	DATA SUMM					F RESE			DATA	SHEET NO.			
	1 OWNER	TVA		2 RIV	R Holst	hon		3. STATE Tennessee					
Ξ	4 SEC. TWF		E	5. NEA	REST TOWN	6. COUNTY Grainger-Jeffers							
8	7. STREAM BED ELEN	. 915			OF DAM EI		1,089	⁹ SPILLWAY CREST ELEV.1/1,07					
-	IO. STORAGE ALLOCATION	IL ELEVAT		I2. SUF	ACRES	13.	STORAGE CRE FEET	ACCUMULAT	ED D/	ATE STORAGE BEGAN			
OIR	^{a.} FLOOD CONTROL b. POWER							·····		12/5/41			
RESERVOIR	C. MULTIPLE USE	$\frac{1,07}{2/93}$		30	,650 1, 450		56,130 3,440	$\frac{1,559,5'}{3,4'}$		DATE NORMAL			
R							DTH OF RESERV	4/16/					
	17. LENGTH OF RES	•		<u> </u>	MILES		0.81	MILE 1(24) INCHE					
WATERSHED	IB. TOTAL DRAINAGE		3,42										
ŝ	19. NET SEDIMENT C			/ 1,477	SQ. MI.		18.2(42)INCHES 3,330,000 AC-F						
ΤĒ		10	AV. WID		MILES		AN ANNUAL RU						
M.	21. MAX. ELEV.	0,001	MIN. EL	0.2.0			IMATIC CLASSIF		Hun				
	26. DATE OF SURVEY		ACCL. EARS	29. TYPE OF SURVEY	OR CONTO	UR INT.			EET AG	-FT. PER SQ.N			
	Dec. 5,1941	0	0	Range	29		30,650			455			
	Apr.21,1949	1	.4	Range	27		30,650			, 453 ,			
	Apr. 29, 1954		2.4	Range	26		30,650	1,547,7		-			
	Jun. 5,1959	5.1 1	7.5	Range	27		30,650	1,545,9	00	-			
		34	35.	PERIOD W	ATER IN	EL OW	AGRE-FEET	36. WATER		DATE AC-F			
	DATE OF SURVEY	PERIOD ANNUAL PRECIPITATION		AN ANNUAL	D MAX. AN		C.PERIOD TOTA			TOTAL TO DAT			
	Apr. 21, 1949	44.9		76,343			22,765,310			2,765,31			
	Apr. 29, 1954	45.2		30,439	4,280,		15, 152, 197			7,917,50			
	Jun. 5,1959	45.8		19,104	4,023,		16,417,431			4,334,93			
DATA						- <u></u>				. <u>, , , , , , , .</u> .			
		37. PERIOD S					38 TOTAL SEL	D. DEPOSITS					
SURVEY		PERIOD TOTAL			1		TOTAL TO DAT	AV. ANNU		0. 340			
5	Apr. 21, 1949		1,	167	0.3	/	8,638 11,795	951		3/			
	Apr. 29, 1954			631 356	0.2		13,610	778		$0.\overline{5}27$			
	Jun. 5,1959	1,815		3.70	0.2		10,01						
	26. DATE OF	39. AV. DRY WGT.	^{40.} SE	D. DEP. TON	SPER SQ.I	MIYR.	1	LOSS PCT. 42	SED. INF				
	SURVEY	LBS. PER CU.F	a.	PERIOD	^{b.} TOTAL T		AV. ANNUAL		PERIOD	b. TOT. TO DA			
	Apr. 21, 1949	55*		407	407		0.075	0.554	334	334			
	Apr.29,1954			$\frac{3}{2}$	$\frac{3}{2}$		0.061	0.756	184	274			
	Jun. 5,1959	55*		289	631		0.050	0.873	97	221			

- $\frac{1}{2}$ Top of Gates. $\frac{2}{2}$ Centerline of $\frac{3}{2}$ Sediment cont Centerline of Sluice Sediment contributing area reduced from 3,381 sq. mi. to 1,477 sq. mi. by closing of Watauga Dam on Dec. 1,1948, South Holston on Nov. 20,1950, Boone on Dec. 16,1952, and Fort Patrick Henry on Oct. 27,1953. Area above Watauga included in 1949 Survey as sediment contributing area.
- Assumed. *

