

Table 31. Descriptions of sediments sampled along Knob 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											
Q	60	51-JW-102	Riffle sand	5	No data	50 qtz, 55 sill sch, 15 peg, 5 gr, 5 fcls	No data	See + 1/4	24	21.1	Total	100	5	0.2	33	1.4	-	-	2	0.08	21	0.9	-	-	11	0.5	2	-	tr	tr	-	-	26					
cont	61	51-JW-101	Riffle gravel	5 1/2	No data	40 qtz, 25 fcls, 20 bio qtz, 15 sill sch	No data	See + 1/4	18	14.8	Total	100	5	0.1	28	0.8	-	-	-	-	10	0.3	-	-	10	0.3	2	-	tr	4	-	-	41					
R	62	51-JW-28	Riffle sand	4	No data	65 qtz, 20 fcls, 10 bio sch, 5 sill sch & mica	No data	See + 1/4	22.5	74.5	Total	100	8	1.2	49	7.3	-	-	-	-	14	2.1	-	-	3	0.4	1	-	-	-	1	-	24					
		51-JW-29	Bank silt	1 1/4	No data		No data		4.5	37.1	Total	100	10	0.8	45	3.5	=	-	1	0.08	7	0.5	-	-	1	0.08	1	-	-	-	-	-	35					
	63	51-JW-30	Riffle sand	4	No data	70 qtz, 15 gr & peg, 5 fcls, 5 sill sch	No data	See + 1/4	19	69.2	Total	100	3	0.4	51	7.0	-	-	-	-	20	2.8	-	-	1	0.1	1	-	-	-	-	1	-	23				
	64	51-JW-31	Riffle sand		No data	70 qtz, 15 peg & fcls, 5 bio qtz, 5 gr, 5 mica	No data	See + 1/4	23	11.4	Total	100	4	0.09	18	0.4	1	0.02	2	0.05	2	0.05	-	-	16	0.4	3	-	-	-	-	-	54					
	65	51-JW-32	Riffle sand	6 1/2	No data	70 qtz, 10 fcls, 10 bio qtz, 5 peg, 5 sill sch	No data	See + 1/4	24	15.0	Total	100	3	0.09	36	1.1	1	0.03	-	-	14	0.4	-	-	6	0.2	1	-	-	-	-	1	-	38				
	66	51-JW-33	Riffle gravel	5 1/2	No data	50 qtz, 30 sill sch, 15 bio qtz, 5 fcls, 10 peg	No data	See + 1/4	18	15.4	Total	100	7	0.2	15	0.5	1	0.03	-	-	17	0.5	-	-	4	0.1	1	-	-	-	-	-	53	line 2				
		51-JW-34	Riffle gravel	5 1/2	No data		No data		15.5	14.0	Total	100	4	0.1	9	0.3	-	-	-	-	9	0.3	-	-	15	0.4	1	-	-	-	2	-	59	line 1				
S	67	51-JW-35	Riffle sand	6	No data	70 qtz, 15 sill sch, 5 fcls, 5 peg, 5 bio sch & mica	No data	See + 1/4	26	39.9	Total	100	3	0.2	8	0.6	-	-	-	-	14	1.1	-	-	21	1.7	1	-	-	-	3	-	50					
		51-JW-36	Bank gravel	6	No data	40 bio qtz, 40 sill sch, 10 qtz, 5 fcls, 5 gr	No data	See + 1/4	6	21.5	Total	100	16	0.8	19	1.0	1	0.05	-	-	26	1.3	-	-	38	1.9	-	-	-	-	-	-	-					
	68	51-JW-37	Riffle gravel	6	No data	50 qtz, 20 bio qtz, 20 sill sch, 6 fcls, 4 mica	No data	See + 1/4	18	22.3	Total	100	1	0.05	14	0.8	2	0.1	-	-	6	0.3	-	-	74	4.0	1	-	-	-	1	-	1					
	69	51-JW-38	Riffle sand	6 1/2	No data	80 qtz, 5 fcls, 5 bio qtz, 5 gr & peg, 5 sill, mica & gr	No data	See + 1/4	29	18.6	Total	100	2	0.01	14	0.5	-	-	2	0.07	6	0.2	-	-	73	2.7	1	-	-	-	2	-	-					
T	70	51-JW-64	Riffle sand	6	No data	40 qtz, 25 sill sch, 20 bio qtz, 10 fcls, 5 gr & peg	No data	See + 1/4	19	20.9	Total	100	38	1.6	22	0.9	1	0.04	2	0.08	3	0.1	-	-	3	0.1	1	-	-	-	-	-	30					
