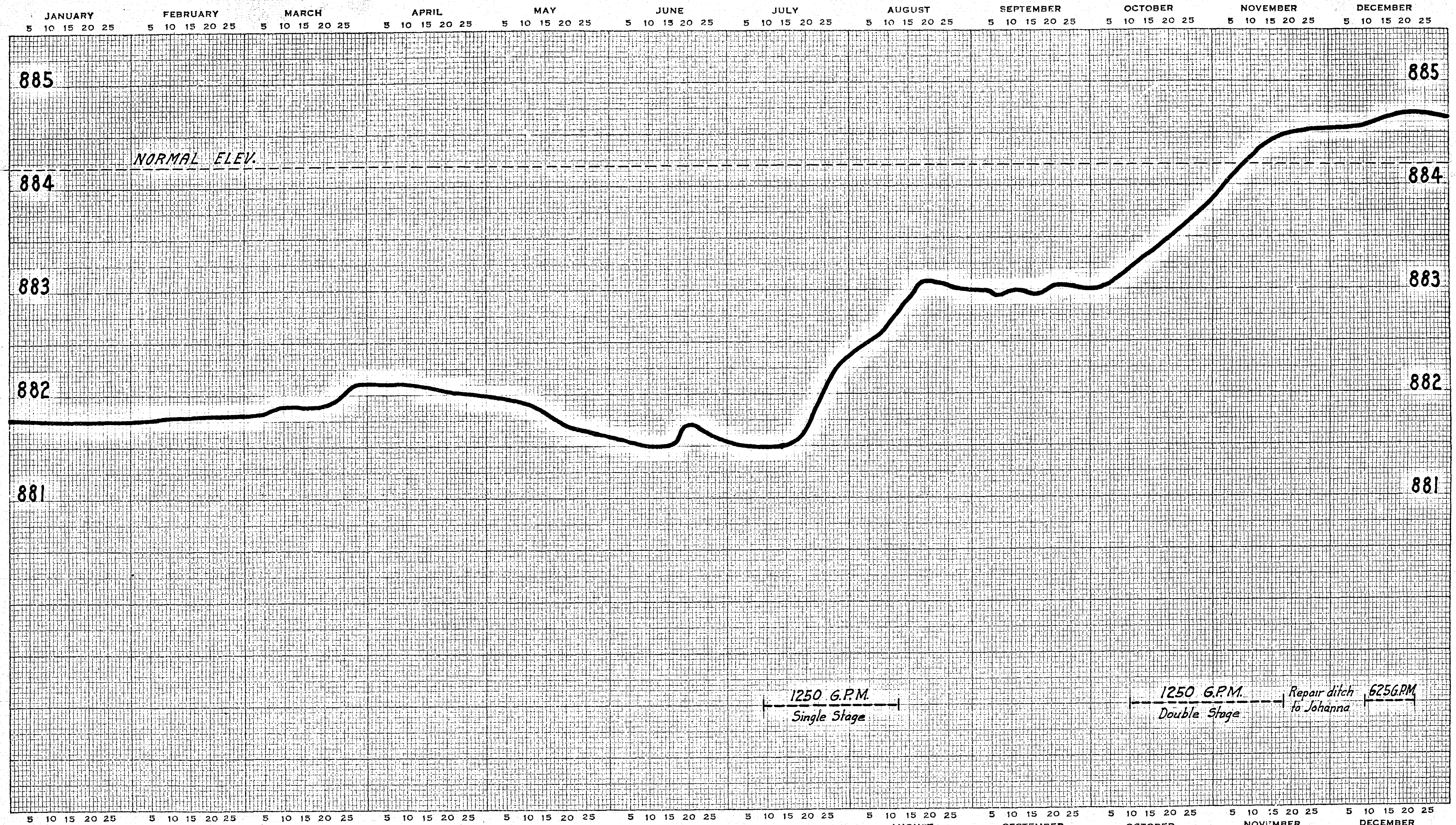
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 to .93

Lake JOSEPHINE Year 1926

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY	39.3	18591	393.65
AUG.			
SEPT.	48.5	22400	587.10
OCT.			
NOV.	13.75	4500	132.20
DEC.			
TOTAL		47491	1113.15

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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	<u>\$ 1113.15</u>	Cum. Pumping Cost	<u>\$ 1113.15</u>
Mil. Gals. Pumped This Year	<u>155.0</u>	Cum. M. G. Pumped	<u>155.0</u>
Equiv. on Lake in Ft. This Year	<u>3.64</u>	Cum. Equiv. on Lake in Ft.	<u>3.64</u>
Av. Costs Per K. W. H. This Year	<u>0.0234</u>	Cum. Av. Cost Per K. W. H.	<u>0.0234</u>
Av. Costs Per M. G. Pumped This Year	<u>7.19</u>	Cum. Av. Costs Per M. G. Pumped	<u>7.19</u>

Precipitation This Year 23.04 26.43
 Normal Precipitation 27.34 27.24
 Cum. Excess-Deficiency -14.81 -3.78
 (Since 1924)

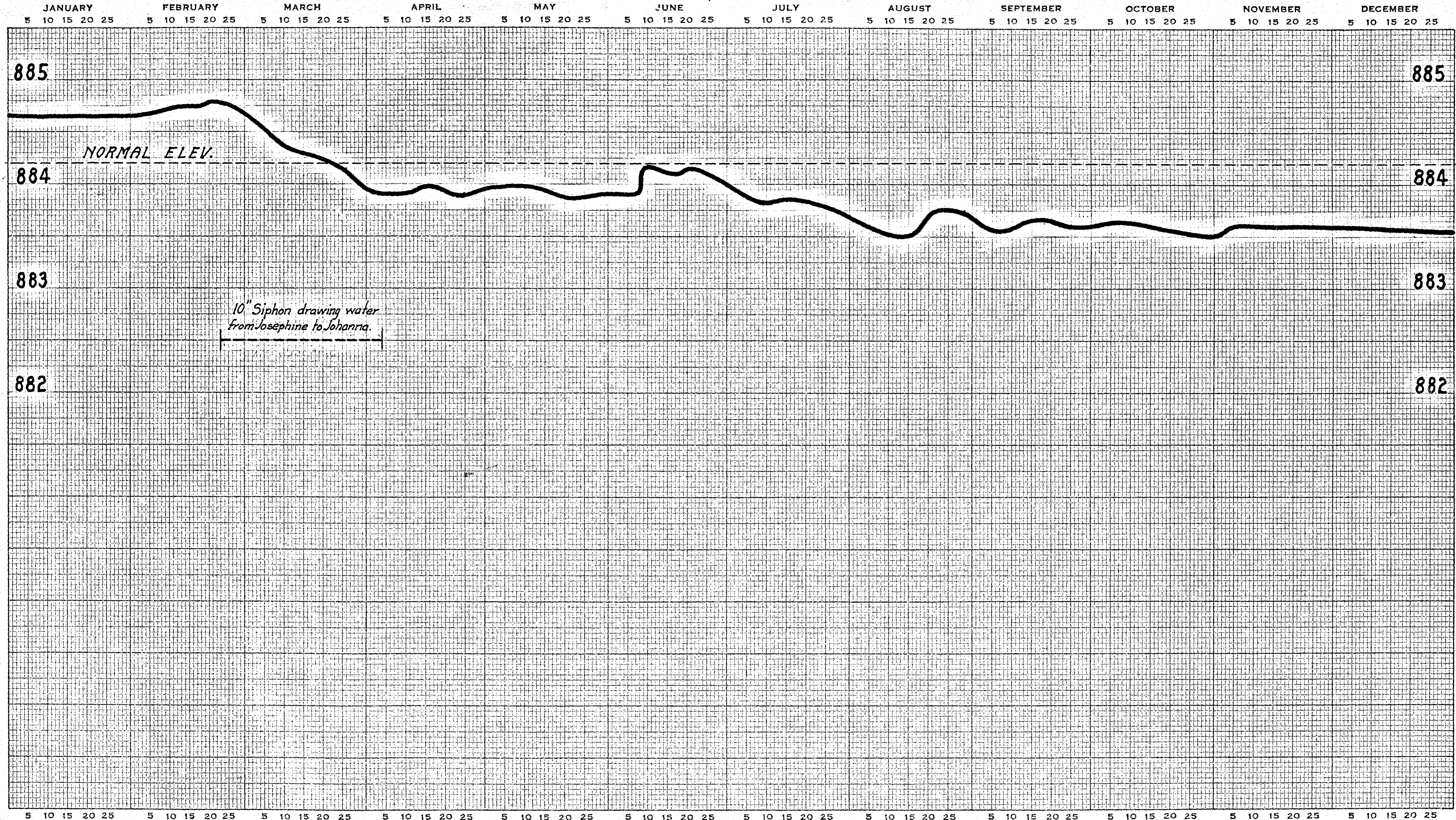
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 to .93

Lake JOSEPHINE Year 1927

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

JANUARY PUMPING UNIT NO. _____				FEBRUARY PUMPING UNIT NO. _____				MARCH PUMPING UNIT NO. _____				APRIL PUMPING UNIT NO. _____				MAY PUMPING UNIT NO. _____				JUNE PUMPING UNIT NO. _____				JULY PUMPING UNIT NO. _____				AUGUST PUMPING UNIT NO. _____				SEPTEMBER PUMPING UNIT NO. _____				OCTOBER PUMPING UNIT NO. _____				NOVEMBER PUMPING UNIT NO. _____				DECEMBER PUMPING UNIT NO. _____											
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost				
JAN.				FEB.				MAR.				APR.				MAY				JUNE				JULY				AUG.				SEPT.				OCT.				NOV.				DEC.											
TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL				TOTAL			

Pumping Costs This Year 0 Cum. Pumping Cost \$1113.15
 Mil. Gals. Pumped This Year 0 Cum. M. G. Pumped 155.0
 Equiv. on Lake in Ft. This Year 0 Cum. Equiv. on Lake in Ft. 3.64
 Av. Costs Per K. W. H. This Year 0 Cum. Av. Cost Per K. W. H. 0.0234
 Av. Costs Per M. G. Pumped This Year 0 Cum. Av. Costs Per M. G. Pumped 7.19

Precipitation This Year 22.48 24.80
 Normal Precipitation 27.31 27.27
 Cum. Excess-Deficiency -19.64 -6.25
 (Since 1924)

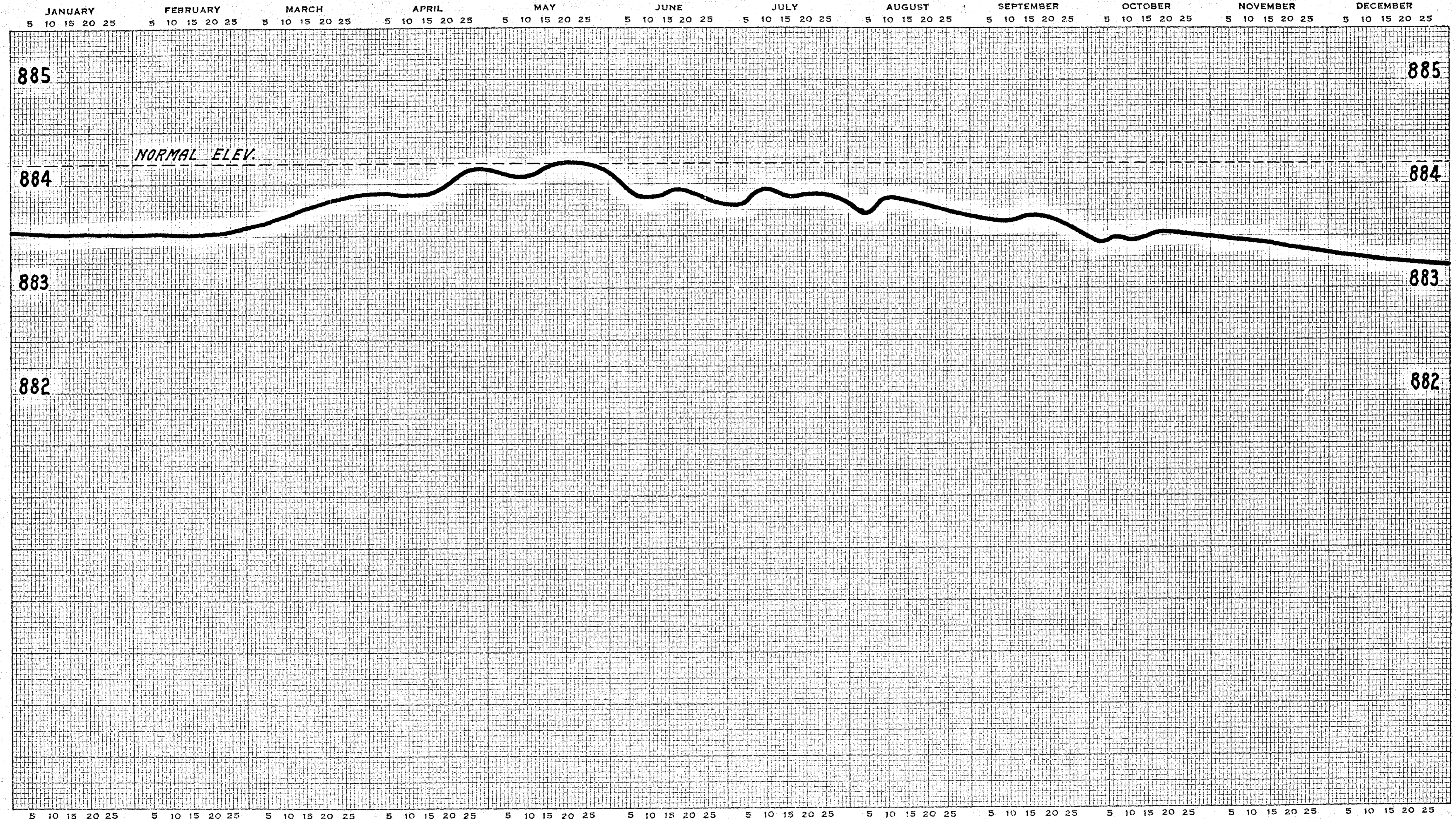
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 to .93

Lake JOSEPHINE Year 1928

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____				PUMPING UNIT NO. _____				PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.				JAN.				JAN.			
FEB.				FEB.				FEB.			
MAR.				MAR.				MAR.			
APR.				APR.				APR.			
MAY				MAY				MAY			
JUNE				JUNE				JUNE			
JULY				JULY				JULY			
AUG.				AUG.				AUG.			
SEPT.				SEPT.				SEPT.			
OCT.				OCT.				OCT.			
NOV.				NOV.				NOV.			
DEC.				DEC.				DEC.			
TOTAL				TOTAL				TOTAL			

Pumping Costs This Year 0
 Mil. Gals. Pumped This Year 0
 Equiv. on Lake in Ft. This Year 0
 Av. Costs Per K. W. H. This Year 0
 Av. Costs Per M. G. Pumped This Year 0
 Cum. Pumping Cost \$ 1113.15
 Cum. M. G. Pumped 155.0
 Cum. Equiv. on Lake in Ft. 3.64
 Cum. Av. Cost Per K. W. H. 0.0234
 Cum. Av. Costs Per M. G. Pumped 7.19

Precipitation This Year 23.22 24.39
 Normal Precipitation 27.28 27.24
 Cum. Excess-Deficiency -23.70 -9.10
 (Since 1924)

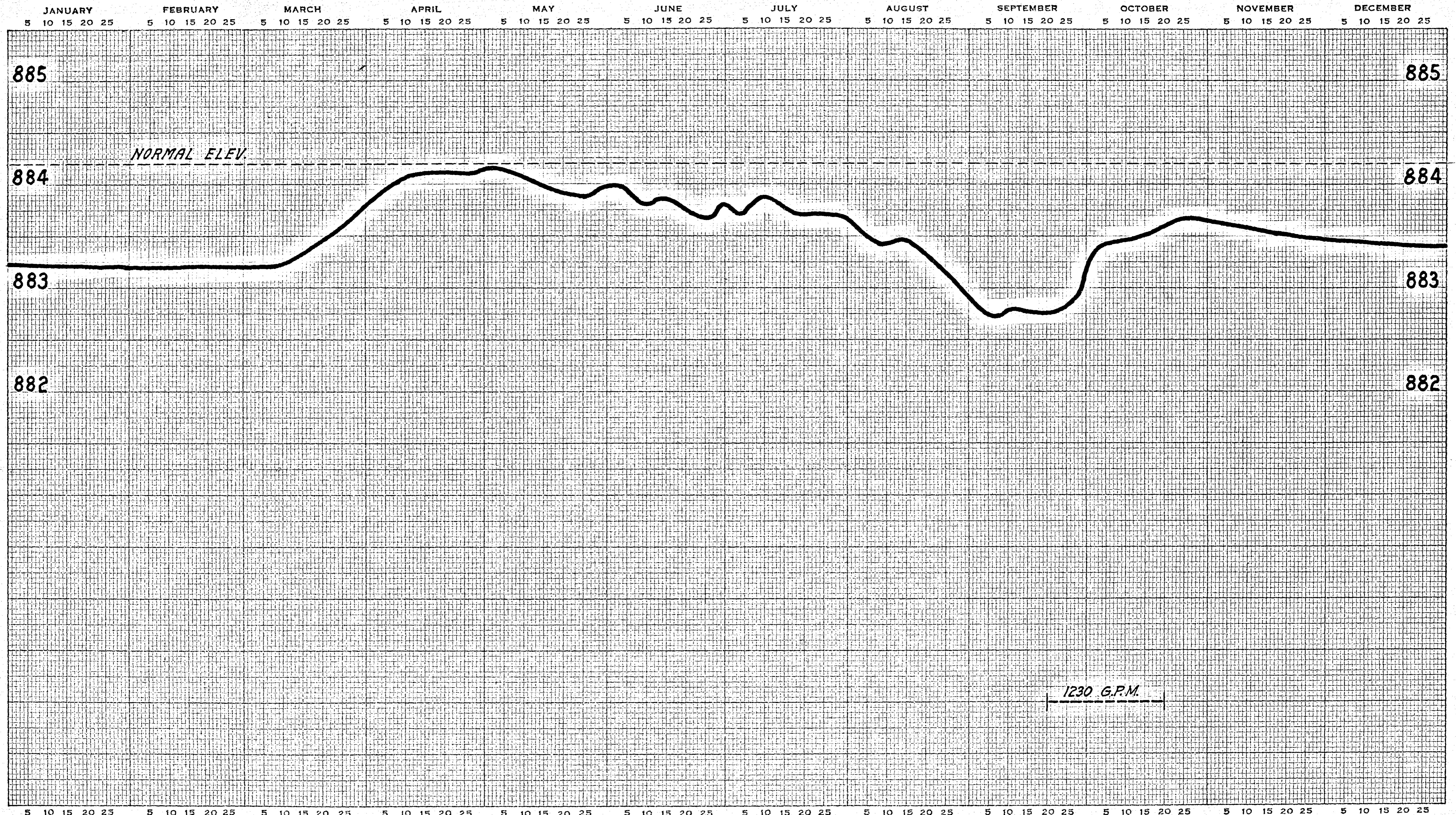
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 170.93

Lake JOSEPHINE Year 1929

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.	<u>26.0</u>	<u>36.50</u>	<u>190.24</u>
OCT.	<u>25.5</u>	<u>86.50</u>	<u>254.96</u>
NOV.			
DEC.			
TOTAL		<u>12300</u>	<u>445.20</u>

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 \$ 445.20
 Mil. Gals. Pumped This Year 53.80
 Equiv. on Lake in Ft. This Year 1.26
 Av. Costs Per K. W. H. This Year 0.0362
 Av. Costs Per M. G. Pumped This Year 8.30

Cum. Pumping Cost \$ 1558.35
 Cum. M. G. Pumped 208.80
 Cum. Equiv. on Lake in Ft. 4.90
 Cum. Av. Cost Per K. W. H. 0.0264
 Cum. Av. Costs Per M. G. Pumped 7.43

50

Precipitation This Year 19.09 20.05
 Normal Precipitation 27.20 27.24
 Cum. Excess-Deficiency -31.81 -16.29
 (Since 1924)

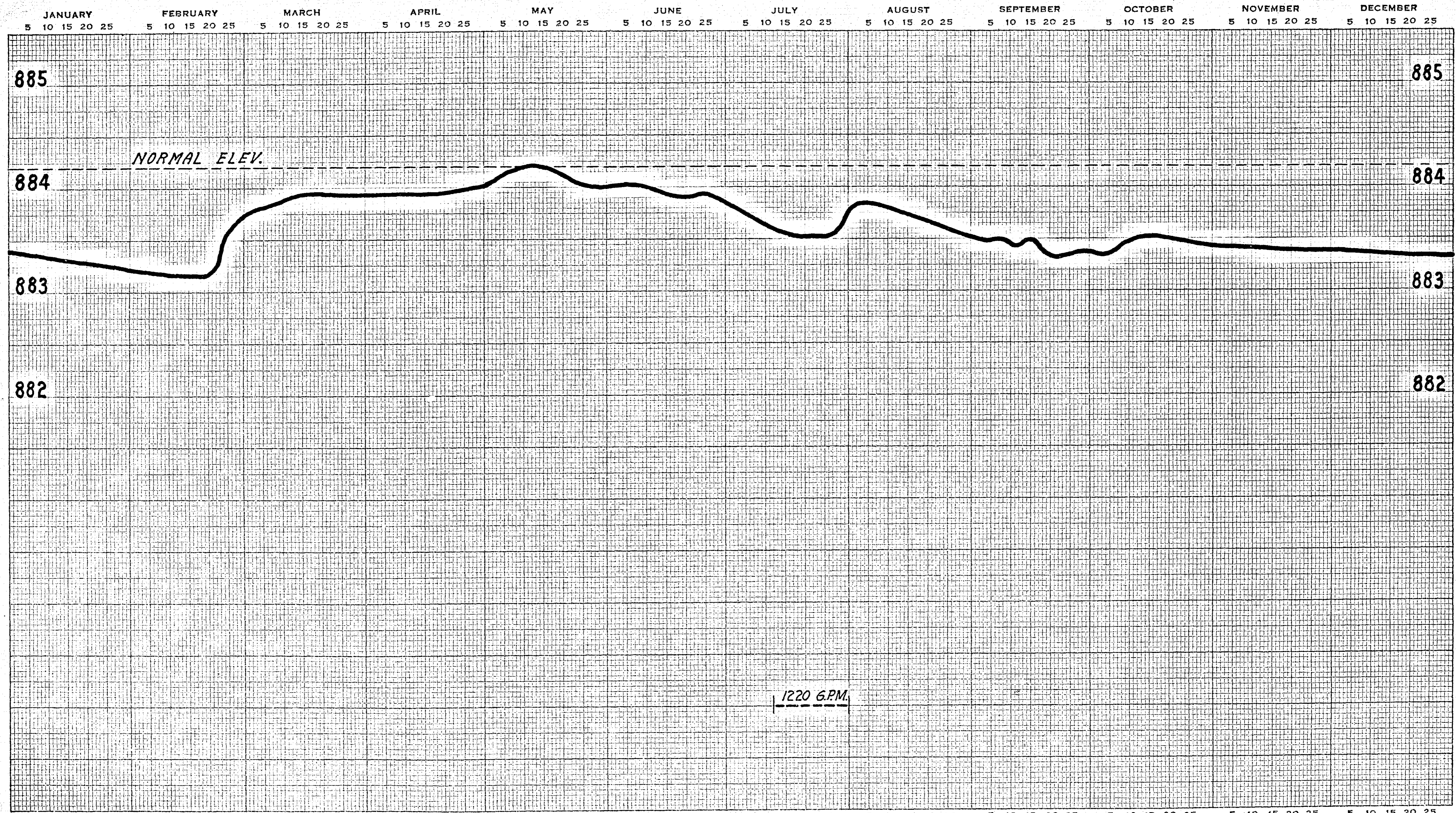
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 170.93

Lake JOSEPHINE Year 1930

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

JANUARY PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY	<u>26.0</u>	<u>10386</u>	<u>173.99</u>
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		<u>103.86</u>	<u>173.99</u>

MARCH PUMPING UNIT NO. _____

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

MAY PUMPING UNIT NO. _____

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 173.99
 Mil. Gals. Pumped This Year 32.4
 Equiv. on Lake in Ft. This Year 0.756
 Av. Costs Per K. W. H. This Year 0.0167
 Av. Costs Per M. G. Pumped This Year 5.47

Cum. Pumping Cost 1732.34 1732.34
 Cum. M. G. Pumped 241.20 241.20
 Cum. Equiv. on Lake in Ft. 5.656 5.656
 Cum. Av. Cost Per K. W. H. 0.0247 0.0247
 Cum. Av. Costs Per M. G. Pumped 7.20 7.20

Precipitation This Year 19.90 22.60
 Normal Precipitation 27.15 27.20
 Cum. Excess-Deficiency -39.06 -20.93
 (Since 1924)

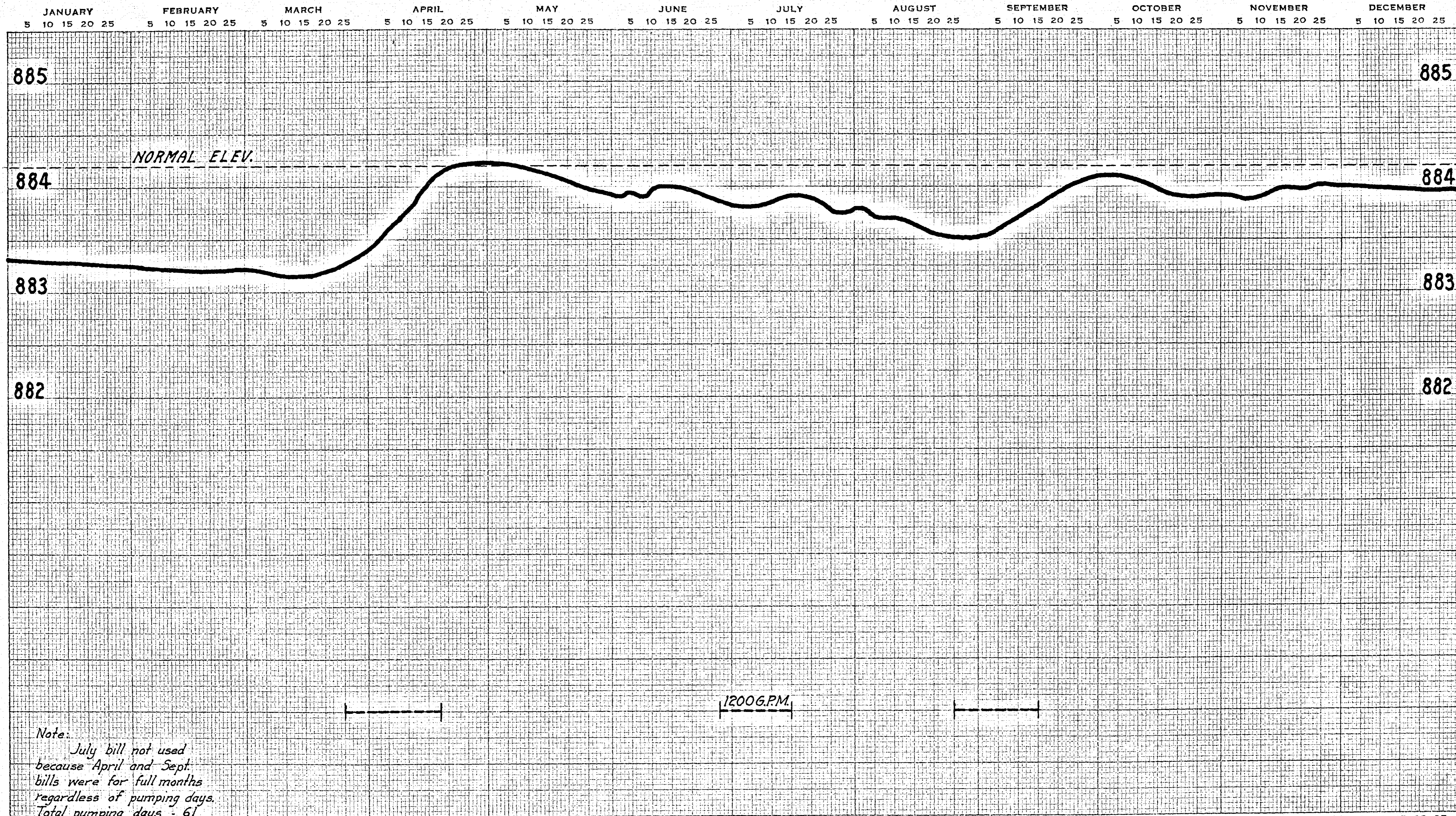
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 to .93

Lake JOSEPHINE Year 1931

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

107,437

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.	250	17550	293.07
MAY			
JUNE			
JULY			
AUG.			
SEPT.	250	19710	320.77
OCT.			
NOV.			
DEC.			
TOTAL		37260	613.84

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 \$ 613.84 Cum. Pumping Cost \$ 2346.18
 Mil. Gals. Pumped This Year 119.0 Cum. M. G. Pumped 360.2
 Equiv. on Lake in Ft. This Year 2.83 Cum. Equiv. on Lake in Ft. 8.49
 Av. Costs Per K. W. H. This Year 0.0166 Cum. Av. Cost Per K. W. H. 0.0218
 Av. Costs Per M. G. Pumped This Year 5.17 Cum. Av. Costs Per M. G. Pumped 6.50

Precipitation This Year 23.14 23.56
 Normal Precipitation 27.11 27.27
 Cum. Excess-Deficiency -43.03 -24.64
 (Since 1924)

