

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Nichlaus

NAME OF RESERVOIR

46- 23

DATA SHEET NO.

Lower Arkansas River Basin

DAM	1. OWNER Wm. Nichlaus			2. STREAM Trib - Slough Creek			3. STATE Kansas								
	4. SEC. NW3 TWP. 26S RANGE 4W			5. NEAREST P. O. Haven			6. COUNTY Reno								
	7. LAT. 37° 49' 24" LONG. 97° 45' 00 "			8. TOP OF DAM ELEVATION 5.50*			9. SPILLWAY CREST ELEV. 2.50*								
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										May 1932				
	b. MULTIPLE USE														
	c. POWER										16. DATE NORMAL OPER. BEGAN				
	d. WATER SUPPLY		2.50*		10.80		46.14		46.14						
	e. IRRIGATION										May 1932				
	f. CONSERVATION														
	g. INACTIVE														
17. LENGTH OF RESERVOIR 0.33 MILES					AV. WIDTH OF RESERVOIR 0.04 MILES										
WATERSHED	18. TOTAL DRAINAGE AREA 2.29 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 29 INCHES										
	19. NET SEDIMENT CONTRIBUTING AREA 2.27 SQ. MI.				23. MEAN ANNUAL RUNOFF 2.5 INCHES										
	20. LENGTH 2.30 MILES				AV. WIDTH 1.00 MILES				24. MEAN ANNUAL RUNOFF 305 AC.-F.T.						
	21. MAX. ELEV. 1,580.00				MIN. ELEV. 1,515.00				25. ANNUAL TEMP: MEAN 57 RANGE -27 to 116						
	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.
May 1 1967		35		35		Contour		7		7.00		1/ 13.6 2/ 46.14		.04 .15	
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			
SURVEY DATA	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		
	May 1 1967		3/ 32.54		0.93		0.41		17.44		0:50		0.22		
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	
May 1 1967		70		335		335		2.01		70.5					

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

* Assumed elevations
 1/ Present capacity - spillway has eroded 2.00'
 2/ Original capacity
 3/ Due to spillway erosion and sediment deposits

Cropland = 89% with 2% slopes - 15% terraced
 Pasture (fair) = 11% with 4% slopes
 I.E. = 72%
 Watershed yield = 0.31 ac. ft./sq. mi./yr.

48. AGENCY MAKING SURVEY
 49. AGENCY SUPPLYING DATA U.S.D.A., Soil Conservation Service 50. DATE May 1, 1967