

RESERVOIR SEDIMENT  
DATA SUMMARY

CS-34 Rev. 6-66

Denton Creek - Site 3-B

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

51 - 44

DATA SHEET NO.

DAM	1. OWNER Byford			2. STREAM Mallard Creek			3. STATE Texas									
	4. SEC. TWP. RANGE			5. NEAREST P.O. Montague			6. COUNTY Montague									
	7. LAT. 33° 36' 25" LONG. 97° 39' 15"			8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV.									
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		1/ 1048.0		92.19		850.35		1232.05		12-69					
	b. MULTIPLE USE															
	c. POWER										16. DATE NORMAL OPER. BEGAN					
	d. WATER SUPPLY															
	e. IRRIGATION															
	f. CONSERVATION		2/ 1035.8		46.05		85.09		381.70		12-69					
g. INACTIVE		3/ 1033.7		36.15		296.61		296.61								
WATERSHED	17. LENGTH OF RESERVOIR				1.27 MILES				AV. WIDTH OF RESERVOIR				0.11 MILES			
	18. TOTAL DRAINAGE AREA				2.71 SQ. MI.				22. MEAN ANNUAL PRECIPITATION				29.97 INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				5/ 1.88 SQ. MI.				23. MEAN ANNUAL RUNOFF				3.50 INCHES			
	20. LENGTH				2.94 MILES				AV. WIDTH				0.92 MILES			
	21. MAX. ELEV.				1297.0				MIN. ELEV.				1014.0			
								25. ANNUAL TEMP: MEAN 64°				FRANGE 44° - 84° F				
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.	
	12-69		-		-		Range		87 R		92.19		1232.05		5/ 3.27	
	10-76		6.83		6.83		Contour		4' CI		92.69		1121.59		5/ 2.99	
	12-69		-		-		(D)				45.06		381.70		-	
	10-76		6.83		6.83						44.21		307.45		-	
	12-69		-		-						36.15		296.61		-	
	10-76		6.83		6.83						36.21		223.15		-	
	10-69		-		-								935.44			
	10-76		-		-								898.44			
	10-76		-		-											
SURVEY DATA	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			
SURVEY DATA	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			
	10-76		110.46		16.17		8.60		110.46		16.17		8.60			
	10-76		74.25		10.87		5.78		74.25		10.87		5.78			
	10-76		73.46		10.76		5.72		73.46		10.76		5.72			
10-76		37.0		5.42		2.88		37.0		5.42		2.88				
SURVEY DATA	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. ANN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE	
	10-76		-		12375.75		12375.75		1.31		8.96					
	10-76		96.8 6/		6071.92		6071.92		2.85		19.45					
10-76		50.6 7/		6303.83		6303.83		3.63		24.77						

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. 1976		ELEVATION-AREA-CAPACITY DATA						
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1020.0	0.58	0.77	1040.0	61.91	529.26			
1024.0	10.01	18.10	1044.0	71.11	795.02			
1028.0	19.28	75.66	1048.0	92.69	1121.59			
1032.0	27.65	169.00						
1033.7	36.21	223.15						
1035.8	44.21	307.45						

47. REMARKS AND REFERENCES

1/ Total reservoir.

2/ Principal spillway crest (includes sediment pool and sediment reserve).

3/ Sediment pool.

4/ Figures represent sediment reserve pool and detention pool deposits.

5/ Adjusted due to upstream control by 3 sediment control structures.

Geology: Antlers sand, Lower Cretaceous Age.

Land Resource Area: Cross Timbers.

6/ Aerated sediment.

7/ Submerged sediment.

48. AGENCY MAKING SURVEY SCS, Temple, Texas

49. AGENCY SUPPLYING DATA SCS, Temple, Texas

50. DATE 4-77