UNITED STATES DEPARTMENT OF THE INTERIOR

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Analytical results and sample locality map of stream-sediment and heavy-mineral-concentrate samples from the Mt. Katmai quadrangle, and portions of the Naknek, Afognak, and Iliamna quadrangles, Alaska

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STUDIES RELATED TO AMRAP

The U.S. Geological Survey is required by the Alaskan National Interests Lands Conservation Act (Public Law 96-487, 1980), to survey certain Federal lands to determine their mineral values, if any. Results from the Alaska Mineral Resource Assessment Program (AMRAP) must be made available to the public and be submitted to the President and the Congress. This report presents analytical results of a geochemical survey of the Mt. Katmai quadrangle, and portions of the Naknek, Afognak, and Iliamna quadrangles, Alaska.

INTRODUCTION

During the summers of 1983-85, we conducted a reconnaissance geochemical survey of the Mt. Katmai quadrangle and portions of the Naknek, Afognak, and Iliamna quadrangles, Alaska (fig. 1). The area comprises approximately 10,000 mi^2 (26,000 km^2) on the northern part of the Alaska Pennisula. The towns of Naknek and King Salmon lie in the northwestern portion of the study area. The study area encompasses much of the Katmai National Park and Preserve, as well as a part of the McNeil State Game Preserve. Very few roads exist throughout the quadrangles and access to much of the area is limited to air or boat travel

The topographic relief in the study area is about 7090 ft. (2170 m), with a maximum elevation of 7090 ft. at the summit of Snowy Mountain. The relief is rugged and mountainous terrain with youthful stream drainages. Interstream uplands, underlain by extensive ground moraines, are covered by fields of grasses and low shrubs and have narrow, deeply incised drainages. Large glacial lakes preserved in the area were formed by the retreat of the glaciers from the terminal moraines (Keller and Reiser, 1959). The Valley of Ten Thousand Smokes, formed when the ash from the Mt. Katmai eruption of 1912 (Fenner, 1920), has been deeply incised and was not sampled. The climate is very wet; rainfall exceeds 200 inches per year.

Marine sedimentary rocks of the Mt. Katmai study area range in age from Jurassic through early Tertiary. Igneous rocks of Jurassic to early Tertiary age formed an early batholithic terrane that was the source for the extensive Naknek formation in the late Jurassic. The Kaguyak Formation of late Cretaceous age overlies the Naknek and is composed of littoral siltstone, sandstone and shale. Nonmarine siltstones shales, and coal-bearing units of Eocene age interfinger with volcanic rocks (Keller and Reiser, 1959). Basaltic to andesitic volcanic rocks form the active part of the Aleutian volcanic chain. Several of these volcanoes are active: Mt. Katmai erupted in 1912, Trident erupted in 1973, and Augustine, located just north of the study area, erupted in 1986. Mt. Mageik has an active hot-spring system in the summit caldera.

METHODS OF STUDY

Sample Media

Analyses of the stream-sediment samples represent the chemistry of the rock material eroded from the drainage basin upstream from each sample site. Such information is useful in identifying those basins which contain concentrations of elements that may be related to mineral deposits. Heavy-mineral-concentrate-samples provide information about the chemistry of certain minerals in rock material eroded from the drainage basin upstream from each

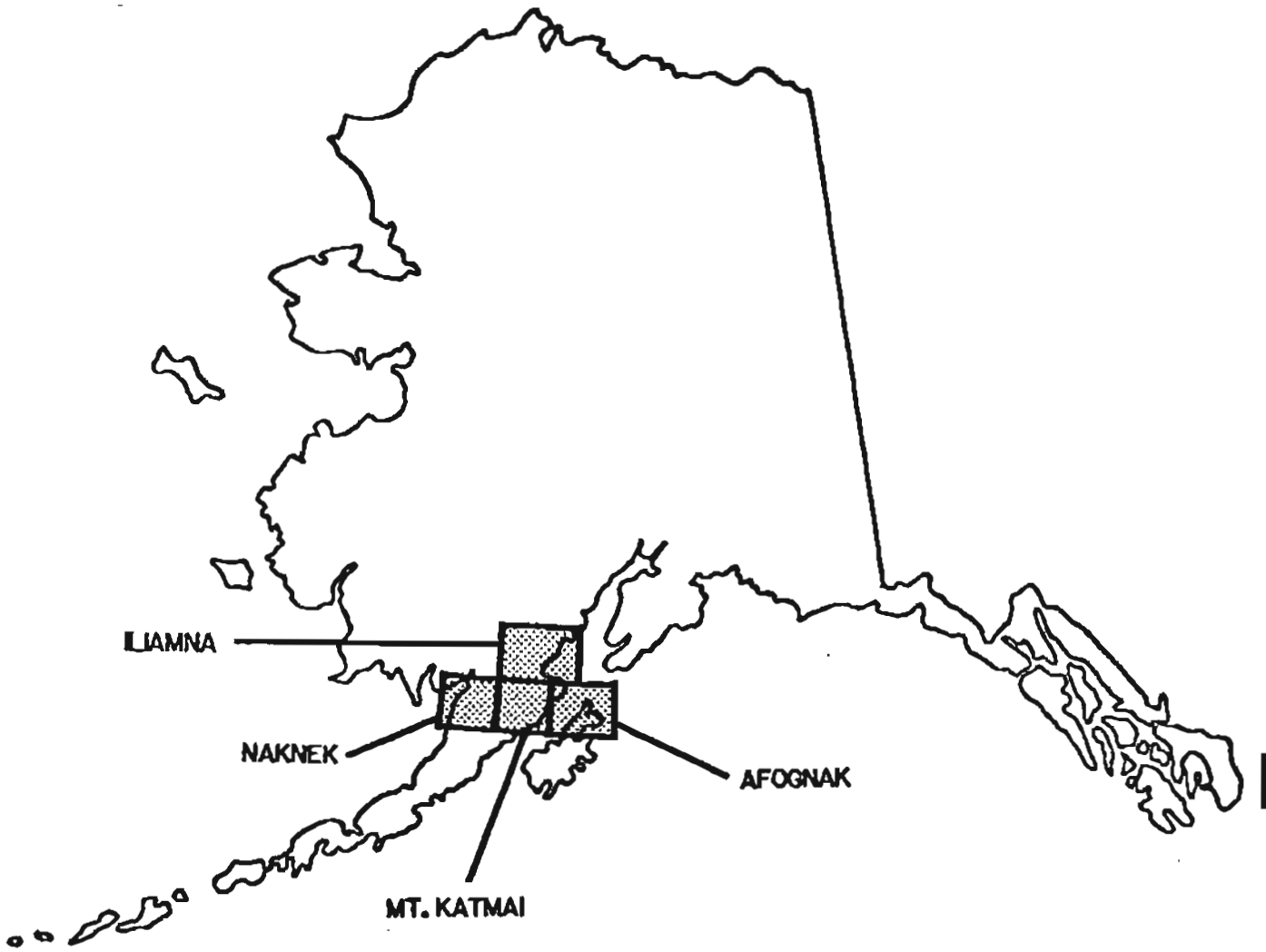

Figure 1. Index map of the Mt. Katmai, Naknek, Afognak, and Iliamna quadrangles, Alaska.

sample site. The selective concentration of minerals, many of which may be ore-related, permits determination of some elements that are not easily detected in stream-sediment samples.

Sample Collection

We collected samples at 1243 sites (plate 1). At nearly all of those sites, we collected both a stream-sediment sample and a heavy-mineral-concentrate sample. Sampling density was about 1 sample site per 5 mi^2 for the stream sediments and heavy-mineral concentrates; areas covered by glacial material were not sampled. The area of the drainage basins sampled ranged from 2 mi^2 to about 10 mi^2. Duplicate samples were taken at approximately every 20th site and are denoted by sample suffix SD in Table 2, or by sample suffix CD. Samples denoted by CR1 and CR2 in table 3 refer to pairs of duplicate samples.

Stream-sediment samples

The stream-sediment samples consisted of active alluvium collected primarily from first-order (unbranched) and second-order (below the junction of two first-order) streams as shown on USGS topographic maps (scale = 1:63,360). Each sample was composited from several localities within an area that may extend as much as 100 ft. from the site plotted on the map.

Heavy-mineral-concentrate samples

We collected heavy-mineral-concentrate samples from the same active alluvium as the stream-sediment samples. Each bulk sample was screened with a 2.0-mm (10-mesh) screen to remove the coarse material. The less than 2.0-mm fraction was panned until most of the quartz, feldspar, organic material, and clay-sized material were removed. Several panned concentrates were obtained from altered or mineralized rock at sites where alteration was observed; these samples are designated with the suffix CM in Table 3.

Sample Preparation

The stream sediment samples were air dried, then sieved using 80-mesh (0.17 mm) stainless steel sieves. The portion of the sediment passing through the sieve was saved for analysis.

After air drying, we used bromoform (specific gravity = 2.8) to remove the remaining quartz and feldspar from the heavy-mineral-concentrate samples that had been panned in the field. The resultant heavy mineral sample was separated into three fractions using a large electromagnet (in this case a modified Frantz Isodynamic Separator). The most magnetic material, primarily magnetite, and a second fraction, largely ferromagnesian silicates and iron oxides, was not analyzed. The third fraction (the least magnetic material which may include the nonmagnetic ore minerals, zircon, sphene, etc.) was split using a Jones splitter. One split was hand-ground for spectrographic analysis; the other split was saved for mineralogical analysis. These magnetic separates are the same separates that would be produced by using a Frantz Isodynamic Separator set at a slope of 15° and a tilt of 10° with a current of 0.1 ampere to remove the magnetite and ilmenite, and a current of 1.0 ampere to split the remainder of the sample into paramagnetic and nonmagnetic fractions.

Sample Analysis

We analyzed the stream-sediment and heavy-mineral-concentrate samples for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). The elements analyzed and their lower limits of determination are listed in Table 1. Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (magnesium, calcium, iron, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram). Analytical results for stream-sediment and the heavy-mineral-concentrate samples are listed in tables 2 and 3, respectively.

ROCK ANALYSIS STORAGE SYSTEM

Upon completion of all analytical work, the analytical results were entered into a computer-based file called Rock Analysis Storage System (RASS). This data base contains both descriptive geological information and analytical data. Any or all of this information may be retrieved and converted to a binary form (STATPAC) for computerized statistical analysis or publication (VanTrump and Miesch, 1977).

DESCRIPTION OF DATA TABLES

Tables 2-3 list the analyses for the samples of stream sediment and heavy-mineral-concentrate samples respectively. For the two tables, the data are arranged so that column 1 contains the USGS-assigned sample-site numbers. These numbers correspond to the numbers shown on the site location map (plate 1). Columns in which the element headings show the letter "s" below the element symbol are emission spectrographic analyses. A letter "N" in the tables indicates that a given element was looked for but not detected at the lower limit of determination shown for that element in table 1. If an element was observed but was below the lowest reporting value, a "less than" symbol (<) was entered in the tables in front of the lower limit of determination. If an element was observed but was above the highest reporting value, a "greater than" symbol (>) was entered in the tables in front of the upper limit of determination. If an element was not looked for in a sample, two dashes (--) are entered in tables 2-3 in place of an analytical value. Because of the formatting used in the computer program that produced tables 2-3, some of the elements listed in these tables (Fe, Mg, Ca, Ti, Ag, and Be) carry one or more nonsignificant digits to the right of the significant digits. The analysts did not determine these elements to the accuracy suggested by the extra zeros.

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TABLE 1.--Limits of determination for the spectrographic analysis of stream sediments, based on a 10-mg sample

[The spectrographic limits of determination for heavy-mineral-concentrate samples are based on a 5-mg sample, and are therefore two reporting intervals higher than the limits given for and stream sediments]

Elements	Lower determination limit	Upper determination limit
	Percent	
Magnesium (Mg)	0.02	10
Calcium (Ca)	.05	20
Iron (Fe)	.05	20
Titanium (Ti)	.002	1
	Parts per million	
Manganese (Mn)	10	5,000
Silver (Ag)	0.5	5,000
Arsenic (As)	200	10,000
Gold (Au)	10	500
Boron (B)	10	2,000
Barium (Ba)	20	5,000
Beryllium (Be)	1	1,000
Bismuth (Bi)	10	1,000
Cadmium (Cd)	20	500
Cobalt (Co)	5	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Lanthanum (La)	20	1,000
Molybdenum (Mo)	5	2,000
Niobium (Nb)	20	2,000
Nickel (Ni)	5	5,000
Lead (Pb)	10	20,000
Antimony (Sb)	100	10,000
Scandium (Sc)	5	100
Tin (Sn)	10	1,000
Strontium (Sr)	100	5,000
Vanadium (V)	10	10,000
Tungsten (W)	50	10,000
Yttrium (Y)	10	2,000
Zinc (Zn)	200	10,000
Zirconium (Zr)	10	1,000
Thorium (Th)	100	2,000

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska
[N, not detected; <, detected but below the limit of detection shown; >, determined to be greater than the value shown]

mple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
01S	58 30 47	153 58 59	.7	.70	3.0	.50	500	N	N	N	30	150
02S	58 29 36	154 2 8	1.0	1.00	7.0	.70	1,000	N	N	N	50	300
03S	58 32 4	154 5 47	1.0	1.00	5.0	.50	1,000	N	N	N	15	300
04S	58 31 2	154 11 26	1.0	1.00	5.0	.30	1,000	.5	N	N	20	300
05S	58 31 54	154 7 55	.7	1.00	2.0	.50	700	N	N	N	20	300
06S	58 32 38	154 14 42	1.0	1.00	2.0	.50	700	N	N	N	30	500
07S	58 32 37	154 14 53	1.0	1.00	3.0	.50	500	N	N	N	20	200
08S	58 32 9	154 13 39	1.0	1.00	5.0	.30	500	N	N	N	30	500
09S	58 31 54	154 13 55	1.0	1.00	3.0	.50	700	<.5	N	N	20	500
10S	58 31 29	154 15 59	1.0	1.50	3.0	.50	700	N	N	N	50	500
11S	58 31 9	154 17 26	1.0	1.00	5.0	.50	700	N	N	N	50	500
12S	58 30 52	154 18 27	1.0	1.00	5.0	.50	700	N	N	N	20	300
13S	58 30 46	154 18 30	1.0	1.00	5.0	.50	700	N	N	N	20	300
14S	58 30 29	154 17 41	2.0	2.00	7.0	.50	1,000	N	N	N	<10	100
15S	58 30 50	154 16 10	2.0	2.00	7.0	.70	700	<.5	N	N	30	200
16S	58 30 35	154 13 3	2.0	1.50	5.0	.70	1,000	N	N	N	20	300
17S	58 17 26	154 19 40	1.5	1.50	15.0	1.00	1,500	N	N	N	<10	100
18S	58 17 19	154 20 6	1.5	1.00	7.0	.70	1,000	N	N	N	10	200
19S	58 17 7	154 21 8	1.5	1.50	7.0	1.00	1,000	N	N	N	10	300
20S	58 19 24	154 19 40	2.0	1.50	7.0	.70	700	N	N	N	<10	100
21S	58 19 57	154 22 16	1.5	1.00	7.0	.70	700	N	N	N	15	150
22S	58 20 2	154 22 58	1.0	1.00	7.0	.70	1,000	N	N	N	50	150
23S	58 1 13	154 50 47	1.0	1.50	5.0	.50	700	N	N	N	50	100
24S	58 2 3	154 53 4	2.0	1.00	10.0	>1.00	1,000	N	N	N	<10	150
25S	58 5 38	154 52 55	2.0	1.50	10.0	>1.00	1,000	N	N	N	10	200
26S	58 3 34	154 53 26	1.0	1.00	10.0	1.00	1,000	N	N	N	15	200
27S	58 5 31	154 53 2	1.0	1.00	10.0	1.00	1,000	N	N	N	50	200
28S	58 7 57	154 52 23	1.5	1.00	10.0	1.00	1,000	N	N	N	10	100
29S	58 9 20	154 51 8	2.0	1.50	10.0	>1.00	1,000	N	N	N	10	200
30S	58 9 34	154 52 28	1.5	1.50	10.0	>1.00	1,000	N	N	N	15	100
31S	58 8 8	154 53 12	2.0	1.50	10.0	>1.00	1,000	N	N	N	10	200
32S	58 6 53	154 53 23	2.0	1.00	10.0	.70	1,000	<.5	N	N	<10	100
33S	58 5 35	154 55 11	2.0	1.00	15.0	1.00	1,500	N	N	N	10	300
34S	58 6 10	154 58 30	1.5	1.00	7.0	.70	1,000	N	N	N	15	200
35S	58 12 22	154 41 28	1.5	1.50	7.0	.70	1,000	N	N	N	10	200
36S	58 7 22	155 0 26	2.0	1.00	10.0	1.00	1,500	N	N	N	10	150
37S	58 12 18	154 41 34	2.0	1.00	10.0	1.00	1,500	N	N	N	<10	100
38S	58 11 38	154 42 53	2.0	1.50	10.0	1.00	1,500	N	N	N	<10	200
39S	58 11 26	154 43 18	2.0	1.00	10.0	1.00	1,000	N	N	N	<10	100
40S	58 4 32	154 32 59	2.0	1.50	10.0	1.00	1,500	N	N	N	<10	150
41S	58 6 7	154 30 38	1.0	1.00	5.0	.70	1,000	N	N	N	70	300
42S	58 6 44	154 32 45	1.5	1.00	7.0	.70	1,000	N	N	N	10	200
43S	58 6 56	154 34 49	1.5	1.00	10.0	1.00	1,000	N	N	N	<10	100
44S	58 6 54	154 36 36	1.5	1.50	10.0	1.00	1,500	N	N	N	10	200
45S	58 5 44	154 34 51	2.0	1.50	10.0	.70	1,000	N	N	N	10	200
46S	58 9 8	154 35 27	2.0	1.50	10.0	1.00	1,000	N	N	N	<10	200
47S	58 10 12	154 34 5	2.0	1.00	15.0	1.00	1,000	N	N	N	<10	100
48S	58 10 36	154 34 32	1.5	1.00	10.0	.70	1,000	N	N	N	15	200
49S	58 10 36	154 34 18	2.0	1.00	10.0	1.00	1,500	N	N	N	30	100
50S	58 10 40	154 36 24	2.0	1.00	10.0	>1.00	1,500	N	N	N	<10	100
51S	58 11 15	154 37 54	2.0	1.00	15.0	1.00	1,500	N	N	N	<10	100
52S	58 6 18	154 36 19	2.0	1.00	15.0	>1.00	1,500	N	N	N	<10	100
53S	58 0 27	154 47 9	1.5	1.00	15.0	1.00	1,500	N	N	N	<10	200
54S	58 2 12	154 46 47	2.0	1.00	10.0	.70	1,000	N	N	N	10	300
55S	58 2 16	154 46 42	1.5	1.00	7.0	.70	1,000	N	N	N	15	300
56S	58 0 55	154 44 12	1.5	.70	10.0	.70	1,000	N	N	N	10	300
57S	58 1 2	154 44 1	2.0	1.00	10.0	.70	1,000	N	N	N	10	500
58S	58 2 14	154 43 44	2.0	1.00	15.0	>1.00	1,500	N	N	N	<10	50
59S	58 4 48	154 43 12	2.0	1.00	10.0	1.00	1,500	N	N	N	20	150
60S	58 4 50	154 42 1	2.0	1.00	15.0	1.00	2,000	N	N	N	<10	70

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb
K00018	N	N	N	20	50	20	N	N	N	15	
K00028	N	N	N	30	50	20	N	N	N	10	
K00038	N	N	N	20	50	20	N	N	N	15	
K00048	N	N	N	20	20	20	N	N	N	15	
K00058	N	N	N	15	30	15	N	N	N	15	
K00068	N	N	N	15	50	15	N	N	N	20	
K00078	N	N	N	15	50	10	N	N	N	15	
K00088	N	N	N	20	70	30	N	N	N	30	
K00098	N	N	N	30	100	30	N	N	N	30	
K00108	<1.0	N	N	20	50	15	N	N	N	20	
K00118	N	N	N	20	50	15	N	N	N	20	
K00128	N	N	N	20	50	10	N	N	N	20	
K00138	N	N	N	30	50	20	N	N	N	20	
K00148	N	N	N	50	100	20	N	<5	N	20	
K00158	N	N	N	50	70	30	N	N	N	20	
K00168	N	N	N	30	70	20	N	N	N	20	
K00178	N	N	N	100	100	15	N	N	N	20	
K00188	N	N	N	30	100	20	N	N	N	20	
K00198	N	N	N	30	70	20	N	N	N	20	
K00208	N	N	N	50	200	20	N	N	N	50	
K00218	N	N	N	30	150	20	N	N	N	30	
K00228	N	N	N	50	200	20	N	N	N	20	
K00238	N	N	N	30	50	30	N	N	N	20	
K00248	N	N	N	70	150	20	N	N	N	30	
K00258	N	N	N	70	150	30	N	N	N	30	
K00268	N	N	N	50	100	20	N	N	N	20	
K00278	N	N	N	50	100	30	N	N	N	20	
K00288	N	N	N	70	150	30	N	N	N	20	
K00298	N	N	N	70	100	30	N	N	N	20	
K00308	N	N	N	100	200	15	N	N	N	20	
K00318	N	N	N	70	100	30	N	N	N	20	
K00328	N	N	N	50	100	20	N	N	N	15	
K00338	N	N	N	100	200	30	N	N	N	20	
K00348	N	N	N	50	70	20	N	N	N	20	
K00358	<1.0	N	N	50	70	20	N	N	N	15	
K00368	N	N	N	50	150	30	N	N	N	20	
K00378	N	N	N	50	100	20	N	N	N	15	
K00388	N	N	N	50	70	20	N	N	N	20	
K00398	N	N	N	70	100	20	N	N	N	20	
K00408	N	N	N	70	100	30	N	N	N	20	
K00418	<1.0	N	N	30	100	20	N	N	N	20	
K00428	<1.0	N	N	30	100	20	N	N	N	20	
K00438	N	N	N	50	100	20	N	N	N	20	
K00448	<1.0	N	N	70	200	20	N	N	N	20	
K00458	N	N	N	50	70	20	N	N	N	15	
K00468	<1.0	N	N	50	150	20	N	N	N	20	
K00478	N	N	N	70	150	30	N	N	N	30	
K00488	N	N	N	30	70	20	N	N	N	10	
K00498	N	N	N	50	100	30	N	N	N	15	
K00508	N	N	N	100	150	20	N	N	N	20	
K00518	N	N	N	70	200	20	N	N	N	20	
K00528	N	N	N	100	150	30	N	N	N	20	
K00538	N	N	N	70	150	20	N	N	N	20	
K00548	N	N	N	50	100	20	N	N	N	15	
K00558	N	N	N	30	70	20	N	N	N	20	
K00568	N	N	N	50	150	20	N	N	N	20	
K00578	N	N	N	50	100	15	N	N	N	20	
K00588	N	N	N	100	200	20	N	N	N	30	
K00598	N	N	N	70	150	20	N	N	N	20	
K00608	N	N	N	70	300	30	N	N	N	70	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

ample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
)01S	N	15	N	100	150	N	20	N	150	N
)02S	N	20	N	200	200	N	30	N	200	N
)03S	N	20	N	200	200	N	20	N	150	N
)04S	N	20	N	150	200	N	20	300	100	N
)05S	N	20	N	150	150	N	20	N	200	N
)06S	N	20	N	200	150	N	30	N	150	N
)07S	N	20	N	150	150	N	20	N	100	N
)08S	N	20	N	200	200	N	20	N	70	N
)09S	N	20	N	200	200	N	20	N	70	N
)10S	N	20	N	200	200	N	30	N	150	N
)11S	N	20	N	150	200	N	20	N	100	N
)12S	N	20	N	100	150	N	20	N	100	N
)13S	N	20	N	200	200	N	20	N	100	N
)14S	N	50	N	200	300	N	20	N	50	N
)15S	N	50	N	200	300	N	50	<200	70	N
)16S	N	30	N	200	200	N	30	N	100	N
)17S	N	50	N	200	700	N	50	200	100	N
)18S	N	50	N	200	500	N	30	N	100	N
)19S	N	30	N	200	200	N	30	N	70	N
)20S	N	30	N	300	500	N	30	N	70	N
)21S	N	20	N	300	300	N	20	N	70	N
)22S	N	30	N	150	300	N	30	<200	300	N
)23S	N	20	N	300	200	N	30	N	100	N
)24S	N	50	N	100	700	N	30	200	100	N
)25S	N	50	N	200	700	N	50	<200	100	N
)26S	N	50	N	100	700	N	30	<200	200	N
)27S	N	30	N	150	500	N	30	<200	150	N
)28S	N	70	N	150	1,000	N	30	<200	70	N
)29S	N	50	N	200	700	N	50	<200	100	N
)30S	N	50	N	200	1,000	N	30	300	50	N
)31S	N	50	N	200	700	N	50	<200	100	N
)32S	N	50	N	100	700	N	20	<200	50	N
)33S	N	50	N	150	1,000	N	50	300	70	N
)34S	N	50	N	200	300	N	20	N	100	N
)35S	N	50	N	200	300	N	30	200	100	N
)36S	N	50	N	200	700	N	30	300	70	N
)37S	N	50	N	200	700	N	30	200	100	N
)38S	N	50	N	300	700	N	30	200	200	N
)39S	N	50	N	200	700	N	30	200	70	N
)40S	N	50	N	200	1,000	N	30	300	100	N
)41S	N	20	N	200	300	N	20	<200	100	N
)42S	N	30	N	200	500	N	20	200	100	N
)43S	N	50	N	150	700	N	30	200	70	N
)44S	N	70	N	200	500	N	50	200	100	N
)45S	N	50	N	200	700	N	30	<200	100	N
)46S	N	50	N	300	500	N	50	200	100	N
)47S	N	50	N	200	1,000	N	30	<200	70	N
)48S	N	30	N	200	200	N	30	200	100	N
)49S	N	50	N	150	700	N	50	200	100	N
)50S	N	50	N	200	1,000	N	30	500	100	N
)51S	N	50	N	150	1,000	N	30	300	70	N
)52S	N	50	N	150	1,000	N	30	500	70	N
)53S	N	50	N	200	1,000	N	30	300	100	N
)54S	N	50	N	200	500	N	30	<200	150	N
)55S	N	30	N	200	300	N	20	<200	150	N
)56S	N	30	N	200	1,000	N	20	200	200	N
)57S	N	30	N	200	500	N	20	<200	100	N
)58S	N	50	N	N	1,500	N	50	500	100	N
)59S	N	50	N	150	700	N	30	300	70	N
)60S	N	50	N	150	1,500	N	50	200	700	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba
K0061S	58 7 6	154 27 21	2.0	1.00	15.0	>1.00	1,500	N	N	N	<10	
K0062S	58 7 32	154 27 39	1.5	1.00	10.0	1.00	1,500	N	N	N	<10	
K0063S	58 9 45	154 28 1	1.5	1.50	10.0	1.00	1,500	N	N	N	<10	
K0064S	58 10 55	154 29 2	1.5	1.50	10.0	1.00	1,000	N	N	N	10	
K0065S	58 12 55	154 35 10	1.5	1.00	15.0	1.00	1,500	N	N	N	<10	
K0066S	58 13 0	154 35 5	2.0	1.00	15.0	1.00	1,500	N	N	N	<10	
K0067S	58 8 33	154 38 29	2.0	1.00	15.0	1.00	1,000	N	N	N	N	
K0068S	58 9 40	154 36 27	2.0	1.00	10.0	1.00	1,500	N	N	N	<10	
K0069S	58 11 21	154 38 39	2.0	1.00	7.0	.70	1,000	N	N	N	<10	
K0070S	58 10 27	154 42 8	1.5	1.00	15.0	>1.00	1,500	N	N	N	<10	
K0071S	58 10 28	154 41 54	1.5	1.00	10.0	1.00	1,000	N	N	N	<10	
K0072S	58 9 41	154 41 57	2.0	1.50	10.0	1.00	2,000	N	N	N	10	
K0073S	58 9 37	154 41 40	2.0	1.50	10.0	1.00	1,500	N	N	N	<10	
K0074S	58 6 7	154 43 58	1.5	1.50	15.0	1.00	1,000	N	N	N	N	
K0075S	58 5 55	154 43 57	2.0	1.00	10.0	1.00	1,000	N	N	N	20	
K0076S	58 6 49	154 42 35	1.5	1.00	10.0	1.00	1,000	N	N	N	<10	
K0077S	58 7 39	154 42 31	1.5	1.00	10.0	1.00	1,000	N	N	N	10	
K0078S	58 9 5	154 42 4	1.5	.70	15.0	>1.00	1,000	N	N	N	<10	
K0079S	58 11 42	154 29 44	2.0	1.00	10.0	1.00	1,000	N	N	N	10	
K0080S	58 12 13	154 28 33	1.5	1.00	7.0	1.00	1,000	N	N	N	10	
K0081S	58 11 42	154 24 21	1.0	.70	10.0	1.00	1,000	N	N	N	10	
K0082S	58 12 6	154 24 40	1.5	1.00	7.0	.70	1,000	N	N	N	10	
K0083S	58 10 16	154 25 51	1.5	1.00	7.0	1.00	1,000	N	N	N	10	
K0084S	58 8 37	154 25 26	1.5	1.00	10.0	1.00	1,500	N	N	N	<10	
K0085S	58 8 25	154 59 29	1.5	1.50	10.0	1.00	1,000	N	N	N	<10	
K0086S	58 5 56	154 20 39	1.0	1.00	5.0	.70	700	N	N	N	20	
K0087S	58 10 16	154 58 30	2.0	1.50	10.0	1.00	1,000	N	N	N	<10	
K0088S	58 11 43	154 59 40	2.0	1.50	5.0	.70	1,000	N	N	N	10	
K0089S	58 11 44	154 59 27	1.5	1.50	7.0	.70	1,000	N	N	N	10	
K0090S	58 10 58	155 1 0	2.0	1.00	7.0	1.00	1,000	N	N	N	<10	
K0091S	58 10 35	155 2 23	1.5	1.50	7.0	1.00	1,000	N	N	N	<10	
K0092S	58 9 18	155 3 5	2.0	1.00	15.0	1.00	1,500	N	N	N	<10	
K0093S	58 2 30	154 38 43	2.0	1.00	15.0	1.00	2,000	N	N	N	<10	
K0094S	58 3 38	154 38 27	1.5	1.00	15.0	1.00	1,500	N	N	N	<10	
K0095S	58 6 2	155 17 8	1.5	1.00	5.0	.70	1,000	N	N	N	20	
K0096S	58 4 13	154 39 20	2.0	1.50	10.0	1.00	1,500	N	N	N	10	
K0097S	58 2 28	154 33 23	1.0	.70	7.0	1.00	1,000	N	N	N	15	
K0098S	58 6 9	155 17 6	1.5	1.00	7.0	.50	1,000	N	N	N	20	
K0099S	58 1 34	155 13 27	1.0	.70	3.0	.30	1,000	N	N	N	15	
K0100S	58 10 27	154 49 45	1.5	1.50	10.0	1.00	1,000	N	N	N	<10	
K0101S	58 11 54	154 41 50	1.5	1.00	10.0	1.00	1,500	N	N	N	<10	
K0102S	58 10 27	154 48 1	2.0	1.50	10.0	1.00	1,500	N	N	N	N	
K0103S	58 10 28	154 45 39	1.5	1.00	10.0	1.00	1,000	N	N	N	<10	
K0104S	58 10 17	154 45 58	1.5	1.00	10.0	1.00	1,000	N	N	N	10	
K0105S	58 10 15	154 51 19	2.0	2.00	10.0	1.00	1,500	<.5	N	N	10	
K0106S	58 8 36	154 47 33	1.5	1.50	5.0	.50	700	N	N	N	10	
K0107S	58 12 54	154 29 37	1.5	1.00	10.0	1.00	1,000	N	N	N	<10	
K0108S	58 12 35	154 32 16	2.0	1.50	10.0	1.00	1,000	N	N	N	15	
K0109S	58 12 20	154 33 57	2.0	1.00	15.0	1.00	1,000	.7	N	N	<10	
K0110S	58 10 59	154 37 37	2.0	1.00	10.0	1.00	1,500	N	N	N	<10	
K0111S	58 10 24	154 37 9	1.5	1.00	10.0	1.00	1,000	N	N	N	<10	
K0112S	58 5 59	154 40 28	2.0	1.00	10.0	.70	1,000	N	N	N	10	
K0113S	58 7 12	154 40 52	1.5	1.00	10.0	1.00	1,000	.5	N	N	<10	
K0114S	58 8 33	154 42 36	2.0	1.50	10.0	1.00	1,000	N	N	N	<10	
K0115S	58 8 1	154 41 18	1.5	1.00	15.0	1.00	1,000	N	N	N	<10	
K0116S	58 8 53	154 41 46	2.0	1.50	10.0	1.00	1,000	N	N	N	10	
K0117S	58 8 14	154 21 13	1.5	1.00	10.0	1.00	1,500	N	N	N	<10	
K0118S	58 9 31	154 20 10	2.0	1.00	15.0	1.00	1,000	N	N	N	<10	
K0119S	58 9 10	154 18 50	1.5	.70	20.0	1.00	1,000	N	N	N	<10	
K0120S	58 7 51	154 15 34	1.5	1.00	10.0	1.00	1,000	N	N	N	20	

