

**RESERVOIR SEDIMENT  
DATA SUMMARY**

Arkabutla Reservoir  
NAME OF RESERVOIR

15-26b

DATA SHEET NO.

|                                 |                                                |                                    |                                   |                                                   |                                                 |                                 |                        |                                   |
|---------------------------------|------------------------------------------------|------------------------------------|-----------------------------------|---------------------------------------------------|-------------------------------------------------|---------------------------------|------------------------|-----------------------------------|
| <b>DAM</b>                      | 1. OWNER U.S. Army Corps of Engrs.             |                                    | 2. STREAM Coldwater River         |                                                   | 3. STATE Mississippi                            |                                 |                        |                                   |
|                                 | 4. SEC. 2 TWP. 4S RANGE 9W                     |                                    | 5. NEAREST TOWN Arkabutla         |                                                   | 6. COUNTY Tate-DeSoto                           |                                 |                        |                                   |
|                                 | 7. STREAM BED ELEVATION 184.0 msl 1/           |                                    | 8. TOP OF DAM ELEVATION 265.0' 1/ |                                                   | 9. SPILLWAY CREST ELEV. 239.0 1/                |                                 |                        |                                   |
| <b>RESERVOIR</b>                | 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                               | 239.0 1/                           | 33,400                            | 493,800                                           | 525,300                                         | 14 Aug 41                       |                        |                                   |
|                                 | c. POWER                                       |                                    |                                   |                                                   |                                                 |                                 |                        |                                   |
|                                 | d. WATER SUPPLY                                |                                    |                                   |                                                   |                                                 |                                 |                        |                                   |
|                                 | e. IRRIGATION                                  |                                    |                                   |                                                   |                                                 | 16. DATE NORMAL OPER. BEGAN     |                        |                                   |
|                                 | f. CONSERVATION                                | 210.0 1/                           | 5,100                             | 31,500                                            | 31,500                                          | 17 Nov 45                       |                        |                                   |
|                                 | g. SEDIMENT                                    |                                    |                                   |                                                   |                                                 | 2/                              |                        |                                   |
|                                 | h. INACTIVE                                    |                                    |                                   |                                                   |                                                 |                                 |                        |                                   |
| 17. LENGTH OF RESERVOIR 31.1 3/ |                                                |                                    | MILES                             |                                                   | AV. WIDTH OF RESERVOIR 1.68                     |                                 | MILES                  |                                   |
| <b>WATERSHED</b>                | 18. TOTAL DRAINAGE AREA 1,000 SQ. MI.          |                                    |                                   | 22. MEAN ANNUAL PRECIPITATION 53.03(20.75) INCHES |                                                 |                                 |                        |                                   |
|                                 | 19. NET SEDIMENT CONTRIBUTING AREA 948 SQ. MI. |                                    |                                   | 23. MEAN ANNUAL RUNOFF 19.74(20.75) INCHES        |                                                 |                                 |                        |                                   |
|                                 | 20. LENGTH 80 Thalweg MILES                    |                                    | AV. WIDTH 12.5 MILES              |                                                   | 24. MEAN ANNUAL RUNOFF 1,052,800(20.75) AC.-FT. |                                 |                        |                                   |
|                                 | 21. MAX. ELEV. 600                             |                                    | MIN. ELEV. 184.0 msl              |                                                   | 25. CLIMATIC CLASSIFICATION Humid               |                                 |                        |                                   |
|                                 |                                                |                                    |                                   |                                                   |                                                 |                                 |                        |                                   |
| <b>SURVEY DATA</b>              | 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. |
|                                 | Apr. 1939 4/                                   |                                    |                                   | Contour                                           | 5-ft.                                           | 33,400                          | 525,300                | 525                               |
|                                 | Aug 1941 5/                                    | 0                                  | 0                                 | Range D                                           | 45                                              |                                 |                        |                                   |
|                                 | Dec 1947 6/                                    | 6.33                               | 6.33                              | Range D                                           | 54                                              | 33,400                          | 521,540                | 522                               |
|                                 | Aug 1951 7/                                    | 3.67                               | 10.00                             | Range D                                           | 4                                               |                                 |                        |                                   |
|                                 | May 1962 8/                                    | 10.75                              | 20.75                             | Range D                                           | 22                                              | 33,400                          | 513,060                | 513                               |
|                                 | 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       |                                   |
|                                 | Dec 1947                                       | 52.44                              | 1,034,100                         | 1,549,900                                         | 6,546,700                                       | 1,034,000                       | 6,546,700              |                                   |
|                                 | May 1962                                       | 53.33                              | 1,060,800                         | 1,496,000                                         | 15,297,600                                      | 1,052,800                       | 21,844,300             |                                   |
| 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             |                        |                                   |
| Dec 1947                        | 3,760                                          | 594                                | .627                              | 3,760                                             | 594                                             | .627                            |                        |                                   |
| May 1962                        | 8,480                                          | 588                                | .620                              | 12,240                                            | 590                                             | .622                            |                        |                                   |
| 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        |                                   |
| Dec 1947                        | 60*                                            | 819                                | 819                               | .113                                              | .716                                            | 552                             | 552                    |                                   |
| May 1962                        | 60*                                            | 810                                | 813                               | .112                                              | 2.330                                           | 533                             | 539                    |                                   |
| *Estimated                      |                                                |                                    |                                   |                                                   |                                                 |                                 |                        |                                   |

