U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

RESERVOIR SEDIMENTATION DATA SUMMARY

Jenson-O'Neil Farm Pond (NAME OF RESERVOIR) — 35-13 (DATA SHEET NO.)

DAM

1. OWNER Jenson & O'Neil	2. RIVER Trib. of L. Nemaha R.	3. STATE Nebraska
4. SEC. 28 TWP. 8 N RANGE 12 E	5. NEAREST TOWN Syracuse	6. COUNTY Otoe
7. STREAM BED ELEV. 0.0*	8. TOP OF DAM ELEV. 15*	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					November 1936
b. POWER					
c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION		3.95	23.7	23.7	November 1936
f. INACTIVE					

17. LENGTH OF RESERVOIR — MILES | AV. WIDTH OF RESERVOIR — MILES

WATERSHED

18. TOTAL DRAINAGE AREA (127.34 ac.) 0.199 SQ. MI.		22. MEAN ANNUAL PRECIPITATION	INCHES
19. NET SEDIMENT CONTRIBUTING AREA 0.193 SQ. MI.		23. MEAN ANNUAL RUNOFF 3.4*	INCHES
20. LENGTH MILES	AV. WIDTH 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.
Nov. 1936	-	-	-	-	3.95	23.7	119
Nov. 1948	12.0	12.0	Range Detailed	8	3.63	16.8	84

26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW			36. WATER INFL. TO DATE AC-FT.	
		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE
		(inches)				
Nov. 1948		3.9*				

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
Nov. 1948	6.89 (8.24) 1/	0.574 (0.687)	2.97 (3.56)	6.89 (8.24)	0.574 (0.687)	2.97 (3.56)

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
Nov. 1948	56.9 (3)	3680 (4410)	3680 (4410)	2.43	29.1	2/ 12,650 (15,130)	2/ 12,650 (15,130)

* Assumed or estimated

1/ Above-crest deposits within original flow line.

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 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. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

Gottschalk, L.C. and Brune, G. M. Sediment design criteria for the Missouri Basin Loess Hills. U. S. Soil Conserv. Serv. SCS-TP-97, 34 pp., illus., processed. Milwaukee, Wis., Oct. 1950.

Erosion condition is moderate. Conservation practices are observed.

$$2/\ 42 = \frac{37b \times 39 \times 1{,}000{,}000}{35a \times 18 \times \frac{640 \times 62.4}{12}}$$

48. AGENCY SUPPLYING DATA Region 5, Soil Conservation Service
U. S. Dept. of Agriculture
Lincoln, Nebraska

49. DATE January 8, 1951

AGR-SCS-BELTSVILLE, MD. 2403 JUNE 1952