

**RESERVOIR SEDIMENT
DATA SUMMARY**

SCS-34 Rev. 6-62

**Main Reservoir
Deep Creek Site 5**
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

53-38

DATA SHEET NO.

DAM	1. OWNER A. Hughes			2. STREAM Colorado			3. STATE Texas				
	4. SEC. TWP.		RANGE		5. NEAREST TOWN Brady			6. COUNTY McCulloch			
	7. STREAM BED ELEVATION 1080.0			8. TOP OF DAM ELEVATION 1122.0			9. SPILLWAY CREST ELEV 1116.0				
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. MULTIPLE USE										8-12-53
	b. FLOOD CONTROL		1116.0		119.1		1088.3		1326.7		
	c. POWER										
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN
	e. IRRIGATION										
	f. CONSERVATION		1100.0		28.2		238.4		238.4		
	g. SEDIMENT										
	h. INACTIVE										
WATERSHED	17. LENGTH OF RESERVOIR 0.83 MILES				AV. WIDTH OF RESERVOIR 0.2 MILES						
	18. TOTAL DRAINAGE AREA 2.91 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 22.3 (7.8) INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 2.72 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.8 INCHES						
	20. LENGTH MILES		AV. WIDTH MILES		24. MEAN ANNUAL RUNOFF 279 AC.-FT.						
	21. MAX. ELEV.		MIN. ELEV. 1080.0		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. PERSQ. MI.			
	1/ 8-12-53	-	-	-	-	119.1	1326.7	455.9			
	2/ 8-12-53	-	-	-	-	28.2	238.4	81.9			
	1/ 7-15-61	7.9	7.9	Range Detail	17	119.1	1295.7	445.3			
	2/ 7-15-61	7.9	7.9	"	17	27.7	207.9	71.4			
	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		
1/ 8-12-53	-		-	-	-		-	-			
1/ 7-15-61	31.0		3.92	1.44	31.0		3.92	1.44			
2/ 7-15-61	30.5		3.86	1.42	30.5		3.86	1.42			
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. INFLOW PPM				
	a. PERIOD		b. TOTAL TO DATE	a. AV. AN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE				
* 7-15-61 (2)	90.0		39	39	0.30	2.34					
2/ 7-15-61 (5)	53.3		1648	1648	1.62	12.79					

1/ Both detention and sediment pool

2/ Sediment pool only

* Detention pool samples - exposed to air drying.

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
1084.0	0.2	0.6	1098.0	23.9	156.3	1110.0	76.3	716.4
1086.0	1.5	2.3	1100.0	27.7	207.9	1112.0	89.0	881.1
1088.0	4.0	8.0	1102.0	36.0	271.2	1114.0	104.0	1073.8
1090.0	9.6	21.6	1104.0	46.2	353.5	1116.0	119.1	1295.7
1092.0	13.5	45.0	1106.0	55.8	455.2	1118.0	130.0	1544.2
1094.0	16.6	74.9	1108.0	65.0	575.7	1120.0	142.1	1815.8
1096.0	20.3	112.0						

47. REMARKS AND REFERENCES
 Land Use = Rangeland 95%; Roads, Houses, and Cultivated 5%
 C/I Ratio = Both Pools - 4.64; Sediment Pool Only - 0.74
 Estimated Trap Efficiency - 98%
 Total Annual Sediment Load, Adjusted for Trap Efficiency - 1.47 Ac.Ft./Sq.Mi./Yr.
 Physiographic Area: Palo Pinto Section
 Geology: Cisco Group of Pennsylvanian Age and Trinity group of Cretaceous Age.

48. AGENCY MAKING SURVEY Soil Conservation Service
 49. AGENCY SUPPLYING DATA Temple, Texas
 50. DATE 11-14-61