

RESERVOIR SEDIMENTATION

CANTON RESERVOIR

46-13a

DATA SUMMARY

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER <b>Corps of Engineers</b>			2. RIVER <b>North Canadian</b>			3. STATE <b>Oklahoma</b>			
	4. SEC <b>27, 28, &amp; 33 TWP. 19N RANGE 13W</b>			5. NEAREST TOWN <b>Canton</b>			6. COUNTY <b>Blaine</b>			
	7. STREAM BED ELEV. <b>1575</b>			8. TOP OF DAM ELEV. <b>1648.0</b>			9. SPILLWAY CREST ELEV. <b>1/1638</b>			
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	<b>1638.0</b>	<b>15,750</b>	<b>281,200</b>	<b>401,500</b>	<b>2/ 25 July 1947</b>				
	b. POWER									
	c. WATER SUPPLY	<b>3/ 1614.0</b>	<b>7,700</b>	<b>97,550</b>	<b>120,300</b>	<b>16. DATE NORMAL OPER. BEGAN</b>				
	d. IRRIGATION									
	e. CONSERVATION	<b>3/ 1596.5</b>	<b>3,340</b>	<b>22,750</b>	<b>22,750</b>	<b>4 July 1948</b>				
f. INACTIVE										
17. LENGTH OF RESERVOIR <b>13.1</b> MILES			AV. WIDTH OF RESERVOIR <b>1.8</b> MILES							
WATERSHED	18. TOTAL DRAINAGE AREA <b>4/ 12,483</b> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <b>19.34</b> INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA <b>5/ 6,081</b> SQ. MI.			23. MEAN ANNUAL RUNOFF <b>0.32 (21.58 yrs.)</b> INCHES						
	20. LENGTH <b>300</b> MILES AV. WIDTH <b>40</b> MILES			24. MEAN ANNUAL RUNOFF <b>216,300 (21.58 yrs.)</b> AC.-FT.						
	21. MAX. ELEV. <b>6500</b> MIN. ELEV. <b>1575</b>			25. CLIMATIC CLASSIFICATION <b>Semi-arid</b>						
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. M.		
	<b>July 1947</b>	<b>-</b>	<b>-</b>	<b>Range (D)</b>	<b>44</b>	<b>15,750</b>	<b>401,500</b>	<b>5/ 66</b>		
	<b>May 1953</b>	<b>5.8</b>	<b>5.8</b>	<b>Range (D)</b>	<b>22</b>	<b>15,750</b>	<b>390,800</b>	<b>5/ 64</b>		
	<b>Oct. 1959</b>	<b>6.4</b>	<b>12.2</b>	<b>Range (D)</b>	<b>22</b>	<b>15,750</b>	<b>385,900</b>	<b>5/ 63</b>		
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			
	<b>May 1953</b>	<b>20.05</b>	<b>289,200</b>	<b>540,700</b>	<b>1,677,200</b>	<b>289,200</b>	<b>1,677,200</b>			
	<b>Oct. 1959</b>	<b>19.51</b>	<b>160,744</b>	<b>423,904</b>	<b>1,028,765</b>	<b>221,800</b>	<b>2,705,965</b>			
SURVEY DATA	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.-YR.	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YR.			
	<b>May 1953</b>	<b>10,700</b>	<b>1,840</b>	<b>0.303</b>	<b>10,700</b>	<b>1,840</b>	<b>0.303</b>			
	<b>Oct. 1959</b>	<b>4,900</b>	<b>766</b>	<b>0.120</b>	<b>15,600</b>	<b>1,280</b>	<b>0.210</b>			
SURVEY DATA	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. TO DATE	a. PERIOD	b. TO DATE		
	<b>May 1953</b>	<b>70.9 (13)</b>	<b>468</b>	<b>468</b>	<b>0.458</b>	<b>2.66</b>	<b>7250</b>	<b>7250</b>		
	<b>Oct. 1959</b>	<b>66.3</b>	<b>173</b>	<b>303</b>	<b>0.319</b>	<b>3.89</b>	<b>4293</b>	<b>6125</b>		

