SCS-34 Rev. 6-66

R-3

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

Kiowa Creek Watershed

NAME OF RESERVOIR

34-8a DATA SHEET NO.

OWNER KIOWA SCD Kiowa Creek 3. STATE Colorado STREAM COUNTY Elbert 26 TWP. 10S RANGE 64W NEAREST P. O. Elbert SEC. 4. SPILLWAY CREST ELEV. 6953.20 08 15" LONG 104" 32 00" TOP OF DAM ELEVATION 6959.20 LAT. 39 7. GROSS STORAGE, 15. DATE 13. ORIGINAL 11. ELEVATION 12. ORIGINAL 10. STORAGE STORAGE BEGAN ACRE-FEET TOP OF POOL SURFACE AREA, ACRES CAPACITY. ACRE-FEET **ALLOCATION** 20.81 99.89 147.59 6953.20 a. FLOOD CONTROL b. MULTIPLE USE c. POWER 16. DATE NOR-MAL OPER, BEGAN d. WATER SUPPLY e. IRRIGATION July f. CONSERVATION 1956 g. INACTIVE 0.07 MILES 0.43 MILES AV. WIDTH OF RESERVOIR 17. LENGTH OF RESERVOIR 15.6INCHES MEAN ANNUAL PRECIPITATION 2.92 TOTAL DRAINAGE AREA SQ. MI 18. 3.5 <u>1</u>/ INCHES MEAN ANNUAL RUNOFF 2.89 SQ. MI 23. 19. NET SEDIMENT CONTRIBUTING AREA ATERSH 545 AC.-FT. 1.5 MILES MEAN ANNUAL RUNOFF 20. LENGTH MILES AV. WIDTH 45°F RANGE 30°-67°F (Chees ANNUAL TEMP.: MEAN 25 MIN. ELEV. 21. MAX. ELEV. 30. NO. OF RANGES 31. SURFACE 32. CAPACITY. 33. C/I. RATIO, 28 29. TYPE OF 26. DATE OF AC.-FT. PER AC.-FT. ACCL. PERIOD ACRE-FEET OR CONTOUR INT SURVEY AREA, ACRES SURVEY YEARS **YEARS** 147.6 0.27 20.81 56 July 1956 Range 40 20.81 138.2 0.25 10 10 Mar. 1966 Range 36. WATER INFL. TO DATE, AC.-FT. PERIOD WATER INFLOW, ACRE-FEET 34. PERIOD 35. 26. DATE OF ANNUAL a. MEAN ANNUAL b. MAX. ANNUAL c. PERIOD TOTAL TOTAL TO DATE MEAN ANNUAL b. SURVEY PRECIPITATION DATA SURVEY TOTAL SED. DEPOSITS TO DATE, ACRE-FEET PERIOD CAPACITY LOSS, ACRE-FEET 26. DATE OF c. PER SQ. MI. YEAR C. PER SQ. MI.-YEAR a. TOTAL TO DATE b. AV. ANNUAL SURVEY a. PERIOD TOTAL b. AV. ANNUAL 0.94 0.32 0.32 9.37 Mar. 1966 9.37 0.94 40.SED. DEP., TONS PERSQ. MI.-YR. 41.STORAGE LOSS, PCT. 42. SED. INFLOW, PPM 39. AV. DRY WGT., 26. DATE OF b. TOT. TO DATE LBS, PER CU. FT. b. TOTAL TO DATE a. AV. ANN b. TOT. TO DATE a. PERIOD a. PERIOD SURVEY 0.64 6.35 Mar. 1966 80* 557 557

| 26. DATE OF | 43. | 43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION | | | | | | | | | | | | | |
|--|----------|---|----------|-------|---------------|---------|------------|-------|--------|---------|----------|------------|------|---------------|-------|
| SURVEY | | | | | | | <u> </u> | | | | <u>ļ</u> | <u> </u> | | | |
| | | | PERC | ENT O | F TOTA | L SEDI | MENT I | OCATE | D WIT | HIN DE | PTH DE | SIGNA | TION | | |
| | | | | - | | | | | | | | | | | |
| 26. DATE OF | 44. | | REACH | DESIG | NOITAN | PERCE | NT OF | TOTAL | ORIG | NAL L | NGTH (| OF RES | ERVO | IR | |
| SURVEY | 0-10 | 10-20 | | | | 50-60 | | | | | 1 1 | -110 | | - 120 | - 125 |
| ļ | | | PERC | ENT O | F TOTAL | L SEDIN | IENT L | OCATE | D WITI | IIN RE | ACH DE | SIGNAT | ION | | |
| | | | | | | | | | | | | | | | |
| 45. | - | | | RA | NGE IN | RESER | VOIR | OPERA | TION | | | - | | • | |
| WATER YEA | R MAX. | ELEV. | MIN. E | LEV. | INFLOW, ACFT. | | WATER YEAR | | N | AX. ELE | V. | MIN. ELEV. | | INFLOW, ACFT. | |
| 46. | | | | | | | | | | | | | | | |
| ELEVATION | AREA | | PACITY | _ | ATION | ON-ARE | | | | 7 | | | | T | |
| | | | , ACIT | | | | EA | CA | PACITY | ELE | VATION | A | REA | CAPA | MIT |
| 47. REMARKS | AND REFE | RENCES | <u> </u> | | | | | • | | • | | | | 1 | |
| Almost all of the sediment in the reservoir was deposited during an extremely large storm on June 17, 1965, in which flow through the emergency spillway was about 4 feet deep. Sediment deposited in the sediment pool totaled 5.62 acre feet (60%). Sediment deposited in the flood pool totaled 3.75 acre feet (40%). | | | | | | | | | | | | | | | |

