

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Jesse Pond
NAME OF RESERVOIR

32-39

DATA SHEET NO.

Trib. to

DAM	1. OWNER <u>Guy W. Jesse</u>			2. STREAM <u>Smoky Hill River</u>			3. STATE <u>Kansas</u>									
	4. SEC. <u>NW 5 TWP. 15</u> RANGE <u>24</u>			5. NEAREST P.O. <u>Arnold, Ks.-12108</u>			6. COUNTY <u>Trego</u>									
	7. LAT. <u>38 47'</u> " LONG <u>100 01'</u> "			8. TOP OF DAM ELEVATION <u>102.0*</u>			9. SPILLWAY CREST ELEV. <u>98.0*</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										Dec. 1944					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY		<u>98.0*</u>		<u>5.03</u>		<u>23.42</u>		<u>23.42</u>		16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION										Dec. 1944					
	f. CONSERVATION															
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR				<u>.34</u> MILES		AV. WIDTH OF RESERVOIR				<u>.02</u> MILES					
	18. TOTAL DRAINAGE AREA				<u>.93</u> SQ. MI.		22. MEAN ANNUAL PRECIPITATION				<u>21.2</u> INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA				<u>.92</u> SQ. MI.		23. MEAN ANNUAL RUNOFF				<u>.85</u> INCHES					
	20. LENGTH		<u>1.88</u> MILES		AV. WIDTH		<u>.50</u> MILES		24. MEAN ANNUAL RUNOFF		<u>42</u> AC.-FT.					
	21. MAX. ELEV. <u>2450*</u>			MIN. ELEV. <u>2340*</u>			25. ANNUAL TEMP: MEAN <u>520</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.	
	8-10-70		25.7		25.7		Range (D)		5		5.03		Original 23.42 Present 21.25		.556 .506	
	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			
	8-10-70		2.17		.08		.09		2.17		.08		.09			
	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	
8-10-70		*80#		158		158		.36		9.23						

*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) & Cropland 2-3% all.
 Land Use: 16% Range & 84% Cropland (of which 1% is LCT).
 Trap Efficiency: 98%
 Yield: .093 Ac. Ft./Sq. Mi./Yr. (162.01 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