

RESERVOIR SEDIMENT
DATA SUMMARY

San Diego-Rosita Creek, Site 1

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

CS-34 Rev. 6-66

NAME OF RESERVOIR

55 - 2

DATA SHEET NO.

DAM	1. OWNER <u>Yates</u>			2. STREAM <u>San Diego Creek</u>			3. STATE <u>Texas</u>									
	4. SEC. <u>TWP.</u> RANGE			5. NEAREST P.O. <u>Freer</u>			6. COUNTY <u>Duval</u>									
	7. LAT. <u>27° 58' 24"</u> LONG. <u>98° 25' 40"</u>			8. TOP OF DAM ELEVATION <u>532.5</u>			9. SPILLWAY CREST ELEV. <u>527.5</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		1/ 527.5		575.5		4829.6		5189.6		7-29-60					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										7-29-60					
	e. IRRIGATION															
	f. CONSERVATION		2/ 510.8		93.0		75.7		360.0							
	g. INACTIVE		3/ 510.0		79.6		284.3		284.3							
17. LENGTH OF RESERVOIR		5/		2.12		MILES		AV. WIDTH OF RESERVOIR		0.42		MILES				
WATERSHED	18. TOTAL DRAINAGE AREA				23.19		SQ. MI.		22. MEAN ANNUAL PRECIPITATION				19.27 (80)		INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA				22.29		SQ. MI.		23. MEAN ANNUAL RUNOFF				0.5		INCHES	
	20. LENGTH		5.81		MILES		AV. WIDTH		3.99		MILES		24. MEAN ANNUAL RUNOFF		618.36	AC.-FT.
	21. MAX. ELEV.				MIN. ELEV. 501.6				25. ANNUAL TEMP: MEAN				RANGE			
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.	
	1/ 9-30-60		-		-		Range-		17 R		575.50		5189.6		8.39	
	2/ 4-13-76		15.54		15.54		Contour		2' CI		570.00		4966.54		8.03	
	3/ 9-30-60		-		-		(D)				93.00		360.0			
	4/ 4-13-76		15.54		15.54						90.00		325.70			
	5/ 9-30-60		-		-						79.60		284.30			
	6/ 4-13-76		15.54		15.54						77.20		259.05			
	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			
	1/ 4-13-76		223.06		14.35		0.64		223.06		14.35		0.64			
	2/ 4-13-76		34.3		2.21		0.10		34.3		2.21		0.10			
	3/ 4-13-76		25.25		1.62		0.07		25.25		1.62		0.07			
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		
4/ 4-13-76		Aer 92 (4)		1082.03		1082.03		0.57		8.88						
3/ 4-13-76		6/ 85 (5)		129.59		129.59		0.61		9.53						
2/ 4-13-76		Aer 92 (4)		60.11		60.11		0.28		4.30						
1/ 4-13-76				1271.73		1271.73										

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
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							
500.0	2.35	1.57	512.0	102.31	441.01	526.0	484.90	4176.22							
502.0	6.75	10.28	514.0	140.06	682.15	527.5	570.00	4966.54							
504.0	17.05	33.28	516.0	175.86	997.08										
506.0	27.91	77.75	518.0	219.66	1391.39										
508.0	39.40	144.56	520.0	275.98	1885.46										
510.0	77.20	259.05	522.0	353.38	2512.60										
510.8	90.00	325.70	524.0	414.37	3278.77										
47. REMARKS AND REFERENCES															
<u>1/</u> Total reservoir up to elevation 527.5'. <u>2/</u> Reservoir below principal spillway crest elevation 510.8'. <u>3/</u> Sediment pool, below elevation 510.0'. <u>4/</u> Detention pool only. <u>5/</u> Length of south arm is 1.50 miles. <u>6/</u> Dry pool. Land Use: rangeland 94%, miscellaneous 6%. Geology: The reservoir is located upon an outcrop of the Goliad Formation of Pliocene Age, Upper Tertiary. Land Resource Area: Rio Grande Plain.															
48. AGENCY MAKING SURVEY SCS, Temple, Texas															
49. AGENCY SUPPLYING DATA SCS, Temple, Texas															
50. DATE 3-76															