Arkabutla Reservoir (con.)

|                                                            |                                                                       |                  |       |       |       |       |       |      |     |       |      |
|------------------------------------------------------------|-----------------------------------------------------------------------|------------------|-------|-------|-------|-------|-------|------|-----|-------|------|
| 26. DATE OF SURVEY                                         | 43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION |                  |       |       |       |       |       |      |     |       |      |
|                                                            | 49-44                                                                 | 44-39            | 39-34 | 34-29 | 29-24 | 24-19 | 19-14 | 14-9 | 9-4 | 4-Cr. |      |
| PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION |                                                                       |                  |       |       |       |       |       |      |     |       |      |
| Dec. 1947<br>May 1962                                      | 0.5                                                                   | (Not Determined) | 5.2   | 10.3  | 12.4  | 5.2   | 19.8  | 10.5 | 7.0 | 16.6  | 12.5 |

|                                                            |                                                                     |                  |       |       |       |       |       |       |       |        |      |      |      |      |
|------------------------------------------------------------|---------------------------------------------------------------------|------------------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| 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 |                                                                     |                  |       |       |       |       |       |       |       |        |      |      |      |      |
| Dec. 1947<br>May 1962                                      | 21                                                                  | (Not Determined) | 7     | 9     | 8     | 36    | 8     | 3     | 4     | 2      | 2    |      |      |      |

| 45. RANGE IN RESERVOIR OPERATION |            |            |                |            |            |            |                |
|----------------------------------|------------|------------|----------------|------------|------------|------------|----------------|
| WATER YEAR                       | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. | WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. |
| 1941-1942                        | 225.7      | 193.7      | 874,700        | 1951-1952  | 231.3      | 205.8      | 1,112,000      |
| 1942-1943                        | 220.7      | 193.5      | 643,600        | 1952-1953  | 242.4      | 210.6      | 1,366,400      |
| 1943-1944                        | 227.6      | 193.6      | 898,700        | 1953-1954  | 221.5      | 209.9      | 509,900        |
| 1944-1945                        | 230.7      | 193.8      | 1,261,900      | 1954-1955  | 234.0      | 210.3      | 907,700        |
| 1945-1946                        | 236.6      | 193.9      | 1,861,300      | 1955-1956  | 232.8      | 210.0      | 829,900        |
| 1946-1947                        | 228.7      | 209.5      | 910,400        | 1956-1957  | 230.4      | 210.0      | 913,600        |
| 1947-1948                        | 234.8      | 209.9      | 1,151,500      | 1957-1958  | 232.2      | 208.1      | 1,352,500      |
| 1948-1949                        | 230.1      | 210.2      | 1,474,100      | 1958-1959  | 228.0      | 229.7      | 635,700        |
| 1949-1950                        | 234.4      | 210.5      | 1,469,300      | 1959-1960  | 223.9      | 210.3      | 782,400        |
| 1950-1951                        | 229.5      | 194.2      | 1,112,500      | 1960-1961  | 232.5      | 210.0      | 887,500        |
|                                  |            |            |                | 1961-1962  | 229.0      | 210.0      | 982,400        |