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION											
	63-58	58-53	53-48	48-43	43-38	38-33	33-28	28-23	23-18	18-13	13-8	8-crest
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
May 1953 Oct. 1959	1.5	4.7	5.1	9.3	13.8	16.9	15.9	14.7	10.3	4.6	3.2	0.0
	1.1	3.4	3.2	5.4	8.3	13.3	18.8	20.3	12.8	7.4	4.4	1.6

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														
May 1953 Oct. 1959	2.5	6.4	10.7	19.3	21.3	17.9	15.6	4.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
	2.3	2.2	4.7	17.0	27.2	19.1	17.1	6.1	3.1	1.2	0.0	0.0	0.0	0.0	0.0

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC-FT	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC-FT
1948	1599.8	-	91,650	1956	1613.27	1604.33	10,960
1949	1614.3	1595.9	437,500	1957	1625.51	1596.32	423,900
1950	1623.8	1602.8	524,400	1958	1616.12	1613.68	185,300
1951	1628.0	1602.4	540,700	1959	1615.40	1613.12	104,200
1952	1605.3	1598.7	81,230				
1953	1598.8	1588.7	27,870				
1954	1596.75	1588.30	52,850				
1955	1615.50	1585.60	223,700				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA 6/	CAPACITY	ELEVATION	AREA 6/	CAPACITY	ELEVATION	AREA	CAPACITY
1580	0	0	1610	6,200	82,180			
1585	301	597	1613	7,080	102,000			
1590	1,560	5,150	1615	7,830	116,900			
1595	2,920	15,900	1620	9,450	160,200			
1596.5	3,190	20,570	1625	11,260	212,100			
1600	3,770	32,380	1630	12,810	272,100			
1603	4,450	44,850	1635	14,560	339,800			
1605	5,010	54,260	1638	15,750	385,900			

47. REMARKS AND REFERENCES 1/ Top of spillway gates closed. Spillway crest, bottom of gates, is at elevation 1613.0 2/ Date of diversion. 3/ Reservoir is being operated at "designated" pool elevation 1614.0, which temporarily supplies municipal water to Oklahoma City. 4/ Areas determined by AWR committee for April 1954 Drainage Area Data publication. 5/ Excludes 4642 sq mi of watershed not contributing to runoff, 1735 sq mi above Fort Supply Dam, and 25 sq mi surface area of Canton Reservoir. 6/ Areas are estimated.

48. AGENCY SUPPLYING DATA Department of the Army, CE, Tulsa District 49. DATE February 1960

**RESERVOIR SEDIMENT  
DATA SUMMARY**

SCS-34 Rev. 6-66

**CANTON LAKE**

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

46-13b

DATA SHEET NO.