Table 2. Analyses of stream-sediment samples from the Mt. Entiat study area, Alaska—(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
61S	N	N	N	100	150	50	N	N	N	30	N
62S	N	N	N	70	70	20	N	N	N	15	N
63S	N	N	N	50	150	20	N	N	N	20	<10
64S	N	N	N	50	70	20	N	N	N	20	30
65S	N	N	N	100	200	30	N	N	N	20	N
66S	N	N	N	100	200	30	N	N	N	20	N
67S	N	N	N	70	200	20	N	N	N	20	10
68S	N	N	N	70	150	20	N	N	N	20	N
69S	N	N	N	30	100	20	N	N	N	15	<10
70S	N	N	N	100	200	20	N	N	N	20	N
71S	N	N	N	30	100	20	N	N	N	20	10
72S	N	N	N	50	100	20	N	N	N	15	N
73S	N	N	N	70	200	20	N	N	N	20	<10
74S	<1.0	N	N	70	150	20	N	N	N	30	10
75S	N	N	N	70	150	20	N	N	N	20	<10
76S	<1.0	N	N	50	200	20	N	N	N	20	10
77S	N	N	N	70	200	30	N	N	N	20	10
78S	N	N	N	70	150	30	N	N	N	20	<10
79S	N	N	N	50	150	30	N	N	N	20	<10
80S	N	N	N	30	100	30	N	N	N	20	15
81S	N	N	N	50	150	30	N	N	N	20	20
82S	N	N	N	30	100	20	N	N	N	20	10
83S	N	N	N	50	100	20	N	N	N	15	10
84S	N	N	N	70	150	30	N	N	N	20	<10
85S	N	N	N	50	100	20	N	N	N	20	10
86S	<1.0	N	N	20	100	20	N	N	N	20	10
87S	N	N	N	70	150	20	N	N	N	20	N
88S	N	N	N	30	70	20	N	N	N	15	10
89S	N	N	N	30	50	20	N	N	N	15	10
90S	N	N	N	50	100	20	N	N	N	15	N
91S	N	N	N	50	10	20	N	N	N	15	15
92S	N	N	N	100	150	30	N	N	N	20	<10
93S	N	N	N	100	200	30	N	N	N	30	<10
94S	N	N	N	70	200	30	N	N	N	30	<10
95S	N	N	N	30	70	20	N	N	N	20	10
96S	<1.0	N	N	70	100	20	N	N	N	20	10
97S	<1.0	N	N	30	100	20	N	N	N	20	10
98S	<1.0	N	N	30	70	20	N	N	N	20	10
99S	N	N	N	10	70	15	N	N	N	15	15
00S	N	N	N	30	70	20	N	N	N	15	20
01S	N	N	N	70	150	50	N	N	N	20	10
02S	N	N	N	70	150	30	N	N	N	20	10
03S	N	N	N	50	150	20	N	10	N	20	10
04S	<1.0	N	N	50	100	50	N	N	N	20	10
05S	<1.0	N	N	50	150	70	N	N	N	20	15
06S	N	N	N	30	50	20	N	N	N	20	15
07S	N	N	N	70	100	30	N	N	N	20	<10
08S	N	N	N	70	70	30	N	N	N	20	20
09S	N	N	N	70	100	30	N	N	N	20	50
10S	N	N	N	100	150	20	N	N	N	20	<10
11S	N	N	N	50	70	30	N	N	N	15	10
12S	N	N	N	50	70	30	N	N	N	20	10
13S	N	N	N	70	100	30	N	N	N	20	<10
14S	N	N	N	50	70	20	N	N	N	20	<10
15S	N	N	N	70	200	20	N	N	N	20	<10
16S	N	N	N	70	150	30	N	N	N	30	<10
17S	N	N	N	100	150	20	N	N	N	20	<10
18S	N	N	N	70	100	20	N	N	N	20	10
19S	N	N	N	100	200	30	N	N	N	20	<10
20S	N	N	N	50	200	20	N	N	N	20	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K00618	N	50	N	150	1,000	N	50	300	70
K00628	N	50	N	200	1,000	N	20	500	100
K00638	N	50	N	200	700	N	30	200	70
K00648	N	50	N	500	500	N	30	N	100
K00658	N	50	N	200	1,000	N	30	200	100
K00668	N	50	N	150	1,000	N	30	200	100
K00678	N	50	N	200	700	N	20	300	70
K00688	N	70	N	200	1,000	N	50	200	70
K00698	N	30	N	200	500	N	50	<200	100
K00708	N	50	N	150	1,000	N	30	500	100
K00718	N	50	N	150	500	N	20	200	100
K00728	N	50	N	300	1,000	N	50	200	100
K00738	N	70	N	200	1,000	N	50	300	70
K00748	N	20	N	150	1,000	N	50	500	100
K00758	N	50	N	100	700	N	30	<200	70
K00768	N	30	N	150	700	N	20	<200	100
K00778	N	50	N	100	700	N	30	<200	100
K00788	N	50	N	N	700	N	30	<200	50
K00798	N	50	N	100	500	N	30	200	100
K00808	N	30	N	200	500	N	30	N	100
K00818	N	30	N	<100	1,000	N	30	200	50
K00828	N	30	N	200	500	N	30	<200	100
K00838	N	50	N	150	500	N	30	200	100
K00848	N	50	N	150	700	N	30	200	70
K00858	N	30	N	200	500	N	30	200	100
K00868	N	20	N	200	300	N	30	N	100
K00878	N	50	N	150	700	N	30	<200	50
K00888	N	20	N	200	200	N	30	N	100
K00898	N	30	N	200	300	N	30	N	70
K00908	N	50	N	150	500	N	30	<200	50
K00918	N	30	N	200	500	N	30	200	50
K00928	N	50	N	150	1,000	N	30	<200	50
K00938	N	50	N	100	1,000	N	30	200	100
K00948	N	30	N	100	1,000	N	30	300	50
K00958	N	30	N	200	300	N	30	N	100
K00968	N	50	N	150	700	N	50	300	70
K00978	N	20	N	150	500	N	20	200	100
K00988	N	20	N	150	200	N	30	N	200
K00998	N	15	N	<100	150	N	20	N	100
K01008	N	30	N	200	500	N	30	<200	70
K01018	N	50	N	200	1,000	N	50	<200	100
K01028	N	50	N	150	1,000	N	30	300	70
K01038	N	30	N	150	500	N	30	200	70
K01048	N	50	N	200	500	N	30	200	100
K01058	N	30	N	200	500	N	50	N	100
K01068	N	20	N	200	200	N	30	N	100
K01078	N	30	N	100	700	N	30	200	70
K01088	N	50	N	200	500	N	50	<200	100
K01098	N	30	N	150	1,000	N	30	200	70
K01108	N	30	N	150	700	N	50	200	50
K01118	N	50	N	200	500	N	30	<200	70
K01128	N	50	N	200	500	N	20	<200	70
K01138	N	50	N	150	700	N	30	N	70
K01148	N	50	N	200	500	N	30	<200	70
K01158	N	50	N	100	1,000	N	30	<200	70
K01168	N	50	N	300	700	N	50	<200	100
K01178	N	50	N	150	1,000	N	30	200	100
K01188	N	30	N	150	700	N	30	200	50
K01198	N	50	N	150	1,000	N	50	300	50
K01208	N	30	N	150	500	N	20	N	100

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
21S	58 10 41	154 17 6	1.5	1.00	10.0	1.00	1,000	N	N	N	<10	150
22S	58 11 58	154 20 37	1.0	1.00	10.0	1.00	1,000	N	N	N	<10	200
23S	58 12 32	154 19 5	1.5	1.00	15.0	1.00	1,500	N	N	N	<10	70
24S	58 12 7	154 16 44	1.5	1.50	7.0	.50	700	N	N	N	30	200
25S	58 12 0	154 13 45	2.0	1.00	10.0	1.00	1,000	N	N	N	15	100
26S	58 11 49	154 15 38	2.0	1.00	10.0	1.00	1,000	N	N	N	20	150
27S	58 18 15	154 11 7	1.5	1.50	7.0	.70	1,000	N	N	N	50	200
28S	58 17 22	154 12 58	2.0	1.00	10.0	1.00	1,000	N	N	N	10	100
29S	58 21 35	154 9 1	1.5	.70	10.0	1.00	1,000	N	N	N	<10	70
30S	58 21 33	154 10 33	2.0	1.00	15.0	1.00	1,000	N	N	N	<10	70
31S	58 19 56	154 13 28	1.5	1.50	7.0	.70	1,000	N	N	N	30	200
32S	58 19 23	154 15 12	1.5	1.00	10.0	1.00	1,000	N	N	N	100	150
33S	58 18 47	154 16 49	1.5	1.50	7.0	.70	1,000	N	N	N	20	150
34S	58 16 25	154 15 12	1.0	1.00	10.0	.70	700	N	N	N	70	100
35S	58 19 7	154 22 32	1.5	1.00	10.0	1.00	1,000	N	N	N	<10	100
36S	58 19 45	154 27 11	1.5	1.50	5.0	.50	700	N	N	N	15	100
37S	58 19 52	154 27 21	1.5	1.50	10.0	1.00	1,500	N	N	N	10	200
38S	58 20 46	154 24 8	1.0	1.00	5.0	.70	700	N	N	N	10	150
39S	58 20 50	154 23 57	1.0	1.00	5.0	.70	1,000	N	N	N	10	200
40S	58 14 57	154 16 43	1.5	1.00	10.0	1.00	1,000	N	N	N	150	200
41S	58 14 43	154 14 23	2.0	1.50	15.0	1.00	1,000	<.5	N	N	10	100
42S	58 14 37	154 13 58	1.5	1.00	15.0	1.00	1,000	N	N	N	<10	70
43S	58 15 43	154 13 33	1.5	1.00	10.0	1.00	1,000	N	N	N	30	100
44S	58 15 49	154 11 14	1.5	1.50	10.0	1.00	1,000	N	N	N	10	150
45S	58 13 38	154 10 42	2.0	1.00	15.0	1.00	1,500	N	N	N	<10	100
46S	58 12 51	154 12 23	2.0	1.00	10.0	1.00	1,000	N	N	N	10	70
47S	58 11 31	154 11 27	1.5	1.00	10.0	.10	1,000	N	N	N	70	150
48S	58 17 31	154 8 15	1.5	.70	10.0	.70	700	N	N	N	15	100
49S	58 14 36	154 33 46	1.5	.70	10.0	1.00	700	N	N	N	20	300
50S	58 14 39	154 33 58	2.0	1.50	15.0	>1.00	1,500	N	N	N	<10	100
51S	58 14 51	154 33 9	1.5	1.50	10.0	1.00	1,000	N	N	N	30	150
52S	58 13 32	154 29 51	1.5	1.00	10.0	.70	1,000	N	N	N	<10	150
53S	58 14 14	154 27 18	2.0	1.50	10.0	1.00	1,000	N	N	N	10	100
54S	58 13 10	154 28 1	2.0	1.50	10.0	1.00	1,000	N	N	N	20	150
55S	58 13 46	154 24 41	1.5	1.50	10.0	1.00	1,000	N	N	N	15	150
56S	58 14 12	154 21 32	1.5	1.00	7.0	.70	700	N	N	N	10	100
57S	58 44 20	153 46 43	1.0	1.00	3.0	.50	500	N	N	N	10	300
58S	58 43 36	153 45 18	1.5	1.00	5.0	.30	500	N	N	N	10	200
59S	58 43 0	153 45 30	1.0	1.00	3.0	.20	300	N	N	N	15	300
60S	58 42 50	153 45 40	1.0	.70	7.0	.30	300	N	N	N	<10	200
61S	58 42 11	153 44 35	1.0	1.00	3.0	.50	500	N	N	N	10	300
62S	58 42 22	153 44 21	1.0	1.00	5.0	.50	300	N	N	N	10	200
62SD	58 42 25	153 44 15	1.5	1.00	5.0	.70	500	N	N	N	20	300
63S	58 42 22	153 45 42	1.0	1.00	5.0	.30	500	N	N	N	15	150
64S	58 36 9	154 11 31	1.0	1.00	5.0	.50	500	N	N	N	10	300
65S	58 35 30	154 14 23	.7	.70	3.0	.30	500	N	N	N	15	300
66S	58 35 32	154 15 7	1.0	1.00	3.0	.30	500	N	N	N	15	300
67S	58 36 14	154 13 50	1.0	.70	3.0	.30	500	N	N	N	10	200
68S	58 36 52	154 13 22	1.0	1.00	2.0	.30	700	N	N	N	10	300
69S	58 37 29	154 12 58	1.5	1.00	5.0	.50	500	N	N	N	10	300
70S	58 37 28	154 12 46	1.0	.70	3.0	.30	300	N	N	N	20	300
71S	58 36 48	154 11 13	1.5	1.00	5.0	.50	700	N	N	N	10	300
72S	58 36 37	154 8 52	1.0	1.00	3.0	.20	500	N	N	N	10	300
73S	58 35 46	154 7 57	1.0	1.00	5.0	.70	700	N	N	N	10	300
74S	58 37 2	154 6 41	1.5	1.00	3.0	.20	500	N	N	N	10	200
75S	58 37 32	154 6 51	1.0	1.00	5.0	.50	500	N	N	N	15	500
76S	58 38 4	154 6 12	1.0	1.00	3.0	.30	500	N	N	N	15	300
77S	58 36 21	154 4 31	1.0	1.00	3.0	.30	500	N	N	N	10	300
78S	58 18 7	154 30 33	1.5	1.50	5.0	.50	700	N	N	N	15	300
79S	58 18 12	154 30 13	1.5	1.00	5.0	.70	700	N	N	N	15	200

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	P
K0121S	N	N	N	50	100	20	N	N	N	20	
K0122S	N	N	N	70	70	30	N	N	N	20	
K0123S	N	N	N	70	150	30	N	N	N	20	
K0124S	N	N	N	20	50	20	N	N	N	10	
K0125S	N	N	N	50	70	20	N	N	N	20	
K0126S	N	N	N	50	100	30	N	N	N	15	
K0127S	N	N	N	30	50	20	N	N	N	15	
K0128S	N	N	N	50	70	20	N	N	N	20	
K0129S	N	N	N	70	150	30	N	N	N	20	
K0130S	N	N	N	70	200	20	N	N	N	20	
K0131S	N	N	N	30	50	20	N	N	N	15	
K0132S	N	N	N	50	70	50	N	N	N	30	
K0133S	N	N	N	20	50	20	N	N	N	15	
K0134S	N	N	N	30	100	30	N	10	N	30	
K0135S	N	N	N	50	100	30	N	N	N	30	
K0136S	N	N	N	30	70	15	N	N	N	20	
K0137S	<1.0	N	N	50	200	30	N	N	N	30	
K0138S	N	N	N	20	50	15	N	N	N	10	
K0139S	N	N	N	20	100	20	N	<5	N	20	
K0140S	N	N	N	50	100	30	N	N	N	20	
K0141S	N	N	N	100	100	30	N	N	N	20	
K0142S	N	N	N	50	150	20	N	N	N	20	
K0143S	<1.0	N	N	50	100	20	N	N	N	20	
K0144S	N	N	N	50	100	30	N	N	N	20	
K0145S	N	N	N	100	150	30	N	N	N	20	
K0146S	N	N	N	70	100	20	N	N	N	20	
K0147S	N	N	N	50	150	20	N	N	N	20	
K0148S	N	N	N	50	100	20	N	N	N	30	
K0149S	N	N	N	50	100	20	N	N	N	20	
K0150S	N	N	N	100	200	50	N	N	N	50	
K0151S	<1.0	N	N	50	200	30	N	N	N	30	
K0152S	N	N	N	70	100	30	N	N	N	20	
K0153S	N	N	N	50	70	20	N	N	N	20	
K0154S	<1.0	N	N	50	70	30	N	N	N	20	
K0155S	N	N	N	50	100	30	N	N	N	20	
K0156S	N	N	N	50	150	20	N	N	N	20	
K0157S	<1.0	N	N	10	70	20	N	10	N	10	
K0158S	N	N	N	15	100	20	N	<5	N	20	
K0159S	<1.0	N	N	10	70	20	N	<5	N	15	
K0160S	<1.0	N	N	10	30	50	N	5	N	20	
K0161S	<1.0	N	N	15	70	20	N	N	N	10	
K0162S	<1.0	N	N	15	150	30	N	N	N	20	
K0162SD	N	N	N	20	150	50	N	5	N	30	
K0163S	<1.0	N	N	15	100	30	N	N	N	50	
K0164S	<1.0	N	N	15	50	10	N	N	N	15	
K0165S	N	N	N	15	50	15	N	N	N	10	
K0166S	<1.0	N	N	10	50	15	N	N	N	20	
K0167S	N	N	N	10	70	7	N	N	N	15	
K0168S	<1.0	N	N	10	50	10	N	N	N	15	
K0169S	<1.0	N	N	15	50	15	N	N	N	20	
K0170S	<1.0	N	N	15	70	20	N	N	N	30	
K0171S	<1.0	N	N	15	100	20	N	N	N	20	
K0172S	<1.0	N	N	15	50	15	N	N	N	10	
K0173S	<1.0	N	N	15	100	20	100	N	N	10	
K0174S	N	N	N	10	<10	7	N	N	N	5	
K0175S	<1.0	N	N	15	50	15	N	N	N	20	
K0176S	<1.0	N	N	15	70	20	N	N	N	20	
K0177S	<1.0	N	N	15	20	10	N	<5	N	7	
K0178S	<1.0	N	N	30	50	15	N	30	N	30	
K0179S	N	N	N	20	100	20	N	N	N	15	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
21S	N	50	N	200	500	N	30	<200	100	N
22S	N	50	N	100	500	N	30	<200	200	N
23S	N	50	N	100	1,000	N	30	200	100	N
24S	N	20	N	200	200	N	20	N	70	N
25S	N	50	N	200	500	N	30	<200	70	N
26S	N	50	N	200	700	N	30	<200	70	N
27S	N	30	N	200	300	N	20	N	100	N
28S	N	50	N	150	500	N	30	N	100	N
29S	N	50	N	150	500	N	20	200	100	N
30S	N	50	N	150	700	N	30	200	70	N
31S	N	30	N	200	300	N	30	N	70	N
32S	N	20	N	200	500	N	30	N	100	N
33S	N	30	N	300	300	N	20	N	70	N
34S	N	30	N	150	300	N	20	N	70	N
35S	N	50	N	200	700	N	20	<200	70	N
36S	N	30	N	300	200	N	30	N	70	N
37S	N	50	N	200	300	N	50	<200	150	N
38S	N	20	N	200	150	N	20	N	100	N
39S	N	20	N	150	300	N	30	N	150	N
40S	N	30	N	200	500	N	30	<200	100	N
41S	N	50	N	200	700	N	50	<200	70	N
42S	N	30	N	100	1,000	N	20	200	100	N
43S	N	30	N	200	500	N	30	N	100	N
44S	N	50	N	200	500	N	30	N	70	N
45S	N	70	N	100	1,000	N	30	500	100	N
46S	N	50	N	100	500	N	30	<200	70	N
47S	N	50	N	100	500	N	30	<200	70	N
48S	N	20	N	100	300	N	20	N	70	N
49S	N	50	N	200	300	N	30	N	100	N
50S	N	50	N	200	1,000	N	30	200	70	N
51S	N	50	N	300	300	N	30	<200	100	N
52S	N	50	N	150	500	N	30	N	100	N
53S	N	50	N	200	500	N	30	200	70	N
54S	N	50	N	300	300	N	50	<200	100	N
55S	N	20	N	200	500	N	30	<200	100	N
56S	N	50	N	200	300	N	30	N	70	N
57S	N	20	N	300	100	N	30	N	300	N
58S	N	20	N	200	150	N	30	N	200	N
59S	N	15	N	200	100	N	20	N	100	N
60S	N	20	N	100	100	N	30	N	200	N
61S	N	20	N	500	150	N	50	N	300	N
62S	N	20	N	200	150	N	20	N	100	N
62SD	N	20	N	300	150	N	50	N	150	N
63S	N	20	N	300	150	N	20	N	70	N
64S	N	20	N	200	150	N	30	N	100	N
65S	N	20	N	200	100	N	30	N	100	N
66S	N	15	N	200	150	N	20	N	70	N
67S	N	20	N	100	150	N	20	N	100	N
68S	N	15	N	200	150	N	20	N	50	N
69S	N	20	N	200	100	N	30	N	70	N
70S	N	20	N	300	100	N	20	N	70	N
71S	N	20	N	500	150	N	20	N	150	N
72S	N	15	N	300	150	N	30	N	100	N
73S	N	20	N	300	150	N	50	N	200	N
74S	N	20	N	200	100	N	30	N	70	N
75S	N	20	N	300	150	N	30	N	70	N
76S	N	20	N	200	150	N	20	N	150	N
77S	N	20	N	150	150	N	30	N	100	N
78S	N	20	N	500	100	N	30	N	100	N
79S	N	20	N	200	200	N	20	N	100	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba
K0180S	58 16 28	154 36 39	1.0	1.00	5.0	.50	500	N	N	N	15	
K0181S	58 16 11	154 31 55	1.0	.70	3.0	.50	500	N	N	N	20	
K0182S	58 17 7	154 26 42	1.5	1.00	10.0	.70	700	N	N	N	10	
K0183S	58 17 2	154 24 44	2.0	1.50	7.0	.70	700	N	N	N	<10	
K0184S	58 15 25	154 29 57	1.5	.70	15.0	>1.00	1,000	N	N	N	<10	
K0185S	58 22 42	154 14 36	1.5	.70	15.0	1.00	1,000	N	N	N	<10	
K0185SD	58 22 42	154 14 38	1.5	1.00	7.0	1.00	700	N	N	N	10	
K0186S	58 22 46	154 14 27	1.5	.70	7.0	.70	1,000	N	N	N	15	
K0187S	58 22 53	154 13 21	2.0	1.00	10.0	1.00	1,000	N	N	N	<10	
K0188S	58 22 1	154 17 17	1.5	1.00	5.0	.70	700	N	N	N	20	
K0189S	58 21 16	154 16 4	1.5	1.00	10.0	1.00	500	N	N	N	<10	
K0190S	58 20 52	154 15 26	1.0	.50	10.0	1.00	700	N	N	N	15	
K0191S	58 21 13	154 6 12	1.5	1.00	7.0	.50	700	N	N	N	10	
K0192S	58 21 28	154 3 0	2.0	1.00	10.0	>1.00	700	N	N	N	10	
K0193S	58 22 56	154 1 8	1.0	1.00	5.0	.30	700	N	N	N	15	
K0194S	58 23 52	154 1 48	1.5	1.00	5.0	.50	700	N	N	N	10	
K0195S	58 25 39	154 12 0	1.5	1.00	5.0	.50	500	.5	N	N	20	
K0196S	58 26 28	154 11 9	2.0	1.50	5.0	.30	700	N	N	N	10	
K0197S	58 22 52	154 8 10	1.5	1.00	5.0	.50	500	N	N	N	30	
K0198S	58 8 17	155 18 40	1.5	1.00	5.0	.50	700	N	N	N	15	
K0199S	58 6 56	155 18 3	1.5	1.00	5.0	.30	700	N	N	N	15	
K0200S	58 6 34	155 16 32	1.0	.70	3.0	.50	500	N	N	N	10	
K0201S	58 5 23	155 15 43	1.0	1.00	3.0	.20	700	N	N	N	10	
K0202S	58 4 45	155 13 24	.7	1.00	3.0	.50	1,000	N	N	N	15	
K0203S	58 4 17	155 13 59	1.0	1.00	3.0	.20	500	N	N	N	20	
K0204S	58 3 13	155 15 8	1.5	1.00	2.0	.30	1,500	N	N	N	20	
K0205S	58 3 13	155 13 31	1.0	1.00	3.0	.30	700	N	N	N	10	
K0206S	58 1 29	155 16 10	.7	.70	2.0	.15	500	N	N	N	10	
K0207S	58 1 38	155 16 13	1.0	.70	3.0	.30	1,500	N	N	N	10	
K0208S	58 0 2	155 18 44	1.0	.70	3.0	.30	1,500	N	N	N	15	
K0209S	58 0 0	155 12 0	1.5	1.00	3.0	.20	700	N	N	N	20	
K0210S	58 1 37	155 10 15	1.0	1.00	2.0	.20	700	N	N	N	10	
K0211S	58 1 44	155 9 0	1.0	.70	3.0	.50	1,000	N	N	N	20	
K0212S	58 0 34	155 8 20	1.0	.70	3.0	.30	700	N	N	N	20	
K0213S	58 1 6	155 5 54	1.0	.50	5.0	.30	500	N	N	N	50	
K0214S	58 2 8	155 33 26	1.5	1.00	5.0	.50	700	N	N	N	10	
K0215S	58 2 12	155 33 27	1.5	1.00	5.0	.30	500	N	N	N	15	
K0216S	58 2 23	155 32 59	1.5	1.00	5.0	.30	700	N	N	N	20	
K0217S	58 1 40	155 30 55	1.5	1.50	5.0	.50	700	N	N	N	15	
K0217SD	58 1 40	155 30 55	1.5	1.00	5.0	.50	700	N	N	N	15	
K0218S	58 1 31	155 30 36	1.5	1.00	5.0	.20	500	N	N	N	20	
K0219S	58 2 34	155 36 2	1.0	1.00	3.0	.20	500	N	N	N	50	
K0220S	58 1 6	155 29 48	1.0	1.00	2.0	.30	700	N	N	N	20	
K0221S	58 0 25	155 29 6	1.5	1.00	3.0	.50	700	N	N	N	20	
K0222S	58 0 43	155 33 58	1.0	1.00	3.0	.30	700	N	N	N	15	
K0223S	58 1 2	155 35 20	1.5	.70	3.0	.20	500	N	N	N	10	
K0224S	58 0 3	155 37 9	1.5	1.00	5.0	.30	1,000	N	N	N	15	
K0225S	58 0 5	155 39 22	1.0	1.00	5.0	.30	1,000	<.5	N	N	20	
K0226S	58 0 53	155 26 16	1.0	.70	3.0	.50	700	N	N	N	10	
K0227S	58 4 50	155 29 18	1.5	1.00	3.0	.20	500	N	N	N	15	
K0228S	58 4 51	155 29 11	1.0	.70	2.0	.30	700	N	N	N	10	
K0229S	58 4 6	155 29 11	1.0	.70	3.0	.30	500	N	N	N	10	
K0230S	58 3 23	155 29 11	1.5	1.50	5.0	.30	700	N	N	N	20	
K0231S	58 3 18	155 29 0	1.5	1.00	2.0	.30	500	N	N	N	15	
K0232S	58 3 13	155 29 16	1.5	1.00	5.0	.20	500	N	N	N	20	
K0233S	58 3 32	155 9 11	1.5	1.00	2.0	.30	500	N	N	N	20	
K0234S	58 3 27	155 9 13	1.0	1.00	2.0	.20	500	N	N	N	15	
K0235S	58 2 44	155 7 50	1.0	1.00	3.0	.50	1,000	N	N	N	15	
K0236S	58 1 28	155 4 21	1.0	1.00	3.0	.50	700	N	N	N	10	
K0237S	58 3 56	155 2 10	1.0	.70	3.0	.20	500	N	N	N	30	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

mple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
80S	<1.0	N	N	20	20	20	N	<5	N	7	10
81S	<1.0	N	N	10	50	20	N	N	N	15	10
82S	N	N	N	50	100	30	N	N	N	30	<10
83S	<1.0	N	N	20	100	10	N	N	N	20	10
84S	N	N	N	100	70	20	N	N	N	20	<10
85S	<1.0	N	N	70	100	20	N	N	N	30	10
85SD	N	N	N	30	70	30	N	N	N	20	15
86S	<1.0	N	N	50	150	30	N	N	N	30	10
87S	<1.0	N	N	50	100	20	N	N	N	20	<10
88S	<1.0	N	N	20	100	20	N	N	N	20	10
89S	<1.0	N	N	30	100	30	N	N	N	30	<10
90S	N	N	N	50	70	15	N	N	N	20	10
91S	N	N	N	50	100	10	N	N	N	15	10
92S	N	N	N	70	150	10	N	N	N	20	<10
93S	<1.0	N	N	20	70	20	N	N	N	15	10
94S	<1.0	N	N	20	30	15	N	N	N	15	10
95S	<1.0	N	N	20	70	20	N	<5	N	20	<10
96S	<1.0	N	N	20	70	20	N	N	N	20	<10
97S	<1.0	N	N	30	100	20	N	N	N	50	10
98S	<1.0	N	N	20	30	20	N	7	N	15	<10
99S	<1.0	N	N	20	50	20	N	<5	N	10	10
00S	<1.0	N	N	15	50	10	N	N	N	15	<10
01S	<1.0	N	N	10	50	20	30	N	N	N	<10
02S	N	N	N	10	50	10	N	N	N	15	<10
03S	N	N	N	10	70	20	N	N	N	15	10
04S	N	N	N	15	50	20	30	N	N	20	<10
05S	<1.0	N	N	10	50	15	N	N	N	20	10
06S	N	N	N	10	30	10	70	N	N	10	N
07S	<1.0	N	N	10	50	15	N	N	N	15	<10
08S	N	N	N	15	50	15	50	N	N	10	<10
09S	<1.0	N	N	15	50	20	N	N	N	15	15
10S	N	N	N	10	50	15	50	N	N	10	<10
11S	<1.0	N	N	15	50	10	N	N	N	15	<10
12S	<1.0	N	N	10	30	20	N	N	N	15	10
13S	N	N	N	20	50	30	N	N	N	15	15
14S	<1.0	N	N	20	100	30	N	N	N	30	<10
15S	N	N	N	20	70	30	N	N	N	20	10
16S	N	N	N	15	150	30	N	N	N	30	<10
17S	<1.0	N	N	20	70	20	N	N	N	20	<10
17SD	N	N	N	20	70	30	N	N	N	30	10
18S	N	N	N	15	50	20	N	N	N	20	10
19S	N	N	N	15	50	20	N	15	N	20	10
20S	<1.0	N	N	15	50	20	N	N	N	20	<10
21S	<1.0	N	N	15	70	20	N	N	N	30	10
22S	<1.0	N	N	15	70	20	N	N	N	30	<10
23S	N	N	N	10	70	20	N	N	N	20	10
24S	N	N	N	15	50	20	N	N	N	15	10
25S	N	N	N	20	20	20	N	N	N	10	20
26S	<1.0	N	N	15	50	15	N	N	N	20	<10
27S	N	N	N	15	70	20	N	N	N	20	10
28S	<1.0	N	N	15	50	20	N	N	N	20	<10
29S	N	N	N	15	70	20	N	N	N	30	10
30S	N	N	N	20	100	30	N	N	N	20	10
31S	<1.0	N	N	10	70	20	N	N	N	20	10
32S	N	N	N	15	70	20	N	N	N	20	10
33S	<1.0	N	N	10	100	20	N	N	N	20	10
34S	N	N	N	15	50	10	N	N	N	15	<10
35S	<1.0	N	N	15	50	15	N	N	N	15	<10
36S	N	N	N	15	50	20	N	N	N	20	<10
37S	<1.0	N	N	15	50	20	N	N	N	10	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	T
K0180S	N	20	N	200	150	N	50	N	100	
K0181S	N	20	N	200	150	N	30	N	100	
K0182S	N	20	N	300	200	N	20	N	70	
K0183S	N	30	N	300	150	N	30	N	70	
K0184S	N	30	N	200	500	N	15	N	50	
K0185S	N	30	N	150	500	N	20	N	50	
K0185SD	N	30	N	200	500	N	20	N	70	
K0186S	N	20	N	150	200	N	20	N	70	
K0187S	N	30	N	<100	300	N	30	N	100	
K0188S	N	20	N	500	150	N	30	N	200	
K0189S	N	20	N	200	200	N	30	N	50	
K0190S	N	30	N	200	200	N	20	N	70	
K0191S	N	20	N	200	150	N	20	N	70	
K0192S	N	20	N	200	300	N	20	N	100	
K0193S	N	20	N	150	150	N	20	N	70	
K0194S	N	20	N	200	150	N	20	N	50	
K0195S	N	20	N	300	200	N	20	N	100	
K0196S	N	20	N	500	150	N	30	N	70	
K0197S	N	20	N	300	150	N	20	N	100	
K0198S	N	20	N	300	150	N	30	N	100	
K0199S	N	20	N	500	150	N	30	N	100	
K0200S	N	20	N	200	100	N	20	N	50	
K0201S	N	15	N	100	150	N	30	N	300	
K0202S	N	20	N	200	150	N	30	N	100	
K0203S	N	20	N	200	100	N	20	N	150	
K0204S	N	20	N	200	150	N	30	N	100	
K0205S	N	20	N	150	150	N	30	N	100	
K0206S	N	15	N	150	100	N	20	N	70	
K0207S	N	20	N	100	100	N	30	N	150	
K0208S	N	20	N	200	100	N	30	N	200	
K0209S	N	20	N	300	150	N	20	N	200	
K0210S	N	20	N	200	150	N	20	N	200	
K0211S	N	20	N	100	150	N	30	N	150	
K0212S	N	15	N	100	100	N	20	N	100	
K0213S	N	20	N	150	100	N	20	N	100	
K0214S	N	20	N	300	200	N	30	N	100	
K0215S	N	20	N	200	200	N	20	N	70	
K0216S	N	20	N	300	150	N	30	N	70	
K0217S	N	20	N	500	150	N	30	N	70	
K0217SD	N	20	N	300	150	N	20	N	100	
K0218S	N	20	N	300	150	N	30	N	150	
K0219S	N	20	N	200	150	N	20	N	70	
K0220S	N	20	N	200	150	N	30	N	200	
K0221S	N	20	N	300	150	N	30	N	70	
K0222S	N	20	N	200	100	N	20	N	100	
K0223S	N	20	N	200	150	N	20	N	50	
K0224S	N	20	N	200	150	N	20	N	50	
K0225S	N	20	N	300	150	N	20	<200	70	
K0226S	N	20	N	300	150	N	20	N	100	
K0227S	N	20	N	200	150	N	20	N	100	
K0228S	N	20	N	200	100	N	30	N	150	
K0229S	N	20	N	150	150	N	20	N	100	
K0230S	N	20	N	500	150	N	30	N	100	
K0231S	N	20	N	200	100	N	30	N	100	
K0232S	N	20	N	300	150	N	20	N	70	
K0233S	N	20	N	200	150	N	30	N	100	
K0234S	N	20	N	300	100	N	20	N	150	
K0235S	N	20	N	200	150	N	30	N	200	
K0236S	N	20	N	300	150	N	30	N	100	
K0237S	N	20	N	200	100	N	20	N	100	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

