

RESERVOIR SEDIMENTATION
DATA SUMMARY

Santaquin Debris Basin
NAME OF RESERVOIR

65-3
DATA SHEET NO.

DAM	1. OWNER --		2. RIVER Summit Creek		3. STATE Utah			
	4. SEC. 12 TWP. 10S RANGE 1E		5. NEAREST TOWN Santaquin		6. COUNTY Utah			
	7. STREAM BED ELEV. 5160*		8. TOP OF DAM ELEV. 5190*		9. SPILLWAY CREST ELEV. 5184*			
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		8.3*	84.0*	84.0*	Fall 1954		
	b. POWER					16. DATE NORMAL OPER. BEGAN Fall 1954		
	c. WATER SUPPLY							
	d. IRRIGATION							
	e. CONSERVATION							
	f. INACTIVE							
17. LENGTH OF RESERVOIR 0.12 MILES		AV. WIDTH OF RESERVOIR 0.11 MILES						
WATERSHED	18. TOTAL DRAINAGE AREA 17.65 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 15-35 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 13.5 SQ. MI.		23. MEAN ANNUAL RUNOFF 10.68 INCHES					
	20. LENGTH 8.0 MILES AV. WIDTH 2.2 MILES		24. MEAN ANNUAL RUNOFF 10,060 AG.-FT.					
	21. MAX. ELEV. 10,900 MIN. ELEV. 5160		25. CLIMATIC CLASSIFICATION Subhumid					
	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
12-17-57		3	3	Range (R)	--	8.3* 8.3*	84.0* 65.0*	4.8 3.7
SURVEY DATA	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	a. MEAN ANNUAL	b. TOTAL TO DATE	
	12-17-57	15-35	10,060	--	30,180	10,060	30,180	
	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	
	12-17-57	19.0±	6.3	0.47	19.0±	6.3	0.47	
	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
	12-17-57	90*	921	921	7.5	22.6	908	908

* Assumed

**RESERVOIR SEDIMENT
DATA SUMMARY**

SCS-34 Rev. 6-62

Santaquin Debris Basin
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

65-3a

DATA SHEET NO.

DAM	1. OWNER --			2. STREAM Summit Creek			3. STATE Utah									
	4. SEC. 12 TWP. 10S RANGE 1E			5. NEAREST TOWN Santaquin			6. COUNTY Utah									
	7. STREAM BED ELEVATION 5160*			8. TOP OF DAM ELEVATION 5190*			9. SPILLWAY CREST ELEV. 5184*									
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. MULTIPLE USE															
	b. FLOOD CONTROL				8.3*		84.0*		84.0*		Fall 1954					
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION															
	g. SEDIMENT										Fall 1954					
h. INACTIVE																
17. LENGTH OF RESERVOIR 0.12			MILES			AV. WIDTH OF RESERVOIR 0.11			MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 17.65				SQ. MI.				22. MEAN ANNUAL PRECIPITATION 15-35				INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA 13.5				SQ. MI.				23. MEAN ANNUAL RUNOFF 10.68				INCHES			
	20. LENGTH 8.0				MILES				AV. WIDTH 2.2				MILES			
	24. MEAN ANNUAL RUNOFF 10,060				AC.-FT.				25. CLIMATIC CLASSIFICATION Subhumid							
	21. MAX. ELEV. 10,900				MIN. ELEV. 5,160											
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.	
	12-17-57		3		3		Range (R)		--		8.3*		65.0*		3.7	
	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			
	12-17-57		15-35		10,060		--		30,180		10,060		30,180			
	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			
	12-17-57		19.0 ⁺		6.3		0.47		19.0 ⁺		6.3		0.47			
	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. AN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE	
12-17-57		90*		921		921		7.5		22.6		908		908		

* Assumed

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
No data available.								

47. REMARKS AND REFERENCES

Majority of sediment was deposited during a snowmelt flood which occurred in June 1957.

48. AGENCY MAKING SURVEY
 49. AGENCY SUPPLYING DATA SCS, WPS, Salt Lake City, Utah
 50. DATE 9-20-61