

RESERVOIR SEDIMENTATION
DATA SUMMARY

Sandstone Creek No. 6
NAME OF RESERVOIR

50 - 30
DATA SHEET NO.

DAM	1. OWNER			2. RIVER East Br. Sandstone C			3. STATE Oklahoma									
	4. SEC. 26 TWP. 12N RANGE 22W			5. NEAREST TOWN Elk City			6. COUNTY Beckham									
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV.									
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		100.00		125.90				2060.21		4-1-51					
	b. POWER															
	c. WATER SUPPLY															
	d. IRRIGATION										16. DATE NORMAL OPER. BEGAN					
	e. CONSERVATION		82.98		42.66				605.27							
	f. INACTIVE										4-1-51					
WATERSHED	17. LENGTH OF RESERVOIR				1.39 1/ MILES				AV. WIDTH OF RESERVOIR				0.14 MILES			
	18. TOTAL DRAINAGE AREA				6.46 SQ. MI.				22. MEAN ANNUAL PRECIPITATION				25.00 INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				5.24 SQ. MI.				23. MEAN ANNUAL RUNOFF				1.38 INCHES			
	20. LENGTH		4.27 MILES		AV. WIDTH		1.51 MILES		24. MEAN ANNUAL RUNOFF		73.60		AC.-FT.			
	21. MAX. ELEV.				MIN. ELEV. 48.2				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.	
	8-1-57		6.33		6.33		Detail Range		9		42.66 (125.90)		605.27 (2060.21)		93.70 (318.92)	
	5-1-60		2.83		9.16				9		38.52 (125.90)		495.48 (1932.01)		76.70 (299.07)	
	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			
	8-1-57		77.54 (78.54)		12.25 (12.41)		2.34 (2.37)		77.54 (78.54)		12.25 (12.41)		2.34 2/ (2.37) 2/			
	5-1-60		32.25 (49.66)		11.40 (17.55)		2.18 (3.35)		109.79 (128.20)		11.99 (14.00)		2.29 (2.67)			
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				
8-1-57		84.76		(4375.19)		(4375.19)		2.02 (00.60) 12.81 (03.81)								
5-1-60		73.66		(4102.68)		(4283.52)		01.98 (00.68) 18.14 (06.22)								

1/ Includes 0.29 mi. length of side arm
2/ Excludes sed. pool and area above 4 drop inlets

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														
5-1-60	44	20	14	12	5	3	2								

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
100.0	125.90	2060.21	72.0	23.64	223.12			
96.0	109.25	1589.92	68.0	14.03	147.78			
92.0	86.84	1197.74	64.0	10.84	98.04			
88.0	69.30	885.46	60.0	8.84	58.68			
84.0	48.10	650.66	56.0	6.88	27.24			
83.0	42.66	605.27	52.0	3.70	6.74			
80.0	39.84	481.52	48.2	0	0			
76.0	32.86	336.12						

47. REMARKS AND REFERENCES
 These capacities figured by different method.
 Land Use: Native Pasture 77%; Cultivated 18%; Miscellaneous 2%; Other 3%.
 Estimated Trap Efficiency - 98%
 Geology: 38% Elk City, Member Quartermaster Formation.
 40% Doxey " " "
 22% Ogallala " " "

48. AGENCY SUPPLYING DATA Soil Conservation Service
 Stillwater, Oklahoma

49. DATE 10/16/61

Continuation

U. S. Department of Agriculture

Soil Conservation Service
Data Sheet 50-30

Sandstone Creek No. 6

46. ELEVATION - AREA - CAPACITY DATA

1960 Capacity

<u>Elevation</u>	<u>Area</u>	<u>Capacity</u>
100.0	125.90	1932.01
96.0	109.25	1461.73
92.0	86.84	1069.55
88.0	66.42	762.63
86.0	57.18	639.03
83.0	38.52	495.48
80.0	34.80	385.50
76.0	28.95	258.50
72.0	21.50	157.10
68.0	14.00	86.10
64.0	10.00	38.10
60.00	6.72	4.66
59.0	2.60	0

**RESERVOIR SEDIMENT
DATA SUMMARY**

SCS-34 Rev. 6-62

SANDSTONE CREEK - Site 6

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

50-30 a

DATA SHEET NO.