aple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
38S	58 6 46	155 27 39	1.0	.70	2.0	.30	700	N	N	N	20	500
39S	58 6 48	155 27 39	1.5	.70	3.0	.30	1,000	N	N	N	20	500
40S	58 6 42	155 27 15	1.0	.50	3.0	.20	500	N	N	N	15	500
41S	58 4 38	155 25 58	1.0	.70	2.0	.20	700	N	N	N	20	500
42S	58 3 44	155 24 42	1.0	1.00	2.0	.30	1,000	N	N	N	20	500
43S	58 6 13	155 24 24	1.0	.70	3.0	.50	1,000	N	N	N	10	500
44S	58 6 15	155 24 14	1.0	.50	3.0	.30	700	2.0	N	N	15	700
45S	58 4 14	155 23 58	1.0	.30	3.0	.30	500	N	N	N	20	700
46S	58 3 8	155 23 59	1.0	1.00	2.0	.30	1,500	N	N	N	20	1,000
47S	58 2 21	155 24 47	1.0	.70	2.0	.30	1,000	N	N	N	15	1,000
48S	58 1 23	155 27 50	1.0	.50	3.0	.30	500	N	N	N	20	700
49S	58 1 44	155 27 41	1.5	.50	3.0	.30	500	<.5	N	N	20	700
49SD	58 1 44	155 27 41	1.0	1.00	3.0	.30	700	N	N	N	20	300
50S	58 13 46	154 43 21	1.5	1.00	7.0	1.00	1,000	N	N	N	10	500
51S	58 13 42	154 43 17	1.5	.50	5.0	.70	700	N	N	N	10	300
52S	58 13 26	154 44 24	1.0	.20	10.0	1.00	1,000	N	N	N	<10	300
53S	58 13 33	154 45 4	2.0	.70	10.0	1.00	1,500	N	N	N	N	300
54S	58 13 9	154 46 57	2.0	1.00	7.0	1.00	1,000	N	N	N	10	500
55S	58 13 17	154 47 57	2.0	.70	7.0	1.00	1,000	N	N	N	10	500
56S	58 14 15	154 46 35	1.5	.50	10.0	1.00	1,000	N	N	N	<10	500
57S	58 14 6	154 47 46	1.5	.50	7.0	.50	700	N	N	N	10	300
58S	58 13 21	154 48 59	1.5	.70	5.0	.50	500	N	N	N	10	500
59S	58 14 4	154 50 2	2.0	1.00	7.0	>1.00	1,000	N	N	N	<10	300
60S	58 13 17	154 50 41	2.0	1.00	7.0	1.00	1,000	N	N	N	<10	500
61S	58 12 51	154 53 32	2.0	1.50	5.0	.70	700	N	N	N	<10	500
62S	58 13 24	154 54 1	2.0	1.50	7.0	>1.00	1,000	N	N	N	10	500
63S	58 14 38	154 53 27	1.5	.50	5.0	.50	500	N	N	N	10	300
64S	58 14 38	154 53 39	1.5	.50	5.0	.50	700	N	N	N	<10	300
65S	58 13 20	154 55 9	2.0	1.50	7.0	.70	1,000	N	N	N	10	500
66S	58 12 50	154 56 4	2.0	1.00	5.0	.50	700	N	N	N	10	300
67S	58 13 18	154 56 8	1.5	.70	5.0	.50	1,000	N	N	N	10	500
68S	58 12 32	154 57 18	2.0	1.00	5.0	.70	1,000	N	N	N	10	500
69S	58 11 32	154 57 41	1.5	.50	7.0	.50	1,000	N	N	N	10	300
70S	58 12 43	155 4 24	2.0	1.00	10.0	1.00	1,000	N	N	N	<10	300
71S	58 11 43	155 4 26	2.0	1.00	5.0	.70	700	N	N	N	10	500
72S	58 11 50	155 4 54	2.0	1.00	5.0	.70	1,000	N	N	N	10	700
73S	58 12 57	155 9 51	1.5	.50	5.0	.50	700	N	N	N	<10	500
74S	58 12 55	155 10 5	2.0	1.00	5.0	1.00	700	N	N	N	10	500
75S	58 11 58	155 8 19	2.0	1.00	5.0	.70	1,500	N	N	N	10	500
76S	58 10 59	155 6 39	2.0	1.50	5.0	.50	1,000	N	N	N	20	1,000
77S	58 11 20	155 9 7	2.0	1.00	10.0	1.00	1,000	N	N	N	10	500
78S	58 9 59	155 10 0	1.5	.50	5.0	.50	700	N	N	N	10	500
79S	58 9 59	155 10 12	2.0	1.50	5.0	.70	1,000	N	N	N	10	500
80S	58 9 35	155 11 46	2.0	1.50	7.0	>1.00	1,000	N	N	N	<10	700
81S	58 9 17	155 9 54	2.0	1.00	7.0	1.00	1,000	N	N	N	<10	500
82S	58 8 14	155 15 25	1.0	.20	5.0	.50	500	N	N	N	20	1,000
83S	58 8 44	155 3 23	1.5	.50	7.0	1.00	1,000	N	N	N	<10	500
84S	58 8 14	155 12 45	1.5	2.00	5.0	.50	1,000	N	N	N	20	1,000
85S	58 7 38	155 13 50	1.0	.70	3.0	.50	700	N	N	N	20	1,000
86S	58 6 27	155 11 56	1.0	.30	3.0	.50	700	N	N	N	15	1,000
87S	58 6 38	155 9 10	1.0	1.00	2.0	.50	700	N	N	N	15	700
88S	58 8 30	155 9 9	1.0	1.00	3.0	.50	500	N	N	N	20	1,000
89S	58 7 13	155 22 51	2.0	.70	7.0	.70	1,000	N	N	N	10	500
90S	58 5 51	155 21 2	1.5	1.00	5.0	.70	1,000	N	N	N	15	500
91S	58 5 27	155 20 11	1.0	.50	3.0	.30	1,000	N	N	N	20	1,000
92S	58 4 34	155 20 15	1.0	1.00	2.0	.30	700	N	N	N	20	1,000
93S	58 2 53	155 20 13	1.0	1.00	3.0	.30	700	N	N	N	20	1,000
94S	58 3 50	155 21 18	1.0	.70	2.0	.30	1,000	N	N	N	20	1,000
95S	58 2 14	155 22 22	1.0	.20	3.0	.50	1,000	N	N	N	30	700
96S	58 1 9	155 22 24	.7	.30	5.0	.30	1,000	N	N	N	10	700

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	P
K0238S	<1.0	N	N	15	50	20	N	N	N	20	
K0239S	N	N	N	15	70	20	50	N	N	15	
K0240S	N	N	N	10	30	15	N	N	N	10	
K0241S	<1.0	N	N	10	50	20	N	N	N	20	
K0242S	<1.0	N	N	10	50	20	N	N	N	20	
K0243S	N	N	N	15	50	15	N	N	N	15	
K0244S	N	N	N	15	50	50	N	N	N	15	
K0245S	N	N	N	15	50	50	N	N	N	15	
K0246S	<1.0	N	N	15	50	20	30	7	N	15	
K0247S	N	N	N	10	50	15	N	N	N	10	
K0248S	N	N	N	20	70	50	N	10	N	20	
K0249S	N	N	N	15	50	20	N	7	N	15	
K0249SD	N	N	N	10	50	10	N	N	N	10	
K0250S	N	N	N	30	50	20	N	N	N	10	
K0251S	N	N	N	30	150	30	N	<5	N	30	
K0252S	N	N	N	70	100	70	N	N	N	15	
K0253S	N	N	N	70	70	15	N	<5	N	15	
K0254S	N	N	N	50	50	20	N	5	N	15	
K0255S	N	N	N	30	70	20	N	N	N	15	
K0256S	N	N	N	70	100	20	N	N	N	10	
K0257S	N	N	N	50	100	50	N	N	N	20	
K0258S	N	N	N	20	70	50	N	N	N	15	
K0259S	N	N	N	50	100	15	N	N	N	10	
K0260S	N	N	N	50	70	20	N	N	N	15	
K0261S	N	N	N	20	100	20	N	N	N	20	
K0262S	N	N	N	30	70	20	N	<5	N	10	
K0263S	N	N	N	20	70	50	N	5	N	15	
K0264S	N	N	N	30	50	30	N	N	N	10	
K0265S	N	N	N	30	50	20	N	N	N	7	
K0266S	N	N	N	30	50	20	N	N	N	15	
K0267S	N	N	N	20	50	30	N	N	N	10	
K0268S	N	N	N	20	70	20	N	5	N	10	
K0269S	N	N	N	30	50	50	N	N	N	10	
K0270S	N	N	N	50	50	20	N	N	N	10	
K0271S	N	N	N	20	30	15	N	N	N	10	
K0272S	N	N	N	30	50	30	N	<5	N	7	
K0273S	N	N	N	20	30	20	N	N	N	7	
K0274S	N	N	N	30	50	20	N	5	N	10	
K0275S	N	N	N	30	50	100	N	7	N	15	
K0276S	N	N	N	20	50	15	N	<5	N	10	
K0277S	N	N	N	50	70	20	N	N	N	15	
K0278S	N	N	N	20	50	20	N	N	N	10	
K0279S	N	N	N	30	70	20	N	7	N	15	
K0280S	N	N	N	30	70	20	N	N	N	10	
K0281S	N	N	N	50	70	30	N	<5	N	10	
K0282S	N	N	N	20	50	50	N	<5	N	10	
K0283S	N	N	N	50	50	20	N	N	N	10	
K0284S	N	N	N	20	70	20	N	<5	N	20	
K0285S	N	N	N	15	50	30	30	<5	N	10	
K0286S	N	N	N	20	50	20	70	N	N	10	
K0287S	N	N	N	20	70	20	N	5	N	15	
K0288S	N	N	N	15	70	20	N	7	N	15	
K0289S	N	N	N	30	70	20	N	N	N	15	
K0290S	N	N	N	20	50	20	N	5	N	15	
K0291S	N	N	N	15	50	30	N	10	N	20	
K0292S	N	N	N	10	30	15	20	N	N	10	
K0293S	N	N	N	10	30	20	70	N	N	10	
K0294S	<1.0	N	N	10	50	20	N	N	N	10	
K0295S	N	N	N	15	30	30	30	5	N	15	
K0296S	N	N	N	15	50	20	70	N	N	10	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
38S	N	20	N	300	150	N	20	N	70	N
39S	N	20	N	300	150	N	30	N	300	N
40S	N	15	N	200	100	N	15	N	70	N
41S	N	20	N	200	100	N	30	N	200	N
42S	N	20	N	200	100	N	30	N	100	N
43S	N	30	N	200	150	N	30	N	100	N
44S	N	15	N	500	150	N	30	N	100	N
45S	N	15	N	200	100	N	30	N	100	N
46S	N	15	N	300	100	N	50	N	200	N
47S	N	15	N	200	100	N	30	N	300	N
48S	N	15	N	300	100	N	30	N	100	N
49S	N	15	N	200	100	N	20	N	100	N
49S0	N	20	N	200	100	N	20	N	500	N
50S	N	20	N	200	300	N	50	N	70	N
51S	N	20	N	300	150	N	20	N	100	N
52S	N	20	N	100	300	N	30	N	50	N
53S	N	20	N	150	300	N	30	200	30	N
54S	N	20	N	200	300	N	30	N	70	N
55S	N	20	N	200	300	N	30	N	50	N
56S	N	20	N	200	500	N	30	200	50	N
57S	N	20	N	200	150	N	20	N	70	N
58S	N	20	N	300	200	N	30	N	70	N
59S	N	30	N	300	500	N	30	N	50	N
60S	N	20	N	200	300	N	30	<200	50	N
61S	N	20	N	500	200	N	30	N	100	N
62S	N	20	N	200	300	N	30	N	50	N
63S	N	20	N	300	150	N	20	N	100	N
64S	N	20	N	200	200	N	30	N	50	N
65S	N	20	N	200	200	N	30	N	70	N
66S	N	20	N	300	200	N	30	N	50	N
67S	N	20	N	300	100	N	20	N	50	N
68S	N	20	N	200	300	N	30	N	50	N
69S	N	20	N	200	150	N	20	N	50	N
70S	N	20	N	150	300	N	20	N	70	N
71S	N	20	N	300	200	N	30	N	70	N
72S	N	20	N	300	200	N	50	N	70	N
73S	N	20	N	200	150	N	30	N	50	N
74S	N	20	N	300	200	N	30	N	150	N
75S	N	20	N	200	200	N	30	N	50	N
76S	N	20	N	300	150	N	50	N	100	N
77S	N	20	N	200	500	N	30	N	70	N
78S	N	20	N	200	150	N	30	N	100	N
79S	N	20	N	300	300	N	30	N	70	N
80S	N	20	N	300	300	N	30	N	70	N
81S	N	20	N	200	500	N	30	<200	50	N
82S	N	15	N	200	150	N	30	N	100	N
83S	N	20	N	100	300	N	30	<200	50	N
84S	N	15	N	300	200	N	30	N	150	N
85S	N	15	N	300	150	N	30	N	100	N
86S	N	20	N	200	100	N	30	N	100	N
87S	N	15	N	300	150	N	30	N	70	N
88S	N	15	N	300	100	N	30	N	100	N
89S	N	20	N	200	300	N	30	N	70	N
90S	N	20	N	300	200	N	30	N	70	N
91S	N	15	N	300	100	N	30	N	150	N
92S	N	15	N	200	100	N	30	N	150	N
93S	N	15	N	300	70	N	30	N	200	N
94S	N	15	N	500	100	N	30	N	200	N
95S	N	15	N	200	100	N	30	N	200	N
96S	N	15	N	100	100	N	50	N	150	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K0297S	58 7 46	155 27 23	1.5	1.50	3.0	.70	1,000	N	N	N	50
K0298S	58 5 38	155 4 35	1.0	.70	3.0	.50	700	N	N	N	15
K1000S	58 15 58	155 20 20	2.0	1.00	7.0	1.00	700	N	N	N	10
K1001S	58 16 16	155 20 12	1.5	1.00	3.0	.30	500	N	N	N	15
K1003S	58 17 46	155 20 1	1.5	1.00	5.0	.50	1,000	N	N	N	10
K1004S	58 18 8	155 20 6	1.5	1.00	5.0	.50	700	N	N	N	10
K1005S	58 20 28	155 20 51	2.0	1.00	7.0	.70	1,000	N	N	N	30
K1006S	58 20 44	155 21 55	2.0	.70	10.0	1.00	1,000	N	N	N	<10
K1007S	58 15 11	155 19 36	2.0	1.00	15.0	1.00	1,500	N	N	N	<10
K1008S	58 15 12	155 19 31	1.5	.50	5.0	.70	1,000	N	N	N	15
K1009S	58 15 20	155 19 0	2.0	1.00	7.0	1.00	1,000	N	N	N	15
K1010S	58 16 3	155 19 9	1.5	.70	5.0	.30	1,000	N	N	N	15
K1011S	58 16 30	155 19 0	1.5	1.00	5.0	.30	700	N	N	N	10
K1012S	58 17 31	155 18 12	2.0	.70	10.0	.50	700	N	N	N	<10
K1013S	58 17 26	155 18 16	1.5	1.00	7.0	.50	1,000	N	N	N	10
K1014S	58 18 7	155 19 19	1.0	.70	5.0	.50	300	N	N	N	10
K1015S	58 18 36	155 19 40	2.0	1.00	5.0	.50	1,000	N	N	N	<10
K1016S	58 19 43	155 19 32	2.0	1.00	10.0	1.00	1,000	N	N	N	10
K1016SD	58 19 43	155 19 32	1.5	1.00	7.0	.70	700	N	N	N	10
K1017S	58 17 1	155 22 45	2.0	1.00	10.0	1.00	1,000	N	N	N	20
K1018S	58 17 8	155 22 50	1.5	1.50	5.0	.50	1,000	N	N	N	10
K1019S	58 18 55	155 23 32	1.5	1.00	7.0	.70	700	N	N	N	10
K1020S	58 18 50	155 23 12	2.0	1.00	5.0	.70	1,000	N	N	N	10
K1021S	58 19 45	155 25 0	1.0	.70	3.0	.50	700	N	N	N	10
K1022S	58 17 8	155 28 5	2.0	1.50	7.0	.30	1,000	N	N	N	20
K1023S	58 17 13	155 27 55	2.0	1.00	10.0	1.00	1,000	N	N	N	10
K1024S	58 18 0	155 28 35	2.0	1.00	10.0	1.00	1,000	N	N	N	10
K1025S	58 18 10	155 32 0	2.0	1.00	10.0	1.00	1,000	N	N	N	10
K1026S	58 18 8	155 31 50	1.5	1.00	7.0	.70	1,000	N	N	N	<10
K1027S	58 18 0	155 33 15	1.5	1.00	5.0	.50	1,000	N	N	N	10
K1028S	58 19 46	155 37 5	1.5	1.00	7.0	.50	1,000	N	N	N	10
K1029S	58 19 42	155 37 0	1.5	.70	7.0	.50	1,000	N	N	N	10
K1030S	58 19 30	155 37 40	1.0	1.00	5.0	.50	700	N	N	N	10
K1031S	58 20 35	155 38 40	1.0	.70	3.0	.20	500	N	N	N	10
K1032S	58 27 5	155 32 35	2.0	1.00	10.0	1.00	1,000	N	N	N	10
K1033S	58 27 10	155 32 30	1.5	1.00	5.0	.70	700	N	N	N	<10
K1034S	58 28 55	155 26 40	1.0	1.00	5.0	.30	1,000	N	N	N	10
K1035S	58 28 58	155 26 48	1.5	1.00	5.0	.50	1,000	N	N	N	10
K1036S	58 29 25	155 0 40	1.5	1.00	7.0	.50	700	N	N	N	10
K1037S	58 29 18	155 0 45	3.0	1.00	7.0	1.00	1,000	N	N	N	50
K1038S	58 29 43	154 55 0	1.5	1.00	5.0	.50	1,000	N	N	N	10
K1038SD	58 29 43	154 55 0	2.0	1.00	10.0	1.00	1,000	N	N	N	10
K1039S	58 27 51	154 58 45	2.0	1.00	10.0	1.00	1,000	N	N	N	20
K1040S	58 24 58	154 56 28	1.5	1.50	5.0	.30	700	<.5	N	N	50
K1041S	58 23 52	154 56 35	1.5	.70	7.0	.50	700	<.5	N	N	15
K1042S	58 26 15	154 53 55	1.0	1.00	5.0	.50	1,000	N	N	N	10
K1043S	58 27 18	154 56 10	2.0	1.50	7.0	.50	1,000	N	N	N	20
K1044S	58 22 30	154 49 50	3.0	1.00	7.0	1.00	1,000	N	N	N	20
K1045S	58 24 9	154 48 37	1.5	1.50	3.0	.50	1,000	<.5	N	N	15
K1049S	58 22 33	154 41 44	.2	.15	10.0	.30	150	N	<200.0	N	15
K1050S	58 29 49	154 52 30	2.0	1.00	10.0	1.00	1,500	N	N	N	<10
K1051S	58 24 1	154 39 12	1.0	.70	7.0	.50	1,000	N	N	N	10
K1052S	58 23 40	154 40 38	1.5	1.00	3.0	.50	700	N	N	N	10
K1053S	58 22 5	154 43 55	1.5	1.00	7.0	.50	1,000	N	N	N	<10
K1054S	58 26 59	154 35 32	1.5	1.00	5.0	.50	1,000	N	N	N	10
K1055S	58 28 8	154 37 50	1.0	1.00	5.0	.30	700	N	N	N	10
K1056S	58 31 58	154 39 5	1.5	1.50	5.0	.50	700	<.5	N	N	20
K1057S	58 32 15	154 35 8	1.0	.70	3.0	.20	500	N	N	N	15
K1058S	58 30 32	154 53 52	1.5	1.00	5.0	.50	700	N	N	N	10
K1059S	58 26 28	154 44 53	1.0	1.00	5.0	.50	700	N	N	N	15

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

mple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
97S	N	N	N	15	50	20	N	<5	N	10	20
98S	N	N	N	20	50	30	N	N	N	10	20
00S	N	N	N	50	100	30	N	N	N	20	<10
01S	<1.0	N	N	20	50	20	N	N	N	20	10
03S	N	N	N	50	100	20	N	N	N	20	<10
04S	N	N	N	20	50	20	N	N	N	10	10
05S	<1.0	N	N	30	30	50	N	N	N	15	50
06S	N	N	N	100	100	50	N	N	N	20	10
07S	N	N	N	100	100	30	N	N	N	20	<10
08S	<1.0	N	N	30	30	10	N	N	N	15	<10
09S	N	N	N	50	70	30	N	N	N	20	10
10S	N	N	N	50	100	30	N	N	N	30	10
11S	N	N	N	20	50	10	N	N	N	10	<10
12S	N	N	N	50	100	20	N	N	N	20	<10
13S	N	N	N	30	70	20	N	N	N	15	<10
14S	N	N	N	20	50	20	N	N	N	15	10
15S	N	N	N	20	50	5	N	N	N	10	10
16S	N	N	N	70	70	20	N	N	N	20	<10
16SD	N	N	N	30	70	20	N	N	N	15	<10
17S	N	N	N	50	20	70	N	N	N	10	50
18S	<1.0	N	N	30	50	20	N	N	N	10	10
19S	N	N	N	50	100	30	N	N	N	20	10
20S	N	N	N	30	70	30	N	N	N	20	10
21S	N	N	N	10	50	10	N	N	N	15	10
22S	<1.0	N	N	30	30	100	N	N	N	10	30
23S	N	N	N	50	70	200	N	10	N	15	50
24S	N	N	N	70	100	20	N	N	N	30	10
25S	N	N	N	50	70	70	N	N	N	20	30
26S	<1.0	N	N	50	70	10	N	N	N	20	10
27S	<1.0	N	N	10	30	7	N	N	N	20	10
28S	<1.0	N	N	20	50	20	N	N	N	10	10
29S	N	N	N	50	70	20	N	N	N	15	<10
30S	<1.0	N	N	20	30	10	N	N	N	20	<10
31S	<1.0	N	N	15	30	15	N	N	N	10	<10
32S	N	N	N	30	100	20	N	N	N	15	20
33S	N	N	N	20	50	20	N	N	N	15	<10
34S	N	N	N	20	50	30	N	N	N	15	10
35S	N	N	N	20	70	20	N	N	N	15	10
36S	N	N	N	30	100	10	N	N	N	20	<10
37S	N	N	N	50	100	70	N	N	N	20	20
38S	N	N	N	20	70	20	N	N	N	20	<10
38SD	N	N	N	50	150	20	N	N	N	20	<10
39S	N	N	N	50	100	20	N	N	N	15	20
40S	<1.0	N	N	15	30	20	N	N	N	30	50
41S	N	N	N	30	50	50	N	10	N	15	10
42S	N	N	N	30	50	20	N	N	N	15	15
43S	N	N	N	50	70	70	N	N	N	20	30
44S	N	N	N	70	70	70	N	N	N	15	20
45S	<1.0	N	N	15	30	30	N	N	N	15	15
49S	N	N	N	5	70	50	N	N	N	10	20
50S	N	N	N	100	70	30	N	N	N	20	<10
51S	N	N	N	50	100	30	N	N	N	30	10
52S	<1.0	N	N	20	50	15	N	N	N	20	10
53S	N	N	N	30	70	20	N	N	N	20	10
54S	N	N	N	50	100	30	N	N	N	20	<10
55S	N	N	N	15	100	15	N	N	N	20	<10
56S	<1.0	N	N	20	70	20	N	N	N	30	<10
57S	N	N	N	20	100	20	N	N	N	20	10
58S	N	N	N	30	50	20	N	N	N	15	10
59S	N	N	N	20	70	20	N	N	N	20	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th
K0297S	N	15	N	200	150	N	30	N	100	
K0298S	N	15	N	300	200	N	30	N	100	
K1000S	N	30	N	200	200	N	20	N	100	
K1001S	N	20	N	300	200	N	20	N	100	
K1003S	N	20	N	200	150	N	20	N	50	
K1004S	N	20	N	200	200	N	20	N	70	
K1005S	N	20	N	500	200	N	50	<200	150	
K1006S	N	50	N	200	500	N	30	N	100	
K1007S	N	50	N	150	500	N	20	N	70	
K1008S	N	20	N	100	200	N	20	N	50	
K1009S	N	30	N	500	300	N	50	N	100	
K1010S	N	20	N	100	200	N	20	N	70	
K1011S	N	20	N	200	200	N	20	N	100	
K1012S	N	20	N	150	300	N	20	N	70	
K1013S	N	20	N	200	200	N	20	N	100	
K1014S	N	15	N	100	150	N	20	N	70	
K1015S	N	20	N	200	200	N	15	N	70	
K1016S	N	20	N	200	500	N	20	N	70	
K1016SB	N	20	N	200	200	N	20	N	50	
K1017S	N	30	N	500	500	N	50	200	150	
K1018S	N	20	N	200	150	N	20	<200	50	
K1019S	N	30	N	150	200	N	30	N	70	
K1020S	N	30	N	500	200	N	20	N	70	
K1021S	N	20	N	200	100	N	20	N	100	
K1022S	N	20	N	700	200	N	50	N	150	
K1023S	N	30	N	500	500	N	50	200	100	
K1024S	N	50	N	300	300	N	30	N	100	
K1025S	N	30	N	500	500	N	50	200	150	
K1026S	N	30	N	300	300	N	20	N	100	
K1027S	N	20	N	500	150	N	20	N	100	
K1028S	N	20	N	300	150	N	30	N	100	
K1029S	N	20	N	200	200	N	20	N	50	
K1030S	N	20	N	200	200	N	30	N	100	
K1031S	N	15	N	200	100	N	20	N	70	
K1032S	N	30	N	300	300	N	50	<200	200	
K1033S	N	20	N	200	200	N	30	N	100	
K1034S	N	20	N	300	150	N	20	N	100	
K1035S	N	20	N	300	100	N	30	N	100	
K1036S	N	20	N	200	200	N	20	N	100	
K1037S	N	30	N	500	500	N	50	200	200	
K1038S	N	20	N	300	150	N	20	N	70	
K1038SD	N	20	N	200	200	N	20	N	70	
K1039S	N	50	N	300	500	N	50	300	100	
K1040S	N	20	N	500	150	N	20	N	70	
K1041S	N	30	N	200	200	N	20	N	70	
K1042S	N	20	N	300	200	N	30	N	100	
K1043S	N	30	N	500	300	N	50	<200	150	
K1044S	N	30	N	500	1,000	N	50	500	70	
K1045S	N	20	N	200	150	N	20	<200	50	
K1049S	N	10	N	100	200	N	<10	N	100	
K1050S	N	30	N	150	500	N	20	N	50	
K1051S	N	20	N	N	200	N	20	N	100	
K1052S	N	20	N	500	100	N	20	N	70	
K1053S	N	20	N	200	200	N	20	N	70	
K1054S	N	30	N	200	200	N	20	N	50	
K1055S	N	20	N	500	100	N	30	N	50	
K1056S	N	20	N	300	150	N	30	N	100	
K1057S	N	20	N	200	150	N	20	N	70	
K1058S	N	30	N	200	200	N	30	N	100	
K1059S	N	20	N	200	200	N	20	N	70	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
059SD	58 26 28	154 44 53	1.5	1.00	5.0	.50	500	<.5	N	N	15	300
060S	58 29 8	154 41 39	1.5	.70	5.0	.50	500	N	N	N	10	300
061S	58 35 25	154 32 31	1.5	1.00	5.0	.30	1,000	N	N	N	<10	100
062S	58 36 37	154 26 37	1.5	1.00	3.0	.30	300	<.5	N	N	20	300
063S	58 36 55	154 26 41	1.0	1.00	5.0	.30	500	N	N	N	30	500
064S	58 21 26	155 49 10	1.5	1.00	7.0	.50	1,000	N	N	N	10	500
065S	58 24 10	155 46 47	2.0	1.00	7.0	.50	1,000	N	N	N	15	300
066S	58 23 58	155 45 39	1.5	1.00	5.0	.30	1,000	N	N	N	15	200
067S	58 24 22	155 41 56	1.0	1.00	5.0	.50	1,000	N	N	N	10	300
068S	58 17 17	155 44 10	1.0	1.00	5.0	.50	1,000	N	N	N	10	300
069S	58 16 43	155 41 45	1.5	1.00	5.0	.50	1,000	N	N	N	10	200
070S	58 16 40	155 41 40	1.5	1.00	5.0	.50	1,000	N	N	N	10	300
071S	58 16 20	155 45 50	1.0	1.00	5.0	.50	700	N	N	N	10	300
072S	58 18 45	155 52 10	1.0	1.00	5.0	.50	1,000	N	N	N	<10	300
073S	58 18 50	155 52 12	1.5	1.00	5.0	.50	1,500	N	N	N	10	300
074S	58 15 15	155 48 31	1.5	.70	5.0	.50	1,000	N	N	N	<10	200
076S	58 15 41	156 0 27	1.0	1.00	7.0	.70	1,500	N	N	N	10	300
077S	58 17 35	156 4 49	1.0	1.00	5.0	.30	2,000	N	N	N	10	300
078S	58 22 12	156 0 21	1.0	1.00	3.0	.20	1,000	N	N	N	20	300
079S	58 28 31	156 7 45	1.5	1.00	5.0	.50	1,000	N	N	N	10	300
080S	58 29 40	156 13 20	1.5	1.00	5.0	.50	1,000	N	N	N	10	300
081S	58 29 32	156 13 30	1.5	1.00	5.0	.50	1,000	N	N	N	10	500
001S	58 55 42	155 46 56	1.5	1.00	3.0	.50	1,000	N	N	N	10	300
002S	58 54 53	155 48 51	1.5	1.00	3.0	.50	1,000	N	N	N	20	500
003S	58 54 51	155 49 0	1.5	1.00	5.0	.30	1,000	N	N	N	15	300
004S	58 51 39	155 48 43	1.5	1.00	3.0	.50	700	N	N	N	15	300
005S	58 51 39	155 48 51	.7	1.00	2.0	.50	700	N	N	N	20	300
006S	58 48 45	155 48 35	1.0	1.00	3.0	.30	1,000	N	N	N	15	300
007S	58 48 45	155 48 45	1.5	1.00	3.0	.50	1,000	N	N	N	15	300
010S	58 29 12	156 16 55	1.0	1.00	5.0	.50	1,000	N	N	N	10	200
011S	58 23 42	156 17 3	1.5	.70	5.0	.70	1,000	N	N	N	10	300
012S	58 20 52	155 59 52	1.0	.70	5.0	.50	700	N	N	N	10	300
013S	58 21 45	155 55 37	1.5	.70	5.0	.50	1,500	N	N	N	10	500
014S	58 26 21	155 48 16	2.0	1.00	15.0	>1.00	1,500	N	N	N	10	300
015S	58 26 16	155 48 18	1.5	.70	5.0	.50	700	N	N	N	10	500
016S	58 26 9	155 40 57	1.5	1.00	5.0	.50	700	N	N	N	30	300
017S	58 26 3	155 40 56	1.5	1.00	7.0	.50	1,000	N	N	N	10	300
018S	58 26 12	155 40 10	1.0	1.00	5.0	.50	700	N	N	N	15	300
019S	58 33 47	155 51 15	.5	.50	1.5	.20	500	N	N	N	50	300
020S	58 34 10	155 54 48	.5	.50	2.0	.20	1,500	N	N	N	10	200
021S	58 35 38	155 56 50	.5	1.00	1.5	.15	500	N	N	N	20	300
022S	58 35 33	155 55 0	1.5	1.00	5.0	.50	700	N	N	N	30	300
023S	58 36 7	155 51 52	.7	.70	2.0	.20	500	<.5	N	N	30	300
023SD	58 36 7	155 51 52	1.0	1.00	2.0	.30	500	<.5	N	N	30	500
024S	58 30 30	156 1 3	1.0	1.00	3.0	.30	1,500	N	N	N	10	300
025S	58 33 50	156 13 40	1.5	1.00	7.0	.50	1,000	N	N	N	10	300
026S	58 37 47	154 41 35	1.5	1.00	2.0	.30	500	N	N	N	10	200
027S	58 37 18	154 41 55	1.5	1.00	5.0	.50	700	N	N	N	10	300
028S	58 38 17	154 44 35	1.0	1.00	3.0	.20	500	N	N	N	10	300
029S	58 38 28	154 47 20	1.0	1.00	3.0	.30	700	N	N	N	10	300
030S	58 40 30	154 49 20	1.5	1.00	3.0	.30	700	N	N	N	10	200
030S	58 40 30	154 49 20	1.5	1.00	3.0	.20	700	N	N	N	15	300
031S	58 41 10	154 47 10	1.0	.70	3.0	.30	500	N	N	N	10	200
032S	58 42 10	154 44 50	1.0	1.00	3.0	.30	500	N	N	N	10	300
033S	58 43 0	154 43 10	1.0	1.00	5.0	.50	1,000	N	N	N	<10	300
034S	58 42 58	154 43 0	1.0	1.00	5.0	.50	700	N	N	N	10	300
035S	58 1 14	155 42 40	1.5	1.00	5.0	.30	700	N	N	N	10	200
036S	58 1 33	155 43 28	1.5	1.00	5.0	.50	700	N	N	N	15	300
037S	58 2 22	155 44 25	1.5	1.00	5.0	.30	500	N	N	N	10	200
038S	58 5 19	155 43 17	1.0	1.00	3.0	.30	700	N	N	N	10	300

