

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Land Utilization Project No. 226-22

37-9

NAME OF RESERVOIR

DATA SHEET NO.

|                         |   |   |                                     |  |  |  |                                  |                                   |
|-------------------------|---|---|-------------------------------------|--|--|--|----------------------------------|-----------------------------------|
| DAM                     | 1. OWNER <b>USDA, Soil Conserv. Serv.</b>             |   |                                     | 2. RIVER <b>Unnamed tributary to Bad River</b> |  | 3. STATE <b>South Dakota</b>                           |                                  |                                   |
|                         | 4. SEC. <b>2</b>                                      |   | TWP. <b>109 N</b>                   |  | RANGE <b>79 W</b>                            |  | 5. NEAREST TOWN <b>Pierre</b>    |                                   |
|                         | 7. STREAM BED ELEV. <b>-</b>                          |   |                                     | 8. TOP OF DAM ELEV. <b>-</b>                   |  |  | 9. SPILLWAY CREST ELEV. <b>-</b> |                                   |
| 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                                      |   |                                     |  |  | Nov. 1936  |                                  |                                   |
|                         | b. POWER  |   |                                     |  |  |  |                                  |                                   |
|                         | c. WATER SUPPLY                                       |   |                                     |  |  | 16. DATE NORMAL OPER. BEGAN                            |                                  |                                   |
|                         | d. IRRIGATION   |   |                                     |  |  |  |                                  |                                   |
|                         | e. CONSERVATION                                       |   |                                     | <b>2.5</b>                                     | <b>9.2</b>                                   | <b>9.2</b>   |                                  |                                   |
|                         | f. INACTIVE   |   |                                     |  |  |  |                                  |                                   |
| 17. LENGTH OF RESERVOIR |   |   |                                     | MILES  | 17. AV. WIDTH OF RESERVOIR                   |  |                                  |                                   |
|                         |   |   |                                     |  |  |  |                                  |                                   |
| WATERSHED               | 18. TOTAL DRAINAGE AREA ( <b>329 ac.</b> )            |   |                                     | <b>0.514</b>                                   | SQ. MI.                                      | 22. MEAN ANNUAL PRECIPITATION <b>16.20 (53)</b> INCHES |                                  |                                   |
|                         | 19. NET SEDIMENT CONTRIBUTING AREA ( <b>327 ac.</b> ) |   |                                     | <b>0.511</b>                                   | SQ. MI.                                      | 23. MEAN ANNUAL RUNOFF                                 |                                  |                                   |
|                         | 20. LENGTH  |   |                                     | MILES  | 24. MEAN ANNUAL RUNOFF                       |  | INCHES                           |                                   |
|                         | 21. MAX. ELEV.  |   |                                     | MIN. ELEV.                                     | 25. CLIMATIC CLASSIFICATION <b>Semi-arid</b> |  |                                  |                                   |
|                         |   |   |                                     |  |  |  |                                  |                                   |
| 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. |
|                         | Nov. 1936   | -                                       | -                                   | -  | -  | 2.5  | 9.2                              | 17.9                              |
|                         | July 1945   | 8.7                                     | 8.7                                 | Range Detailed                                 | 3  | 2.5  | 8.3                              | 16.1                              |
|                         | 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  | d. MEAN ANNUAL                   | e. 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                           | d. TOTAL TO DATE                             | e. AV. ANNUAL  | f. PER SQ. MI.- YEAR             |                                   |
|                         | July 1945   | 0.888                                   | 0.102                               | 0.200  | 0.888  | 0.102  | 0.200                            |                                   |
|                         | 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 1945               |   |   |                                     | 1.11   | 9.65   |  |                                  |                                   |

|  |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
|--|---|------------|----------------|------------|------------|------------|----------------|----------|-------|--------------------------|------|------|------|------|
| 26.<br>DATE OF SURVEY  | 43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION |            |                |            |            |            |                |          |       |                          |      |      |      |      |
|  | PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION            |            |                |            |            |            |                |          |       |                          |      |      |      |      |
|  |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
| 26.<br>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   |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
|  |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
| 45. RANGE IN RESERVOIR OPERATION   |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
| WATER YEAR   | MAX. ELEV.  | MIN. ELEV. | INFLOW AC.-FT. | WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. |          |       |                          |      |      |      |      |
|  |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
| 46. ELEVATION-AREA-CAPACITY DATA   |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
| ELEVATION  | AREA  | CAPACITY   | ELEVATION      | AREA       | CAPACITY   | ELEVATION  | AREA           | CAPACITY |       |                          |      |      |      |      |
|  |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
| 47. REMARKS AND REFERENCES   |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
| <p>Gottschalk, L. C. Silting of stock ponds in the Land Utilization Project Area SD-LU-2, Pierre, South Dakota. U. S. Soil Conserv. Serv. Spec. Rpt. No. 9, 11 pp., illus., processed. Washington, D. C., May 1946.</p> <p>Region 5, Soil Conservation Service<br/>U. S. Department of Agriculture</p> |   |            |                |            |            |            |                |          |       |                          |      |      |      |      |
| 48. AGENCY SUPPLYING DATA Lincoln, Nebraska  |   |            |                |            |            |            |                |          |       | 49. DATE January 5, 1951 |      |      |      |      |