DAM	1. OWNER				2. STREAM Washita			3. STATE Oklahoma			
	4. SEC. 26 TWP. 12N RANGE 22W			5. NEAREST TOWN Elk City			6. COUNTY Beckham				
	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										4-1-51
	b. FLOOD CONTROL		100.00		125.90				2060.21		
	c. POWER										
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN
	e. IRRIGATION										
	f. CONSERVATION										
	g. SEDIMENT		82.98		42.66				605.27		4-1-51
h. INACTIVE											
WATERSHED	17. LENGTH OF RESERVOIR				1.39 1/2 MILES		AV. WIDTH OF RESERVOIR		0.14 MILES		
	18. TOTAL DRAINAGE AREA				6.46 SQ. MI.		22. MEAN ANNUAL PRECIPITATION		25.00 INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA				5.24 SQ. MI.		23. MEAN ANNUAL RUNOFF		1.38 INCHES		
	20. LENGTH 4.27 MILES		AV. WIDTH 1.51 MILES		24. MEAN ANNUAL RUNOFF		73.60 AC.-F.T.				
	21. MAX. ELEV.		MIN. ELEV. 48.2		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.		
	8-1-57		6.33	6.33	Detail Range	9	42.66 (125.90)	527.73 (1981.67)	81.69 (306.76)		
	5-1-60		2.83	9.16		9	38.52 (125.90)	495.48 (1932.01)	76.70 (299.07)		
	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			
	8-1-57		77.54 (78.54)	12.25 (12.41)	2.34 (2.37)	77.54 (78.54)	12.25 (12.41)	2.34 (2.37)			
	5-1-60		32.25 (49.66)	11.40 (17.55)	2.18 (3.35)	109.79 (128.20)	11.99 (14.00)	2.29 (2.67)			
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			
8-1-57		84.76	(4375.19)	(4375.19)	2.02 (00.60)	12.81 (3.81)					
5-1-60		73.66	(5779.32)	(4606.25)	01.98 (00.68)	18.14 (6.22)					

1/ Includes 0.29 mi. length of side arm.

Figures in parentheses include sediment deposits above principal spillway crest and total storage losses.

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
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
5-1-60	44	20	14	12	5	3	2							

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV. ✓	INFLOW AC.-FT.

46. 1960 Capacity			ELEVATION-AREA-CAPACITY DATA					
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
100.0	125.90	1932.01	72.0	21.50	157.10			
96.0	109.25	1461.73	68.0	14.00	86.10			
92.0	86.84	1069.55	64.0	10.00	38.10			
88.0	66.42	762.63	60.0	6.72	4.66			
86.0	57.18	639.03	59.0	2.60	0			
83.0	38.52	495.48						
80.0	34.80	385.50						
76.0	28.95	258.50						

47. REMARKS AND REFERENCES

These capacities figured by different method.
 Land Use: Native Pasture 77%; Cultivated 18%; Miscellaneous 2%; Other 3%.
 Estimated Trap Efficiency - 98%.
 Geology: 38% Elk City, Member Quartermaster Formation.
 40% Doxey " " "
 22% Ogallala " " "

48. AGENCY MAKING SURVEY Soil Conservation Service
 49. AGENCY SUPPLYING DATA Stillwater, Oklahoma
 50. DATE 10/16/61

RESERVOIR SEDIMENT
DATA SUMMARY

Sandstone - Site # 6

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

NAME OF RESERVOIR

50- 30b

DATA SHEET NO.