Table 2. Analyses of stream-sediment samples from the Mt. Kataai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pt
K1059SD	N	N	N	20	100	30	N	N	N	20	
K1060S	N	N	N	20	100	20	N	N	N	30	
K1061S	N	N	N	50	150	30	N	N	N	50	
K1062S	N	N	N	15	100	30	N	N	N	30	
K1063S	N	N	N	20	100	30	N	N	N	30	
K1064S	N	N	N	20	150	20	N	N	N	7	
K1065S	N	N	N	50	150	15	N	N	N	15	
K1066S	N	N	N	20	70	20	N	N	N	5	
K1067S	<1.0	N	N	20	50	15	N	N	N	10	
K1068S	N	N	N	20	30	20	N	N	N	10	
K1069S	N	N	N	50	50	20	N	N	N	20	
K1070S	N	N	N	30	100	20	N	N	N	30	
K1071S	<1.0	N	N	15	20	10	N	N	N	7	
K1072S	<1.0	N	N	20	20	10	N	N	N	7	
K1073S	<1.0	N	N	10	20	10	N	N	N	5	
K1074S	N	N	N	30	30	7	N	N	N	10	
K1076S	<1.0	N	N	15	50	10	N	N	N	<5	
K1077S	<1.0	N	N	20	20	10	N	N	N	10	
K1078S	N	N	N	15	30	20	N	N	N	10	
K1079S	<1.0	N	N	15	30	<5	N	N	N	7	
K1080S	N	N	N	15	70	7	N	N	N	10	
K1081S	N	N	N	20	100	5	N	N	N	10	
K2001S	N	N	N	15	70	10	N	N	N	15	
K2002S	N	N	N	15	70	20	50	N	N	15	
K2003S	N	N	N	15	100	15	N	N	N	30	
K2004S	N	N	N	20	70	15	20	N	N	20	
K2005S	1.0	N	N	10	50	10	N	N	N	15	
K2006S	N	N	N	15	50	15	N	N	N	10	
K2007S	N	N	N	15	50	10	50	N	N	10	
K2010S	N	N	N	15	30	10	N	N	N	10	
K2011S	N	N	N	30	70	10	N	N	N	15	
K2012S	N	N	N	20	30	10	N	N	N	15	
K2013S	<1.0	N	N	20	20	7	N	N	N	<5	
K2014S	N	N	N	30	100	20	N	N	N	10	
K2015S	<1.0	N	N	20	70	20	N	N	N	15	
K2016S	<1.0	N	N	20	70	20	N	N	N	20	
K2017S	N	N	N	20	100	20	N	N	N	10	
K2018S	<1.0	N	N	20	100	10	N	N	N	20	
K2019S	<1.0	N	N	15	10	20	N	N	N	7	
K2020S	<1.0	N	N	10	15	30	N	N	N	7	
K2021S	<1.0	N	N	7	10	20	N	N	N	15	
K2022S	N	N	N	30	100	20	N	N	N	20	
K2023S	<1.0	N	N	10	20	70	N	<5	N	7	
K2023SD	<1.0	N	N	10	20	70	N	5	N	15	
K2024S	<1.0	N	N	15	20	30	N	N	N	10	
K2025S	<1.0	N	N	20	100	10	N	N	N	15	
K2026S	N	N	N	10	50	15	N	N	N	15	
K2027S	N	N	N	30	50	20	N	N	N	20	
K2028S	N	N	N	15	150	20	N	N	N	20	
K2029S	N	N	N	10	70	15	N	N	N	10	
K2030S	N	N	N	15	150	30	N	N	N	30	
K2030S	N	N	N	20	100	20	N	N	N	15	
K2031S	N	N	N	10	30	15	N	N	N	15	
K2032S	N	N	N	15	100	20	N	N	N	20	
K2033S	<1.0	N	N	20	70	30	30	N	N	30	
K2034S	<1.0	N	N	15	50	20	N	N	N	15	
K2035S	N	N	N	15	100	20	N	N	N	30	
K2036S	N	N	N	20	100	30	N	N	N	30	
K2037S	N	N	N	20	100	30	N	5	N	20	
K2038S	<1.0	N	N	10	50	20	N	N	N	20	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
99SD	N	20	N	200	200	N	15	N	70	N
08S	N	20	N	200	150	N	15	N	50	N
18S	N	20	N	200	150	N	20	N	50	N
28S	N	15	N	200	100	N	20	N	50	N
38S	N	20	N	200	150	N	20	N	70	N
48S	N	30	N	300	150	N	50	N	200	N
58S	N	30	N	300	300	N	30	N	500	N
68S	N	30	N	150	100	N	50	N	700	N
78S	N	30	N	200	200	N	30	N	500	N
88S	N	20	N	200	200	N	30	N	100	N
98S	N	20	N	300	200	N	30	N	70	N
08S	N	20	N	300	150	N	30	N	70	N
18S	N	20	N	200	100	N	50	N	70	N
28S	N	20	N	200	150	N	50	N	100	N
38S	N	20	N	200	100	N	30	N	150	N
48S	N	20	N	200	150	N	30	N	70	N
68S	N	30	N	200	200	N	30	N	150	N
78S	N	20	N	200	100	N	30	N	70	N
88S	N	20	N	300	100	N	20	N	100	N
98S	N	20	N	300	70	N	20	N	300	N
08S	N	20	N	300	150	N	20	N	100	N
18S	N	20	N	300	150	N	20	N	200	N
18S	N	20	N	200	150	N	20	N	100	N
28S	N	20	N	300	150	N	30	N	150	N
38S	N	20	N	200	200	N	30	N	200	N
48S	N	20	N	200	150	N	30	N	150	N
58S	N	15	N	200	150	N	20	N	200	N
68S	N	20	N	200	150	N	20	N	150	N
78S	N	20	N	200	150	N	30	N	200	N
08S	N	20	N	200	100	N	20	N	200	N
18S	N	30	N	200	150	N	30	N	100	N
28S	N	15	N	100	100	N	20	N	100	N
38S	N	20	N	200	150	N	30	N	200	N
48S	N	50	N	N	300	N	150	N	200	N
58S	N	30	N	200	200	N	50	N	200	N
68S	N	30	N	200	200	N	30	N	150	N
78S	N	30	N	200	200	N	50	N	200	N
88S	N	30	N	200	300	N	30	N	500	N
98S	N	10	N	100	100	N	20	N	70	N
08S	N	10	N	200	100	N	15	N	70	N
18S	N	10	N	150	70	N	20	N	70	N
28S	N	20	N	300	200	N	30	N	200	N
38S	N	10	N	200	70	N	30	N	70	N
38SD	N	15	N	200	100	N	30	N	100	N
48S	N	20	N	300	150	N	20	N	70	N
58S	N	20	N	200	100	N	20	N	200	N
68S	N	15	N	300	100	N	20	N	100	N
78S	N	20	N	300	100	N	30	N	150	N
88S	N	20	N	300	100	N	30	N	50	N
98S	N	20	N	300	100	N	30	N	200	N
08S	N	20	N	200	100	N	30	N	100	N
08S	N	20	N	200	100	N	30	N	70	N
18S	N	20	N	200	100	N	30	N	150	N
28S	N	20	N	300	100	N	30	N	300	N
38S	N	30	N	200	200	N	30	N	100	N
48S	N	20	N	300	150	N	30	N	100	N
58S	N	30	N	300	150	N	20	N	50	N
68S	N	20	N	500	150	N	20	N	50	N
78S	N	20	N	300	150	N	30	N	70	N
88S	N	30	N	200	100	N	20	N	50	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba
K2039S	58 4 57	155 53 0	1.5	1.00	5.0	.30	1,000	N	N	N	<10	
K2040S	58 4 55	155 52 35	2.0	1.50	5.0	.30	1,000	N	N	N	<10	
K2041S	58 5 0	155 51 58	2.0	1.00	10.0	1.00	1,500	N	N	N	N	
K2042S	58 0 30	155 57 30	2.0	1.00	5.0	.30	1,000	N	N	N	<10	
K2043S	58 0 59	155 49 10	1.5	1.00	3.0	.20	1,000	<.5	N	N	10	
K2044S	58 1 10	155 49 12	2.0	1.00	7.0	.50	700	N	N	N	10	
K2045S	58 51 32	155 31 12	1.0	1.00	7.0	.70	1,000	N	N	N	10	
K2046S	58 37 1	154 21 15	1.0	.70	3.0	.30	500	N	N	N	20	
K2047S	58 37 15	154 21 14	.7	.70	3.0	.30	500	N	N	N	20	
K2048S	58 37 15	154 21 40	1.0	.70	3.0	.30	300	<.5	N	N	15	
K2049S	58 36 35	154 23 45	1.0	1.00	3.0	.30	500	N	N	N	20	
K2050S	58 34 57	154 27 5	1.0	.70	3.0	.30	500	N	N	N	<10	
K2051S	58 36 40	154 31 9	1.0	.70	3.0	.20	500	<.5	N	N	20	
K2052S	58 36 53	154 35 12	1.5	1.00	3.0	.30	700	N	N	N	20	
K2053S	58 41 3	154 35 11	1.0	.70	5.0	.50	500	N	N	N	10	
K2054S	58 41 12	154 35 41	1.0	1.00	3.0	.30	700	N	N	N	10	
K2055S	58 14 17	155 17 9	2.0	.70	7.0	1.00	700	N	N	N	<10	
K2057S	58 15 15	155 11 48	.5	.50	2.0	.20	200	<.5	N	N	20	
K2058S	58 14 3	155 22 15	2.0	1.00	7.0	.70	1,000	N	N	N	10	
K2059S	58 12 46	155 23 39	1.5	1.00	7.0	1.00	1,000	N	N	N	<10	
K2060S	58 12 2	155 25 30	1.5	1.00	5.0	.50	700	N	N	N	10	
K2061S	58 14 35	155 25 19	1.5	1.00	7.0	.70	1,000	N	N	N	<10	
K2062S	58 14 33	155 27 22	1.5	.70	7.0	.50	1,000	N	N	N	10	
K2063S	58 14 53	155 31 32	1.5	.70	5.0	.50	500	N	N	N	15	
K2064S	58 12 11	155 36 11	1.5	1.00	5.0	.50	1,000	N	N	N	10	
K2065S	58 11 17	155 38 0	1.5	1.00	5.0	.50	1,000	N	N	N	10	
K2066S	58 8 43	155 30 27	1.5	1.00	5.0	.50	1,000	<.5	N	N	15	
K2066SD	58 8 43	155 30 27	1.5	1.00	5.0	.50	700	N	N	N	20	
K2067S	58 9 4	155 35 8	1.0	.70	5.0	.30	1,000	N	N	N	20	
K2068S	58 7 50	155 31 0	1.0	1.00	5.0	.30	1,000	N	N	N	15	
K2069S	58 7 41	155 32 8	1.0	.70	2.0	.20	500	N	N	N	10	
K2070S	58 8 10	155 34 44	1.0	.70	5.0	.50	700	N	N	N	15	
K2071S	58 6 40	155 33 9	1.0	1.00	3.0	.50	2,000	N	N	N	10	
K2072S	58 45 21	155 33 11	1.0	1.00	3.0	.50	1,500	N	N	N	10	
K2073S	58 44 17	155 22 35	1.0	1.00	5.0	.50	500	N	N	N	10	
K2074S	58 49 55	155 34 50	1.0	1.00	5.0	.50	1,000	N	N	N	10	
K2075S	58 49 55	155 27 0	1.0	1.00	3.0	.30	700	N	N	N	10	
K2076S	58 44 38	155 23 55	1.5	1.00	5.0	.70	1,000	N	N	N	15	
K2077S	58 40 58	155 22 0	1.0	1.00	5.0	.50	2,000	N	N	N	15	
K2078S	58 33 54	155 37 10	1.5	1.00	5.0	.50	1,000	N	N	N	15	
K2079S	58 48 27	155 43 52	1.0	1.00	5.0	.50	1,000	N	N	N	10	
K2080S	58 49 5	155 43 40	1.0	1.00	2.0	.20	300	N	N	N	20	
K2081S	58 50 50	155 43 51	1.0	1.00	5.0	.70	1,000	N	N	N	10	
K2081SD	58 50 50	155 43 51	1.5	1.00	5.0	.50	700	N	N	N	10	
K2082S	58 15 47	155 57 21	1.0	1.00	7.0	.50	1,000	N	N	N	10	
K2083S	58 8 1	156 16 10	1.5	1.00	5.0	.50	1,500	N	N	N	10	
K2084S	58 5 19	156 17 57	1.5	1.00	5.0	.50	1,000	N	N	N	10	
K2085S	58 4 34	156 19 40	1.5	1.00	5.0	.50	700	N	N	N	10	
K2086S	58 4 19	156 8 58	1.5	1.00	5.0	.50	1,500	N	N	N	10	
K2087S	58 4 16	156 9 18	1.5	1.00	5.0	.30	1,000	N	N	N	10	
K2088S	58 2 49	156 1 22	1.5	1.00	5.0	.50	1,000	N	N	N	10	
K2089S	58 6 22	156 5 57	1.5	1.00	5.0	.50	2,000	N	N	N	10	
K2090S	58 6 58	156 0 30	2.0	1.00	7.0	.70	1,000	N	N	N	10	
K2091S	58 4 5	155 34 59	1.0	1.00	3.0	.20	700	N	N	N	15	
K2092S	58 4 14	155 34 30	1.5	1.00	3.0	.20	1,000	N	N	N	15	
K2093S	58 4 27	155 34 30	1.0	1.00	5.0	.30	700	N	N	N	15	
K2094S	58 4 21	155 41 42	2.0	1.00	7.0	.50	1,000	N	N	N	10	
K2095S	58 13 21	155 54 20	1.5	1.00	5.0	.50	1,500	N	N	N	15	
K2096S	58 12 10	156 13 35	1.0	1.00	5.0	.30	1,000	N	N	N	10	
K2097S	58 10 9	156 8 5	2.0	1.00	5.0	.50	2,000	N	N	N	10	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

mple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
39S	N	N	N	20	30	30	N	N	N	15	<10
40S	<1.0	N	N	30	50	20	N	N	N	15	<10
41S	N	N	N	70	100	70	N	N	N	50	<10
42S	N	N	N	50	100	50	N	N	N	30	<10
43S	<1.0	N	N	50	100	100	N	N	N	30	15
44S	N	N	N	70	100	70	N	N	N	50	N
45S	N	N	N	20	70	10	70	N	N	10	<10
46S	N	N	N	15	100	30	N	N	N	30	10
47S	N	N	N	10	50	15	N	N	N	10	<10
48S	N	N	N	10	70	20	N	N	N	20	10
49S	<1.0	N	N	15	70	20	N	N	N	20	10
50S	<1.0	N	N	15	100	30	N	N	N	30	10
51S	<1.0	N	N	15	70	20	N	N	N	20	<10
52S	<1.0	N	N	15	100	20	N	N	N	20	<10
53S	N	N	N	15	70	20	N	N	N	20	<10
54S	N	N	N	15	200	15	N	N	N	15	<10
55S	N	N	N	50	100	10	N	N	N	20	<10
57S	<1.0	N	N	7	15	20	N	5	N	5	20
58S	<1.0	N	N	50	100	30	N	N	N	20	<10
59S	N	N	N	30	100	20	N	N	N	20	<10
60S	N	N	N	30	100	50	N	15	N	20	<10
61S	N	N	N	50	70	20	N	N	N	15	<10
62S	N	N	N	50	70	30	N	N	N	20	70
63S	N	N	N	20	50	30	N	N	N	20	<10
64S	N	N	N	20	70	20	N	N	N	20	10
65S	<1.0	N	N	20	70	20	30	N	N	20	10
66S	N	N	N	15	70	200	150	N	N	20	10
66SD	N	N	N	20	70	30	N	N	N	20	10
67S	N	N	N	20	70	20	N	N	N	30	<10
68S	<1.0	N	N	15	70	20	N	N	N	20	10
69S	N	N	N	15	50	20	N	N	N	20	<10
70S	N	N	N	20	70	20	N	N	N	20	<10
71S	<1.0	N	N	10	50	20	50	N	N	10	10
72S	<1.0	N	N	10	50	10	N	N	N	10	10
73S	<1.0	N	N	15	70	10	N	N	N	15	<10
74S	<1.0	N	N	15	70	10	N	N	N	10	15
75S	N	N	N	15	70	10	N	<5	N	7	15
76S	<1.0	N	N	20	100	20	N	N	N	10	10
77S	<1.0	N	N	15	20	15	N	<5	N	7	10
78S	N	N	N	20	50	10	N	N	N	10	20
79S	<1.0	N	N	20	100	15	N	N	N	15	<10
80S	<1.0	N	N	7	30	10	N	<5	N	5	20
81S	<1.0	N	N	15	50	10	N	<5	N	15	10
81SD	N	N	N	15	50	20	N	N	N	15	10
82S	<1.0	N	N	15	50	15	N	N	N	7	10
83S	N	N	N	20	50	15	N	N	N	10	10
84S	<1.0	N	N	20	50	15	N	N	N	10	10
85S	N	N	N	20	100	20	N	N	N	20	10
86S	N	N	N	20	70	20	N	N	N	15	<10
87S	N	N	N	15	50	20	N	N	N	10	30
88S	<1.0	N	N	20	70	30	N	N	N	20	10
89S	N	N	N	20	30	10	N	N	N	10	<10
90S	<1.0	N	N	30	70	20	N	N	N	20	10
91S	N	N	N	15	50	20	30	N	N	20	10
92S	N	N	N	20	100	20	30	N	N	50	10
93S	N	N	N	20	70	20	N	N	N	20	<10
94S	<1.0	N	N	30	100	30	N	N	N	20	10
95S	<1.0	N	N	20	20	20	N	N	N	10	10
96S	N	N	N	15	30	10	N	N	N	10	10
97S	<1.0	N	N	20	100	15	N	5	N	30	<10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th
K2039S	N	20	N	300	150	N	20	N	30	
K2040S	N	20	N	300	150	N	20	N	30	
K2041S	N	30	N	300	500	N	15	N	50	
K2042S	N	20	N	200	200	N	20	N	50	
K2043S	N	30	N	300	100	N	30	N	50	
K2044S	N	30	N	300	200	N	20	N	50	
K2045S	N	20	N	200	150	N	20	N	200	
K2046S	N	20	N	200	150	N	20	N	70	
K2047S	N	15	N	200	150	N	20	N	1,000	
K2048S	N	10	N	200	100	N	20	N	70	
K2049S	N	15	N	500	100	N	20	N	70	
K2050S	N	20	N	300	100	N	20	N	70	
K2051S	N	20	N	300	100	N	20	N	70	
K2052S	N	20	N	300	150	N	20	N	100	
K2053S	N	20	N	200	150	N	20	N	100	
K2054S	N	20	N	150	150	N	30	N	150	
K2055S	N	20	N	100	500	N	20	N	50	
K2057S	N	15	N	150	100	N	30	N	100	
K2058S	N	30	N	200	200	N	30	N	100	
K2059S	N	20	N	150	300	N	20	N	50	
K2060S	N	20	N	200	200	N	20	N	70	
K2061S	N	30	N	300	200	N	20	N	50	
K2062S	N	20	N	200	200	N	30	N	70	
K2063S	N	20	N	300	150	N	20	N	100	
K2064S	N	20	N	300	200	N	20	N	100	
K2065S	N	20	N	300	150	N	30	N	100	
K2066S	N	20	N	300	100	N	20	N	50	
K2066SD	N	20	N	300	150	N	30	N	100	
K2067S	N	20	N	300	150	N	30	N	70	
K2068S	N	20	N	200	100	N	30	N	100	
K2069S	N	15	N	200	100	N	20	N	100	
K2070S	N	20	N	200	200	N	30	N	70	
K2071S	N	20	N	200	100	N	50	N	200	
K2072S	N	15	N	200	150	N	20	N	100	
K2073S	N	20	N	300	150	N	20	N	50	
K2074S	N	20	N	300	150	N	30	N	70	
K2075S	N	20	N	200	100	N	30	N	100	
K2076S	N	20	N	500	150	N	20	N	150	
K2077S	N	20	N	200	150	N	30	N	100	
K2078S	N	20	N	300	100	N	20	N	70	
K2079S	N	30	N	300	200	N	30	N	200	
K2080S	N	15	N	200	100	N	30	N	100	
K2081S	N	20	N	300	150	N	20	N	100	
K2081SD	N	20	N	300	200	N	30	N	200	
K2082S	N	20	N	200	200	N	50	N	100	
K2083S	N	20	N	200	100	N	20	N	200	
K2084S	N	20	N	200	100	N	20	N	200	
K2085S	N	20	N	200	100	N	20	N	100	
K2086S	N	20	N	300	100	N	20	N	70	
K2087S	N	20	N	200	150	N	20	N	70	
K2088S	N	20	N	200	150	N	20	N	70	
K2089S	N	20	N	200	200	N	30	N	100	
K2090S	N	20	N	300	150	N	20	N	70	
K2091S	N	15	N	200	100	N	20	N	70	
K2092S	N	20	N	300	100	N	30	N	70	
K2093S	N	20	N	300	100	N	30	N	70	
K2094S	N	20	N	200	150	N	20	N	100	
K2095S	N	30	N	200	100	N	50	N	100	
K2096S	N	15	N	200	100	N	20	N	70	
K2097S	N	20	N	300	200	N	30	N	150	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
098S	58 9 40	156 3 27	1.5	1.00	3.0	.30	700	N	N	N	10	500
099S	58 12 10	156 1 30	1.0	.70	3.0	.50	1,000	N	N	N	<10	300
100S	58 14 5	156 6 0	2.0	1.00	5.0	.70	1,500	N	N	N	<10	300
101S	58 29 12	156 17 4	.7	.70	2.0	.20	300	N	N	N	10	200
102S	58 2 12	156 24 0	1.5	1.00	5.0	.50	700	N	N	N	10	300
103S	58 3 12	156 26 22	1.5	1.50	5.0	.50	1,000	N	N	N	<10	500
104S	58 6 8	156 26 11	1.0	1.00	2.0	.30	700	N	N	N	15	300
105S	58 9 42	156 27 31	1.0	.70	2.0	.20	700	N	N	N	10	300
106S	58 10 21	156 24 30	.7	.50	1.5	.20	500	N	N	N	15	200
107S	58 32 20	156 15 15	1.0	1.00	2.0	.30	500	N	N	N	15	300
108S	58 32 38	156 16 2	1.0	1.00	3.0	.30	1,000	N	N	N	20	300
109S	58 35 23	155 17 42	1.5	1.00	3.0	.50	1,000	N	N	N	15	300
110S	58 36 37	155 14 54	.7	.70	2.0	.20	300	N	N	N	15	300
111S	58 34 30	155 15 3	1.0	1.00	5.0	.30	700	N	N	N	10	500
112S	58 36 18	155 10 48	.7	.70	2.0	.30	500	<.5	N	N	10	300
113S	58 39 0	155 10 32	1.0	1.00	3.0	.50	700	N	N	N	10	300
114S	58 40 12	155 13 50	1.0	1.00	3.0	.30	500	N	N	N	15	500
115S	58 40 2	155 5 39	1.5	1.00	5.0	.50	500	N	N	N	10	500
116S	58 40 1	155 5 32	1.5	1.00	5.0	.50	700	N	N	N	10	500
117S	58 35 21	155 5 23	.7	1.00	7.0	.20	700	7.0	N	N	10	500
118S	58 42 0	155 6 21	2.0	1.50	5.0	.50	700	N	N	N	15	500
119S	58 43 5	155 4 7	1.0	1.00	3.0	.30	700	N	N	N	10	300
120S	58 42 50	155 1 24	1.5	1.00	5.0	.30	700	<.5	N	N	10	300
121S	58 41 52	154 59 20	1.5	1.00	5.0	.50	1,000	N	N	N	15	300
122S	58 44 0	154 54 45	1.5	1.00	5.0	.50	1,000	N	N	N	10	300
123S	58 47 25	156 24 0	1.5	1.00	5.0	.50	700	N	N	N	20	300
124S	58 48 24	156 23 1	.7	1.00	2.0	.20	700	N	N	N	10	300
125S	58 49 14	156 20 52	1.5	1.00	5.0	.70	1,000	N	N	N	10	300
126S	58 49 48	156 29 38	1.0	.70	2.0	.30	500	N	N	N	10	300
127S	58 51 51	156 20 12	.5	.50	3.0	.30	1,000	N	N	N	10	300
128S	58 51 8	156 18 30	1.5	1.00	3.0	.30	700	N	N	N	10	500
129S	58 49 33	156 18 0	1.5	1.00	3.0	.30	500	N	N	N	15	300
130S	58 48 4	156 12 0	1.0	1.00	2.0	.20	500	N	N	N	10	300
131S	58 46 42	156 4 55	1.0	1.00	3.0	.30	700	N	N	N	<10	200
131SD	58 46 42	156 4 55	2.0	1.00	7.0	.50	700	N	N	N	10	300
132S	58 50 19	156 4 38	1.0	1.00	2.0	.20	1,000	N	N	N	10	300
133S	58 52 17	156 0 45	2.0	1.00	7.0	.70	2,000	N	N	N	10	500
134S	58 52 12	156 7 10	1.5	1.00	5.0	.70	2,000	N	N	N	15	500
135S	58 52 21	156 7 11	1.5	1.00	7.0	.70	1,000	N	N	N	10	300
136S	58 53 2	156 13 56	1.5	1.00	3.0	.50	500	N	N	N	10	300
137S	58 56 7	156 17 38	1.0	1.00	3.0	.50	700	N	N	N	15	500
138S	58 57 25	156 8 37	.5	.70	2.0	.20	500	N	N	N	15	300
139S	58 58 0	156 6 56	1.5	.70	5.0	.50	700	N	N	N	10	300
140S	58 57 49	156 4 18	2.0	1.00	5.0	1.00	1,000	N	N	N	10	500
141S	58 57 52	156 4 30	1.0	1.00	3.0	.30	500	N	N	N	15	300
142S	58 43 19	155 8 30	1.0	.70	3.0	.30	500	N	N	N	<10	300
143S	58 44 31	155 10 30	1.5	1.00	5.0	.50	1,000	N	N	N	10	500
144S	58 43 57	155 13 0	1.0	1.00	5.0	.50	1,000	N	N	N	10	300
145S	58 47 50	155 12 30	1.5	1.00	3.0	.50	700	N	N	N	15	500
146S	58 49 17	155 14 11	1.5	1.00	5.0	.70	1,000	N	N	N	10	300
147S	58 52 39	155 17 11	1.5	1.00	5.0	.50	1,000	N	N	N	10	500
147SD	58 52 39	155 17 11	1.5	1.00	5.0	.30	700	N	N	N	10	300
148S	58 52 45	155 17 0	1.5	1.00	5.0	.70	1,000	N	N	N	10	300
149S	58 53 44	155 23 30	.7	.50	7.0	.30	1,500	N	N	N	10	300
150S	58 46 54	155 54 5	1.5	1.00	7.0	.50	1,000	N	N	N	15	300
151S	58 53 8	155 24 35	1.5	.70	5.0	.50	1,000	N	N	N	10	300
152S	58 46 23	155 51 48	1.0	1.00	5.0	.50	1,000	N	N	N	10	300
153S	58 59 4	155 58 35	.5	.50	1.0	.15	500	N	N	N	10	300
154S	58 58 27	155 57 13	.7	.50	1.5	.30	500	N	N	N	20	300
155S	58 55 30	155 54 5	.7	.50	3.0	.50	700	N	N	N	10	300