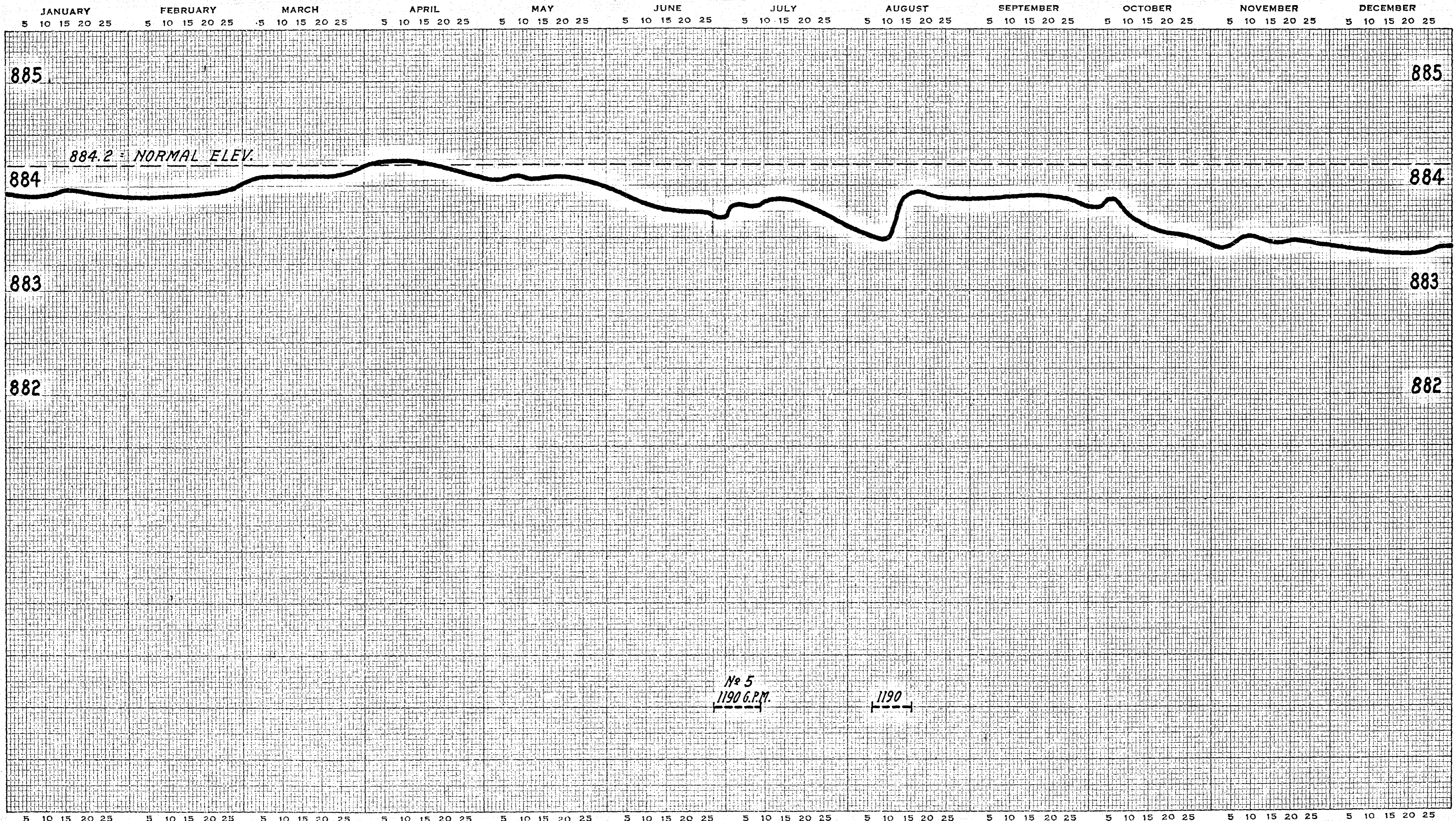
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 TO .93

Lake JOSEPHINE Year 1932

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 328-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

JANUARY PUMPING UNIT NO. <u>5</u>			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		<u>9920</u>	<u>192.96</u>

MARCH PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

MAY PUMPING UNIT NO. _____			
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 \$192.96
 Mil. Gals. Pumped This Year 46.4
 Equiv. on Lake in Ft. This Year 1.08
 Av. Costs Per K. W. H. This Year 0.0193
 Av. Costs Per M. G. Pumped This Year 4.15

Cum. Pumping Cost \$2539.14
 Cum. M. G. Pumped 406.6
 Cum. Equiv. on Lake in Ft. 9.57
 Cum. Av. Cost Per K. W. H. 0.0216
 Cum. Av. Costs Per M. G. Pumped 6.20

55

Precipitation This Year 21.65 23.52
 Normal Precipitation 27.08 27.24
 Cum. Excess-Deficiency -47.56 -28.36
 (Since 1924)

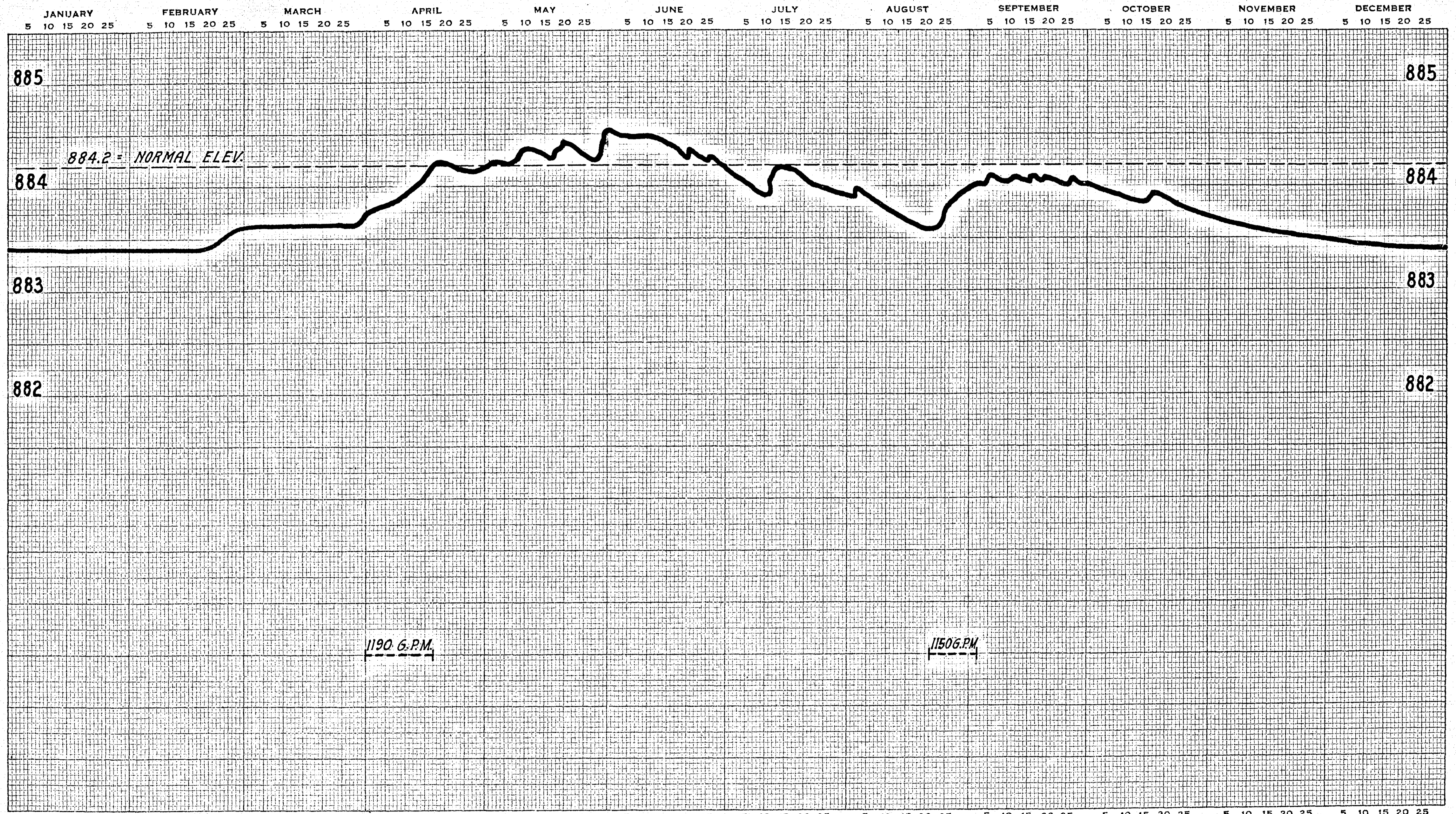
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 TO .93

Lake JOSEPHINE Year 1933

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 989-1411
 One Year by Days, Calendar Year.
 Divided 15 per unit, vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.	<i>Note: Entire April Bill to cover all Josephine 1933</i>		
MAR.			
APR.	<i>Pumping 25.0</i>	<i>166.90</i>	<i>282.04</i>
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		<i>166.93</i>	<i>282.04</i>

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 \$282.04
 Mil. Gals. Pumped This Year 47.3
 Equiv. on Lake in Ft. This Year 1.10
 Av. Costs Per K. W. H. This Year 0.0169
 Av. Costs Per M. G. Pumped This Year 5.97

Cum. Pumping Cost \$2821.18
 Cum. M. G. Pumped 453.9
 Cum. Equiv. on Lake in Ft. 10.67
 Cum. Av. Cost Per K. W. H. 0.021
 Cum. Av. Costs Per M. G. Pumped 6.22
 Cum. C.W.H. 134,047

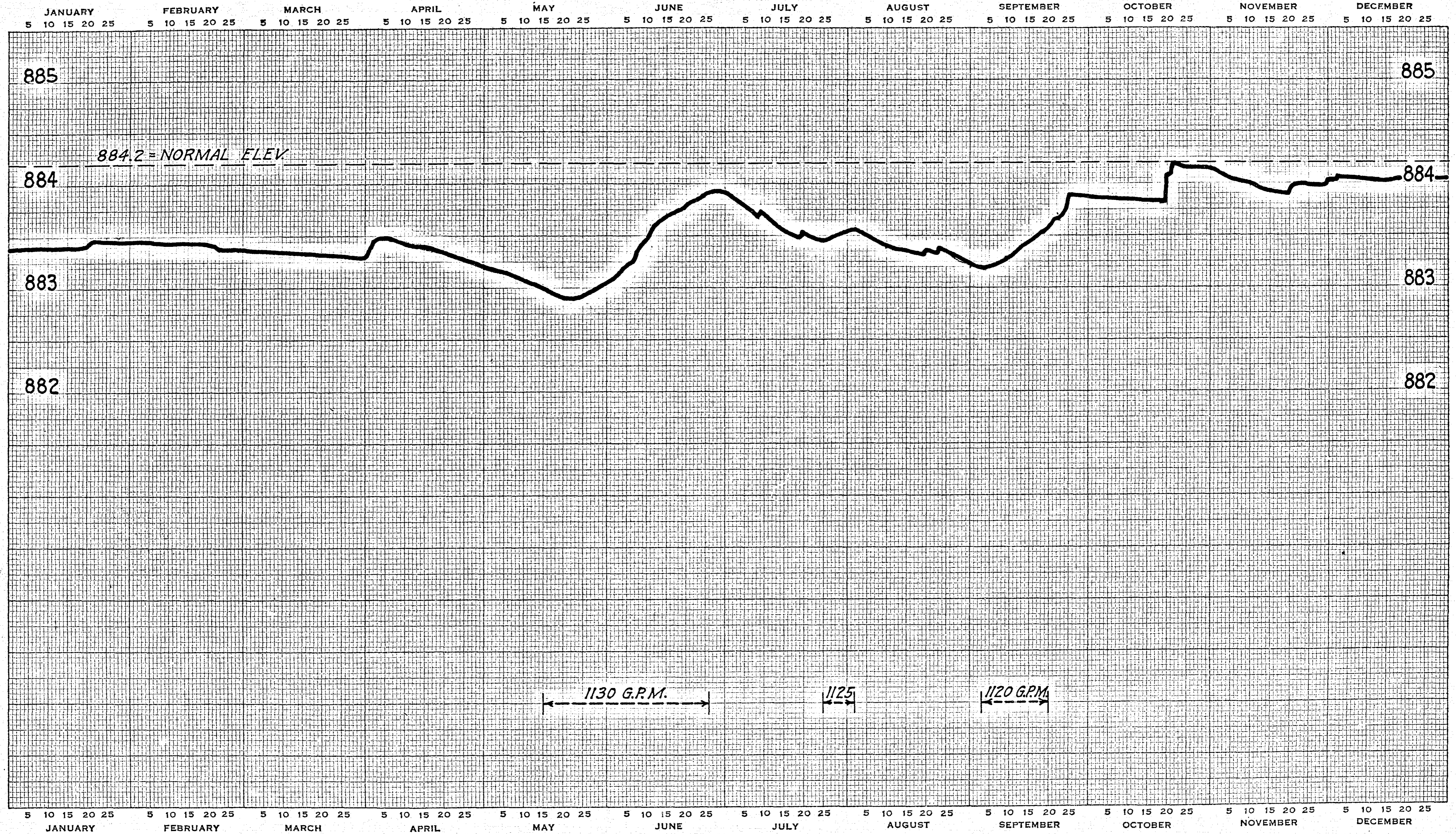
Precipitation This Year 21.97 22.73
 Normal Precipitation 27.05 27.24
 Cum. Excess-Deficiency -51.27 -32.87
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1 to .93
 DAILY RECORD SHEET

Lake JOSEPHINE Year 1934

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5



KEUFFEL & ESSER CO., N. Y., NO. 369-1411
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY	28.0	2848	48.98
JUNE	25.0	17510	292.55
JULY			
AUG.	25.0	4682	77.05
SEPT.	24.5	9260	152.19
OCT.			
NOV.			
DEC.			
TOTAL		34300	570.77

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 570.77
 Mil. Gals. Pumped This Year 109.2
 Equiv. on Lake in Ft. This Year 2.55
 Av. Costs Per K. W. H. This Year 0.0168
 Av. Costs Per M. G. Pumped This Year 5.25

Cum. Pumping Cost 3391.95
 Cum. M. G. Pumped 563.1
 Cum. Equiv. on Lake in Ft. 13.22
 Cum. Av. Cost Per K. W. H. 0.02
 Cum. Av. Costs Per M. G. Pumped 6.00
 Cum. K.W. 168347

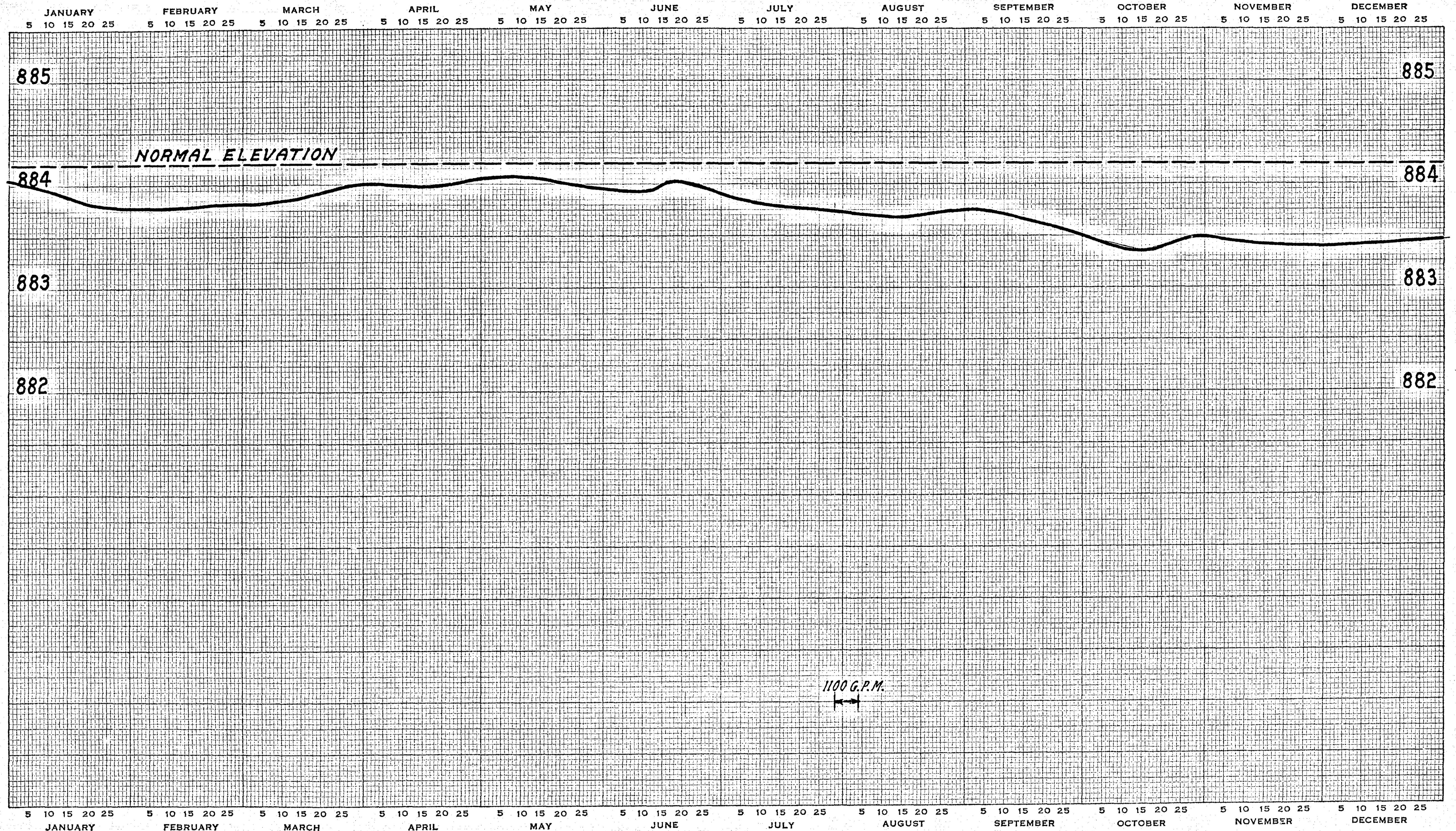
Precipitation This Year 27.50 27.50
 Normal Precipitation 27.15 27.24
 Cum. Excess-Deficiency -50.91 -32.61
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1
 DAILY RECORD SHEET

Lake JOSEPHINE Year 1935

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5



KEUFFEL & ESSER CO., N. Y. NO. 369-1411
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		<u>3530</u>	<u>59.32</u>

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 \$59.32
 Mil. Gals. Pumped This Year 9.50
 Equiv. on Lake in Ft. This Year .22
 Av. Costs Per K. W. H. This Year .0168
 Av. Costs Per M. G. Pumped This Year 6.25

Cum. Pumping Cost 3451.27
 Cum. M. G. Pumped 572.6
 Cum. Equiv. on Lake in Ft. 13.44
 Cum. Av. Cost Per K. W. H. 0.020
 Cum. Av. Costs Per M. G. Pumped 6.03
 Cum. K.W.H. 171877

Precipitation This Year 18.47 18.47
 Normal Precipitation 27.06 27.27
 Cum. Excess-Deficiency -59.51 -41.41
 (Since 1924)

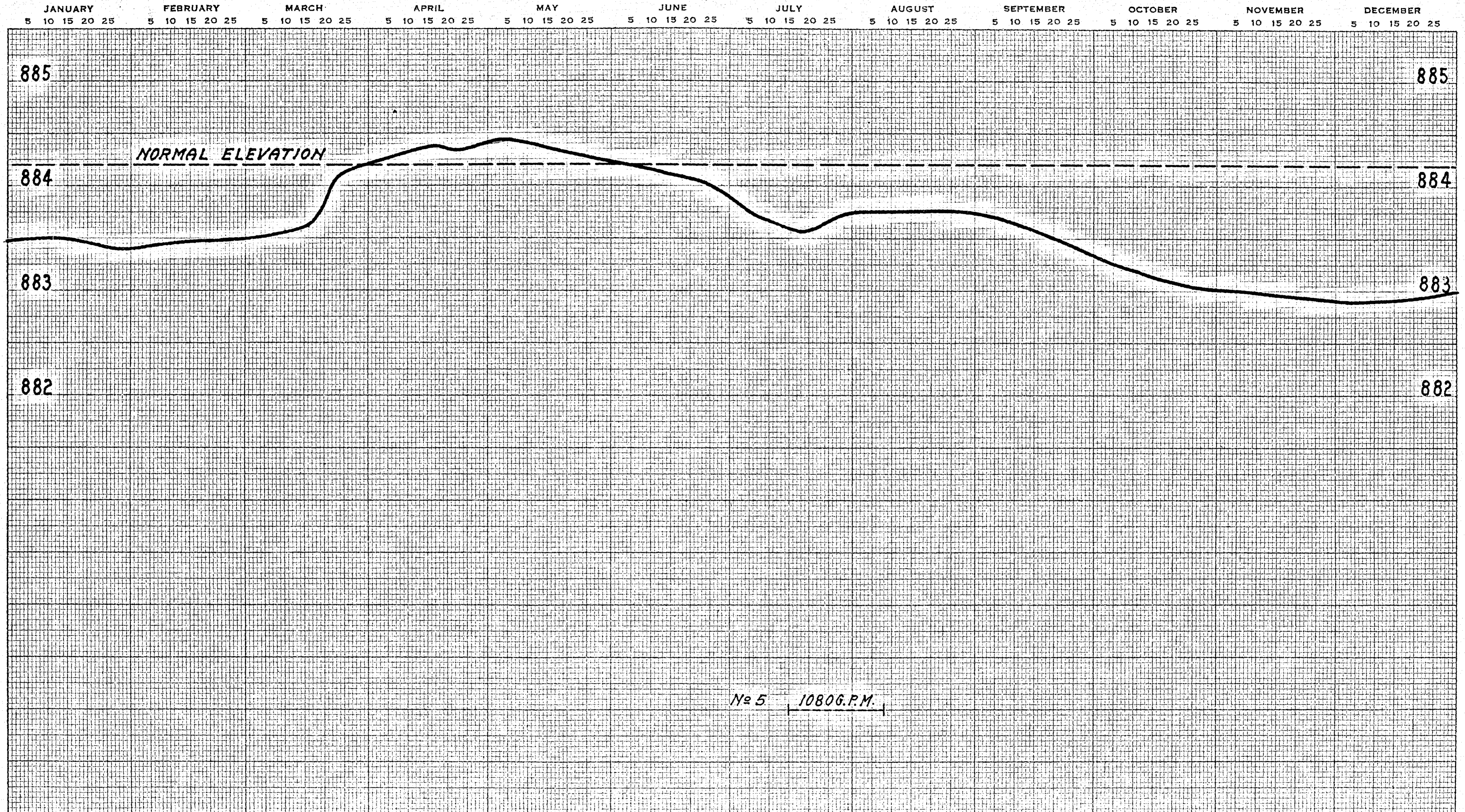
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake JOSEPHINE Year 1936

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



No 5 1080G.P.M.

KEUFFEL & ESSER CO., N. Y. NO. 365-1411
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

JANUARY PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY	<u>30.0</u>	<u>7185</u>	<u>122.50</u>
AUG.	<u>26.0</u>	<u>4634</u>	<u>78.33</u>
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL	<u>11879</u>	<u>200.83</u>	

MARCH PUMPING UNIT NO. _____

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

JUNE PUMPING UNIT NO. 833.73 JULY

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 \$200.83
 Mil. Gals. Pumped This Year 37.32
 Equiv. on Lake in Ft. This Year 0.8699
 K. W. H. Consumed This Year 11879
 Av. Costs Per K. W. H. This Year \$0.0169
 Av. Costs Per M. G. Pumped This Year \$5.381

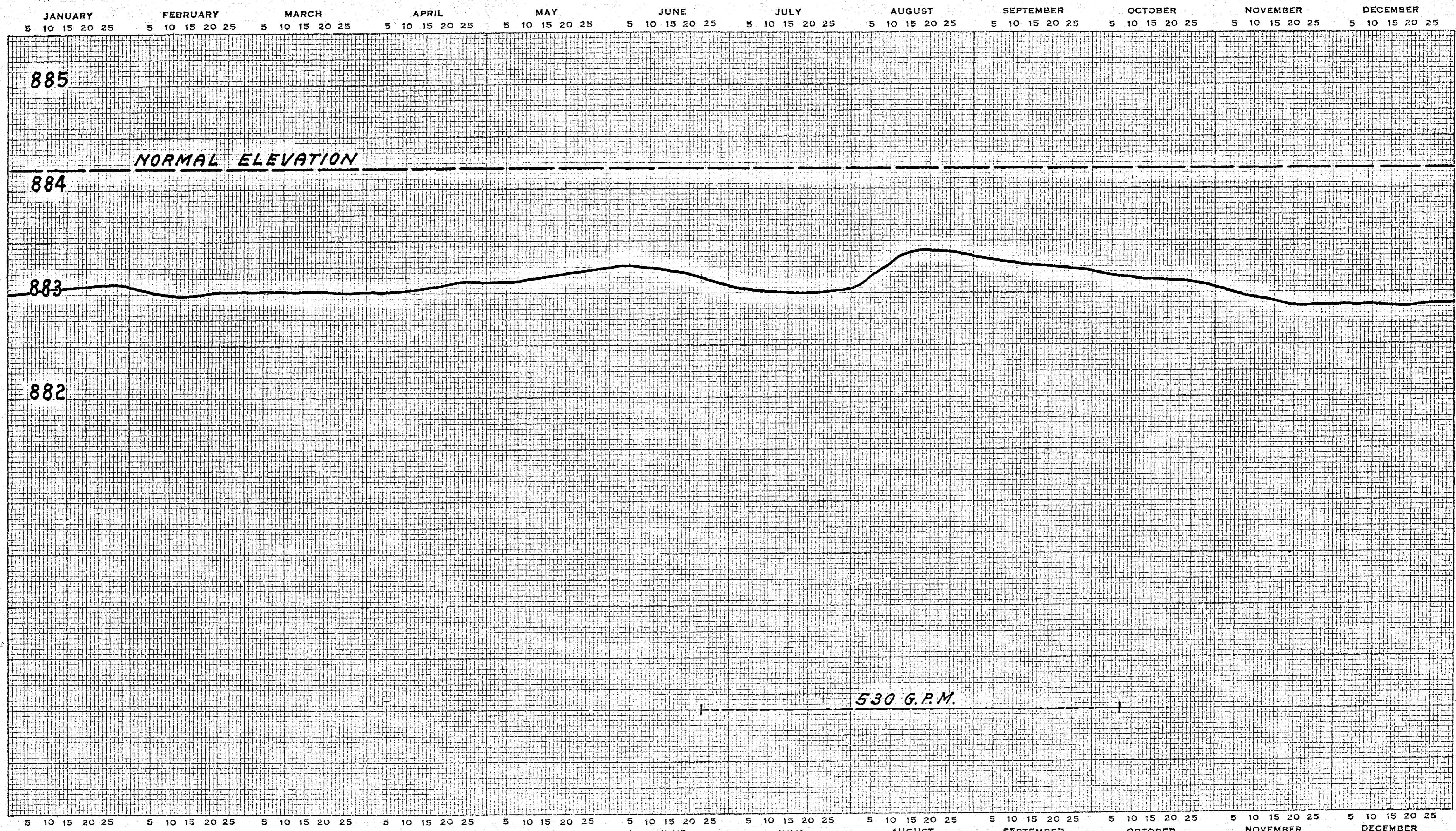
Cum. Pumping Cost \$3652.10
 Cum. M. G. Pumped 609.92
 Cum. Equiv. on Lake in Ft. 14.31
 Cum. K. W. H. 183756
 Cum. Av. Cost Per K. W. H. \$0.01987
 Cum. Av. Costs Per M. G. Pumped \$5.988

Precipitation This Year 22.59 21.49
 Normal Precipitation 27.03 27.24
 Cum. Excess-Deficiency -63.95 47.16
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake JOSEPHINE Year 1937
 OFFICE OF
 RAMSEY COUNTY SURVEYOR
 Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 369-14-11
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

JANUARY FEBRUARY **5** MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		<u>3052</u>	<u>465.80</u>

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 \$465.80
 Mil. Gals. Pumped This Year 81.0
 Equiv. on Lake in Ft. This Year 1.888
 K. W. H. Consumed This Year 31052
 Av. Costs Per K. W. H. This Year 0.0150
 Av. Costs Per M. G. Pumped This Year 5.750

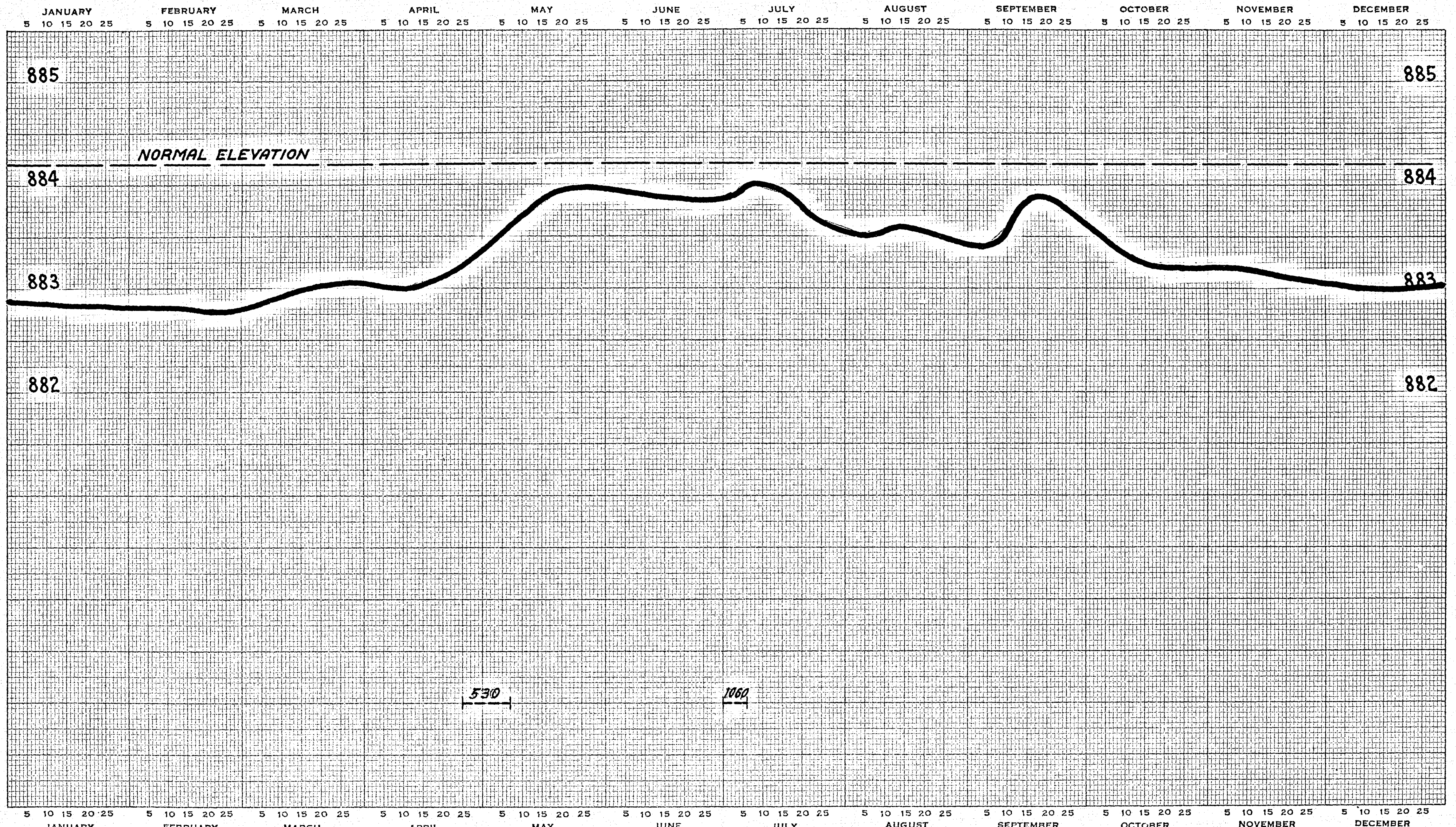
Cum. Pumping Cost \$4117.90
 Cum. M. G. Pumped 690.92
 Cum. Equiv. on Lake in Ft. 16.198
 Cum. K. W. H. 214808
 Cum. Av. Cost Per K. W. H. 0.01917
 Cum. Av. Costs Per M. G. Pumped 5.96