DAM	1. OWNER			2. STREAM Sandstone			3. STATE Oklahoma						
	4. SEC. 26 TWP. 12N RANGE 22W			5. NEAREST P. O. Elk City			6. COUNTY Beckham						
	7. LAT. " LONG. "			8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV. 100.0						
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		100.00		(121.67)		(1956.05)		(1956.05)		4-1-51		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION										4-1-51		
	f. CONSERVATION												
g. INACTIVE		83.00		48.12		543.90		543.90					
WATERSHED	17. LENGTH OF RESERVOIR 1.39 MILES				AV. WIDTH OF RESERVOIR 0.14 MILES								
	18. TOTAL DRAINAGE AREA 6.46 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 25.00 INCHES								
	19. NET SEDIMENT CONTRIBUTING AREA 5.24 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.38 INCHES								
	20. LENGTH 4.27 MILES		AV. WIDTH 1.51 MILES		24. MEAN ANNUAL RUNOFF 475 AC.-FT.								
	21. MAX. ELEV.		MIN. ELEV. 52.00		25. ANNUAL TEMP.: MEAN RANGE 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/I. RATIO, AC.-FT. PER AC.-FT.		
	4-1-51		-	-	Range & Topo			48.12 (121.67)	543.90 (1956.05)		1.15 (4.12)		
	10-10-62		11.53	11.53	-	-		45.25 (121.67)	420.13 (1813.20)		0.88 (3.82)		
	9-22-67		4.96	16.49	Range Contour (D)	13 (R) 2' C.I.		42.89 (121.67)	417.70 (1806.22)		0.88 (3.80)		
	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					
	10-10-62		123.77 (142.85)	10.73 (12.39)	2.05 (2.36)	123.77 (142.85)	10.73 (12.39)	2.05 (2.36)					
9-22-67		2.43 (6.98)	0.49 (1.41)	0.09 (0.27)	126.20 (149.83)	7.65 (9.09)	1.46 (1.73)						
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					
10-10-62		70.7	3157 (3634)	3157 (3634)	1.97 (0.63)	22.76 (7.30)							
9-22-67		65 Sed P(2) 90 Det P(2)	127 (529)	2067 (3391)	1.41 (0.46)	23.20 (7.66)							

() Includes Both Pools. *weighted Avg. = 72 lbs / ft³*

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	00-96	96-92	92-88	88-83	83-80	80-76	76-72	72-68	68-64	64-60	60-56	56-52
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
1962	0	2	6	9	11	16	10	7	9	13	13	4
1967	2	2	2	12	15	14	10	8	8	8	13	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. ELEVATION-AREA-CAPACITY DATA <u>1/</u>								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

Geology: 38% Elk City Member, 40% Doxey Member of Quartermaster Formation Permian Age, 22% Ogallala Formation Tertiary Age.

Land Use: 85% Native Pasture, 13% Cultivation, 2% Miscellaneous.

1/ Capacity Data on Attached Sheet.

48. AGENCY MAKING SURVEY

49. AGENCY SUPPLYING DATA S.C.S.

50. DATE 11/2/67

ELEVATION - AREA - CAPACITY DATA

Sandstone Creek Site #6

Data Sheet No. 50-

<u>Elevation</u>	<u>Area</u>	<u>Capacity</u>	:	<u>Elevation</u>	<u>Area</u>	<u>Capacity</u>
<u>Original Capacity</u>				<u>October 1962</u>		
100.0	121.67	1966.75		100.0	121.67	1825.06
96.0	103.96	1515.49		96.0	103.96	1373.80
92.0	83.95	1139.67		92.0	83.48	998.92
88.0	67.16	837.45		88.0	64.99	701.98
83.0	48.12	549.25		83.0	45.29	426.28
80.0	40.59	416.18		80.0	33.87	307.54
76.0	29.10	276.80		76.0	24.32	191.16
72.0	20.33	177.94		72.0	17.83	106.86
68.0	14.09	109.10		68.0	11.28	48.64
64.0	9.82	61.28		64.0	6.03	14.02
60.0	6.33	28.98		60.0	.49	.98
56.0	3.74	8.84				
52.0	0.34	0.68				
<u>September 1967</u>						
61.0	0.00	.00				
62.0	4.61	2.30				
64.0	6.01	12.92				
66.0	9.43	28.36				
68.0	11.24	49.03				
70.0	13.81	74.08				
72.0	17.66	105.55				
74.0	20.99	144.20				
76.0	24.00	189.19				
78.0	30.60	243.79				
80.0	32.58	306.97				
82.0	37.80	377.35				
83.0	42.89	417.70				
84.0	46.90	463.43				
86.0	55.52	565.85				
88.0	64.62	685.99				
90.0	75.96	826.57				
92.0	83.02	985.55				
94.0	93.14	1161.71				
96.0	103.13	1357.98				
98.0	111.72	1572.83				
100.0	121.67	1806.22				

