U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

RESERVOIR SEDIMENTATION DATA SUMMARY

Dean Pond #1
NAME OF RESERVOIR

50-17
DATA SHEET NO.

DAM

1. OWNER Ted Dean	2. RIVER Trib. of Nine Mile Cr.	3. STATE Oklahoma
4. SEC. NW1/4 20 TWP. 15 N RANGE 22 W	5. NEAREST TOWN 8 mi. NE Cheyenne	6. COUNTY Roger Mills
7. STREAM BED ELEV.	8. TOP OF DAM ELEV.	9. SPILLWAY CREST ELEV.

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					Spring 1944
b. POWER					
c. WATER SUPPLY		0.322	1.078	1.078	16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION					
f. INACTIVE					

17. LENGTH OF RESERVOIR MILES | AV. WIDTH OF RESERVOIR MILES

WATERSHED

18. TOTAL DRAINAGE AREA 0.0359 SQ. MI.	22. MEAN ANNUAL PRECIPITATION 24.38 (16) INCHES
19. NET SEDIMENT CONTRIBUTING AREA 0.0354 SQ. MI.	23. MEAN ANNUAL RUNOFF 1.20 INCHES
20. LENGTH MILES AV. WIDTH MILES	24. MEAN ANNUAL RUNOFF 64 ac.ft./sq.mi. AC.-FT.
21. MAX. ELEV. MIN. ELEV.	25. CLIMATIC CLASSIFICATION Subhumid

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.
Spring 1944					0.322	1.078	30.0
Mar. 17, 1955	11	11	Range Detail	7 Ranges	0.322	0.807	22.5

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 SEDIMENT DEPOSITS 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
Mar. 17, 1955	0.271	0.0246 ±	0.69	0.271	0.0246	0.69

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
March. 17, 1955	91.0	1,368	1,368	2.28	25.14	-	-

Watershed sample weight 88#/cu.ft.

U.S.D.A., Soil Conservation Service, Milwaukee, 1952

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

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGH 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

Land Use =
C/I ratio = 0.41
Estimated trap efficiency = 96%
Total annual sediment load, adjusted for trap efficiency = 72 ac.ft./sq.mi.

48. AGENCY SUPPLYING DATA **SCS, Oklahoma City, Okla.**

49. DATE June 8, 1955