(Cont.) Mineral content

Table 2. Descriptions of sediments sampled along Broadway Creek and other tributaries to the Rocky 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	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														Percent of concentrate							
N cont.	45	52-DC-330	Riffle gravel		17	80 qtz, 10 fels, 10 gn	1	2	50 qtz, 20 fels, 15 gn, 10 sill sch, 5 bio sch	14		163.0	45	15	tr		15		tr		—		tr		—		—		—	—	—	—	—	—	tr	
													100	44	—		36		—		2		—		—		—		—	—	—	—	—	tr	6	
													170	9	tr		6		—		3		—		—		—		—	—	—	—	—	—	—	
													Total		tr	—	57	12.5	tr	—	5	1.6	tr	—	—		—		32	—	—	—	—	tr	6	Xenotime
O	46	52-DC-329	Riffle gravel		16	60 qtz, 20 gn, 10 fels, 10 bio sch	6	3	60 qtz, 20 fels, 10 sill sch, 10 bio sch	15		91.7	45	12	1		10		—		1		—		—		—		—	—	—	—	—	—	tr	—
													100	70	10		52		—		6		—		—		—		—	—	—	—	—	1	1	—
													170	12	2		8		—		2		—		—		—		—	—	—	—	—	—	—	tr
													Total		13	2.4	70	12.8	—	—	9	1.6	—	—	—	—	—	—	6	—	—	—	—	1	1	tr
	47	52-DC-328	Riffle gravel		16	40 qtz, 30 bio sch, 20 gn, 10 fels & sill sch	6	2	60 qtz, 20 fels, 10 sill sch, gn, bio sch & micas	16		97.2	45	40	1		34		—		1		—		—		—		—	—	—	—	—	1	3	
													100	45	2		39		—		1		—		—		—		—	—	—	—	—	tr	3	
													170	6	tr		5		—		1		—		—		—		—	—	—	—	—	—	—	
													Total		3	.6	78	15.1	—	—	3	.6	—	—	—	—	—	—	9	—	—	—	—	1	6	
	48	52-DC-325	Riffle sand		11	40 gn, 30 bio sch, 20 fels, 10 qtz & micas	3/4	3	60 qtz, 20 gn, 10 fels, 10 bio sch, sill sch & micas	20		16.7	45	20	1		16		—		—		1		—		—		—	1	—	—	—	tr	1	
													100	70	3		62		—		3		—		—		—		—	—	—	—	—	—	2	
													170	4	tr		4		—		tr		—		—		—		—	—	—	—	—	—	tr	
													Total		4	.1	82	2.7	—	—	3	.1	1	.03	—	—	—	—	6	1	—	—	—	tr	3	
		52-DC-326	Bank silt	5	-	—	—	-	—	15	15	9.9	45	tr	—		—		—		—		—		—		—		—	—	—	—	—	—	—	
													100	41	—		35		—		2		1		—		—		—	—	—	—	—	2	1	
													170	59	2		46		—		7		—		—		—		—	—	—	—	—	3	1	
													Total		2	.04	81	1.7	—	—	9	.2	1	.02	—	—	—	—	tr	—	—	—	—	5	2	
	49	52-DC-324	Riffle gravel		19	50 qtz, 20 gn, 20 fels, 10 bio sch & silt sch	2	2	70 qtz, 10 sill sch, 10 fels, 10 bio sch, mica & gn	13		220.5	45	33	5		26		—		tr		1		—		—		—	—	—	—	—	—	1	Xenotime tr
													100	58	8		46		—		1		1		—		—		—	—	—	—	—	—	2	—
													170	7	2		4		—		1		—		—		—		—	—	—	—	—	—	—	—
													Total		15	6.6	76	33.4	—	—	2	.9	2	.9	—	—	—	—	2	—	—	—	—	—	3	tr
	50	52-DC-323	Riffle sand		7	40 qtz, 30 gn, 20 fels, 10 bio sch	1	5	60 qtz, 20 fels, 10 gn, 10 sill sch & bio sch	20		59.3	45	24	—		18		—		—		3		—		—		—	—	—	—	—	—	3	
													100	65	—		60		—		—		—		—		—		—	—	—	1	—	2	2	
													170	9	—		7		—		2		—		—		—		—	—	—	—	—	tr	—	
													Total		—	—	85	10.0	—	—	2	.2	3	4	—	—	—	—	2	—	—	1	—	2	5	
P	51	52-DC-361	Riffle gravel		20	80 qtz, 10 gn, 10 fels	5	3	70 qtz, 10 fels, 10 gn, 10 bio sch	9		90.6	45	75	—		61		—		—		2		—		—		—	—	—	—	—	1	11	