1/ Atlas HA-212, USGS 1966

48. AGENCY MAKING SURVEY
49. AGENCY SUPPLYING DATA

Soil Conservation Service

Same

50. DATE May 2, 1966

Kiowa Creek R-3

34 - 8a DATA SHEET NO.

| _ | | | | | NA | ME OF RESER | VOIR | | | | DATA SHEE | T NO. | |
|----------------|---|---|----------------------|--------------------------|----------------|-------------------|------------------|----------------------------|----------|---------------------------------------|-----------|------------------------------------|--|
| F | 1. OWNER Kiowa | SCD | | | 2. STF | REAM Trib | <u>. of</u> | Kiowa | Ck. | 3. STATE | Colo | rado | |
| DAM | | VP. 10S | RANG | € 64 | | | 6. COUNTY Elbert | | | | | | |
| | 7. LAT. 39° 08' | | | | | OF DAM EL | | | .2 | 9. SPILL | WAY CREST | ELEV. 6953.2 | |
| | 10. STORAGE ALLOCATION | 11. | ELEVATIO TOP OF P | | 12. ORIGI | NAL | 13. C | RIGINAL CITY. ACRE-FEET | | 14. GROSS STORAGE, ACRE-FEET | | 15. DATE STORAGE BEGAN | |
| | a. FLOOD CONTROL | L | 6953.2 | 0 | 20. | 81 | | 99.89 | | 147.59 | | July | |
| ١Ĕ | b. MULTIPLE USE | | | | | | | | | | | 1956 | |
| SERVOIR | c. POWER | | | | | | | | | | | 16. DATE NOR- | |
| SE | d. WATER SUPPLY | | | | | | | | <u> </u> | | | MAL OPER, BEGAN | |
| 12 | e. IRRIGATION | | | | | | | | | | | | |
| Ι. | f. CONSERVATION | | | | | | | | | · · · · · · · · · · · · · · · · · · · | | July | |
| l | g. INACTIVE 1/ | | <u>6945.7</u> | 0 | | | 47.70 | | | 47 | 7.70 | 1956 | |
| _ | 17. LENGTH OF RESERVOIR 0.43 MILES AV. WIDTH OF RESERVOIR 0.07 MILE | | | | | | | | | | | | |
| 南 | 18. TOTAL DRAINAGE AREA 2.84 SQ. MI. 22. MEAN ANNUAL PRECIPITATION 17 INCHES | | | | | | | | | | | | |
| RSH | 19. NET SEDIMENT CONTRIBUTING AREA 2.81 SQ. MI. 23. MEAN ANNUAL RUNOFF 0.5 INC. | | | | | | | | | | | | |
|] W | | | | | | | | | | | | | |
| WAT | 21. MAX. ELEV. 7 | 1. MAX. ELEV. 7, 240 MIN. ELEV. 6, 960 25. ANNUAL TEMP: MEAN 48 RANGE 28 - 70 | | | | | | | | | | | |
| ĺ | 26. DATE OF | | | | PE OF IRVEY | 30, NO. OF RA | | | | 32. CAP | | 33. C/I. RATIO, ACFT. PER ACFT. | |
| 1 | SURVEY | JRVEY YEARS YEARS | | | | 5.K 35.K 150K 114 | | AREA, ACRES | | ACRE-FEET | | AGUT LITTER AGUT L | |
| | July 1956 | _ _ ' | | Range | | 56 | | 20.81 | | 147.59 | | 1.95 | |
| | March 1966 | 9.7 9.7 | | Range | | • | 56 | | | 138.22 | | 1.82 | |
| | May 1976 | 10.1 19.8 | | Range | | 56 | | 20.81 20.81 | | 136.79 | | 1.81 | |
| ' | 110, 15, 0 | | | | | 5 | | | | -30.77 | | 1.0- | |
| 1 | | | | | | | | · | | | | | |
| | | ANNUAL | | | | | | | | | | | |
| | 26. DATE OF | | | 35. PERIOD WATER II | | | | | | 36. WATER INFL. T | | | |
| | SURVET | | | a. MEAN ANNUAL | | b. MAX. ANNUAL | | c. PERIOD TOTAL | | | | b. TOTAL TO DATE | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | · | |
| ا ہے ا | | | | | | | | | | | i | | |
| DATA | | | | | | | | | | | | | |
| اچ[| | | | | | | | | | | | | |
| Ę. | | 37 | DEDIO | D CAPACITY LOSS, ACRE-FI | | | ET 38. TOTAL SED | | | DEBOS | | TE ACRE-FEET | |
| SURVEY | 26. DATE OF SURVEY | 37. | | | | | | YEAR a. TOTAL TO DATE | | | | D. PER SQ. MI. YEAR | |
| l _o | | a. PERIC | JU TUTAL | D. AV. | ANNUAL | C. FER SQ. MI | . I EAR | a. IUIAL I | Ų DAIĖ. | 0. AV. | ANNUAL | G. PER SQ. MILTEAR | |
| | | | | _ | | | | | | | | | |
| | March 1966 | 9.37 | | 0.966 | | 0.34 | | 9.37 | | 0.966 | | 0.34 | |
| 1 | May 1976 | 1.43 | | 0.142 | | 0.05 | | 10.80 | | 0.545 | | 0.19 | |
| | | l | | | | | | | | | | | |
| | | 1 | | | | | | | | | | | |
| | 25 DATE 25 | 39. AV. DRY WGT., LBS. PER CU. FT. | | 40.SED. DEP.,TONS | | SPERSO MI -YP | | 41 STORAGE LO | | OSS, PCT, 42. SED. 1 | | INFLOW, PPM | |
| | 26. DATE OF SURVEY | | | a. PER | | | | | | OT. TO DATE a. PERIOD | | B. TOT. TO DATE | |
| | | | | | | | | | | | | | |
| | March 1966 | | | | | | | 0.65 | ۷ | 25 | | | |
| | May 1976 | | | | | | | | | 5.35 7.32 | | | |
| i | Flay 19/0 | | | | | | | 0.57 | / • | ے د | | | |
| | | | | | | | | | | | | | |
| ĺ | | 1 | | | | | | | | | | | |

