SCS-34
Jan. 1958

U.S. DEPARTMENT OF AGRICULTURE

RESERVOIR SEDIMENTATION DATA SUMMARY

Sandstone Creek 16A Trib. of
NAME OF RESERVOIR

SOIL CONSERVATION SERVICE
50-35
DATA SHEET NO.

DAM

1. OWNER **Marshall-Neal**	2. RIVER Sandstone Cr.	3. STATE **Oklahoma**
4. SEC. **31** TWP. **12N** RANGE **23W**	5. NEAREST TOWN **Cheyenne**	6. COUNTY **Roger Mills**
7. STREAM BED ELEV.	8. TOP OF DAM ELEV.	9. SPILLWAY CREST ELEV. **102.0**

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
d. FLOOD CONTROL	**102.0**	1/ **103.58**		1/ **(2065.88)**	**12-7-51**
b. POWER					
c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION					**12-7-51**
f. INACTIVE	**69.89**	1/ **26.77**		1/ **273.01**	

17. LENGTH OF RESERVOIR **1.14** MILES — AV. WIDTH OF RESERVOIR **0.14** MILES

WATERSHED

18. TOTAL DRAINAGE AREA **8.78** SQ. MI.		22. MEAN ANNUAL PRECIPITATION **25.00**	INCHES
19. NET SEDIMENT CONTRIBUTING AREA **5.11** SQ. MI.		23. MEAN ANNUAL RUNOFF **1.0**	INCHES
20. LENGTH **4.55** MILES	AV. WIDTH **1.93** MILES	24. MEAN ANNUAL RUNOFF **53.3**	AC.-FT.
21. MAX. ELEV. **102.0**	MIN. ELEV. **44.0**	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. $C_s/_W$ RATIO AC.-FT. PER SQ. MI.
12-7-51	-	-	-	-	**26.77**	1/ **273.01**	**31.09**
			Det. R. Contour		**(103.58)**	**(2065.88)**	**(235.29)**
10-1-56	**4.82**	**4.82**		**15**	**26.28**	**242.03**	**27.57**
					(103.58)	**(2033.89)**	**(231.65)**
9-20-61	**4.88**	**9.70**	"	**15**	**24.03**	**208.74**	**23.77**
					(103.58)	**(1987.93)**	**(226.42)**

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
10-1-56	**30.98**	**6.43**	**1.26**	**30.98**	**6.43**	**1.26**
	(31.99)	**(6.64)**	**(1.30)**	**(31.99)**	**(6.64)**	**(1.30)**
9-20-61	**33.29**	**6.82**	**1.33**	**73.17**	**7.54**	**1.48**
	(45.96)	**(9.42)**	**(1.84)**	**(77.95)**	**(8.04)**	**(1.57)**

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
10-1-56	**80.56**	**2211**	**2211**	**02.36**	**11.35**		
		(2281)	**(2281)**	**(0.32)**	**(1.55)**		
9-20-61	**79.79**	**2919**	**2572**	**2.76**	**26.80**		
		(3181)	**(2728)**	**(0.39)**	**(3.77)**		

(-) Includes both pools. 1/ Original capacity.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION											
1951	~~100~~-98	98-94	94-90	90-86	86-82	82-78	78-74	74-70	70-66	66-62	62-58	58-54
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
1956	0	0	0	0	0	0	0	3	17	15	21	19
1961	0	0	0	0	0	1.8	5.2	10.5	14.2	14.3	14.4	14.5
	54-50	50-46	46-44									
1956	22	11	2									
1961	15.5	9.2	0.4									

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGH 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
102.0	103.58	2065.88	69.89	26.77	273.01			
98.1	88.32	1683.44	66.0	19.46	181.17			
94.0	73.44	1361.18	62.0	14.88	112.86			
90.0	61.32	1092.69	58.0	9.96	63.64			
86.0	51.39	868.12	54.0	1.90	30.19			
82.0	43.42	679.19	50.0	4.25	8.15			
78.0	35.65	521.70	46.0	0.37	0.34			
74.0	31.17	388.49	44.0	0.03	0			

47. REMARKS AND REFERENCES

Geology: 85% in the Ogalalla formation
10% in the Elk City member of the Quartermaster formation
5% in the Doxey member of the Quartermaster formation

48. AGENCY SUPPLYING DATA **Soil Conservation Service**
Stillwater, Oklahoma

49. DATE March 26, 1962

U. S. Department of Agriculture Soil Conservation Service

50-35
Data Sheet No.

