

Table 29. Descriptions of sediments sampled along Buffalo Creek and Bowens 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		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							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	
										Volume ratio	Abundance																									Weight of concentrate (grams)
M	49	51-KR-101	Bank sand	0	No data		No data	21		1.5	Total	100	10	0.03	40	0.1	—	—	—	—	—	—	15	0.05	—	—	—	—	—	—	35					
cont		51-KR-102	Bank gravel		No data	90 bio gm, 5 fty	No data	See + 1/4	9		21.3	Total	100	20	1.0	45	2.3	—	—	—	—	23	1.2	—	—	—	—	—	—	9						
	50	51-KR-119	Riffle sand	3 1/2	No data	95 fty, 5 rock frags	No data	See + 1/4	26		15.1	Total	100	—	—	80	2.4	—	—	2	0.06	1	0.03	—	—	—	—	—	—	17						
	51	51-KR-87	Riffle sand	12	No data	85 fty, 15 rock frags	No data	See + 1/4	19		31.4	Total	100	3	0.2	51	3.2	1	0.06	—	—	10	0.6	2	0.1	6	0.4	1	—	2	—	24				
	52	51-KR-88	Riffle sand	4	No data		No data	No data	27		11.9	Total	100	2	0.05	47	1.1	1	0.02	2	0.05	11	0.3	—	—	8	0.2	1	—	—	—	27				
N	53	51-KR-104	Riffle gravel	4	No data	60 fty, 15 sill sch, 15 bio gm, 10 peg & gn	No data	See + 1/4	14		78.4	Total	100	5	0.8	32	5.0	—	—	—	—	30	4.7	—	—	—	—	3	—	—	—	30				
	57	51-KR-115	Riffle sand	—	—	—	—	No data	32		No report																									
	58	51-KR-89	Riffle sand	4	No data	70 fty, 30 rock frags	No data	See + 1/4	20		48.9	Total	100	3	0.3	68	6.6	—	—	—	—	5	0.5	—	—	4	0.4	—	—	—	—	20				
	59	51-KR-114	Riffle sand	2	—	—	—	No 100 fty data	25		3.8	Total	100	3	0.02	77	0.6	3	0.02	—	—	—	—	—	—	—	—	—	—	—	—	17				
	60	51-KR-106	Riffle sand	2	No data	90 fty, 10 rock frags	No data	See + 1/4	31		24.0	Total	100	12	0.6	62	3.0	—	—	1	0.05	12	0.6	—	—	—	—	—	—	2	1	—	10			
	61	51-KR-105	Riffle gravel	3	No data	55 fty, 20 sill sch, 15 bio gm, 10 peg & gn	No data	See + 1/4	13		41.6	Total	100	3	0.2	32	2.7	—	—	—	—	26	2.2	5	0.4	3	0.2	1	—	5	1	—	24			
	62	51-KR-90	Riffle sand	4 1/2	No data	65 fty, 35 rock frags	No data	See + 1/4	26		10.7	Total	100	4	0.09	41	0.9	—	—	—	—	11	0.2	5	0.1	4	0.09	—	—	2	—	4	—	29		
	63	51-KR-107	Riffle gravel	3	No data	65 sill sch, 30 fty, 5 fela	No data	See + 1/4	16		31.2	Total	100	4	0.2	45	2.8	—	—	—	—	10	0.6	—	—	4	0.2	1	—	5	—	25	—	6		
	64	51-KR-108	Riffle gravel	4 1/2	No data	95 fty, 5 rock frags	No data	See + 1/4	18		5.0	Total	100	2	0.02	50	0.5	—	—	—	—	17	0.2	1	0.01	—	—	—	—	5	—	—	—	25		
	65	51-KR-91	Riffle sand		No data	50 fty, 25 sill sch, 25 bio gm	No data	See + 1/4	24		10.4	Total	100	—	—	56	1.2	1	0.02	—	—	10	0.2	2	0.04	10	0.2	2	—	1	—	6	—	12		
O	54	51-KR-118	Riffle sand	3 1/2	No data	95 fty, 5 rock frags	No data	See + 1/4	20		25.8	Total	100	—	—	72	3.7	—	—	1	0.05	6	0.3	—	—	—	—	—	—	2	—	—	—	19		
	55	51-KR-117	Riffle gravel	4	No data	90 fty, 10 rock frags	No data	See + 1/4	14		22.9	Total	100	2	0.09	74	3.4	—	—	—	—	13	0.6	—	—	—	—	—	—	4	—	—	—	7		
P	66	51-KR-113	Riffle sand	4	No data	55 fty, 45 rock frags	No data	See + 1/4	19		9.0	Total	100	6	0.1	56	1.0	—	—	—	—	5	0.09	—	—	—	—	3	—	1	1	—	—	28		
	67	51-KR-109	Riffle gravel	2 1/2	No data	60 sill sch, 30 fty, 10 bio gm	No data	See + 1/4	15		74.3	Total	100	3	0.4	27	4.0	1	0.1	—	—	31	4.6	4	0.6	10	1.5	4	—	4	—	—	—	16		
