(cont.) Mineral Content

Table 15/1 ~~Descriptions~~ of sediments sampled along Big Brushy Creek and other tributaries to the Saluda 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)	Minerals in concentrate: 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																					
H	17	52-DC-	Bank	5	–	—	–	0.5	qtz, fels, & mica	19	10	40.8	45	2	tr		1		–		–		–		–		–		–	–	–	–	tr	1	tr	
cont	cont	434	sand										100	57	–		19		–		–		1		–		–		–	–	–	–	–	13	24	
													170	41	–		23		–		15		–		–		–		–	–	–	–	–	2	1	
													Total		tr	–	43	3.7	–	–	15	1.3	1	.09	–	–	–	–	tr	–	–	–	tr	16	25	
	18	52-DC-	Riffle		1	60 qtz, 20 qtz,	5/8	1	60 qtz, 30 fels,	24		16.5	45	8	tr		8		–		tr		–		–		–		–	tr	–	–	–	tr	tr	
		430	sand			10 fels, 10 bio sch			10 qtz, bio sch &				100	42	–		27		–		1		–		–		1		–	–	–	–	–	3	10	
									mica				170	38	–		16		–		1.9		–		–		–		–	–	–	–	–	1	2	
													Total		tr	–	51	1.7	–	–	20	.7	–	–	–	–	1	.03	12	tr	–	–	–	4	12	
	19	52-DC-	Riffle		3	40 qtz, 30 qtz,	5/8	2	50 qtz, 20 qtz	28		66.9	45	14	–		12		–		–		–		–		–		–	–	–	–	–	2	–	
		429	sand			20 bio sch, 10 fels			20 fels, 10 bio sch				100	45	–		28		–		–		–		–		–		–	–	–	–	–	10	1	
									& mica				170	6	–		5		–		tr		–		–		–		–	–	–	–	–	1	tr	
													Total		–	–	45	6.0	–	–	tr	–	–	–	–	–	–	–	35	–	–	–	–	13	7	
I	20	52-DC-	Bank	2	–	—	–	–	—	.5	30	2.7	45	tr	–		–		–		–		–		–		–		–	–	–	–	–	–	–	
		427	silt										100	35	1		12		–		–		–		–		2		–	–	–	–	1	5	14	
													170	39	–		35		–		1		–		–		1		–	–	–	–	–	1	1	
													Total		1	.006	47	.3	–	–	1	.006	–	–	–	–	3	.02	26	–	–	–	1	6	15	
	21	52-DC-	Riffle		6	40 qtz, 30 qtz,	2	4	50 qtz, 30 fels,	24		29.5	45	12	tr		8		–		–		3		–		tr		–	–	–	–	–	1	tr	
		426	sand			20 fels, 10 bio sch			10 qtz, 10 sill sch				100	47	1		34		–		–		3		–		5		–	–	–	–	–	1	3	
						& sill sch			mica & bio sch				170	8	tr		8		–		tr		–		–		–		–	–	–	–	–	–	tr	
													Total		1	.06	50	2.9	–	–	tr	–	6	.4	–	–	5	.3	33	–	–	–	–	2	3	
J	22	52-DC-	Riffle		4	60 qtz, 20 qtz,	3/4	2	70 qtz, 10 fels,	25		550.6	45	2	–		1		–		–		tr		–		–		–	–	–	–	–	tr	1	
		425	sand			10 bio sch,			10 bio sch, 10 qtz				100	16	–		10		–		–		tr		–		–		–	1	–	–	–	1	4	
						10 fels							170	4	–		4		–		tr		–		–		–		–	–	–	–	–	tr	tr	
													Total		–	–	15	16.5	–	–	tr	–	tr	–	–	–	–	–	18	1	–	–	–	1	5	
	23	52-DC-	Bank	3	10	90 qtz, 10 fels	5	1	90 qtz, 10 fels	7	10	4.5	45	16	–		16		–		–		–		–		–		–	–	–	–	–	–	–	
		424	gravel										100	59	–		33		–		–		–		–		–		–	–	–	–	–		26	
													170	21	–		14		–		3		–		–		–		–	–	–	–	–	tr	4	
													Total		–	–	63	.7	–	–	3	.03	–	–	–	–	–	–	4	–	–	–	–	tr	30	
	24	52-DC-	Riffle		11	40 qtz, 40 qtz,	2	3	60 qtz, 20 qtz,	20		3836.0	45	5	–		tr		–		–		–		–		–		–	–	–	–	–	–	5	
		423	sand			10 fels, 10 sill sch			15 fels, 5 bio sch				100	15	–		1		–		–		–		–		–		–	–	–	–	–	–	14	
									& sill sch				170	4	tr		2		–		tr		–		–		tr		–	–	–	–	–	–	2	
													Total		tr	–	3	23.0	–	–	tr	–	–	–	–	–	tr	–	16	–	–	–	–	–	21	
K	25	52-DC-	Riffle		8	50 sill sch, 30 qtz,	1	6	30 sill sch, 30 qtz,	18		37.9	45	15	1		8		–		–		6		–		–		–	–	–	–	–	–	–	
		422	gravel			10 fels, 10 qtz			30 fels, 10 qtz				100	60	7		28		–		–		6		–		1		–	–	–	–	–	1	11	
									& mica				170	24	6		15		–		1		–		–		1		–	–	–	–	–	1	–	
													Total		14	1.0	51	3.9	–	–	1	.08	12	.9	–	–	8	.6	1	–	–	–	–	2	11	

Mineralogical analyses by R. P. Marquiss, C. J. Spangler, Jerome Stone, M. N. Hilliard