

Table 32. Descriptions of sediments sampled along Hinton Creek and other tributaries to the First Broad River - continued.

Block	Station number	Sample number	Material sampled	Depth of sample below surface of flood plain (feet)	Screening characteristics										Minerals in concentrate																																				
					Plus 1/4 inch			Minus 1/4 - plus 1/8 inch			Minus 1/8 inch		Weight of concentrate (grams)	Sieve fraction		Monazite		Ilmenite		Rutile		Zircon		Garnet		Kyanite		Sillimanite		Magnetite	Hematite	Staurolite	Tourmaline	Amphibole, pyroxene, biotite	Epidote	Quartz	Others														
					Volume ratio	Composition (percent)	Maximum intermediate dimension (inches)	Volume ratio	Composition (percent)	Sand	Silt and clay	Mesh		Percent of concentrate	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate									Pounds per cubic yard													
																																							Volume ratio	Abundance	Percent of concentrate	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard	Percent of concentrate	Pounds per cubic yard
I	39	52-CS-808	Riffle gravel	3 1/2	16	80 gran. bio. sil. gn., 15 peg., 5 fty.	6	3	50 bio. gn., 25 fty., 25 peg.	9	7.7	45	35	6		9		—		—		19		—		tr		—	—	—	tr	tr	tr	1																	
cont												100	52	2		24		tr		1		15		—		1		—	—	—	tr	—	2	7																	
												170	12	3		8		—		tr		1		—		tr		—	—	—	tr	—	tr	tr																	
												Total		11	0.2	41	0.6	tr	—	1	0.02	35	0.5	—	—	1	0.02	1	—	—	tr	tr	2	8																	
	40	52-CS-807	Riffle gravel	5	21	70 gran. bio. gn., 25 peg., 5 fty.	5	2	60 bio. gn., 20 peg., 20 fty.	6	12.0	45	48	4		19		1		1		20		—		2		—	—	—	—	—	1																		
												100	42	3		22		1		—		5		—		3		—	—	—	tr	—	1	7																	
												170	10	1		7		tr		tr		1		—		1		—	—	—	tr	—	tr	tr																	
												Total		8	0.2	48	1.1	2	0.05	1	0.02	26	0.6	—	—	6	0.1	tr	—	—	tr	—	1	8																	
		52-CS-813	Bank silt	1/2	—	—	—	—	—	1	33	2.2	45	18	—		3		—		—		4		—		3		—	2	—	—	1	5																	
												100	77	—		6		—		—		6		—		12		—	5	—	1	5	tr	42																	
												170	5	1		2		tr		tr		tr		—		1		—	—	—	tr	tr	tr	1																	
												Total		1	0.005	11	0.05	tr	—	tr	—	10	0.05	—	—	16	0.07	tr	7	—	1	6	tr	48																	
	42	52-CS-806	Riffle gravel	3 1/2	19	70 bio. gn., 20 peg., 10 fty., tr. calc. silicate	8	2	60 bio. gn., 20 peg., 20 fty.	7	30.5	45	69	3		21		—		1		37		—		3		—	1	—	—	—	tr	tr	4																
												100	28	1		13		1		1		6		—		3		—	—	—	—	tr	tr	3																	
												170	3	tr		2		tr		tr		1		—		tr		—	—	tr	—	tr	—	tr																	
												Total		4	0.2	36	2.2	1	0.06	1	0.06	44	2.7	—	—	6	0.4	tr	1	tr	—	tr	tr	7																	
	43	52-CS-805	Riffle gravel	7	19	70 gran. chl. bio. gn., 20 peg., 10 fty., tr. calc. silicate	5	4	40 bio. gn., 40 fty., 20 peg.	7	21.2	45	69	3		21		1		—		33		—		—		—	—	—	tr	1	—	5																	
												100	28	1		13		1		—		8		—		5		—	—	—	tr	tr	—	4																	
												170	3	1		2		tr		tr		tr		—		1		—	—	—	tr	—	tr	tr																	
												Total		5	0.2	36	1.5	2	0.08	tr	—	41	1.7	—	—	6	0.3	tr	—	—	tr	1	—	9																	
	44	52-CS-804	Riffle gravel	4 1/2	19	50 gran. bio. hgn., 30 peg., 20 fty., tr. calc. silicate	4	2	50 bio. gn., 30 fty., 20 peg.	8	20.7	45	52	7		18		—		—		22		—		—		—	1	—	tr	1	—	3																	
