

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

Hess Pond
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

45- 48
DATA SHEET NO.

DAM	1. OWNER Hess				2. STREAM Trib to Duck Creek				3. STATE Kansas				
	4. SEC. 32 TWP. 32 RANGE 14				5. NEAREST P.O. Elk City				6. COUNTY Montgomery				
	7. LAT. 37° 11' 51" LONG. 95° 53' 45"				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										1933		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY		97.00*		10.10		53.04		53.04		16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION										1933		
	f. CONSERVATION												
	g. INACTIVE												
WATERSHED	17. LENGTH OF RESERVOIR 0.23 MILES				AV. WIDTH OF RESERVOIR 0.08 MILES								
	18. TOTAL DRAINAGE AREA 1.75 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 38.00 INCHES								
	19. NET SEDIMENT CONTRIBUTING AREA 1.73 SQ. MI.				23. MEAN ANNUAL RUNOFF 7.00 INCHES								
	20. LENGTH 02.13 MILES		AV. WIDTH 0.81 MILES		24. MEAN ANNUAL RUNOFF 653 AC.-F.T.								
	21. MAX. ELEV. 1,020.00		MIN. ELEV. 830.00		25. ANNUAL TEMP.: MEAN 57 RANGE -26 to 121								
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.	
	July 31 1967		34	34	Range		5	10.10		Original 53.04 Present 29.69		0.080 0.045	
	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		
	July 31 1967		23.35	0.69	0.40		23.35		0.69		0.40		
	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					
July 31 1967		60*	522	522	1.30	44.00							

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

Land Use: Cropland - 47% with 0 - 2% slopes
 Pasture - 47% with 5% slopes
 Timber - 6% with 12% slopes
 T.E. - 75%; watershed yield = 0.53 ac.ft./sq.mi./yr.

48. AGENCY MAKING SURVEY

49. AGENCY SUPPLYING DATA U.S.D.A., Soil Conservation Service 50. DATE July 31, 1967