Table 27. Descriptions of sediments sampled along Cherokee Creek and other tributaries to the Broad River — continued.

Block	Station number	Sample number	Material sampled	Depth of sample below surface of flood plain (feet)	Screening characteristics: Plus 1/4 inch — Volume ratio	Plus 1/4 inch — Composition (percent)	Plus 1/4 inch — Maximum intermediate dimension (inches)	Minus 1/4 – plus 1/8 inch — Volume ratio	Minus 1/4 – plus 1/8 inch — Composition (percent)	Minus 1/8 inch — Sand Volume ratio	Minus 1/8 inch — Silt and clay Abundance	Weight of concentrate (grams)	Sieve fraction — Mesh	Sieve fraction — Percent of concentrate	Minerals in concentrate: Monazite — Percent of concentrate	Monazite — Pounds per cubic yard	Ilmenite — Percent of concentrate	Ilmenite — Pounds per cubic yard	Rutile — Percent of concentrate	Rutile — Pounds per cubic yard	Zircon — Percent of concentrate	Zircon — Pounds per cubic yard	Garnet — Percent of concentrate	Garnet — Pounds per cubic yard	Kyanite — Percent of concentrate	Kyanite — Pounds per cubic yard	Sillimanite — Percent of concentrate	Sillimanite — Pounds per cubic yard	Magnetite	Hematite	Staurolite	Tourmaline	Amphibole, pyroxene, biotite	Epidote	Quartz	Others
															Percent of concentrate																						
O cont	51	52-PK-53	Riffle gravel	10	21	75 bio sch, 15 peg, 10 qtz	6	3	35 qtz, 25 bio sch, 15 peg, 15 sill sch, 10 fels	8		115.0	45	32	17		8		1		—		6		—		—		—	—	—	—	—	—	—	—
													100	54	14		12		7		—		2		2		4		—	—	—	—	—	—	—	13
													170	13	1		2		2		—		1		—		2		—	—	tr	—	—	—	—	5
													Total		32	7.3	22	5.0	10	2.3	—	—	9	2.1	2	0.5	6	1.4	1	—	tr	—	—	—	—	18
		52-PK-54	Bank gravel	8½	9	85 bio sch, 10 peg, 5 fels	5	1	40 qtz, 30 fels, 20 bio sch, 10 peg	6	5	2.6	45	8	1		1		—		—		6		—		—		—	—	—	—	—	—	—	tr
													100	17	2		4		2		—		6		—		—		—	—	—	—	—	—	—	3
													170	75	4		23		11		—		—		—		2		—	—	—	3	—	—	—	32
													Total		7	0.04	28	0.2	13	0.08	—	—	12	0.07	—	—	2	0.01	tr	—	—	3	—	—	—	35
	52	52-PK-50	Riffle gravel	6	12	50 bio sch, 20 qtz, 15 peg, 10 sill sch, 5 fels	2	5	40 bio sch, 40 qtz, 10 fels, 5 peg, 5 sill sch	16		192.5	45	39	6		11		3		—		15		2		—		—	—	—	—	—	—	—	2
													100	51	10		11		7		—		5		2		3		—	—	—	—	—	—	—	13
													170	9	2		2		1		—		tr		—		1		—	—	—	—	—	—	—	3
													Total		18	6.9	24	9.2	11	4.2	—	—	20	7.7	4	1.5	4	1.5	1	—	—	—	—	—	—	18
	53	52-PK-52	Riffle gravel	6	15	40 bio sch, 30 peg, 15 qtz, 10 sill sch, 5 fels	8	4	35 sill sch, 25 qtz, 25 bio sch, 10 fels, 5 peg	14		161.8	45	54	11		24		2		—		8		—		—		—	—	—	—	—	—	—	9
													100	38	6		10		2		1		tr		—		—		—	—	—	1	—	—	—	18
													170	7	1		2		tr		—		—		tr		tr		—	—	—	tr	—	—	—	4
													Total		18	5.8	36	11.6	4	1.3	1	0.3	8	2.6	tr	—	tr	—	1	—	—	1	—	—	—	31
	54	52-PK-51	Riffle gravel	5	14	35 qtz, 30 bio sch, 20 sill sch, 10 fels, 5 peg	2	4	40 qtz, 25 sill sch, 20 bio sch, 10 fels, 5 peg	12		67.6	45	25	4		14		2		—		5		—		—		—	—	—	—	—	—	—	—
													100	63	15		29		6		—		3		—		2		—	—	—	1	—	—	—	7
													170	11	1		3		2		tr		tr		—		1		—	—	—	tr	—	—	—	4
