

Table 33. Descriptions of sediments sampled along Flyda Creek and other tributaries to the Broad River, Rutherford County, N.C.

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								
A	1	51-PK-113	Riffle gravel	4	No data	50 gts, 50 rock frags	No data	No data	See + 1/4	14		74.6	Total	100	5	0.7	62	9.2	2	0.3	1	0.1	12	1.8	—	—	3	0.4	—	—	—	—	1	—	14		
	2	51-PK-114	Riffle gravel	4	No data	50 gts, 50 gr & silt sch	No data	No data	See + 1/4	15		159.1	Total	100	6	1.9	67	21.3	—	—	2	0.6	11	3.5	—	—	5	1.6	—	—	—	—	—	—	9		
	3	51-PK-111	Riffle sand	4	No data	65 gts, 35 rock frags	No data	No data	See + 1/4	20		349.0	Total	100	13	9.1	56	39.0	—	—	1	0.7	9	6.3	—	—	4	2.8	2	—	—	—	—	—	15		
		51-PK-112	Bank gravel	2	15	90 gts, 10 silt sch	8	See + 1/4		4		62.3	Total	100	8	1.2	57	8.4	—	—	3	0.4	9	1.3	—	—	10	1.5	—	—	—	—	—	—	13		
	4	51-PK-115	Riffle gravel	7	No data	70 gts, 30 bio-grn & gr	No data	No data	See + 1/4	13		60.8	Total	100	9	1.1	60	7.3	4	0.5	2	0.2	9	1.1	—	—	10	1.2	1	—	—	—	—	—	5		
	5	51-PK-109	Riffle gravel	8	No data	60 gts, 20 bio-sch, 20 gr	2 1/2	No data	See + 1/4	10		75.2	Total	100	9	1.4	59	8.9	—	—	3	0.5	3	0.5	—	—	5	0.8	4	—	—	—	1	—	16		
		51-PK-110	Bank gravel	3 1/2	15	90 gts, 10 bio-sch	2	See + 1/4		6		44.8	Total	100	15	1.6	60	6.4	1	0.1	7	0.7	10	1.1	—	—	2	0.2	—	—	—	—	—	—	5		
	6	51-PK-116	Riffle gravel	6	No data	85 gts, 15 gr & silt sch	No data	No data	See + 1/4	12		77.9	Total	100	13	2.0	64	10.0	1	0.2	2	0.3	8	1.2	—	—	5	0.8	1	—	—	—	—	—	6		
	7	51-PK-117	Riffle gravel	4	No data	40 gts, 25 bio-sch, 20 silt sch, 10 pg & gr, 5 fela & musc	No data	No data	See + 1/4	15		25.2	Total	100	9	0.5	56	2.8	2	0.1	1	0.05	20	1.0	—	—	5	0.3	1	—	—	—	—	—	6		
		51-PK-118	Bank clay	3	tr	gts	1/4	No data	90 gts, 5 fela, 3 bio-sch, 2 silt sch	18		34.2	Total	100	13	1.1	47	3.8	—	—	5	0.4	20	1.6	—	—	8	0.6	—	—	—	—	—	—	7		
	8	51-PK-119	Riffle sand	8	No data	85 gts, 10 bio-sch, 5 pg, 10 silt sch	1 1/2	No data	See + 1/4	19		54.9	Total	100	9	1.0	66	7.2	—	—	1	0.1	18	2.0	—	—	3	0.3	—	—	—	—	—	—	3		
	9	51-PK-120	Riffle gravel	7	No data	80 gts, 20 rock frags	No data	No data	See + 1/4	14		67.5	Total	100	15	2.0	61	8.2	4	0.5	3	0.4	11	1.5	—	—	2	0.3	—	—	—	—	—	—	4		
B	10	51-PK-121	Riffle gravel	2 1/2	No data	75 gts, 20 bio-sch, 5 pg & silt sch	3 1/2	No data	See + 1/4	6		80.7	Total	100	26	4.2	34	5.5	1	0.2	1	0.2	24	3.9	—	—	—	—	—	—	—	—	—	—	14		
