

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Carleton
NAME OF RESERVOIR

45-10
DATA SHEET NO.

DAM	1. OWNER State of Oklahoma			2. RIVER Fourche Maline Creek			3. STATE Oklahoma					
	4. SEC 23, 24 TWP. 6 RANGE 18			5. NEAREST TOWN Wilburton			6. COUNTY Latimer					
	7. STREAM BED ELEV. 680			8. TOP OF DAM ELEV. 711			9. SPILLWAY CREST ELEV. 711					
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					1933						
	b. POWER											
	c. WATER SUPPLY											
	d. IRRIGATION					16. DATE NORMAL OPER. BEGAN						
	e. CONSERVATION	711	52	570	570	1933						
f. INACTIVE												
17. LENGTH OF RESERVOIR		.55		MILES		13. AV. WIDTH OF RESERVOIR		.13		MILES		
WATERSHED	18. TOTAL DRAINAGE AREA			19.8			22. MEAN ANNUAL PRECIPITATION			46.5 (9)		
	19. NET SEDIMENT CONTRIBUTING AREA			19.7			23. MEAN ANNUAL RUNOFF			INCHES		
	20. LENGTH		MILES		AV. WIDTH		MILES		24. MEAN ANNUAL RUNOFF			
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION							
					Humid							
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.				
	Orig. at 1938 Crest July 1947	-	-	-	-	52	570	29				
		14	14	Range Recon.	6	52	511	26				
	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					
	July 1947	58.5	4.2	.21	58.5	4.2	.21					
	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					
July 1947	-	-	-	0.74	10.26	-	-					

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 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
References: Unpublished Reconnaissance Investigation, July 1947.
Lake drained in 1937. Dam raised and reinforced. Storage resumed 1938.
Sediment grayish black silt underlain by reddish gravelly clay or blue-black clay with shale old soil. Upper portion of lake appears to be extremely sandy with occasional pieces of pea-size gravel overlain by a few tenths of silt.

48. AGENCY SUPPLYING DATA Region 4, Soil Conservation Service 49. DATE Aug. 4, 1950
U. S. Dept. of Agriculture
Fort Worth, Texas