

**RESERVOIR SEDIMENT
DATA SUMMARY**
SCS-34 Rev. 6-62

Barnitz Creek - Site #14
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

50-48

DATA SHEET NO.

DAM	1. OWNER				2. STREAM Barnitz		3. STATE Oklahoma									
	4. SEC 28-29 TWP. 16N RANGE 17W				5. NEAREST TOWN Clinton		6. COUNTY Custer									
	7. STREAM BED ELEVATION				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. MULTIPLE USE										11-17-58					
	b. FLOOD CONTROL		1831.2		136.44		1068.37		1693.70							
	c. POWER															
	d. WATER SUPPLY															
	e. IRRIGATION										16. DATE NORMAL OPER. BEGAN					
	f. CONSERVATION															
	g. SEDIMENT		1820.3		64.92		625.33		625.33		11-17-58					
h. INACTIVE																
17. LENGTH OF RESERVOIR 1.25 MILES				AV. WIDTH OF RESERVOIR 0.09 MILES												
WATERSHED	18. TOTAL DRAINAGE AREA 4.32 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 26.65 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 4.11 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.75 INCHES											
	20. LENGTH 2.2 MILES				AV. WIDTH 1.96 MILES				24. MEAN ANNUAL RUNOFF 403 AC.-FT.							
	21. MAX. ELEV.				MIN. ELEV.				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. PER SQ. MI.	
	11-17-58		-		-		Contour D		4		64.92 (136.44)		625.33 (1693.70)		144.75 (392.06)	
	9-24-63		4.85		4.85						64.92 (136.44)		551.82 (1620.19)		127.74 (375.04)	
	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			
	9-24-63		73.51 (73.51)		15.16 (15.16)		3.69 (3.69)		73.51 (73.51)		15.16 (15.16)		3.69 (3.69)			
	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. AN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE				
9-24-63		70.6 (3)		5674 (5674)		5674 (5674)		2.42 (0.90)		11.76 (4.34)						

Side Arm 0.53 miles
" " 0.50 "
(--) both pools

31- 28- 24- 20.3- 16- 12- 08- 04- 1800- 98- 96-

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION											
	28	24	20.3	16	12	08	04	1800	98	96	92	
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
9-24-63	0	0	0	5	16	15	19	23	5	11	6	

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. Original Capacity			ELEVATION-AREA-CAPACITY DATA					
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1831.2	136.44	1693.70	1798	5.46	11.80	1812	28.89	165.32
1828	110.62	1297.90	1796	2.47	4.03	1808	16.55	75.80
1824	86.99	904.61	1792	0.09	0	1804	6.76	30.73
1820.3	64.92	625.33	<u>1963 + Capacity</u>			1800	4.09	9.30
1816	48.02	383.99	1831.2	136.44	1620.19	1798	.94	0
1812	33.03	225.53	1828	110.62	1244.39			
1808	17.98	123.28	1824	86.99	831.10			
1804	12.03	63.82	1820.3	64.92	551.82			
1800	7.56	24.82	1816	46.40	314.15			

47. REMARKS AND REFERENCES

Land Use:

Geology: 33% Rush Springs Sandstone
67% Cloud Chief Gypsum

48. AGENCY MAKING SURVEY Soil Conservation Service

49. AGENCY SUPPLYING DATA

50. DATE _____