	68	51-KR-92	Riffle sand	4	—	—	—	No data	32		3.4	Total	100	—	—	6	0.04	—	—	—	—	6	0.04	7	0.05	5	0.03	—	—	1	—	4	—	71		
	69	51-KR-110	Riffle gravel	3 1/2	No data	50 fty, 30 sill sch, 20 rock frags	No data	See + 1/4	11		50.1	Total	100	2	0.2	32	3.2	1	0.1	—	—	5	0.5	1	0.1	1	0.1	33	—	1	—	—	—	24		
	70	51-KR-112	Riffle gravel	3 1/2	No data	75 fty, 25 rock frags	No data	See + 1/4	18		15.8	Total	100	1	0.03	80	2.5	—	—	—	—	—	—	—	—	—	—	4	—	2	—	—	—	13		
	71	51-KR-111	Riffle gravel	3	No data	50 fty, 30 sill sch, 20 rock frags	No data	See + 1/4	14		110.9	Total	100	3	0.7	41	9.1	—	—	—	—	2	0.4	—	—	—	—	24	—	12	—	—	—	18		
	72	51-KR-93	Riffle sand	4	No data	65 fty, 35 rock frags	No data	See + 1/4	22		52.8	Total	100	5	0.5	42	4.4	—	—	—	—	13	1.4	1	0.1	6	0.6	9	—	6	—	3	—	15		
	73	51-KR-94	Riffle gravel	7	No data	70 fty, 15 sill sch, 15 clay balls	No data	See + 1/4	17		91.4	Total	100	—	—	28	5.1	—	—	—	—	15	2.7	—	—	4	0.7	3	—	4	—	—	—	46		
Q	74	51-OT-198A	Riffle gravel	6	No data	75 fty, 15 peg, 10 sill sch	3	See + 1/4	11		43.2	Total	100	20	1.7	34	2.9	—	—	—	—	20	1.7	2	0.2	2	0.2	16	—	—	—	—	—	6		
		51-OT-199A	Bank silt	5	—	—	—	—	1	33	4.05	Total	100	15	0.1	30	0.3	1	0.009	1	0.009	27	0.2	7	0.06	—	—	7	—	4	—	—	—	8		
	75	51-OT-200	Riffle sand	5	No data	95 fty, 5 sill sch	No data	See + 1/4	22		29.9	Total	100	13	0.8	33	2.0	1	0.06	1	0.06	11	0.7	14	0.8	7	0.4	1	—	5	—	—	—	14		
	76	51-OT-201	Riffle gravel	4 1/2	No data	90 sill sch, 10 fty	No data	See + 1/4	12		296.6	Total	100	3	1.8	21	12.4	—	—	—	—	7	4.1	12	7.1	3	1.8	5	—	29	—	—	—	20		
	77	51-OT-202	Riffle gravel	6	15	70 fty, 30 sill sch	1	6	60 fty, 40 sill sch	13		22.6	Total	100	6	0.3	38	1.7	—	—	—	—	17	0.8	12	0.5	1	0.05	9	—	6	—	—	—	11	
R	78	51-OT-203	Riffle gravel	4 1/2	No data	70 sill sch, 20 bio gm, 10 fty	3	See + 1/4	10		176.5	Total	100	4	1.4	10	3.5	—	—	—	—	3	1.1	5	1.8	—	—	5	—	58	—	—	—	15		
	79	51-OT-205	Riffle gravel	5	No data	55 sill sch, 35 fty, 5 fela, 5 bio gm	7	See + 1/4	15		17.2	Total	100	5	0.2	24	0.8	—	—	—	—	12	0.4	9	0.3	4	0.1	1	—	23	—	—	—	22		
	80	51-OT-204	Riffle gravel	1	No data	65 sill sch, 30 fty, 5 bio gm	1 1/4	See + 1/4	15		52.5	Total	100	19	2.0	2	0.2	—	—	—	—	9	0.9	—	—	8	0.8	1	—	41	—	—	—	20		
	81	51-OT-206	Riffle gravel	6	No data	50 fty, 30 sill sch, 10 bio gm, 5 fela, 5 peg	1 1/2	See + 1/4	15		28.9	Total	100	10	0.6	20	1.2	—	—	—	—	15	0.9	11	0.6	3	0.2	2	—	27	—	—	—	12		
S	82	51-OT-209	Riffle gravel	4 1/2	No data	45 sill sch, 40 fty, 15 peg	3 1/2	See + 1/4	13		75.6	Total	100	21	3.2	30	4.5	—	—	—	—	19	2.9	10	1.5	—	—	1	—	10	—	—	—	9		
	83	51-OT-208	Bank gravel	6	22	95 fty, 5 fela	No data	See + 1/4	4	8	72.5	Total	100	24	4.1	35	6.0	—	—	—	—	2	0.3	8	1.4	3	0.5	—	—	10	—	—	—	18		
	84	51-OT-207	Riffle gravel	7	No data	60 fty, 35 sill sch, 5 fela	1	See + 1/4	15		75.6	Total	100	23	3.5	29	4.4	—	—	—	—	7	1.1	6	0.9	4	0.6	—	—	8	—	—	—	23		
T	85	51-OT-210	Riffle gravel	4	No data	60 bio gm, 25 fty, 10 peg, 5 sill sch	4	See + 1/4	15		45.1	Total	100	3	0.3	23	2.1	—	—	—	—	14	1.3	10	0.9	3	0.3	1	—	13	—	—	—	33		