26.	1	43.	D	ЕРТН	DESIG	NATION	RANG	E IN FE	EET A	BOVE	AND BE	LOW, C	REST EL	EVAT	IQN]
DATE OF	ł	66-150	150-1	35 135	-120	20-105	105-90	90-7	5 75	-60	60-45	45-30	30-15	15-	1 op (7
SURVEY	ļ	<u></u>	<u>µ00 1</u>	PERC	ENT C	F TOT	AL SEC	IMEN	LOC!	ATED	WITHIN	DEPT	H DESIGI		DN Gate	5.
Apr. 21, 19	49	1	1	8	3	11	34	21	1	12	5	1	0		0	
Apr. 29, 19		1	1	8		15	32	22	1	14	6	1	0		0	
Jun. 5,19	- E	1	5			16	31	21	1	12	5	1	$\frac{4}{-1}$		0	
1														1		
	ĺ															
				ł							i		1	1		
26.		44.											TH OF RE	SER	VOIR	<u>.</u>
DATE OF Survey		0-10				_					0 90-100	<u> </u>	_ا	~115		-125
3011721			F	PERCE	NT OF	TOTAL	SEDI	HENT	LOCA	TED		REACH	DESIG	NATI	ON	
Apr. 21, 19	949		13	10	9	20	15	6	0	0	0					
Apr.29,19			12	12	11	18	15	9	0	0	0	1				
Jun. 5,19	959	23	13	12	12	17	16	7	0	0	0				1	
	1															
-																
										l						<u> </u>
45.		<u></u>				ANGE I										
WATER YEA	R	MAX.	ELEV.		ELEV.		W ACF				MAX. ELE		MIN. ELEV		FLOW	
1943			1.04	1	2.75		90,70		1952		1058.2 1052.2	•	1017.0			
1944		1074.37 1011					2,772				í	980.7				
1945			5 9. 58		6.24		47,51 90,77		1954 1955		1045. 1060.		982. 0			
1946			59.84		.9.79 10.83		83,63		1956		1068.		981.1		•	
1947 1948			58.55		0.94		69,14		1957		1062.		995.2			
1940			2.33		7.88		55, 59		1958		1073.	40	1001.5			
1950		-	38.21		5.94		80,82		1959		1051.	78	985.1	0 2	, 512,	585
46.			31,96	1.100	8.83		16,79		DACIT		TA -					
						EVATION	- <u>r</u> .	REA	1	ACITY		<u>1941)</u> vation	ARE		CAP	ACITY
ELEVATION		AREA		PACITY		EVATION	_	040		1, 53		060	24,9			3,590
909		0 0	1	0 150		970 980		420		L, 41	· ·	075	30,6	50	1,55	9,570
920 930		30 270		,470		99 0		000		3, 34					.	•
930		620		, 410	1	,000		880		2, 50					ł	
950	•	1,230		, 180		020		360		9,79						
960		1,950		, 850		040	18,	270	712	2, 58	0					
		-							1							
47. REMARK	(G /		FFRF	NCES	_i		<u>_</u>	·					, I		J	
REIMARIA							_									

 $\frac{4}{*}$ (*) Minus indicates scour. Treated as negative sediment.

