

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Little Deep Fork Site #10

SCS-34 Rev. 6-66

NAME OF RESERVOIR

45-58

DATA SHEET NO.

DAM	1. OWNER <u>Otis Wolf & Mrs. Fred Sparkman</u>			2. STREAM <u>Deep Fork</u>			3. STATE <u>Oklahoma</u>									
	4. SEC. <u>10&15</u> TWP. <u>16N</u> RANGE <u>7E</u>			5. NEAREST P. O. <u>Drumright</u>			6. COUNTY <u>Creek</u>									
	7. LAT <u>35° 57' 25"</u> LONG <u>96° 45' 20"</u>			8. TOP OF DAM ELEVATION <u>886.25</u>			9. SPILLWAY CREST ELEV. <u>879.5</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		879.5		174.01		1126.41		1522.49		1 Nov 1968					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION															
	g. INACTIVE <u>1/</u>		870.1		73.2		396.08		396.08		1 Nov 1968					
WATERSHED	17. LENGTH OF RESERVOIR				1.62 MILES		AV. WIDTH OF RESERVOIR				.17 MILES					
	18. TOTAL DRAINAGE AREA				7.55 SQ. MI.		22. MEAN ANNUAL PRECIPITATION				37.0 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA				7.28 SQ. MI.		23. MEAN ANNUAL RUNOFF				6.0 INCHES					
	20. LENGTH		5.13 MILES		AV. WIDTH		1.47 MILES		24. MEAN ANNUAL RUNOFF				2415.9 AC.-FT.			
	21. MAX. ELEV. <u>948.0 Est.</u>				MIN. ELEV. <u>859.7</u>		25. ANNUAL TEMP.: MEAN <u>61°</u> RANGE <u>-13° to 115°</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.	
	11-1-68		-		-		Range Contour (D)		25 (R) 2' C.I.		73.2 (174.01)		396.1 (1522.5)		(.63)	
	9-10-74		5.86		5.86		Range Contour (D)		25 (R) 2' C.I.		69.0 (166.5)		379.6 (1493.9)		(.62)	
	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			
	11-1-68		-		-		-		-		-		-			
	9-10-74		16.5 (28.6)		2.82 (4.88)		.39 (.67)		16.5 (28.6)		2.82 (4.88)		.39 (.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		
11-1-68		-		-		-		-		-		-		-		
9-10-74		58 Sed. P. (4) 93 Det. P. (3)		492 (1059)		492 (1059)		.71 (.32)		4.17 (1.88)						

1/ Sediment Pool

Note: Figures in parentheses represent sediment and flood control pools.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	79.5-	78-76	76-74	74-72	72-70	70.1-68	68-66	66-64	64-62	62-60	60-58	58-56			
	78 PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
9-10-74	19.2	1.4	2.8	3.1	15.7	11.3	0	0	0	7.0	26.9	12.6			
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. Original Survey 1969									ELEVATION-AREA-CAPACITY DATA						
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
856.0	0.5	0.3	872.0	90.0	550.8	864.0	27.9	90.1							
858.0	3.3	3.7	874.0	111.2	751.7	866.0	39.3	157.0							
860.0	14.6	20.2	876.0	130.4	993.1	868.0	54.3	250.3							
862.0	20.1	54.7	878.0	153.7	1276.9	870.1	69.0	379.6							
864.0	27.9	162.5	879.5	174.0	1522.5	872.0	89.6	529.8							
866.0	39.3	169.4	1974 Survey			874.0	110.7	729.9							
868.0	54.3	262.7	858.0	.12	0.1	876.0	129.9	970.4							
870.1	73.2	396.1	860.0	12.0	8.9	878.0	153.7	1253.8							
			862.0	20.9	41.4	879.5	166.5	1493.9							
47. REMARKS AND REFERENCES															
Land Use 1974: Cropland 2%, Range-Pasture 13%, Timber 77%, Miscellaneous 8%															
1968: Cropland 2%, Range 14%, Timber 78%, Miscellaneous 6%															
Geology: Vamoosa 90%, Vanoss 10%, Pennsylvanian Age															
Land Resource Area: Cross Timbers															
48. AGENCY MAKING SURVEY Oklahoma Watershed and River Basin Planning Staff															
49. AGENCY SUPPLYING DATA SCS USDA										50. DATE December 23, 1974					