

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Smith-Case
NAME OF RESERVOIR

46- 27

DATA SHEET NO.

Trib. to

DAM	1. OWNER Kermit Case			2. STREAM Little Ark River			3. STATE Kansas									
	4. SEC. 24 TWP. 19S RANGE 7W			5. NEAREST P.O. Little River			6. COUNTY Rice									
	7. LAT 39° 9' N " LONG 98° 2' W "			8. TOP OF DAM ELEVATION 104.00			9. SPILLWAY CREST ELEV. 100.00									
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		13. ORIGINAL CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN					
	a. FLOOD CONTROL		100.00		11.67		58.49		66.89		Dec. 18 1958					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY		92.00		3.36		8.40		8.40		16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION										Dec. 18 1958					
	f. CONSERVATION															
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 0.17 MILES				AV. WIDTH OF RESERVOIR 0.08 MILES											
	18. TOTAL DRAINAGE AREA 0.56 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 26.20 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 0.56 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.20 INCHES											
	20. LENGTH 1.00 MILES		AV. WIDTH 0.56 MILES		24. MEAN ANNUAL RUNOFF 36 AC.-FT.											
	21. MAX. ELEV.		MIN. ELEV.		25. ANNUAL TEMP: MEAN 56 RANGE -27 to +114											
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/I. RATIO, AC.-FT. PER AC.-FT.	
	August 22 1968		9.75		9.75		Range		6		11.67		Original 66.89		1.86	
													Present 62.29		1.73	
	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 CAPACITY LOSS, 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 22 1968		4.60		0.47		0.84		4.60		0.47		0.84			
	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. ANN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE				
August 22 1968		60 ¹/₂		1098		1098		0.70		6.88						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, 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
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

Trap Efficiency 96%

Pasture - fair 20% w/ 5% slopes
 Crop 80% w/ 2% slopes

83% of Cropland - under contours and terraces

1/ Assumed

48. AGENCY MAKING SURVEY

49. AGENCY SUPPLYING DATA **USDA Soil Cons. Service**

50. DATE **Sept. 16, 1968**