48. AGENCY SUPPLYING DATA TENNESSEE VALLEY AUTHORITY HYDRAULIC DATA BRANCH

E :	DATA SUMM		N	-	······	Chero	kee	RVOIR	HYDRAULIC DATA BRANC					
Σ	LOWNER	TVA			2. RIV			ston	^{3.} STATE Tennessee					
Ā	4 SEG. TW		RANGE	:	5. NEA	REST TOW	Jeffe	erson City						
	7.STREAM BED ELE		8. TOP	OF DAM E	. E V.	1089		9. SPILLWAY CREST ELEV.1/ 1075						
	IO. STORAGE ALLOCATION	тог	EVATI	-	1	ACRES	13. A	STORAGE CRE - FEET	ACCUMU	DATE STORAGE BEGAN				
œ∤	. FLOOD CONTRO	L		<u> </u>										
~ i	^{b.} POWER										12/5/			
۲Ľ	C. MULTIPLE USE	- 1	075			650	1, 5	556, 130	1, 559,	570	IG. DATE N	ORMAL		
RESE	d. INACTIVE	2/ 9	935			450		3, 440	3,	440	OPER. E	EGAN		
				• <u>-</u>							4/16/4	12		
	17. LENGTH OF RES	ERVOIR			59	MILES	AV. WIC	TH OF RESER	VOIR	0.81 MILES				
ຕຼ	16. TOTAL DRAINAG			342		SQ. MI.	22. ME	AN ANNUAL PR	EGIPITATION	44.	2(28)	INCHE		
WATERSHE	9 NET SEDIMENT	CONTRIBUTI	NG AR	EA 3/	1477	SQ. MI.	^{23.} ME	AN ANNUAL RU						
μ	00			V. WIDT										
۶I		964	1.	IN. ELE	v. 91	5	25. CL	MATIC CLASSI		Humi				
-		27. PERIOD 28. AC		2	9. TYPE OF				32. GAPA		^{33.} C/ _W R	AT 10		
	SURVEY	YEARS		ARS	SURVEY			AREA ACRE		-FEET	AC-FT. PE	R SQ.N		
ļ	Dec. 5, 1941	0		0 1	Range	29		30,650	1,559	570	45	5		
	Jun. 5, 1964	5.0	22.		Range	-		30,650			-			
	26.	34.		35					- 16		_			
	DATE OF	PERIOD AN			·······			ACRE-FEET	<u></u>		.TO DATE AC-			
	SURVEY	PRECIPITA	TION			^b MAX. AN		C PERIOD TOT			b. TOTAL T			
	Jun. 5, 1964	44.4		3, 179, 970		4, 129,	082 15,899,8		1 3, 121, 546		70, 234, 78			
DATA	26	37						38	TOTAL SED. DEPOSITS TO DA					
	DATE OF	a PERIOD T			ANNUAL	C. PER SQ.M			ATE ACRE-FEET					
SURVEY				k				15,643	TE ^{D.} AV. AN		0. 471			
าร	Jun. 5,1964	2,033		407		0.276		10,010						
ĺ	26. DATE OF	39. AV. DRY 1		^{40.} SED	DEP. TON	S PER SQ.N	1YR.	41.STORAGE	LOSS PCT.	42. SED.	INFLOW	PPN		
	SURVEY	LBS. PER		<u></u>	ERIOD	D. TOTAL TO		······	P. TOT. TO DATE	a. PERIC		TO DAT		
	Jun. 5, 1964	55*		3	31	56	1	0.045	1.003	1.003 113		96		

*Assumed

.

26,	43.	D	EPTH D	ESIGNATIO	N RANGE	IN FEE	T ABOVI	E,ANC	BELOW	, CR	EST E	LEVA	ТЮД	
DATE OF	166-				105-	90-75	75-60	60 -	45 45-	-30	30-1	5 15		p or
SURVEY	150	135		NT 005TOT										tes
Jun. 5,196	4 1	3		16	33	25	14	6			<u>4</u> / -6	1	-1	
26,	44.	REA	CH DES	IGNATION	PERCEN	TOFT	OTAL OF	RIGIN	AL LEN	IGT	HOFF	RESE	RVOIR	
DATE OF	0-10			0-40 40-50					~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	105	-110			0 -12
SURVEY		PE		T OF TOTA	L SEDIN	IENTL	OCATED	WIT	HIN REA	\CH	DESI	GNAT	ION	
Jun. 5, 196	4 23	15		12 17	15		/-1 4/-		0					
Juli. 5, 15														
45. 			- <u>1</u>	RANGE								<u> </u>		
WATER YEAR	X AM \$	ELEV.	MIN, I		OW ACF		YEAR	MAX.	ELEV.	N	AIN. ELE	EV.	NFLOW	AC-F
1961 1060.46 99					300,393									
					389,099									
	1962 1067.58 1007 1962 1057.04 1009				129,082									
1963		57.84			323, 523 379, 647									
1964	10	64.18	1000	.42 2,	515,044	' 								
46.			1	ELEVATI	ON-ARE	A-CAP	ACITY D	ATA					•••••	
ELEVATION	AREA	CA	PAGITY	ELEVATION		EA	CAPAGIT	Y	ELEVATIO	N	ARI	EA	CAF	ACITY
				980	-+	420	91,4						-	
90 9 920	0 30		0 150	990		000	143, 3							
930	270	1	470	1000		880	212, 5							
940	620	· ·	410	1020		360	409,7							
950	1,230		180	1040		270	712,8							
960	1, 950		850	1060			, 143, 5							
970	3,040	1 1	530	1075			, 559, 5							
	-,	,					•							
17. DEMARK				J	l	1			-				1	
$\frac{1}{2}$ Cent	of Gate erline (s. ofslui	ce.	rea reduc	ed fror	n 3.38	1 sq. 1	ni. 1	to 1,47	17 s	sq. m	i. b	y clo	sing
of W	atauga	Dam c	on Dec.	1, 1948	, South	Holst	on on l	lov.	20, 19	950	, Воо	ne c	on De	C. 16
	and F	ort Pa	atrick	Henry on	Oct. 2	7, 195	3. Ar	ea al	bove W	lata	auga i	nclu	ided i	n
1952	Survey	as se	edimen	t contribi	iting ar	ea.								
1952				· · · · · · · · · · · · · · · · · · ·					Threat	ho	ag ne	motiv		di
1952 1949 48. AGENCY TENNESSI	-	AUTHOP		$\frac{4}{\text{men}}$		indica	es sco	ur.				-	-	