C	12	51-PK-107	Riffle gravel	3	No data	50 bio-sch, 40 gts, 10 gr	3	No data	See + 1/4	8		155.7	Total	100	19	5.9	47	14.6	1	0.3	3	0.9	12	3.7	—	—	3	0.9	1	—	—	—	1	—	13		
		51-PK-108	Bank gravel	2 1/2	20	50 gts, 50 gr, bio-grn, omph	6	See + 1/4		8		64.9	Total	100	10	1.5	27	4.1	—	—	2	0.3	19	2.9	—	—	1	0.2	—	—	—	—	22	2	17		
	13	51-PK-106	Riffle gravel	4	No data	55 gr-grn, bio-grn & silt sch, 45 gts	3	No data	See + 1/4	10		190.0	Total	100	16	6.1	59	22.4	1	0.4	5	1.9	6	2.3	—	—	3	1.1	—	—	—	—	2	—	8		
	14	51-PK-104	Riffle gravel	4 1/2	No data	85 gts, 10 bio-sch, 5 gr & pg	No data	No data	See + 1/4	12		150.5	Total	100	11	3.3	50	15.0	—	—	2	0.6	10	3.0	—	—	1	0.3	6	—	—	—	2	—	18		
	15	51-PK-105	Riffle gravel	5	No data	75 gts, 20 bio-sch, 5 pg, musc, gr, silt	No data	No data	See + 1/4	15		229.2	Total	100	10	4.6	50	22.9	—	—	3	1.4	12	5.5	—	—	1	0.5	6	—	—	—	1	—	17		
	16	51-PK-103	Riffle gravel	5 1/2	No data	70 gts, 30 bio-grn & silt sch	No data	No data	See + 1/4	12		139.4	Total	100	15	4.2	63	17.5	—	—	5	1.4	4	1.1	—	—	1	0.3	4	—	—	—	1	—	7		
	17	51-PK-101	Bank sand	3 1/2	8	99 gts, 1 silt sch, ky, fela & pg	2	See + 1/4		13		187.5	Total	100	17	6.7	67	26.4	1	0.4	1	0.4	3	1.2	—	—	3	1.2	—	—	—	—	—	—	8		
		51-PK-102	Riffle gravel	5	No data	80 gts, 10 bio-sch, 5 silt sch, 5 pg, fela & musc	No data	No data	See + 1/4	14		422.5	Total	100	10	8.4	78	65.8	—	—	1	0.8	—	—	—	—	1	0.8	2	—	—	—	—	—	8		
	18	51-PK-99	Riffle sand	4	No data	75 gts, 25 silt sch & bio-grn	No data	No data	See + 1/4	25		160.0	Total	100	9	2.9	65	20.8	1	0.3	3	1.0	5	1.6	—	—	2	0.6	2	—	—	—	3	—	10		
D	11	51-PK-100	Riffle sand	5	No data	70 gts, 30 rock frags	No data	No data	See + 1/4	19		150.6	Total	100	10	3.0	52	15.6	—	—	2	0.6	22	6.6	—	—	1	0.3	1	—	—	—	—	—	12		
	19	51-PK-98	Riffle gravel	7	No data	55 gts, 45 rock frags	No data	No data	See + 1/4	10		32.7	Total	100	10	0.7	59	3.9	1	0.07	1	0.07	11	0.7	—	—	4	0.3	1	—	—	—	1	—	12		
	20	51-PK-95	Riffle gravel	6 1/2	No data	90 gts, 10 bio-grn, to silt	1	No data	See + 1/4	9		46.6	Total	100	10	0.9	63	5.9	—	—	5	0.5	6	0.6	—	—	3	0.3	1	—	—	—	2	—	10		
		51-PK-96	Riffle gravel	5	No data	50 gts, 50 silt sch, gr & bio-grn	No data	No data	See + 1/4	18		78.3	Total	100	9	1.4	58	9.1	1	0.2	1	0.2	17	2.7	—	—	2	0.3	2	—	—	—	—	—	10		
	21	51-PK-97	Riffle gravel	5	No data	50 gts, 50 rock frags	No data	No data	See + 1/4	17		50.8	Total	100	18	1.8	57	5.8	—	—	3	0.3	12	1.2	—	—	—	—	2	—	—	—	—	—	8		
	22	51-PK-94	Riffle gravel	8	No data	90 gts, 10 rock frags	1 1/2	No data																													