

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

DIAMOND LAKE C-14

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

25-26

DATA SHEET NO.

DAM	1. OWNER <u>LEROY SIMBRO</u>		2. STREAM TRIB. OF <u>MOON CR.</u>		3. STATE <u>IOWA</u>			
	4. SEC. <u>1</u> TWP. <u>78N</u> RANGE <u>15W</u>		5. NEAREST P.O. <u>MONTZUMA</u>		6. COUNTY <u>POWESHIE</u>			
	7. LAT. <u>41° 35' 41"</u> LONG. <u>92° 32' 6"</u>		8. TOP OF DAM ELEVATION <u>931.5</u>		9. SPILLWAY CREST ELEV. <u>926.8</u>			
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	<u>926.8</u>	<u>12.40</u>	<u>48.06</u>	<u>85.33</u>	<u>NOV. 1973</u>		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION					<u>NOV. 1973</u>		
	g. INACTIVE	<u>922.0</u>	<u>7.48</u>	<u>37.27</u>	<u>37.27</u>			
17. LENGTH OF RESERVOIR <u>.413</u> MILES			AV. WIDTH OF RESERVOIR <u>.028</u> MILES					
WATERSHED	18. TOTAL DRAINAGE AREA			22. MEAN ANNUAL PRECIPITATION <u>34.48</u> INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA <u>0.81</u> SQ. MI.			23. MEAN ANNUAL RUNOFF <u>70</u> INCHES				
	20. LENGTH <u>.97</u> MILES		AV. WIDTH <u>.66</u> MILES		24. MEAN ANNUAL RUNOFF <u>238.9</u> AC.-FT.			
	21. MAX. ELEV.			25. ANNUAL TEMP: MEAN <u>48.4</u> RANGE <u>-30 TO 113</u>				
	MIN. ELEV. <u>902.3 (905.7)</u>							
SURVEY DATA	25. 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.
	<u>1973</u>	<u>0</u>	<u>0</u>	<u>—</u>	<u>9</u>	<u>7.48</u> <u>(12.40)</u>	<u>37.27</u> <u>(85.33)</u>	<u>.156</u> <u>(.357)</u>
	<u>August 1982</u>	<u>8.75</u>	<u>8.75</u>	<u>Range (1)</u>	<u>9</u>	<u>7.48</u> <u>(12.40)</u>	<u>27.17</u> <u>(75.82)</u>	<u>0.122</u> <u>(0.317)</u>
	<u>Jan. 1988</u>	<u>4.42</u>	<u>13.17</u>	<u>"</u>	<u>"</u>			
	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	
	<u>1982</u>							
	<u>1988</u>							
		<u>PS</u>	<u>ES</u>					
	25. 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		
<u>1982</u>	<u>21.0 (11.8)</u>	<u>2.34 (1.34)</u>	<u>2.87 (1.65)</u>	<u>7.75 (10.19)</u>	<u>0.89 (1.165)</u>	<u>1.10 (1.44)</u>		
<u>1988</u>	<u>51.1 (46.6)</u>	<u>3.88 (3.54)</u>	<u>4.79 (4.37)</u>	<u>18.98 (40.12)</u>	<u>1.43 (3.05)</u>	<u>1.77 (3.76)</u>		
25. 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	
<u>1982</u>	<u>59/75 ²¹</u>	<u>12295 (4728)</u>	<u>12295 (4728)</u>	<u>2.4 (1.3)</u>	<u>21 (11.9)</u>			
<u>1988</u>	<u>59/75 ²¹</u>	<u>17848 (5249)</u>	<u>30143 (8772)</u>	<u>3.7 (3.5)</u>	<u>51.1 (46.6)</u>			

Total sediment deposited
so far

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, 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

47. REMARKS AND REFERENCES

1/ ——— Principal Spillway 3/59 = submerged; 75 = aerated
 (—) Emergency Spillway

48. AGENCY MAKING SURVEY _____

49. AGENCY SUPPLYING DATA _____

50. DATE _____