| 46. ELEVATION-AREA-CAPACITY DATA |       |          |           |        |          |           |        |           |
|----------------------------------|-------|----------|-----------|--------|----------|-----------|--------|-----------|
| ELEVATION                        | AREA  | CAPACITY | ELEVATION | AREA   | CAPACITY | ELEVATION | AREA   | CAPACITY  |
| 190                              | 0     | 0        | 210       | 5,081  | 31,495   | 230       | 21,756 | 279,065   |
| 192                              | 9     | 9        | 212       | 6,221  | 42,795   | 235       | 27,758 | 402,850   |
| 194                              | 19    | 38       | 214       | 7,362  | 56,381   | 240       | 34,868 | 559,415   |
| 196                              | 194   | 169      | 216       | 8,719  | 72,349   | 245       | 42,421 | 752,635   |
| 198                              | 534   | 889      | 218       | 10,292 | 91,364   | 250       | 50,760 | 985,590   |
| 200                              | 875   | 2,310    | 220       | 11,865 | 113,525  | 255       | 59,286 | 1,260,705 |
| 202                              | 1,669 | 4,851    | 222       | 13,638 | 139,020  | 260       | 68,961 | 1,581,319 |
| 204                              | 2,462 | 8,984    | 224       | 15,411 | 168,073  | 265       | 79,000 | 1,951,150 |
| 206                              | 3,303 | 14,722   | 226       | 17,389 | 200,764  |           |        |           |
| 208                              | 4,192 | 22,220   | 228       | 19,572 | 237,732  |           |        |           |

47. REMARKS AND REFERENCES 1/ Subtract 0.72 ft. from elevations to correct for 1941 and 1944 adjustments. 2/ Operated without conservation pool until 1945. 3/ Thalweg distance along major stream to valley El. 239; valley length of reservoir at spillway crest El. 239 is 16.1 miles. 4/ Survey to determine reservoir area and volume. 5/ Survey establishing reservoir sediment ranges. 6/ 1947-48 survey of reservoir ranges; nine ranges were added during this survey. Original area and capacity were not revised for operational purposes since differences were considered to be within limits of survey accuracy. 7/ Dry-land survey of 4 ranges and spot measurements in conservation pool only. 8/ May 1962 survey of 22 of 54 ranges, 1947-48 and 1951 surveys, and reach range surveys gave a reasonable estimate of sediment deposits to May 1962.

48. AGENCY MAKING SURVEY U. S. Army Engr. Dist., Vicksburg  
 49. AGENCY SUPPLYING DATA Vicksburg, Mississippi  
 50. DATE April 1966

RESERVOIR SEDIMENT  
DATA SUMMARY

Arkabutla Reservoir  
NAME OF RESERVOIR

15-26b

DATA SHEET NO.