Precipitation This Year 29.75 33.45
 Normal Precipitation 27.05 27.24
 Cum. Excess-Deficiency -61.25 -40.95
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake JOSEPHINE Year 1938
 OFFICE OF
 RAMSEY COUNTY ENGINEER
 Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		<u>695.0</u>	<u>104.25</u>

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 104.25 Cum. Pumping Cost 4222.15
 Mil. Gals. Pumped This Year 16.934 Cum. M. G. Pumped 707.85
 Equiv. on Lake in Ft. This Year 0.395 Cum. Equiv. on Lake in Ft. 16.593
 Av. Costs Per K. W. H. This Year 0.015 Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year 6.156 Cum. Av. Costs Per M. G. Pumped 5.964

Precipitation This Year 24.51 28.57
 Normal Precipitation 27.01 27.24
 Cum. Excess-Deficiency -63.76 -39.62
 (Since 1924)

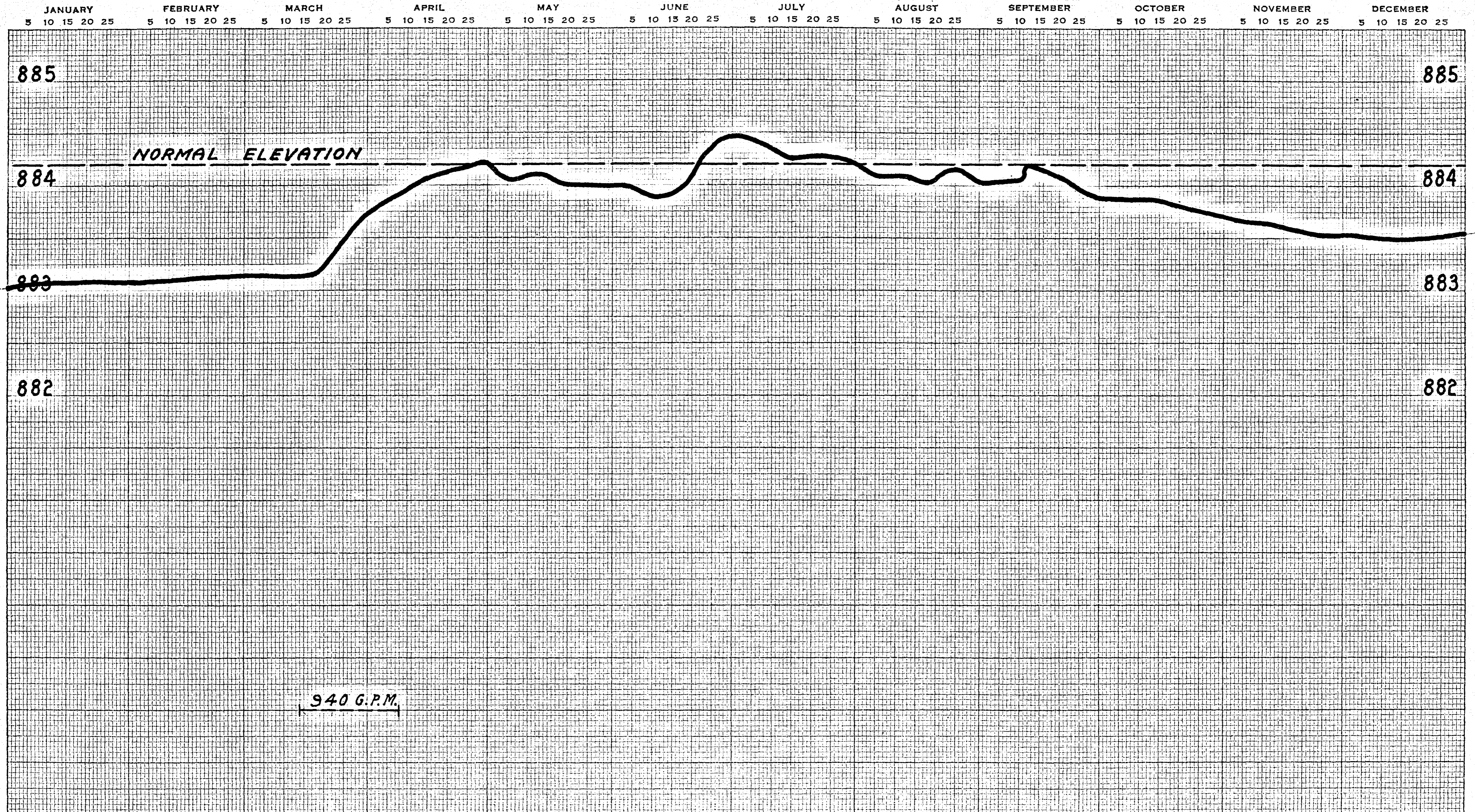
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake JOSEPHINE Year 1939

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 369-141L
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. <u>5</u>				PUMPING UNIT NO. <u>5</u>				PUMPING UNIT NO. <u>5</u>			
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.				JAN.				JAN.			
FEB.				FEB.				FEB.			
MAR.				MAR.				MAR.			
APR.				APR.				APR.			
MAY				MAY				MAY			
JUNE				JUNE				JUNE			
JULY				JULY				JULY			
AUG.				AUG.				AUG.			
SEPT.				SEPT.				SEPT.			
OCT.				OCT.				OCT.			
NOV.				NOV.				NOV.			
DEC.				DEC.				DEC.			
TOTAL		<u>13993</u>	<u>209.90</u>	TOTAL				TOTAL			

Pumping Costs This Year 209.90
 Mil. Gals. Pumped This Year 33.84
 Equiv. on Lake in Ft. This Year 0.789
 K. W. H. Consumed This Year 13993
 Av. Costs Per K. W. H. This Year 0.015
 Av. Costs Per M. G. Pumped This Year 6.202

Cum. Pumping Cost 4432.05
 Cum. M. G. Pumped 741.69
 Cum. Equiv. on Lake in Ft. 17.382
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 5.975

Precipitation This Year 28.54 27.87
 Normal Precipitation 27.04 27.24
 Cum. Excess-Deficiency -62.26 -38.99
 (Since 1924)

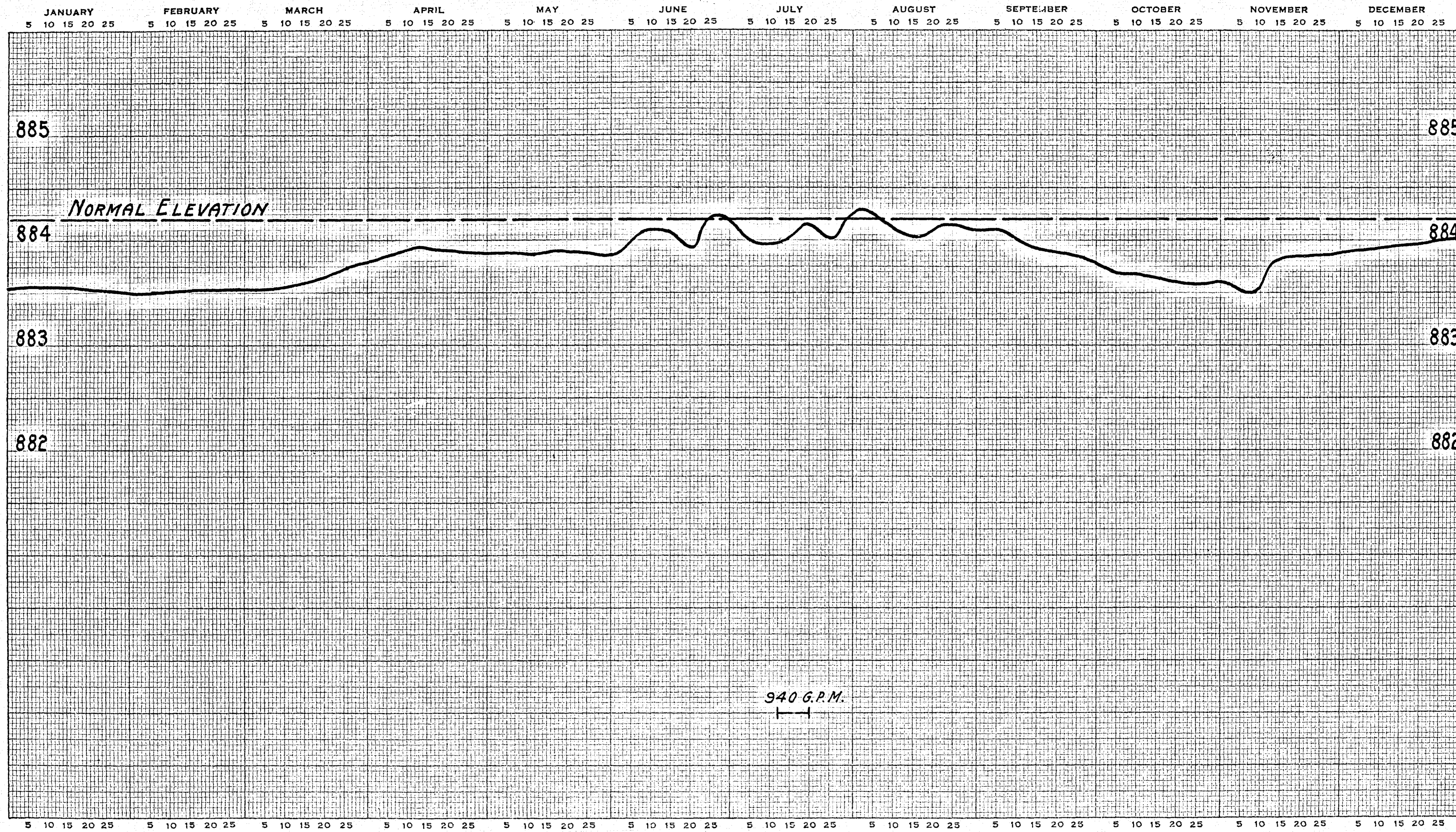
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake JOSEPHINE Year 1940

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 369-1411
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. <u>5</u>				PUMPING UNIT NO. <u>5</u>				PUMPING UNIT NO. <u>5</u>			
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.				JAN.				JAN.			
FEB.				FEB.				FEB.			
MAR.				MAR.				MAR.			
APR.				APR.				APR.			
MAY				MAY				MAY			
JUNE				JUNE				JUNE			
JULY				JULY				JULY			
AUG.				AUG.				AUG.			
SEPT.				SEPT.				SEPT.			
OCT.				OCT.				OCT.			
NOV.				NOV.				NOV.			
DEC.				DEC.				DEC.			
TOTAL				TOTAL				TOTAL			

Pumping Costs This Year 86.14 Cum. Pumping Cost 4518.19
 Mil. Gals. Pumped This Year 10.80 Cum. M. G. Pumped 752.49
 Equiv. on Lake in Ft. This Year 0.25 Cum. Equiv. on Lake in Ft. 17.63
 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 7.98 Cum. Av. Costs Per M. G. Pumped 6.00

Precipitation This Year 27.00 28.98
 Normal Precipitation 27.04 27.24
 Cum. ~~Excess~~-Deficiency - 62.30 - 37.25
 (Since 1924)

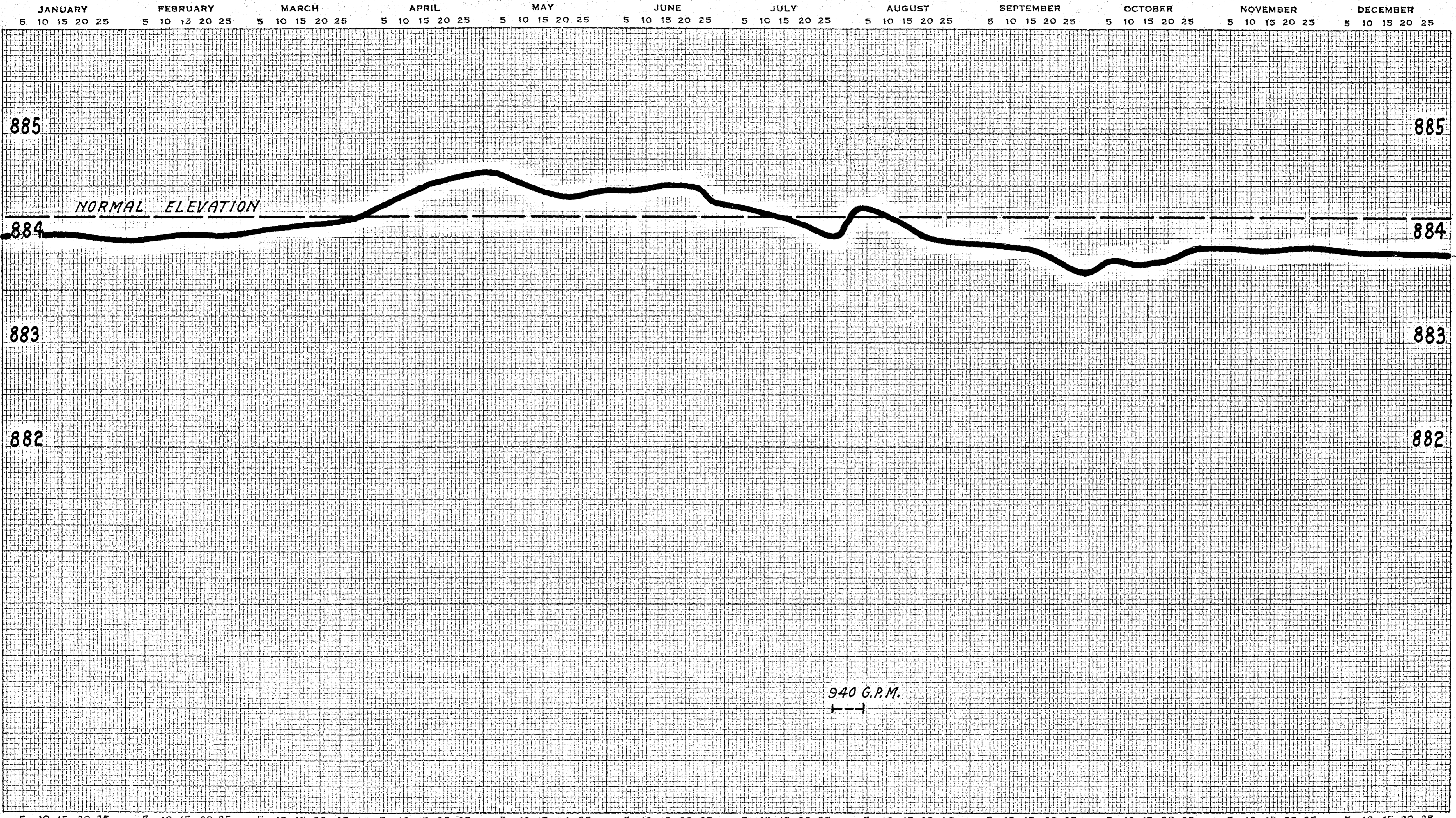
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake **JOSEPHINE** Year 1941

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



REUFEL & ESSER CO., N. Y. NO. 959-1411
 One Year by Days. Calendar Year.
 Divided 19 per unit vertically.

PUMPING UNIT NO. <u>5</u>				PUMPING UNIT NO. _____				PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.				JAN.				JAN.			
FEB.				FEB.				FEB.			
MAR.				MAR.				MAR.			
APR.				APR.				APR.			
MAY				MAY				MAY			
JUNE				JUNE				JUNE			
JULY				JULY				JULY			
AUG.				AUG.				AUG.			
SEPT.				SEPT.				SEPT.			
OCT.				OCT.				OCT.			
NOV.				NOV.				NOV.			
DEC.				DEC.				DEC.			
TOTAL			<u>69.69</u>	TOTAL				TOTAL			

Pumping Costs This Year 69.69 Cum. Pumping Cost 4587.88
 Mil. Gals. Pumped This Year 10.8 Cum. M. G. Pumped 763.29
 Equiv. on Lake in Ft. This Year 0.25 Cum. Equiv. on Lake in Ft. 17.88
 Av. Costs Per K. W. H. This Year _____ Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year 6.45 Cum. Av. Costs Per M. G. Pumped 6.01

Precipitation This Year 38.71 38.71
 Normal Precipitation 27.16 27.24
 Cum. Excess-Deficiency -50.75 -25.78
 (Since 1924)

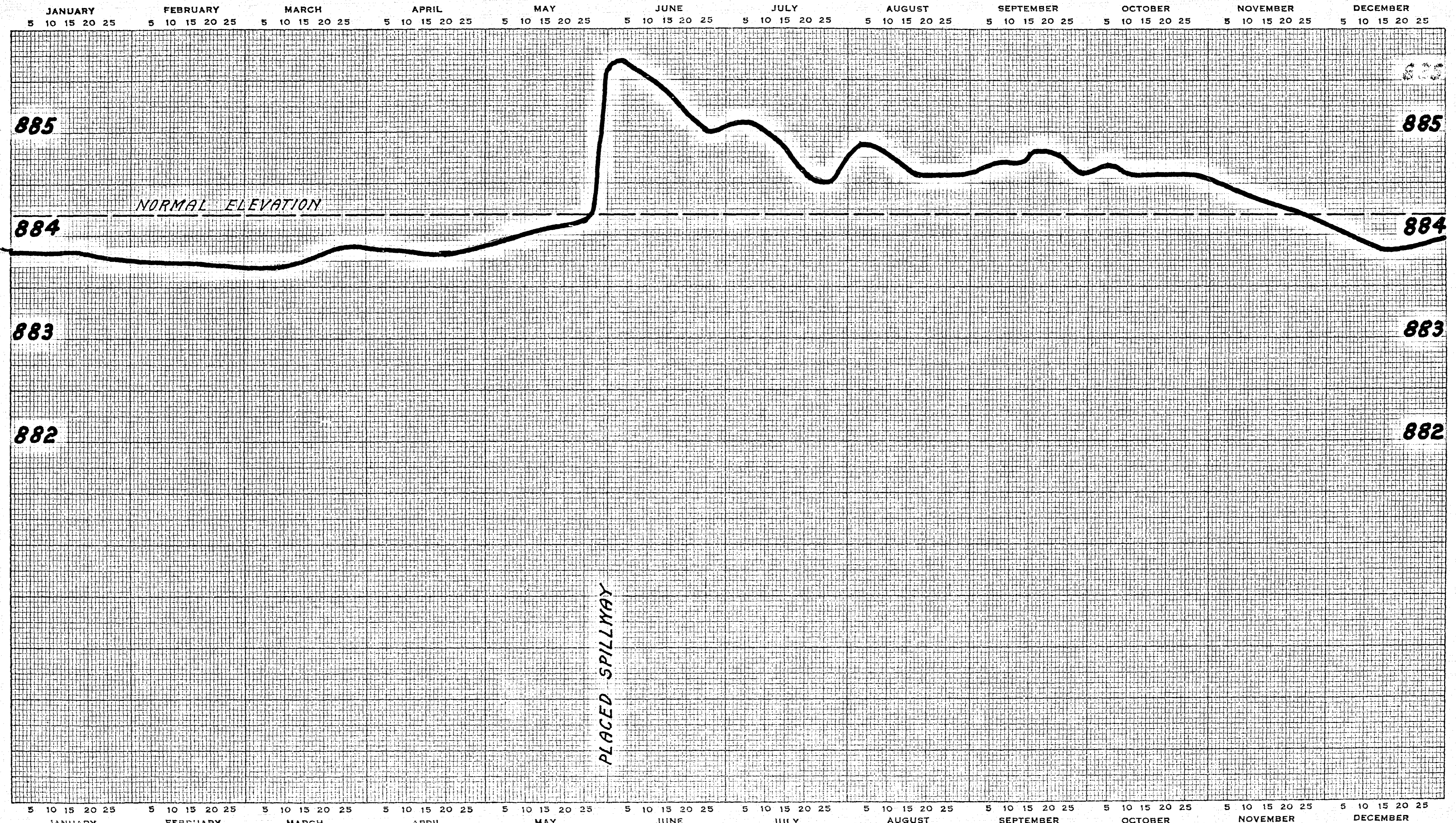
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake JOSEPHINE Year 1942

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 369-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

JANUARY PUMPING UNIT NO. 5

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

MARCH PUMPING UNIT NO. _____

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

MAY PUMPING UNIT NO. _____

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 0.0
 Mil. Gals. Pumped This Year 0.0
 Equiv. on Lake in Ft. This Year _____
 K. W. H. Consumed This Year _____
 Av. Costs Per K. W. H. This Year _____
 Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost 4587.88
 Cum. M. G. Pumped 763.29
 Cum. Equiv. on Lake in Ft. 17.88
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.01

Precipitation This Year 25.74 25.85
 Normal Precipitation 27.15 27.24
 Cum. Excess-Deficiency -52.15 -27.17
 (Since 1924)

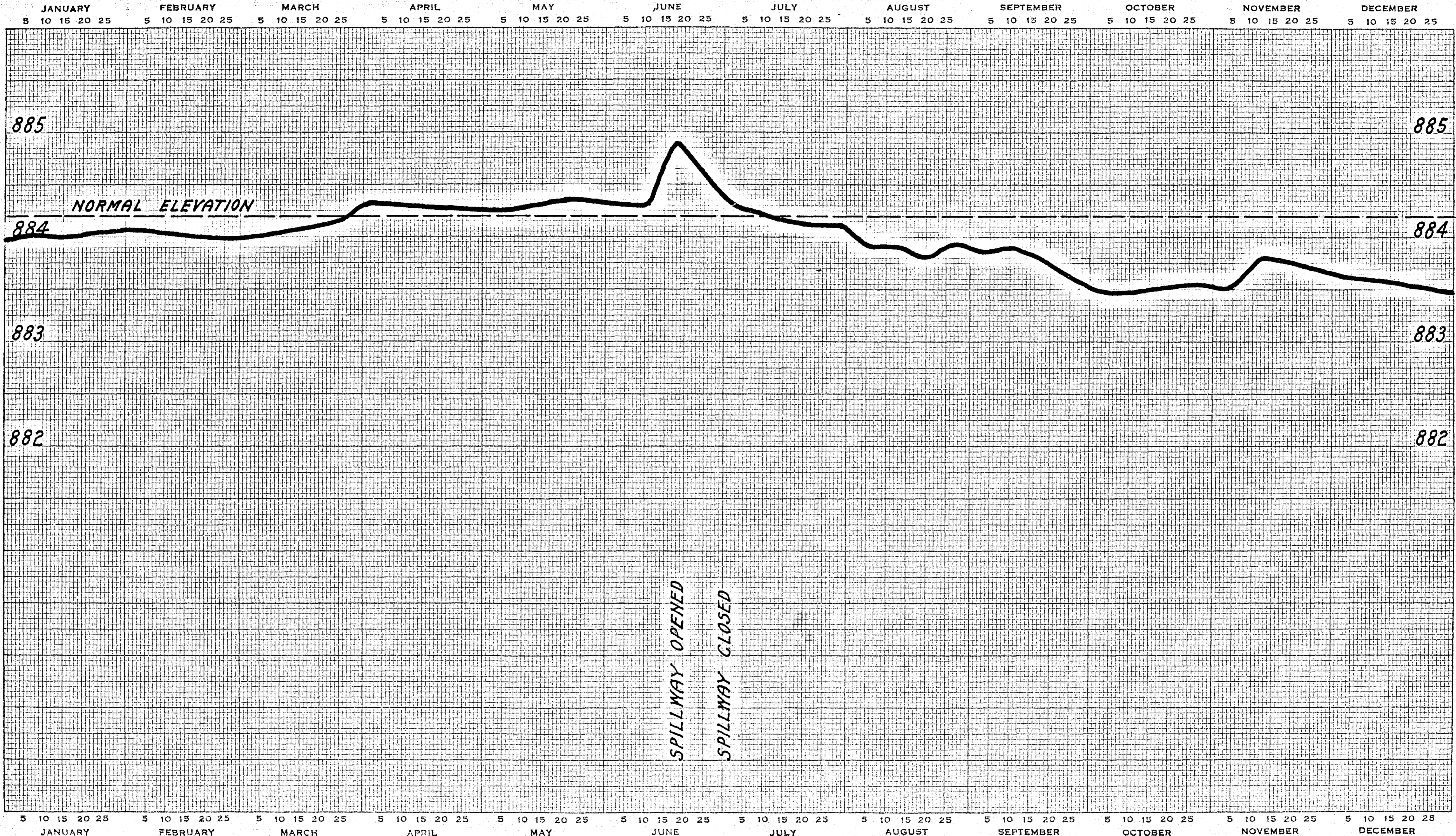
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake JOSEPHINE Year 1943

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 369-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 5

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

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 0.0
 Mil. Gals. Pumped This Year 0.0
 Equiv. on Lake in Ft. This Year _____
 K. W. H. Consumed This Year _____
 Av. Costs Per K. W. H. This Year _____
 Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost 4587.88
 Cum. M. G. Pumped 763.29
 Cum. Equiv. on Lake in Ft. 17.88
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.01

Precipitation This Year 28.76
 Normal Precipitation 27.27
 Cum. Excess-Deficiency - 25.68
 (Since 1924)

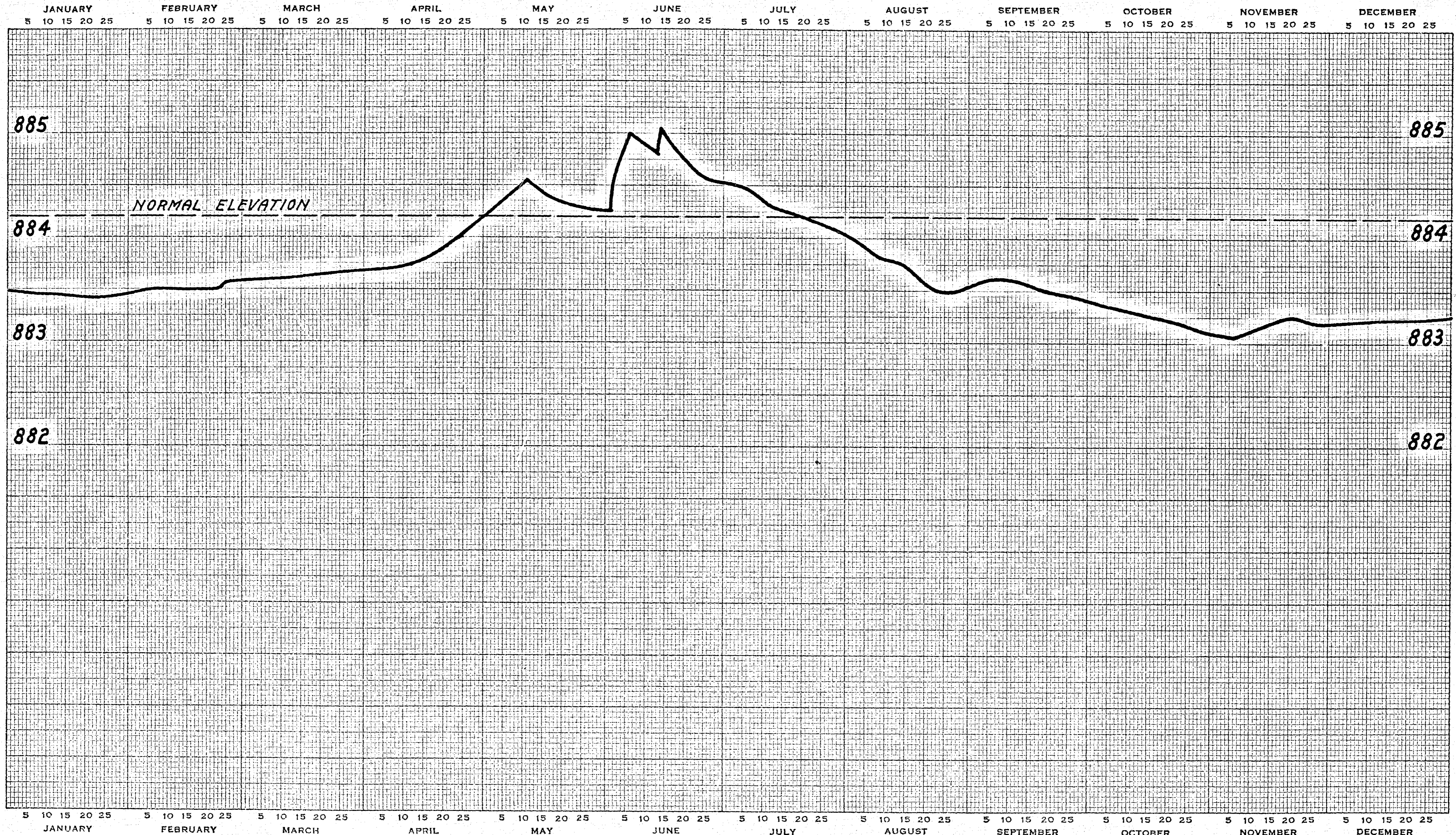
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake **JOSEPHINE** Year **1944**

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-141L
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 0.0
 Mil. Gals. Pumped This Year 0.0
 Equiv. on Lake in Ft. This Year _____
 Av. Costs Per K. W. H. This Year _____
 Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost 4587.88
 Cum. M. G. Pumped 763.29
 Cum. Equiv. on Lake in Ft. 17.88
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.01

Precipitation This Year 28.96 ~~28.96~~
 Normal Precipitation 27.20 ~~27.24~~
 Cum. Excess-Deficiency -20.12 ~~-23.96~~
 (Since 1924)