Sandstone Creek No. 16A

46. ELEVATION - AREA - CAPACITY DATA

1956 Capacity

Elevation	Area	Capacity	Elevation	Area	Capacity
102.0	103.58	2033.89	74.0	31.17	356.50
98.0	88.32	1651.45	69.89	26.28	242.03
94.0	73.44	1329.19	66.0	18.82	152.47
90.0	61.32	1060.70	62.0	13.11	89.11
86.0	51.39	836.13	58.0	8.38	46.59
82.0	43.42	647.20	54.0	5.38	19.36
78.0	35.65	489.71	50.0	2.43	4.16

Elevation	Area	Capacity
46.0	.13	0

1961 Capacity

Elevation	Area	Capacity	Elevation	Area	Capacity
102.0	103.58	1987.93	74.0	29.85	316.02
98.0	88.32	1605.49	69.89	24.03	208.74
94.0	73.44	1283.23	66.0	16.69	127.94
90.0	61.32	1014.74	62.0	12.09	70.76
86.0	51.39	790.17	58.0	7.16	32.79
82.0	43.42	601.24	54.0	4.08	10.65
78.0	34.96	445.18	50.0	1.21	0.66

Elevation	Area	Capacity
49.0	0.24	0

SCS-34
Jan. 1958

U.S. DEPARTMENT OF AGRICULTURE

RESERVOIR SEDIMENTATION DATA SUMMARY

Sandstone Creek 16A — NAME OF RESERVOIR

Trib. 6I

SOIL CONSERVATION SERVICE — 50-35a — DATA SHEET NO.

DAM

1. OWNER **Marshall-Neal**	2. RIVER Sandstone Cr.	3. STATE **Oklahoma**
4. SEC. **31** TWP. **12N** RANGE **23W**	5. NEAREST TOWN **Cheyenne**	6. COUNTY **Roger Mills**
7. STREAM BED ELEV.	8. TOP OF DAM ELEV.	9. SPILLWAY CREST ELEV. **102.0**

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	**102.0**	1/ **103.58**	1/ **(2065.88)**		**12-7-51**
b. POWER					
c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION					**12-7-51**
f. INACTIVE	**69.89**	1/ **26.77**		1/ **273.01**	

17. LENGTH OF RESERVOIR **1.14** MILES — AV. WIDTH OF RESERVOIR **0.14** MILES

WATERSHED

18. TOTAL DRAINAGE AREA **8.78** SQ. MI.		22. MEAN ANNUAL PRECIPITATION **25.00**	INCHES
19. NET SEDIMENT CONTRIBUTING AREA **5.11** SQ. MI.		23. MEAN ANNUAL RUNOFF **1.0**	INCHES
20. LENGTH **4.55** MILES	AV. WIDTH **1.93** MILES	24. MEAN ANNUAL RUNOFF **53.3**	AC.-FT.
21. MAX. ELEV. **102.0**	MIN. ELEV. **44.0**	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.
12-7-51	-	-	-	-	**26.77**	1/ **273.01**	**31.09**
			Det. R. Contour		**(103.58)**	**(2065.88)**	**(235.29)**
10-1-56	**4.82**	**4.82**		**15**	**26.28**	**242.03**	**27.57**
					(103.58)	**(2033.89)**	**(231.65)**
9-20-61	**4.88**	**9.70**	"	**15**	**24.03**	**208.74**	**23.77**
					(103.58)	**(1987.93)**	**(226.42)**

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
10-1-56	**30.98**	**6.43**	**1.26**	**30.98**	**6.43**	**1.26**
	(31.99)	**(6.64)**	**(1.30)**	**(31.99)**	**(6.64)**	**(1.30)**
9-20-61	**33.29**	**6.82**	**1.33**	**73.17**	**7.54**	**1.48**
	(45.96)	**(9.42)**	**(1.84)**	**(77.95)**	**(8.04)**	**(1.57)**

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
10-1-56	**80.56**	**2211**	**2211**	**02.36**	**11.35**		
		(2281)	**(2281)**	**(0.32)**	**(1.55)**		
9-20-61	**79.79**	2311	**2572**	**2.76**	**26.80**		
		(3198)	**(2728)**	**(0.39)**	**(3.77)**		

(-) Includes both pools. 1/ Original capacity.