|                         |                                        |                                   |                                   |                                            |                                                   |                                    |                             |                                  |
|-------------------------|----------------------------------------|-----------------------------------|-----------------------------------|--------------------------------------------|---------------------------------------------------|------------------------------------|-----------------------------|----------------------------------|
| DAM                     | 1. OWNER U.S. Army Corps of Engrs.     |                                   | 2. STREAM Coldwater River         |                                            | 3. STATE Mississippi                              |                                    |                             |                                  |
|                         | 4. SEC. 2 TWP. 4S RANGE 9W             |                                   | 5. NEAREST TOWN Arkabutla         |                                            | 6. COUNTY Tate-DeSoto                             |                                    |                             |                                  |
|                         | 7. STREAM BED ELEVATION 184.0 msl 1/   |                                   | 8. TOP OF DAM ELEVATION 265.0 1/  |                                            | 9. SPILLWAY CREST ELEV. 239.0 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. MULTIPLE USE                        |                                   |                                   |                                            |                                                   |                                    | 14 Aug 41                   |                                  |
|                         | b. FLOOD CONTROL                       |                                   | 239.0 1/                          | 33,400                                     | 493,800                                           | 525,300                            |                             |                                  |
|                         | c. POWER                               |                                   |                                   |                                            |                                                   |                                    |                             |                                  |
|                         | d. WATER SUPPLY                        |                                   |                                   |                                            |                                                   |                                    |                             |                                  |
|                         | e. IRRIGATION                          |                                   |                                   |                                            |                                                   |                                    | 16. DATE NORMAL OPER. BEGAN |                                  |
|                         | f. CONSERVATION                        |                                   | 210.0 1/                          | 5,100                                      | 31,500                                            | 31,500                             |                             |                                  |
|                         | g. SEDIMENT                            |                                   |                                   |                                            |                                                   |                                    | 17 Nov 45                   |                                  |
| h. INACTIVE             |                                        |                                   |                                   |                                            |                                                   |                                    |                             |                                  |
| 17. LENGTH OF RESERVOIR |                                        | 31.1 3/                           |                                   | MILES                                      |                                                   | 14V. WIDTH OF RESERVOIR 1.68 MILES |                             |                                  |
| WATERSHED               | 18. TOTAL DRAINAGE AREA                |                                   |                                   | 1,000 SQ. MI.                              | 22. MEAN ANNUAL PRECIPITATION 53.03(20.75) INCHES |                                    |                             |                                  |
|                         | 19. NET SEDIMENT CONTRIBUTING AREA     |                                   |                                   | 948 SQ. MI.                                | 23. MEAN ANNUAL RUNOFF 19.74(20.75) INCHES        |                                    |                             |                                  |
|                         | 20. LENGTH 80 Thalweg MILES            |                                   |                                   | AV. WIDTH 12.5 MILES                       | 24. MEAN ANNUAL RUNOFF 1,052,800(20.75) AC.-FT.   |                                    |                             |                                  |
|                         | 21. MAX. ELEV. 600                     |                                   | MIN. ELEV. 184.0 msl              |                                            | 25. CLIMATIC CLASSIFICATION Humid                 |                                    |                             |                                  |
| 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. PERSQ. MI. |
|                         | Aug 1941 4/                            |                                   |                                   | Contour                                    | 5-ft.                                             | 33,400                             | 525,300                     | 525                              |
|                         | Aug 1941 5/                            | 0                                 | 0                                 | Range D                                    | 45                                                |                                    |                             |                                  |
|                         | Dec 1947 6/                            | 6.33                              | 6.33                              | Range D                                    | 54                                                | 33,400                             | 521,540                     | 522                              |
|                         | Aug 1951 7/                            | 3.67                              | 10.00                             | Range D                                    | 4                                                 |                                    |                             |                                  |
|                         | May 1962 8/                            | 10.75                             | 20.75                             | Range D                                    | 22                                                | 33,400                             | 513,060                     | 513                              |
|                         | 26. DATE OF SURVEY                     | 34. PERIOD ANNUAL PRECIPITATION   | 35. PERIOD WATER INFLOW ACRE-FEET |                                            |                                                   | 36. WATER INFL. TO DATE AC.-FT.    |                             |                                  |
|                         | Dec 1947                               | 52.44                             | a. MEAN ANNUAL                    | b. MAX. ANNUAL                             | c. PERIOD TQTL                                    | a. MEAN ANNUAL                     | b. TOTAL TO DATE            |                                  |
|                         | May 1962                               | 53.33                             | 1,034,100                         | 1,549,900                                  | 6,546,700                                         | 1,034,000                          | 6,546,700                   |                                  |
|                         |                                        |                                   | 1,060,800                         | 1,496,000                                  | 15,297,600                                        | 1,052,800                          | 21,844,300                  |                                  |
| 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                |                             |                                  |
| Dec 1947                | 3,760                                  | 594                               | .627                              | 3,760                                      | 594                                               | .627                               |                             |                                  |
| May 1962                | 8,480                                  | 588                               | .620                              | 12,240                                     | 590                                               | .622                               |                             |                                  |
| 26. DATE OF SURVEY      | 39. AV. DRY WGT. LBS. PER CU. FT.      | 40. SED. DEP. TONS PERSQ. 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             |                                  |
| Dec 1947                | 60*                                    | 819                               | 819                               | .113                                       | .716                                              | 552                                | 552                         |                                  |
| May 1962                | 60*                                    | 810                               | 813                               | .112                                       | 2.330                                             | 533                                | 539                         |                                  |
| *Estimated              |                                        |                                   |                                   |                                            |                                                   |                                    |                             |                                  |

Arkabutla Reservoir (con.)

|                       |                                                                       |                  |       |       |       |       |       |      |      |       |  |
|-----------------------|-----------------------------------------------------------------------|------------------|-------|-------|-------|-------|-------|------|------|-------|--|
| 26. DATE OF SURVEY    | 43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION |                  |       |       |       |       |       |      |      |       |  |
|                       | 49-44                                                                 | 44-39            | 39-34 | 34-29 | 29-24 | 24-19 | 19-14 | 14-9 | 9-4  | 4-Cr. |  |
|                       | PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION            |                  |       |       |       |       |       |      |      |       |  |
| Dec. 1947<br>May 1962 | 0.5                                                                   | (Not Determined) |       |       | 5.2   | 19.8  | 10.5  | 7.0  | 16.6 | 12.5  |  |