DAM		1. OWNER <b>Corps of Engineers</b>		2. STREAM <b>North Canadian</b>		3. STATE <b>Oklahoma</b>		
		4. SEC <b>272833 TWP. 19N RANGE 13W</b>		5. NEAREST P.O. <b>Canton 2 N</b>		6. COUNTY <b>Blaine</b>		
		7. LAT <b>36° 05'</b> " LONG. <b>98° 36'</b> "		8. TOP OF DAM ELEVATION <b>1648.0</b>		9. SPILLWAY CREST ELEV. <b>1/1638.0</b>		
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	1638.0	15,750	272,300	401,500	2/25 Jul 47		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY	3/ 1615.2	8,360	106,450	129,200	16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION	3/ 1596.5	3,340	22,750	22,750	4 Jul 48		
g. INACTIVE								
WATERSHED		17. LENGTH OF RESERVOIR <b>13.1</b> MILES		AV. WIDTH OF RESERVOIR <b>1.8</b> MILES				
		18. TOTAL DRAINAGE AREA <b>4/ 12,483</b> SQ. MI.		22. MEAN ANNUAL PRECIPITATION <b>19.30</b> INCHES				
		19. NET SEDIMENT CONTRIBUTING AREA <b>5/ 6,081</b> SQ. MI.		23. MEAN ANNUAL RUNOFF <b>0.28 (28.58 yrs)</b> INCHES				
		20. LENGTH <b>300</b> MILES AV. WIDTH <b>40</b> MILES		24. MEAN ANNUAL RUNOFF <b>186,400</b> AC.-FT.				
		21. MAX. ELEV. <b>6500</b> MIN. ELEV. <b>1575</b>		25. ANNUAL TEMP.: MEAN <b>58.5</b> RANGE <b>106 to -2.5</b>				
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.
	July 1947	-	-	Range (D)	44	15,750	401,500	2.15
	6/May 1953	5.83	5.83	Range (D)	22	15,750	390,800	2.10
	6/Oct 1959	6.42	12.25	Range (D)	22	15,750	385,900	2.07
	Sept 1966	6.92	19.17	Range (D)	25	15,700	383,300	2.06
	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		
	May 1953	20.05	288,890	540,420	1,684,200	288,890	1,684,200	
	Oct 1959	19.51	162,760	422,930	1,044,900	222,780	2,729,100	
	Sept 1966	18.69	99,170	159,390	686,260	178,160	3,415,360	
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		
May 1953	10,690	1,834	0.302	10,690	1,834	0.302		
Oct 1959	4,880	760	0.125	15,570	1,271	0.209		
Sept 1966	2,660	384	0.063	18,230	951	0.156		
				7/18,500	7/ 965	7/0.159		
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	
May 1953	70.9	466.4	466.4	0.457	2.66	7,224	7,212	
Oct 1959	56.2	65.3	255.8	0.317	3.88	1,795	5,138	
Sept 1966	56.1	76.4	190.6	0.237	4.54	3,447	4,799	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	63-55	55-45	45-40	40-35	35-30	30-25	25-20	20-15	15-8	8-cr	cr +5	+5-+10
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
May 1953	4.3	12.1	11.9	15.7	17.1	15.2	12.0	7.4	4.3	0.0	0.0	0.0
Oct 1959	3.2	7.7	5.6	12.0	16.4	22.2	14.7	9.9	6.7	1.6	0.0	0.0
Sept. 1966	3.5	13.2	9.1	13.1	16.3	15.4	11.5	7.4	6.2	2.8	1.4	0.1

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														
May 1953	2.5	6.4	10.7	19.3	21.3	17.9	15.6	4.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Oct 1959	2.3	2.2	4.7	17.0	27.2	19.1	17.1	6.1	3.1	1.2	0.0	0.0	0.0	0.0	0.0
Sept 1966	4.3	5.7	7.7	18.0	22.3	16.2	14.1	5.3	3.3	1.8	1.3	0.0	0.0	0.0	0.0

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1947 (2 mo)	-	-	248	1957	1625.51	1596.32	422,930
1948	1599.80	-	90,800	1958	1616.12	1613.68	185,310
1949	1614.27	1595.91	437,640	1959	1615.40	1613.12	104,130
1950	1623.84	1602.85	532,180	1960	1615.56	1613.79	145,230
1951	1628.05	1602.36	540,420	1961	1614.65	1613.79	135,330
1952	1605.30	1598.65	81,170	1962	1615.16	1613.12	106,920
1953	1598.75	1588.66	29,530	1963	1614.21	1610.21	61,326
1954	1596.75	1588.30	52,846	1964	1611.93	1600.86	20,513
1955	1615.50	1585.66	223,790	1965	1616.18	1600.41	159,390
1956	1613.27	1604.33	10,953	1966	1615.52	1609.82	74,720

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1580	0	0	1610	6,323	79,150			
1585	242	256	1614	7,535	106,700			
1590	1,489	3,987	1615	7,879	114,400			
1595	2,678	14,160	1620	9,497	157,800			
1596.5	3,018	18,430	1625	11,258	209,800			
1600	3,652	29,950	1630	12,756	269,800			
1603	4,411	42,100	1635	14,510	338,100			
1605	4,873	51,390	1638	15,700	383,300			

47. REMARKS AND REFERENCES

- 1/ Top of spillway gates closed. Spillway crest is at elevation 1613.0.
- 2/ Date of diversion.
- 3/ Reservoir is being operated at "designated" pool elevation 1615.2 which temporarily provides municipal water supply for Oklahoma City.
- 4/ Area as determined by AWR committee for April 1954 drainage area data publication.
- 5/ Excludes 4,642 sq. mi. of watershed not contributing to sediment; 1735 sq. mi. above Fort Supply Dam and 25 sq. mi. surface area of Canton Lake.
- 6/ To provide a uniform presentation of data from all sedimentation resurveys of Canton Lake, data summaries for the 1953 and 1959 resurveys have been revised to conform with present instructions.
- 7/ Includes above crest deposits.