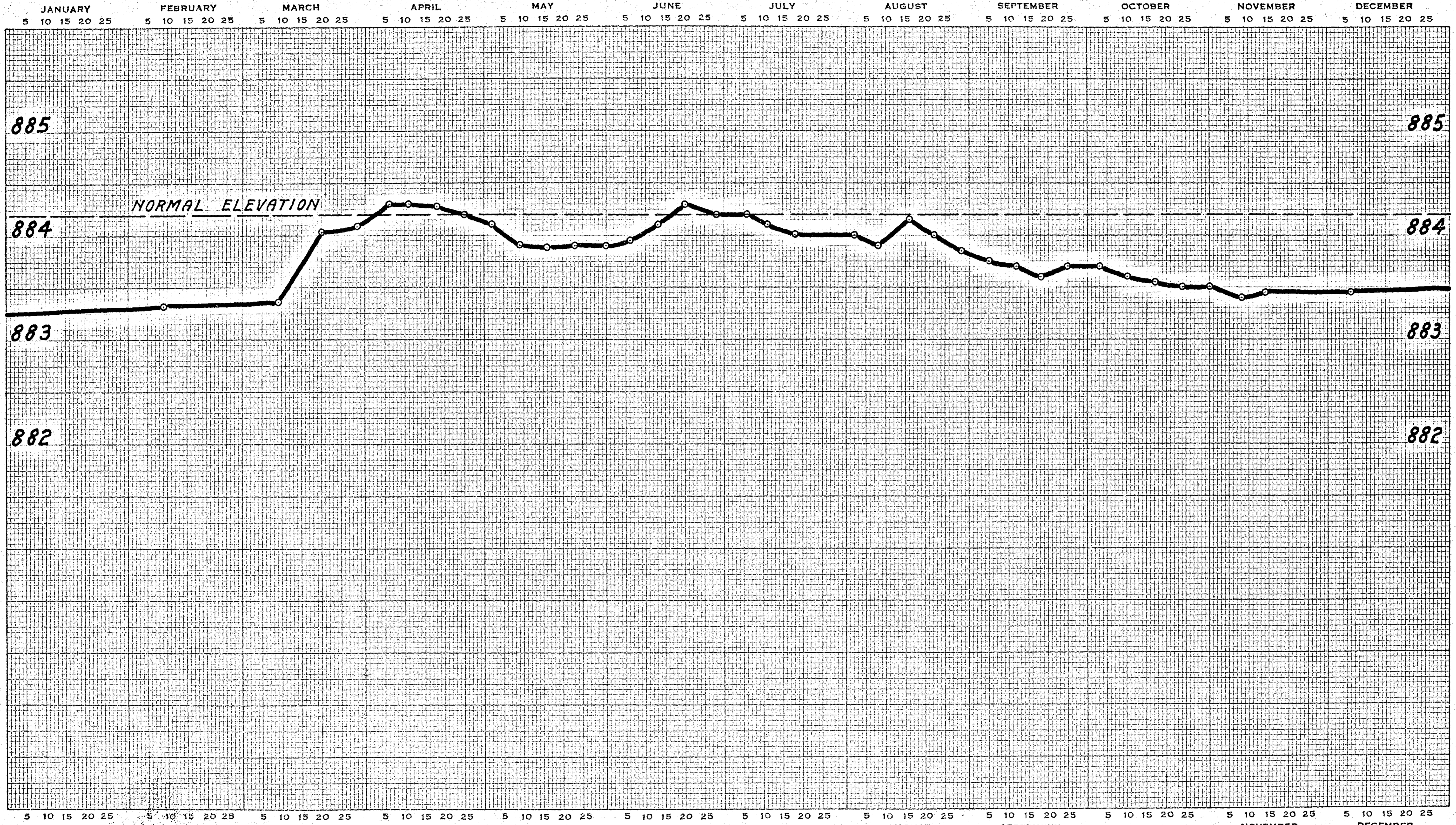
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake **JOSEPHINE** Year **1945**

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 350-1411
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

JANUARY FEBRUARY

PUMPING UNIT NO. _____

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

MARCH APRIL

PUMPING UNIT NO. _____

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

MAY JUNE JULY

PUMPING UNIT NO. _____

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 0.0
 Mil. Gals. Pumped This Year 0.0
 Equiv. on Lake in Ft. This Year _____
 Av. Costs Per K. W. H. This Year _____
 Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost 4587.88
 Cum. M. G. Pumped 763.29
 Cum. Equiv. on Lake in Ft. 17.88
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.01

Precipitation This Year 28.97 30.66
 Normal Precipitation 27.19 27.24
 Cum. Excess-Deficiency 18.34 - 20.54
 (Since 1924)

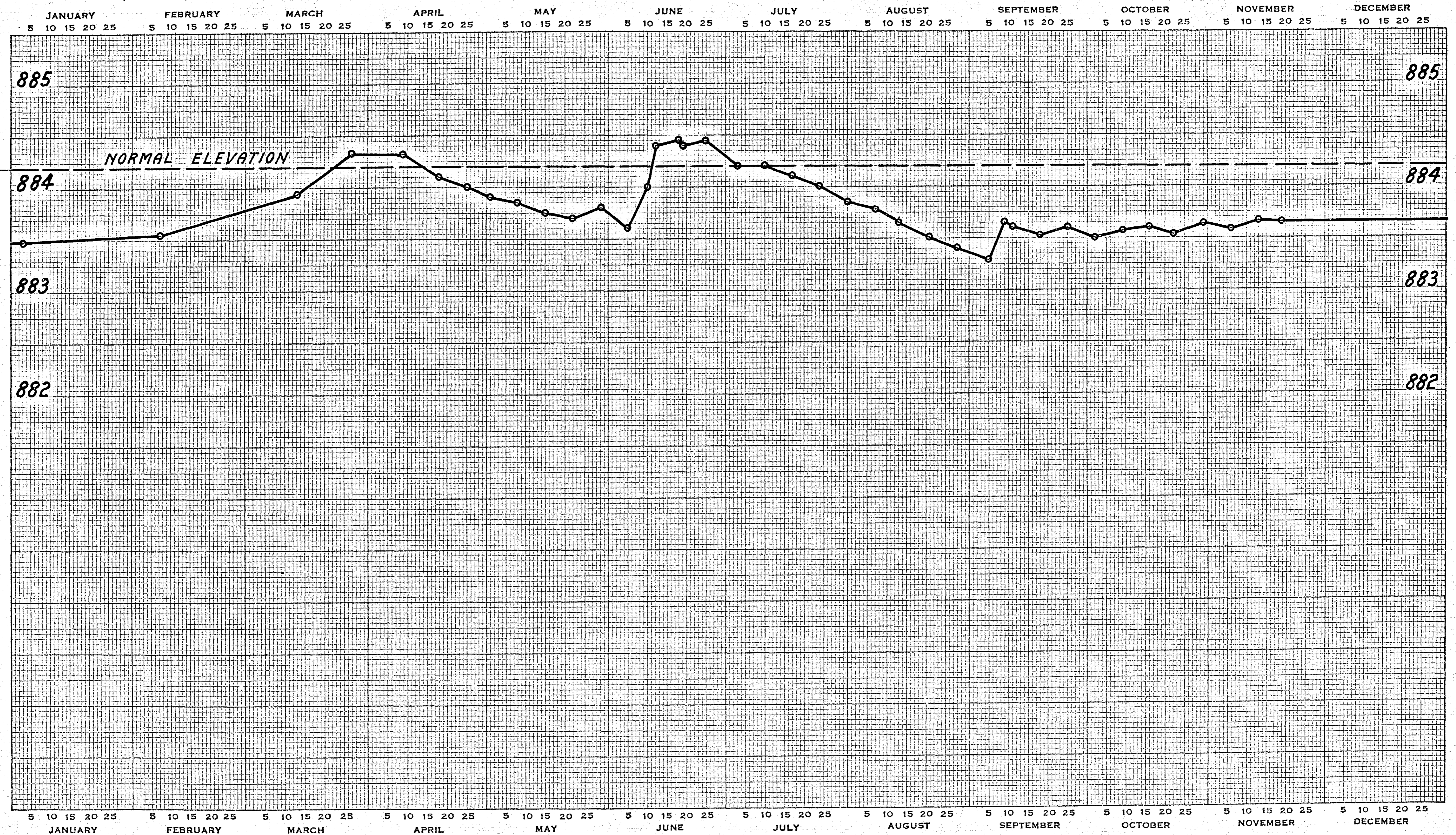
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake JOSEPHINE Year 1946

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 350-1411
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

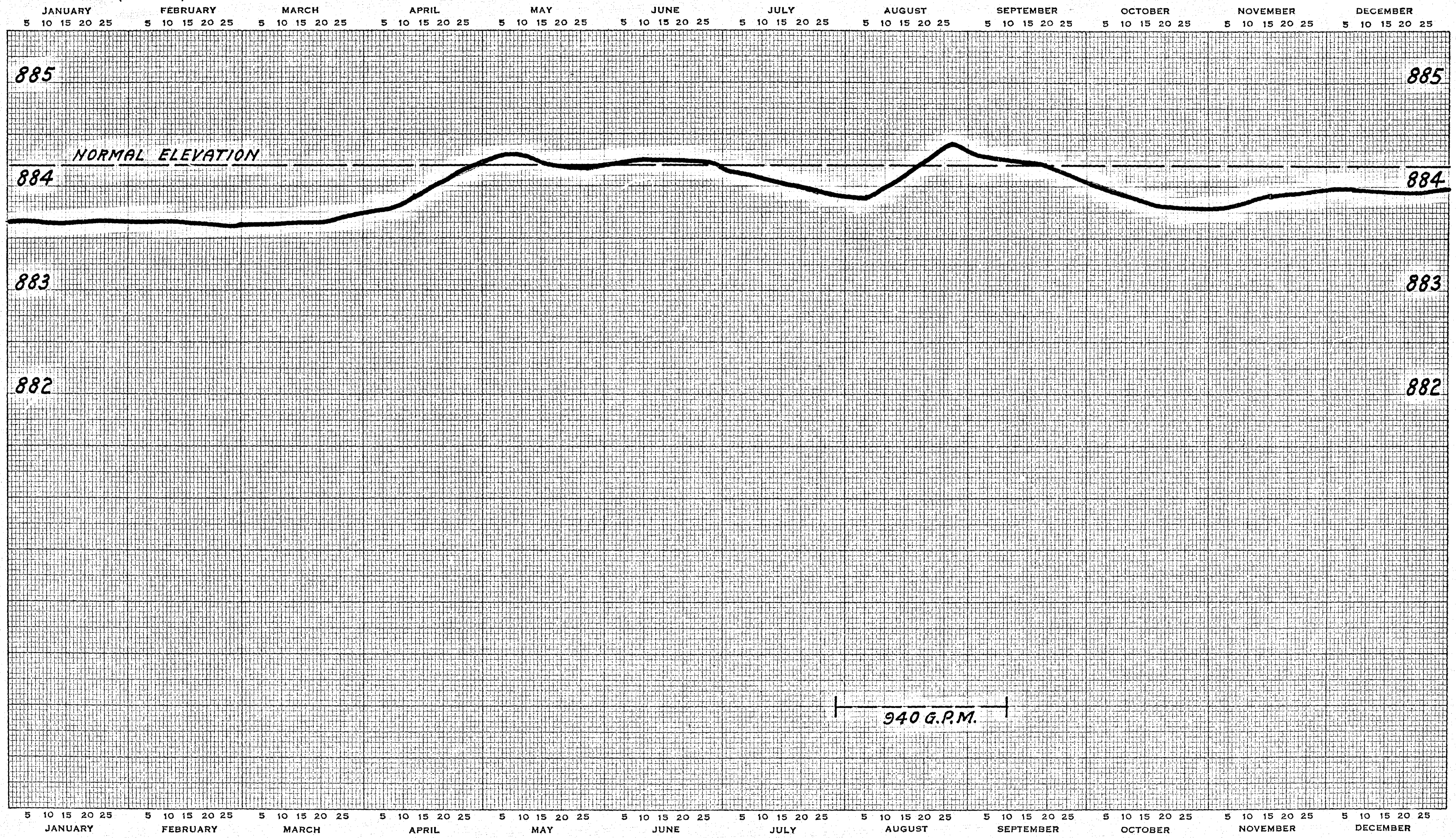
Pumping Costs This Year 0.00
 Mil. Gals. Pumped This Year 0.00
 Equiv. on Lake in Ft. This Year _____
 Av. Costs Per K. W. H. This Year _____
 Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost 4587.88
 Cum. M. G. Pumped 763.29
 Cum. Equiv. on Lake in Ft. 17.88
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.01

Precipitation This Year 21.09 ~~22.54~~
 Normal Precipitation 27.66 ~~27.24~~
 Cum. Excess-Deficiency 24.91 ~~-25.24~~
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1
 DAILY RECORD SHEET

Lake **JOSEPHINE** Year **1947**
 OFFICE OF
RAMSEY COUNTY ENGINEER
 Sheet No. **5**



KEUFFEL & ESSER CO., N. Y. NO. 359-1411
 One Year by Days, Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		22950	359.40

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 359.40 Cum. Pumping Cost 4947.28
 Mil. Gals. Pumped This Year 58.20 Cum. M. G. Pumped 818.49
 Equiv. on Lake in Ft. This Year 1.385 Cum. Equiv. on Lake in Ft. 19.27
 Av. Costs Per K. W. H. This Year 0.015 Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year 6.175 Cum. Av. Costs Per M. G. Pumped 6.04

Precipitation This Year 24.50
 Normal Precipitation 27.24
 Cum. Excess-Deficiency - 34.54
 (Since 1924)

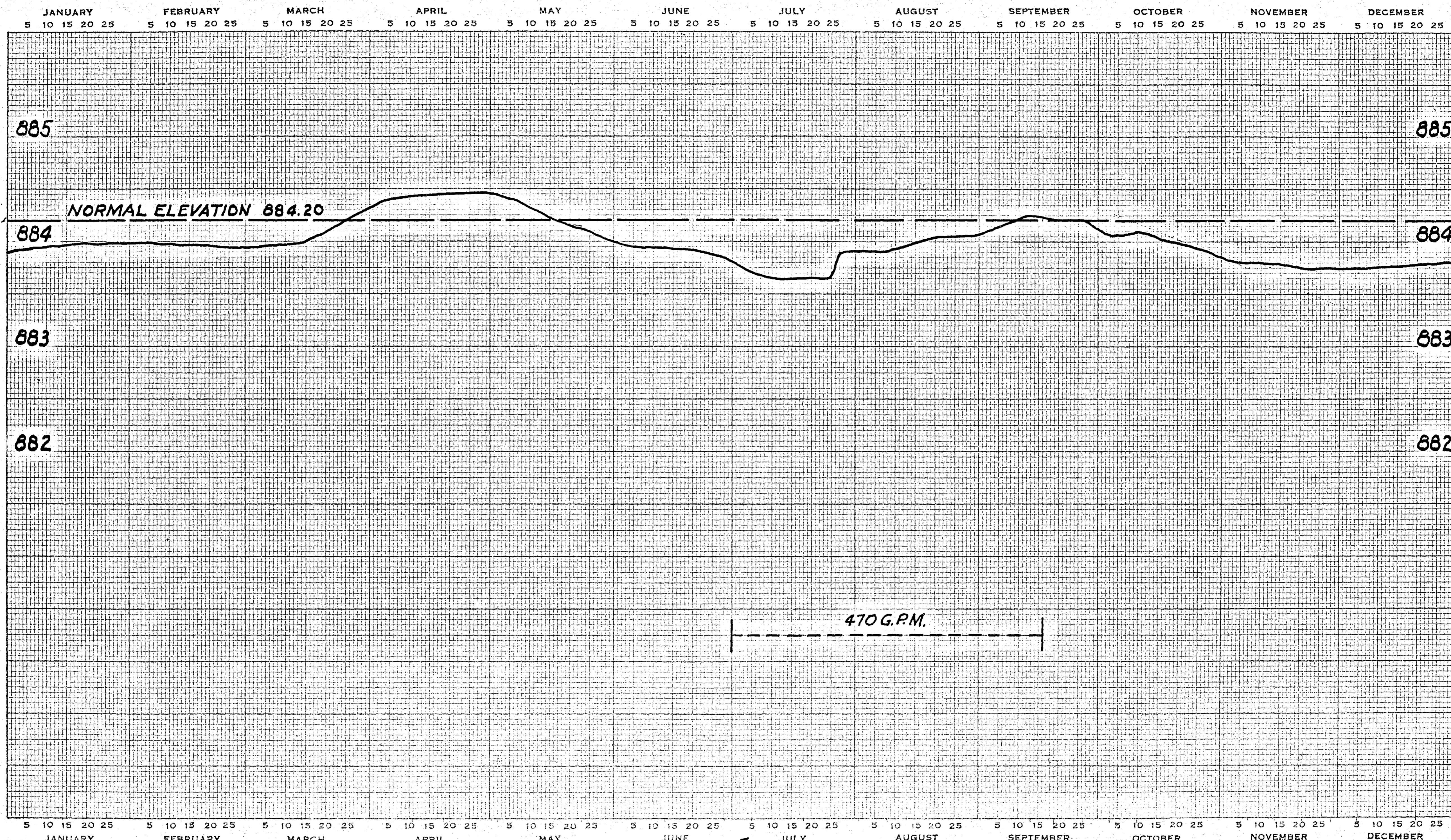
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake JOSEPHINE Year 1949

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 369-1411
 One Year by Days - Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMPING UNIT NO. <u>5</u>			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL	<u>36</u>	<u>16880</u>	<u>285.92</u>

Pumping Costs This Year 285.92
 Mil. Gals. Pumped This Year 52.79
 Equiv. on Lake in Ft. This Year 1.23
 K. W. H. Consumed This Year 16880
 Av. Costs Per K. W. H. This Year .017
 Av. Costs Per M. G. Pumped This Year 5.42

Cum. Pumping Cost 5882.51
 Cum. M. G. Pumped 944.38
 Cum. Equiv. on Lake in Ft. 22.20
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.23

Precipitation This Year 24.46
 Normal Precipitation 27.24
 Cum. Excess-Deficiency -37.32
 (Since 1924)

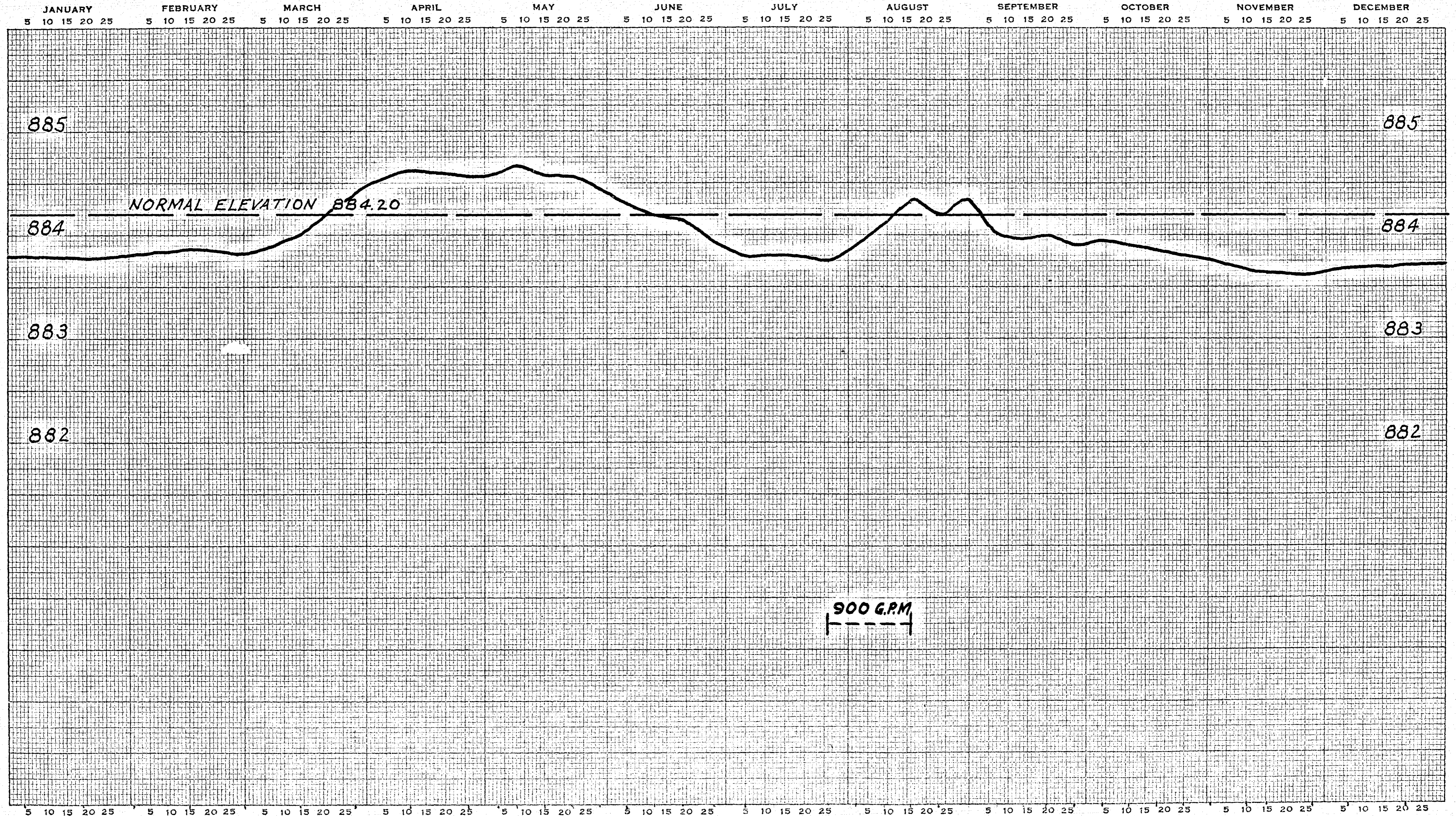
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake JOSEPHINE Year 1950

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 959-141L
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. 5

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.		11,920	194.53
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		11,920	194.53

Pumping Costs This Year	<u>194.53</u>	Cum. Pumping Cost	<u>6077.04</u>
Mil. Gals. Pumped This Year	<u>27.22</u>	Cum. M. G. Pumped	<u>971.60</u>
Equiv. on Lake in Ft. This Year	<u>.63</u>	Cum. Equiv. on Lake in Ft.	<u>22.83</u>
K. W. H. Consumed This Year	<u>11,920</u>	Cum. K. W. H.	_____
Av. Costs Per K. W. H. This Year	<u>.0163</u>	Cum. Av. Cost Per K. W. H.	_____
Av. Costs Per M. G. Pumped This Year	<u>7.15</u>	Cum. Av. Costs Per M. G. Pumped	<u>6.25</u>

Precipitation This Year 37.20
 Normal Precipitation 27.24
 Cum. Excess-Deficiency -27.36
 (Since 1924)

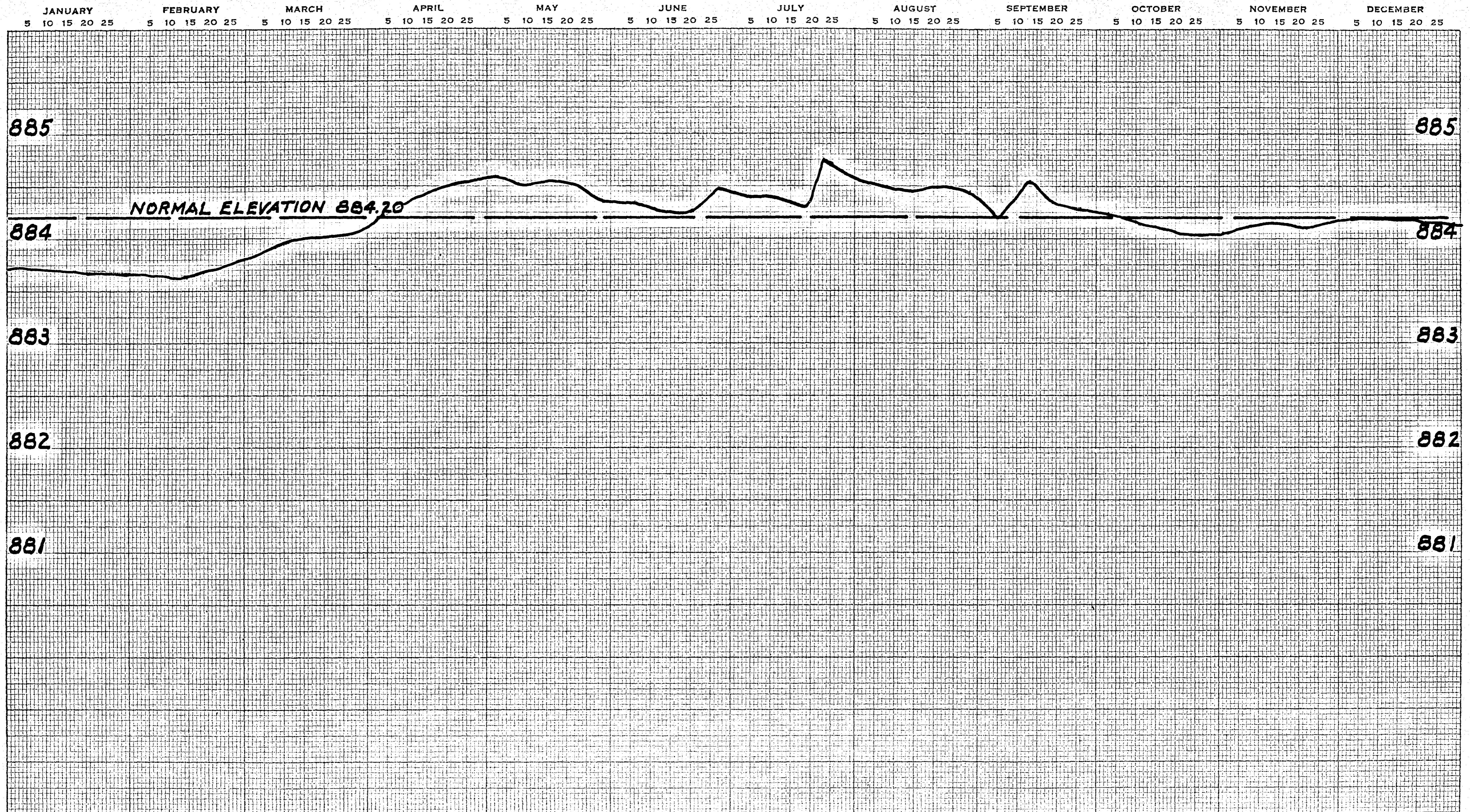
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake JOSEPHINE Year 1951

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 369-1411
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

JANUARY PUMPING UNIT NO. _____

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

MARCH PUMPING UNIT NO. _____

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

MAY PUMPING UNIT NO. _____

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	<u>0.00</u>	Cum. Pumping Cost	<u>6077.04</u>
Mil. Gals. Pumped This Year	<u>0.00</u>	Cum. M. G. Pumped	<u>971.60</u>
Equiv. on Lake in Ft. This Year	_____	Cum. Equiv. on Lake in Ft.	<u>22.83</u>
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	<u>6.25</u>

Precipitation This Year 23.64
 Normal Precipitation 27.27
 Cum. Excess-Deficiency -30.99
 (Since 1924)

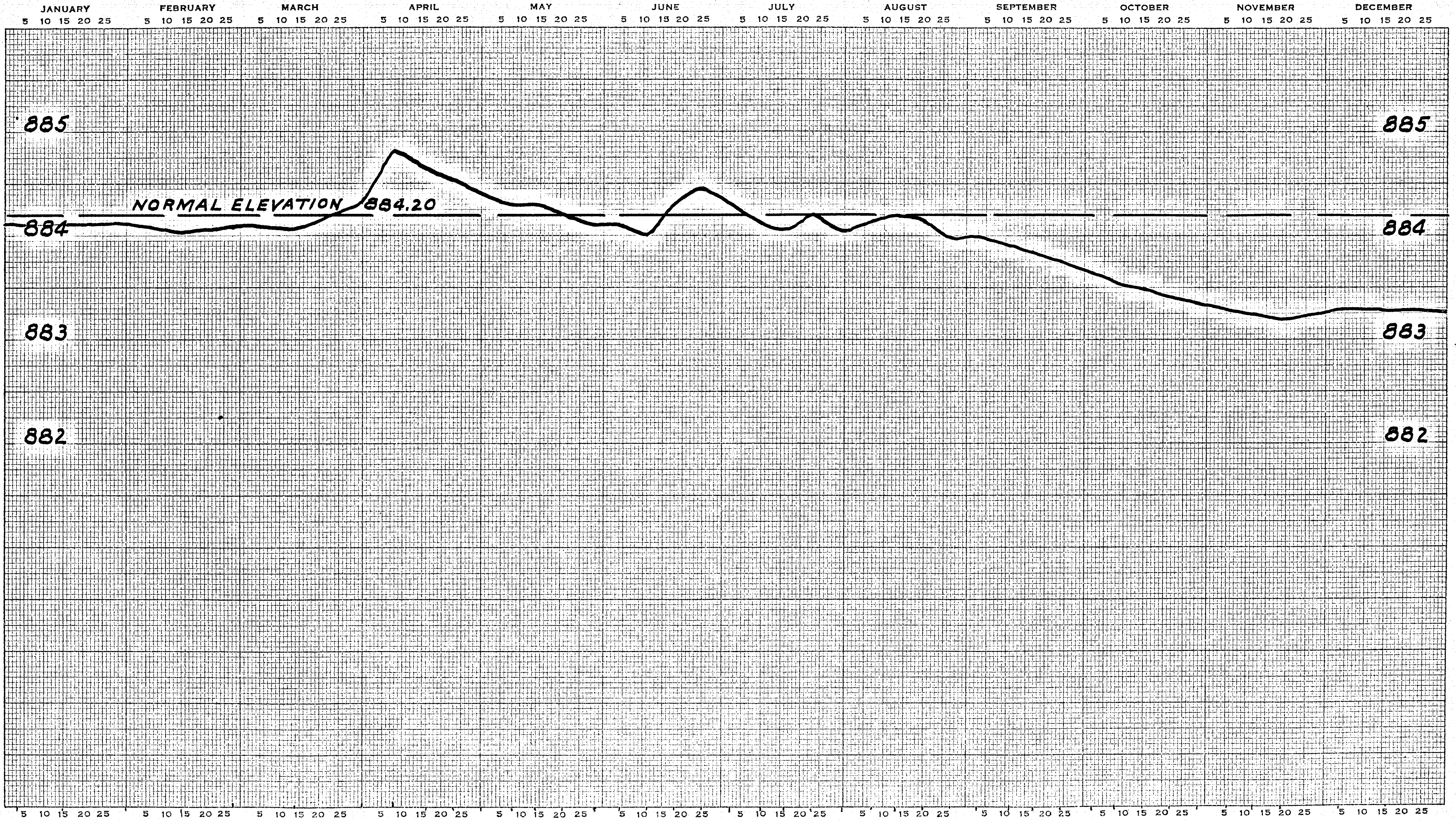
Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake JOSEPHINE Year 1952

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 369-141L
 One Year by Days. Calendar Year.
 Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____				PUMPING UNIT NO. _____				PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.				JAN.				JAN.			
FEB.				FEB.				FEB.			
MAR.				MAR.				MAR.			
APR.				APR.				APR.			
MAY				MAY				MAY			
JUNE				JUNE				JUNE			
JULY				JULY				JULY			
AUG.				AUG.				AUG.			
SEPT.				SEPT.				SEPT.			
OCT.				OCT.				OCT.			
NOV.				NOV.				NOV.			
DEC.				DEC.				DEC.			
TOTAL				TOTAL				TOTAL			

