

RESERVOIR SEDIMENTATION
DATA SUMMARY

Mountain Creek
NAME OF RESERVOIR

54 - 7
DATA SHEET NO.

DAM	1. OWNER Robert Lee Water Co.			2. RIVER Mountain Cr.			3. STATE Texas				
	4. SEC. TWP. RANGE		5. NEAREST TOWN Robert Lee			6. COUNTY Coke					
	7. STREAM BED ELEV. 64.1			8. TOP OF DAM ELEV. 110.0			9. SPILLWAY CREST ELEV. 100.0*				
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					5-31-50					
	b. POWER										
	c. WATER SUPPLY	100.0*	77.5	945.3	945.3	16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION										
	e. CONSERVATION										
	f. INACTIVE										
17. LENGTH OF RESERVOIR 1.48			MILES			AV. WIDTH OF RESERVOIR 0.08			MILES		
WATERSHED	18. TOTAL DRAINAGE AREA 32.00			SQ. MI.			22. MEAN ANNUAL PRECIPITATION 1/ 18.64			INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA 31.88			SQ. MI.			23. MEAN ANNUAL RUNOFF 1.5			INCHES	
	20. LENGTH 10.5		MILES		AV. WIDTH 3.0		MILES		24. MEAN ANNUAL RUNOFF 80.0 ac. ft. /sq. mi. AC- FT.		
	21. MAX. ELEV. 2/ 2500.0			MIN. ELEV. 64.1			25. CLIMATIC CLASSIFICATION Semi-arid				
	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.		
5-31-50		-	-	-	-	77.5	945.3	29.54			
4-16-61		10.9	10.9	Range Detail	28	77.5	804.9	25.15			
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			
	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			
	5-31-50		-	-	-	-	-	-			
	4-16-61		140.4	12.88	0.40	140.4	12.88	0.40			
	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			
	4-16-61		53.06	462.17	462.17	1.36	14.85				

* Assumed Elevation.

1/ San Angelo Recording Station

2/ Actual Elevation

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							
72.0	0.09	0.3	82.0	18.0	70.1	92.0	41.3	351.8							
74.0	1.5	1.6	84.0	21.5	109.6	94.0	48.2	441.3							
76.0	4.6	7.4	86.0	24.7	155.7	96.0	55.6	545.0							
78.0	7.0	18.9	88.0	30.1	210.5	98.0	63.5	664.1							
80.0	13.3	38.9	90.0	35.0	275.6	100.0	77.5	804.9							
						102.0	88.1	970.5							
47. REMARKS AND REFERENCES Geology: Upper Permian - Double Mountain Group - San Angelo sandstone formation, Dog Creek shale and Blaine formations. Somerecent alluvial deposits. Physiographic Area: Red Hills Land Resource Area: Rolling Plains Land Use: Rangeland = 75%; Cultivated = 25% CI Ratio = 0.31 Estimated Trap Efficiency = 98%. Total annual sediment load, adjusted for trap efficiency = 0.41 ac.ft./sq.mi./yr.															
Soil Conservation Service															
48. AGENCY SUPPLYING DATA				Temple, Texas				49. DATE <u>May 25, 1961</u>							