

**RESERVOIR SEDIMENTATION  
DATA SUMMARY**

Brown Reservoir No. 1

48 - 2

NAME OF RESERVOIR

DATA SHEET NO.

<b>DAM</b>	1. OWNER J. C. Gunter			2. RIVER Van Bremer Arroyo			3. STATE Colorado				
	4. SEC. TWP. 29, 30S RANGE 61, 62W			5. NEAREST TOWN Trinidad			6. COUNTY Las Animas				
	7. STREAM BED ELEV. -			8. TOP OF DAM ELEV. -			9. SPILLWAY CREST ELEV. -				
<b>RESERVOIR</b>	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					1900					
	b. POWER										
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION		104	758	758						
	e. CONSERVATION										
	f. INACTIVE										
17. LENGTH OF RESERVOIR			MILES	AV. WIDTH OF RESERVOIR			MILES				
<b>WATERSHED</b>	18. TOTAL DRAINAGE AREA			74.6	SQ. MI.	22. MEAN ANNUAL PRECIPITATION			12 - 14	INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA			74.4	SQ. MI.	23. MEAN ANNUAL RUNOFF				INCHES	
	20. LENGTH		MILES	AV. WIDTH		MILES	24. MEAN ANNUAL RUNOFF			AG-FT.	
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION			Semi-arid			
<b>SURVEY DATA</b>	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 <sub>w</sub> RATIO AC-FT. PER SQ. MI.			
	1900	-	-	-	-	104	758	10.2			
	Nov. 1939	39	39	Range detailed	11	85	82	1.10			
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AG-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				
	Nov. 1939	676 (699) 1/	17.3 (17.9)	0.233 (0.241)	676 (699)	17.3 (17.9)	0.233 (0.241)				
	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			
Nov. 1939	89.07 (11)	452 (468)	452 (468)	2.28	89.18						

1/ Above-crest deposits within original flow line.

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

47. REMARKS AND REFERENCES

Sedimentation Section  
Soil Conservation Service  
U. S. Dept. of Agriculture  
Washington, D. C.

48. AGENCY SUPPLYING DATA

49. DATE July 10, 1951