

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Baker Lake

NAME OF RESERVOIR

42-1 a

DATA SHEET NO.

| | | | | | | | | | | | | | |
|--------------------|--|------------------------------------|-------------------------------------|--|---|--|--|----------------------------------|-------------------------------------|--|-----------------------------|--|--|
| DAM | 1. OWNER <u>CMST&P Railroad</u> | | | 2. STREAM <u>Sandstone Creek</u> | | | 3. STATE <u>Montana</u> | | | | | | |
| | 4. SEC. <u>13</u> TWP. <u>7N</u> RANGE <u>59E</u> | | | 5. NEAREST P.O. <u>Baker</u> | | | 6. COUNTY <u>Fallon</u> | | | | | | |
| | 7. LAT. " " " " " " " " " " " " | | | 8. TOP OF DAM ELEVATION <u>2939.14</u> | | | 9. SPILLWAY CREST ELEV. <u>2934.14</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 | | | | | | | | | | May (early) 1908 | | |
| | b. MULTIPLE USE | | | | | | | | | | 16. DATE NORMAL OPER. BEGAN | | |
| | c. POWER | | | | | | | | | | | | |
| | d. WATER SUPPLY | | | | | | | | | | | | |
| | e. IRRIGATION | | | | | | | | | | | | |
| | f. CONSERVATION <u>1/</u> | | <u>2934.14</u> | | <u>122</u> | | <u>756</u> | | <u>756</u> | | May 1908 | | |
| g. INACTIVE | | | | | | | | | | | | | |
| WATERSHED | 17. LENGTH OF RESERVOIR <u>1.25</u> MILES | | | | AV. WIDTH OF RESERVOIR <u>0.15</u> MILES | | | | | | | | |
| | 18. TOTAL DRAINAGE AREA <u>5.20</u> SQ. MI. | | | | 22. MEAN ANNUAL PRECIPITATION <u>14.88</u> INCHES | | | | | | | | |
| | 19. NET SEDIMENT CONTRIBUTING AREA <u>5.01</u> SQ. MI. | | | | 23. MEAN ANNUAL RUNOFF <u>0.8</u> INCHES | | | | | | | | |
| | 20. LENGTH <u>3.5</u> MILES | | AV. WIDTH <u>1.5</u> MILES | | 24. MEAN ANNUAL RUNOFF <u>222</u> AC.-F.T. | | | | | | | | |
| | 21. MAX. ELEV. <u>3050</u> | | MIN. ELEV. <u>2900</u> | | 25. ANNUAL TEMP.: MEAN <u>42.9</u> RANGE <u>36 to 104°F</u> | | | | | | | | |
| 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. | | | | |
| | May 1908 | | | | | | 122 | 756 | 3.40 | | | | |
| | May 30, 1937 | | 29.1 | 29.1 | Range Detailed | 16 | 122 | 502 | 2.26 | | | | |
| | May 1955 | | 18.0 | 47.1 | Range | 16 | 122 | 393 | 1.77 | | | | |
| | July 1970 | | 15.2 | 62.3 | Range | 12 | 122 | 235 | 1.06 | | | | |
| | 26. DATE OF SURVEY | | 34. PERIOD ANNUAL PRECIPITATION | | 35. PERIOD WATER INFLOW, ACRE-FEET | | | 36. WATER INFL. TO DATE, AC.-FT. | | | | | |
| | | | 14.88 (25 yrs) | | No gage data | | | | | | | | |
| | 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 | | | | | |
| | May 30, 1937 | | 254 | 8.73 | 1.74 | 254 | 8.73 | 1.74 | | | | | |
| May 1955 | | 109 | 6.06 | 1.21 | 363 | 7.71 | 1.54 | | | | | | |
| July 1970 | | 158 | 10.39 | 2.08 | 521 | 8.36 | 1.67 | | | | | | |
| 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 | | | | | |
| May 30, 1937 | | 39 (5) | 1478 | 1478 | 1.15 | 33.60 | | | | | | | |
| May 1955 | | 45 (1) | 1553 | 1509 | 1.02 | 48.0 | | | | | | | |
| July 1970 | | 40 (1) | 1288 | 1455 | 1.11 | 68.9 | | | | | | | |

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|--------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|
| 26. DATE OF SURVEY | 43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION | | | | | | | | | | | | |
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|--------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|------|
| 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 | | | | | | | | | | | | | | |
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| 45. RANGE IN RESERVOIR OPERATION | | | | | | | |
| WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW, AC.-FT. | WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW, AC.-FT. |
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| 46. ELEVATION-AREA-CAPACITY DATA | | | | | | | | |
| ELEVATION | AREA | CAPACITY | ELEVATION | AREA | CAPACITY | ELEVATION | AREA | CAPACITY |
| | | | | | | | | |

47. REMARKS AND REFERENCES

1/ Formerly water supply for railroad; now used for recreation and ice supply.

48. AGENCY MAKING SURVEY Soil Conservation Service, USDA
 49. AGENCY SUPPLYING DATA Bozeman, Montana
 50. DATE Nov. 1971