

**RESERVOIR SEDIMENT
DATA SUMMARY**

SCS-34 Rev. 6-62

Harry Strunk Lake
(Medicine Creek Dam)

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

33-3a

DATA SHEET NO.

DAM	1. OWNER Bureau of Reclamation		2. STREAM Medicine Creek		3. STATE Nebraska			
	4. SEC. TWP. 5-6N RANGE 25-26W		5. NEAREST TOWN Cambridge		6. COUNTY Frontier			
	7. STREAM BED ELEVATION 2300		8. TOP OF DAM ELEVATION 2415		9. SPILLWAY CREST ELEV. 2386.2			
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. MULTIPLE USE							
	b. FLOOD CONTROL	2386.2	3,550	52,320	92,817	8-8-49 1/		
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION	2366.1	1,897	34,531	40,497			
	f. CONSERVATION							
	g. SEDIMENT							
	h. INACTIVE	2335.0	520	5,966	5,966	8-8-49		
17. LENGTH OF RESERVOIR 8.5 2/		MILES		AV. WIDTH OF RESERVOIR 0.34		MILES		
WATERSHED	18. TOTAL DRAINAGE AREA 656		SQ. MI.		22. MEAN ANNUAL PRECIPITATION 19.37		INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA 653		SQ. MI.		23. MEAN ANNUAL RUNOFF --		INCHES	
	20. LENGTH 47	MILES		AV. WIDTH 14	MILES		24. MEAN ANNUAL RUNOFF 54,892	
	21. MAX. ELEV. +3100		MIN. ELEV. 2300		25. CLIMATIC CLASSIFICATION semiarid			
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/W RATIO AC.-FT. PER SQ. MI.
	Aug 8, 1949	0	0	Contour	10 ft	3,550	92,817	141
	Oct 4, 1951	2.16	2.16	Range (b)	34	3,457	90,920	139
	Dec 8, 1962	11.17	13.33	Range (b)	31	3,427	88,663	135
	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	
	Oct 4, 1951	25.56	71,456	99,040	154,344	71,456	154,344	
	Dec 8, 1962	18.48	51,690	99,040	577,374	54,892	731,718	
	26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS 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	
Oct 4, 1951	1,897	878	1.34	1,897	878	1.34		
Dec 8, 1962	2,257	202	0.31	4,154	312	0.48		
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. AN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
Oct 4, 1951	71.4 (22)	2,084	2,084	0.946	2.04	14,063	14,063	
Dec 8, 1962	70.3 (44)	475	735	0.336	4.48	4,404	6,396	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	72.5-78.5	78.5-88.5	88.5-118.5	118.5-148.5	148.5-208.5	208.5-288.5	288.5-388.5	388.5-528.5	528.5-628.5	628.5-728.5	728.5-828.5	828.5-928.5
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												

Oct. 4, 1951	3.1	10.6	8.2	11.2	22.2	20.9	14.8	7.5	0.11	0.07	0.16	1.1
Dec. 8, 1962												

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														

Oct. 4, 1951	6	3	2	7	13	19	24	12	10	4				
Dec. 8, 1962														

45. RANGE IN RESERVOIR OPERATION

WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1950	2362.55	2329.30	49,153 4/	1958	2367.90	2363.70	48,113
1951	2372.35	2362.50	99,040	1959	2367.35	2354.75	40,727
1952	2367.40	2364.00	43,371	1960	2374.10	2353.27	75,420
1953	2366.50	2357.30	38,171	1961	2367.96	2354.03	39,563
1954	2366.10	2354.05	40,481	1962	2372.90	2356.81	99,040
1955	2369.20	2347.45	38,498				
1956	2363.60	2348.25	40,444				
1957	2371.90	2352.50	66,340				

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
2312.0	0	0	2370.0	2,113	44,889			
2320.0	118	472	2380.0	2,854	69,725			
2330.0	352	2,822	2386.2	3,427	88,663			
2340.0	605	7,607						
2350.0	924	15,254						
2360.0	1,445	27,098						
2366.1	1,833	36,989						

47. REMARKS AND REFERENCES

- 1/ Closure made at 9:00 a.m. on August 8, 1949
- 2/ At normal water surface elevation, 2366.1
- 3/ Maximum and minimum recorded
- 4/ Estimated