Pumping Costs This Year 0.00 Cum. Pumping Cost 6,077.04
 Mil. Gals. Pumped This Year 0.00 Cum. M. G. Pumped 971.60
 Equiv. on Lake in Ft. This Year _____ Cum. Equiv. on Lake in Ft. 2,283
 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 6.25

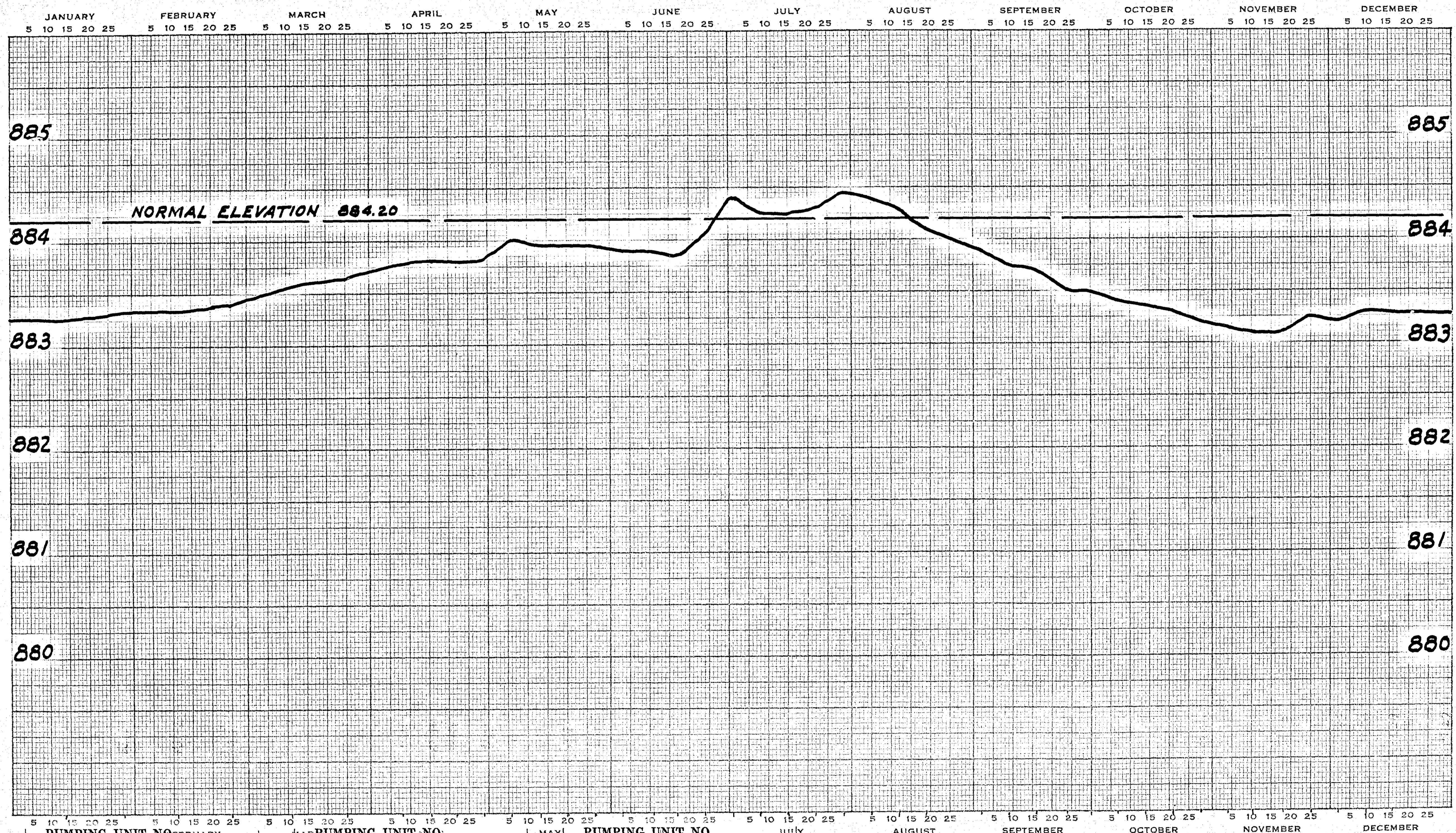
Precipitation This Year 27.91
 Normal Precipitation 24.71
 Cum. Excess-Deficiency - 28.75
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake JOSEPHINE Year 1953

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5



359-141L KEUFFEL & ESSER CO.
 One Year by Days, Calendar Year.
 366 days X 150 (10 per unit) divisions.
 MADE IN U.S.A.

SEA LEVEL ELEVATION

PUMPING UNIT NO. FEBRUARY

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

PUMPING UNIT NO. MARCH

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

PUMPING UNIT NO. MAY

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 0.00 Cum. Pumping Cost 6,077.04
 Mil. Gals. Pumped This Year 0.00 Cum. M. G. Pumped 971.60
 Equiv. on Lake in Ft. This Year _____ Cum. Equiv. on Lake in Ft. 22.83
 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 6.25

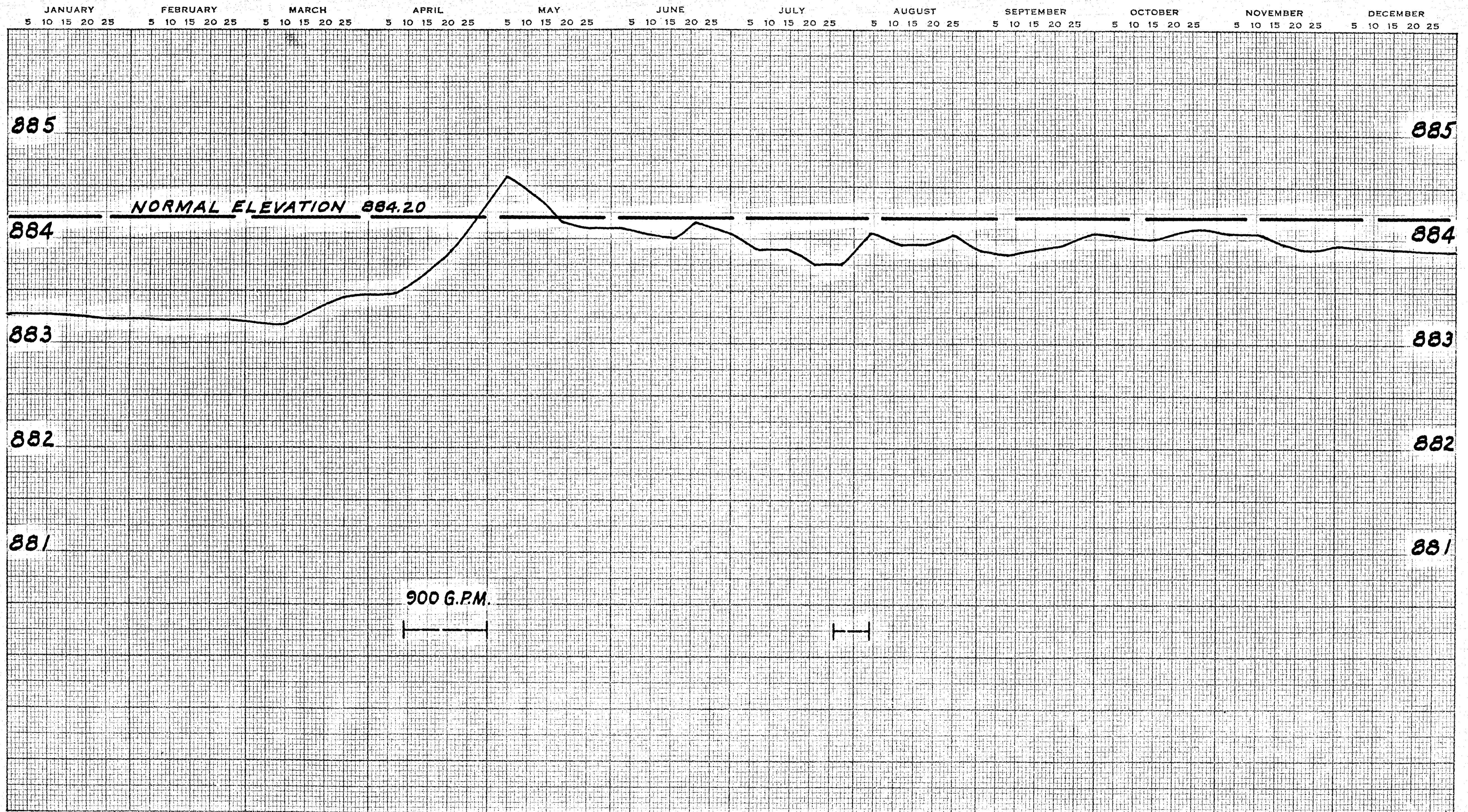
Precipitation This Year 23.68
 Normal Precipitation 24.71
 Cum. Excess-Deficiency 29.78
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake **JOSEPHINE** Year **1954**

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. **5**



359-141L KEUFFEL & ESSER CO.
 One Year by Days, Calendar Year.
 366 days X 150 (10 per unit) divisions.
 MADE IN U. S. A.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____				PUMPING UNIT NO. _____				PUMPING UNIT NO. <u>5</u>							
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.				JAN.				JAN.				JAN.			
FEB.				FEB.				FEB.				FEB.			
MAR.				MAR.				MAR.				MAR.			
APR.				APR.				APR.				APR.			
MAY				MAY				MAY				MAY			
JUNE				JUNE				JUNE	21640		367.45	JUNE			
JULY				JULY				JULY				JULY			
AUG.				AUG.				AUG.	10840		187.06	AUG.			
SEPT.				SEPT.				SEPT.	16320		260.13	SEPT.			
OCT.				OCT.				OCT.	1580		26.48	OCT.			
NOV.				NOV.				NOV.				NOV.			
DEC.				DEC.				DEC.				DEC.			
TOTAL				TOTAL				TOTAL	49380		838.12	TOTAL			

Pumping Costs This Year 276.30 Cum. Pumping Cost 6,353.34
 Mil. Gals. Pumped This Year 38.88 Cum. M. G. Pumped 1,010.48
 Equiv. on Lake in Ft. This Year 0.906 Cum. Equiv. on Lake in Ft. 23.74
 K. W. H. Consumed This Year 16279 Cum. K. W. H. _____
 Av. Costs Per K. W. H. This Year .0170 Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year 7.11 Cum. Av. Costs Per M. G. Pumped 6.29

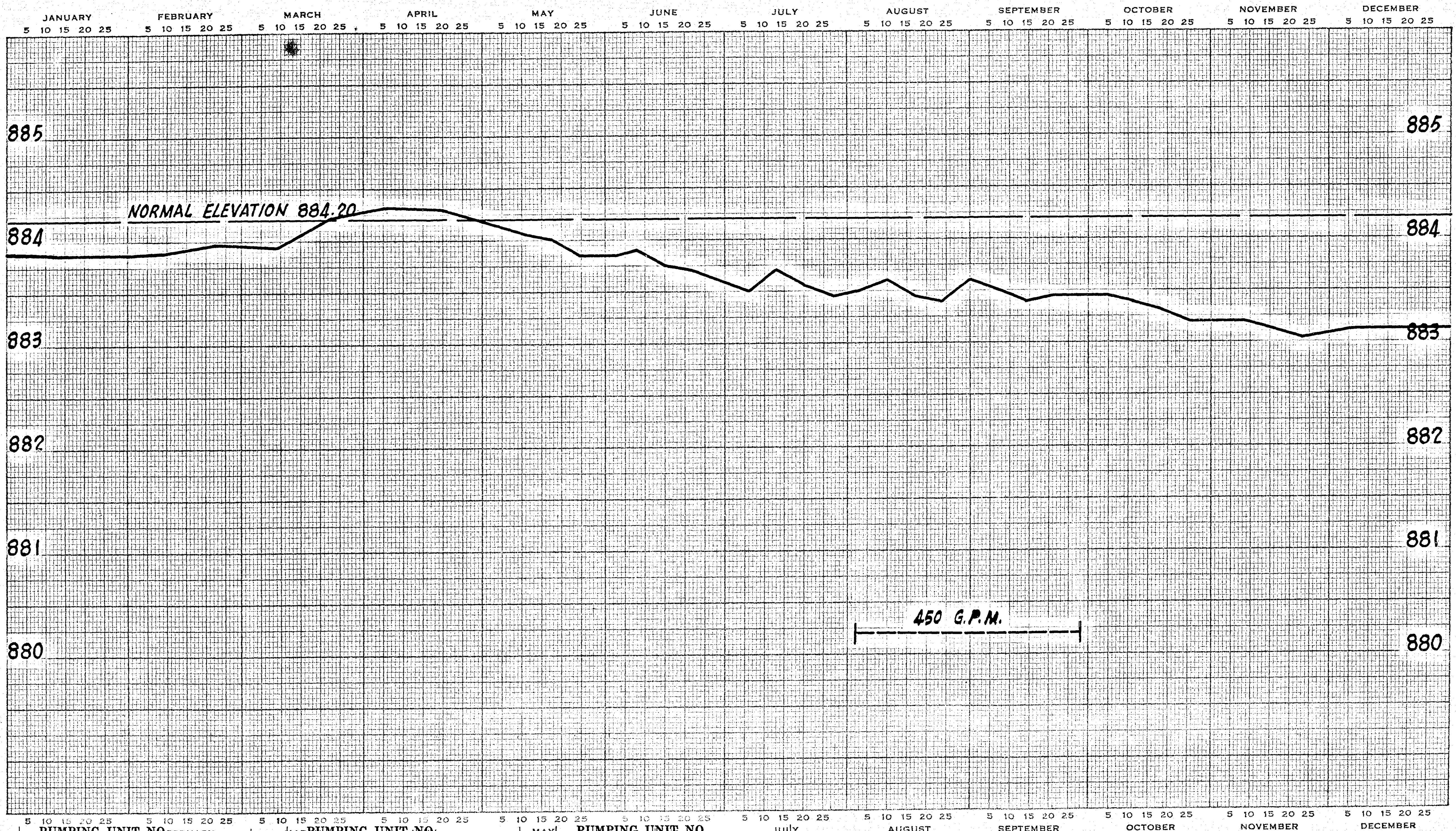
Precipitation This Year 21.11
 Normal Precipitation 24.71
 Cum. Excess-Deficiency -33.38
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake JOSEPHINE Year 1955

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. 5



599-141L KEUFFEL & ESSER CO.
 One Year by Days. Calendar Year.
 866 days X 150 (10 per unit) divisions.
 MADE IN U. S. A.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.		8150	135.72
SEPT.		7850	131.80
OCT.			
NOV.			
DEC.			
TOTAL		16000	268.52

Pumping Costs This Year 268.52
 Mil. Gals. Pumped This Year 36.94
 Equiv. on Lake in Ft. This Year .86
 K. W. H. Consumed This Year 16000
 Av. Costs Per K. W. H. This Year .0168
 Av. Costs Per M. G. Pumped This Year 7.15

Cum. Pumping Cost 6621.86
 Cum. M. G. Pumped 1047.42
 Cum. Equiv. on Lake in Ft. 24.60
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.32

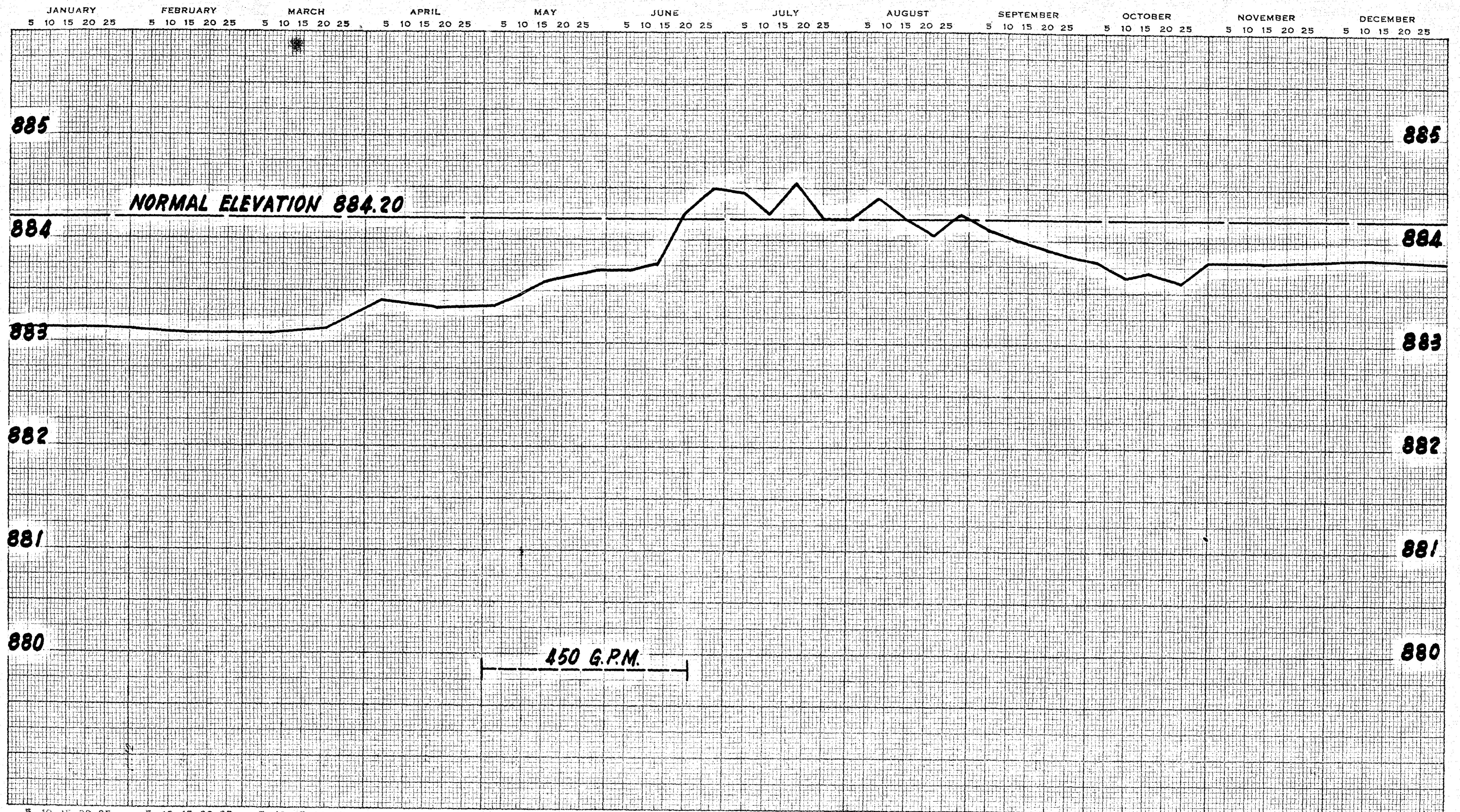
Precipitation This Year 26.75
 Normal Precipitation 24.71
 Cum. Excess-Deficiency -31.34
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake **JOSEPHINE** Year **1956**

OFFICE OF
 RAMSEY COUNTY SURVEYOR

Sheet No. **5**



380-MIL KEUFFEL & ESSER CO.
 One Year by Days, Calendar Year.
 386 days X 100 (10 per unit) divisions.
 MADE IN U. S. A.

SEA LEVEL ELEVATION

PUMPING UNIT NO. 0				PUMPING UNIT NO. 1				PUMPING UNIT NO. 5			
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.				JAN.				JAN.			
FEB.				FEB.				FEB.			
MAR.				MAR.				MAR.			
APR.				APR.				APR.			
MAY				MAY				MAY			
JUNE				JUNE				JUNE	8861	144.64	
JULY				JULY				JULY	5867	97.98	
AUG.				AUG.				AUG.			
SEPT.				SEPT.				SEPT.			
OCT.				OCT.				OCT.			
NOV.				NOV.				NOV.			
DEC.				DEC.				DEC.			
TOTAL				TOTAL				TOTAL	14528	242.62	

Pumping Costs This Year 242.62 Cum. Pumping Cost 6864.48
 Mil. Gals. Pumped This Year 33.70 Cum. M. G. Pumped 1081.12
 Equiv. on Lake in Ft. This Year .79 Cum. Equiv. on Lake in Ft. 25.39
 K. W. H. Consumed This Year 14528 Cum. K. W. H. _____
 Av. Costs Per K. W. H. This Year .0167 Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year 7.20 Cum. Av. Costs Per M. G. Pumped 6.35

Precipitation This Year 27.85

Area in Acres at Normal Elevation 131

Lake **JOSEPHINE** Year **1957**

Normal Precipitation 24.71

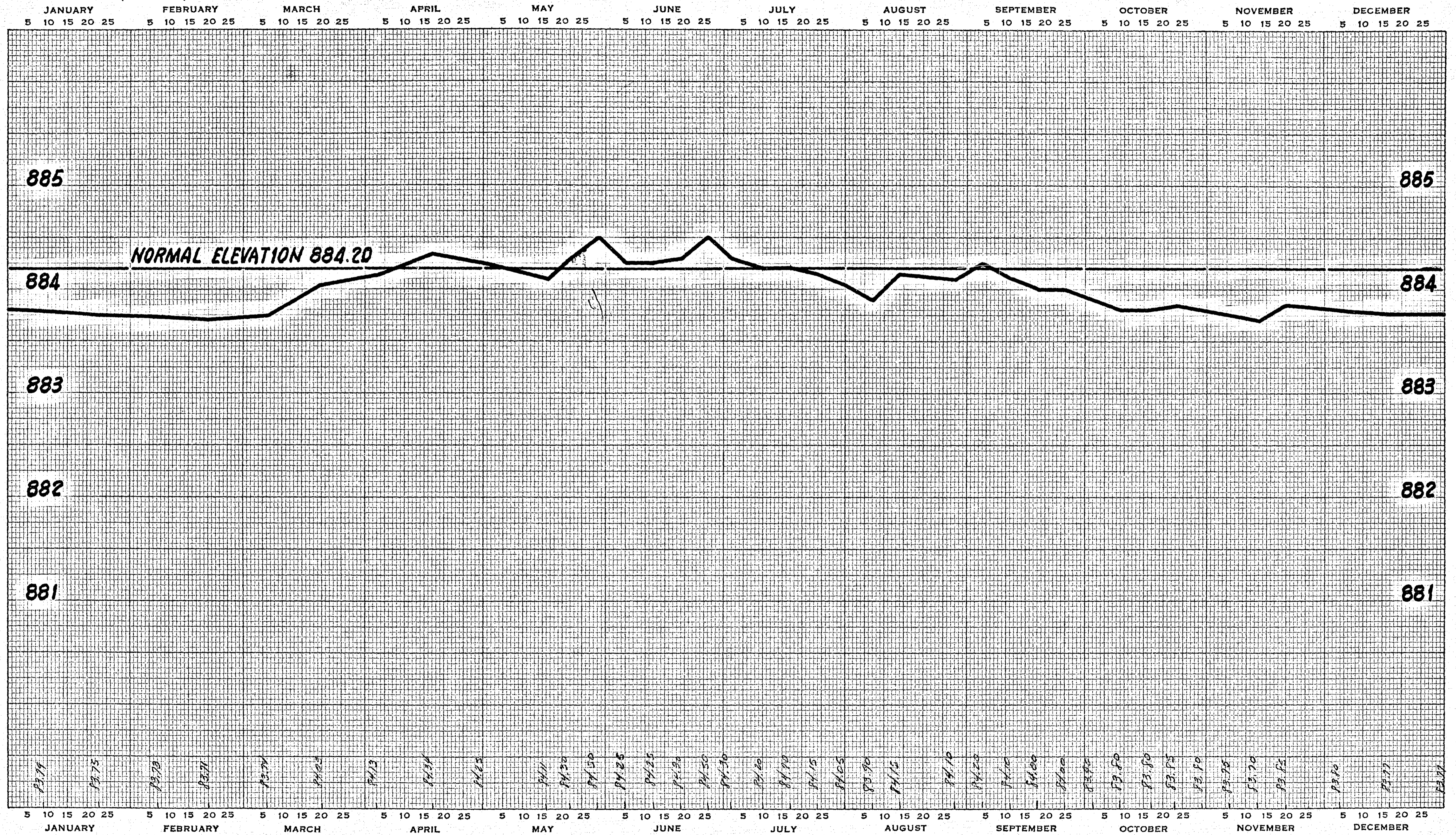
Gallons Equiv. to One Foot on Lake 42,900,000

OFFICE OF
RAMSEY COUNTY ENGINEER

Cum. Excess-Deficiency - 28.20
(Since 1924)

Ratio: Watershed to Lake Area 1.08 To 1
DAILY RECORD SHEET

Sheet No. **5**



KEUFFEL & ESSER CO., N. Y. NO. 389-1411
One Year by Days, Calendar Year,
Divided 10 per unit vertically.

SEA LEVEL ELEVATION

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMPING UNIT NO. _____			
Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

PUMPING UNIT NO. _____			
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 0.00 Cum. Pumping Cost 6864.48 6864.48
 Mil. Gals. Pumped This Year 0.0 Cum. M. G. Pumped 1081.12 1081.12
 Equiv. on Lake in Ft. This Year _____ Cum. Equiv. on Lake in Ft. 25.39 25.39
 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 6.35 6.35

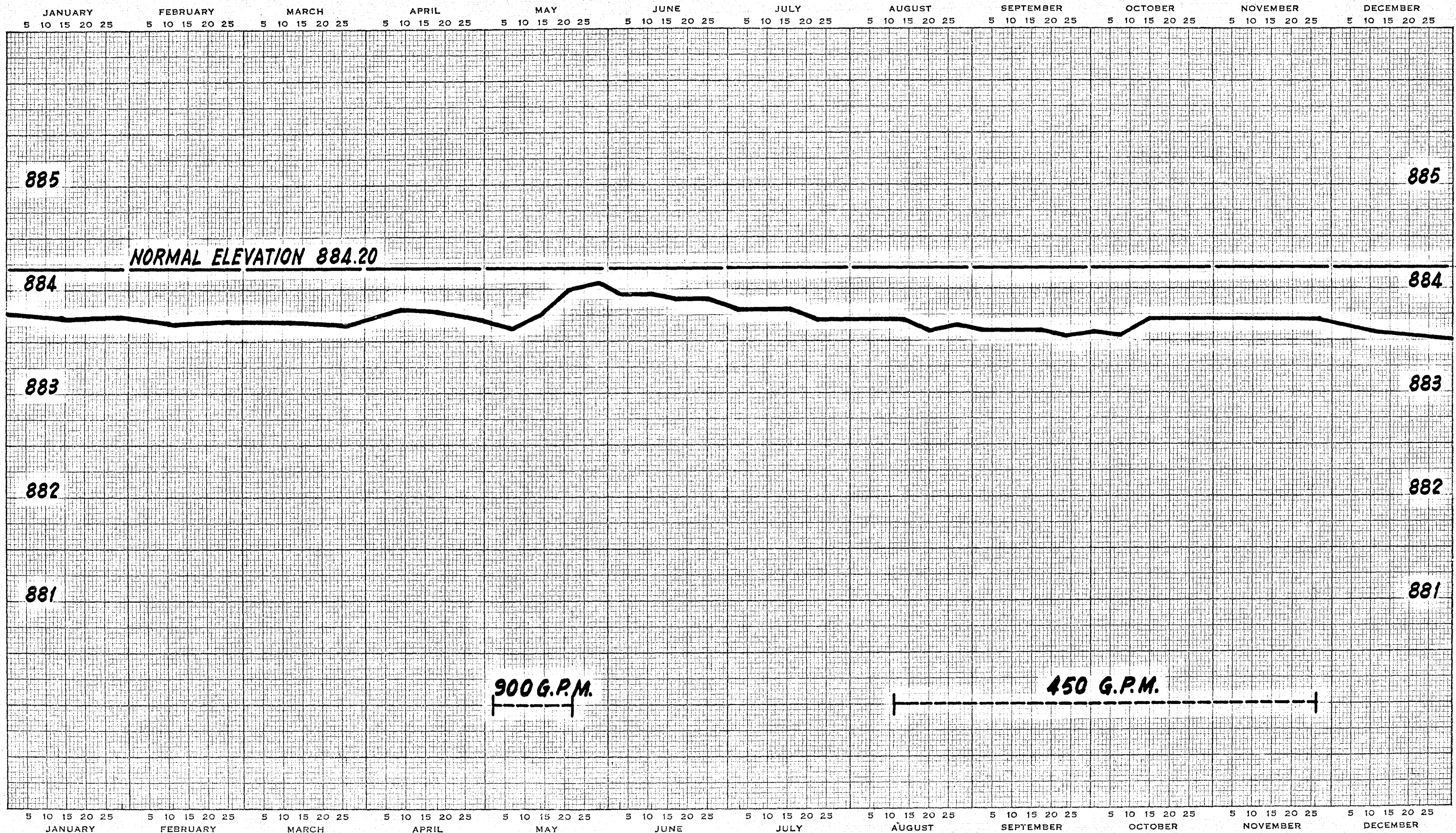
Precipitation This Year 16.20
 Normal Precipitation 24.71
 Cum. Excess-Deficiency -36.71
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 To 1

Lake **JOSEPHINE** Year **1958**

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. **5**



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

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

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

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 650.00 Cum. Pumping Cost 7514.48
 Mil. Gals. Pumped This Year 95.26 Cum. M. G. Pumped 1176.38
 Equiv. on Lake in Ft. This Year 2.22 Cum. Equiv. on Lake in Ft. 27.61
 K. W. H. Consumed This Year 40101 Cum. K. W. H. _____
 Av. Costs Per K. W. H. This Year .0162 Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year 6.82 Cum. Av. Costs Per M. G. Pumped 6.39

Precipitation This Year 26.88

Area in Acres at Normal Elevation 131

Lake **JOSEPHINE** Year **1959**

Normal Precipitation 24.71

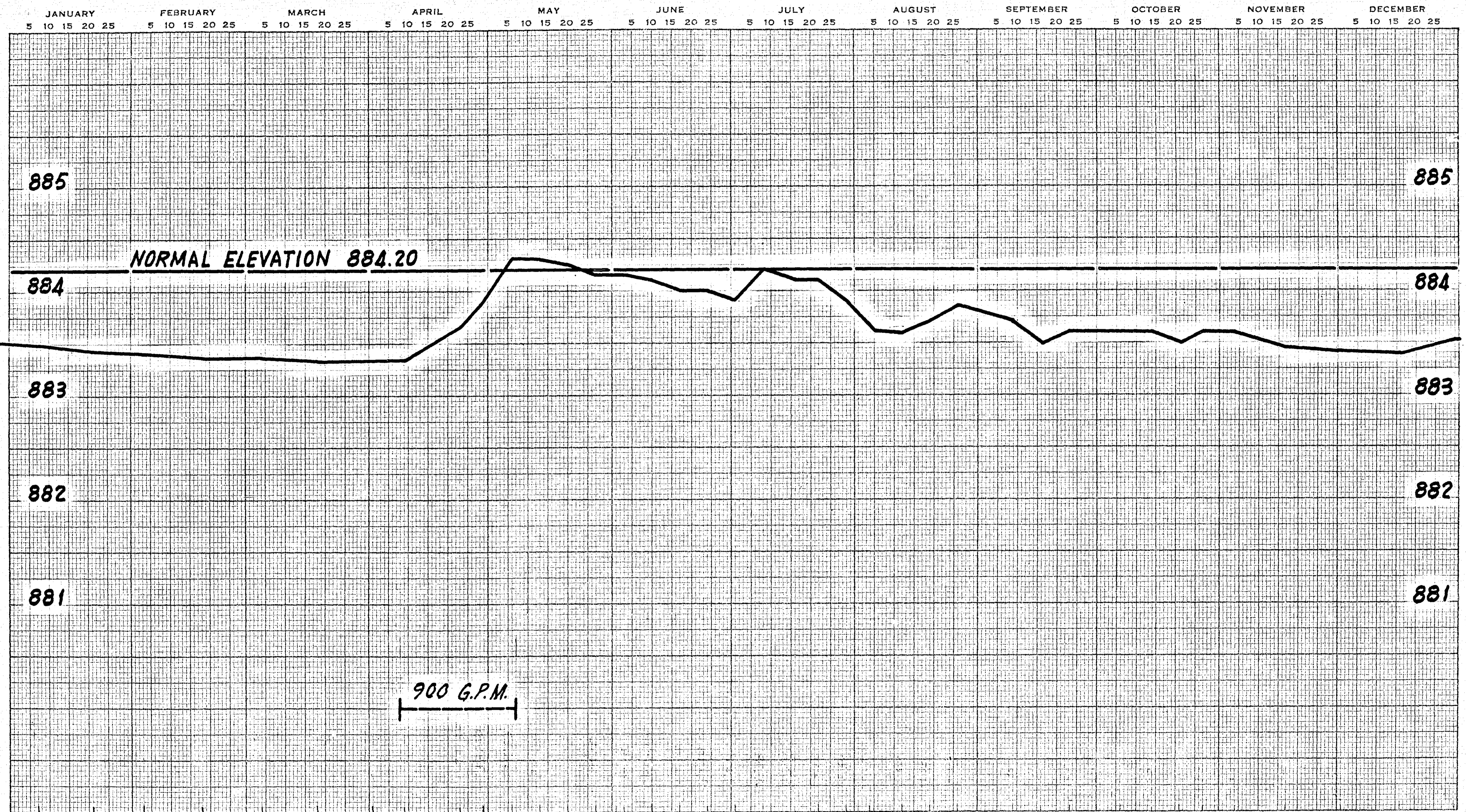
Gallons Equiv. to One Foot on Lake 42,900,000

OFFICE OF
RAMSEY COUNTY SURVEYOR

Cum. Excess-Deficiency - 34.54
(Since 1924)

Ratio: Watershed to Lake Area 1.08 To 1

Sheet No. **6**



359-141L KEUFFEL & ESSER CO.
One Year by Days, Calendar Year.
366 days X 150 (10 per unit) divisions.
MADE IN U. S. A.

