

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Thorne  
NAME OF RESERVOIR

31-37  
DATA SHEET NO.

DAM	1. OWNER John Thorne			2. RIVER Unnamed Tributary			3. STATE Kansas									
	4. SEC. NE 15 TWP. 6 S RANGE 19 E			5. NEAREST TOWN Effingham			6. COUNTY Atchison									
	7. STREAM BED ELEV. 1000*			8. TOP OF DAM ELEV. 1025*			9. SPILLWAY CREST ELEV. 1022*									
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					
	a. FLOOD CONTROL										September 1946					
	b. POWER															
	c. WATER SUPPLY		1020*		7.68		29.13		29.13		16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION															
	e. CONSERVATION															
	f. INACTIVE										September 1946					
17. LENGTH OF RESERVOIR 0.15 MILES					AV. WIDTH OF RESERVOIR 0.05 MILES											
WATERSHED	18. TOTAL DRAINAGE AREA 1.17 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 34* INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 1.16 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES											
	20. LENGTH 1.6 MILES		AV. WIDTH 0.7 MILES		24. MEAN ANNUAL RUNOFF AG.-FT.											
	21. MAX. ELEV. 1130		MIN. ELEV. 1000		25. CLIMATIC CLASSIFICATION											
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.	
	Sept., 1941		-		-		-		-		7.68		29.13		24.9	
	August 1957		11		11		Range		6		7.68		17.7		15.13	
	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		a. MEAN ANNUAL		b. TOTAL TO DATE			
	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		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR			
	August 1957		11.5		1.04		.90		11.5		1.04		0.90			
	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		a. AV. ANNUAL		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE		
August 1957		60*		1176		1176		3.6		39.1						

\* Assumed

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