

U.S. DEPARTMENT OF AGRICULTURE
**RESERVOIR SEDIMENTATION
DATA SUMMARY**

Hall Pond No. 1
NAME OF RESERVOIR

SOIL CONSERVATION SERVICE
50 - 20
DATA SHEET NO.

DAM	1. OWNER Charley Hall			2. RIVER Unnamed		3. STATE Oklahoma		
	4. SEC. 12 TWP. 16N RANGE 20W			5. NEAREST TOWN Leedey		6. COUNTY Roger Mills		
	7. STREAM BED ELEV. 84			8. TOP OF DAM ELEV. 105		9. SPILLWAY CREST ELEV. 100		
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					5-1-39		
	b. POWER							
	c. WATER SUPPLY	100	3.0	Stock Pond	17.59	16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION							
	e. CONSERVATION							
	f. INACTIVE					5-1-39		
17. LENGTH OF RESERVOIR		0.184	MILES	AV. WIDTH OF RESERVOIR		0.025	MILES	
WATERSHED	18. TOTAL DRAINAGE AREA		0.20	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		1/ 25.00	INCHES
	19. NET SEDIMENT CONTRIBUTING AREA		0.20	SQ. MI.	23. MEAN ANNUAL RUNOFF		2/ 1.36	INCHES
	20. LENGTH		0.85	MILES	AV. WIDTH		0.235	MILES
	24. MEAN ANNUAL RUNOFF		2/ 73.60			AG.-FT.		
	21. MAX. ELEV.		MIN. ELEV. 84		25. CLIMATIC CLASSIFICATION SuB-humid			
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.
	5-1-39	-	-	-	-	3.00	17.59	87.95
	8-1-57	18.25	18.25	Detail Range	4	3/ 3.00	3/13.47	3/ 67.35
	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.
	8-1-57	-		-	-	-	-	-
	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	
	8-1-57	4.12	0.23	1.15	4.12	0.23	1.13	
	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	
8-1-57	4/ 70.2	1758.30	1758.30	01.31	23.42	-	-	

1/ Assumed

2/ From chart "Average Annual Runoff - Inches" Plate 4-L-8649 Fort Worth, Texas

3/ Area and capacity at date of present survey.

4/ Estimated same as Site No. 3, Sandstone.

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 (Original Capacity)															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
100	3.00	17.59													
96	1.80	8.19													
92	1.00	2.67													
88	0.00	0.00													
47. REMARKS AND REFERENCES Land Use: 100% native pasture. C/I ratio = (87.95 = 1.19); (67.35 = 0.92) Estimated trap efficiency: 85 percent Total annual sediment load adjustment for trap efficiency = 1.35 ac.ft./sq.mi. Geology: 100% in Doxey member, Quartermaster formation.															
48. AGENCY SUPPLYING DATA				Soil Conservation Service Stillwater, Oklahoma				49. DATE <u>September 1957</u>							