SEA LEVEL ELEVATION

BUMPING UNIT NO. FEBRUARY				PUMPING UNIT NO. MARCH				PUMPING UNIT NO. 5 JULY			
Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost	Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.				JAN.				JAN.			
FEB.				FEB.				FEB.			
MAR.				MAR.				MAR.			
APR.				APR.				APR.	3170	151.31	
MAY				MAY				MAY	2912	48.15	
JUNE				JUNE				JUNE			
JULY				JULY				JULY			
AUG.				AUG.				AUG.			
SEPT.				SEPT.				SEPT.			
OCT.				OCT.				OCT.			
NOV.				NOV.				NOV.			
DEC.				DEC.				DEC.			
TOTAL				TOTAL				TOTAL	12088	199.46	

Pumping Costs This Year 199.46 Cum. Pumping Cost 7713.94
 Mil. Gals. Pumped This Year 37.58 Cum. M. G. Pumped 1213.96
 Equiv. on Lake in Ft. This Year .88 Cum. Equiv. on Lake in Ft. 28.49
 K. W. H. Consumed This Year 12088 Cum. K. W. H. _____
 Av. Costs Per K. W. H. This Year 0.0165 Cum. Av. Cost Per K. W. H. _____
 Av. Costs Per M. G. Pumped This Year 6.98 Cum. Av. Costs Per M. G. Pumped 6.35

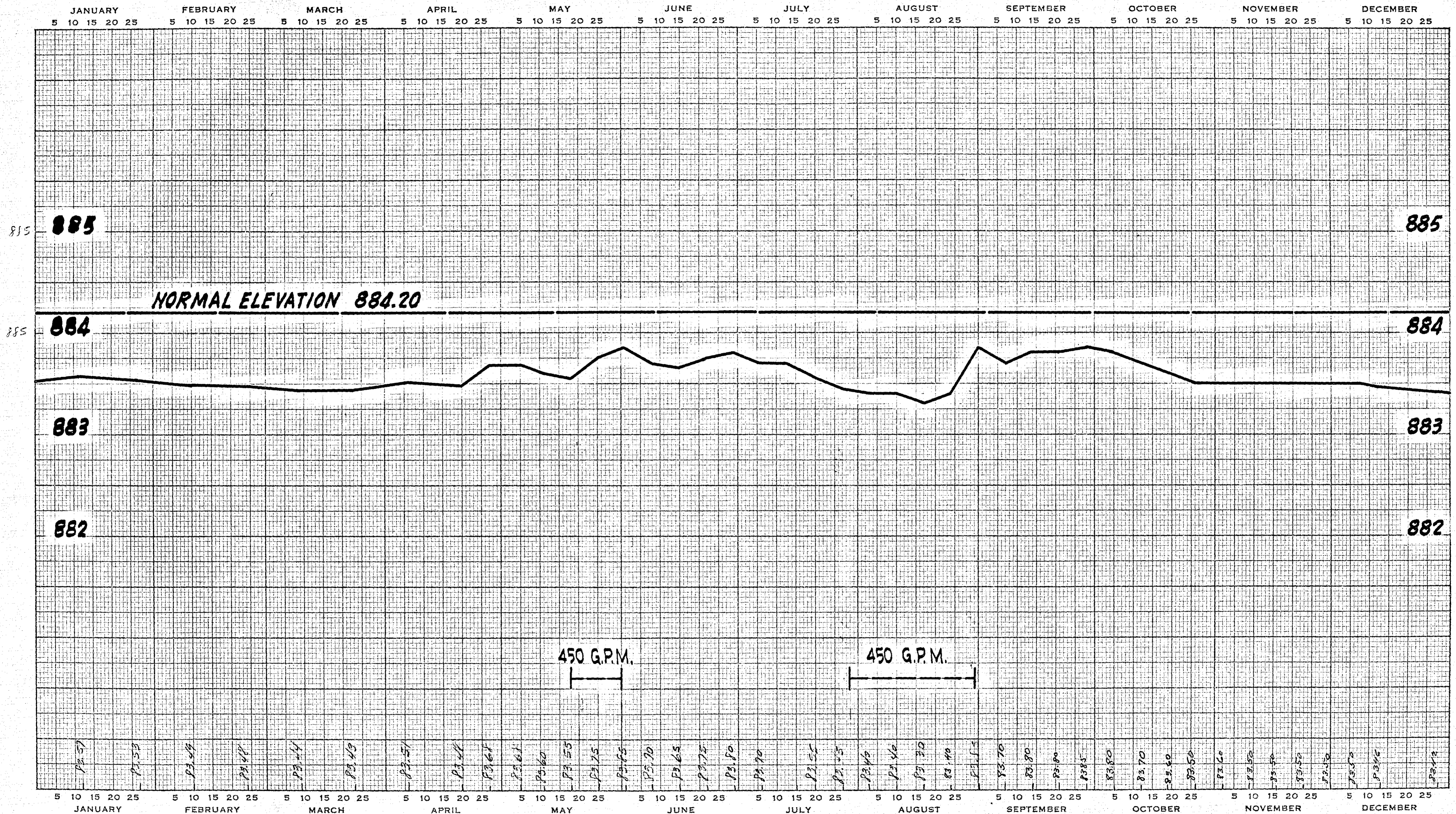
Precipitation This Year 21.46
 Normal Precipitation 24.75
 Cum. Excess-Deficiency -37.83
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake **JOSEPHINE** 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

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

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

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE		1930	31.84
JULY			
AUG.		8880	146.52
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		10810	178.36

Pumping Costs This Year 178.36
 Mil. Gals. Pumped This Year 30.46
 Equiv. on Lake in Ft. This Year 0.71
 K. W. H. Consumed This Year 10810
 Av. Costs Per K. W. H. This Year 0.0165
 Av. Costs Per M. G. Pumped This Year 5.86

Cum. Pumping Cost 7892.30
 Cum. M. G. Pumped 1244.42
 Cum. Equiv. on Lake in Ft. 29.20
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.34

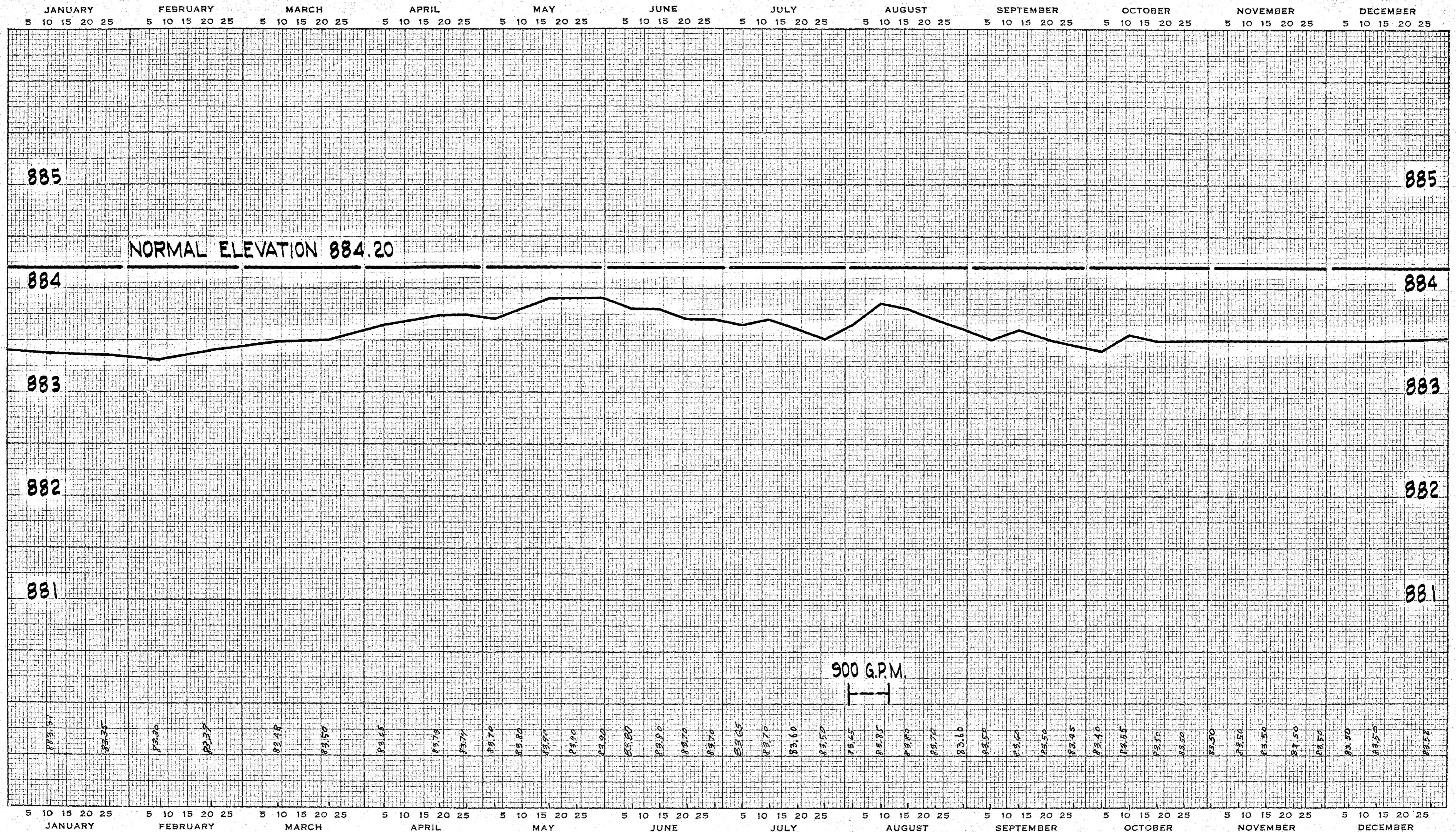
Precipitation This Year 25.74
 Normal Precipitation 24.71
 Cum. Excess-Deficiency -36.80
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake **JOSEPHINE** Year **1961**

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. _____



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

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

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

Month	K. W. Demand	K. W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.		5820	9603
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		5820	9603

Pumping Costs This Year 96.03
 Mil. Gals. Pumped This Year 14.26
 Equiv. on Lake in Ft. This Year 0.33
 K. W. H. Consumed This Year 5820.00
 Av. Costs Per K. W. H. This Year 0.0165
 Av. Costs Per M. G. Pumped This Year 6.74

Cum. Pumping Cost 7988.33
 Cum. M. G. Pumped 1258.68
 Cum. Equiv. on Lake in Ft. 29.53
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.35

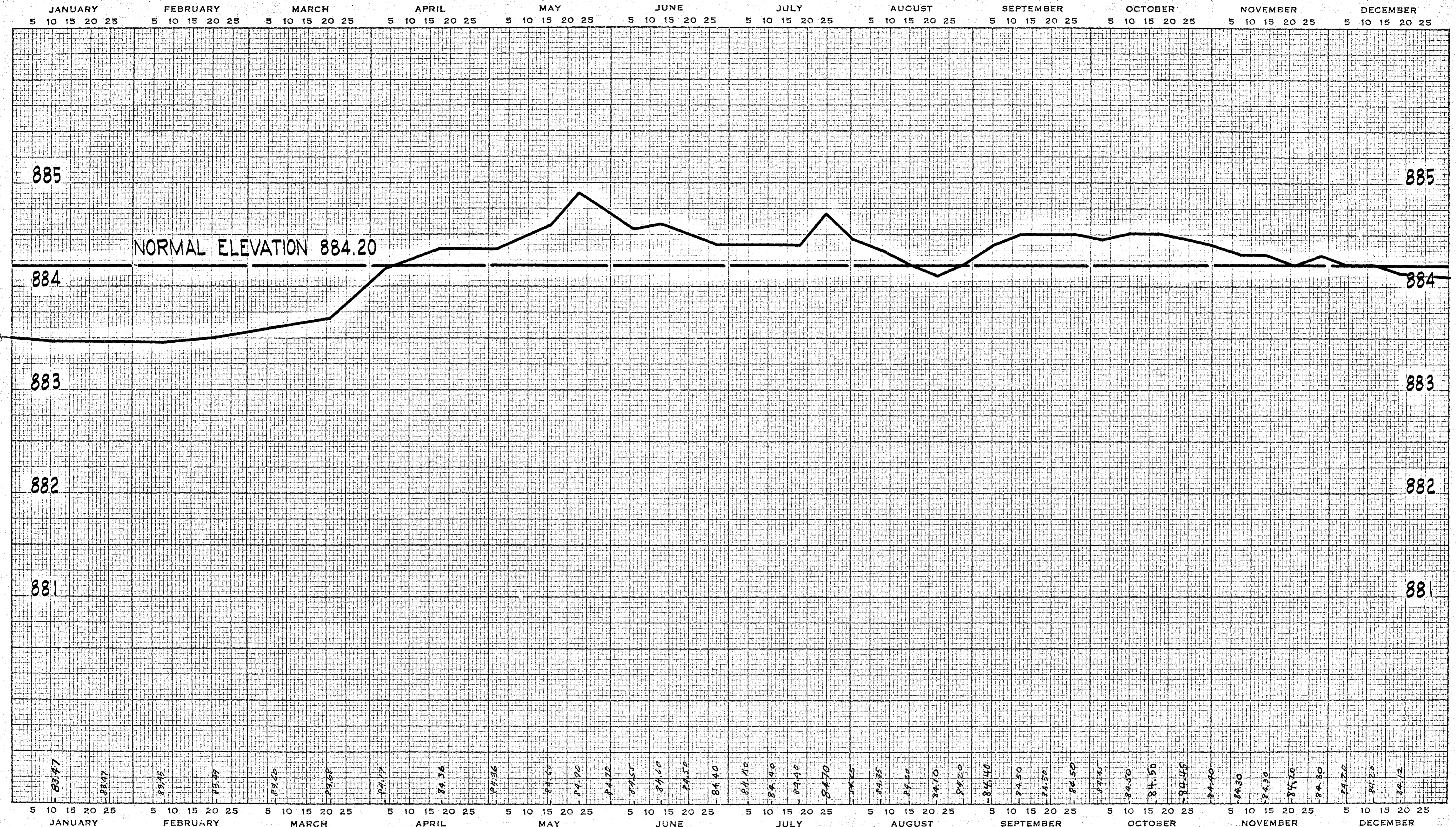
Precipitation This Year 28.83
 Normal Precipitation 24.78
 Cum. Excess-Deficiency -32.75
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake **JOSEPHINE** Year **1962**

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

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

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

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

Cum. Pumping Cost _____
 Cum. M. G. Pumped _____
 Cum. Equiv. on Lake in Ft. _____
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped _____

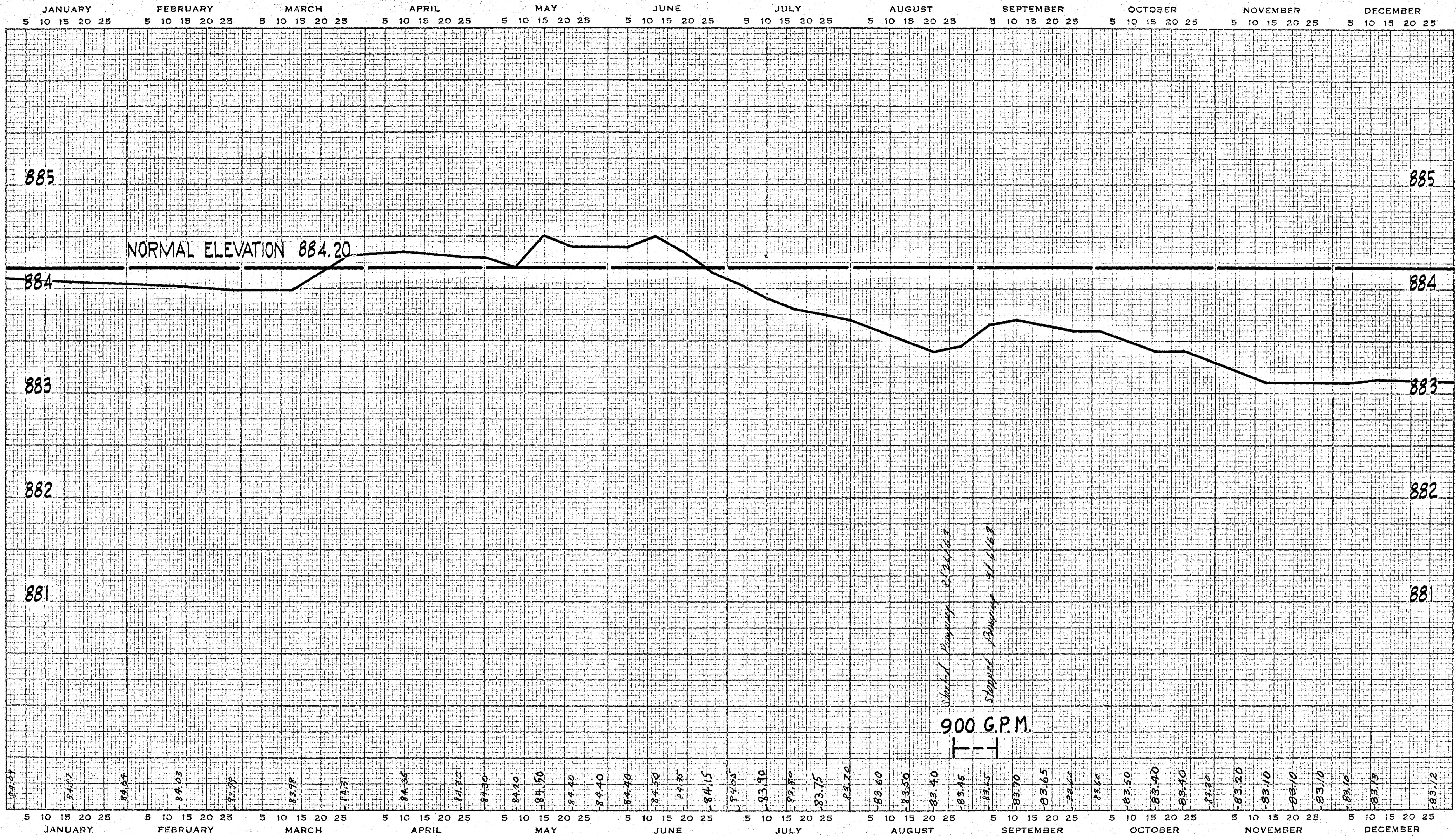
Precipitation This Year 19.57
 Normal Precipitation 24.78
 Cum. Excess-Deficiency -37.96
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake **JOSEPHINE** Year **1963**

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. _____



1 YEAR BY DAYS X 180 DIVNS. 359-1411
 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. _____

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

PUMP NO. 5

Month	K.W. Demand	K.W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		<u>5900</u>	<u>97.35</u>

Pumping Costs This Year 97.35
 Mil. Gals. Pumped This Year 15.56
 Equiv. on Lake in Ft. This Year 0.36
 K. W. H. Consumed This Year 5900
 Av. Costs Per K. W. H. This Year 0.0165
 Av. Costs Per M. G. Pumped This Year 6.26

Cum. Pumping Cost 8085.68
 Cum. M. G. Pumped 1274.24
 Cum. Equiv. on Lake in Ft. 29.89
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.35

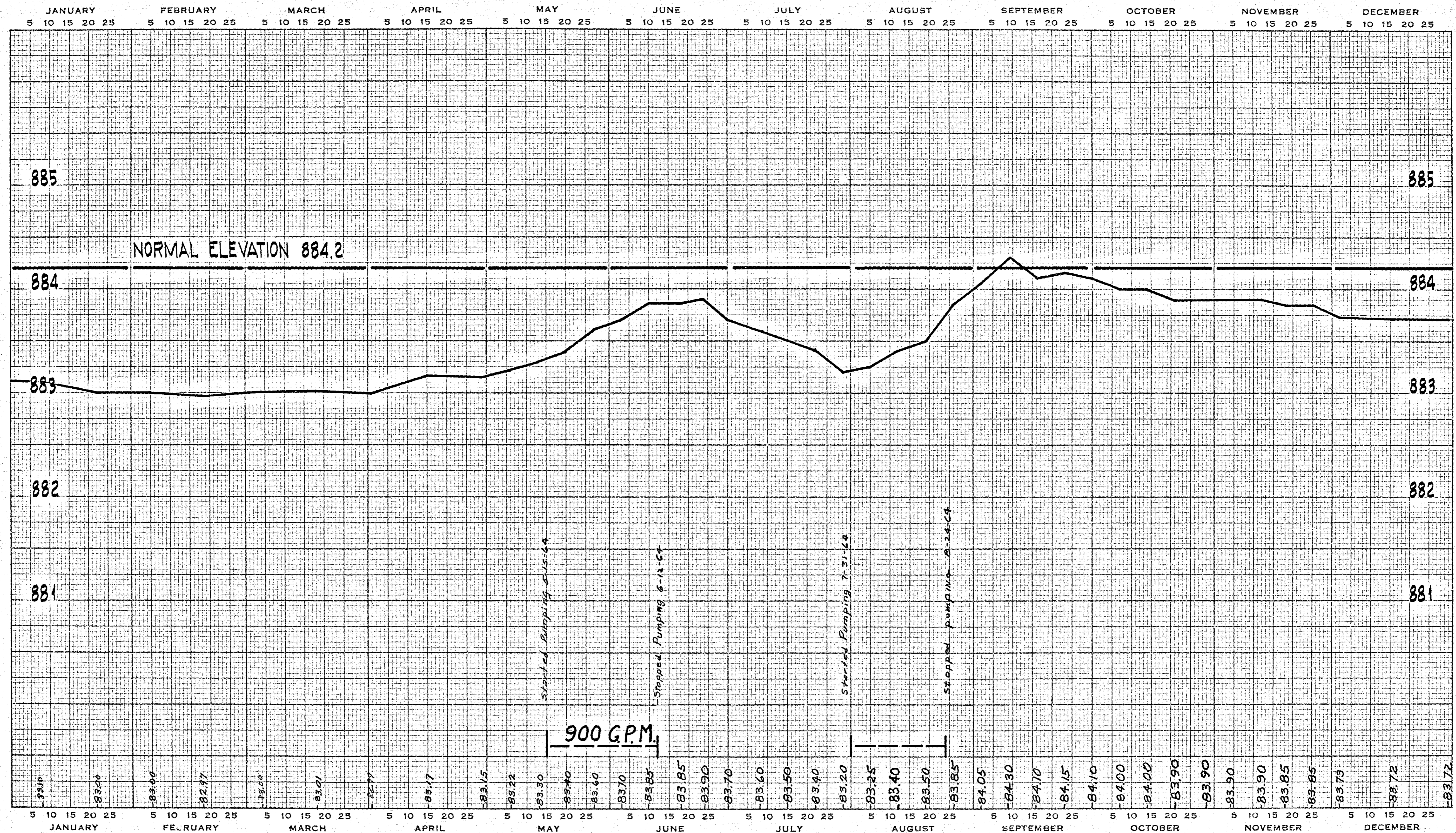
Precipitation This Year 25.97
 Normal Precipitation 24.78
 Cum. Excess-Deficiency -36.77
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake **JOSEPHINE** Year **1964**

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

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

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

Month	K.W. Demand	K.W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		26950.00	444.68

Pumping Costs This Year 444.68
 Mil. Gals. Pumped This Year 69.98
 Equiv. on Lake in Ft. This Year 1.63
 K. W. H. Consumed This Year 26950.00
 Av. Costs Per K. W. H. This Year 0.0165
 Av. Costs Per M. G. Pumped This Year 6.35

Cum. Pumping Cost 8530.36
 Cum. M. G. Pumped 1344.22
 Cum. Equiv. on Lake in Ft. 31.52
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.35

Precipitation This Year 39.94

Area in Acres at Normal Elevation 131

Lake **JOSEPHINE** Year **1965**

Normal Precipitation 24.78

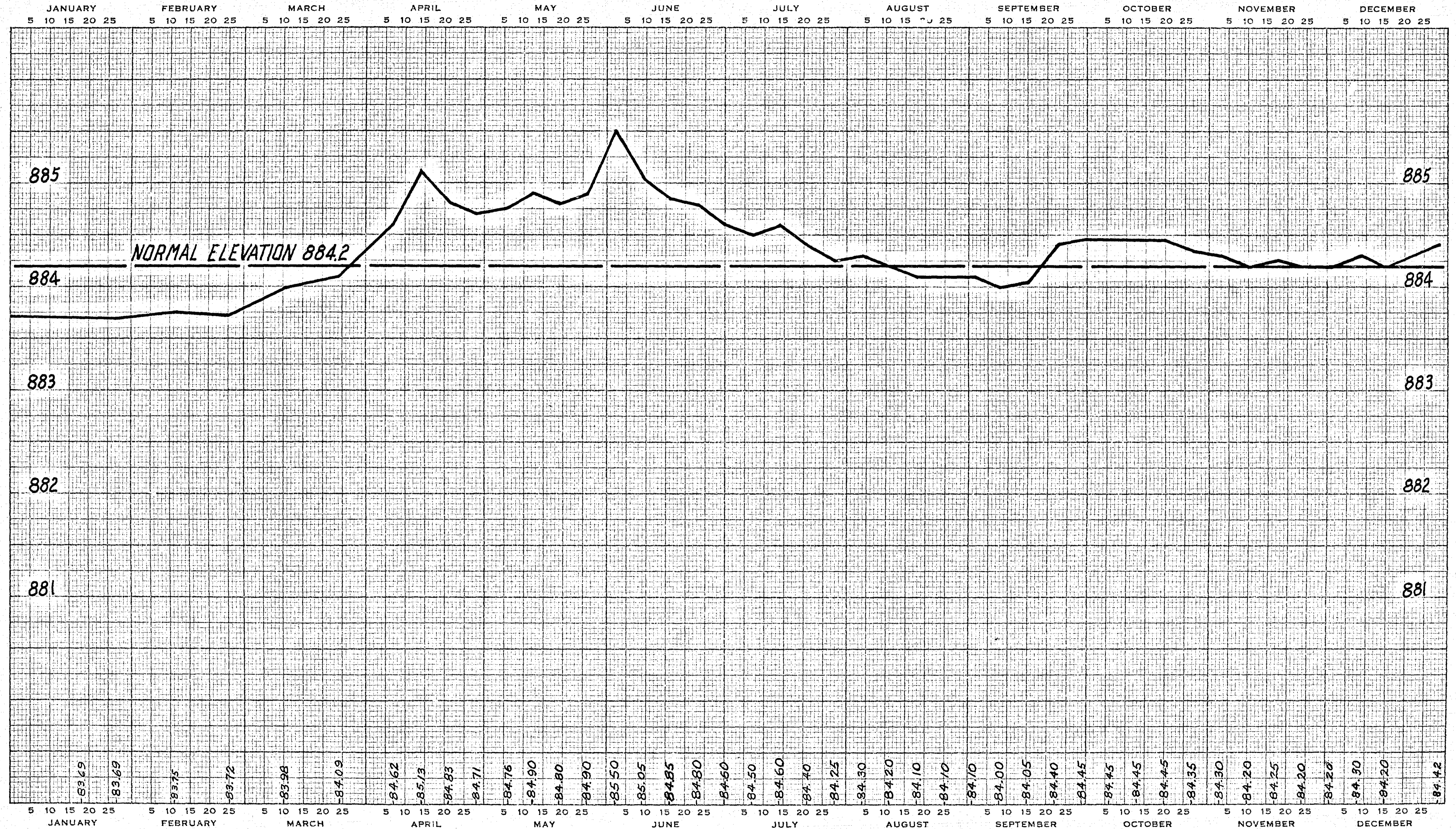
Gallons Equiv. to One Foot on Lake 42,900,000

OFFICE OF
RAMSEY COUNTY ENGINEER

Cum. Excess-Deficiency -21.61
(Since 1924)

Ratio: Watershed to Lake Area 1.08 TO 1

Sheet No. _____



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

SEA LEVEL ELEVATION

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

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

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

Cum. Pumping Cost 8530.36
 Cum. M. G. Pumped 1344.22
 Cum. Equiv. on Lake in Ft. 31.52
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.35

PUMP NO.