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K2098S	N	N	N	15	50	10	N	N	N	15
K2099S	N	N	N	15	30	<5	N	N	N	10
K2100S	N	N	N	30	70	10	N	N	N	20
K2101S	N	N	N	7	20	15	N	N	N	10
K2102S	<1.0	N	N	15	70	20	N	N	N	20
K2103S	N	N	N	20	50	10	N	N	N	10
K2104S	<1.0	N	N	10	50	20	N	N	N	15
K2105S	<1.0	N	N	10	20	15	N	N	N	7
K2106S	N	N	N	7	20	10	N	N	N	7
K2107S	<1.0	N	N	15	50	10	N	N	N	10
K2108S	<1.0	N	N	15	70	15	N	N	N	15
K2109S	N	N	N	20	30	20	N	N	N	10
K2110S	<1.0	N	N	10	30	20	N	N	N	10
K2111S	<1.0	N	N	15	20	15	N	<5	N	7
K2112S	N	N	N	7	15	10	N	<5	N	10
K2113S	<1.0	N	N	15	50	15	N	N	N	15
K2114S	<1.0	N	N	15	30	30	N	5	N	10
K2115S	N	N	N	20	100	20	N	N	N	15
K2116S	N	N	N	30	150	30	N	N	N	20
K2117S	<1.0	N	N	10	10	10	N	N	N	5
K2118S	<1.0	N	N	30	200	20	N	N	N	50
K2119S	N	N	N	20	100	20	N	N	N	30
K2120S	N	N	N	20	100	50	N	7	N	20
K2121S	N	N	N	30	50	20	N	N	N	20
K2122S	N	N	N	30	50	10	N	N	N	15
K2123S	N	N	N	15	70	7	N	N	N	15
K2124S	<1.0	N	N	10	50	10	N	N	N	10
K2125S	<1.0	N	N	15	70	10	N	N	N	15
K2126S	<1.0	N	N	10	50	10	N	N	N	15
K2127S	N	N	N	10	30	7	N	N	N	10
K2128S	N	N	N	15	100	15	N	N	N	15
K2129S	<1.0	N	N	15	70	10	N	N	N	15
K2130S	<1.0	N	N	10	50	7	N	N	N	10
K2131S	<1.0	N	N	15	70	7	N	N	N	15
K2131SD	N	N	N	30	150	7	N	N	N	20
K2132S	<1.0	N	N	15	30	7	N	N	N	7
K2133S	<1.0	N	N	20	100	15	N	N	N	10
K2134S	<1.0	N	N	30	70	20	N	N	N	20
K2135S	N	N	N	20	100	20	N	N	N	20
K2136S	N	N	N	10	70	10	N	N	N	10
K2137S	N	N	N	15	50	20	N	N	N	10
K2138S	<1.0	N	N	N	30	7	N	N	N	10
K2139S	<1.0	N	N	15	70	10	N	N	N	15
K2140S	N	N	N	20	150	10	N	N	N	10
K2141S	<1.0	N	N	15	50	10	N	N	N	10
K2142S	N	N	N	10	30	10	N	N	N	7
K2143S	<1.0	N	N	20	30	10	N	N	N	10
K2144S	N	N	N	20	70	10	N	N	N	10
K2145S	N	N	N	20	100	15	N	N	N	20
K2146S	<1.0	N	N	15	50	15	N	N	N	10
K2147S	<1.0	N	N	20	50	20	N	N	N	10
K2147SD	N	N	N	20	50	30	N	N	N	20
K2148S	<1.0	N	N	20	100	15	N	N	N	7
K2149S	N	N	N	20	50	10	N	N	N	10
K2150S	<1.0	N	N	20	70	10	N	N	N	15
K2151S	N	N	N	10	50	7	N	N	N	10
K2152S	N	N	N	20	100	15	N	N	N	20
K2153S	N	N	N	<5	15	7	N	N	N	5
K2154S	N	N	N	5	30	7	N	N	N	5
K2155S	<1.0	N	N	7	30	7	N	N	N	5

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
98S	N	20	N	300	100	N	30	N	150	N
99S	N	20	N	200	100	N	20	N	300	N
00S	N	30	N	300	150	N	30	N	100	N
01S	N	15	N	200	100	N	20	N	100	N
02S	N	20	N	200	150	N	20	N	70	N
03S	N	20	N	500	150	N	30	N	200	N
04S	N	20	N	200	100	N	30	N	100	N
05S	N	15	N	200	150	N	20	N	70	N
06S	N	10	N	100	100	N	15	N	70	N
07S	N	20	N	200	150	N	20	N	150	N
08S	N	15	N	300	150	N	20	N	100	N
09S	N	20	N	200	200	N	30	N	200	N
10S	N	10	N	100	100	N	20	N	100	N
11S	N	20	N	300	150	N	50	N	100	N
12S	N	15	N	200	100	N	50	N	100	N
13S	N	20	N	200	150	N	30	N	100	N
14S	N	15	N	200	150	N	30	N	150	N
15S	N	20	N	300	150	N	30	N	100	N
16S	N	30	N	300	150	N	30	N	200	N
17S	N	20	N	150	100	N	30	N	100	N
18S	N	30	N	500	200	N	30	N	100	N
19S	N	20	N	300	150	N	20	N	150	N
20S	N	20	N	300	200	50	30	N	70	N
21S	N	30	N	300	200	N	20	N	70	N
22S	N	20	N	200	200	N	20	N	70	N
23S	N	20	N	200	100	N	20	N	300	N
24S	N	10	N	200	100	N	20	N	50	N
25S	N	20	N	200	150	N	30	N	200	N
26S	N	15	N	200	100	N	20	N	100	N
27S	N	10	N	150	70	N	15	N	100	N
28S	N	20	N	300	100	N	20	N	150	N
29S	N	20	N	300	100	N	20	N	100	N
30S	N	20	N	300	100	N	20	N	100	N
31S	N	20	N	200	100	N	15	N	200	N
31SD	N	20	N	200	150	N	20	N	200	N
32S	N	15	N	300	100	N	20	N	100	N
33S	N	20	N	300	150	N	20	N	300	N
34S	N	20	N	300	150	N	20	N	200	N
35S	N	20	N	300	150	N	20	N	200	N
36S	N	20	N	200	100	N	20	N	70	N
37S	N	20	N	300	150	N	30	N	150	N
38S	N	10	N	200	70	N	10	N	50	N
39S	N	20	N	300	150	N	20	N	100	N
40S	N	30	N	200	150	N	30	N	200	N
41S	N	20	N	200	150	N	20	N	300	N
42S	N	15	N	150	100	N	20	N	50	N
43S	N	20	N	300	150	N	30	N	150	N
44S	N	15	N	200	200	N	20	N	100	N
45S	N	20	N	200	150	N	20	N	70	N
46S	N	20	N	300	150	N	50	N	100	N
47S	N	20	N	300	100	N	20	N	70	N
47SD	N	20	N	200	150	N	20	N	70	N
48S	N	20	N	200	150	N	50	N	150	N
49S	N	15	N	150	150	N	15	N	70	N
50S	N	30	N	300	200	N	30	N	200	N
51S	N	15	N	150	150	N	15	N	150	N
52S	N	20	N	200	200	N	20	N	150	N
53S	N	7	N	150	50	N	10	N	70	N
54S	N	7	N	200	50	N	10	N	100	N
55S	N	15	N	200	150	N	20	N	100	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K2156S	58 55 18	155 50 57	1.5	1.00	5.0	.70	1,000	N	N	N	10
K2501S	58 19 34	155 17 15	1.5	1.00	10.0	.70	1,000	N	N	N	10
K2502S	58 18 47	155 16 28	1.5	1.00	5.0	.70	1,000	N	N	N	10
K2503S	58 16 43	155 16 21	1.5	1.00	7.0	.70	1,000	N	N	N	<10
K2504S	58 15 57	155 16 25	1.5	1.00	5.0	.70	1,000	1.0	N	N	10
K2505S	58 15 51	155 11 58	1.5	1.00	5.0	.50	1,000	N	N	N	10
K2506S	58 17 12	155 10 16	2.0	1.00	7.0	.70	1,000	N	N	N	<10
K2507S	58 16 58	155 5 5	2.0	1.00	10.0	1.00	1,000	N	N	N	10
K2508S	58 18 16	155 4 40	1.5	.70	10.0	.70	1,000	N	N	N	10
K2509S	58 18 30	155 5 10	1.5	.50	5.0	.50	700	N	N	N	<10
K2510S	58 18 49	155 7 15	2.0	1.50	10.0	1.00	1,000	N	N	N	10
K2511S	58 19 20	155 9 11	2.0	1.00	15.0	1.00	1,000	N	N	N	<10
K2512S	58 21 0	155 11 11	2.0	1.00	7.0	.50	1,000	N	N	N	10
K2513S	58 21 0	155 11 21	1.5	.70	7.0	1.00	1,000	N	N	N	<10
K2514S	58 20 45	155 12 40	2.0	.70	7.0	.70	500	N	N	N	10
K2515S	58 20 48	155 14 1	1.5	1.00	5.0	.50	1,000	N	N	N	10
K2516S	58 21 39	155 15 40	1.5	.70	10.0	>1.00	1,000	N	N	N	<10
K2517S	58 22 10	155 17 0	1.0	.50	10.0	1.00	1,000	N	N	N	N
K2518S	58 24 8	155 23 51	2.0	1.00	10.0	1.00	1,000	N	N	N	30
K2519S	58 25 55	155 12 6	1.5	.50	10.0	1.00	700	N	N	N	10
K2520S	58 26 48	155 11 50	1.5	1.00	5.0	.50	500	N	N	N	10
K2521S	58 25 42	155 8 32	2.0	1.00	15.0	1.00	1,500	N	N	N	<10
K2522S	58 25 40	155 8 45	2.0	1.00	10.0	.70	1,000	N	N	N	10
K2523S	58 26 20	155 0 50	1.0	.70	3.0	.30	700	N	N	N	10
K2524S	58 25 28	155 1 55	2.0	1.00	10.0	>1.00	1,000	N	N	N	10
K2525S	58 24 40	155 0 35	1.5	1.00	5.0	.30	700	<.5	N	N	15
K2526S	58 22 36	154 58 47	2.0	1.00	15.0	1.00	1,500	N	N	N	<10
K2527S	58 21 43	154 58 22	1.5	.70	10.0	.70	1,000	N	N	N	<10
K2527SD	58 21 43	154 58 22	2.0	1.00	10.0	.70	1,000	N	N	N	10
K2528S	58 20 41	154 57 18	1.5	1.00	7.0	.50	1,000	N	N	N	70
K2529S	58 20 12	154 55 15	1.5	1.00	10.0	.70	1,000	N	N	N	10
K2530S	58 19 32	154 59 10	1.5	1.00	7.0	.70	1,000	N	N	N	10
K2531S	58 19 36	154 59 22	2.0	1.00	7.0	.50	1,000	N	N	N	10
K2532S	58 20 9	154 59 10	1.5	1.00	7.0	.70	1,500	1.0	N	N	10
K2533S	58 22 2	155 33 1	1.5	.70	7.0	1.00	1,500	N	N	N	10
K2534S	58 22 5	155 33 12	1.5	.70	5.0	.50	1,000	N	N	N	10
K2535S	58 21 58	155 30 42	3.0	.70	7.0	1.00	1,000	N	N	N	20
K2536S	58 25 48	155 29 50	2.0	1.00	10.0	1.00	1,000	N	N	N	20
K2537S	58 25 54	155 29 52	3.0	2.00	5.0	.70	1,000	N	N	N	30
K2538S	58 19 42	155 27 20	2.0	.70	10.0	1.00	1,000	N	N	N	10
K2539S	58 18 40	155 27 50	3.0	1.00	10.0	1.00	1,000	N	N	N	20
K2540S	58 17 37	155 31 50	3.0	1.50	7.0	1.00	1,000	N	N	N	10
K2541S	58 17 10	155 35 24	2.0	1.50	5.0	.30	1,000	N	N	N	10
K2542S	58 17 50	155 39 0	3.0	1.50	7.0	1.00	1,000	N	N	N	20
K2543S	58 22 5	155 38 50	2.0	1.00	10.0	1.00	1,000	N	N	N	10
K2544S	58 21 58	155 38 30	1.5	1.00	5.0	.50	1,000	N	N	N	10
K2545S	58 22 25	155 37 52	1.0	.70	3.0	.30	500	N	N	N	10
K2546S	58 29 12	155 31 20	1.5	1.00	5.0	.50	500	N	N	N	15
K2547S	58 29 36	155 30 0	1.0	1.00	3.0	.30	700	<.5	N	N	15
K2548S	58 28 8	155 20 32	1.5	1.00	5.0	.50	700	N	N	N	10
K2549S	58 27 8	155 16 48	2.0	1.00	5.0	.50	700	N	N	N	10
K2550S	58 29 30	155 10 23	2.0	1.00	7.0	.70	1,500	N	N	N	10
K2551S	58 27 22	155 0 25	1.5	.70	5.0	.50	500	<.5	N	N	15
K2552S	58 25 35	154 58 5	2.0	1.00	5.0	.50	700	N	N	N	20
K2553S	58 23 50	154 54 45	2.0	1.00	10.0	.70	1,000	N	N	N	10
K2554S	58 25 0	154 52 10	1.5	1.00	10.0	1.00	700	N	N	N	10
K2554SD	58 25 0	154 52 10	3.0	1.00	10.0	1.00	1,000	N	N	N	15
K2555S	58 24 52	154 52 30	3.0	1.00	10.0	>1.00	1,000	N	N	N	10
K2556S	58 24 52	154 52 57	3.0	1.00	7.0	>1.00	1,000	N	N	N	30
K2557S	58 23 38	154 48 6	3.0	1.00	10.0	1.00	1,000	N	N	N	30

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Ba-ppm n	Bi-ppm s	Cd-ppm s	Co-ppm n	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
168	<1.0	N	N	20	70	10	N	N	N	15	<10
218	N	N	N	70	100	20	N	N	N	20	<10
228	<1.0	N	N	50	50	20	N	N	N	15	10
238	<1.0	N	N	50	70	10	N	N	N	20	10
248	N	N	N	30	70	30	N	N	N	20	10
258	N	N	N	30	50	20	N	N	N	10	15
268	<1.0	N	N	30	50	7	N	N	N	15	<10
278	N	N	N	50	30	70	N	N	N	15	30
288	<1.0	N	N	30	50	10	N	N	N	15	<10
298	N	N	N	50	70	10	N	N	N	15	10
108	N	N	N	70	70	10	N	10	N	15	<10
118	N	N	N	70	70	20	N	N	N	15	<10
128	N	N	N	70	100	30	N	N	N	15	10
138	N	N	N	50	70	10	N	N	N	10	<10
148	N	N	N	50	100	20	N	N	N	10	10
158	N	N	N	20	30	20	N	N	N	10	10
168	N	N	N	70	70	10	N	N	N	20	<10
178	N	N	N	50	100	20	N	N	N	15	<10
188	<1.0	N	N	30	200	70	N	N	N	20	50
198	N	N	N	70	100	30	N	N	N	20	10
108	N	N	N	20	70	20	N	N	N	20	15
118	N	N	N	150	70	30	N	N	N	20	<10
128	N	N	N	50	70	70	N	N	N	20	30
138	N	N	N	20	30	10	N	N	N	7	15
148	N	N	N	100	100	100	N	N	N	20	30
158	N	N	N	50	100	30	N	N	N	30	70
168	N	N	N	100	50	150	N	N	N	20	30
178	N	N	N	50	70	20	N	N	N	15	15
178D	N	N	N	50	100	50	N	20	N	20	100
188	<1.0	N	N	50	70	30	N	N	N	20	10
198	N	N	N	50	100	30	N	N	N	30	10
108	N	N	N	30	100	20	N	N	N	15	10
118	N	N	N	50	50	30	N	N	N	15	15
128	N	N	<20	50	100	300	N	N	N	15	150
138	<1.0	N	N	50	50	20	N	N	N	20	10
148	<1.0	N	N	30	50	300	N	N	N	20	<10
158	N	N	N	50	70	20	N	N	N	20	20
168	N	N	N	50	70	50	N	N	N	15	50
178	<1.0	N	N	30	70	30	N	N	N	15	30
188	N	N	N	100	70	100	N	N	N	20	50
198	N	N	N	50	50	20	N	N	N	10	30
108	N	N	N	70	50	50	N	N	N	20	20
118	N	N	N	50	70	20	N	N	N	20	10
128	N	N	N	50	50	10	N	N	N	15	30
138	N	N	N	30	50	70	N	N	N	10	50
148	N	N	N	30	70	20	N	N	N	15	10
158	N	N	N	15	50	10	N	N	N	15	<10
168	N	N	N	20	70	20	N	N	N	20	10
178	N	N	N	15	50	20	N	<5	N	15	15
188	<1.0	N	N	30	70	20	N	N	N	20	10
198	N	N	N	30	70	20	N	N	N	50	15
508	N	N	N	50	50	20	N	N	N	15	<10
518	<1.0	N	N	20	50	30	N	N	N	20	15
528	<1.0	N	N	20	20	7	N	N	N	5	30
538	N	N	N	50	100	20	N	N	N	20	10
548	N	N	N	50	70	30	N	N	N	20	10
548D	N	N	N	50	50	70	N	N	N	20	50
558	N	N	N	100	50	150	N	N	N	20	70
568	N	N	N	70	50	100	N	N	N	30	100
578	N	N	N	70	100	70	N	N	N	20	20

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sm-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th
K2156S	N	30	N	300	150	N	30	N	300	
K2501S	N	30	N	150	300	N	30	N	70	
K2502S	N	30	N	300	300	N	30	N	100	
K2503S	N	30	N	100	300	N	20	N	70	
K2504S	N	20	N	300	200	N	20	N	100	
K2505S	N	30	N	200	200	N	50	N	100	
K2506S	N	30	N	300	200	N	30	N	100	
K2507S	N	30	N	300	500	N	50	200	200	
K2508S	N	20	N	200	300	N	30	N	100	
K2509S	N	30	N	<100	150	N	20	N	50	
K2510S	N	30	N	300	300	N	30	N	70	
K2511S	N	50	N	200	300	N	50	N	70	
K2512S	N	30	N	150	200	N	30	N	50	
K2513S	N	30	N	200	300	N	20	N	100	
K2514S	N	20	N	100	200	N	20	N	100	
K2515S	N	20	N	300	200	N	20	N	100	
K2516S	N	30	N	N	500	N	20	N	50	
K2517S	N	20	N	200	500	N	20	N	50	
K2518S	N	30	N	700	300	N	70	<200	200	
K2519S	N	30	N	N	500	N	20	N	100	
K2520S	N	20	N	200	150	N	20	N	70	
K2521S	N	30	N	100	700	N	20	N	50	
K2522S	N	20	N	300	500	N	50	200	150	
K2523S	N	20	N	200	150	N	20	N	100	
K2524S	N	50	N	300	500	N	50	1,000	100	
K2525S	N	20	N	200	100	N	30	N	70	
K2526S	N	50	N	300	500	N	30	1,000	50	
K2527S	N	30	N	200	200	N	20	N	70	
K2527SB	N	30	N	300	200	N	30	N	50	
K2528S	N	20	N	300	200	N	20	N	70	
K2529S	N	20	N	200	300	N	20	N	70	
K2530S	N	20	N	200	300	N	20	N	70	
K2531S	N	20	N	200	300	N	20	N	30	
K2532S	N	30	N	200	200	N	20	1,000	50	
K2533S	N	20	N	300	300	N	30	N	100	
K2534S	N	20	N	200	200	N	30	N	70	
K2535S	N	30	N	500	1,000	N	50	500	150	
K2536S	N	30	N	500	500	N	50	<200	200	
K2537S	N	30	N	700	200	N	50	<200	150	
K2538S	N	30	N	200	1,000	N	50	1,000	100	
K2539S	N	30	N	300	700	N	50	300	150	
K2540S	N	50	N	500	500	N	50	200	200	
K2541S	N	30	N	500	150	N	30	N	50	
K2542S	N	30	N	500	500	N	50	200	100	
K2543S	N	20	N	500	300	N	50	<200	150	
K2544S	N	20	N	200	200	N	30	N	100	
K2545S	N	20	N	200	100	N	20	N	70	
K2546S	N	20	N	300	150	N	30	N	100	
K2547S	N	20	N	200	100	N	30	N	100	
K2548S	N	20	N	200	200	N	20	N	70	
K2549S	N	15	N	200	150	N	15	N	50	
K2550S	N	30	N	200	300	N	30	N	100	
K2551S	N	20	N	200	100	N	20	N	100	
K2552S	N	20	N	500	100	N	50	N	200	
K2553S	N	30	N	200	200	N	20	N	70	
K2554S	N	30	N	200	300	N	20	N	100	
K2554SD	N	30	N	500	700	N	50	300	150	
K2555S	N	70	N	300	700	N	50	500	150	
K2556S	N	50	N	500	1,000	N	50	500	100	
K2557S	N	30	N	300	1,000	N	50	500	200	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

aple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
558S	58 23 55	154 45 43	2.0	1.50	10.0	.70	1,000	N	N	N	20	700
559S	58 25 16	154 45 40	1.5	1.00	7.0	.70	1,000	N	N	N	<10	150
560S	58 27 0	154 46 1	1.5	1.00	10.0	1.00	1,000	N	N	N	100	200
561S	58 29 40	154 52 41	1.5	.50	7.0	1.00	700	N	N	N	10	200
561SD	58 29 40	154 52 41	2.0	1.00	10.0	>1.00	1,000	N	N	N	20	200
562S	58 24 0	154 37 48	1.0	1.00	7.0	.50	700	N	N	N	20	300
563S	58 22 30	154 41 10	2.0	.70	10.0	.70	1,500	N	N	N	15	300
564S	58 22 40	154 41 20	1.5	.70	7.0	.70	700	N	N	N	10	500
565S	58 26 39	154 37 21	1.5	1.00	5.0	.50	700	N	N	N	10	200
566S	58 30 8	154 42 30	1.5	.70	3.0	.30	500	N	N	N	10	200
567S	58 32 38	154 40 20	1.0	.70	5.0	.50	700	N	N	N	10	300
568S	58 32 27	154 38 56	1.5	.70	5.0	.50	500	N	N	N	20	300
569S	58 31 0	154 33 18	3.0	1.00	7.0	.70	1,000	N	N	N	70	700
570S	58 31 10	154 33 22	1.5	1.00	5.0	.50	500	N	N	N	15	300
571S	58 30 55	155 2 27	1.5	.70	5.0	.70	1,000	N	N	N	10	300
572S	58 30 48	154 57 34	1.5	1.00	5.0	.70	700	N	N	N	15	500
573S	58 32 14	154 54 25	1.5	1.00	5.0	.70	700	N	N	N	10	300
574S	58 34 16	154 39 31	1.5	1.00	5.0	.50	700	N	N	N	20	300
575S	58 34 27	154 35 57	1.5	1.00	5.0	.50	700	<.5	N	N	20	500
576S	58 34 42	154 36 27	2.0	1.00	7.0	.50	>30	<.5	N	N	20	500
577S	58 37 33	154 34 26	1.0	1.00	5.0	.50	500	N	N	N	50	300
578S	58 37 30	154 34 24	1.5	1.00	5.0	.50	500	<.5	N	N	15	500
578SD	58 37 30	154 34 24	1.5	1.00	3.0	.30	500	<.5	N	N	15	500
579S	58 31 48	154 29 39	1.5	1.00	3.0	.30	500	N	N	N	10	200
580S	58 35 59	154 28 23	1.0	.70	3.0	.20	500	N	N	N	30	500
581S	58 35 5	155 32 48	1.5	1.00	7.0	.70	1,000	N	N	N	10	300
582S	58 34 51	155 29 20	1.5	.70	5.0	.50	1,000	N	N	N	15	300
583S	58 32 28	155 27 30	1.0	1.00	5.0	.30	500	N	N	N	30	300
584S	58 30 0	155 28 30	1.5	.70	5.0	.50	1,000	N	N	N	10	300
584SD	58 30 0	155 28 30	1.5	1.00	5.0	.50	700	N	N	N	10	500
585S	58 40 18	155 47 0	1.5	1.00	5.0	.30	1,500	N	N	N	10	300
586S	58 41 52	155 48 1	3.0	1.50	10.0	.70	1,000	N	N	N	10	500
587S	58 44 42	156 5 33	.5	.50	3.0	.15	700	N	N	N	10	150
588S	58 47 49	155 58 10	1.0	.70	2.0	.30	500	N	N	N	15	200
589S	58 48 38	155 59 20	1.0	.70	5.0	.30	700	N	N	N	10	300
590S	58 49 20	155 58 52	1.0	1.00	7.0	.70	1,000	N	N	N	10	300
591S	58 50 5	155 55 5	1.5	1.00	5.0	.50	1,000	N	N	N	10	200
592S	58 48 50	155 53 1	1.5	1.00	5.0	.50	1,000	N	N	N	<10	300
593S	58 49 0	155 52 30	1.5	.70	7.0	.70	1,000	N	N	N	<10	300
594S	58 1 50	155 45 0	1.5	1.50	5.0	.50	700	N	N	N	10	200
595S	58 3 30	155 46 22	2.0	1.00	5.0	.30	500	N	N	N	10	300
596S	58 5 53	155 48 30	1.5	1.00	5.0	.50	700	N	N	N	10	300
597S	58 4 5	155 55 42	1.5	1.00	5.0	.50	700	N	N	N	10	150
600S	58 0 40	155 50 58	1.5	1.50	5.0	.50	700	N	N	N	10	150
601S	58 49 33	155 29 24	1.0	.70	3.0	.30	1,000	N	N	N	10	300
602S	58 49 32	155 29 0	1.0	1.00	5.0	.70	5,000	N	N	N	10	500
603S	58 47 54	155 25 22	1.0	.70	3.0	.20	1,000	N	N	N	10	300
604S	58 48 0	155 25 0	1.0	1.00	5.0	.50	1,000	N	N	N	15	200
605S	58 48 22	155 25 10	.7	1.00	2.0	.20	300	N	N	N	15	300
606S	58 35 0	154 21 13	1.0	.70	3.0	.30	500	N	N	N	20	500
607S	58 35 2	154 20 49	1.0	.50	3.0	.20	500	N	N	N	15	300
608S	58 36 4	154 24 39	1.0	1.00	5.0	.50	700	N	N	N	15	700
609S	58 37 3	154 31 56	1.0	.70	5.0	.50	700	<.5	N	N	15	500
610S	58 38 55	154 31 36	1.5	.70	3.0	.30	500	<.5	N	N	30	300
611S	58 38 32	154 32 32	1.5	1.00	5.0	.50	700	<.5	N	N	20	500
612S	58 36 25	154 37 39	1.0	1.00	5.0	.30	500	N	N	N	15	500
614S	58 41 49	154 34 42	1.0	1.00	3.0	.30	700	N	N	N	<10	200
615S	58 41 58	154 34 47	1.0	.70	7.0	.70	1,000	N	N	N	<10	300
616S	58 14 25	155 15 15	2.0	1.00	10.0	1.00	700	N	N	N	<10	150
617S	58 14 28	155 14 4	1.0	.50	5.0	.70	700	N	N	N	<10	300

