

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Santa Fe Reservoir

46-7

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER <b>Santa Fe R.R.</b>			2. RIVER <b>Indianola Creek</b>			3. STATE <b>Kansas</b>									
	4. SEC. <b>11, 12, 13</b> , TWP. <b>27S</b> RANGE <b>3E</b>			5. NEAREST TOWN <b>Augusta</b>			6. COUNTY <b>Butler</b>									
	7. STREAM BED ELEV. <b>1240</b>			8. TOP OF DAM ELEV. <b>1281</b>			9. SPILLWAY CREST ELEV. <b>1271</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										October 1928					
	b. POWER															
	c. WATER SUPPLY		<b>1271</b>		<b>244</b>		<b>1741</b>		<b>1741</b>		16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION															
	e. CONSERVATION										October 1928					
	f. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR				MILES				AV. WIDTH OF RESERVOIR				MILES			
	18. TOTAL DRAINAGE AREA <b>37.93</b>				SQ. MI.				22. MEAN ANNUAL PRECIPITATION <b>31.53</b>				INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA <b>37.55</b>				SQ. MI.				23. MEAN ANNUAL RUNOFF				INCHES			
	20. LENGTH		MILES		AV. WIDTH		MILES		24. MEAN ANNUAL RUNOFF		AC.- FT.					
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION <b>Humid</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. MI.	
	Oct. 1928		-		-		-		-		244		1741		45.9	
	May 1937		8.6		8.6		Range Detailed		40		244		1595		42.1	
	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		d. MEAN ANNUAL		e. 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		d. TOTAL TO DATE		e. AV. ANNUAL		f. PER SQ. MI.- YEAR			
	May 1937		146		17.0		0.45		146		17.0		0.45			
	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				
May 1937		58.1 (5)		569		569		0.98		8.39						

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
46		0	68		974			
48		3	70		1364			
50		10	Crest 71		1595			
52		21						
54		38						
56		64						
58		105						
60		170						
62		270						
64		432						
66		667						

47. REMARKS AND REFERENCES  
 (14) Spillway was raised 3 feet in 1941 - pres. capacity 2613 - surf. area 405 Ac.  
 Height of dam 39'  
 Length of dam 1100'

Region 5, Soil Conservation Service  
 U. S. Dept. of Agriculture  
 Lincoln, Nebraska

48. AGENCY SUPPLYING DATA  
 49. DATE January 3, 1951