|                       |                                                                     |                  |       |       |       |       |       |       |       |        |      |      |      |      |      |
|-----------------------|---------------------------------------------------------------------|------------------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|------|
| 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          |                  |       |       |       |       |       |       |       |        |      |      |      |      |      |
| Dec. 1947<br>May 1962 | 21                                                                  | (Not Determined) |       |       | 7     | 9     | 8     | 36    | 8     | 3      | 4    | 2    | 2    |      |      |

| 45. RANGE IN RESERVOIR OPERATION |            |            |                |            |            |            |                |
|----------------------------------|------------|------------|----------------|------------|------------|------------|----------------|
| WATER YEAR                       | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. | WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. |
| 1941-1942                        | 225.7      | 193.7      | 874,700        | 1951-1952  | 231.3      | 205.8      | 1,111,000      |
| 1942-1943                        | 220.7      | 193.5      | 643,600        | 1952-1953  | 242.4      | 210.6      | 1,360,000      |
| 1943-1944                        | 227.6      | 193.6      | 898,700        | 1953-1954  | 221.5      | 209.9      | 509,900        |
| 1944-1945                        | 230.7      | 193.8      | 1,261,900      | 1954-1955  | 234.0      | 210.3      | 907,700        |
| 1945-1946                        | 236.6      | 193.9      | 1,861,300      | 1955-1956  | 232.8      | 210.0      | 829,900        |
| 1946-1947                        | 228.7      | 209.5      | 910,400        | 1956-1957  | 230.4      | 210.0      | 913,600        |
| 1947-1948                        | 234.8      | 209.9      | 1,151,500      | 1957-1958  | 232.2      | 208.1      | 1,352,500      |
| 1948-1949                        | 230.1      | 210.2      | 1,474,100      | 1958-1959  | 228.0      | 229.7      | 635,700        |
| 1949-1950                        | 234.4      | 210.5      | 1,469,300      | 1959-1960  | 223.9      | 210.3      | 782,400        |
| 1950-1951                        | 229.5      | 194.2      | 1,112,500      | 1960-1961  | 232.5      | 210.0      | 887,500        |
|                                  |            |            |                | 1961-1962  | 229.0      | 210.0      | 982,400        |

| 46. Original (1941) ELEVATION-AREA-CAPACITY DATA |       |          |           |        |          |           |        |          |
|--------------------------------------------------|-------|----------|-----------|--------|----------|-----------|--------|----------|
| ELEVATION                                        | AREA  | CAPACITY | ELEVATION | AREA   | CAPACITY | ELEVATION | AREA   | CAPACITY |
| 190                                              | 0     | 0        | 210       | 5,081  | 31,495   | 230       | 21,756 | 279,065  |
| 192                                              | 9     | 9        | 212       | 6,221  | 42,795   | 235       | 27,758 | 402,850  |
| 194                                              | 19    | 38       | 214       | 7,362  | 56,381   | 240       | 34,868 | 559,415  |
| 196                                              | 194   | 169      | 216       | 8,719  | 72,349   |           |        |          |
| 198                                              | 534   | 889      | 218       | 10,292 | 91,364   |           |        |          |
| 200                                              | 875   | 2,310    | 220       | 11,865 | 113,525  |           |        |          |
| 202                                              | 1,669 | 4,851    | 222       | 13,638 | 139,020  |           |        |          |
| 204                                              | 2,462 | 8,984    | 224       | 15,411 | 168,073  |           |        |          |
| 206                                              | 3,303 | 14,722   | 226       | 17,389 | 200,764  |           |        |          |
| 208                                              | 4,192 | 22,220   | 228       | 19,572 | 237,732  |           |        |          |

47. REMARKS AND REFERENCES 1/ Subtract 0.72 ft. from elevations to correct for 1941 and 1944 adjustments. 2/ Operated without conservation pool until 1945. 3/ Thalweg distance along major stream to valley El. 239; valley length of reservoir at spillway crest El. 239 is 16.1 miles. 4/ Survey to determine reservoir area and volume. 5/ Survey establishing reservoir sediment ranges. 6/ 1947-48 survey of reservoir ranges; nine ranges were added during this survey. Original area and capacity were not revised for operational purposes since differences were considered to be within limits of survey accuracy. 7/ Dry-land survey of 4 ranges and spot measurements in conservation pool only. 8/ May 1962 survey of 2 ranges, 1947-48 and 1951 surveys, and reach range surveys gave a reasonable estimate of sediment deposits to May 1962.

48. AGENCY MAKING SURVEY U. S. Army Engr. Dist., Vicksburg  
 49. AGENCY SUPPLYING DATA Vicksburg, Mississippi  
 50. DATE April 1966