-

RESERVOIR SEDIMENT DATA SUMMARY

• •

. alt anna tha

Cherokee NAME OF RESERVOIR

•

.

.

20-5C DATA SHEET NO.

.

•				•			•		•		-	DATA SHE	ET NO),	
~	1. OWNER TV	A		· · · · · · · · · ·	•	2. ST	REAM HO	lsto	n		3. STAT	rt Tenne	sse	e	
MAX	4. SEC.	IGE 5. NEAREST 'PO'ST'OFF, Jefferson Gty							6. COUNTYGrainper Efferson						
	7. LAT. 36 "10 "01 "1		LONG. 83" 29 52"				OP OF DAM E					LWAY CREST			
	10. STORAGE ALLOCATION				ON 12 ORIG				DRIGINAL 1		14. GROSS STORAGE ACRE-FEET		15	15. DATE STORAGE BEG	
	. FLOOD CONTRO														
Ř	C. POWER	se 1,07		5		650	11,	556,130)1	,559	570	12-5-41			
ERVOI	d. WATER SUPPLY	~~ <u></u>					╂				<u>.</u>				
S	. IRRIGATION	••• •						· · · · · · · · · · · · · · · · · · ·				MA	L OPER, BE		
2	I. CONSERVATION												-		
	8. INACTIVE		27	935			450	╞╍┈	3,440)	3.	440	- 4	4-16-42	
	17. LENGTH OF RE	SERVO	DIR			54	MILES		TH OF RE			0.	81	MIL	
8	18. TOTAL DRAINA	GE AR	EA		34	28	SQ. MI.	22. ME	AN ANNUA	L PREC	PITATIO	N 44.	1	INCH	
	19. NET SEDIMENT	CONT	TRIBU	TING AF	EA 3/	1,477	SQ. MI.	23. MI	EAN ANNU	AL RUNC	FF	17.	8	INCH	
ATERSH	20. LENGTH	AV. WIDT	н	16 MILES	off 3,2	254,111		AC							
N.	21. MAX. ELEV.	X. ELEV. 5,964				v. 9	MP. N	IEAN 5	INGE	-11 tol					
	26. DATE OF	27. 28.			29. TYP		30. NO. OF R	ANGES	S 31. SURFACE		32. CAPACITY		33, (C/I, RATIO	
	SURVEY	PERIOD ACCL YEARS YEARS		OF SURVEY		OR CONTOL	JR INT. AREA ACRI		ACRES	ES ACRE-FEET		ACFT. PERAC			
		1	Ī				}		1		· ·				
	12-05-41	1	0	0	Ran	ige	29		30,650		1,559,570		.468		
ĺ	10-01-79	15	.3	37.8	Ran	000	28		30,65			3,070			
	10 01-12	1 1	• 1	57+0		.ee	20		20,00	Ū,	1,94	13,070		-	
ļ		ļ		l									1		
ł	26. DATE OF	34	PERI	סכ	35. F		ATER INFL				ac WAR	TER INFL. T	[TE AC . ET	
	SURVEY	ANNUAL					b. MAX. AN								
		PRECIPITATION *				SI OPINI NU									
	10-01-79		46	.5"	3-44	4.446	5,145 6	514	52,700,030		30 3,252,244		122	034 810	
	** ****** * **	ł			J J J 7 7 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7		5,170,014		22,700,030] 3,232,244		+ ,	104,012	
		ļ				e .						-			
		1													
2	·	<u>.</u>													
UNVEN	26. DATE OF SURVEY	37.	PER	IOD ICA	PACITY	LOSS	ACRE-FE	ET .	38. TOT/	AL SED.	DEPO	SITS TO D	TE A	CRE-FEET	
5	GUNTE!	s. Pl	ERIOD	TOTAL	b. AV. A	NNUAL	C.PER SQ. MI, YE		R .TOTAL TO DATE				c. PER SQ. MIYE		
"[{	• •												
ļ	10-01-79	ا ا	857		56		0.038	;	16,50	0	4	37	0.	296	
									1		-				
	• .								· ·						
														-	
	AL DATE OF						05000 14		41 67064		C DOT	40.055			
	26. DATE OF SURVEY						S PERSQ. M	и.—YК.							
┢		ļ			- WIAL	TO DATE	. PERIOD		#. AV. AN.	0.101.1	UDATE	a. PERIOD	^b	TOT. TO DAT	
-	10-01-79	,	*5 5		45	.5	355		.028	1.0	6	14.3		118	
						1		1		1 100	-				
								. [
ł				[
				Ì				-		· ·					
~		L							ام معند مستحد م		أحجر مرجو المرجو ا	L			