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	P
K25358S	N	N	N	50	100	100	N	N	N	20	
K25359S	N	N	N	50	50	30	N	N	N	20	
K25360S	N	N	N	50	100	30	N	N	N	20	
K25361S	N	N	N	70	70	10	N	N	N	20	
K25361SD	N	N	N	50	100	30	N	N	N	20	
K25362S	<1.0	N	N	20	100	30	N	N	N	30	
K25363S	N	N	N	70	100	30	N	N	N	20	
K25364S	N	N	N	20	70	15	N	N	N	15	
K25365S	N	N	N	30	100	20	N	N	N	30	
K25366S	N	N	N	20	100	15	N	N	N	30	
K25367S	N	N	N	20	70	15	N	N	N	30	
K25368S	N	N	N	20	70	30	N	N	N	20	
K25369S	N	N	N	50	100	70	N	N	N	50	
K25370S	N	N	N	20	150	20	N	N	N	50	
K25371S	<1.0	N	N	20	50	10	N	N	N	15	
K25372S	N	N	N	30	70	30	N	N	N	30	
K25373S	<1.0	N	N	20	70	20	20	N	N	20	
K25374S	<1.0	N	N	20	50	20	N	N	N	30	
K25375S	<1.0	N	N	20	100	30	N	N	N	30	
K25376S	N	N	N	30	100	30	N	N	N	30	
K25377S	N	N	N	20	100	30	N	N	N	50	
K25378S	<1.0	N	N	20	100	50	N	N	N	30	
K25378SD	N	N	N	20	100	30	N	N	N	30	
K25379S	N	N	N	15	70	20	N	N	N	20	
K25380S	<1.0	N	N	15	50	20	N	N	N	15	
K25381S	N	N	N	20	50	15	N	N	N	15	
K25382S	N	N	N	20	50	50	N	N	N	15	
K25383S	<1.0	N	N	20	20	200	N	5	N	10	
K25384S	N	N	N	20	50	20	N	N	N	15	
K25384SD	<1.0	N	N	15	50	20	N	N	N	10	
K25385S	N	N	N	20	50	10	N	N	N	10	
K25386S	N	N	N	30	50	7	N	N	N	15	
K25387S	<1.0	N	N	7	15	7	N	N	N	<5	
K25388S	N	N	N	15	20	10	N	N	N	10	
K25389S	<1.0	N	N	20	30	20	N	N	N	10	
K25390S	<1.0	N	N	20	30	10	N	N	N	5	
K25391S	N	N	N	20	30	20	N	N	N	20	
K25392S	<1.0	N	N	30	70	20	N	N	N	15	
K25393S	N	N	N	20	70	20	N	N	N	20	
K25394S	N	N	N	20	100	30	N	N	N	20	
K25395S	N	N	N	20	100	20	N	N	N	30	
K25396S	N	N	N	20	150	30	N	N	N	50	
K25397S	<1.0	N	N	20	50	50	N	N	N	20	
K26000S	N	N	N	30	50	50	N	N	N	30	
K26001S	N	N	N	15	150	15	N	N	N	15	
K26002S	N	N	N	20	50	10	N	N	N	10	
K26003S	N	N	N	15	50	10	N	N	N	10	
K26004S	N	N	N	20	100	20	N	N	N	20	
K26005S	<1.0	N	N	7	20	10	N	N	N	<5	
K26006S	<1.0	N	N	15	70	20	N	N	N	30	
K26007S	<1.0	N	N	10	70	15	50	N	N	10	
K26008S	N	N	N	15	100	30	N	N	N	15	
K26009S	<1.0	N	N	20	100	20	N	N	N	30	
K26010S	N	N	N	15	70	30	N	N	N	30	
K26011S	N	N	N	20	100	30	N	N	N	20	
K26012S	<1.0	N	N	15	30	20	N	<5	N	10	
K26014S	N	N	N	15	50	20	N	N	N	20	
K26015S	N	N	N	20	200	7	N	N	N	15	
K26016S	N	N	N	70	100	20	N	N	N	20	
K26017S	N	N	N	20	70	10	N	N	N	10	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
58S	N	30	N	500	300	N	30	200	150	N
59S	N	30	N	200	300	N	20	N	50	N
60S	N	30	N	200	300	N	30	N	100	N
61S	N	30	N	150	200	N	20	N	70	N
61SD	N	30	N	200	500	N	20	N	100	N
62S	N	20	N	200	150	N	30	N	100	N
63S	N	20	N	100	300	N	20	N	100	N
64S	N	20	N	200	150	N	20	N	100	N
65S	N	20	N	200	200	N	20	N	50	N
66S	N	20	N	200	100	N	20	N	50	N
67S	N	20	N	200	200	N	20	N	70	N
68S	N	20	N	300	150	N	20	N	70	N
69S	N	30	N	500	300	N	50	200	100	N
70S	N	20	N	300	150	N	20	N	50	N
71S	N	20	N	200	200	N	20	N	100	N
72S	N	20	N	300	150	N	20	N	100	N
73S	N	20	N	200	200	N	30	N	70	N
74S	N	20	N	300	150	N	20	N	70	N
75S	N	20	N	500	150	N	20	N	100	N
76S	N	30	N	500	200	N	30	<200	70	N
77S	N	20	N	300	150	N	20	N	70	N
78S	N	20	N	300	150	N	20	N	70	N
78SD	N	20	N	300	150	N	20	N	50	N
79S	N	20	N	200	100	N	20	N	50	N
80S	N	15	N	300	100	N	15	N	200	N
81S	N	30	N	200	200	N	30	N	300	N
82S	N	20	N	300	150	N	20	N	100	N
83S	N	20	N	200	150	N	30	N	150	N
84S	N	20	N	300	200	N	30	N	100	N
84SD	N	20	N	200	150	N	20	N	150	N
85S	N	20	N	200	100	N	20	N	150	N
86S	N	30	N	300	100	N	30	N	200	N
87S	N	7	N	N	100	N	10	N	50	N
88S	N	15	N	200	100	N	20	N	50	N
89S	N	20	N	200	150	N	30	N	70	N
90S	N	20	N	200	150	N	20	N	200	N
91S	N	20	N	100	150	N	20	N	100	N
92S	N	20	N	300	200	N	30	N	100	N
93S	N	20	N	200	200	N	20	N	70	N
94S	N	20	N	500	100	N	20	N	70	N
95S	N	20	N	200	150	N	30	N	100	N
96S	N	20	N	300	150	N	20	N	70	N
97S	N	20	N	200	150	N	30	N	70	N
00S	N	15	N	500	150	N	20	N	50	N
01S	N	15	N	200	150	N	20	N	70	N
02S	N	20	N	300	200	N	30	N	100	N
03S	N	15	N	200	100	N	20	N	70	N
04S	N	20	N	300	150	N	20	N	70	N
05S	N	15	N	200	100	N	30	N	100	N
06S	N	20	N	300	150	N	20	N	70	N
07S	N	10	N	150	100	N	20	N	500	N
08S	N	20	N	300	150	N	50	N	300	N
09S	N	20	N	200	200	N	20	N	70	N
10S	N	20	N	300	150	N	20	N	50	N
11S	N	20	N	500	200	N	30	N	100	N
12S	N	15	N	200	100	N	30	N	100	N
14S	N	20	N	300	100	N	20	N	70	N
15S	N	20	N	200	200	N	30	N	1,000	N
16S	N	30	N	N	500	N	20	N	50	N
17S	N	20	N	100	200	N	20	N	70	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K26179D	58 14 28	155 14 4	1.5	1.00	5.0	.70	700	N	N	N	10
K26180S	58 14 19	155 22 48	1.5	1.00	10.0	1.00	700	N	N	N	<10
K26195	58 13 51	155 20 58	1.0	.50	10.0	1.00	700	N	N	N	10
K26205	58 13 45	155 20 59	1.5	1.00	7.0	.70	1,000	N	N	N	10
K26205D	58 13 45	155 20 59	2.0	.70	7.0	.70	500	N	N	N	10
K26215	58 11 34	155 31 42	.7	1.00	5.0	.30	500	2.0	N	N	10
K26225	58 11 39	155 31 19	1.5	1.00	3.0	.30	500	N	N	N	10
K26235	58 10 50	155 28 5	1.0	.70	3.0	.20	500	N	N	N	15
K26245	58 10 57	155 27 53	1.0	.70	3.0	.20	500	N	N	N	15
K26255	58 12 35	155 32 42	1.5	1.00	3.0	.30	500	N	N	N	10
K26265	58 12 11	155 34 10	1.5	1.00	5.0	.30	700	N	N	N	10
K26275	58 11 40	155 39 30	1.0	1.00	2.0	.20	700	N	N	N	10
K26285	58 9 36	155 39 30	1.0	.70	3.0	.30	1,000	N	N	N	10
K26295	58 9 39	155 33 29	1.0	.70	3.0	.20	1,000	N	N	N	10
K26305	58 9 12	155 37 10	1.0	1.00	3.0	.50	1,000	N	N	N	10
K26315	58 8 7	155 36 45	1.0	.70	3.0	.30	700	N	N	N	15
K26325	58 6 55	155 34 3	1.0	.70	2.0	.20	700	N	N	N	20
K26335	58 5 52	155 33 0	1.0	1.00	2.0	.20	700	N	N	N	10
K26345	58 46 0	155 30 0	1.5	1.00	3.0	.50	700	N	N	N	10
K26355	58 47 2	155 32 5	1.0	1.00	5.0	.20	2,000	N	N	N	15
K26365	58 47 10	155 32 21	1.0	1.00	5.0	.50	1,000	N	N	N	10
K26375	58 52 38	155 32 40	1.0	.50	15.0	1.00	1,000	N	N	N	<10
K26375D	58 52 38	155 32 40	1.5	1.00	15.0	1.00	1,000	N	N	N	<10
K26385	58 48 22	155 21 25	1.5	1.00	5.0	.70	1,000	N	N	N	10
K26395	58 44 20	155 18 0	1.5	1.00	5.0	.50	700	N	N	N	10
K26405	58 42 44	155 35 52	.5	.70	5.0	.15	1,000	N	N	N	10
K26415	58 43 27	155 35 38	1.5	1.00	3.0	.70	1,000	N	N	N	10
K26425	58 32 36	155 34 35	1.5	1.00	5.0	.50	700	N	N	N	10
K26435	58 32 26	155 31 49	1.0	.70	5.0	.30	700	N	N	N	10
K26445	58 47 31	155 44 47	1.0	1.00	3.0	.30	700	N	N	N	10
K26455	58 49 48	155 44 50	1.0	1.00	5.0	.50	1,000	N	N	N	10
K26465	58 51 20	155 43 50	.7	1.00	3.0	.20	500	N	N	N	10
K26485	58 24 5	155 49 30	1.5	1.00	7.0	.30	1,500	N	N	N	20
K26495	58 22 43	155 47 26	1.5	1.00	5.0	.50	1,000	N	N	N	10
K26505	58 23 15	155 45 10	1.5	1.00	7.0	1.00	1,000	N	N	N	15
K26515	58 24 22	155 42 18	1.5	.70	5.0	.30	700	N	N	N	20
K26525	58 18 50	155 44 0	1.5	1.00	5.0	.70	1,500	N	N	N	10
K26535	58 16 9	155 40 53	2.0	1.50	5.0	.70	1,500	N	N	N	10
K26545	58 16 23	155 48 45	1.5	1.00	5.0	.50	1,000	N	N	N	10
K26555	58 16 30	155 48 35	1.0	1.00	2.0	.20	700	<.5	N	N	10
K26565	58 14 10	155 58 20	1.0	1.00	5.0	.50	1,000	N	N	N	<10
K26575	58 11 55	155 58 7	1.0	1.00	3.0	.50	1,000	N	N	N	10
K26585	58 16 22	156 0 47	2.0	1.00	7.0	1.00	1,500	N	N	N	<10
K26595	58 16 53	156 3 43	1.5	1.00	5.0	.50	1,000	N	N	N	10
K26605	58 16 56	156 4 9	1.5	1.00	7.0	.70	1,000	N	N	N	10
K26615	58 21 27	156 2 41	1.5	1.00	5.0	.50	1,500	N	N	N	10
K26625	58 27 50	156 9 46	2.0	1.00	5.0	.70	1,000	N	N	N	10
K26635	58 28 45	156 12 25	1.5	1.00	5.0	.50	1,000	N	N	N	10
K26645	58 30 25	156 16 35	.7	.70	3.0	.20	700	N	N	N	15
K26655	58 11 25	156 12 32	1.5	1.00	5.0	.30	1,000	N	N	N	10
K26655D	58 11 25	156 12 32	1.5	1.00	3.0	.70	1,500	N	N	N	10
K26665	58 10 26	156 9 30	.7	1.00	3.0	.30	3,000	N	N	N	20
K26675	58 9 56	156 6 30	1.5	1.00	5.0	.50	1,500	N	N	N	<10
K26685	58 10 42	156 1 0	1.5	1.00	5.0	.50	1,500	N	N	N	10
K26695	58 12 10	156 3 45	1.5	1.00	5.0	.50	1,000	N	N	N	<10
K26705	58 14 43	156 12 5	1.0	1.00	5.0	.20	700	N	N	N	<10
K26715	58 29 56	156 18 10	1.5	1.00	5.0	.50	1,000	N	N	N	15
K26725	58 2 39	156 25 16	1.5	1.00	5.0	.50	1,000	N	N	N	10
K26735	58 5 47	156 21 20	2.0	.70	10.0	>1.00	1,500	N	N	N	<10
K26745	58 8 32	156 32 25	1.5	1.00	5.0	.70	1,000	N	N	N	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
175D	N	N	N	20	50	20	N	N	N	10	10
18S	N	N	N	50	100	10	N	N	N	20	<10
19S	N	N	N	50	100	20	N	N	N	20	<10
20S	<1.0	N	N	50	100	30	N	N	N	20	10
20SD	N	N	N	30	100	30	N	5	N	20	10
21S	<1.0	N	N	15	70	20	N	N	N	15	10
22S	<1.0	N	N	15	70	15	N	N	N	20	<10
23S	N	N	N	15	100	10	N	N	N	20	<10
24S	<1.0	N	N	10	50	20	N	N	N	15	<10
25S	<1.0	N	N	20	100	20	50	N	N	20	10
26S	N	N	N	15	70	10	N	N	N	15	<10
27S	<1.0	N	N	15	50	20	N	N	N	15	10
28S	N	N	N	10	50	10	N	N	N	10	N
29S	N	N	N	10	30	15	N	N	N	15	<10
30S	<1.0	N	N	15	50	20	N	N	N	20	<10
31S	N	N	N	15	50	20	N	N	N	20	10
32S	<1.0	N	N	10	50	20	N	N	N	15	10
33S	N	N	N	15	70	15	N	N	N	20	10
34S	<1.0	N	N	15	100	15	N	N	N	15	10
35S	<1.0	N	N	15	50	20	N	N	N	10	10
36S	N	N	N	20	100	15	N	N	N	20	10
37S	N	N	N	20	150	7	N	N	N	15	<10
37SD	N	N	N	50	200	20	N	N	N	20	10
38S	N	N	N	15	70	20	N	N	N	10	15
39S	<1.0	N	N	20	100	10	N	N	N	10	10
40S	N	N	N	10	10	10	N	N	N	5	15
41S	<1.0	N	N	15	50	5	N	N	N	10	<10
42S	N	N	N	20	50	7	N	N	N	7	10
43S	N	N	N	20	15	15	N	N	N	7	<10
44S	<1.0	N	N	15	70	15	N	N	N	15	10
45S	N	N	N	20	100	20	N	N	N	20	<10
46S	<1.0	N	N	10	30	7	N	<5	N	10	10
48S	N	N	N	20	30	15	N	N	N	5	10
49S	<1.0	N	N	30	70	20	N	N	N	20	10
50S	N	N	N	30	100	20	N	N	N	10	10
51S	N	<10	N	20	100	20	N	N	N	15	10
52S	<1.0	N	N	20	30	20	N	N	N	7	10
53S	<1.0	N	N	20	70	20	N	N	N	20	<10
54S	<1.0	N	N	20	20	20	N	N	N	10	15
55S	<1.0	N	N	10	20	7	N	N	N	7	20
56S	<1.0	N	N	20	20	15	N	N	N	7	10
57S	<1.0	N	N	15	30	15	N	N	N	10	10
58S	N	N	N	50	70	10	50	N	N	15	10
59S	N	N	N	20	50	10	N	N	N	10	10
60S	<1.0	N	N	20	100	10	N	N	N	10	<10
61S	<1.0	N	N	20	50	5	N	N	N	5	<10
62S	N	N	N	20	150	10	N	N	N	20	<10
63S	<1.0	N	N	20	50	10	N	N	N	15	10
64S	<1.0	N	N	15	20	10	N	N	N	5	10
65S	N	N	N	20	50	10	N	N	N	10	10
65SD	N	N	N	20	50	7	N	N	N	20	<10
66S	<1.0	N	N	15	50	15	N	N	N	10	<10
67S	N	N	N	15	30	7	N	N	N	10	<10
68S	N	N	N	20	50	15	N	<5	N	15	10
69S	N	N	N	20	50	10	N	N	N	10	<10
70S	N	N	N	10	20	7	N	N	N	10	15
71S	<1.0	N	N	20	100	20	N	N	N	20	<10
72S	<1.0	N	N	15	50	10	N	N	N	15	10
73S	N	N	N	50	150	10	N	N	N	20	<10
74S	N	N	N	30	100	20	N	N	N	20	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	T
K2617SD	N	20	N	200	150	N	20	N	70	
K2618S	N	20	N	200	300	N	20	N	50	
K2619S	N	30	N	100	300	N	30	N	100	
K2620S	N	20	N	200	200	N	20	N	70	
K2620SD	N	30	N	N	300	N	20	N	70	
K2621S	N	20	N	200	100	N	20	N	100	
K2622S	N	20	N	200	150	N	20	N	100	
K2623S	N	20	N	200	150	N	20	N	50	
K2624S	N	20	N	200	100	N	20	N	200	
K2625S	N	20	N	300	150	N	30	N	70	
K2626S	N	20	N	150	150	N	20	N	200	
K2627S	N	20	N	200	100	N	20	N	70	
K2628S	N	20	N	300	150	N	20	N	200	
K2629S	N	15	N	300	150	N	20	N	100	
K2630S	N	20	N	300	100	N	50	N	150	
K2631S	N	20	N	200	150	N	20	N	100	
K2632S	N	15	N	200	100	N	20	N	50	
K2633S	N	20	N	300	100	N	15	N	50	
K2634S	N	20	N	500	150	N	20	N	100	
K2635S	N	20	N	300	150	N	30	N	70	
K2636S	N	30	N	300	200	N	50	N	100	
K2637S	N	20	N	100	500	N	20	N	200	
K2637SD	N	20	N	200	500	N	20	N	300	
K2638S	N	20	N	300	150	N	20	N	70	
K2639S	N	20	N	200	150	N	20	N	150	
K2640S	N	10	N	200	70	N	20	N	70	
K2641S	N	20	N	300	150	N	30	N	150	
K2642S	N	20	N	300	150	N	20	N	70	
K2643S	N	20	N	300	150	N	30	N	150	
K2644S	N	20	N	200	100	N	20	N	100	
K2645S	N	20	N	300	150	N	20	N	150	
K2646S	N	15	N	300	100	N	30	N	100	
K2648S	N	20	N	200	100	N	30	N	200	
K2649S	N	30	N	200	200	N	50	N	70	
K2650S	100	20	N	200	200	N	30	N	200	
K2651S	N	20	N	150	150	N	20	N	100	
K2652S	N	30	N	200	150	N	30	N	70	
K2653S	N	20	N	500	200	N	20	200	70	
K2654S	N	20	N	200	150	N	30	N	50	
K2655S	N	15	N	200	100	N	30	N	100	
K2656S	N	20	N	200	150	N	50	N	200	
K2657S	N	20	N	300	100	N	20	N	100	
K2658S	N	30	N	300	200	N	50	N	150	
K2659S	N	20	N	300	100	N	30	N	150	
K2660S	N	20	N	200	300	N	30	N	1,000	
K2661S	N	20	N	300	200	N	30	N	200	
K2662S	N	30	N	500	150	N	20	N	100	
K2663S	N	20	N	500	150	N	20	N	150	
K2664S	N	10	N	200	100	N	20	N	70	
K2665S	N	20	N	200	100	N	20	N	70	
K2665SD	N	20	N	300	150	N	20	N	100	
K2666S	N	15	N	200	100	N	20	N	100	
K2667S	N	30	N	300	150	N	30	N	300	
K2668S	N	30	N	200	150	N	30	N	200	
K2669S	N	30	N	200	150	N	30	N	200	
K2670S	N	15	N	200	100	N	20	N	70	
K2671S	N	30	N	500	150	N	30	N	100	
K2672S	N	20	N	300	150	N	20	N	70	
K2673S	N	30	N	150	300	N	20	N	200	
K2674S	N	20	N	200	200	N	20	N	70	

Table 2. Analyses of stream-sediment samples from the Mt. Kataai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
75S	58 30 10	156 14 20	1.0	.70	3.0	.20	500	N	N	N	10	300
76S	58 40 1	155 23 12	2.0	1.00	5.0	.50	1,000	N	N	N	10	300
77S	58 35 8	155 11 55	1.0	1.00	5.0	.30	700	N	N	N	10	500
78S	58 36 27	155 7 7	1.5	1.00	5.0	.50	1,000	N	N	N	10	300
79S	58 38 17	155 2 9	1.5	1.00	3.0	.30	500	<.5	N	N	10	500
80S	58 38 46	155 3 38	1.0	1.00	3.0	.30	500	N	N	N	10	300
81S	58 42 20	155 4 0	1.5	1.00	3.0	.30	700	N	N	N	10	500
82S	58 42 24	155 1 13	1.5	1.00	5.0	.30	300	N	N	N	10	300
83S	58 43 1	155 0 0	1.0	1.00	3.0	.30	500	N	N	N	15	300
84S	58 42 40	154 58 42	1.5	1.00	5.0	.50	700	N	N	N	<10	300
85S	58 48 0	156 28 17	2.0	1.00	5.0	.50	1,500	N	N	N	10	500
86S	58 48 0	156 28 0	1.0	1.00	2.0	.30	500	N	N	N	20	500
01S	58 54 45	155 45 56	.7	.70	2.0	.20	500	N	N	N	15	500
02S	58 54 18	155 47 34	1.5	1.50	3.0	.50	700	N	N	N	10	500
03S	58 53 45	155 44 20	.7	1.00	2.0	.20	1,000	N	N	N	10	300
04S	58 52 42	155 45 12	1.0	1.00	3.0	.50	1,000	N	N	N	10	500
05S	58 51 55	155 46 8	1.5	1.00	5.0	.50	1,000	N	N	N	10	500
06S	58 49 23	155 48 52	1.0	.70	2.0	.30	700	N	N	N	15	300
07S	58 50 8	155 48 48	1.5	1.00	7.0	.70	1,000	N	N	N	10	300
08S	58 46 3	155 44 36	1.0	1.00	5.0	.30	1,000	N	N	N	10	300
09S	58 1 30	156 16 52	2.0	1.00	7.0	.50	1,500	N	N	N	<10	300
09SD	58 1 30	156 16 52	2.0	1.50	5.0	.70	1,000	N	N	N	10	500
10S	58 1 42	156 19 20	1.5	1.00	7.0	.70	1,000	<.5	N	N	10	300
11S	58 1 0	156 14 50	2.0	1.00	7.0	.70	1,000	N	N	N	10	500
12S	58 1 0	156 14 22	1.5	1.00	5.0	.50	700	N	N	N	10	300
13S	58 0 40	156 12 0	1.5	1.00	5.0	.50	1,000	N	N	N	10	300
14S	58 0 7	156 10 40	2.0	1.50	7.0	1.00	1,000	N	N	N	<10	300
15S	58 0 6	156 9 8	2.0	1.00	10.0	1.00	1,000	N	N	N	10	300
16S	58 0 3	156 7 4	1.5	1.00	5.0	.70	1,000	N	N	N	10	300
17S	58 26 36	155 23 37	1.5	1.50	5.0	.50	1,000	N	N	N	10	300
18S	58 26 41	155 23 19	1.5	.70	5.0	.30	500	<.5	N	N	10	200
19S	58 26 1	155 23 49	1.5	1.00	5.0	.30	700	N	N	N	10	300
20S	58 25 33	155 22 28	1.5	1.00	3.0	.30	700	N	N	N	10	300
21S	58 22 30	155 14 0	2.0	.70	10.0	>1.00	1,000	N	N	N	<10	500
22S	58 23 44	155 12 22	2.0	1.00	20.0	>1.00	1,000	N	N	N	<10	200
23S	58 23 52	155 12 19	2.0	1.00	10.0	1.00	1,000	N	N	N	<10	300
24S	58 25 48	155 13 59	1.5	1.00	7.0	1.00	500	N	N	N	<10	300
25S	58 25 45	155 13 30	2.0	1.00	10.0	1.00	1,000	N	N	N	15	1,000
26S	58 24 22	155 4 20	3.0	1.00	10.0	1.00	1,000	N	N	N	10	500
27S	58 24 22	155 4 42	3.0	1.00	10.0	1.00	1,000	N	N	N	10	500
28S	58 24 32	155 6 40	2.0	1.00	7.0	1.00	1,000	N	N	N	20	500
29S	58 23 41	155 2 40	3.0	1.00	10.0	1.00	1,000	N	N	N	10	500
29SD	58 23 41	155 2 40	2.0	1.00	7.0	.70	700	N	N	N	<10	200
30S	58 22 50	155 0 57	1.5	1.00	5.0	.50	700	N	N	N	10	200
31S	58 21 11	154 59 13	2.0	.70	10.0	>1.00	1,000	N	N	N	10	500
32S	58 20 19	154 59 10	1.5	.70	10.0	1.00	1,500	N	N	N	<10	200
33S	58 20 14	155 33 35	2.0	1.00	10.0	1.00	1,000	N	N	N	10	500
34S	58 20 12	155 34 0	3.0	1.00	10.0	1.00	1,000	N	N	N	10	500
35S	58 20 34	155 33 41	1.5	1.00	5.0	.70	700	N	N	N	10	300
36S	58 24 30	155 29 45	2.0	1.00	10.0	1.00	1,000	N	N	N	20	700
37S	58 19 16	155 28 10	1.5	1.00	5.0	.50	700	N	N	N	<10	300
38S	58 16 25	155 34 0	2.0	1.00	7.0	1.00	1,000	N	N	N	20	500
39S	58 16 15	155 34 10	1.5	1.00	5.0	.70	1,000	N	N	N	10	300
40S	58 16 55	155 38 30	2.0	1.00	5.0	.50	1,000	N	N	N	20	700
41S	58 18 40	155 39 5	2.0	1.00	10.0	.70	1,000	N	N	N	20	500
42S	58 23 10	155 38 25	2.0	1.50	7.0	1.00	1,000	N	N	N	20	700
43S	58 23 20	155 38 36	1.5	.70	5.0	.50	1,000	N	N	N	10	300
44S	58 23 31	155 35 53	1.5	1.00	5.0	.50	1,000	N	N	N	<10	300
45S	58 27 45	155 31 0	2.0	1.00	7.0	.70	1,000	N	N	N	20	700
46S	58 29 40	155 22 42	1.5	1.00	5.0	.50	700	N	N	N	10	300

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K2675S	<1.0	N	N	7	20	10	N	N	N	7
K2676S	<1.0	N	N	20	30	7	N	7	N	7
K2677S	<1.0	N	N	15	30	20	N	<5	N	7
K2678S	N	N	N	20	70	15	N	N	N	15
K2679S	N	N	N	20	70	30	N	N	N	30
K2680S	N	N	N	15	100	20	N	N	N	30
K2681S	N	N	N	20	30	15	N	N	N	15
K2682S	N	N	N	30	100	30	N	N	N	20
K2683S	<1.0	N	N	15	50	50	N	5	N	15
K2684S	N	N	N	20	50	10	N	N	N	15
K2685S	N	N	N	20	100	10	N	N	N	10
K2686S	<1.0	N	N	15	70	15	N	N	N	15
K3001S	N	N	N	7	20	15	N	<5	N	7
K3002S	N	N	N	15	50	10	N	N	N	15
K3003S	<1.0	N	N	7	30	10	N	N	N	10
K3004S	N	N	N	15	70	7	N	N	N	10
K3005S	N	N	N	20	100	20	N	5	N	15
K3006S	<1.0	N	N	10	30	20	N	N	N	10
K3007S	<1.0	N	N	30	150	20	N	N	N	20
K3008S	N	N	N	20	70	10	N	N	N	15
K3009S	N	N	N	50	150	30	N	N	N	30
K3009SD	N	N	N	20	100	30	N	N	N	20
K3010S	N	N	N	50	150	30	N	N	N	20
K3011S	N	N	N	50	150	30	N	N	N	20
K3012S	1.0	N	N	20	100	20	N	N	N	20
K3013S	N	N	N	20	70	20	N	N	N	20
K3014S	N	N	N	30	100	30	N	N	N	30
K3015S	N	N	N	70	150	30	N	N	N	50
K3016S	<1.0	N	N	20	100	20	N	N	N	20
K3017S	N	N	N	30	70	30	N	N	N	20
K3018S	N	N	N	50	100	20	N	N	N	20
K3019S	<1.0	N	N	20	50	20	N	N	N	10
K3020S	N	N	N	20	100	20	N	N	N	15
K3021S	N	N	N	100	50	100	N	N	N	20
K3022S	N	N	N	150	100	10	N	N	N	20
K3023S	N	N	N	70	150	30	N	N	N	20
K3024S	N	N	N	50	100	30	N	N	N	15
K3025S	N	N	N	50	50	70	N	N	N	15
K3026S	N	N	N	100	100	50	N	N	N	15
K3027S	N	N	N	70	70	100	N	N	N	15
K3028S	N	N	N	70	100	70	N	N	N	15
K3029S	N	N	N	50	50	70	N	N	N	10
K3029SD	N	N	N	30	70	30	N	N	N	20
K3030S	N	N	N	20	50	15	N	N	N	15
K3031S	N	N	N	100	70	100	N	N	N	20
K3032S	<1.0	N	N	70	70	20	N	N	N	20
K3033S	N	N	N	50	70	70	N	N	N	15
K3034S	N	N	N	50	70	70	N	N	N	15
K3035S	N	N	N	20	50	20	N	N	N	20
K3036S	N	N	N	50	70	70	N	N	N	15
K3037S	<1.0	N	N	20	50	15	N	N	N	20
K3038S	N	N	N	50	50	50	N	N	N	15
K3039S	N	N	N	20	100	10	N	N	N	10
K3040S	N	N	N	30	50	30	N	N	N	15
K3041S	N	N	N	30	50	70	N	N	N	10
K3042S	N	N	N	50	50	20	N	N	N	15
K3043S	N	N	N	50	100	20	N	N	N	30
K3044S	<1.0	N	N	30	50	10	N	N	N	20
K3045S	N	N	N	30	50	70	N	N	N	15
K3046S	N	N	N	20	70	20	N	N	N	30

