

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Nyhart

31-32

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Charles Nyhart		2. RIVER Unnamed Tributary		3. STATE Kansas			
	4. SEC. 34 TWP. 5 S RANGE 18 E		5. NEAREST TOWN Effingham		6. COUNTY Atchison			
	7. STREAM BED ELEV. 1000*		8. TOP OF DAM ELEV. 1025*		9. SPILLWAY CREST ELEV. 1023*			
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 28, 1949		
	b. POWER							
	c. WATER SUPPLY	1017*	7.62	49.4	49.4	16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION							
	e. CONSERVATION					October 28, 1949		
	f. INACTIVE							
17. LENGTH OF RESERVOIR 0.12 MILES			AV. WIDTH OF RESERVOIR 0.05 MILES					
WATERSHED	18. TOTAL DRAINAGE AREA 0.16 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 34* INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 0.15 SQ. MI.		23. MEAN ANNUAL RUNOFF INCHES					
	20. LENGTH 0.5 MILES		AV. WIDTH 0.30 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.			
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION			
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.
	October, 1949	-	-	-	-	7.6	49.4	308.7
	October 2, 1957	7.0	7.9	Range	4	7.6	46.3	289.4
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AG.-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	
	October 2, 1957	3.1	0.39	2.4	3.1	0.39	2.4	
	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	c. AV. ANNUAL	d. TOT. TO DATE	e. PERIOD	f. TOT. TO DATE	
October 1957	60*	3136	3136	0.79	6.3			

\* Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION											
	33-30	30-25	25-22.5	22.5-20	20-17.5	17.5-15	15-12.5	12.5-10	10-7.5	7.5-5	5-2.5	2.5-0
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
Jan. 1, 1936	-	-	-	-	-	-	-	-	-	-	-	-
Jun. 11, 1951	0.99	9.89	9.29	11.93	10.94	10.17	9.20	9.70	11.19	9.15	5.00	2.55
Aug. 28, 1952	0.88	5.79	8.29	11.04	11.88	10.62	10.22	10.29	11.75	9.50	4.49	2.18
Oct. 22, 1953	0.91	9.15	8.59	11.46	11.82	10.96	10.44	10.09	11.01	9.01	4.47	2.10
Apr. 25, 1955	New Depth Designation--				20-17	17-15	15-11	11-9	9-7	7-5	5-2.5	2.5-0
	0.84	8.48	7.96	10.62	15.03	8.72	16.97	8.37	8.38	7.23	4.86	2.53

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														
Jan. 1, 1936	-	-	-	-	-	-	-	-	-	-	Tributaries				
Jun. 11, 1951	14.5	12.4	14.1	13.0	12.0	9.0	6.0	3.5	0.2	-	10/	1.2%	14.1%		
Aug. 28, 1952	13.5	13.5	14.0	14.0	12.0	9.0	5.5	3.0	0.3	-		1.1	14.1		
Oct. 22, 1953	13.5	13.5	14.0	14.0	12.5	8.5	5.5	2.9	0.2	-		1.2	14.2		
Apr. 25, 1955	14.0	13.5	13.5	13.0	12.0	8.0	6.0	3.5	0.6	-		1.3	14.6		

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.
Data available but not processed							

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
86.7	0.53	-	100.0	83.07	579.2			
87.0	3.55	0.5	102.5	108.07	817.5			
88.0	13.86	8.7	105.0	131.98	1117.0			
90.0	22.26	44.5	107.5	156.68	1477.4			
92.0	34.56	100.8	110.0	180.43	1898.5			
94.0	51.52	186.4						
96.0	60.97	298.7						
98.0	68.38	428.0						

47. REMARKS AND REFERENCES

48. AGENCY SUPPLYING DATA

49. DATE