PUMP NO.

PUMP NO.

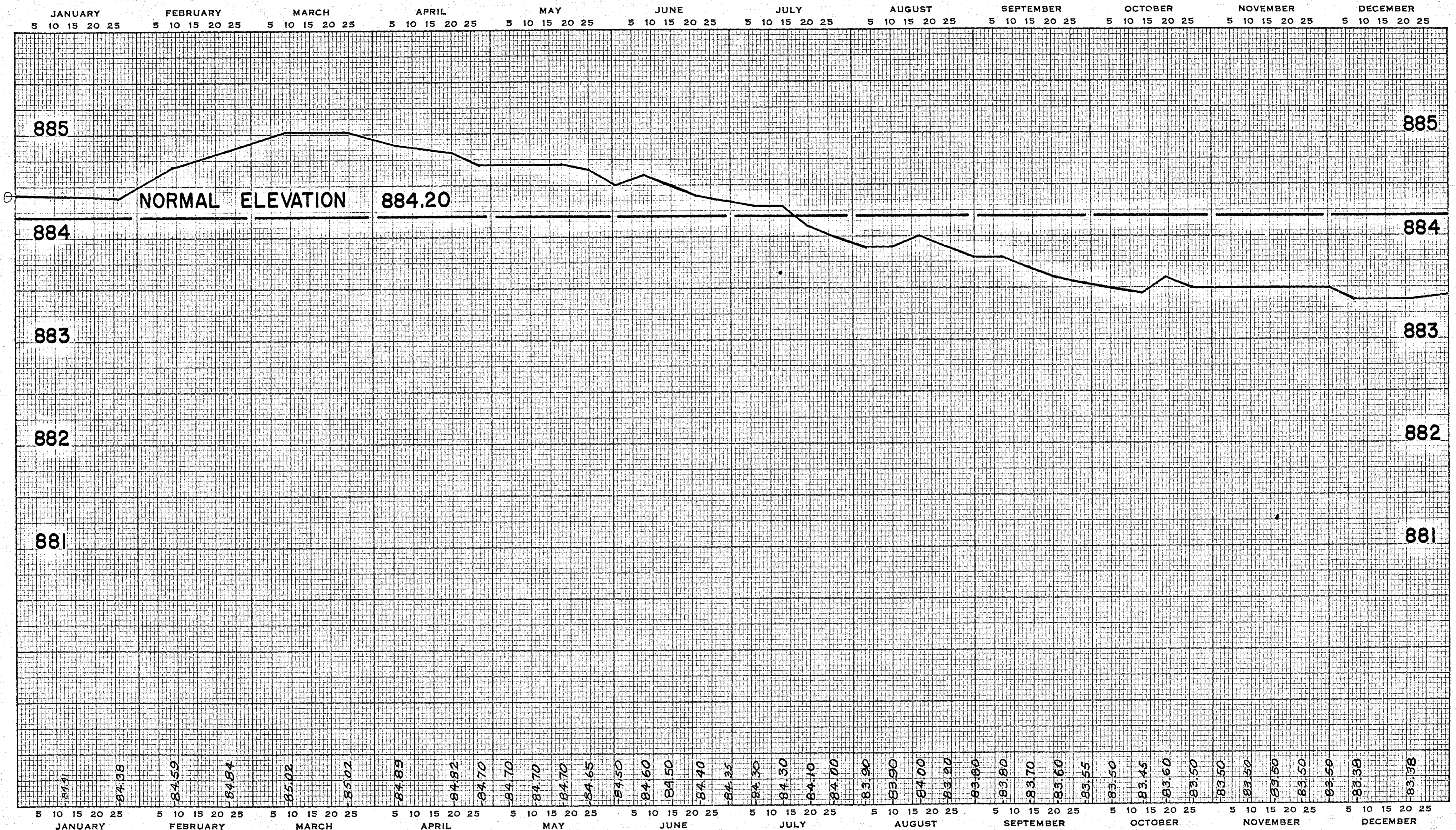
Precipitation This Year 24.34
 Normal Precipitation 24.78
 Cum. Excess-Deficiency -22.05
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 to 1

Lake **JOSEPHINE** Year **1966**

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. _____



1 YEAR BY DAYS 47 2613
 X 150 DIVISIONS MADE IN U. S. A.
 KEUFFEL & ESSER CO.

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

PUMP NO.	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 _____
 Mil. Gals. Pumped This Year _____
 Equiv. on Lake in Ft. This Year _____
 K. W. H. Consumed This Year _____
 Av. Costs Per K. W. H. This Year _____
 Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost 8530.36
 Cum. M. G. Pumped 1344.22
 Cum. Equiv. on Lake in Ft. 31.52
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.35

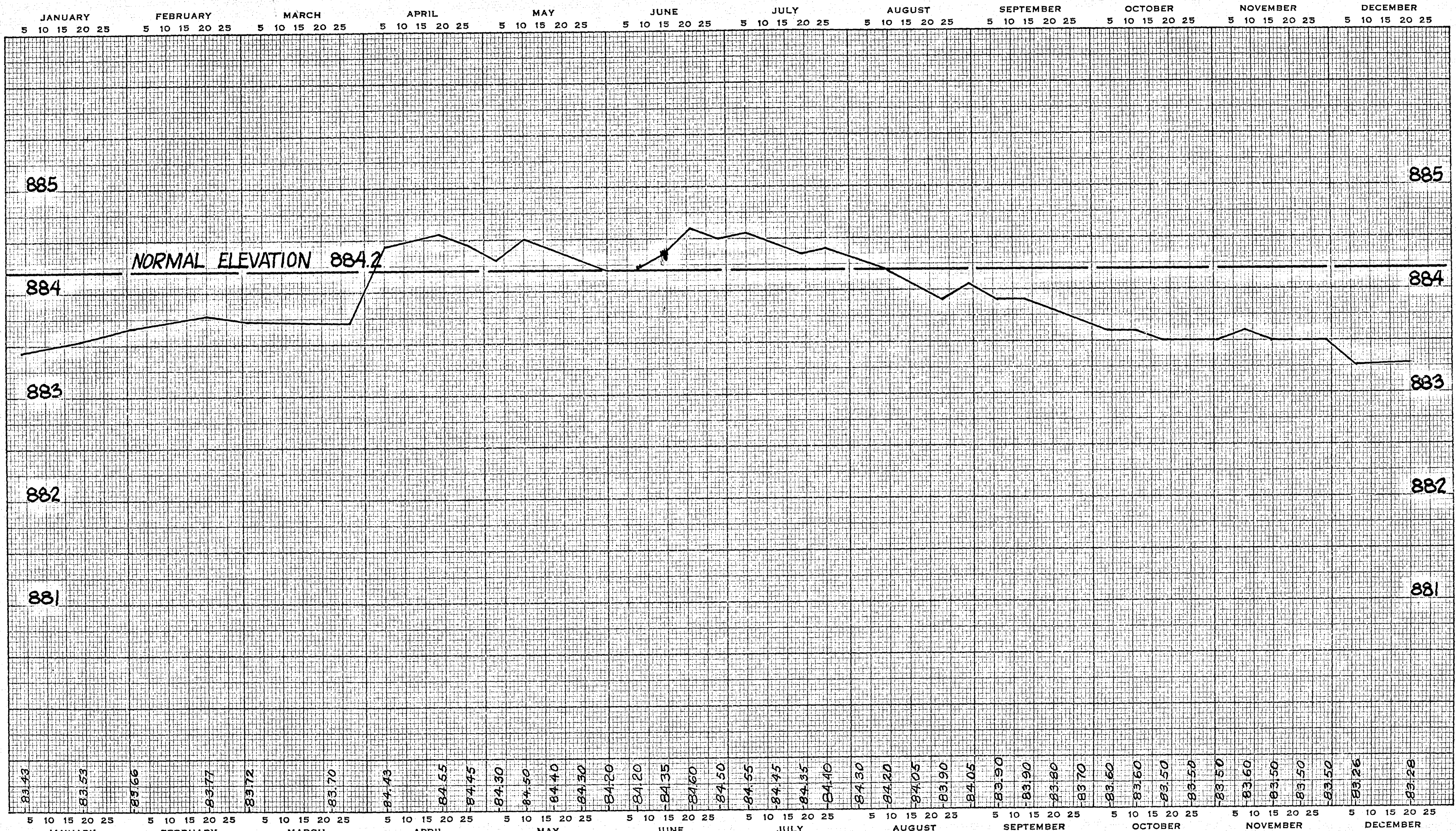
Precipitation This Year 25.44
 Normal Precipitation 24.78
 Cum. Excess-Deficiency - 21.39
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake **JOSEPHINE** Year **1967**

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. _____



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

PUMP NO.	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 _____
 Mil. Gals. Pumped This Year _____
 Equiv. on Lake in Ft. This Year _____
 K. W. H. Consumed This Year _____
 Av. Costs Per K. W. H. This Year _____
 Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost 8530.36
 Cum. M. G. Pumped 1344.22
 Cum. Equiv. on Lake in Ft. 31.52
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.35

KE 1 YEAR BY DAYS 47 2813
 X 150 DIVISIONS MADE IN U.S.A.
 KEUFFEL & ESSER CO.

SEA LEVEL ELEVATION

Precipitation This Year 37.93

Area in Acres at Normal Elevation 131

Lake **JOSEPHINE** Year **1968**

Normal Precipitation 24.78

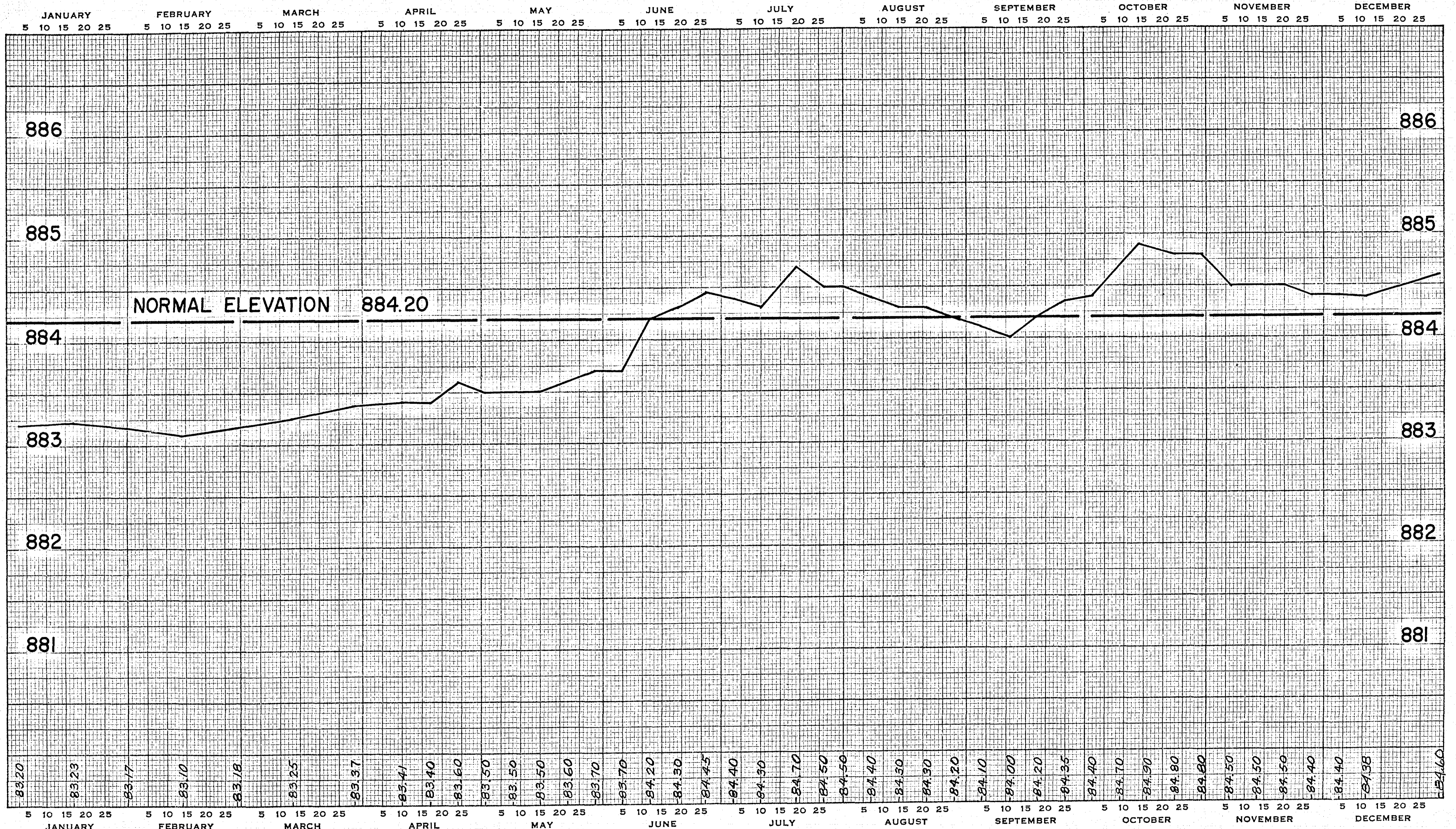
Gallons Equiv. to One Foot on Lake 42,900,000

OFFICE OF
RAMSEY COUNTY ENGINEER

Cum. Excess-Deficiency -8.24
(Since 1924)

Ratio: Watershed to Lake Area 1.08 to 1

Sheet No. _____



1 YEAR BY DAYS
X 150 DIVISIONS
MADE IN U.S.A.
KEUFFEL & ESSER CO.

SEA LEVEL ELEVATION

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

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

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

Cum. Pumping Cost 8530.36
 Cum. M. G. Pumped 1344.22
 Cum. Equiv. on Lake in Ft. 31.52
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.35

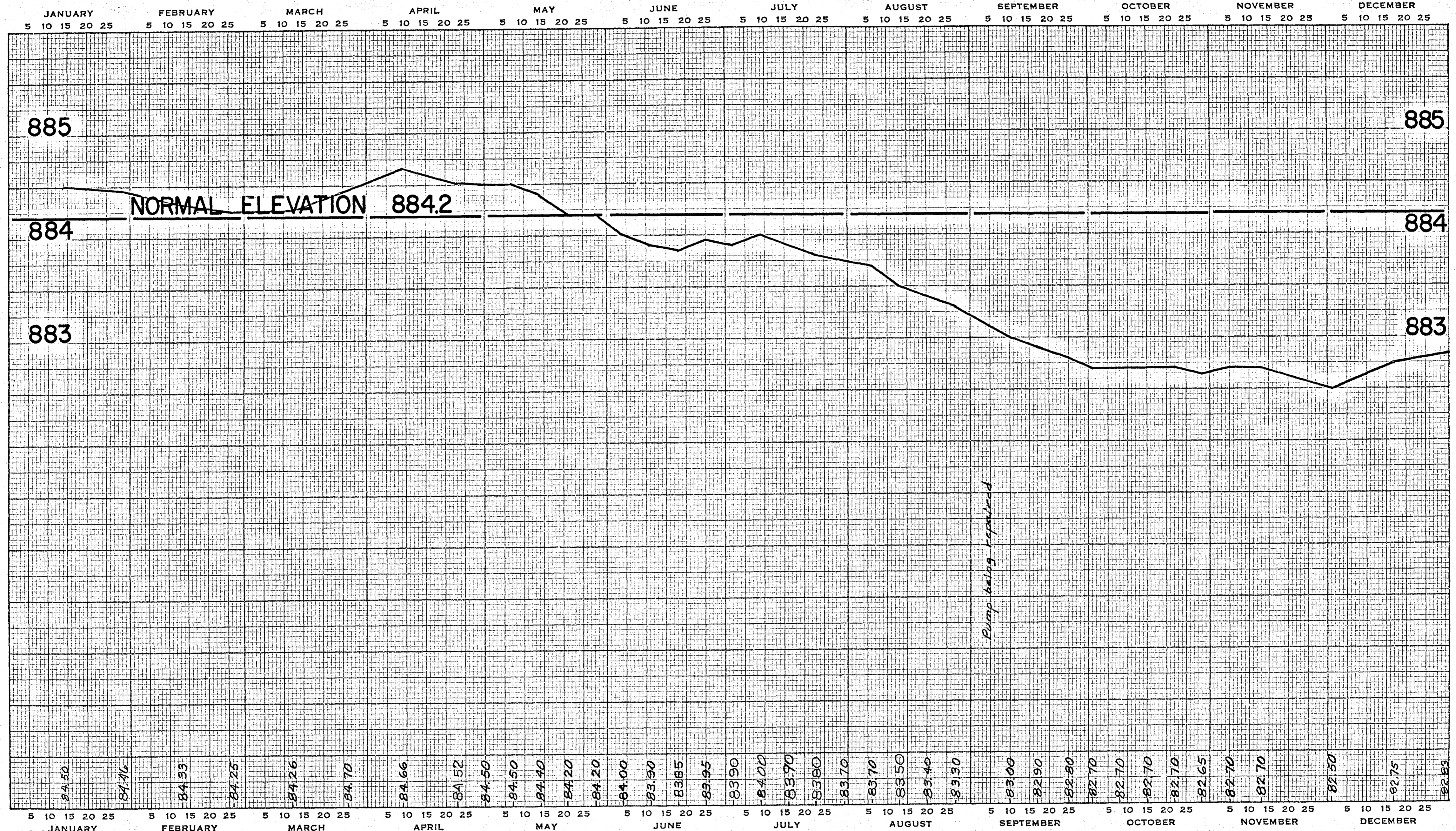
Precipitation This Year 19.39
 Normal Precipitation 24.78
 Cum. Excess-Deficiency -13.63
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake **JOSEPHINE** Year **1969**

OFFICE OF
RAMSEY COUNTY ENGINEER

Sheet No. _____



1 YEAR BY DAYS 47 2613
 X 150 DIVISIONS MADE IN U.S.A.
 KEUFFEL & ESSER CO.

SEA LEVEL ELEVATION

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

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

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

Cum. Pumping Cost 8530.36
 Cum. M. G. Pumped 1344.22
 Cum. Equiv. on Lake in Ft. 31.52
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.35

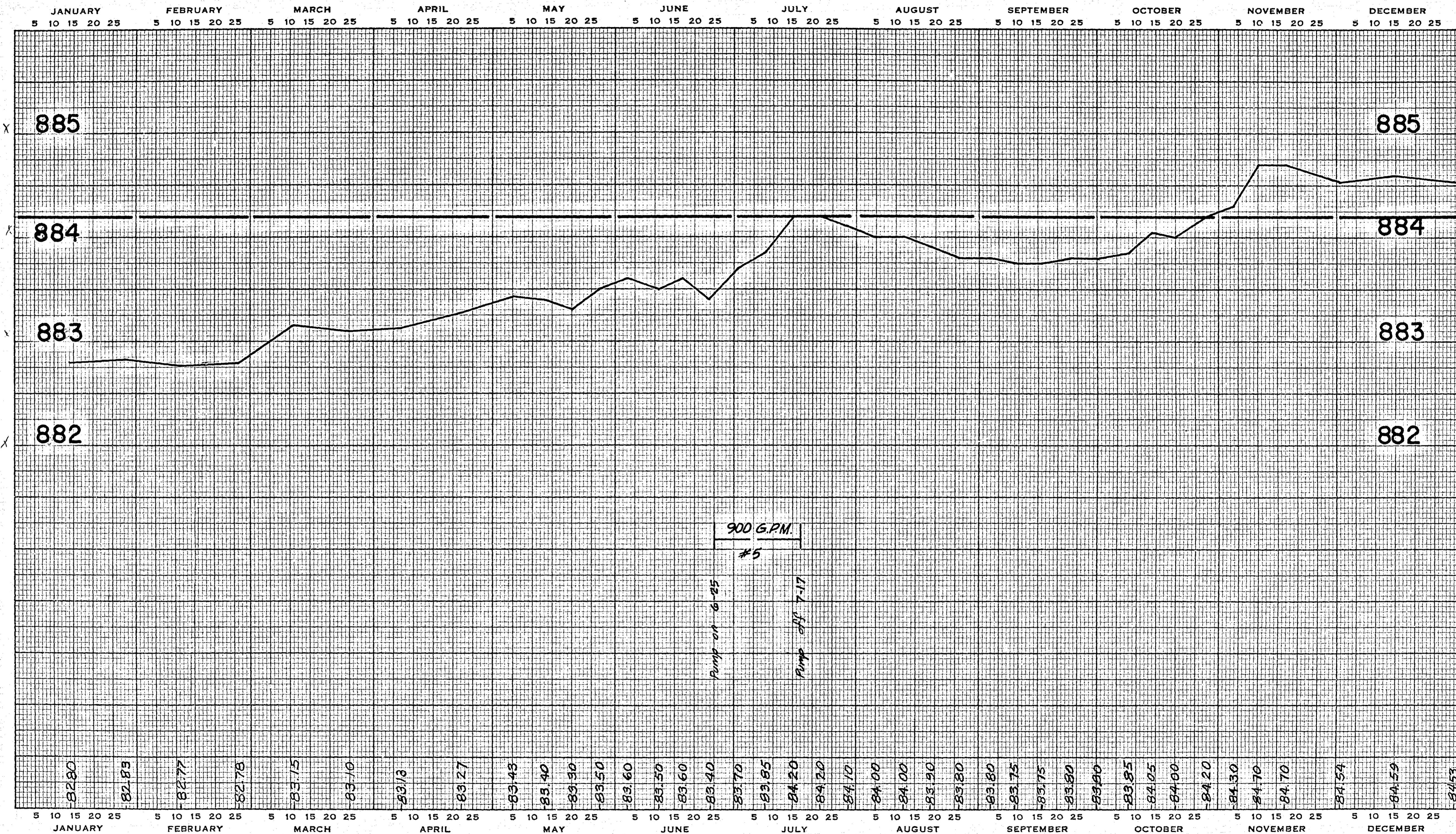
Precipitation This Year 30.53
 Normal Precipitation 24.78
 Cum. Excess-Deficiency -7.88
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake **JOSEPHINE** Year **1970**

OFFICE OF
RAMSEY COUNTY ENGINEER

Sheet No. _____



1 YEAR BY DAYS
 X 150 DIVISIONS
 KEUFFEL & ESSER CO.
 MADE IN U.S.A.

SEA LEVEL ELEVATION

PUMP NO. 5

Month	K.W. Demand	K.W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE		4533	7713
JULY		12087	20568
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL		16620	28281

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.

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 28281
 Mil. Gals. Pumped This Year 28.51
 Equiv. on Lake in Ft. This Year .66
 K. W. H. Consumed This Year 16,620
 Av. Costs Per K. W. H. This Year .0170
 Av. Costs Per M. G. Pumped This Year 9.92

Cum. Pumping Cost 8,813.17
 Cum. M. G. Pumped 1,372.73
 Cum. Equiv. on Lake in Ft. 32.18
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped 6.42

Precipitation This Year _____

Area in Acres at Normal Elevation 131

Lake **JOSEPHINE** Year **1971**

Normal Precipitation _____

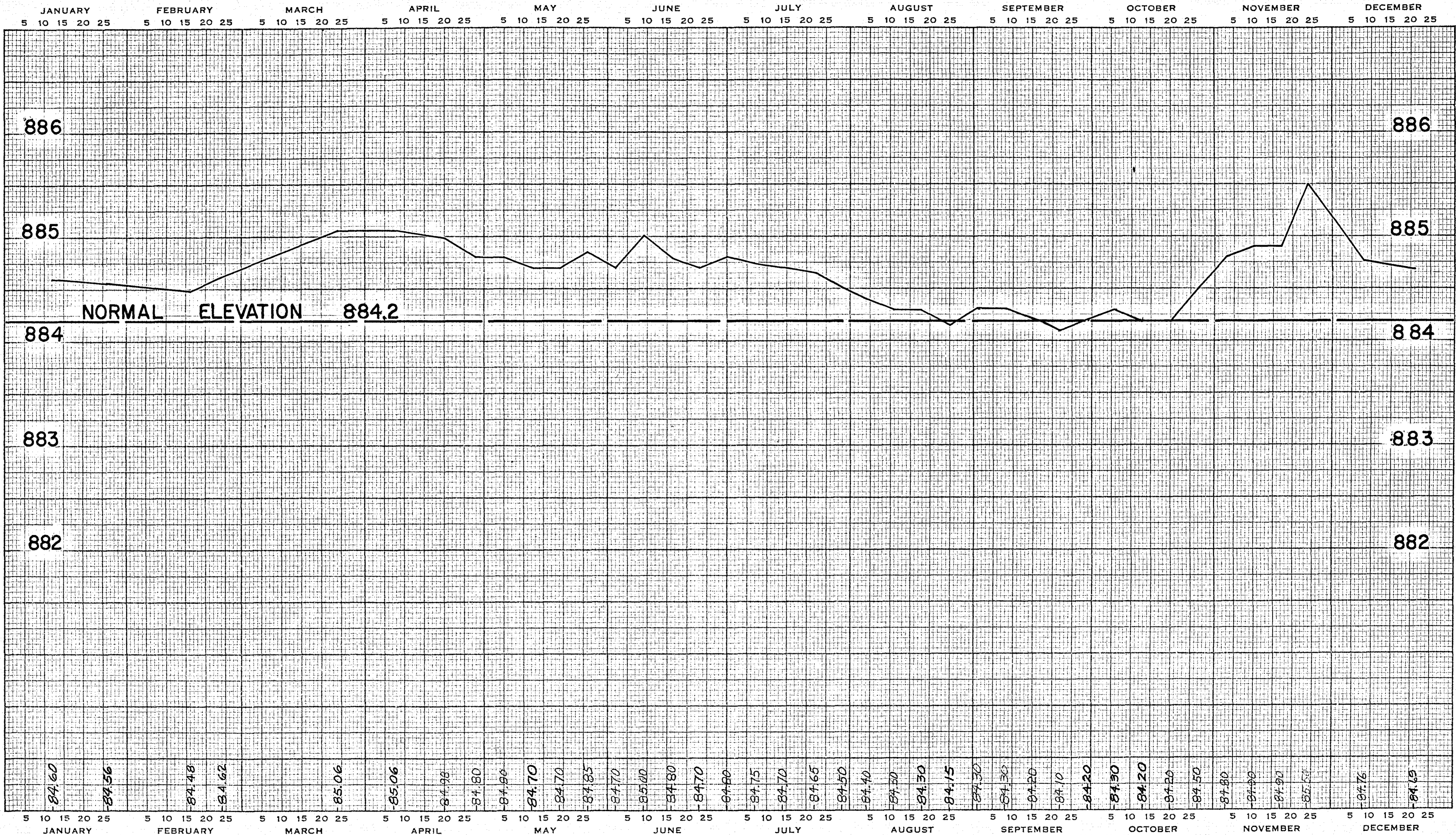
Gallons Equiv. to One Foot on Lake 42,900,000

OFFICE OF
RAMSEY COUNTY ENGINEER

Cum. Excess-Deficiency _____
(Since 1924)

Ratio: Watershed to Lake Area 1.08 to 1

Sheet No. _____



1 YEAR BY DAYS
X 150 DIVISIONS
KEUFFEL & ESSER CO.

SEA LEVEL ELEVATION

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

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

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 _____

Mil. Gals. Pumped This Year _____

Equiv. on Lake in Ft. This Year _____

K. W. H. Consumed This Year _____

Av. Costs Per K. W. H. This Year _____

Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost **8,813.17**

Cum. M. G. Pumped **1,372.73**

Cum. Equiv. on Lake in Ft. **32.18**

Cum. K. W. H. _____

Cum. Av. Cost Per K. W. H. _____

Cum. Av. Costs Per M. G. Pumped **6.42**

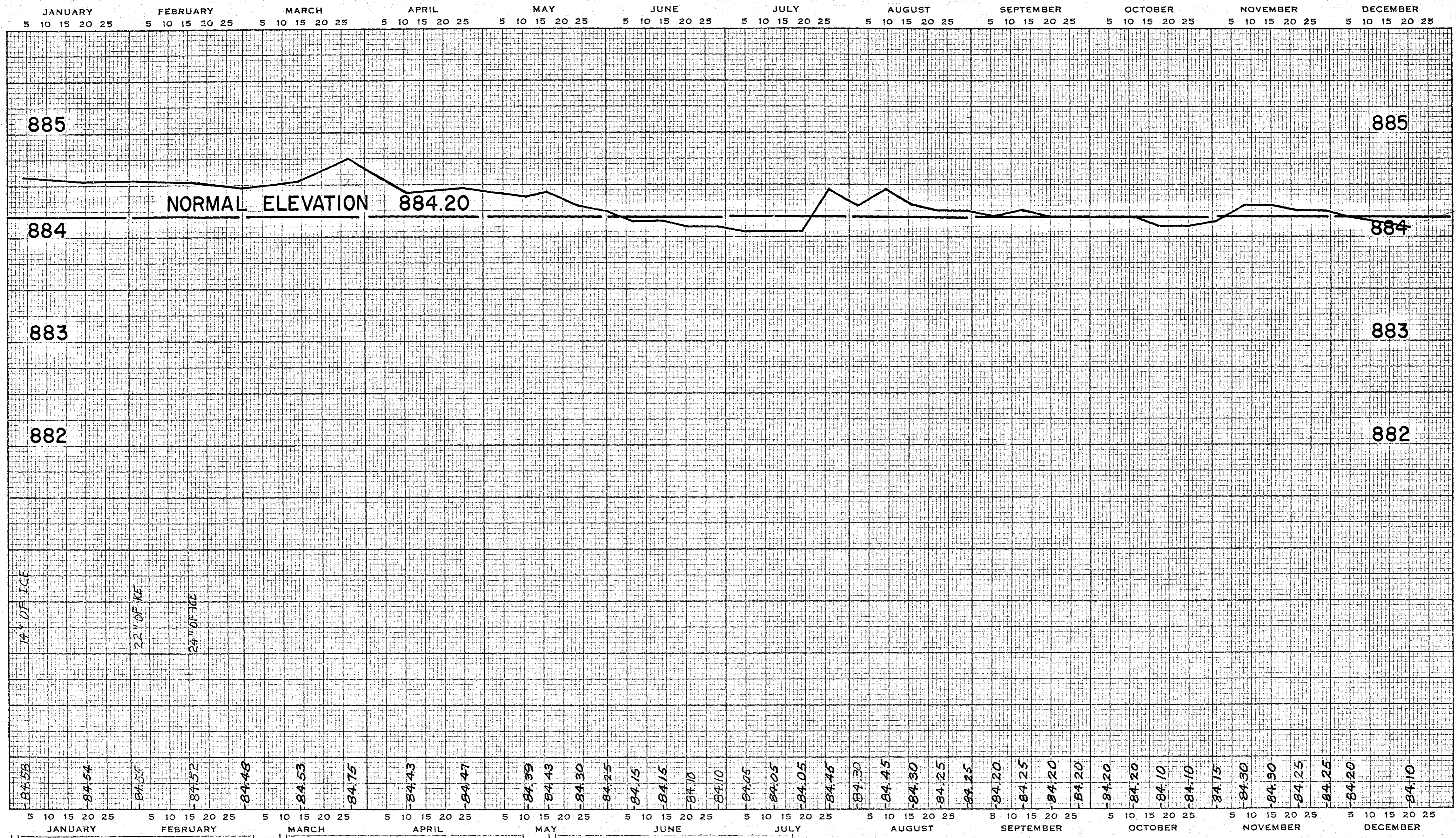
Precipitation This Year _____
 Normal Precipitation _____
 Cum. Excess-Deficiency _____
 (Since 1924)

