

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

DAVID D. TERRY LAKE (POOL NO. 6)

NAME OF RESERVOIR

15-37

DATA SHEET NO.

DAM	1. OWNER Dept. of the Army, C.ofE.		2. STREAM Arkansas River		3. STATE Arkansas			
	4. SEC. 35 TWP. 11N RANGE 11W		5. NEAREST P.O. Scott 4SW		6. COUNTY Pulaski			
	7. LAT 34° 40' 00.8" LONG. 92° 09' 20.1"		8. TOP OF DAM ELEVATION 241		9. SPILLWAY CREST ELEV. 233 1/2			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, AC-RE-FEET	14. GROSS STORAGE, AC-RE-FEET	15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL					Sep 20, 1968		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION					Jan 1, 1969		
	f. CONSERVATION 2/	231	4,910	51,410	51,410			
g. INACTIVE 3/	206	0	0	0				
17. LENGTH OF RESERVOIR 16.75 MILES			AV. WIDTH OF RESERVOIR 0.46 MILES					
WATERSHED	18. TOTAL DRAINAGE AREA 158,288 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 12-50 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 3,901 SQ. MI.		23. MEAN ANNUAL RUNOFF 3.40 (44 yrs) 4/ INCHES					
	20. LENGTH 1,276 MILES		AV. WIDTH 124 MILES		24. MEAN ANNUAL RUNOFF 28,845,000 (44) 4/ AC.-FT.			
	21. MAX. ELEV. 14,431		MIN. ELEV. 206		25. ANNUAL TEMP: MEAN 56 RANGE -22 to 114			
	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, AC-RE-FEET	33. C/I. RATIO, 5/ AC.-FT. PER AC.-FT.
Mar 31, 1969			Range (D)	20	4,910	51,410	.0130	
Jun 3, 1970	1.18	1.18	Range (D)	20	4,570	49,470	.0124	
Jun 19, 1971	1.04	2.22	Range (D)	20	4,850	48,230	.0120	
SURVEY DATA	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, AC-RE-FEET			36. WATER INFL. TO DATE, AC.-FT.		
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE	
	Jun 3, 1970		33,340,500		39,341,900	33,340,500	39,341,900	
	Jun 19, 1971		20,350,800		21,164,900	27,255,200	60,506,800	
	26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, AC-RE-FEET			38. TOTAL SED. DEPOSITS TO DATE, AC-RE-FEET			
		a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	
	Jun 3, 1970	1,940	1,644	.421	1,940	1,644	.421	
	Jun 19, 1971	1,240	1,192	.306	3,180	1,432	.367	
	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 6/	
			a. PERIOD	b. TOTAL TO DATE	a. AV. ANN	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
Jun 3, 1970	80*	733	733	3.20	3.77	173	173	
Jun 19, 1971	80	533	639	2.79	6.19	90	134	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET											M.S.L.			
	206-15	115-17	117-19	119-21	121-23	123-25	125-27	127-29	129-31	131-33					
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
Jun 3, 1970	-6	-3	-1	+8	+9	+16	+14	+13	+20	+30					
Jun 19, 1971	+274	-136	+10	+28	+29	+25	+23	+5	-43	-113					
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														
Jun 3, 1970	+6	+60	+54	+9	-20	-11	-5	-1	-1	+9					
Jun 19, 1971	+33	+56	-38	+21	+27	+4	+10	+2	-12	-3					
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
1969	231.3	226.8	39,529,000												
1970	234.1	228.9	25,768,000												
1971	231.2	228.4	19,571,600												
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
Original Survey - 1969			219	1,870	9,540	227	3,520	30,940							
233	5,570	62,320	217	1,340	6,230	225	3,000	24,170							
231	4,910	51,410	215	900	3,900	223	2,660	18,260							
229	4,260	41,800	1971 Survey			221	2,230	13,100							
227	3,680	33,440				219	1,810	8,950							
225	3,230	26,150	233	5,560	58,980	217	1,320	5,680							
223	2,830	19,650	231	4,850	48,230	215	540	2,460							
221	2,380	14,060	229	4,140	38,920										
47. REMARKS AND REFERENCES															
1/ Top of spillway gates in closed position.															
2/ Top of navigation pool.															
3/ Spillway crest.															
4/ Based on USGS Water Resources Data for Arkansas at Murray Dam at Little Rock and runoff from area between Dardanelle and Murray Dam.															
5/ Adjustment based on inflow from net sediment contributing area (Item 19) as taken from USGS W.R. Data; 1969 (3,961,300 AC.FT); 1970 (3,987,800 AC. FT); 1971 (4,024,900 AC. FT).															
6/ Computed from measured suspended sediment concentrations.															
48. AGENCY MAKING SURVEY Dept. of the Army, Corps of Engineers															
49. AGENCY SUPPLYING DATA Southwestern Div., Little Rock Dist. 50. DATE 1 Nov 76															