**RESERVOIR SEDIMENT
DATA SUMMARY**

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Sandstone Site 6

NAME OF RESERVOIR

50- 30c

DATA SHEET NO.

DAM	1. OWNER			2. STREAM Sandstone			3. STATE Oklahoma									
	4. SEC. 26 TWP. 12N RANGE 22W			5. NEAREST P.O. Elk City			6. COUNTY Beckham									
	7. LAT 35° 22' 50" LONG 99° 31' 30"			8. TOP OF DAM ELEVATION 1978.0			9. SPILLWAY CREST ELEV. 1974.3									
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		1974.3		121.67		1412.15		1956.05		4-1-51					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION										4-1-51					
g. INACTIVE 1/		1957.3		48.12		543.90		543.90								
WATERSHED	17. LENGTH OF RESERVOIR 1.39 MILES				AV. WIDTH OF RESERVOIR 0.14 MILES											
	18. TOTAL DRAINAGE AREA 6.46 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 25.00 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 5.08 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.38 INCHES											
	20. LENGTH 4.27 MILES		AV. WIDTH 1.51 MILES		24. MEAN ANNUAL RUNOFF 475 AC.-FT.											
	21. MAX. ELEV. 2250 est.		MIN. ELEV. 1826.3		25. ANNUAL TEMP.: MEAN 65° RANGE +113° -11°											
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.	
	4-1-51		-				Range Topog.		13		48.1(121.7)		543.9(1956.1)		1.15(4.11)	
	10-10-62		11.53		11.53		"		13		45.3(121.7)		420.1(1813.2)		0.88(3.81)	
	9-22-67		4.96		16.49		Range Contour (D)		13(R)2'C.I.		42.9(121.7)		417.7(1806.2)		0.88(3.80)	
	6-20-72		4.75		21.24		"		13(R)2'C.I.		41.2(126.3)		413.3(1791.0)		0.87(3.77)	
	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			
10-10-62		123.8(142.9)		10.7(12.4)		2.1(2.4)		123.8(142.9)		10.7(12.4)		2.11(2.44)				
9-22-67		2.4(7.0)		0.5(1.4)		0.1(0.3)		126.2(149.9)		7.7(9.1)		1.50(1.79)				
6-20-72		4.4(15.2)		0.9(3.2)		0.2(0.6)		130.6(165.1)		6.1(7.8)		1.21(1.53)				
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		
10-10-62		71 lbsave(3)		3263(3773)		3263(3773)		2.0(0.6)		22.8(7.3)						
9-22-67		65 lbs SedP(2)		135(703)		2124(2692)		1.4(0.5)		23.2(7.7)						
6-20-72		90 lbs DetP(2)		214(998)		1423(2029)		1.1(0.4)		24.0(8.4)						
		54 lbs SedP(3)														
		87 lbs DetP(3)														

26. DATE OF SURVEY 1974	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	4.3-70	70-66	66-62	62-57	57-54	54-50	50-46	46-42	42-38	38-34	34-30	30-26
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
10-10-62	0	2	6	9	11	16	10	7	9	13	13	4
9-22-67	2	2	2	12	15	14	10	8	8	8	13	6
6-20-72	0	0	0	21	8	14	11	2	14	13	12	5

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
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 2/								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

