

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

N
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Lange

NAME OF RESERVOIR

46- 50

DATA SHEET NO.

Lower Ark Basin

DAM	1. OWNER Harold Lange			2. STREAM Trib to Slate Creek			3. STATE Kansas						
	4. SEC NW27 TWP. 30 RANGE 3W			5. NEAREST P. O. Conway Springs			6. COUNTY Sumner						
	7. LAT 37° 24' 52" LONG 97° 38' 05"			8. TOP OF DAM ELEVATION 100.00*			9. SPILLWAY CREST ELEV. 97.00*						
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										16. DATE NORMAL OPER. BEGAN		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY		97.00*		1.60		8.11		8.11				
	e. IRRIGATION										1956		
	f. CONSERVATION												
	g. INACTIVE												
17. LENGTH OF RESERVOIR 0.11 MILES					AV. WIDTH OF RESERVOIR 0.03 MILES								
WATERSHED	18. TOTAL DRAINAGE AREA 0.31 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 31 INCHES								
	19. NET SEDIMENT CONTRIBUTING AREA 0.31 SQ. MI.				23. MEAN ANNUAL RUNOFF 3.5 INCHES								
	20. LENGTH 0.70 MILES		AV. WIDTH 0.45 MILES		24. MEAN ANNUAL RUNOFF 57 AC.-FT.								
	21. MAX. ELEV.			MIN. ELEV.		25. ANNUAL TEMP.: MEAN 57 RANGE -19 to 120							
	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 15 1967		11	11	Range		4	1.60		Original 8.11		0.14		
									Present 5.37		0.09		
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 15 1967		2.74		0.25		0.81		2.74		0.25		0.81	
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 15 1967		60*		1,058		1,058		3.10		33.80			

SURVEY DATA

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

* Assumed

Cropland = 87.5% with 1% slopes
 Pasture (fair) = 12.5% with 3% slopes
 T.E. = 83%
 Watershed Yield = 0.97 ac. ft./sq. mi./yr.

48. AGENCY MAKING SURVEY
 49. AGENCY SUPPLYING DATA U.S.D.A., Soil Conservation Service 50. DATE August 22, 1967