												100	39	10		16		tr		1		7		—		2		—	—	—	tr	—	3																		
												170	7	2		3		—		tr		1		—		tr		—	—	—	tr	—	1																		
												Total		19	0.8	37	1.5	tr	—	1	0.04	30	1.2	—	—	2	0.08	2	1	—	tr	1	—	7																	
	48	52-CS-803	Riffle gravel	6	20	60 bio. gn., 20 peg., 20 fty.	5	2	50 bio. gn., 30 fty., 20 peg.	8	121.7	32	19	—		1		—		—		18		—		—		—	—	—	tr	—	—	—	Xenotime																
												45	32	6		12		—		tr		12		—		1		—	—	—	tr	—	—	tr	1																
												100	43	9		20		1		1		7		—		2		—	—	—	tr	—	3	—																	
												170	6	1		4		tr		tr		tr		—		tr		—	—	—	tr	—	1	—																	
												Total		16	3.9	37	9.0	1	0.2	1	0.2	37	9.0	—	—	3	0.7	tr	—	—	tr	—	—	4	1																
J	45	52-CS-815	Riffle gravel	3 1/2	21	50 bio. sil. sch., 30 alb. sch., 15 peg., 5 fty., tr. calc. silicate	5	3	40 bio. sch., 30 peg., 30 fty.	10	62.1	32	49	7		7		tr		1		34		—		—		—	—	—	tr	—	—	—																	
												45	27	9		6		—		1		10		—		tr		—	—	—	tr	tr	—	1																	
												100	21	4		5		tr		tr		3		—		1		—	—	—	tr	tr	—	8																	
												170	2	1		1		tr		tr		tr		—		tr		—	—	—	tr	tr	tr	tr																	
												Total		21	2.8	19	2.5	tr	—	2	0.3	47	6.3	—	—	1	0.1	1	—	—	tr	tr	tr	9																	
	46	52-CS-816	Riffle gravel	4	9	60 bio. sil. sch., 25 peg., 15 fty.	1 1/2	5	50 bio. gn., 30 peg., 20 fty.	14	12.7	45	39	3		11		1		—		18		—		2		—	—	—	tr	—	—	4																	
												100	52	6		25		tr		1		8		—		3		—	—	—	1	—	—	8																	
												170	8	1		5		tr		1		tr		—		1		—	—	—	tr	—	tr	tr																	
												Total		10	0.3	41	1.0	1	0.03	2	0.05	26	0.7	—	—	6	0.2	1	—	—	1	—	tr	12																	
		52-CS-817	Bank silt	3	—	—	—	—	—	6	28	8.0	45	15	1		5		—		—		7		—		1		—	tr	tr	—	1																		
												100	57	7		26		1		1		7		—		6		—	—	—	tr	tr	—	9																	
												170	24	6		16		tr		1		1		—		tr		—	—	—	tr	tr	—	tr																	
												Total		14	0.2	47	0.8	1	0.02	2	0.03	15	0.3	—	—	7	0.1	4	—	tr	tr	tr	—	10																	
	47	52-CS-814	Riffle gravel	4 1/2	21	40 bio. gn., 30 bio. sil. sch., 20 peg., 10 fty.	6	2	40 bio. gn., 30 fty., 30 peg.	6	35.8	32	27	1		1		—		—		25		—		—		—	—	—	tr	—	—	—	Xenotime																
												45	33	6		10		—		1		16		—		tr		—	—	—	tr	—	—	tr																	
												100	36	8		13		tr		1		5		—		1		—	—	—	1	tr	—	7																	
												170	4	1		3		—		tr		tr		—		tr		—	—	—	tr	—	tr	tr																	
												Total		16	1.1	27	1.9	tr	—	2	0.1	46	3.3	—	—	1	0.07	tr	—	—	1	tr	—	7																	
K	55	52-CS-788	Riffle gravel	7	17	40 peg., 40 fty., 20 bio. gn.	5	5	40 peg., 40 bio. gn., 20 fty.	11	381.6	45	46	1		40		—		1		2		—		—		—	—	—	tr	2	—	tr																	
												100	38	2		30		—		1		tr		—		1		—	—	—	tr	—	4																		
												170	16	1		12		—		1		tr		—		tr		—	—	—	tr	—	2																		
												Total		4	3.0	82	62.5	—	—	3	2.3	2	1.5	—	—	1	0.8	tr	—	—	—	2	—	6																	
		52-CS-789	Bank gravel	6 1/2	15	90 fty., 10 peg.	4 1/2	3	90 peg., 10 fty.	11	73.7	45	38	1		34		tr		—		3		—		tr		—	—	—	tr	—	tr																		
												100	49	2		37		—		1		2		—		1		—	—	—	tr	—	6																		
												170	13	tr		11		—		1		tr		—		tr		—	—	—	tr	—	1																		
												Total		3	0.5	82	14.3	tr	—	2	0.3	5	0.9	—	—	1</																									