

Table 3. Sand fraction heavy-mineral analyses of sediment samples from the Rio de La Plata, Rio Grande de Manati, system. G: garnet; A: apatite; R: rutile; H: hematite; C: chromite; and TO: tourmaline.

Sample	Magnetite	Ilmenite	Amphiboles+ pyroxenes	Epidote	Sphene	Zircon	Trace Minerals	Altered Grains rock fragments
Rio de La Plata								
1	16.7	5.8	40.8	12.4	0.0	0.0	G	24.2
24	27.8	5.8	34.9	10.3	0.0	0.0	G,R	21.2
Rio Cibuco								
11	16.4	9.9	32.4	15.1	0.4	0.1	G,R=0.1	25.5
7	20.8	10.8	32.0	13.5	1.8	0.0	0.0	21.1
8	27.9	8.7	30.3	10.1	1.1	0.2	R	21.7
9	8.8	10.5	34.6	11.5	0.6	0.0	R=0.1	33.9
4	25.9	9.4	32.1	10.5	1.3	0.2	0.0	20.6
6	9.6	7.2	43.0	12.9	2.0	0.0	G	25.2
22	41.9	5.5	20.1	6.3	0.2	0.0	0.0	25.9
Rio Mavilla								
10	13.1	10.6	34.1	16.3	0.4	0.1	G,R,A	25.4
3	25.4	10.3	27.9	13.0	0.1	0.0	G,R	23.2
17	13.2	9.4	32.2	13.3	0.2	0.1	R,H=0.3	31.2
18	28.5	4.9	25.8	10.9	0.2	<0.1	R,A	29.6
19	23.6	7.3	27.6	6.1			R,H=0.2	34.7
20	29.3	11.6	26.9	10.3	0.3	0.0	R	21.6
Rio de Los Negros								
5	16.1	12.6	33.8	8.6	1.4	0.0	R	27.5
Rio Dos Bocas								
28	15.8	6.0	41.1	9.3	0.6	0.0	0.0	27.2
Rio Indio								
12	16.3	16.6	41.9	11.1	1.0	0.3	G	12.8
13	21.4	14.7	37.4	12.3	0.9	0.3	G	13.0
Rio Unibon								
23	2.4	15.4	34.9	15.5	1.5	0.0	G,R=0.3	20.0
Rio Las Carreras								
27	3.8	7.7	48.0	11.5	0.8	0.4	0.0	27.7
Rio Morovis								
26	77.4	11.3	3.5	1.6	1.3	0.6	R=0.1,A=0.2	4.0
25	66.4	19.3	4.7	2.0	1.3	0.6	G=0.3,R=0.1,A=0.2,C,TO	5.1
Rio Manati								
15	14.0	17.3	37.0	11.1	0.1	0.1	R	20.4
16	29.4	11.9	28.8	11.0	0.2	0.0	0.0	18.6