

RESERVOIR SEDIMENT  
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

Lloyd Pond  
NAME OF RESERVOIR

32-44  
DATA SHEET NO.

Trib. to

|             |   |      |                                     |  |                                     |                                       |  |            |  |  |                             |  |                                      |  |                                     |  |
|-------------|---|------|-------------------------------------|--|-------------------------------------|---------------------------------------|--|------------|--|--|-----------------------------|--|--------------------------------------|--|-------------------------------------|--|
| DAM         | 1. OWNER <u>Lena Lloyd</u>                    |      |                                     | 2. STREAM <u>Republican River</u>      |                                     | 3. STATE <u>Kansas</u>                |  |            |  |  |                             |  |                                      |  |                                     |  |
|             | 4. SEC. <u>SE 29TWP. 2</u> RANGE <u>4</u>     |      |                                     | 5. NEAREST P.O. <u>Scandia, Ks.-3N</u> |                                     | 6. COUNTY <u>Republic</u>             |  |            |  |  |                             |  |                                      |  |                                     |  |
|             | 7. LAT. <u>39 51'</u> " LONG. <u>97 47'</u> " |      |                                     | 8. TOP OF DAM ELEVATION <u>104.1*</u>  |                                     | 9. SPILLWAY CREST ELEV. <u>100.0*</u> |  |            |  |  |                             |  |                                      |  |                                     |  |
| 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                              |      |                                     |  |                                     |                                       |  |            |  |  | July 1932                   |  |                                      |  |                                     |  |
|             | b. MULTIPLE USE                               |      |                                     |  |                                     |                                       |  |            |  |  |                             |  |                                      |  |                                     |  |
|             | c. POWER                                      |      |                                     |  |                                     |                                       |  |            |  |  |                             |  |                                      |  |                                     |  |
|             | d. WATER SUPPLY                               |      | <u>100.0*</u>                       |  | <u>5.07</u>                         |                                       | <u>20.15</u>                               |            | <u>20.15</u>                             |  | 16. DATE NORMAL OPER. BEGAN |  |                                      |  |                                     |  |
|             | e. IRRIGATION                                 |      |                                     |  |                                     |                                       |  |            |  |  | July 1932                   |  |                                      |  |                                     |  |
|             | f. CONSERVATION                               |      |                                     |  |                                     |                                       |  |            |  |  |                             |  |                                      |  |                                     |  |
|             | g. INACTIVE                                   |      |                                     |  |                                     |                                       |  |            |  |  |                             |  |                                      |  |                                     |  |
| WATERSHED   | 17. LENGTH OF RESERVOIR                       |      |                                     |  | <u>.16</u> MILES                    |                                       |  |            | AV. WIDTH OF RESERVOIR                   |  |                             |  | <u>.05</u> MILES                     |  |                                     |  |
|             | 18. TOTAL DRAINAGE AREA                       |      |                                     |  | <u>.85</u> SQ. MI.                  |                                       |  |            | 22. MEAN ANNUAL PRECIPITATION            |  |                             |  | <u>25.3</u> INCHES                   |  |                                     |  |
|             | 19. NET SEDIMENT CONTRIBUTING AREA            |      |                                     |  | <u>.84</u> SQ. MI.                  |                                       |  |            | 23. MEAN ANNUAL RUNOFF                   |  |                             |  | <u>2.30</u> INCHES                   |  |                                     |  |
|             | 20. LENGTH                                    |      | <u>1.81</u> MILES                   |  | AV. WIDTH                           |                                       | <u>.47</u> MILES                           |            | 24. MEAN ANNUAL RUNOFF                   |  | <u>104</u>                  |  | AC.-FT.                              |  |                                     |  |
|             | 21. MAX. ELEV.                                |      | <u>1585*</u>                        |  | MIN. ELEV.                          |                                       | <u>1473*</u>                               |            | 25. ANNUAL TEMP: MEAN <u>52° F</u> RANGE |  |                             |  |                                      |  |                                     |  |
| 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, AC.-FT. PER AC.-FT. |  |
|             | 7-7-70  |      | 38.0                                |  | 38.0                                |                                       | Range (D)                                  |            | 6  |  | 5.07                        |  | Original<br>20.15<br>Present<br>8.12 |  | .193<br><br>.078                    |  |
|             | 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 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                  |  |                                     |  |
|             | 7-7-70  |      | 12.03                               |  | .32                                 |                                       | .38  |            | 12.03                                    |  | .32                         |  | .38                                  |  |                                     |  |
|             | 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. ANN.                                |            | b. TOT. TO DATE                          |  | a. PERIOD                   |  | b. TOT. TO DATE                      |  |                                     |  |
| 7-7-70      |   | *70# |                                     | 575                                    |                                     | 575                                   |  | 1.57 59.77 |  |  |                             |  |                                      |  |                                     |  |

\*Estimate

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

|                    |   |       |       |       |       |       |       |       |       |        |      |      |      |      |      |
|--------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|------|
| 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          |       |       |       |       |       |       |       |       |        |      |      |      |      |      |
|                    |   |       |       |       |       |       |       |       |       |        |      |      |      |      |      |

|                                  |            |            |                 |            |            |            |                 |
|----------------------------------|------------|------------|-----------------|------------|------------|------------|-----------------|
| 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

Slope: Range (Good) 4-5%. Cropland 1-3%.  
 Land Use: 48% Range & 52% Cropland (no LCT).  
 Trap Efficiency: 90%  
 Yield .419 Ac. Ft./Sq. Mi./Yr. (638.98 Tons/Sq. Mi./Yr.)

48. AGENCY MAKING SURVEY Kansas Watershed Planning Staff, Soil Conservation Service  
 49. AGENCY SUPPLYING DATA Soil Conservation Service 50. DATE 9-29-70