

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Lemon

NAME OF RESERVOIR

31- 53

DATA SHEET NO.

Marais Des Cygnes Basin

| | | | | | | | | | | | | | |
|--------------|--|----|-------------------------------------|--|--|--|---------------------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------------|-------------------------------------|--|
| DAM | 1. OWNER Lemon | | | 2. STREAM Trib to Elm Creek | | | 3. STATE Kansas | | | | | | |
| | 4. SEC. NE11 TWP. 20 RANGE 22E | | | 5. NEAREST P.O. Parker | | | 6. COUNTY Linn | | | | | | |
| | 7. LAT. 38° 19' 42" LONG. 94° 57' 06" | | | 8. TOP OF DAM ELEVATION 100.00* | | | 9. SPILLWAY CREST ELEV. 97.00* | | | | | | |
| 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 | | | | | | | | | | June 1961 | | |
| | b. MULTIPLE USE | | | | | | | | | | | | |
| | c. POWER | | | | | | | | | | | | |
| | d. WATER SUPPLY | | 97.00* | | 3.10 | | 6.70 | | 6.70 | | 16. DATE NORMAL OPER. BEGAN | | |
| | e. IRRIGATION | | | | | | | | | | | | |
| | f. CONSERVATION | | | | | | | | | | July 1961 | | |
| WATERSHED | 17. LENGTH OF RESERVOIR 0.12 MILES | | | | AV. WIDTH OF RESERVOIR 0.07 MILES | | | | | | | | |
| | 18. TOTAL DRAINAGE AREA 0.19 SQ. MI. | | | | 22. MEAN ANNUAL PRECIPITATION 39.00 INCHES | | | | | | | | |
| | 19. NET SEDIMENT CONTRIBUTING AREA 0.19 SQ. MI. | | | | 23. MEAN ANNUAL RUNOFF 8.00 INCHES | | | | | | | | |
| | 20. LENGTH 0.50 MILES | | AV. WIDTH 0.40 MILES | | 24. MEAN ANNUAL RUNOFF 81.0 AC.-FT. | | | | | | | | |
| | 21. MAX. ELEV. 1,054.00 | | MIN. ELEV. 1,010.00 | | 25. ANNUAL TEMP.: MEAN 57 RANGE -26 to 107 | | | | | | | | |
| 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. | |
| | July 25 1967 | | 6 | 6 | Range | | 6 | 3.10 | | Original 6.70 Present 6.16 | | 0.08 0.08 | |
| | 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 | | | | |
| | July 25 1967 | | 0.54 | 0.09 | 0.47 | 0.54 | | 0.09 | 0.47 | | | | |
| | 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. INFLGW, PPM | | | | |
| | | | a. PERIOD | b. TOTAL TO DATE | a. AV. ANN. | b. TOT. TO DATE | a. PERIOD | b. TOT. TO DATE | | | | | |
| July 25 1967 | | 60 | 614 | 614 | 1.34 | 8.05 | | | | | | | |

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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 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 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

* Assumed

Pasture (good) = 43% w/4% slopes
 Cropland = 57% (complete cons. applied) 2 - 3% slopes
 T.E. = 76%
 Watershed yield = 0.62 ac. ft./sq. mi./yr.

48. AGENCY MAKING SURVEY

49. AGENCY SUPPLYING DATA U.S.D.A., Soil Conservation Service

50. DATE August 4, 1967