1/ Sediment Pool
2/ See attached sheet for Elevation-Area-Capacity Data.
Land Use: Cropland 18%, Native Pasture 77%, Misc. 5% - 1962
Land Use: Cropland 13%, Native Pasture 85%, Misc. 2% - 1967
Land Use: Cropland 0%, Native Pasture 98%, Misc. 2% - 1972
Geology: Ogallala FM, Tertiary Age 22%, Quartermaster FM, Permian Age 78%
Land Resource Area: Central Rolling Red Plains
() Figures in parenthesis include sediment and flood pools

48. AGENCY MAKING SURVEY Oklahoma Watershed Planning Staff
49. AGENCY SUPPLYING DATA S.C.S. U.S.D.A. 50. DATE August 9, 1972

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Sandstone Site No. 6

NAME OF RESERVOIR

50 - 30 d

DATA SHEET NO.

DAM		1. OWNER Roy Fowler		2. STREAM Sandstone		3. STATE Oklahoma			
DAM		4. SEC. 26 TWP. 12N RANGE 22W		5. NEAREST P.O. Elk City		6. COUNTY Beckham			
DAM		7. LAT. 35° 22' 50" LONG. 99° 31' 30"		8. TOP OF DAM ELEVATION 1978.0		9. SPILLWAY CREST ELEV. 1974.3			
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	1974.3	121.67	1412.15	1956.05	4-1-51			
	b. MULTIPLE USE								
	c. POWER								
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN			
	e. IRRIGATION								
	f. CONSERVATION								
RESERVOIR	g. INACTIVE	1957.3	48.12	543.90	543.90				
	17. LENGTH OF RESERVOIR		1.39 MILES		AV. WIDTH OF RESERVOIR		0.14 MILES		
	18. TOTAL DRAINAGE AREA		6.46 SQ. MI.		22. MEAN ANNUAL PRECIPITATION		25.00 INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		5.08 SQ. MI.		23. MEAN ANNUAL RUNOFF		1.38 INCHES		
	20. LENGTH		4.27 MILES	AV. WIDTH		1.51 MILES	24. MEAN ANNUAL RUNOFF		475 AC.-FT.
	21. MAX. ELEV.		2250*	MIN. ELEV.		1826.3	25. ANNUAL TEMP. MEAN 65° F RANGE -11° to 113° F		
	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.
4-1-51		-	-	Range-Topog.	13 R	48.1(121.7)	543.9(1956.1)	1.15(4.11)	
10-10-62		11.53	11.53	"	13 R	45.3(121.7)	420.1(1813.2)	0.88(3.81)	
9-22-67		4.96	16.49	Range-Contour (D)	13 R, 2' CI	42.9(121.7)	417.7(1806.2)	0.88(3.80)	
6-20-72		4.74	21.24	"	13 R, 2' CI	41.2	413.3(1791.0)	0.87(3.77)	
7-30-80		8.11	29.35	"	13 R, 2' CI	40.4(120.5)	358.4(1687.3)	0.75(3.55)	
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		
10-10-62	123.8(142.9)	10.7(12.4)	2.1(2.4)	123.8(142.9)	10.7(12.4)	2.11(2.44)			
9-22-67	2.4(7.0)	0.5(1.4)	0.1(0.3)	126.2(149.9)	7.7(9.1)	1.50(1.79)			
6-20-72	4.4(15.2)	0.9(3.2)	0.2(0.6)	130.6(165.1)	6.1(7.8)	1.21(1.53)			
7-30-80	54.9(103.7)	6.8(12.8)	1.3(2.5)	185.5(268.8)	6.3(9.2)	1.24(1.81)			
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		
10-10-62	71 (3)	(3773)	(3773)	2.0(.6)	22.8(7.3)				
9-22-67	65 Sed P(2)	142(534)	2124(2692)	1.4(.5)	23.2(7.7)				
	90 Det P(2)								
6-20-72	54 Sed P(3)	235(993)	1423(2029)	1.1(.4)	24.0(8.4)				
	87 Det P(3)								
7-30-80	55 Sed P(5)	1665(4555)	1485(2577)	1.2(.5)	34.1(13.7)				
	88 Det P(3)								