Area in Acres at Normal Elevation 131
 Gallons Equiv. to One Foot on Lake 42,900,000
 Ratio: Watershed to Lake Area 1.08 TO 1

Lake JOSEPHINE Year 1972

OFFICE OF
 RAMSEY COUNTY ENGINEER

Sheet No. _____



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

PUMP NO.	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 _____
 Mil. Gals. Pumped This Year _____
 Equiv. on Lake in Ft. This Year _____
 K. W. H. Consumed This Year _____
 Av. Costs Per K. W. H. This Year _____
 Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost _____
 Cum. M. G. Pumped _____
 Cum. Equiv. on Lake in Ft. _____
 Cum. K. W. H. _____
 Cum. Av. Cost Per K. W. H. _____
 Cum. Av. Costs Per M. G. Pumped _____

1 YEAR BY DAYS 47 2813
 X 150 DIVISIONS
 KEUFFEL & ESSER CO.

SEA LEVEL ELEVATION

Precipitation This Year _____

Area in Acres at Normal Elevation 131

Lake **JOSPHINE** Year **1973**

Normal Precipitation _____

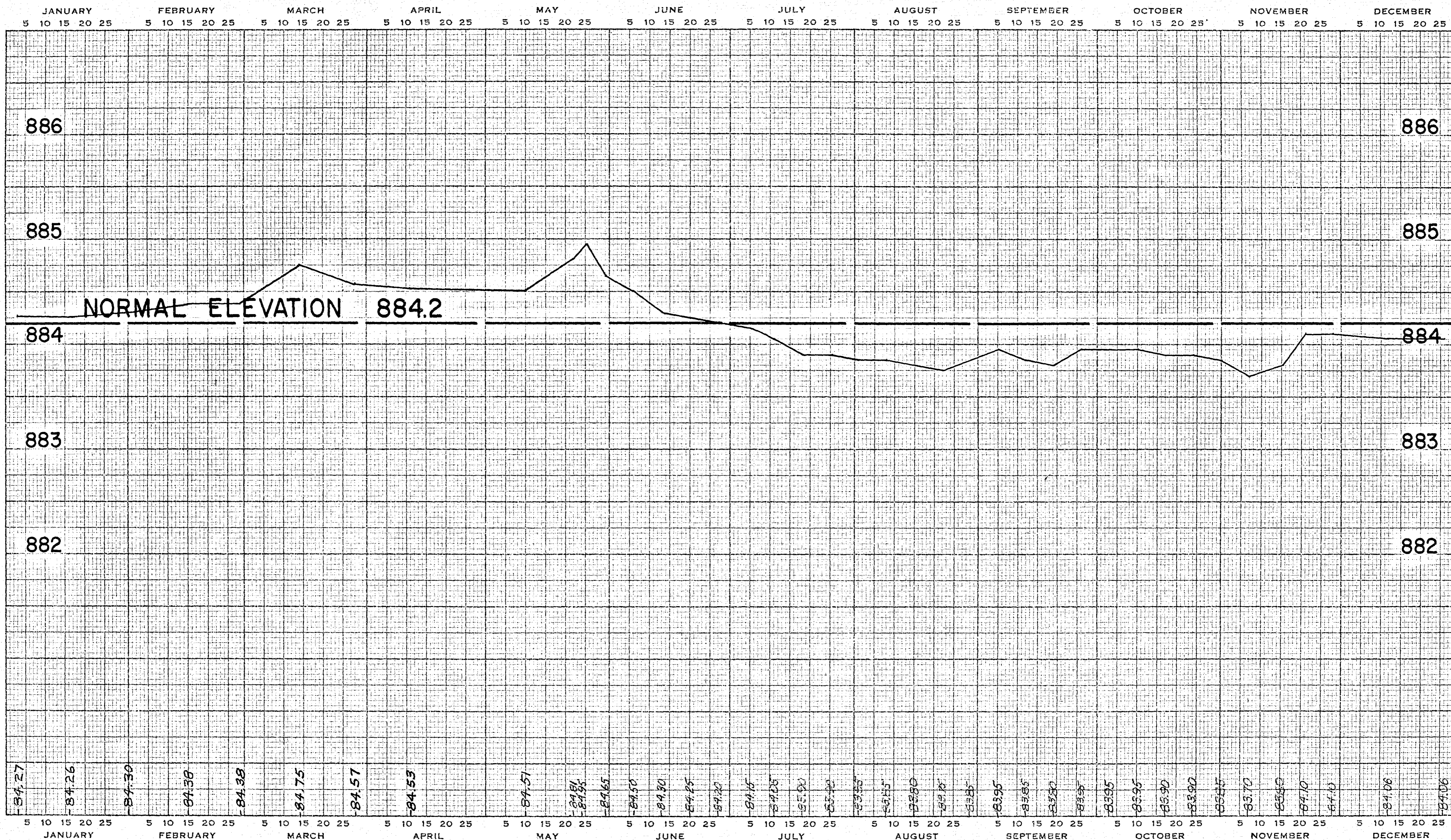
Gallons Equiv. to One Foot on Lake 42,900,000

OFFICE OF
RAMSEY COUNTY ENGINEER

Cum. Excess-Deficiency _____
(Since 1924)

Ratio: Watershed to Lake Area 1.08 to 1

Sheet No. _____



SEA LEVEL ELEVATION

1 YEAR BY DAYS X 180 DIVNS. 359-1411
KEUFFEL & ESSER CO. MADE IN U.S.A.
CALENDAR YEAR

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

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

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 _____

Mil. Gals. Pumped This Year _____

Equiv. on Lake in Ft. This Year _____

K. W. H. Consumed This Year _____

Av. Costs Per K. W. H. This Year _____

Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost _____

Cum. M. G. Pumped _____

Cum. Equiv. on Lake in Ft. _____

Cum. K. W. H. _____

Cum. Av. Cost Per K. W. H. _____

Cum. Av. Costs Per M. G. Pumped _____

PUMP NO.

PUMP NO.

PUMP NO.

Precipitation This Year _____

Area in Acres at Normal Elevation 131

Lake JOSEPHINE Year 1974

Normal Precipitation _____

Gallons Equiv. to One Foot on Lake 42,900,000

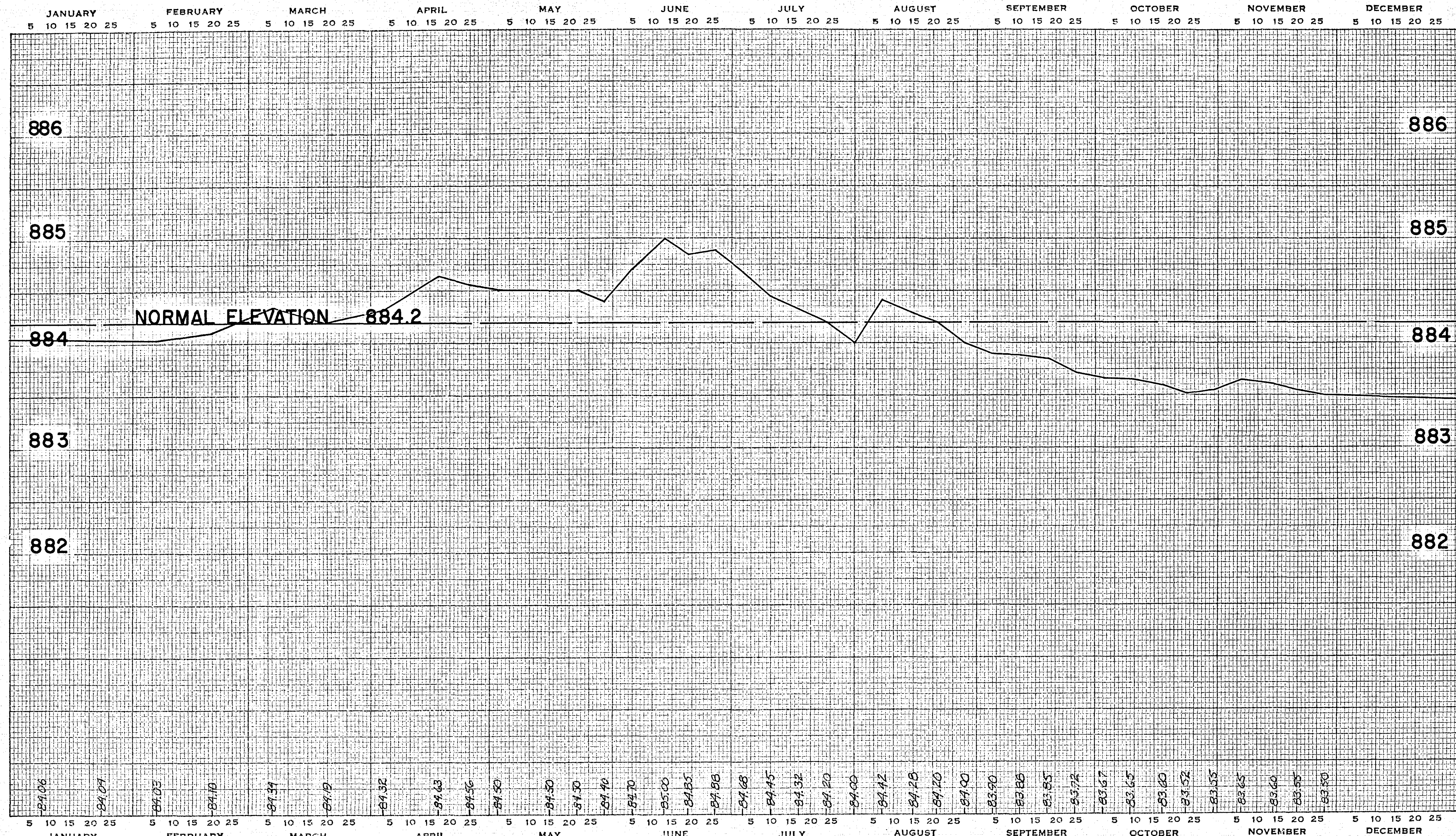
OFFICE OF
RAMSEY COUNTY ENGINEER

Cum. Excess-Deficiency _____
(Since 1924)

Ratio: Watershed to Lake Area 1.08 to 1

Sheet No. _____

DAILY RECORD SHEET



KEUFFEL & ESSER CO., N. Y. NO. 359-14-1
One Year by Days. Calendar Year.
Divided 10 per unit vertically.

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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

PUMPING UNIT NO. _____

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 _____

Mil. Gals. Pumped This Year _____

Equiv. on Lake in Ft. This Year _____

Av. Costs Per K. W. H. This Year _____

Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost _____

Cum. M. G. Pumped _____

Cum. Equiv. on Lake in Ft. _____

Cum. Av. Cost Per K. W. H. _____

Cum. Av. Costs Per M. G. Pumped _____

Precipitation This Year _____

Area in Acres at Normal Elevation 131

Lake **JOSEPHINE** Year **1975**

Normal Precipitation _____

Gallons Equiv. to One Foot on Lake 42,900,000

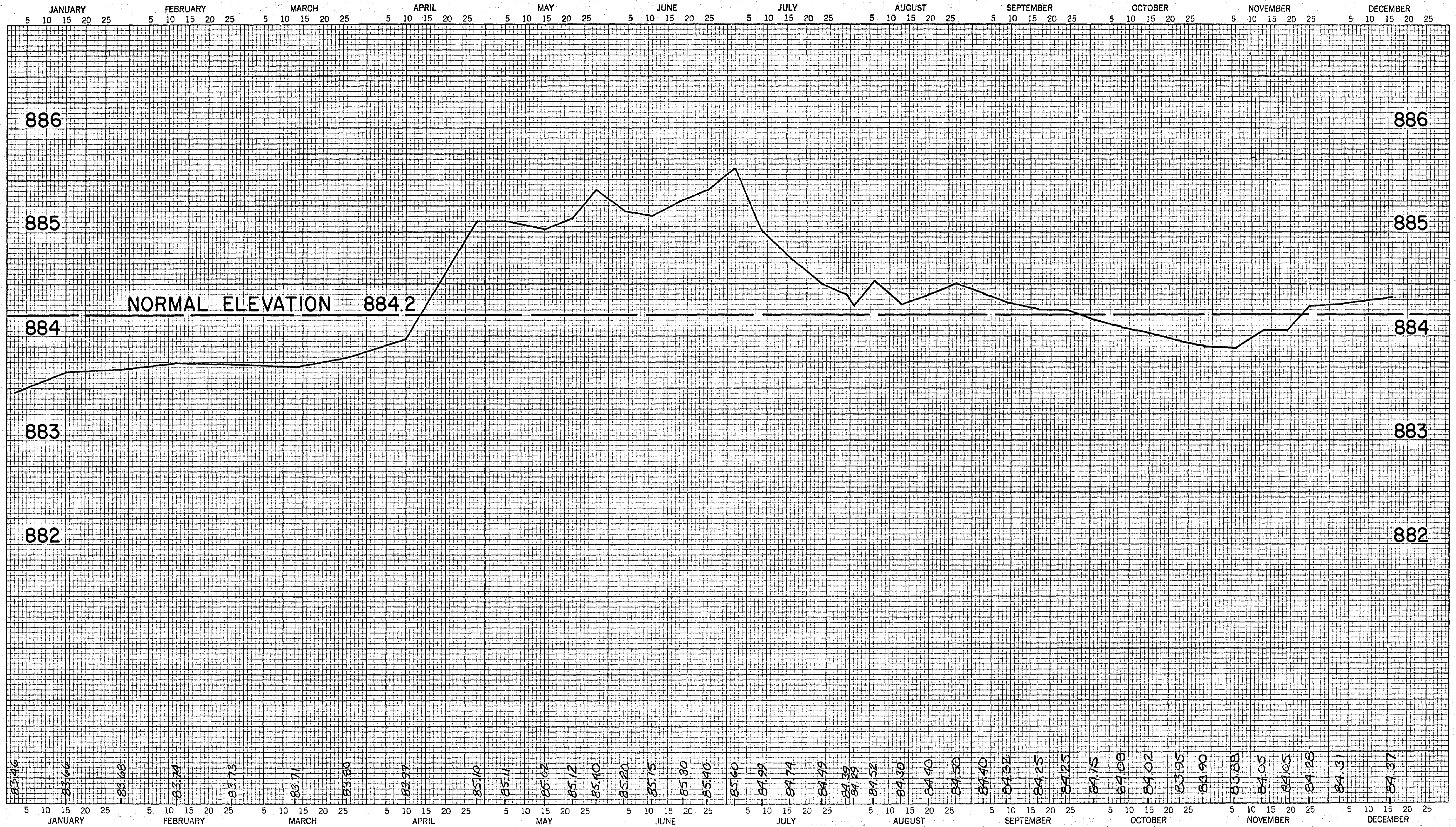
OFFICE OF
RAMSEY COUNTY ENGINEER

Cum. Excess-Deficiency _____
(Since 1924)

Ratio: Watershed to Lake Area 1.08 to 1

Sheet No. _____

FORM NO. LI-101



47 2813

1 YEAR BY DAYS X 150 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SEA LEVEL ELEVATION

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

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

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 _____

Mil. Gals. Pumped This Year _____

Equiv. on Lake in Ft. This Year _____

K. W. H. Consumed This Year _____

Av. Costs Per K. W. H. This Year _____

Av. Costs Per M. G. Pumped This Year _____

Cum. Pumping Cost _____

Cum. M. G. Pumped _____

Cum. Equiv. on Lake in Ft. _____

Cum. K. W. H. _____

Cum. Av. Cost Per K. W. H. _____

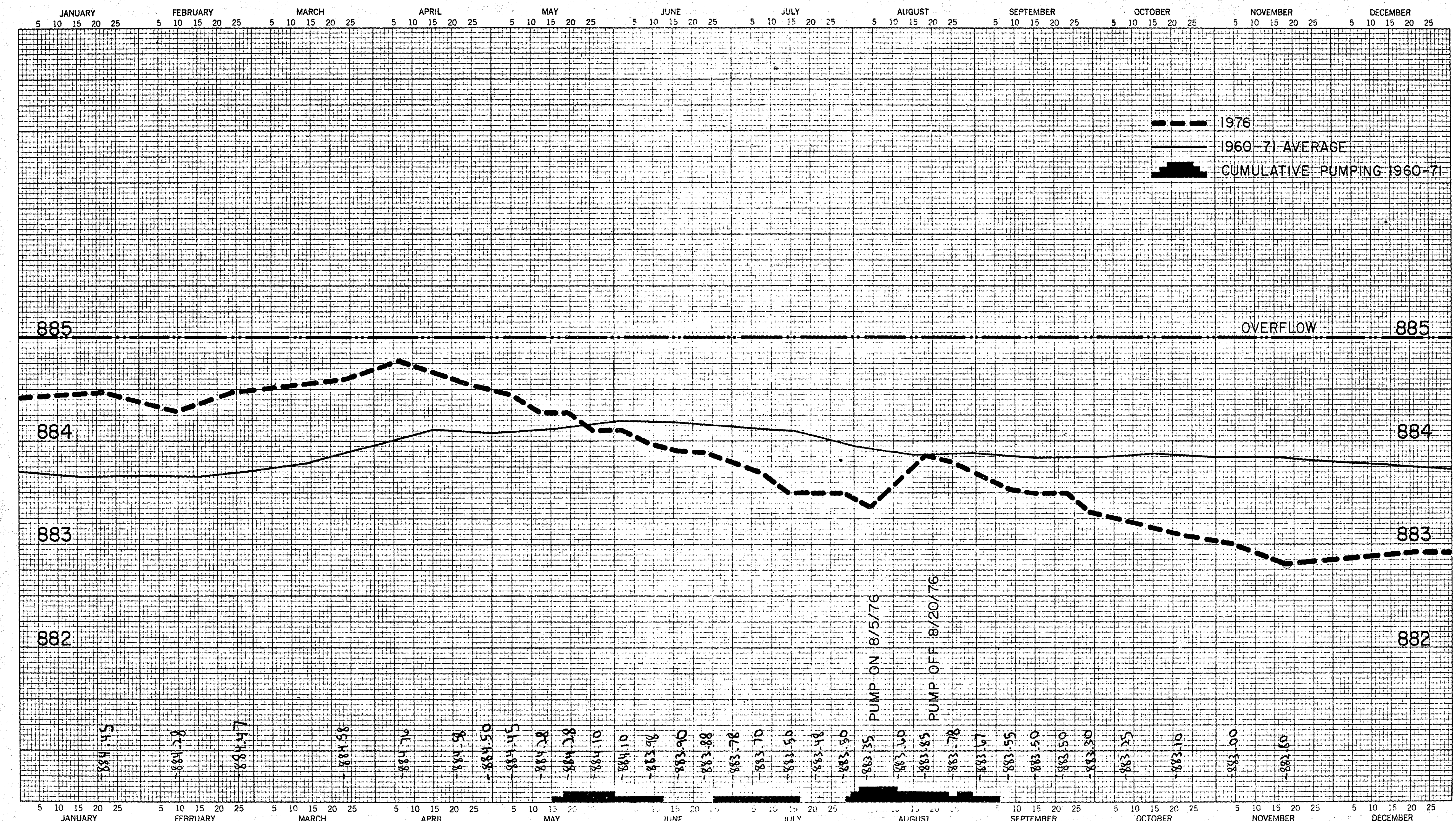
Cum. Av. Costs Per M. G. Pumped _____

HISTORICAL

PUMP: ON OFF

Precipitation This Year _____ HIGH _____ LOW _____ Area in Acres at Normal Elevation 131 HIGH 883.60 884.20 Lake JOSEPHINE Year 1976
 Normal Precipitation _____ 885.70 881.50 Gallons Equiv. to One Foot on Lake 42684 M.G. LOW 883.20 883.65 OFFICE OF
 Cum. Excess-Deficiency _____ 6/04/42 7/10/26 Ratio: Watershed to Lake Area _____ AVG. 883.43 883.86 **RAMSEY COUNTY ENGINEER**
 (Since 1924) Sheet No. _____

FORM NO. LI-101 PUMP NO. 5 CAPACITY 900 G.P.M. PUMPING DAYS / ONE FOOT RISE 32.9



47 2813

46

1 YEAR BY DAYS X 150 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SEA LEVEL ELEVATION

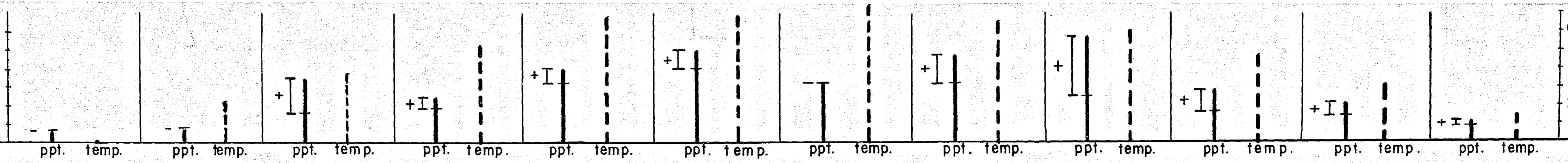
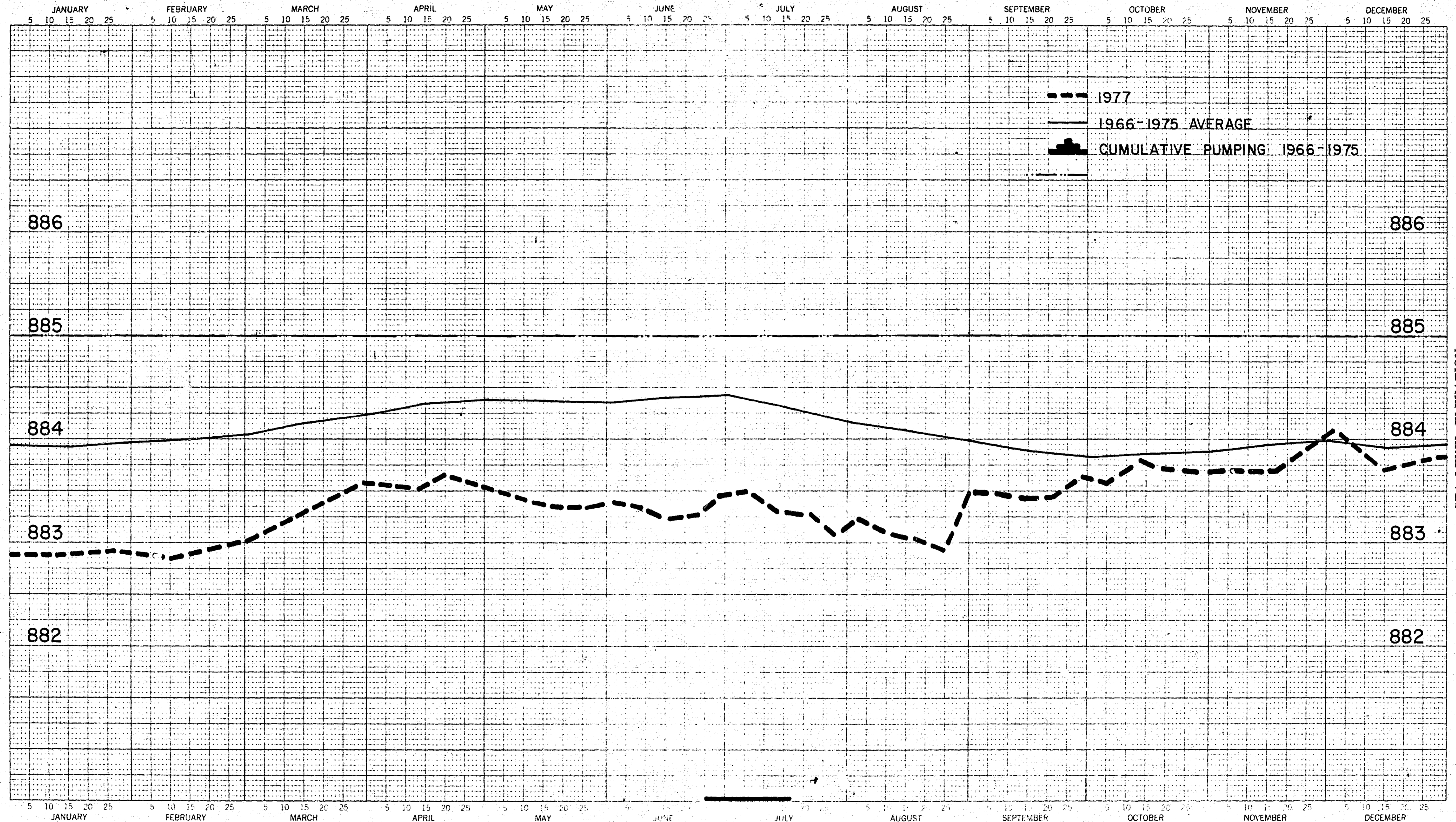
Month	K.W. Demand	K.W. Consumed	Total Cost
JAN.			
FEB.			
MAR.			
APR.			
MAY			
JUNE			
JULY			
AUG.			
SEPT.			
OCT.			
NOV.			
DEC.			
TOTAL			

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

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

Precipitation This Year 36.03 Area in Acres at Normal Elevation 131 Pump: (192 -75) (1966-75)
 Normal Precipitation 24.78 Gallons Equiv. to One Foot on Lake 42,684 M.G. High 884.80 884.70 883.45 884.20 Lake JOSEPHINE Year 1977
 Excess-Deficiency +11.25 Pumping Days/One Foot Rise 32.9 Low 881.50 882.75 Pump Run Once Historical (1924-77) (1966-77)
 Pump No. 5 Capacity 900 G.P.M. DNR Limit : 100 M.G. Avg. 883.52 883.89 Low 881.50 7/10/26 882.50 12/01/69



47 2813

-46-

1 YEAR BY DAY'S X 1/4 DIVISIONS
 REUTHEL & ESSER CO. CHICAGO, ILL.

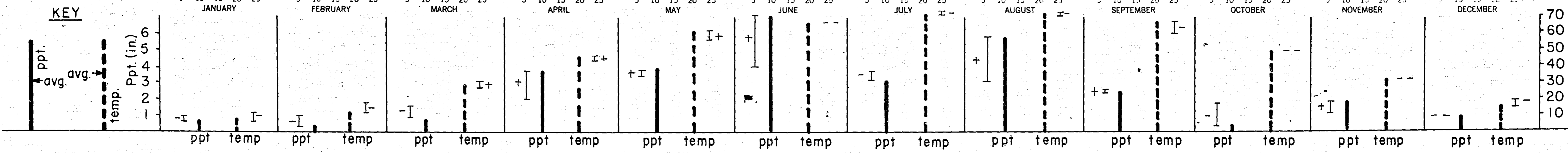
SEA LEVEL ELEVATION

Precipitation This Year 33.88 Area in Acres at Normal Elevation 131 Pump: (192-75) On Off (1966-75) On Off Lake JOSEPHINE Year 1978
 Normal Precipitation 24.78 Gallons Equiv. to One Foot on Lake 42.684 M.G. High 884.80 884.70 883.45 884.20 Historical (1924-78) (1966-78)
 Excess-Deficiency +9.10 Pumping Days/One Foot Rise 32.9 Low 881.50 882.75 Pump Run Once High 885.70 6/04/42 885.65 7/03/78
 Pump No. 5 Capacity 900 G.P.M. DNR Limit : _____ Avg. 883.52 883.89 Low 881.50 7/10/26 882.50 12/01/69



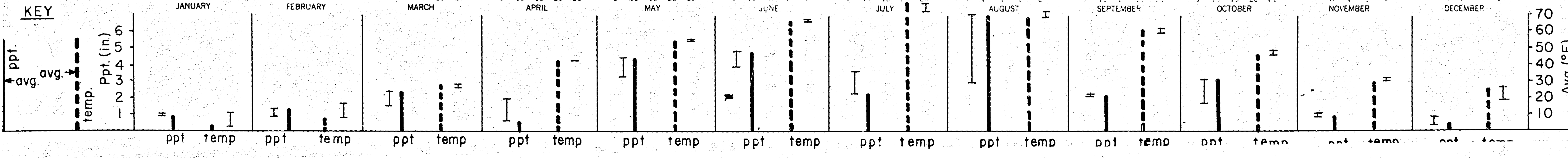
47 2813

1 YEAR BY DAYS X 150 DIVISIONS
 KEUTTEL & BISSER CO. MADE IN U.S.A.



KEY
 ppt. avg. temp. Ppt. (in.) Avg. (°F)

Precipitation This Year 31.07 Area in Acres at Normal Elevation 131 Pump: (192-75) On - Off (1966-75) On Off Lake JOSEPHINE Year 1979
 Normal Precipitation 25.94 Gallons Equiv. to One Foot on Lake 42,684 M.G. High 884.80 884.70 883.45 884.20 Historical (1924-79) (1966-79)
 Excess-Deficiency +5.13 Pumping Days/One Foot Rise 32.9 Low 881.50 882.75 Pump Run Once High 885.70 6/04/42 885.65 7/03/78
 Pump No. 5 Capacity 900 G.P.M. DNR Limit: _____ Avg. 883.52 883.89 Low 881.50 7/10/26 882.50 12/01/69



47 2813

1 YEAR BY DAYS X 10 DIVISIONS
 PRECIPITATION & TEMPERATURE

SEA LEVEL ELEVATION