													Total		20	2.7	46	6.2	10	1.3	tr	—	8	1.1	—	—	3	0.4	1	—	—	1	—	—	—	11
	55	52-PK-49	Riffle sand	8	6	35 bio sch, 20 peg, 15 qtz, 15 fels, 15 sill sch	1	5	50 qtz, 20 bio sch, 15 fels, 10 sill sch, 5 peg	21		80.7	45	9	tr		4		1		—		4		—		—		tr		—	—	—	—	—	—
													100	69	2		21		5		—		18		—		6		—	—	1	2	—	—	—	14
													170	21	2		12		2		—		1		—		—		—	—	—	tr	—	—	—	4
													Total		4	0.6	37	6.0	8	1.3	—	—	23	3.7	—	—	6	1.0	1	—	1	2	—	—	—	18
	56	52-PK-48	Riffle sand	8	9	55 bio sch, 20 peg, 10 qtz, 10 sill sch, 5 fels	2½	5	60 qtz, 20 bio sch, 10 fels, 5 peg, 5 sill sch	20		118.7	45	11	tr		5		tr		—		6		—		—		—	—	—	—	—	—	—	—
													100	61	7		33		5		—		6		—		—		—	—	—	—	—	—	—	10
													170	27	2		13		2		—		1		—		2		—	—	—	1	—	—	—	6
													Total		9	2.1	51	12.1	7	1.7	—	—	13	3.1	—	—	2	0.5	1	—	tr	1	—	—	—	16
	57	52-PK-47	Riffle gravel	0	19	80 bio sch, 15 qtz, 5 peg & fels	5	1	45 qtz, 30 bio sch, 10 fels, 10 musc sch, 5 peg	7		119.1	45	36	7		15		1		—		11		1		—		—	—	—	1	—	—	—	—
													100	51	7		21		—		—		3		—		1		—	—	—	—	—	—	—	19
													170	11	1		4		—		—		—		—		1		—	—	—	tr	—	—	—	5
													Total		15	3.6	40	9.5	1	0.2	—	—	14	3.3	1	0.2	2	0.5	2	—	1	tr	—	—	—	24
	58	52-PK-46	Riffle gravel	5	18	60 qtz, 15 bio sch, 15 gv, 5 fels, 5 peg	3	2	70 qtz, 10 bio sch, 10 peg, 5 fels, 5 sill sch	10		275.3	45	40	6		21		—		—		3		—		—		—	—	2	—	—	3	—	5
													100	50	3		19		—		1		1		—		1		—	—	—	—	2	—	—	23
													170	7	—		3		—		—		—		—		—		—	—	—	—	1	—	—	3
													Total		9	4.9	43	23.6	—	—	1	0.5	4	2.2	—	—	1	0.5	3	2	—	1	5	—	31
	59	52-PK-45	Riffle gravel	6	12	60 qtz, 20 bio sch, 10 musc sch, 5 peg, 5 fels	2½	7	50 qtz, 20 tour sch, 15 bio sch, 15 fels	13		38.1	45	16	2		7		1		—		6		—		—		—	—	—	—	—	—	—	—
													100	54	4		17		2		—		8		—		10		—	—	1	2	—	—	—	10
													170	27	2		7		2		—		—		—		4		—	—	1	2	—	—	—	9
													Total		8	0.6	31	2.4	5	0.4	—	—	14	1.1	—	—	14	1.1	3	—	2	4	—	—	—	19
	60	52-PK-44	Riffle gravel	6	20	80 graywacke, 15 qtz, 5 fels	7	1	40 qtz, 35 bio sch, 20 fels, 5 calcite	8		49.9	45	42	4		24		—		—		14		—		—		—	—	—	—	—	—	—	—
													100	41	1		14		1		—		1		—		3		—	—	1	tr	—	—	—	20
													170	14	—		5		—		—		tr		—		1		—	—	tr	1	—	—	—	7
													Total		5	0.5	43	4.3	1	0.1	—	—	15	1.5	—	—	4	0.4	3	—	1	1	—	—	—	27
	61	52-PK-42	Riffle sand	10	5	35 qtz, 30 bio sch, 15 fels, 10 peg, 5 pyroclastic rock, 5 phyllite	2	7	60 qtz, 20 bio sch, 10 fels, 10 peg	26		58.2	45	20	—		5		1		—		10		1		—		—	—	—	—	—	—	—	—
													100	67	2		24		2		—		5		—		6		—	—	2	1	—	—	—	25
													170	11	1		2		tr		—		—		—		1		—	—	—	tr	—	—	—	7
													Total		3	0.3	31	3.6	3	0.3	—	—	15	1.7	1	0.1	8	0.9	2	—	3	2	—	—	—	32
		52-PK-43	Bank silt	7¾	—	—	—	tr	fels, qtz, musc sch	4	26	15.8	45	1	—		—		—		—		—		—		—		—	—	—	—	—	—	—	1
													100	9	1		3		2		—		—		—		2		—	—	—	tr	—	—	—	1
													170	90	7		35		10		—		—		—		19		—	—	—	3	—	—	—	16
													Total		8	0.3	38	1.3	12	0.4	—	—	—	—	—	—	21	0.7	tr	—	—	3	—	—	—	18

Mineralogical analyses by: M. N. Hirhard, J. P. Owens, Jerome Stone