26. DATE OF SURVEY 1951

43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION

PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION

DATE OF SURVEY	~~102~~-98	98-94	94-90	90-86	86-82	82-78	78-74	74-70	70-66	66-62	62-58	58-54
1956	0	0	0	0	0	0	0	3	17	15	21	19
1961	0	0	0	0	0	1.8	5.2	10.5	14.2	14.3	14.4	14.5

DATE OF SURVEY	54-50	50-46	46-44
1956	22	11	2
1961	15.5	9.2	0.4

26. DATE OF SURVEY

44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGH OF RESERVOIR

PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION

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

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
102.0	103.58	2065.88	69.89	26.77	273.01			
98.1	88.32	1683.44	66.0	19.46	181.17			
94.0	73.44	1361.18	62.0	14.88	112.86			
90.0	61.32	1092.69	58.0	9.96	63.64			
86.0	51.39	868.12	54.0	1.90	30.19			
82.0	43.42	679.19	50.0	4.25	8.15			
78.0	35.65	521.70	46.0	0.37	0.34			
74.0	31.17	388.49	44.0	0.03	0			

47. REMARKS AND REFERENCES

Geology: 85% in the Ogalalla formation
10% in the Elk City member of the Quartermaster formation
5% in the Doxey member of the Quartermaster formation

48. AGENCY SUPPLYING DATA **Soil Conservation Service**
Stillwater, Oklahoma

49. DATE March 26, 1962

1958

50-35d

Continuation

U. S. Department of Agriculture Soil Conservation Service

50-35
Data Sheet No.

Sandstone Creek No. 16A

46. ELEVATION - AREA - CAPACITY DATA

1956 Capacity

Elevation	Area	Capacity	Elevation	Area	Capacity
102.0	103.58	2033.89	74.0	31.17	356.50
98.0	88.32	1651.45	69.89	26.28	242.03
94.0	73.44	1329.19	66.0	18.82	152.47
90.0	61.32	1060.70	62.0	13.11	89.11
86.0	51.39	836.13	58.0	8.38	46.59
82.0	43.42	647.20	54.0	5.38	19.36
78.0	35.65	489.71	50.0	2.43	4.16

Elevation	Area	Capacity
46.0	.13	0

1961 Capacity

Elevation	Area	Capacity	Elevation	Area	Capacity
102.0	103.58	1987.93	74.0	29.85	316.02
98.0	88.32	1605.49	69.89	24.03	208.74
94.0	73.44	1283.23	66.0	16.69	127.94
90.0	61.32	1014.74	62.0	12.09	70.76
86.0	51.39	790.17	58.0	7.16	32.79
82.0	43.42	601.24	54.0	4.08	10.65
78.0	34.96	445.18	50.0	1.21	0.66

Elevation	Area	Capacity
49.0	0.24	0

RESERVOIR SEDIMENT
DATA SUMMARY
SCS-34 Rev. 6-66

Sandstone Site 16A
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

50- 35b
DATA SHEET NO.

DAM

1. OWNER	2. STREAM	3. STATE
Marshall - Neal	Washita	Oklahoma
4. SEC. 31 **TWP.** 12N **RANGE** 23W	5. NEAREST P. O. Cheyenne	6. COUNTY Roger Mills
7. LAT. ° ' " LONG. ° ' "	8. TOP OF DAM ELEVATION	9. SPILLWAY CREST ELEV. 102.0

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	102.0	(103.58)		(2065.88)	12-7-51
b. MULTIPLE USE					
c. POWER					
d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
e. IRRIGATION					
f. CONSERVATION					
g. INACTIVE	69.89	26.77		273.02	12-7-51

WATERSHED

17. LENGTH OF RESERVOIR	1.14 MILES	AV. WIDTH OF RESERVOIR	0.14 MILES
18. TOTAL DRAINAGE AREA	8.78 SQ. MI.	22. MEAN ANNUAL PRECIPITATION	25.00 INCHES
19. NET SEDIMENT CONTRIBUTING AREA	5.11 SQ. MI.	23. MEAN ANNUAL RUNOFF	1.0 INCHES
20. LENGTH 4.55 MILES	AV. WIDTH 1.93 MILES	24. MEAN ANNUAL RUNOFF	468 AC.-FT.
21. MAX. ELEV. 102.0	MIN. ELEV. 44.0	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/W RATIO, AC.-FT. PER sq.mi.
12-7-51	-	-	-	-	26.77 (103.58)	273.01 (2065.88)	235.29
10-1-56	4.82	4.82	Contour	15	26.28 (103.58)	242.03 (2033.89)	231.65
9-20-61	4.88	9.70	-	15	24.03 (103.58)	208.74 (1987.93)	226.42
8-1-66	4.86	14.65	Range	14 (R)	22.54	202.08	
			Contour (D)	2 C.I.	(103.58)	(1979.45)	225.45