													100	23	tr		16		—		—		—		—		tr		—	—	—	—	—	1	6	
													110	2	—		2		—		—		—		—		tr		—	—	—	—	—	tr	tr	
													Total		tr	—	79	14.3	—	—	—	—	2	4	—	—	tr	—	tr	—	—	—	—	2	11	
	52	52-DC-362	Riffle sand		0.5	60 qtz, 20 fels, 10 gn, 10 bio sch	5/8	3	60 qtz, 20 fels, 10 bio sch, 10 gn & micas	28		19.5	45	6	tr		5		—		—		1		—		tr		—	—	—	tr	—	—	tr	
													100	70	7		50		—		—		3		—		5		—	—	—	2	—	—	3	
													170	24	5		18		—		1		—		—		—		—	—	—	—	—	—	—	
													Total		12	.5	73	2.8	—	—	1	.04	4	.2	—	—	5	2	tr	—	—	2	—	—	3	
	53	52-DC-363	Riffle gravel		18	60 qtz, 20 gn, 10 fels, 10 bio sch	5	3	70 qtz, 10 fels, 10 gn, 10 bio sch	10		84.3	45	71	13		50		—		1		tr		—		1		—	—	—	—	—	—	6	Xenotime tr
													100	25	4		16		—		1		tr		—		tr		—	—	—	—	—	—	4	—
													170	3	tr		3		—		tr		—		—		tr		—	—	—	—	—	—	tr	—
													Total		17	2.9	69	11.6	—	—	2	.3	tr	—	—	—	1	2	1	—	—	—	—	—	10	tr
	54	52-DC-364	Riffle gravel		21	60 qtz, 20 gn, 10 fels, 10 bio sch	4	1	60 qtz, 20 fels, 10 bio sch, 10 gn & sill sch	10		54.8	45	43	4		33		—		—		2		—		—		—	—	—	—	—	—	4	Xenotime —
													100	51	9		32		—		—		—		—		1		—	—	—	2	—	—	6	1
													170	6	1		5		—		tr		—		—		—		—	—	—	—	—	—	—	tr
													Total		14	1.5	70	7.7	—	—	tr	—	2	2	—	—	1	.1	tr	—	—	2	—	—	10	1
	55	52-DC-365	Riffle gravel		14	50 qtz, 20 fels, 20 gn, 10 bio sch & sill sch	1	4	60 qtz, 25 fels, 10 gn, 5 bio sch & sill sch	15		255.0	45	59	7		43		—		tr		2		—		—		—	—	—	—	—	—	7	
													100	34	7		23		—		1		—		—		tr		—	—	—	—	—	—	3	
													170	4	1		3		—		tr		—		—		—		—	—	—	—	—	—	tr	
													Total		15	7.6	69	35.1	—	—	1	.5	2	1.0	—	—	tr	—	3	—	—	—	—	—	10	
	56	52-DC-366	Riffle gravel		11	50 qtz, 20 fels, 20 gn, 10 bio sch	1 1/2	6	70 qtz, 20 fels, 10 bio sch, sill sch & micas	15		29.6	45	48	2		33		—		1		3		—		—		—	—	—	—	2	—	1	
													100	49	6		38		—		2		—		—		1		—	—	—	—	—	—	2	
													170	3	1		2		—		tr		—		—		tr		—	—	—	—	—	—	—	
													Total		9	.5	73	3.3	—	—	3	.2	3	2	—	—	1	.06	tr	—	—	—	2	—	9	
Q	57	52-DC-236	Riffle gravel		15	50 qtz, 20 gn, 10 fels, 10 bio sch, 10 sill sch & micas	6	4	70 qtz, 20 fels, 10 micas, gn & bio sch	13		162.7	45	34	1		25		—		1		—		—		—		—	2	—	—	—	tr	5	
													100	25	tr		18		—		1		—		—		—		—	—	—	—	—	tr	6	
													170	3	tr		2		—		1		—		—		—		—	—	—	—	—	—	—	
													Total		1	.3	45	15.1	—	—	3	1.0	—	—	—	—	—	—	38	2	—	—	—	tr	11	
	58	52-DC-235	Riffle sand		10	60 qtz, 20 gn, 10 fels, 10 micas & bio sch	1 1/2	4	70 qtz, 20 fels, 10 micas, gn, sill sch & bio sch	21		181.8	45	15	—		5		—		—		—		—		—		—	5	—	—	—	—	—	5	
													100	63	1		23		—		2		1		—		—		—	15	—	—	—	—	—	21	
													170	22	—		13		—		6		—		—		—		—	3	—	—	—	—	—	—	
													Total		1	.4	41	14.9	—	—	8	2.9	1	.04	—	—	—	—	23	—	—	—	—	tr	26	

Mineralogical analyses by: M. N. Hinkard, R. P. Marquiss, C. J. Spangler, Jerome Stone, E. J. Young