CREST 4.3 8.3 12.3 17.0 20.3 24.3 28.3 32.3 36.3 40.3 44.3

26. DATE OF SURVEY	43. to DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION to											
	4.3	8.3	12.3	17.0	20.3	24.3	28.3	32.3	36.3	40.3	44.3	48.3
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
10-10-62	0	2	6	9	11	16	10	7	9	13	13	4
9-22-67	2	2	2	12	15	14	10	8	8	8	13	6
6-20-72	0	0	0	21	8	14	11	2	14	13	12	5
7-30-80	0	0	0	30	11	11	10	9	7	11	8	3

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
See attached sheet for elevation-area-capacity data.								

47. REMARKS AND REFERENCES

Figures in parentheses include sediment and flood pools.

Land Use: 1962 - cropland 18%, native pasture 77%, miscellaneous 5%.
 1967 - cropland 13%, native pasture 85%, miscellaneous 2%.
 1972 - cropland 0%, native pasture 98%, miscellaneous 2%.
 1980 - cropland 5%, range 85%, pasture 5%, forest 3%, misc. 2%.

Geology: Ogallala FM, Tertiary Age 22%; Quartermaster FM, Permian Age 78%.

Land Resource Area: Central Rolling Red Plains.

48. AGENCY MAKING SURVEY Oklahoma Watershed Planning Staff
 49. AGENCY SUPPLYING DATA SCS, USDA
 50. DATE Nov. 17, 1980

Sandstone Site No. 6

ELEVATION-AREA-CAPACITY DATA

Elevation	Area	Capacity	Elevation	Area	Capacity
<u>Original Survey (1951)</u>			<u>1962 Survey</u>		
1974.3	121.7	1956.1	1974.3	121.7	1813.2
1970.0	102.3	1504.8	1970.0	104.0	1373.8
1966.0	82.1	1136.0	1966.0	83.5	998.9
1962.0	67.2	837.5	1962.0	65.0	702.0
<u>1/ 1957.3</u>	<u>48.1</u>	<u>543.9</u>	<u>1/ 1957.3</u>	<u>45.3</u>	<u>420.1</u>
1954.0	40.59	416.8	1954.0	33.9	307.5
1950.0	29.10	276.8	1950.0	24.3	191.2
1946.0	20.33	177.9	1946.0	17.8	106.9
1942.0	14.09	109.1	1942.0	11.3	48.6
1938.0	9.82	61.3	1938.0	6.0	14.0
1934.0	6.33	29.0	1934.0	0.5	1.0
1930.0	3.74	8.8	1930.0	0	0
1926.0	0.34	0.7			
<u>1967 Survey</u>			<u>1972 Survey</u>		
1974.3	121.67	1806.22	1974.3	126.33	1790.98
1970.0	103.13	1357.98	1970.0	101.35	1303.69
1966.0	83.02	985.55	1966.0	80.65	939.03
1962.0	64.62	685.99	1962.0	63.00	651.62
<u>1/ 1957.3</u>	<u>42.89</u>	<u>417.70</u>	<u>1/ 1957.3</u>	<u>41.23</u>	<u>413.33</u>
1954.0	32.58	306.97	1953.0	30.37	259.99
1950.0	24.00	189.19	1949.0	21.42	155.81
1946.0	17.66	105.55	1945.0	15.46	82.67
1942.0	11.24	49.03	1941.0	9.60	33.95
1938.0	6.01	12.92	1937.0	5.56	3.70
1934.0	0	0	1933.0	0	0
<u>1980 Survey</u>					
1974.3	120.45	1687.34			
1974.0	109.97	1456.89			
1970.0	87.60	1061.75			
1966.0	70.20	747.74			
1962.0	52.61	499.94			
<u>1/ 1957.3</u>	<u>40.38</u>	<u>358.36</u>			
1954.0	31.10	251.99			
1950.0	21.76	148.72			
1946.0	13.73	75.76			
1942.0	9.18	31.29			
1938.0	4.79	2.72			
1936.0	0	0			

1/ Riser.