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
10-1-56	30.98 (31.99)	6.43 (6.64)	1.26 (1.30)	30.98 (31.99)	6.43 (6.64)	1.26 (1.30)
9-20-61	33.29 (45.96)	6.82 (9.42)	1.33 (1.84)	64.27 (77.95)	6.63 (8.04)	1.30 (1.57)
8-1-66	6.66 (8.48)	1.37 (1.74)	0.27 (0.34)	70.94 (86.43)	4.84 (5.90)	0.95 (1.16)

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
10-1-56	80.56	2211 (2281)	2211 (2291)	02.36 (0.32)	11.35 (1.55)		
9-20-61	79.79	2919 (3181)	2572 (2728)	2.76 (0.39)	22.59 (3.77)		
8-1-66	44 Sed P (2) 94 Det P (2)	259 (402)	910 (1340)	1.78 (0.29)	25.98 (4.18)		

( ) Includes Both Pools. Weighted Av. 77 lbs

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	90-94	94-98	98-102	86-90	82-86	78-82	74-78	70-74	66-70	62-66	58-62	54-58
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
10-1-56	0	0	0	0	0	0	0	3	7	16	21	20
9-20-61	0	0	0	0	0	2	5	11	14	14	14	15
8-1-66	0	0	0	0	0	1	7	13	18	10	12	14

	50-54	46-50	44-46
10-1-56	21	11	1
9-20-61	15	9	1
8-1-66	17	8	0

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 1/

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

1/ Elevation - Area - Capacity Data on separate sheet.

Land Use: 44% Cultivation, 53% Native Pasture, 3% Miscellaneous
Geology: 85% Ogalalla Formation, Tertiary Age
10% Elk City, 5% Doxey Member Quartermaster Formation Permian Age.

48. AGENCY MAKING SURVEY

49. AGENCY SUPPLYING DATA SCS - Stillwater, Oklahoma

50. DATE October 14, 1966

ELEVATION - AREA - CAPACITY

DATA

Sandstone 16A Data Sheet No. 50-

Elevation	Area	Capacity
Original Capacity		
102.0	103.58	2065.88
98.0	88.32	1683.44
94.0	73.44	1361.18
90.0	61.32	1092.69
86.0	51.39	868.12
82.0	43.42	679.19
78.0	35.65	521.70
74.0	31.17	388.49
69.89	26.77	273.01
66.0	19.46	181.17
62.0	14.88	112.86
58.0	9.96	63.64
54.0	6.90	30.19
50.0	4.25	8.15
46.0	0.37	0.34
44.0	0.3	0
1956 Capacity		
102.0	103.58	2033.89
98.0	88.32	1651.45
94.0	73.44	1329.19
90.0	61.32	1060.70
86.0	51.39	836.13
82.0	43.42	647.20
78.0	35.65	489.71
74.0	31.17	356.50
69.89	26.28	242.03
66.0	18.82	152.47
62.0	13.11	89.11
58.0	8.38	46.59
54.0	5.38	19.36
50.0	2.43	4.16
46.0	0.13	0

Elevation	Area	Capacity
1961 Capacity		
102.0	103.58	1987.93
98.0	88.32	1605.49
94.0	73.44	1283.23
90.0	61.32	1014.74
86.0	51.39	790.17
82.0	43.42	601.24
78.0	34.96	445.18
74.0	29.85	316.02
69.89	24.03	208.74
66.0	16.69	127.94
62.0	12.09	70.76
58.0	7.16	32.79
54.0	4.08	10.65
50.0	1.21	0.66
49.0	0.24	0
1966 Capacity		
102.0	103.58	1979.45
98.0	88.32	1596.16
94.0	73.44	1273.19
90.0	61.32	1004.11
86.0	51.39	779.05
82.0	43.42	589.71
78.0	34.83	433.58
76.0	31.88	366.87
74.0	28.52	306.48
72.0	25.39	252.58
69.89	22.54	202.08
68.0	18.86	163.01
66.0	17.20	126.95
64.0	14.97	94.80
62.0	12.42	67.44
60.0	9.54	45.55
58.0	7.64	28.39
56.0	5.24	15.58
54.0	3.51	6.92
52.0	2.07	1.44
50.0	0.5	.03
48.0	0	0

RESERVOIR SEDIMENT
DATA SUMMARY
SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Sandstone Site 16A
NAME OF RESERVOIR

50-35c
DATA SHEET NO.