48. AGENCY MAKING SURVEY U. S. Army Engineer District, Tulsa  
 49. AGENCY SUPPLYING DATA U. S. Army Engineer District, Tulsa  
 50. DATE October 1970

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

Canton Lake

NAME OF RESERVOIR

46-136

DATA SHEET NO.

DAM	1. OWNER Corps of Engineers		2. STREAM N. Canadian River		3. STATE Oklahoma		
	4. 22, 28, 33 TWP 19N RANGE 13W		5. NEAREST P.O. Canton 2 N		6. COUNTY Blaine		
	7. LAT 36° 05' " LONG 98° 36' "		8. TOP OF DAM ELEVATION 1648.0		9. SPILLWAY CREST ELEV. 1638.0		
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		
	a. FLOOD CONTROL		1638.0		15,750		
	b. MULTIPLE USE				246,950		
	c. POWER				401,500		
	d. WATER SUPPLY		1615.4 3/		8,450		
	e. IRRIGATION				131,800		
	f. CONSERVATION		1596.5 3/		3,340		
	g. INACTIVE				22,750		
WATERSHED	13. ORIGINAL CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN		
	17. LENGTH OF RESERVOIR 13.1 MILES		AV. WIDTH OF RESERVOIR 1.8 MILES		25 Jul 47		
	18. TOTAL DRAINAGE AREA 12,483 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 19.04 (30 yrs) INCHES		16. DATE NORMAL OPER. BEGAN		
	19. NET SEDIMENT CONTRIBUTING AREA 6,081 4/ SQ. MI.		23. MEAN ANNUAL RUNOFF 0.241 (39.41 yrs) INCHES		4 Jul 48		
	20. LENGTH 300 MILES		AV. WIDTH 40 MILES				
SURVEY DATA	21. MAX. ELEV. 6500		MIN. ELEV. 1575		25. ANNUAL TEMP MEAN 58.8° RANGE 109 to -2		
	26. DATE OF SURVEY		27. PERIOD YEARS		28. ACCL. YEARS		
	31 Jul 1947		-		-		
	May 1953 5/		5.83		5.83		
	Oct 1959 5/		6.42		12.25		
	Sep 1966		6.92		19.17		
	31 Jul 1977		10.83		30.00		
					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.			
				Range (D)			
				44			
				15,750			
				401,500			
				2.15			
				Range (D)			
				22			
				15,750			
				390,800			
				2.10			
				Range (D)			
				22			
				15,750			
				385,900			
				2.07			
				Range (D)			
				25			
				15,700			
				383,300			
				2.06			
				Range (D)			
				27			
				15,700			
				377,100			
				2.35			
26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET			
				a. MEAN ANNUAL b. MAX ANNUAL c. PERIOD TOTAL			
May 1953		20.05		288,890 540,420 1,684,200			
Oct 1959		19.51		162,760 422,930 1,044,900			
Sep 1966		18.69		99,170 159,390 686,260			
Jul 1977		18.60		91,990 170,490 996,270			
				36. WATER INFL. TO DATE, AC.-FT.			
				a. MEAN ANNUAL b. TOTAL TO DATE			
				288,890 1,684,200			
				222,780 2,729,100			
				178,160 3,415,360			
				147,050 4,411,630			
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		
May 1953		10,690 1,834 0.302			10,690 1,834 0.302		
Oct 1959		4,880 760 0.125			15,570 1,271 0.209		
Sep 1966		2,660 384 0.063			18,230 951 0.156		
Jul 1977		6,240 576 0.095			18,500 6/ 965 6/ 0.159 6/		
					24,470 816 0.134		
					24,580 6/ 819 6/ 0.135 6/		
26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.	
				a. PERIOD b. TOTAL TO DATE		a. AV. ANN. b. TOT. TO DATE	
May 1953		70.9		466.4 466.4		0.457 2.66	
Oct 1959		56.2		65.3 255.8		0.317 3.88	
Sep 1966		56.1		76.4 190.6		0.237 4.54	
Jul 1977		62.4		166.7 182.1		0.203 6.09	
						7,224 7,212	
						1,795 5,138	
						3,447 4,799	
						8,089 5,545	

