

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Medicine

NAME OF RESERVOIR

46-6

DATA SHEET NO.

DAM	1. OWNER Lake Medicine Resort Corp.		2. RIVER Medicine Lodge Cr.		3. STATE Kansas			
	4. SEC. 24 TWP. 30S RANGE 12W		5. NEAREST TOWN Medicine Lodge		6. COUNTY Barber			
	7. STREAM BED ELEV.		8. TOP OF DAM ELEV.		9. SPILLWAY CREST ELEV.			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE- FEET	14. ACCUMULATED ACRE- FEET	15. DATE STORAGE BEGAN		
	d. FLOOD CONTROL					August 1929		
	b. POWER							
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION							
	e. CONSERVATION			32.5	365	365	August 1929	
	f. INACTIVE							
17. LENGTH OF RESERVOIR		0.47	MILES		AV. WIDTH OF RESERVOIR MILES			
WATERSHED	18. TOTAL DRAINAGE AREA		1.89 1/	SQ. MI.	22. MEAN ANNUAL PRECIPITATION 25.47 (45) INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA		1.84	SQ. MI.	23. MEAN ANNUAL RUNOFF INCHES			
	20. LENGTH		MILES		AV. WIDTH MILES			
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION Subhumid			
SURVEY DATA	26. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA ACRES	32. CAPACITY ACRE- FEET	33. C/W RATIO AC- FT. PER SQ. MI.
	August 1929	-	-	-	-	32.5	365	193
	October 1940	11.2	11.2	Range Detailed	22	30.9	295	156
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AC- FT.		
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	d. MEAN ANNUAL	e. TOTAL TO DATE	
	October 1940	21.73						
	26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE- FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.			
		a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.- YEAR	d. TOTAL TO DATE	e. AV. ANNUAL	f. PER SQ. MI.- YEAR	
	October 1940	70.0 (75.0)	6.25 (6.70)	3.40 (3.64)	70.0 (75.0)	6.25 (6.70)	3.40 (3.64)	
	26. DATE OF SURVEY	39. AV. DRY WGT. LBS. PER CU. FT.	40. SED. DEP. TONS PER SQ. MI.- YR.		41. STORAGE LOSS PCT.		42. SED. INFLOW PPM	
a. PERIOD			b. TOTAL TO DATE	c. AV. ANNUAL	d. TOT. TO DATE	e. PERIOD	f. TOT. TO DATE	
October 1940	98.52 (6)	7296 (7810)	7296 (7810)	1.71	19.18			

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION													
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES
1/ Taken from stereoscopic study of drainage area.
 Unpublished data.

Region 5, Soil Conservation Service
 U. S. Dept. of Agriculture
 Lincoln, Nebraska

49. DATE May 25, 1951

48. AGENCY SUPPLYING DATA