DAM

1. OWNER Marshall - Neal	2. STREAM Trib. of Sandstone	3. STATE Oklahoma
4. SEC. 31 TWP. 12N RANGE 23W	5. NEAREST P.O. Cheyenne	6. COUNTY Roger Mills
7. LAT. 35° 28′ 10″ LONG. 99° 41′ 50″	8. TOP OF DAM ELEVATION 2178.7	9. SPILLWAY CREST ELEV. 2171.1

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	2171.1	103.58	1792.86	2065.88	12-7-51
b. MULTIPLE USE					
c. POWER					
d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
e. IRRIGATION					
f. CONSERVATION					
g. INACTIVE 1/	2139.0	26.77	273.02	273.02	12-7-51

WATERSHED

17. LENGTH OF RESERVOIR	1.14 MILES	AV. WIDTH OF RESERVOIR	0.14 MILES
18. TOTAL DRAINAGE AREA	8.78 SQ. MI.	22. MEAN ANNUAL PRECIPITATION	25.00 INCHES
19. NET SEDIMENT CONTRIBUTING AREA	5.03 SQ. MI.	23. MEAN ANNUAL RUNOFF	1.0 INCHES
20. LENGTH 4.55 MILES	AV. WIDTH 1.93 MILES	24. MEAN ANNUAL RUNOFF	468 AC.-FT.
21. MAX. ELEV. 2400.0	MIN. ELEV. 2113.0	25. ANNUAL TEMP: MEAN 60.2°	RANGE -11° to 113°

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.
12-7-51	-	-	Detail Topo	15 Ranges	26.8(103.6)	273.0(2065.9)	0.58(4.41)
10-1-56	4.82	4.82	Detail Topo	15 Ranges	26.3(103.6)	242.0(2033.9)	0.52(4.35)
9-20-61	4.88	9.70	Detail Topo	15 Ranges	24.0(103.6)	208.7(1987.9)	0.45(4.25)
8-1-66	4.86	14.56	Range Contour(D)	14R2'C.I.	22.5(103.6)	202.1(1979.5)	0.43(4.23)
8-3-71	5.06	19.62	Range Contour(D)	14R2'C.I.	21.1(103.3)	176.1(1939.9)	0.38 (4.14)

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
12-7-51	-	-	-	-	-	-
10-1-56	31.0(32.0)	6.43(6.64)	1.27 (1.32)	31.0(32.0)	6.43(6.64)	1.27 (1.32)
9-20-61	33.3(46.0)	6.82(9.43)	1.35 (1.87)	64.3(78.0)	6.63(8.04)	1.32 (1.59)
8-1-66	6.6(8.4)	1.36(1.73)	0.27 (0.34)	70.9(86.4)	4.87(5.93)	0.97 (1.18)
8-3-71	26.0(39.6)	5.13(7.83)	1.02 (1.56)	96.9(126.0)	4.94(6.42)	0.98 (1.28)

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
10-1-56	81	2223 (2311)	2223 (2311)	2.36(.32)	11.36(1.55)		
9-20-61	80	2365 (3260)	2300 (2770)	2.43(.39)	23.55(3.78)		
8-1-66	44Sed.P.(2) 94Det.P.(2)	259 (580)	930 (1359)	1.78(.29)	25.97(4.18)		
8-3-71	66Sed.P.(3) 85Det.P.(3)	2803 (3673)	1408 (1963)	1.81(.31)	35.49(6.10)		

26. DATE OF SURVEY 71	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	1-51	51-47	47-43	43-39	39-35	35-31	31-27	27-23	23-19	19-15	15-13	
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
10-1-56	0	0	0	3	7	16	21	20	21	11	1	
9-20-61	0	2	5	11	14	14	14	15	15	9	1	
8-1-66	0	1	7	13	18	12	12	14	17	8	0	
8-3-71	0	0	7	16	14	13	14	14	16	6	0	

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. 2/ ELEVATION-AREA-CAPACITY DATA

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: 28% Cropland, 55% Grassland, 14% Woodland, 3% Miscellaneous - 1971
44% Cropland, 39% Grassland, 14% Woodland, 3% Miscellaneous - 1966

Geology: 85% Ogallala Formation Tertiary Age and 15% Quartermaster Formation Permian Age

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 March 8, 1972