| | 43. | D | EPTH DE | SIGNA | TION F | RANGE | IN FEE | T BE | LOW | /, AN | D ABO | VE, CR | ST ELE | VATIO | N | |
|-----------------------|----------|-------------------|---------|--------|--------|----------|--------|-------|--------|----------------|------------|--------|------------|---------|--------------|--------|
| 26. DATE OF SURVEY | | | | | | | | | | | | | 1 | l | | |
| | | | PERCE | ENT OF | TOTA | L SEDII | MENT I | LOCA | TED | WITH | HN DE | PTH DI | SIGNA | TION | | |
| | | | | | 1 | | | | | | | | 1 | | | |
| | | | } | | | | | | | | | | | | ļ | |
| | | | | İ | | | | | | | | | | | | |
| | | | | | | | 1 | 1 | | | | | | - 1 | | |
| | | | | | | | | - | | | | İ | | | - | |
| | 44. | <u> </u> | REACH D | DESIGN | IATION | PERCE | NT OF | тот | AL C | RIGI | NAL: LE | NGTH | OF RES | ERVOI | R | |
| 26. DATE OF SURVEY | | | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-8 | 30 8 | 30 - 90 | 90-100 | -105 | -110 | -115 | | - 125 |
| | <u> </u> | | PERCE | NT OF | TOTA | L SEDIA | MENT L | OCA | TED | WITH | IIN RE | ACH DE | SIGNA | TION | | |
| | | | | | | | | | | | | | | | 1 | |
| | | | | | | | | | İ | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | |] [| | | | | | | | | | | | 1 | |
| 45. | | | 11 | RA | NGE II | N RESE | RVOIR | OPE | RATI | ON | | با | | <u></u> | | · |
| WATER YEAR | MAX. | MAX. ELEV. MIN. E | | | | | | | R YEAR | | MAX, ELEV. | | MIN. ELEV. | | INFLOW, ACFT | |
| | | | | | | <u> </u> | | | | | | | 7 | | | |
| | 1 | İ | | | | | | | | 1 | | | | 1 | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | |] | | | | | | | [| | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |] | | |
| | | | | | | | | | | Ì | | | | | | |
| | | | | | | | | | | | | 1 | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | ļ | | i | | | | |
| | | | | | | | | | | | | ŀ | | | | |
| 46. | <u> </u> | | | | LEVAT | ION-AR | EA-CA | PACIT | TY D | ATA | | | | | | |
| ELEVATION | AREA | C | APACITY | | VATION | | REA | | | ACITY | EL | VATION | | AREA | CAI | PACITY |
| | | | | | | | | | | | | | - [" | | 1 . | |
| 1 | | | | | | ļ | | 1 | | | | | | | | |
| | | | | 1 | | | | | | | | | | | | |
| | | | | | | 1 | | | | | | | | | | |
| | | 1 | | | | | | | | | | | , | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

47. REMARKS AND REFERENCES

Most of the sediment in the reservoir was deposited during an extremely large storm on June 17, 1965, in which flow through the emergency spillway was about four feet deep. Sediment deposited in the sediment pool totals 7.05 acre-feet (65%). Sediment deposited in the flood pool totals 3.75 acre-feet (35%).

1/ Sediment pool only.

48. AGENCY MAKING SURVEY
49. AGENCY SUPPLYING DATA

Soil Conservation Service Soil Conservation Service .

50. DATE February 1979