

RESERVOIR SEDIMENT  
DATA SUMMARY

SCS-34 Rev. 6-66

Heikes Pond  
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

32- 31  
DATA SHEET NO.

DAM	1. OWNER <u>Dick Heikes</u>			2. STREAM <u>Trib. to Elk Creek</u>			3. STATE <u>Kansas</u>					
	4. SEC. <u>NE 29</u> TWP. <u>4</u> RANGE <u>24</u>			5. NEAREST P. O. <u>Lenora, Ks. - 6NW</u>			6. COUNTY <u>Norton</u>					
	7. LAT. <u>39° 41'</u> " LONG <u>100° 03'</u> "			8. TOP OF DAM ELEVATION <u>103.5*</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										Oct. 1957	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY		<u>100.0*</u>		<u>8.31</u>		<u>32.00</u>		<u>32.00</u>		16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION										Oct. 1957	
	f. CONSERVATION											
	g. INACTIVE											
WATERSHED	17. LENGTH OF RESERVOIR <u>.33</u> MILES				AV. WIDTH OF RESERVOIR <u>.04</u> MILES							
	18. TOTAL DRAINAGE AREA <u>1.84</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <u>21.0</u> INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA <u>1.83</u> SQ. MI.				23. MEAN ANNUAL RUNOFF <u>.70</u> INCHES							
	20. LENGTH <u>2.38</u> MILES		AV. WIDTH <u>.55</u> MILES		24. MEAN ANNUAL RUNOFF <u>69</u> AC.-F.T.							
	21. MAX. ELEV. <u>2400</u> *		MIN. ELEV. <u>2330</u> *		25. ANNUAL TEMP: MEAN <u>53°</u> F RANGE							
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.		
	8-13-70		12.8	12.8	Range (D)	7	8.31	Original 32.00 Present 24.59		.466  .356		
	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				
	8-13-70		7.41	.58	.32	7.41	.58	.32				
	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		
8-13-70		<u>*75#</u>		523	523	1.81	23.16					

\*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
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) 6-14%. Cropland 1-3%  
Land Use: 34% Range & 66% Cropland (of which 80% is LCT).  
Trap Efficiency: 96%  
Yield: .329 Ac. Ft./Sq. Mi./Yr. (537.59 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