*Assumed

26. DATE OF	43.	DEPTH	DESIGN	TION	RANGE	IN FEE	TBELC	W, AN	D ABO	/E, CR	EST EL	EVATI	ON	
SURVEY	166-50	150-135 135				the second s		the second s		T		r		_of_
		PERC	ENT OF	TOTA	L SEDIM	IENT L	OCATE	D WITH	IN DEP	PTH DE	SIGNA	TION		
10-01-79	1	1	11	18	35	3	0	18	4	<u>4</u> / -	6 <u>4</u> /-	12 4	/ -2'	
							·			UCTH (<u>l</u>	
26, DATE OF SURVEY	44.	REACH	30-40	40-50	50-60				90-100			1		-125
	. 0-10				SEDIM									
10-01-79	15	5 11	11	16	19	18	6	0	+/-1					
45.		<u></u>	R/	NGE I	N RESE	RVOIR	OPERA	TION	· ····	·	· · · · · · · · · · · · · · · · · · ·	· · · · ·		
WATER YEAR	MAX. E	LEV. MIN.	ELEV.	INFLOY	Y AG. FT.	WATE	R YEAR	· M	AX, ELE	/	MIN. EL	.EV. 🦯	INFLOW	ACFT.
1965 1966 1967 1968 1969 1970 1971 1972 1973	1,051 1,071 1,062 1,052 1,056 1,062 1,071	.13 1,019 .56 988 .09 1,018 .08 1,018 .74 1,006 .47 1,008 .14 1,005 .65 1,027 .47 1,029	.40 .20 .40 .68 .69 .34 .63	2,888,946 2,578,804 3,399,390 3,289,325 2,288,923 2,768,597 2,674,750 3,952,491 4,908,032			976 977 978 979	1,0	1,057.48 1,060.97 1,059.17 1,071.88		1,024.16 1,014.26 1,022.71 1,026.65		4,056,19	
1974 1975 46.		.88 1,033 .31 1,030	.00	4,54	5,614 5,137 ON-ARE	А-СЛР/								·_ · · · · · · · · · · ·
ELEVATION	AREA	CAPACITY	ELEV	ATION	AR	EA	CAP	ACITY	ELEV	ATION		REA	САР	ACITY
	0 30 270 620 1,230 1.950 3,040 4,420	0 0 1,080 4,620 12,200 26,730 48,940 82,330	9 1,0 .1,0 1,0 1,0 1,0	20 40 60	6,0 7,8 12,3 18,2 24,9 30,6	880 860 270 30	19 38 69 1,12	9,580 6,130 9,500 3,200 6,680 3,070						
Decemb Wataug <u>4</u> / (-) Mi	gates. line of nt contr auga Dam er 16, 1 a includ nus indi	sluice. ibuting a on Decem 952, and ed in 194	ber 1 Ft. P 9 Sur ur.	, 194 atric vey a Treat	48, So sk Hen is sed ced as	uth l ry or liment nega	Holst n Oct t con ative	on or ober tribu	n Nove 27, 1 sting	ember 1953. area	20, Are	1950	, Boor	losing ne on
18. AGENCY MA					ley Au Branc		ity		*	o nat	- 0c	robe	r. 198	30

.

bes