	71	51-JW-65	Bank gravel	5 1/4	No data	50 qtz, 30 bio qtz, 10 peg, 5 fcls, 5 sill sch	No data	See + 1/4	5	12.6	Total	100	30	0.9	22	0.7	2	0.06	1	0.03	2	0.06	-	-	2	0.06	tr	-	-	2	2	-	37					
	72	51-JW-63	Riffle gravel	7	No data	60 qtz, 25 bio qtz, 10 fcls, 5 sill sch, 5 gr & peg	No data	See + 1/4	17	19.8	Total	100	18	0.7	21	0.8	2	0.08	1	0.04	7	0.3	-	-	6	0.2	tr	-	-	5	-	-	40					
U	73	51-JW-49	Riffle sand	6	No data	35 qtz, 20 sill, 20 bio sch, 15 peg, 5 mica, 5 gr & mica, 5 peg	No data	See + 1/4	24	42.6	Total	100	4	0.4	57	5.4	1	0.1	-	-	1	0.1	-	-	10	1.0	6	-	1	tr	-	-	20					
	74	51-JW-50	Riffle sand	7	No data	70 qtz, 15 sill, 10 fcls, 5 bio qtz	No data	See + 1/4	25	16.8	Total	100	10	0.3	22	0.7	-	-	1	0.03	2	0.07	-	-	8	0.3	1	-	-	1	-	-	55					
	75	51-JW-51	Riffle sand	6	No data	60 qtz, 15 bio qtz, 15 sill sch, 5 fcls	No data	See + 1/4	19	184.8	Total	100	20	7.4	34	14.4	-	-	-	-	3	1.1	-	-	3	1.1	tr	-	-	-	-	-	35					
		51-JW-52	Riffle sand	6	No data	60 qtz, 15 sill sch, 10 peg, 5 fcls	No data	See + 1/4	21	78.2	Total	100	12	1.9	50	7.8	2	0.3	2	0.3	5	0.8	-	-	7	1.1	tr	-	-	-	-	-	22					
		51-JW-53	Bank clay	3 1/2	-	-	-	-	7	16.6	Total	100	2	0.08	54	2.1	1	0.04	1	0.04	2	0.08	-	-	18	0.7	1	-	-	tr	-	-	21					
	76	51-JW-56	Riffle sand	7 1/2	No data	60 qtz, 15 bio qtz, 15 sill sch, 5 fcls, 5 peg	No data	See + 1/4	21	60.4	Total	100	11	1.3	63	7.6	-	-	2	0.2	3	0.4	-	-	3	0.4	1	-	3	-	-	-	14					
		51-JW-57	Riffle sand	7 1/2	No data		No data		29	80.8	Total	100	13	2.1	72	11.6	-	-	2	0.3	2	0.3	-	-	3	0.5	4	-	-	-	-	-	4					
	77	51-JW-58	Riffle sand	5 1/2	No data	65 qtz, 25 sill sch, 5 bio qtz, 5 peg	No data	See + 1/4	22	55.6	Total	100	16	1.8	54	6.0	-	-	-	-	5	0.6	-	-	4	0.4	tr	-	tr	tr	-	-	21					
	78	51-JW-59	Riffle gravel	7	No data	50 qtz, 20 bio qtz, 10 fcls, 10 sill sch, 5 peg, 5 gr	No data	See + 1/4	17	72.5	Total	100	12	1.7	56	8.1	1	0.1	1	0.1	7	1.0	-	-	5	0.7	tr	-	1	-	tr	-	17					
		51-JW-60	Bank silt	-	-	-	-	-	7	10.8	Total	100	10	0.2	55	1.2	4	0.09	1	0.02	-	-	-	-	17	0.4	-	-	-	tr	tr	-	13					
V	79	51-JW-54	Riffle gravel	5 3/4	No data	65 qtz, 15 fcls, 10 bio sch, 5 peg, 5 mica, bio, gr & sill sch	No data	See + 1/4	18	35.7	Total	100	20	1.4	35	2.5	1	0.07	1	0.07	7	0.5	-	-	6	0.4	tr	-	-	-	-	-	30					
		51-JW-55	Bank gravel	4 3/4	No data	85 qtz, 1 1/2 fcls, 2 1/2 bio gr	3	See + 1/4	12	165.1	Total	100	21	8.2	30	11.7	-	-	-	-	21	8.2	-	-	4	1.6	tr	-	-	tr	-	-	24					
	80	51-JW-62	Riffle sand	6	No data	40 qtz, 20 bio qtz, 25 sill sch, 10 fcls, 5 gr & peg	No data	See + 1/4	22	20.6	Total	100	16	0.7	38	1.6	3	0.1	2	0.08	7	0.3	-	-	14	0.6	1	-	-	-	-	-	19					