#12

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	63-55	55-45	45-40	40-35	35-30	30-25	25-20	20-15	15-8	8-Cr	Cr+5	+5.+10
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
May 1953	4.3	12.1	11.9	15.9	17.1	15.2	12.0	7.4	4.3	0.0	0.0	0.0
Oct 1959	3.2	7.7	5.6	12.0	16.4	22.2	14.7	9.9	6.7	1.6	0.0	0.0
Sep 1966	3.5	13.2	9.1	13.1	16.3	15.4	11.5	7.4	6.2	2.8	1.4	0.1
Jul 1977	2.8	23.8	12.4	14.1	14.7	11.5	9.8	5.6	4.4	1.7	.3	-1.1

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														
May 1953	2.5	6.4	10.7	19.3	21.3	17.9	15.6	4.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Oct 1959	2.3	2.2	4.7	17.0	27.2	19.1	17.1	6.1	3.1	1.2	0.0	0.0	0.0	0.0	0.0
Sep 1966	4.3	5.7	7.7	18.0	22.3	16.2	14.1	5.3	3.3	1.8	1.3	0.0	0.0	0.0	0.0
Jul 1977	13.3	12.2	10.0	15.8	18.2	12.7	10.7	4.3	2.8	1.0	.3	.1	1.5	0.0	0.0

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1967	1615.37	1608.68	6,757				
1968	1615.96	1611.41	108,591				
1969	1617.11	1612.51	149,975				
1970	1615.36	1609.64	69,407				
1971	1609.66	1602.48	30,283				
1972	1612.40	1602.33	120,425				
1973	1620.49	1608.25	170,490				
1974	1616.42	1610.05	100,268				
1975	1616.26	1607.57	132,420				
1976	1613.50	1609.65	46,138				
1977(10 mo)	1613.28	1604.64	61,516				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1947 Original Survey			1977 Resurvey			1610	6,350	72,860
1575	0	0	1580	0	0	1614	7,504	100,530
1580	85	173	1585	20	23	1615	7,783	108,170
1590	1,660	6,350	1590	900	1,843	1615.4	7,901	111,348
1596.5	3,340	22,750	1595	2,330	10,370	1620	9,488	151,330
1603	4,920	49,290	1596.5	2,710	14,170	1625	11,256	203,310
1614	8,010	120,280	1600	3,391	25,010	1630	12,789	263,390
1615.4	8,450	131,800	1603	4,243	36,470	1635	14,598	331,710
1638	15,750	401,576	1605	4,749	45,560	1638	15,708	377,110

47. REMARKS AND REFERENCES

- 1/ Top of spillway gates closed. Spillway crest is at elevation 1613.0.
- 2/ Date of Diversion.
- 3/ Reservoir is being operated at "designated" pool elevation 1615.4 which has been increased from elevation 1615.2 in June 1980. This authorized increase temporarily provides municipal water supply for Oklahoma City.
- 4/ Excludes 4,883 sq mi of watershed not contributing to flow; 1,494 sq mi of flow contributing area above Ft Supply Dam; and 25 sq mi surface area of Canton Lake.
- 5/ To provide a uniform presentation of data from all sedimentation resurveys of Canton Lake, data summaries for the 1953 and 1959 resurveys have been revised to conform with present instructions.
- 6/ Includes above crest deposits.

48. AGENCY MAKING SURVEY US Army Engineers, Tulsa

49. AGENCY SUPPLYING DATA US Army Engineers, Tulsa

DATE 10 November 1980