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

mple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
755	N	15	N	200	100	N	20	N	70	N
76S	N	20	N	300	200	N	20	N	100	N
77S	N	20	N	200	150	N	30	N	100	N
78S	N	20	N	200	150	N	30	N	100	N
79S	N	20	N	300	150	N	20	N	70	N
80S	N	20	N	200	150	N	20	N	50	N
81S	N	20	N	300	150	N	30	N	100	N
82S	N	30	N	300	150	N	30	N	70	N
83S	N	20	N	300	150	N	30	N	100	N
84S	N	30	N	200	200	N	50	N	100	N
85S	N	20	N	300	150	N	20	N	300	N
86S	N	20	N	300	100	N	20	N	150	N
01S	N	10	N	200	100	N	30	N	100	N
02S	N	20	N	500	100	N	20	N	200	N
03S	N	15	N	300	100	N	15	N	50	N
04S	N	20	N	300	150	N	30	N	200	N
05S	N	20	N	200	200	N	20	N	150	N
06S	N	15	N	200	150	N	20	N	70	N
07S	N	30	N	200	200	N	30	N	200	N
08S	N	20	N	200	200	N	30	N	200	N
09S	N	15	N	200	200	N	15	N	150	N
09S0	N	20	N	300	200	N	20	N	100	N
10S	N	30	N	200	300	N	20	N	200	N
11S	N	30	N	200	300	N	50	N	200	N
12S	N	20	N	200	150	N	30	N	150	N
13S	N	20	N	300	200	N	20	N	50	N
14S	N	30	N	300	300	N	20	N	100	N
15S	N	30	N	300	200	N	20	N	70	N
16S	N	20	N	300	150	N	30	N	70	N
17S	N	30	N	500	200	N	30	N	50	N
18S	N	20	N	150	150	N	20	N	100	N
19S	N	20	N	200	150	N	20	N	70	N
20S	N	15	N	300	150	N	20	N	150	N
21S	N	30	N	200	500	N	30	1,000	70	N
22S	N	50	N	100	1,000	N	20	N	50	N
23S	N	50	N	200	300	N	20	N	100	N
24S	N	20	N	100	200	N	30	N	70	N
25S	N	30	N	500	500	N	50	<200	200	N
26S	N	30	N	200	500	N	50	500	100	N
27S	N	30	N	300	1,000	N	50	500	150	N
28S	N	30	N	300	1,000	N	50	500	150	N
29S	N	30	N	500	500	N	50	200	100	N
29SB	N	30	N	200	300	N	20	N	70	N
30S	N	20	N	200	200	N	30	N	100	N
31S	N	30	N	200	1,000	N	50	1,500	100	N
32S	N	30	N	200	500	N	20	N	70	N
33S	N	30	N	500	700	N	50	200	100	N
34S	N	30	N	300	700	N	50	500	150	N
35S	N	20	N	300	200	N	20	N	70	N
36S	N	30	N	500	500	N	50	200	150	N
37S	N	20	N	300	200	N	20	N	100	N
38S	N	20	N	500	500	N	50	200	100	N
39S	N	20	N	200	200	N	20	N	150	N
40S	N	20	N	500	300	N	50	<200	150	N
41S	N	30	N	500	500	N	50	<200	100	N
42S	N	50	N	500	300	N	70	200	200	N
43S	N	30	N	200	200	N	30	N	100	N
44S	N	20	N	300	200	N	30	N	100	N
45S	N	20	N	500	300	N	50	<200	300	N
46S	N	20	N	300	150	N	30	N	100	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba
K3047S	58 28 19	155 8 10	1.5	1.00	7.0	1.00	1,000	N	N	N	<10	
K3048S	58 28 15	155 1 5	1.5	1.00	10.0	1.00	1,000	N	N	N	10	
K3049S	58 25 38	154 57 9	1.5	1.00	5.0	.50	700	N	N	N	10	
K3050S	58 25 36	154 47 16	1.0	.70	5.0	.30	500	<.5	N	N	20	
K3051S	58 23 11	154 55 26	1.0	.70	7.0	.70	700	N	N	N	10	
K3052S	58 25 28	154 53 36	1.0	1.00	5.0	.50	700	N	N	N	15	
K3053S	58 26 49	154 54 45	1.5	1.00	7.0	.70	1,000	N	N	N	<10	
K3054S	58 23 14	154 49 32	1.5	1.00	7.0	.70	1,000	N	N	N	<10	
K3055S	58 23 49	155 26 2	1.5	1.00	5.0	.70	700	N	N	N	10	
K3062S	58 23 36	156 11 29	2.0	1.00	10.0	.50	1,500	N	N	N	<10	
K3063S	58 23 31	156 11 35	1.5	1.00	5.0	.50	700	N	N	N	10	
K3064S	58 22 20	156 16 9	1.0	1.00	3.0	.30	500	N	N	N	10	
K3065S	58 21 33	155 55 45	1.5	.70	5.0	.50	700	N	N	N	10	
K3066S	58 21 35	155 55 28	1.5	.70	5.0	.50	700	N	N	N	<10	
K3067S	58 24 32	155 55 28	2.0	.70	7.0	.70	1,500	N	N	N	10	
K3068S	58 27 48	155 45 16	1.5	1.00	5.0	.50	700	N	N	N	15	
K3069S	58 33 50	155 50 36	1.0	.70	3.0	.30	700	N	N	N	30	
K3069SD	58 33 50	155 50 36	1.0	.70	2.0	.30	700	N	N	N	20	
K3070S	58 34 53	155 48 55	2.0	.70	5.0	.50	1,000	N	N	N	10	
K3071S	58 34 59	155 48 59	1.5	.70	5.0	.50	700	N	N	N	10	
K3072S	58 31 18	156 2 52	1.0	.70	3.0	.20	700	N	N	N	15	
K3073S	58 32 12	155 58 19	1.0	1.00	3.0	.30	1,000	N	N	N	10	
K3074S	58 32 33	155 59 50	1.5	1.00	5.0	.50	1,000	N	N	N	15	
K3075S	58 20 15	155 44 0	1.0	1.00	5.0	.50	700	N	N	N	15	
K3076S	58 19 57	155 44 10	1.5	1.00	5.0	.30	700	N	N	N	10	
K3076SD	58 19 57	155 44 10	1.0	1.00	3.0	.30	1,500	N	N	N	15	
K3077S	58 2 42	155 46 10	1.5	1.50	5.0	.50	1,000	N	N	N	10	
K3078S	58 6 30	155 51 12	1.5	1.00	5.0	.50	700	N	N	N	10	
K3079S	58 5 22	155 56 30	2.0	1.00	5.0	.50	700	N	N	N	10	
K3080S	58 1 30	155 57 58	2.0	1.00	5.0	.50	1,000	N	N	N	10	
K3081S	58 0 4	155 47 10	1.5	1.00	5.0	.50	700	N	N	N	<10	
K3082S	58 0 3	155 46 28	1.5	1.00	3.0	.50	700	N	N	N	10	
K3095S	58 35 47	155 9 23	1.0	1.00	2.0	.20	500	N	N	N	10	
K3096S	58 37 55	155 11 51	1.5	1.00	5.0	.50	2,000	10.0	N	N	10	
K3097S	58 37 34	155 13 27	1.0	1.00	2.0	.30	500	N	N	N	10	
K3099S	58 49 4	156 22 46	1.0	.70	2.0	.20	500	N	N	N	10	
K3100S	58 49 46	156 22 19	1.0	1.00	2.0	.30	500	N	N	N	10	
K3101S	58 49 39	156 25 30	1.0	.70	2.0	.20	200	N	N	N	20	
K3102S	58 50 0	156 27 5	1.5	1.00	3.0	.30	700	N	N	N	10	
K3102SD	58 50 0	156 27 5	2.0	1.00	5.0	.30	500	N	N	N	10	
K3103S	58 51 35	156 21 0	1.0	.70	3.0	.30	500	N	N	N	15	
K3104S	58 51 23	156 14 56	2.0	1.00	7.0	1.00	700	N	N	N	10	
K3105S	58 51 10	156 14 40	1.5	1.00	3.0	.50	1,000	N	N	N	10	
K3106S	58 49 50	156 11 55	2.0	1.00	5.0	.70	700	N	N	N	10	
K3107S	58 47 43	156 9 37	.3	.70	1.0	.20	200	N	N	N	10	
K3108S	58 46 29	156 6 5	1.0	1.00	3.0	.30	1,000	N	N	N	10	
K3109S	58 49 41	156 7 2	1.0	1.00	3.0	.50	1,000	N	N	N	10	
K3110S	58 1 23	156 5 59	1.0	1.00	3.0	.50	2,000	N	N	N	10	
K3111S	58 52 27	156 5 0	1.5	1.00	5.0	.50	1,000	N	N	N	10	
K3112S	58 52 26	156 4 41	1.0	1.00	5.0	.30	500	N	N	N	10	
K3113S	58 51 46	156 4 12	1.5	1.00	5.0	.70	1,500	3.0	N	N	10	
K3114S	58 55 25	156 13 0	1.0	.70	3.0	.30	500	N	N	N	10	
K3115S	58 58 8	156 14 50	1.0	1.00	2.0	.30	1,500	N	N	N	10	
K3116S	58 55 12	156 13 6	1.5	1.00	5.0	.70	1,000	N	N	N	10	
K3117S	58 58 13	156 14 35	1.5	1.00	3.0	.50	500	N	N	N	15	
K3118S	58 58 2	156 2 2	1.5	1.00	5.0	.50	1,000	N	N	N	10	
K3119S	58 58 0	156 1 30	1.5	1.00	5.0	.70	1,000	N	N	N	10	
K3120S	58 43 3	155 11 30	1.5	1.00	5.0	.50	700	N	N	N	20	
K3121S	58 43 34	155 8 40	1.5	1.00	5.0	.30	1,000	N	N	N	10	
K3122S	58 46 8	155 11 44	1.5	1.00	5.0	.30	1,000	N	N	N	10	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
17S	<1.0	N	N	30	50	20	N	N	N	10	10
8S	<1.0	N	N	50	100	30	N	N	N	20	10
19S	N	N	N	20	70	20	N	N	N	30	30
06S	N	N	N	15	70	30	N	5	N	20	30
11S	N	N	N	30	100	10	N	N	N	10	10
12S	N	N	N	20	30	20	N	N	N	15	20
13S	<1.0	N	N	30	50	30	N	N	N	20	15
14S	N	N	N	50	100	30	N	N	N	20	10
15S	N	N	N	50	150	30	N	N	N	30	10
2S	N	N	N	30	150	10	N	N	N	20	10
3S	N	N	N	20	50	10	N	N	N	10	10
4S	<1.0	N	N	10	30	15	N	N	N	10	10
5S	N	N	N	20	20	7	150	N	N	<5	10
6S	<1.0	N	N	20	20	5	N	N	N	5	10
7S	<1.0	N	N	30	70	10	N	N	N	10	<10
8S	N	N	N	15	20	10	N	N	N	7	<10
9S	<1.0	N	N	15	70	20	N	N	N	20	20
9SD	N	N	N	15	100	20	N	N	N	20	20
0S	N	N	N	20	150	20	N	N	N	20	10
1S	<1.0	N	N	20	100	15	N	N	N	15	10
2S	<1.0	N	N	10	20	10	N	N	N	5	10
3S	<1.0	N	N	10	20	10	N	N	N	7	10
4S	<1.0	N	N	20	50	20	N	N	N	15	20
5S	N	N	N	15	50	20	N	N	N	15	10
6S	N	N	N	30	20	20	N	N	N	10	10
6SD	<1.0	N	N	50	20	20	N	N	N	15	15
7S	N	N	N	20	50	20	N	N	N	20	<10
8S	N	N	N	15	50	20	N	N	N	20	10
9S	N	N	N	20	50	30	N	N	N	20	10
0S	N	N	N	20	100	20	N	N	N	20	10
1S	N	N	N	20	70	30	N	N	N	20	10
2S	N	N	N	20	100	20	N	N	N	30	<10
5S	<1.0	N	N	10	20	15	N	<5	N	7	15
6S	<1.0	N	N	15	50	7	N	N	N	10	<10
7S	N	N	N	10	10	10	N	5	N	5	10
9S	<1.0	N	N	10	30	10	N	N	N	10	10
0S	<1.0	N	N	15	100	10	N	N	N	20	10
1S	<1.0	N	N	7	50	10	N	N	N	15	15
2S	<1.0	N	N	15	70	5	N	N	N	15	10
2SD	N	N	N	15	100	5	N	N	N	20	<10
3S	<1.0	N	N	10	50	10	N	N	N	15	15
4S	<1.0	N	N	30	150	30	N	N	N	20	10
5S	<1.0	N	N	20	70	15	N	N	N	20	10
6S	N	N	N	20	100	15	N	N	N	20	10
7S	<1.0	N	N	<5	20	10	N	N	N	7	<10
8S	<1.0	N	N	15	70	15	N	N	N	15	10
9S	<1.0	N	N	20	50	7	N	N	N	15	10
0S	<1.0	N	N	15	50	10	N	N	N	15	10
1S	<1.0	N	N	15	50	10	N	N	N	15	10
2S	<1.0	N	N	15	20	10	N	<5	N	5	10
3S	<1.0	N	N	15	50	10	N	N	N	10	<10
4S	N	N	N	10	70	10	N	N	N	7	15
5S	<1.0	N	N	10	30	5	50	N	N	7	10
6S	<1.0	N	N	20	100	20	N	N	N	20	<10
7S	N	N	N	15	70	10	N	N	N	15	10
8S	<1.0	N	N	20	100	10	N	N	N	20	10
9S	<1.0	N	N	20	70	5	N	N	N	10	<10
0S	<1.0	N	N	20	70	20	N	N	N	10	<10
1S	<1.0	N	N	15	20	10	N	N	N	10	<10
2S	<1.0	N	N	20	150	15	N	N	N	30	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K3047S	N	20	N	300	200	N	20	N	50
K3048S	N	30	N	200	500	N	30	N	70
K3049S	N	20	N	300	100	N	20	N	100
K3050S	N	15	N	300	100	N	15	N	70
K3051S	N	20	N	300	300	N	30	N	200
K3052S	N	20	N	300	150	N	20	N	50
K3053S	N	30	N	200	300	N	20	<200	70
K3054S	N	20	N	300	200	N	20	N	100
K3055S	N	20	N	200	200	N	20	N	50
K3062S	N	20	N	150	200	N	20	N	150
K3063S	N	20	N	200	150	N	20	N	100
K3064S	N	15	N	150	100	N	20	N	100
K3065S	N	20	N	150	150	N	50	N	500
K3066S	N	20	N	100	150	N	30	N	300
K3067S	N	50	N	300	200	N	50	N	200
K3068S	N	20	N	300	200	N	30	N	100
K3069S	N	15	N	200	100	N	20	N	70
K3069SD	N	15	N	150	100	N	20	N	70
K3070S	N	20	N	200	200	N	20	N	70
K3071S	N	30	N	200	200	N	20	N	150
K3072S	N	15	N	200	100	N	20	N	100
K3073S	N	20	N	300	100	N	20	N	100
K3074S	N	20	N	300	150	N	20	N	70
K3075S	N	20	N	300	150	N	50	N	150
K3076S	N	20	N	200	150	N	30	N	70
K3076SD	N	20	N	200	100	N	50	N	50
K3077S	N	20	N	500	150	N	20	N	70
K3078S	N	20	N	300	150	N	20	N	70
K3079S	N	20	N	200	150	N	30	N	70
K3080S	N	20	N	200	150	N	20	N	70
K3081S	N	20	N	200	150	N	20	N	150
K3082S	N	20	N	300	150	N	30	N	100
K3095S	N	15	N	200	100	N	30	N	100
K3096S	N	20	N	200	100	N	20	N	150
K3097S	N	15	N	150	150	N	30	N	150
K3099S	N	15	N	200	70	N	20	N	70
K3100S	N	15	N	300	100	N	20	N	150
K3101S	N	15	N	200	100	N	15	N	100
K3102S	N	20	N	300	100	N	20	N	150
K3102SD	N	20	N	200	100	N	20	N	100
K3103S	N	15	N	200	100	N	20	N	100
K3104S	N	30	N	300	150	N	30	N	100
K3105S	N	20	N	300	150	N	20	N	200
K3106S	N	20	N	300	150	N	30	N	200
K3107S	N	10	N	200	100	N	15	N	70
K3108S	N	15	N	200	150	N	20	N	100
K3109S	N	20	N	300	150	N	20	N	300
K3110S	N	20	N	300	150	N	20	N	200
K3111S	N	20	N	300	150	N	30	N	100
K3112S	N	20	N	200	150	N	50	N	100
K3113S	N	20	N	200	150	N	20	N	150
K3114S	N	15	N	100	150	N	15	N	200
K3115S	N	15	N	300	100	N	20	N	150
K3116S	N	20	N	300	150	N	20	N	150
K3117S	N	20	N	300	100	N	30	N	200
K3118S	N	20	N	200	150	N	20	N	100
K3119S	N	20	N	300	150	N	30	N	500
K3120S	N	20	N	200	200	N	30	N	150
K3121S	N	20	N	200	150	N	20	N	100
K3122S	N	20	N	200	100	N	30	N	150

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
2SD	58 46 8	155 11 44	1.5	1.00	7.0	.50	700	N	N	N	10	300
3S	58 48 42	155 13 0	1.5	1.00	10.0	.50	1,000	N	N	N	10	500
4S	58 50 45	155 17 13	1.5	1.00	5.0	.50	1,000	N	N	N	10	500
5S	58 50 49	155 17 18	1.0	.70	5.0	.70	1,000	N	N	N	10	500
6S	58 53 20	155 18 50	1.5	1.00	5.0	.50	1,000	N	N	N	10	500
7S	58 52 2	155 18 0	1.0	1.00	5.0	.50	1,000	N	N	N	20	300
8S	58 53 21	155 23 12	1.0	1.00	5.0	.50	2,000	N	N	N	10	300
9S	58 54 17	155 27 35	1.5	.70	5.0	.50	700	N	N	N	10	500
0S	58 47 17	155 49 32	1.5	.70	5.0	.70	1,000	N	N	N	15	300
1S	58 46 58	155 48 22	1.0	.70	5.0	.50	1,500	N	N	N	10	300
2S	58 50 20	155 52 30	1.0	.70	5.0	.50	1,500	N	N	N	15	300
3S	58 55 18	155 57 22	1.5	.70	5.0	.70	1,000	N	N	N	10	300
4S	58 55 18	155 57 14	1.5	1.00	5.0	.50	1,500	.7	N	N	10	300
5S	58 55 35	155 58 5	.7	.70	3.0	.30	1,000	N	N	N	10	300
6S	58 56 32	155 28 12	1.0	.70	5.0	.30	1,500	N	N	N	<10	300
7S	58 56 14	155 21 42	.5	.30	5.0	.30	>5,000	N	N	N	15	300
8S	58 54 19	155 18 52	1.0	.70	3.0	.30	1,000	N	N	N	15	300
9S	58 54 2	155 14 49	1.5	1.00	7.0	.50	1,500	N	N	N	10	300
0S	58 52 32	155 13 5	.7	.70	2.0	.30	500	N	N	N	10	300
1S	58 52 32	155 12 2	1.5	1.00	3.0	.50	1,000	N	N	N	10	500
1SD	58 52 32	155 12 2	1.5	1.00	5.0	.70	1,000	N	N	N	30	500
2S	58 47 12	155 17 10	1.0	.70	2.0	.30	700	N	N	N	10	500
3S	58 46 24	155 17 56	1.5	1.00	3.0	.50	1,000	N	N	N	10	300
4S	58 50 40	155 22 25	.7	.50	3.0	.30	1,500	N	N	N	10	500
5S	58 51 8	155 24 33	.7	.50	5.0	.30	1,000	N	N	N	10	300
2S	58 23 50	154 37 40	1.0	.30	3.0	.50	500	N	N	N	100	200
4S	58 25 22	154 33 41	.7	.50	10.0	.20	700	N	N	N	15	300
0S	58 42 17	154 49 43	2.0	2.00	5.0	.70	1,500	N	N	N	10	500
1S	58 44 5	154 40 27	2.0	2.00	10.0	.70	2,000	N	N	N	20	500
2S	58 44 10	154 40 34	2.0	2.00	7.0	.70	2,000	N	N	N	20	500
3S	58 43 56	154 41 0	2.0	2.00	10.0	.70	2,000	N	N	N	20	300
4S	58 42 11	154 39 50	1.5	1.50	5.0	1.00	1,500	N	N	N	10	300
5S	58 43 0	154 32 30	1.0	1.50	2.0	.30	1,000	N	N	N	20	500
6S	58 40 38	154 11 46	2.0	1.50	5.0	.30	1,000	<.5	N	N	100	700
7S	58 44 38	154 6 11	2.0	2.00	3.0	.50	1,000	N	N	N	50	300
8S	58 40 16	154 6 8	2.0	1.50	5.0	.30	1,000	N	N	N	50	700
9S	58 40 50	153 52 20	2.0	1.50	10.0	.70	1,000	<.5	N	N	200	300
0S	58 40 49	153 52 2	3.0	2.00	7.0	.30	2,000	<.5	N	N	50	500
1S	58 37 44	153 48 58	1.5	1.50	5.0	.50	1,500	N	N	N	700	500
2S	58 39 36	153 41 50	2.0	1.50	5.0	.50	2,000	.5	N	N	500	500
3S	58 42 43	153 39 3	3.0	2.00	5.0	.30	1,000	N	N	N	50	300
4S	58 41 2	153 34 10	1.5	1.50	5.0	.50	1,500	<.5	<200.0	N	100	300
5S	58 42 43	153 30 15	.7	1.00	1.0	.30	1,000	<.5	N	N	20	200
6S	58 45 5	153 27 25	1.0	.70	2.0	.50	1,500	<.5	N	N	1,500	300
7S	58 54 47	153 22 57	2.0	2.00	10.0	1.00	2,000	N	N	N	200	150
8S	58 53 14	153 20 45	3.0	1.50	5.0	.50	1,000	<.5	N	N	150	300
9S	58 51 3	153 24 15	2.0	2.00	5.0	.70	1,500	N	N	N	100	300
9SD	58 51 3	153 24 15	2.0	2.00	7.0	.70	1,000	N	N	N	200	300
0S	58 47 30	153 26 3	3.0	2.00	7.0	.70	1,500	N	N	N	30	300
1S	58 56 25	153 32 48	2.0	1.50	7.0	.70	2,000	N	N	N	30	500
2S	58 56 50	153 34 10	2.0	1.50	7.0	.70	1,000	N	N	N	20	500
3S	58 56 48	153 34 32	5.0	2.00	7.0	.70	2,000	N	N	N	50	300
4S	58 55 22	153 43 38	1.0	1.00	3.0	.30	1,000	N	N	N	70	700
5S	58 53 57	153 43 14	2.0	1.50	5.0	.50	1,500	N	N	N	70	500
6S	58 53 45	153 43 20	2.0	2.00	5.0	.50	1,500	.5	N	N	100	500
7S	59 2 16	154 0 2	1.0	2.00	3.0	.30	1,000	N	N	N	20	500
8S	59 2 10	153 59 50	1.5	2.00	5.0	.30	1,000	N	N	N	10	500
9S	58 57 0	153 53 30	1.0	2.00	5.0	.50	1,500	N	N	N	30	700
0S	58 53 30	153 55 42	1.0	5.00	7.0	1.00	1,500	N	N	N	50	500
1S	58 49 13	153 59 33	1.5	1.00	7.0	.50	1,000	<.5	N	N	100	700

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	P
K3122SD	N	N	N	20	150	15	N	N	N	30	
K3123S	N	N	N	30	100	15	N	N	N	15	
K3124S	N	N	N	20	70	10	N	N	N	10	
K3125S	N	N	N	15	70	15	N	N	N	15	
K3126S	<1.0	N	N	20	70	10	N	N	N	10	
K3127S	N	N	N	10	100	10	N	N	N	10	
K3128S	<1.0	N	N	15	50	10	N	N	N	15	
K3129S	N	N	N	15	100	10	N	N	N	15	
K3130S	N	N	N	15	70	7	N	N	N	10	
K3131S	N	N	N	10	50	10	N	N	N	7	
K3132S	N	N	N	15	50	10	N	N	N	10	
K3133S	N	N	N	15	100	5	N	N	N	10	
K3134S	<1.0	N	N	30	150	7	N	N	N	20	
K3135S	<1.0	N	N	15	30	7	N	N	N	10	
K3136S	N	N	N	10	30	10	N	N	N	10	
K3137S	N	N	N	20	20	10	N	N	N	5	
K3138S	<1.0	N	N	15	20	7	N	N	N	7	
K3139S	N	N	N	30	100	15	N	N	N	10	
K3140S	N	N	N	7	30	7	N	N	N	5	
K3141S	N	N	N	15	30	7	N	N	N	10	
K3141SD	N	N	N	20	50	10	N	N	N	15	
K3142S	N	N	N	7	50	20	N	N	N	7	
K3143S	<1.0	N	N	15	50	10	N	N	N	15	
K3144S	N	N	N	10	30	10	N	N	N	7	
K3145S	N	N	N	10	50	10	N	N	N	7	
K3152S	N	N	N	10	150	50	N	N	N	30	
K3154S	N	N	N	5	20	10	N	N	N	5	
K3300S	<1.0	N	N	20	50	30	N	N	N	15	
K3301S	<1.0	N	N	30	100	50	N	N	N	20	
K3302S	<1.0	N	N	20	50	20	50	N	N	20	
K3303S	<1.0	N	N	30	70	70	N	N	N	20	
K3304S	1.0	N	N	30	200	20	N	<5	N	7	
K3305S	<1.0	N	N	20	30	20	N	N	N	15	
K3306S	<1.0	N	N	30	200	70	N	N	N	50	
K3307S	<1.0	N	N	20	100	50	N	N	N	20	
K3308S	<1.0	N	N	20	70	50	N	N	N	20	
K3309S	<1.0	N	N	50	100	500	N	10	N	30	
K3310S	N	N	N	50	150	70	N	<5	N	20	
K3311S	1.0	N	N	50	30	50	N	5	N	20	
K3312S	1.0	N	N	70	70	200	N	<5	N	20	
K3313S	<1.0	N	N	30	70	50	N	N	N	30	
K3314S	<1.0	N	N	50	70	50	N	<5	N	20	
K3315S	1.0	N	N	10	30	20	N	<5	N	15	
K3316S	1.0	N	N	50	70	70	N	<5	N	50	
K3317S	<1.0	N	N	50	200	50	N	N	N	30	
K3318S	<1.0	N	N	50	100	70	N	N	N	30	
K3319S	<1.0	N	N	30	70	20	N	N	N	30	
K3319SD	N	N	N	30	200	30	N	N	N	30	
K3320S	<1.0	N	N	50	150	70	N	<5	N	50	
K3321S	N	N	N	50	150	50	N	N	N	30	
K3322S	<1.0	N	N	50	150	70	N	N	N	30	
K3323S	N	N	N	70	300	70	N	N	N	100	
K3324S	1.0	N	N	15	70	20	N	N	N	30	
K3325S	<1.0	N	N	30	150	50	N	N	N	30	
K3326S	1.0	N	N	30	100	30	N	N	N	30	
K3327S	1.0	N	N	20	50	20	N	N	N	20	
K3328S	<1.0	N	N	20	50	20	N	N	N	20	
K3329S	1.0	N	N	20	100	15	20	N	N	20	
K3330S	<1.0	N	N	30	200	30	30	<5	N	20	
K3331S	1.0	N	N	30	100	50	N	N	N	30	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
122SD	N	20	N	200	150	N	20	N	200	N
23S	N	30	N	300	300	N	30	N	70	N
24S	N	30	N	300	100	N	30	N	100	N
25S	N	15	N	300	150	N	20	N	70	N
26S	N	20	N	300	150	N	20	N	70	N
27S	N	15	N	300	200	N	20	<200	70	N
28S	N	20	N	200	150	N	20	N	200	N
29S	N	20	N	200	150	N	30	N	200	N
30S	N	20	N	200	100	N	15	N	150	N
31S	N	15	N	200	100	N	15	N	100	N
32S	N	15	N	200	150	N	20	N	150	N
33S	N	20	N	150	150	N	15	N	200	N
34S	N	30	N	200	150	N	30	N	150	N
35S	N	15	N	200	100	N	20	N	150	N
36S	N	10	N	200	70	N	10	N	70	N
37S	N	10	N	150	100	N	15	N	150	N
38S	N	15	N	200	100	N	20	N	200	N
39S	N	30	N	200	200	N	30	N	200	N
40S	N	15	N	200	100	N	20	N	100	N
41S	N	20	N	300	150	N	20	N	200	N
41SD	N	20	N	500	200	N	30	N	150	N
42S	N	15	N	200	100	N	20	N	100	N
43S	N	20	N	300	150	N	20	N	50	N
44S	N	10	N	150	100	N	20	N	100	N
45S	N	15	N	150	100	N	15	N	100	N
52S	N	20	N	150	100	N	15	<200	50	N
54S	N	7	N	150	70	N	20	N	20	N
00S	N	20	N	200	200	N	20	<200	70	N
01S	N	30	N	300	300	N	20	<200	70	N
02S	N	30	N	300	200	N	30	<200	50	N
03S	N	30	N	200	300	N	30	N	500	N
04S	N	20	N	200	200	N	30	N	100	N
05S	N	15	N	300	150	N	20	N	50	N
06S	N	20	N	500	150	N	30	N	100	N
07S	N	20	N	300	100	N	15	<200	70	N
08S	N	20	N	500	100	N	20	N	70	N
09S	N	20	N	200	300	N	20	N	150	N
10S	N	20	N	500	150	N	20	200	70	N
11S	N	15	N	300	150	N	30	<200	70	N
12S	N	30	N	500	200	N	20	300	70	N
13S	N	20	N	300	200	N	20	N	70	N
14S	N	15	N	150	100	N	20	200	70	N
15S	N	10	N	100	100	N	15	N	50	N
16S	N	15	N	300	100	N	15	200	100	N
17S	N	20	N	200	700	N	20	200	300	N
18S	N	20	N	300	100	N	20	<200	100	N
19S	N	20	N	200	200	N	20	N	100	N
19SD	N	30	N	200	300	N	15	<200	70	N
20S	N	30	N	200	300	N	30	N	1,000	N
21S	N	20	N	200	300	N	20	<200	100	N
22S	N	20	N	200	200	N	20	N	200	N
23S	N	30	N	200	500	N	15	200	50	N
24S	N	15	N	300	100	N	20	N	100	N
25S	N	15	N	500	200	N	20	<200	100	N
26S	N	20	N	500	200	N	20	200	100	N
27S	N	15	N	300	150	N	20	N	70	N
28S	N	20	N	300	150	N	15	N	70	N
29S	N	20	N	500	150	N	20	N	500	N
30S	N	20	N	500	300	N	20	N	300	N
31S	N	15	N	300	200	N	20	<200	100	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	B
K3332S	58 49 0	153 59 40	1.5	1.00	5.0	.50	1,000	N	N	N	150	
K3333S	58 48 59	153 59 52	1.0	1.50	3.0	.30	1,000	N	N	N	150	
K3334S	58 49 1	153 51 43	.5	.70	2.0	.50	1,000	N	N	N	100	
K3335S	58 52 28	153 52 45	.7	.70	2.0	.30	700	N	N	N	50	
K3336S	58 50 47	153 46 50	1.5	2.00	5.0	.50	1,500	N	N	N	50	
K3337S	58 54 18	154 47 52	1.5	1.50	7.0	.50	1,500	<.5	N	N	20	
K3338S	58 52 36	154 40 35	1.5	1.50	5.0	.30	1,500	<.5	N	N	70	
K3339S	58 50 50	154 41 25	1.0	1.50	3.0	.20	1,500	N	N	N	<10	
K3340S	58 48 26	154 40 12	2.0	2.00	7.0	.50	1,500	N	N	N	<10	
K3340SD	58 48 26	154 40 12	2.0	2.00	10.0	.70	1,500	N	N	N	10	
K3341S	58 48 32	154 40 32	1.5	1.50	5.0	.50	1,500	N	N	N	10	
K3342S	58 49 48	154 51 37	1.0	1.50	5.0	.30	1,500	<.5	N	N	10	
K3343S	58 46 29	154 46 40	2.0	1.50	10.0	1.00	1,500	N	N	N	10	
K3344S	58 48 5	154 52 50	1.5	2.00	5.0	.70	1,500	N	N	N	10	
K3345S	58 45 37	155 1 58	2.0	2.00	5.0	.30	1,500	N	N	N	15	
K3346S	58 49 58	154 8 18	1.0	1.00	3.0	.30	1,000	N	N	N	15	
K3347S	58 54 19	154 9 48	1.0	1.50	3.0	.30	1,000	N	N	N	30	
K3348S	58 56 41	154 4 25	1.0	1.50	3.0	.30	1,000	N	N	N	15	
K3349S	58 56 44	154 4 10	.7	1.00	2.0	.20	2,000	N	N	N	20	
K3350S	58 45 38	154 2 20	.7	1.00	2.0	.20	700	N	N	N	20	
K3351S	58 46 10	154 2 38	1.0	1.00	5.0	.50	700	N	N	N	100	
K3352S	58 44 1	153 52 38	2.0	3.00	10.0	>1.00	3,000	N	N	N	20	
K3353S	58 46 57	154 4 11	1.0	2.00	3.0	.70	1,000	N	N	N	100	
K3354S	58 46 38	154 9 35	2.0	2.00	5.0	.50	1,000	N	N	N	20	
K3355S	58 46 30	154 9 28	1.5	3.00	5.0	.50	1,000	N	N	N	50	
K3356S	58 50 5	154 13 28	1.5	2.00	3.0	.50	1,000	N	N	N	20	
K3357S	58 49 30	154 14 20	2.0	1.50	5.0	.50	1,000	N	N	N	10	
K3358S	58 46 53	154 13 36	2.0	3.00	5.0	.70	1,500	N	N	N	20	
K3358SD	58 46 53	154 13 36	2.0	2.00	5.0	.50	1,000	N	N	N	20	
K3359S	58 42 48	154 14 52	1.5	1.00	5.0	.50	1,000	1.0	N	N	70	
K3360S	58 42 50	154 14 44	2.0	2.00	7.0	.70	1,000	<.5	N	N	70	
K3361S	58 42 30	154 23 5	1.5	1.50	5.0	.50	1,500	<.5	N	N	50	
K3362S	58 59 0	154 47 12	3.0	3.00	15.0	1.00	2,000	N	N	N	20	
K3363S	58 57 23	154 51 10	1.0	1.00	7.0	.50	1,000	N	N	N	70	
K3364S	58 38 48	154 16 47	2.0	2.00	5.0	.70	1,000	N	N	N	20	
K3365S	58 56 17	154 56 57	1.5	2.00	10.0	.70	1,500	N	N	N	300	
K3366S	58 38 42	154 16 50	1.0	2.00	5.0	.70	1,500	N	N	N	20	
K3367S	58 45 4	154 21 36	1.5	2.00	5.0	.70	1,500	<.5	N	N	50	
K3368S	58 51 31	154 14 1	1.0	1.50	3.0	.50	1,000	N	N	N	20	
K3369S	58 46 36	154 31 58	.7	.05	5.0	.50	1,500	<.5	200.0	N	10	
K3370S	58 46 23	154 31 55	1.5	2.00	5.0	.70	2,000	N	N	N	<10	
K3371S	58 49 38	154 24 53	.7	1.50	2.0	.30	1,000	N	N	N	10	
K3372S	58 52 3	154 27 45	1.0	1.50	5.0	.50	1,500	N	N	N	10	
K3372SD	58 52 3	154 27 45	2.0	2.00	7.0	.70	2,000	N	N	N	10	
K3373S	58 53 56	154 19 49	1.5	2.00	5.0	.50	1,500	N	N	N	10	
K3374S	58 56 53	154 18 6	2.0	2.00	7.0	.70	2,000	N	N	N	15	
K3375S	58 55 6	154 14 12	.7	1.50	3.0	.30	2,000	N	N	N	10	
K3376S	58 55 15	154 14 0	2.0	1.50	5.0	.50	1,500	N	N	N	10	
K3377S	58 58 50	154 24 52	1.5	2.00	5.0	.50	2,000	N	N	N	10	
K3378S	58 59 39	154 16 50	1.0	2.00	3.0	.30	1,500	N	N	N	10	
K3379S	58 59 30	154 16 0	1.0	2.00	3.0	.30	2,000	N	N	N	<10	
K3380S	58 58 33	154 27 10	1.5	2.00	7.0	.70	2,000	N	N	N	10	
K3381S	58 57 13	154 31 36	2.0	2.00	20.0	1.00	3,000	N	N	N	N	
K3382S	58 57 9	154 31 35	1.5	1.50	5.0	.50	2,000	N	N	N	10	
K3383S	58 55 10	154 32 57	1.5	2.00	5.0	.50	1,500	N	N	N	10	
K3384S	58 47 26	155 5 30	1.5	2.00	10.0	.50	2,000	N	N	N	20	
K3385S	58 58 58	154 35 35	1.5	2.00	5.0	.70	2,000	N	N	N	10	
K3386S	58 59 56	154 32 58	1.0	1.50	7.0	.50	1,500	N	N	N	10	
K3387S	58 59 48	154 36 45	2.0	1.50	5.0	.70	1,000	N	N	N	<10	
K3388S	58 50 36	154 36 49	1.0	1.50	5.0	.30	1,000	N	N	N	<10	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
32S	1.0	N	N	30	200	50	N	N	N	50	20
33S	1.0	N	N	15	100	20	N	N	N	30	15
34S	1.0	N	N	10	50	50	N	N	N	20	<10
35S	1.0	N	N	15	100	20	N	N	N	20	10
36S	1.0	N	N	20	30	20	N	N	N	20	10
37S	1.0	N	N	50	150	100	30	5	N	30	50
38S	1.0	N	N	20	50	200	N	5	N	20	70
39S	1.0	N	N	15	50	20	N	N	N	20	10
40S	<1.0	N	N	30	50	20	N	N	N	10	10
40SD	N	N	N	30	30	15	N	N	N	10	10
41S	<1.0	N	N	20	30	30	N	N	N	10	20
42S	<1.0	N	N	15	30	30	N	<5	N	15	20
43S	N	N	N	50	30	20	N	N	N	10	<10
44S	<1.0	N	N	50	50	100	N	N	N	20	<10
45S	<1.0	N	N	50	50	50	N	N	N	20	10
46S	<1.0	N	N	15	70	20	N	N	N	20	<10
47S	<1.0	N	N	15	30	20	N	N	N	20	10
48S	<1.0	N	N	15	50	20	N	N	N	20	<10
49S	<1.0	N	N	10	70	10	N	N	N	15	<10
50S	<1.0	N	N	10	30	15	N	N	N	10	<10
51S	1.0	N	N	20	100	20	N	N	N	30	15
52S	N	N	N	50	200	30	70	<5	N	20	<10
53S	1.5	N	N	20	150	30	N	N	N	30	15
54S	N	N	N	50	100	30	N	N	N	30	50
55S	<1.0	N	N	30	70	20	N	N	N	20	<10
56S	<1.0	N	N	20	50	20	N	N	N	20	10
57S	N	N	N	20	70	20	N	N	N	20	10
58S	N	N	N	50	100	50	N	N	N	30	10
58SD	<1.0	N	N	20	50	20	N	N	N	20	<10
59S	<1.0	N	N	30	100	70	N	N	N	30	10
60S	N	N	N	50	200	100	N	N	N	30	20
61S	<1.0	N	N	20	70	30	N	N	N	20	<10
62S	N	N	N	70	500	150	N	N	N	30	20
63S	<1.0	N	N	50	150	70	20	N	N	30	30
64S	N	N	N	20	100	30	N	N	N	20	<10
65S	N	N	N	20	100	200	N	10	N	20	30
66S	<1.0	N	N	30	70	20	N	N	N	15	10
67S	1.0	N	N	30	70	50	N	N	N	30	15
68S	1.0	N	N	15	70	20	N	N	N	20	10
69S	1.0	N	N	20	100	100	N	N	N	30	150
70S	N	N	N	20	50	20	N	N	N	10	<10
71S	<1.0	N	N	15	30	10	N	N	N	10	70
72S	<1.0	N	N	20	20	20	N	N	N	7	10
72SD	<1.0	N	N	30	20	20	N	N	N	10	10
73S	<1.0	N	N	20	70	50	N	N	N	30	10
74S	N	N	N	30	150	50	N	N	N	30	10
75S	<1.0	N	N	15	50	15	N	N	N	30	<10
76S	<1.0	N	N	20	100	20	N	N	N	20	10
77S	<1.0	N	N	15	50	20	N	N	N	20	<10
78S	<1.0	N	N	15	100	20	N	N	N	20	<10
79S	<1.0	N	N	50	70	30	N	N	N	30	10
80S	N	N	N	30	100	20	N	N	N	20	10
81S	N	N	N	70	100	50	N	N	N	10	<10
82S	<1.0	N	N	50	30	30	N	N	N	10	20
83S	<1.0	N	N	20	20	50	N	N	N	15	50
84S	N	N	N	50	50	50	N	N	N	15	10
85S	N	N	N	30	20	15	N	N	N	<5	<10
86S	N	N	N	20	20	50	N	<5	N	10	<10
87S	N	N	N	50	100	30	N	N	N	30	<10
88S	<1.0	N	N	15	20	20	N	N	N	15	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th
K33327S	N	15	N	300	150	N	15	N	100	
K33333S	N	15	N	500	150	N	15	N	100	
K33334S	N	10	N	200	150	N	10	N	100	
K33335S	N	10	N	300	100	N	10	N	70	
K33336S	N	20	N	300	200	N	20	N	300	
K33337S	N	20	N	300	300	N	20	<200	500	
K33338S	N	20	N	300	150	N	20	<200	300	
K33339S	N	15	N	200	150	N	30	N	70	
K33340S	N	20	N	500	200	N	20	<200	50	
K33340SD	N	20	N	300	200	N	20	N	200	
K33341S	N	20	N	300	200	N	20	<200	100	
K33342S	N	20	N	300	150	N	20	200	70	
K33343S	N	30	N	300	500	N	30	300	70	
K33344S	N	30	N	500	150	N	30	<200	70	
K33345S	N	30	N	300	200	N	30	N	300	
K33346S	N	15	N	300	150	N	15	N	70	
K33347S	N	20	N	300	150	N	15	N	100	
K33348S	N	15	N	200	150	N	15	N	50	
K33349S	N	10	N	300	100	N	10	N	50	
K33350S	N	10	N	200	150	N	15	N	50	
K33351S	N	20	N	300	200	N	20	N	70	
K33352S	N	30	N	300	500	N	50	200	150	
K33353S	N	20	N	700	150	N	20	N	150	
K33354S	N	20	N	300	150	N	30	N	100	
K33355S	N	20	N	300	150	N	20	N	50	
K33356S	N	20	N	500	100	N	20	N	70	
K33357S	N	20	N	500	100	N	15	N	50	
K33358S	N	30	N	300	200	N	20	N	70	
K33358SD	N	20	N	300	150	N	15	N	70	
K33359S	N	20	N	500	200	N	30	<200	70	
K33360S	N	20	N	500	150	N	30	N	70	
K33361S	N	15	N	500	200	N	30	<200	70	
K33362S	N	30	N	500	500	N	30	N	50	
K33363S	N	15	N	300	200	N	20	N	300	
K33364S	N	20	N	300	150	N	30	N	70	
K33365S	N	20	N	500	300	N	20	<200	150	
K33366S	N	20	N	200	150	N	30	N	150	
K33367S	N	20	N	500	150	N	30	<200	100	
K33368S	N	20	N	500	150	N	20	N	50	
K33369S	N	20	N	N	150	N	15	<200	100	
K33370S	N	20	N	200	200	N	30	<200	100	
K33371S	N	10	N	200	100	N	15	N	30	
K33372S	N	20	N	200	100	N	20	N	100	
K33372SD	N	20	N	500	200	N	20	N	70	
K33373S	N	20	N	200	150	N	20	N	50	
K33374S	N	30	N	300	200	N	30	<200	100	
K33375S	N	15	N	200	100	N	20	N	150	
K33376S	N	20	N	200	150	N	20	N	70	
K33377S	N	20	N	200	200	N	20	N	70	
K33378S	N	15	N	150	150	N	15	200	50	
K33379S	N	20	N	200	150	N	20	<200	50	
K33380S	N	30	N	200	200	N	20	N	50	
K33381S	N	30	N	100	1,000	N	50	<200	200	
K33382S	N	20	N	200	200	N	30	N	100	
K33383S	N	20	N	200	150	N	30	N	70	
K33384S	N	20	N	300	200	N	30	N	150	
K33385S	N	30	N	200	300	N	20	<200	150	
K33386S	N	20	N	150	200	N	20	<200	70	
K33387S	N	30	N	300	200	N	20	N	100	
K33388S	N	20	N	500	150	N	20	N	70	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
89S	58 50 37	154 36 38	.7	1.50	2.0	.30	1,500	N	N	N	20	500
90S	58 51 3	154 57 50	1.5	2.00	5.0	.50	1,500	N	N	N	20	500
90SD	58 51 3	154 57 50	1.5	2.00	5.0	.50	1,500	N	N	N	10	500
91S	58 57 55	156 1 0	1.5	2.00	2.0	.50	1,500	N	N	N	10	500
94S	58 53 29	154 57 48	1.0	1.50	7.0	.30	700	<.5	N	N	20	700
95S	58 59 59	154 58 47	1.0	1.50	2.0	.30	1,500	.5	N	N	50	700
02S	58 36 57	154 19 25	.7	1.50	2.0	.30	1,000	<.5	N	N	200	700
02S	58 36 57	154 19 25	1.5	3.00	2.0	.20	1,000	N	N	N	300	500
03S	58 37 12	154 26 56	1.5	1.50	3.0	.50	1,000	<.5	N	N	50	500
04S	58 33 42	154 31 45	2.0	2.00	7.0	.70	1,500	N	N	N	15	300
05S	58 41 14	155 1 15	1.5	1.50	7.0	.70	1,500	N	N	N	10	300
07S	58 41 40	155 1 37	.7	1.00	2.0	.30	1,000	N	N	N	20	500
13S	58 16 18	155 26 22	.7	1.00	5.0	.50	700	<.5	N	N	<10	200
14S	58 16 10	155 26 20	1.0	2.00	3.0	.30	1,500	<.5	N	N	10	500
18S	58 25 36	155 27 55	1.0	2.00	5.0	.50	1,500	N	N	N	20	500
20S	58 28 11	155 27 16	1.5	2.00	15.0	.70	2,000	N	N	N	10	300
22S	58 26 40	154 48 32	1.5	1.50	20.0	1.00	2,000	N	N	N	10	200
02S	58 43 6	154 0 24	1.5	2.00	10.0	.20	1,000	N	N	N	20	200
07S	58 54 15	154 53 8	1.0	2.00	5.0	.50	1,500	.5	N	N	150	700
22S	58 4 32	154 44 10	2.0	2.00	10.0	.50	1,000	N	N	N	150	1,000
25S	58 0 23	155 39 15	.2	.50	20.0	.10	2,000	N	N	N	<10	50
01S	58 26 20	154 44 50	1.5	1.00	5.0	.50	500	N	N	N	15	300
01SD	58 26 20	154 44 50	1.5	1.00	5.0	.50	700	<.5	N	N	10	500
02S	58 29 8	154 47 20	1.5	1.00	5.0	.50	1,000	N	N	N	70	300
02SD	58 29 8	154 47 20	1.5	1.00	5.0	.50	1,000	N	N	N	50	300
03S	58 24 13	154 40 40	1.5	1.00	10.0	.70	500	N	N	N	10	300
04S	58 26 11	154 36 50	1.5	1.00	7.0	.50	1,000	N	N	N	10	300
05S	58 24 50	154 35 5	2.0	1.00	10.0	.70	1,000	N	N	N	<10	500
06S	58 31 43	154 40 39	1.5	1.00	5.0	.50	700	N	N	N	10	300
07S	58 31 42	154 40 51	1.5	.70	5.0	.50	500	N	N	N	10	300
08S	58 31 52	154 36 36	2.0	1.50	5.0	.50	700	N	N	N	15	500
09S	58 31 40	154 35 10	1.5	.70	7.0	.50	700	N	N	N	<10	300
10S	58 30 50	154 34 5	1.5	1.00	2.0	.20	500	N	N	N	15	300
11S	58 30 28	155 4 38	1.5	1.50	7.0	.70	1,000	N	N	N	10	500
12S	58 31 36	155 0 24	1.5	1.00	5.0	.50	1,000	N	N	N	10	300
13S	58 32 20	154 56 50	1.5	1.00	10.0	.70	1,000	N	N	N	<10	200
14S	58 33 52	154 40 47	1.5	1.00	3.0	.30	700	.5	N	N	30	500
15S	58 34 37	154 38 6	1.5	1.00	5.0	.50	700	N	N	N	10	300
16S	58 34 18	154 30 35	1.5	1.00	5.0	.50	1,000	N	N	N	15	300
17S	58 33 37	154 29 27	2.0	1.50	3.0	.20	500	N	N	N	<10	50
18S	58 34 25	154 26 52	1.0	.70	3.0	.30	500	<.5	N	N	20	300
18SD	58 34 25	154 26 52	1.5	1.00	3.0	.30	700	<.5	N	N	30	500
34S	58 35 16	155 34 40	1.5	1.00	5.0	.50	1,000	N	N	N	15	300
35S	58 34 37	155 25 20	1.0	1.00	3.0	.30	700	N	N	N	15	300
36S	58 33 22	155 24 5	1.5	1.00	5.0	.30	1,000	N	N	N	15	300
37S	58 30 12	155 25 20	2.0	1.00	7.0	.50	500	N	N	N	<10	200
38S	58 40 32	155 48 58	1.5	1.00	5.0	.30	1,000	N	N	N	15	300
39S	58 41 30	155 51 27	.5	.70	5.0	.20	1,500	N	N	N	10	300
40S	58 44 19	156 0 40	1.5	1.00	5.0	.30	700	N	N	N	15	300
41S	58 47 37	155 56 30	2.0	.70	7.0	.70	1,000	N	N	N	10	200
42S	58 50 0	155 58 30	.5	.50	1.0	.15	500	N	N	N	10	150
43S	58 51 27	155 57 18	2.0	1.00	10.0	>1.00	1,000	N	N	N	10	200
44S	58 51 5	155 55 55	1.0	1.00	5.0	.50	1,500	N	N	N	10	300
45S	58 51 40	155 53 31	1.0	.70	5.0	.50	1,000	N	N	N	10	300
46S	58 51 32	155 53 13	1.5	1.00	5.0	.70	1,000	N	N	N	10	300
47S	58 35 38	155 44 0	1.0	.70	5.0	.50	700	N	N	N	10	150
48S	58 21 45	155 41 45	1.0	1.00	3.0	.30	1,000	N	N	N	<10	300
48SD	58 21 45	155 41 45	1.5	1.00	5.0	.50	700	N	N	N	10	500
49S	58 21 32	155 42 0	1.5	1.00	5.0	.50	500	N	N	N	10	300
50S	58 21 12	155 41 28	1.5	1.00	3.0	.30	700	N	N	N	10	150

