OK 11/15/76

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

RESERVOIR SEDIMENT DATA SUMMARY

OZARK LAKE
NAME OF RESERVOIR

44-15
DATA SHEET NO.

DAM

1. OWNER Dept. of the Army, C. of E	2. STREAM Arkansas River	3. STATE Arkansas
4. SEC. 6-12 TWP 9N RANGE 26-27W	5. NEAREST P.O. Ozark 1SE	6. COUNTY Franklin
7. LAT 35°28'20.5" LONG 93°48'46"	8. TOP OF DAM ELEVATION 382	9. SPILLWAY CREST ELEV. 373 1/

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					Dec. 1, 1969
b. MULTIPLE USE					
c. POWER	372.0	10,160	19,090	141,560	16. DATE NORMAL OPER. BEGAN
d. WATER SUPPLY					
e. IRRIGATION					
f. CONSERVATION 2/	370.0	8,340	122,470	122,470	Jan. 1, 1970
g. INACTIVE 3/	327.0	0	0	0	

WATERSHED

17. LENGTH OF RESERVOIR 35.6 MILES		AV. WIDTH OF RESERVOIR 0.45 MILES	
18. TOTAL DRAINAGE AREA 151,801 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 12-50 INCHES	
19. NET SED. CONTRIBUTING AREA 9,521 SQ. MI.		23. MEAN ANNUAL RUNOFF 2.81 (40 yrs) 4/ INCHES	
20. LENGTH 113.4 MILES	AV. WIDTH 13.4 MILES	24. MEAN ANNUAL RUNOFF 22,734,000 4/ AC.-FT.	
21. MAX. ELEV. 14,431	MIN. ELEV. 320	25. ANNUAL TEMP: MEAN 56 RANGE -22 to 114	

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, 5/ AC.-FT. PER AC.-FT.
Dec 1, 1969			Range (D)	34	10,160	141,560	.0227
					8,340 2/	122,470 2/	
Oct 20, 1970	.89	.89	Range (D)	34	10,080	141,010	.0232
Jun 16, 1972	1.65	2.54	Range (D)	34	9,940	140,840	.0235
					8,200 2/	122,190 2/	

26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, ACRE-FEET 4/			36. WATER INFL. TO DATE, AC.-FT. 4/	
		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE
Oct 20, 1970		21,413,000		19,059,000	21,413,000	19,059,000
Jun 16, 1972		16,403,000	20,605,000	27,065,000	18,159,000	46,124,000

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
Oct 20, 1970	550	618	.065	550	618	.065
Jun 16, 1972	170	103	.011	720	283	.030

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 5/	
		a. PERIOD	b. TOTAL TO DATE	a. AV ANN	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
Oct 20, 1970	80*	113	113	.437	.388	166	166
Jun 16, 1972	80*	19	52	.200	.509	82	111

ENG FORM 1787
NOV 66

PREVIOUS EDITIONS ARE OBSOLETE.

*Estimated

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET MSL											
	320-4	342-40	346-90	350-54	354-58	358-62	362-66	366-70	370-74	372-74		
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
Oct 20, 1970	+22	+78	+25	+48	+37	-98	-52	-28	+16	+52		
Jun 16, 1972	-480	-148	-35	+65	+165	+115	+120	+178	+57	+63		

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														
Oct 20, 1970	+137	-28	+58	+344	-15	+73	+49	-44	-172	-302					
Jun 16, 1972	-316	-452	-375	-202	-72	+149	+482	+286	+220	+380					

45. RANGE IN RESERVOIR OPERATION

WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1970	372.00	365.40	20,430,000				
1971	371.00	365.40	15,280,000				
1972	372.12	365.55	14,750,000				

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
Original Survey - 1969			350	2,220	20,800	366	6,480	92,060
374	12,500	165,240	346	1,670	12,770	362	5,270	67,660
372	10,160	141,560	342	1,280	6,780	358	4,120	47,190
370	8,340	122,470	1972 Survey			354	2,880	32,620
366	6,490	91,840				350	2,230	22,420
362	5,250	67,480	374	11,980	163,640	346	1,670	14,520
358	4,320	47,600	372	9,940	140,840	342	1,050	8,740
354	3,230	31,850	370	8,200	122,190			

47. REMARKS AND REFERENCES

1/ Top of spillway gates in closed position.

2/ Top of navigation pool.

3/ Spillway crest.

4/ Interpolated from USGS Water Resources Data for Arkansas at Dam No. 13, near Van Buren, and Dardanelle.

5/ Adjustment based on inflow from net sediment contributing area (Item 19) as taken from USGS W.R. Data; 1969 (6,224,000 AC. FT); 1970 (6,087,000 AC. FT); 1972 (6,002,000 AC. Ft).

6/ Computed from measured suspended sediment concentrations.

48. AGENCY MAKING SURVEY Department of the Army, Corps of Engineers

49. AGENCY SUPPLYING DATA Southwestern Div., Little Rock Dist. 50. DATE 1 Nov 76

* U.S. GOVERNMENT PRINTING OFFICE: 1967 O-246-023 (99)