U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
SOIL AND WATER CONSERVATION RESEARCH DIVISION

RESERVOIR SEDIMENTATION DATA SUMMARY

Higginsville
Old City Lake
NAME OF RESERVOIR

31-39
DATA SHEET NO.

DAM

1. OWNER City of Higginsville	2. RIVER Trib. of Davis Creek	3. STATE Missouri
4. LONG. Sec. 4 LAT. T-49N RANGE 25W	5. NEAREST TOWN Higginsville	6. COUNTY Lafayette
7. STREAM BED ELEV. --	8. TOP OF DAM ELEV. 450	9. SPILLWAY CREST ELEV. 435.75[1]

RESERVOIR

10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE-FEET	14. ACCUMULATED ACRE-FEET	15. DATE STORAGE BEGAN
a. FLOOD CONTROL					Sept. 1924
b. POWER					
c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION	435.75	61[1]	520[1]	520[1]	
f. INACTIVE					

17. LENGTH OF RESERVOIR 0.44 MILES | AV. WIDTH OF RESERVOIR 1080 FEET

WATERSHED

18. TOTAL DRAINAGE AREA 2.728 SQ. MI.		22. MEAN ANNUAL PRECIPITATION	INCHES
19. NET SEDIMENT CONTRIBUTING AREA 2.633 SQ. MI.		23. MEAN ANNUAL RUNOFF	INCHES
20. LENGTH 2.61 MILES	AV. WIDTH 1.04 MILES	24. MEAN ANNUAL RUNOFF	AC.-FT.
21. MAX. ELEV. 539*	MIN. ELEV. 411.4*	25. CLIMATIC CLASSIFICATION	

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.
Sept. 1924	Orig.	--	Range D	5' C. I.	61.0	520.0	197.5
July 1964	39.8	39.8	Range D	2' C. I.	51.0	304.0	115.5

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 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
July 1964	216.0	5.427	2.061	216.0	5.427	2.061

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. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
July 1964	55.94 (58)	2511	2511	1.04	41.5		

SWC Form 30
Apr 1958

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION											
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGH 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. 1964 ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
424.4	0.00	0.00						
426.0	7.37	5.61						
428.0	20.32	33.30						
430.0	28.44	82.06						
432.0	34.90	145.40						
434.0	42.83	223.13						
435.75	51.0	304.0						

47. REMARKS AND REFERENCES

1/ Spillway crest raised 1.35' in about 1951 to 435.75. Original surface area and storage estimated for the new elevation.

* Elevations are assumed.

48. AGENCY SUPPLYING DATA ARS, SWC, Columbia, Missouri 49. DATE Jan. 11, 1967