

RESERVOIR SEDIMENT  
DATA SUMMARY

SCS-34 Rev. 6-66

Sanger Pond

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

32- 49

DATA SHEET NO.

Trib. to

DAM	1. OWNER <u>A. T. Sanger</u>			2. STREAM <u>S. F. Solomon River</u>			3. STATE <u>Kansas</u>									
	4. SEC. <u>SE 1</u> TWP. <u>8</u> RANGE <u>25</u>			5. NEAREST P. O. <u>Morland, Ks. 3NE</u>			6. COUNTY <u>Graham</u>									
	7. LAT. <u>39° 22'</u> " LONG. <u>100 03</u> "			8. TOP OF DAM ELEVATION <u>103.0*</u>			9. SPILLWAY CREST ELEV. <u>100.0*</u>									
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		<u>100.0*</u>		<u>31.28</u>		<u>332.12</u>		<u>332.12</u>		<u>Mar. 1954</u>					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY		<u>98.5*</u>								<u>Mar. 1954</u>					
	e. IRRIGATION															
	f. CONSERVATION															
g. INACTIVE																
17. LENGTH OF RESERVOIR					<u>.42</u> MILES		18. AV. WIDTH OF RESERVOIR					<u>.12</u> MILES				
18. TOTAL DRAINAGE AREA					<u>2.53</u> SQ. MI.		22. MEAN ANNUAL PRECIPITATION					<u>21.1</u> INCHES				
19. NET SEDIMENT CONTRIBUTING AREA					<u>2.32</u> SQ. MI.		23. MEAN ANNUAL RUNOFF					<u>.70</u> INCHES				
20. LENGTH			<u>3.00</u> MILES		AV. WIDTH		<u>.84</u> MILES		24. MEAN ANNUAL RUNOFF			<u>94</u> AC.-FT.				
21. MAX. ELEV.			<u>2400*</u>		MIN. ELEV.		<u>2300*</u>		25. ANNUAL TEMP: MEAN <u>54°</u> F RANGE							
WATERSHED	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.	
	<u>8-11-70</u>		<u>16.4</u>		<u>16.4</u>		<u>Range (D)</u>		<u>7</u>		<u>31.28</u>		Original <u>332.12</u> Present <u>307.5</u>		<u>3.519</u> <u>3.271</u>	
SURVEY DATA	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				
<u>8-11-70</u>		<u>24.65</u>		<u>1.50</u>		<u>.65</u>		<u>24.65</u>		<u>1.50</u>		<u>.65</u>				
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				
<u>8-11-70</u>		<u>*65#</u>		<u>917</u>		<u>917</u>		<u>.45</u>		<u>7.43</u>						

\* Estimate

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	-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

Slope: Range (Fair) 5-6%. Cropland 3-4%.  
 Land Use: 51% Range & 49% Cropland (of which 91% is LCT).  
 Trap Efficiency: 97%  
 Yield: .668 Ac. Ft./Sq. Mi./Yr. (945.89 Tons/Sq. Mi./Yr.)

48. AGENCY MAKING SURVEY Kansas Watershed Planning Staff, Soil Conservation Service  
 49. AGENCY SUPPLYING DATA Soil Conservation Service 50. DATE 9-29-70