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K3389S	<1.0	N	N	10	20	20	N	N	N	5
K3390S	<1.0	N	N	20	50	50	N	N	N	7
K3390SD	<1.0	N	N	30	30	20	N	<5	N	10
K3391S	N	N	N	30	70	10	N	5	N	15
K3394S	<1.0	N	N	70	150	1,300	N	20	N	30
K3395S	1.0	N	N	10	20	20	N	<5	N	7
K3402S	1.0	N	N	10	50	100	N	N	N	20
K3402S	1.5	N	N	7	20	50	N	N	N	15
K3403S	1.0	N	N	20	100	70	N	N	N	30
K3404S	N	N	N	50	20	100	N	N	N	30
K3405S	N	N	N	70	50	30	N	N	N	15
K3407S	1.0	N	N	15	15	20	N	N	N	5
K3413S	<1.0	N	N	20	30	300	N	20	N	20
K3414S	<1.0	N	N	20	20	300	N	10	N	10
K3418S	<1.0	N	N	20	30	30	N	N	N	15
K3420S	N	N	N	70	50	50	N	N	N	20
K3422S	N	N	N	70	50	50	N	N	N	20
K3602S	<1.0	N	N	15	50	200	N	N	N	20
K3607S	1.0	N	N	20	30	50	<20	5	N	10
K3622S	1.0	N	N	30	100	50	N	N	N	30
K3625S	2.0	N	N	<5	<10	15	N	N	N	N
K4001S	N	N	N	30	70	20	N	N	N	20
K4001SD	N	N	N	20	100	50	N	N	N	20
K4002S	N	N	N	30	70	20	N	N	N	15
K4002SD	<1.0	N	N	20	30	20	N	N	N	15
K4003S	N	N	N	70	150	30	N	N	N	50
K4004S	N	N	N	50	100	30	N	N	N	30
K4005S	N	N	N	50	150	30	N	N	N	30
K4006S	N	N	N	20	70	20	N	N	N	20
K4007S	N	N	N	30	100	20	N	N	N	30
K4008S	<1.0	N	N	20	100	30	N	N	N	30
K4009S	N	N	N	30	150	30	N	N	N	30
K4010S	<1.0	N	N	15	70	20	N	N	N	30
K4011S	N	N	N	30	100	30	N	N	N	30
K4012S	N	N	N	20	50	20	N	N	N	20
K4013S	<1.0	N	N	50	50	30	N	N	N	20
K4014S	<1.0	N	N	15	70	30	N	N	N	30
K4015S	N	N	N	20	100	30	N	N	N	50
K4016S	N	N	N	50	70	50	N	N	N	30
K4017S	N	N	N	20	20	20	N	N	N	20
K4018S	N	N	N	10	70	20	N	N	N	20
K4018SD	<1.0	N	N	15	70	30	N	N	N	30
K4034S	<1.0	N	N	20	30	7	N	<5	N	10
K4035S	<1.0	N	N	15	15	20	N	<5	N	10
K4036S	N	N	N	20	50	30	N	N	N	10
K4037S	N	N	N	50	200	50	N	N	N	30
K4038S	<1.0	N	N	15	20	10	N	N	N	10
K4039S	<1.0	N	N	10	10	10	N	N	N	5
K4040S	N	N	N	20	70	20	N	N	N	20
K4041S	N	N	N	50	150	<5	N	N	N	20
K4042S	<1.0	N	N	5	10	7	N	N	N	7
K4043S	N	N	N	50	70	10	N	N	N	15
K4044S	<1.0	N	N	20	50	10	N	N	N	10
K4045S	<1.0	N	N	15	50	10	N	N	N	10
K4046S	<1.0	N	N	20	100	5	70	N	N	10
K4047S	N	N	N	20	150	5	N	N	N	20
K4048S	<1.0	N	N	15	20	20	N	N	N	10
K4048SD	N	N	N	20	30	15	N	N	N	10
K4049S	N	N	N	20	50	30	N	<5	N	10
K4050S	N	N	N	15	20	10	N	N	N	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
79S	N	15	N	150	100	N	20	N	150	N
06	N	20	N	300	150	N	20	N	70	N
08D	N	20	N	300	200	N	20	N	100	N
1S	N	20	N	300	150	N	15	N	100	N
4S	N	15	N	700	200	N	15	<200	70	N
5S	N	10	N	300	100	N	20	N	150	N
2S	N	20	N	300	150	N	15	N	200	N
2S	N	15	N	500	100	N	20	N	50	N
3S	N	20	N	500	200	N	15	N	100	N
4S	N	20	N	500	300	N	10	N	50	N
8S	N	30	N	300	200	N	20	200	50	N
7S	N	10	N	200	100	N	30	N	100	N
3S	N	15	N	300	150	N	10	N	50	N
4S	N	15	N	300	150	N	20	N	70	N
8S	N	20	N	300	150	N	20	N	100	N
0S	N	20	N	300	700	N	20	200	70	N
2S	N	30	N	300	500	N	15	500	100	N
2S	N	20	N	500	100	N	20	200	100	N
7S	N	30	N	200	200	N	50	200	200	N
2S	N	30	N	200	300	N	30	300	100	N
5S	N	5	N	N	100	N	20	300	<10	N
1S	N	20	N	300	200	N	20	N	100	N
1SD	N	20	N	200	150	N	20	N	150	N
2S	N	20	N	200	150	N	30	N	70	N
2SD	N	20	N	300	150	N	20	N	70	N
3S	N	20	N	200	300	N	20	N	70	N
4S	N	20	N	200	200	N	20	N	100	N
5S	N	30	N	200	300	N	20	N	100	N
6S	N	20	N	300	150	N	20	N	50	N
7S	N	20	N	300	200	N	20	N	50	N
8S	N	20	N	500	100	N	30	N	70	N
9S	N	20	N	200	200	N	20	N	70	N
0S	N	20	N	200	150	N	15	N	50	N
1S	N	30	N	300	200	N	30	<200	70	N
2S	N	30	N	300	200	N	30	N	100	N
3S	N	20	N	100	300	N	20	<200	100	N
4S	N	20	N	300	100	N	20	N	30	N
5S	N	30	N	300	200	N	20	N	50	N
6S	N	20	N	300	200	N	20	N	70	N
7S	N	15	N	300	150	N	10	N	50	N
8S	N	15	N	300	100	N	20	N	100	N
8SD	N	20	N	300	100	N	20	N	70	N
4S	N	20	N	200	150	N	30	N	100	N
5S	N	20	N	200	150	N	20	N	100	N
6S	N	20	N	200	150	N	30	N	100	N
7S	N	20	N	200	200	N	30	N	100	N
8S	N	20	N	200	100	N	20	N	100	N
9S	N	10	N	200	150	N	15	N	50	N
0S	N	20	N	500	150	N	20	N	150	N
1S	N	30	N	200	150	N	150	N	150	N
2S	N	10	N	100	100	N	15	N	100	N
3S	N	20	N	150	300	N	20	N	100	N
4S	N	20	N	200	100	N	20	N	100	N
5S	N	20	N	200	200	N	20	N	70	N
6S	N	20	N	200	150	N	20	N	300	N
7S	N	20	N	100	100	N	20	N	100	N
8S	N	20	N	300	100	N	30	N	150	N
8SD	N	20	N	150	200	N	30	N	100	N
9S	N	20	N	200	100	N	30	N	100	N
0S	N	20	N	300	150	N	20	N	70	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K4051S	58 17 27	155 34 35	1.5	1.00	5.0	.70	1,000	N	N	N	<10
K4052S	58 9 13	156 18 18	1.5	1.00	3.0	.30	1,000	N	N	N	10
K4053S	58 4 50	156 12 40	1.5	1.00	5.0	.30	700	N	N	N	10
K4054S	58 4 41	156 12 39	1.5	1.00	5.0	.30	1,000	N	N	N	10
K4055S	58 4 42	156 12 14	1.5	1.00	5.0	.50	1,000	N	N	N	10
K4056S	58 3 10	156 4 30	2.0	1.00	7.0	.50	1,500	N	N	N	10
K4057S	58 1 25	156 0 8	1.5	1.00	5.0	.50	1,000	N	N	N	10
K4058S	58 6 38	156 3 40	1.5	1.00	5.0	.50	1,000	N	N	N	10
K4059S	58 4 45	155 37 59	1.5	1.00	5.0	.30	1,000	N	N	N	15
K4060S	58 5 23	155 35 4	1.5	1.00	3.0	.20	1,000	N	N	N	15
K4061S	58 5 23	155 40 22	1.0	1.00	3.0	.30	1,000	N	N	N	10
K4062S	58 7 37	155 47 42	1.0	1.00	3.0	.30	1,000	N	N	N	10
K4063S	58 11 39	155 42 11	1.5	1.00	7.0	.70	2,000	N	N	N	10
K4064S	58 13 55	155 50 12	1.5	1.00	7.0	.70	1,500	N	N	N	10
K4101S	58 58 9	155 1 11	1.5	2.00	5.0	.70	2,000	<.5	N	N	20
K4102S	58 55 40	155 3 55	2.0	2.00	10.0	.70	2,000	N	N	N	100
K4103S	58 54 57	155 3 13	2.0	2.00	7.0	.50	1,500	N	N	N	20
K4104S	58 54 16	155 3 42	2.0	1.50	5.0	.50	1,000	N	N	N	150
K4105S	58 53 31	155 6 10	1.5	2.00	5.0	.70	2,000	N	N	N	50
K4106S	58 52 0	155 5 10	2.0	2.00	5.0	.70	1,500	N	N	N	100
K4107S	58 51 42	155 5 8	2.0	2.00	5.0	.30	1,500	N	N	N	20
K4108S	58 48 48	155 3 37	1.5	1.50	3.0	.50	1,500	N	N	N	15
K4109S	58 46 52	155 0 15	2.0	2.00	5.0	.70	2,000	<.5	N	N	20
K4110S	58 38 9	154 54 29	1.5	1.50	3.0	.50	1,500	N	N	N	15
K4111S	58 39 17	154 57 12	1.0	2.00	3.0	.30	1,500	N	N	N	20
K4112S	58 41 32	154 54 36	2.0	2.00	5.0	1.00	1,500	N	N	N	15
K4113S	58 44 2	154 45 25	1.5	2.00	5.0	.70	1,500	N	N	N	10
K4114S	58 32 52	154 25 8	1.5	1.50	5.0	.50	1,000	N	N	N	30
K4115S	58 31 22	154 26 17	1.0	1.50	5.0	.50	1,500	N	N	N	70
K4116S	58 37 33	154 39 54	1.5	2.00	3.0	.50	1,500	N	N	N	20
K4117S	58 39 35	154 35 0	2.0	1.50	3.0	.70	1,500	N	N	N	30
K4118S	58 39 44	154 35 0	1.5	1.50	3.0	.70	1,500	N	N	N	20
K4119S	58 42 4	154 29 35	1.5	1.50	3.0	.30	1,000	<.5	N	N	70
K4120S	58 40 30	154 11 47	1.5	1.00	3.0	.30	1,000	.5	N	N	200
K4121S	58 42 48	154 8 11	2.0	2.00	5.0	.50	1,000	N	N	N	50
K4122S	58 40 5	154 1 38	1.5	1.50	5.0	.50	1,000	<.5	N	N	50
K4123S	58 38 49	153 56 30	2.0	1.00	5.0	.70	1,000	N	N	N	100
K4124S	58 38 54	153 56 35	1.5	1.00	5.0	.50	1,000	<.5	N	N	300
K4125S	58 38 5	153 45 37	1.5	1.00	3.0	.30	1,000	N	N	N	200
K4126S	58 40 22	153 39 40	1.0	1.00	7.0	.30	2,000	<.5	N	N	300
K4126SD	58 40 22	153 39 40	1.0	1.00	5.0	.50	2,000	<.5	200.0	N	100
K4127S	58 38 30	153 38 25	1.5	1.00	3.0	.50	700	N	N	N	200
K4128S	58 43 34	153 35 45	2.0	2.00	7.0	.70	2,000	N	N	N	20
K4129S	58 44 22	153 28 34	1.0	2.00	3.0	1.00	2,000	N	N	N	100
K4130S	58 55 37	153 23 17	3.0	2.00	5.0	.70	2,000	N	N	N	200
K4131S	58 51 50	153 22 13	1.5	2.00	7.0	.70	2,000	<.5	200.0	N	100
K4132S	58 48 57	153 23 15	3.0	2.00	10.0	.70	3,000	N	N	N	30
K4133S	58 45 45	153 27 10	2.0	2.00	5.0	.50	1,500	N	N	N	150
K4134S	58 16 45	154 30 15	2.0	2.00	10.0	1.00	1,500	N	N	N	20
K4135S	58 29 20	154 13 40	3.0	2.00	7.0	.50	1,500	N	N	N	<10
K4136S	58 57 41	153 27 40	2.0	2.00	7.0	.50	1,000	N	N	N	300
K4137S	58 56 23	153 36 5	3.0	2.00	5.0	.50	1,000	N	N	N	20
K4138S	58 57 23	153 40 30	2.0	1.50	5.0	.50	1,000	N	N	N	50
K4139S	58 53 9	153 47 10	1.5	1.50	2.0	.30	1,000	<.5	N	N	70
K4140S	59 3 30	154 5 0	1.5	1.50	5.0	.30	700	N	N	N	10
K4141S	59 3 3	153 57 26	1.0	2.00	3.0	.20	1,000	N	N	N	50
K4142S	59 2 8	153 50 53	1.0	1.50	2.0	.20	1,000	N	N	N	20
K4142SD	59 2 8	153 50 53	1.5	2.00	3.0	.50	1,000	N	N	N	20
K4143S	59 0 33	153 51 29	1.0	2.00	3.0	.30	1,000	N	N	N	70
K4144S	58 57 15	153 51 24	1.0	1.50	2.0	.30	1,000	N	N	N	50

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

mple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
51S	N	N	N	20	50	10	N	N	N	7	15
52S	<1.0	N	N	15	30	15	N	N	N	10	<10
53S	<1.0	N	N	20	50	20	N	N	N	15	30
54S	<1.0	N	N	20	50	7	N	N	N	20	<10
55S	N	N	N	20	50	20	N	N	N	20	<10
56S	N	N	N	50	70	70	N	N	N	30	<10
57S	<1.0	N	N	20	50	20	N	N	N	20	<10
58S	<1.0	N	N	30	70	10	N	N	N	20	<10
59S	N	N	N	30	50	30	N	N	N	20	<10
60S	N	N	N	15	100	30	100	N	N	20	10
61S	<1.0	N	N	15	30	15	N	N	N	20	<10
62S	<1.0	N	N	15	50	15	N	N	N	20	<10
63S	N	N	N	30	70	30	N	N	N	10	<10
64S	<1.0	N	N	20	50	20	N	N	N	10	10
01S	1.0	N	N	50	50	30	N	<5	N	10	50
02S	N	N	N	50	100	50	N	N	N	30	20
03S	<1.0	N	N	20	50	20	N	N	N	20	20
04S	1.0	N	N	30	50	70	N	5	N	20	20
05S	<1.0	N	N	20	30	30	N	N	N	15	20
06S	<1.0	N	N	30	100	30	N	<5	N	20	15
07S	<1.0	N	N	20	30	15	N	N	N	15	15
08S	1.0	N	N	20	20	20	N	N	N	5	30
09S	<1.0	N	N	50	50	30	N	5	N	15	15
10S	1.0	N	N	30	20	20	N	N	N	15	<10
11S	1.0	N	N	15	10	20	N	<5	N	10	15
12S	N	N	N	50	50	50	N	N	N	20	10
13S	<1.0	N	N	30	15	15	N	<5	N	10	10
14S	<1.0	N	N	15	70	50	N	N	N	30	15
15S	<1.0	N	N	15	50	20	N	N	N	10	15
16S	1.0	N	N	20	50	20	N	N	N	15	10
17S	<1.0	N	N	50	50	30	N	N	N	20	15
18S	1.0	N	N	20	30	30	N	N	N	15	<10
19S	<1.0	N	N	15	50	20	N	N	N	30	15
20S	<1.0	N	N	20	100	50	N	N	N	20	10
21S	1.0	N	N	30	50	30	N	N	N	30	10
22S	<1.0	N	N	15	100	20	N	N	N	30	<10
23S	<1.0	N	N	20	100	50	N	N	N	30	30
24S	1.0	N	N	50	70	50	N	N	N	20	15
25S	<1.0	N	N	20	30	20	N	N	N	15	20
26S	<1.0	N	N	50	50	70	N	10	N	20	20
26SD	<1.0	N	N	20	30	70	N	10	N	20	20
27S	1.0	N	N	30	70	50	N	N	N	30	20
28S	N	N	N	50	70	70	N	N	N	30	10
29S	N	N	N	20	70	50	N	<5	N	20	10
30S	N	N	N	50	150	70	N	N	N	50	<10
31S	N	N	N	50	100	70	N	N	N	20	30
32S	<1.0	N	N	70	200	100	N	N	N	50	10
33S	1.0	N	N	30	70	50	N	N	N	30	10
34S	<1.0	N	N	70	100	70	N	N	N	50	10
35S	N	N	N	50	50	30	N	N	N	20	10
36S	N	N	N	30	150	50	N	N	N	30	15
37S	<1.0	N	N	50	50	50	N	N	N	30	<10
38S	1.0	N	N	50	150	50	N	N	N	50	30
39S	1.0	N	N	15	50	20	N	N	N	20	10
40S	<1.0	N	N	15	300	20	N	N	N	20	10
41S	1.0	N	N	15	50	20	N	N	N	20	10
42S	1.0	N	N	10	30	50	N	N	N	15	<10
42SD	<1.0	N	N	15	50	15	N	N	N	20	<10
43S	1.0	N	N	20	50	20	N	N	N	20	20
44S	1.0	N	N	20	30	15	N	N	N	20	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K4051S	N	30	N	300	100	N	30	N	70
K4052S	N	20	N	300	150	N	20	N	70
K4053S	N	20	N	300	150	N	20	N	70
K4054S	N	20	N	300	200	N	20	N	50
K4055S	N	20	N	200	150	N	20	N	50
K4056S	N	30	N	200	200	N	30	N	150
K4057S	N	20	N	300	150	N	15	N	50
K4058S	N	20	N	300	150	N	20	N	50
K4059S	N	20	N	500	150	N	30	N	100
K4060S	N	20	N	300	150	N	30	N	150
K4061S	N	15	N	200	150	N	20	N	70
K4062S	N	20	N	300	100	N	20	N	100
K4063S	N	20	N	200	200	N	50	N	200
K4064S	N	20	N	200	150	N	30	N	100
K4101S	N	30	N	500	200	N	30	<200	100
K4102S	N	30	N	300	300	N	30	200	100
K4103S	N	20	N	300	200	N	30	N	100
K4104S	N	20	N	500	200	N	20	N	100
K4105S	N	20	N	300	150	N	15	<200	100
K4106S	N	20	N	300	200	N	30	<200	70
K4107S	N	20	N	300	150	N	15	N	50
K4108S	N	20	N	200	150	N	20	200	70
K4109S	N	20	N	500	200	N	30	<200	200
K4110S	N	20	N	300	150	N	20	<200	70
K4111S	N	20	N	200	150	N	30	N	100
K4112S	N	30	N	300	300	N	20	<200	100
K4113S	N	30	N	300	200	N	30	N	70
K4114S	N	20	N	300	200	N	20	<200	70
K4115S	N	20	N	500	150	N	30	N	500
K4116S	N	20	N	500	200	N	20	N	100
K4117S	N	20	N	500	200	N	20	<200	70
K4118S	N	20	N	500	200	N	20	<200	300
K4119S	N	15	N	300	200	N	15	N	50
K4120S	N	15	N	500	100	N	20	N	70
K4121S	N	20	N	300	150	N	20	<200	70
K4122S	N	15	N	200	150	N	15	N	70
K4123S	N	20	N	300	200	N	20	<200	150
K4124S	N	20	N	300	150	N	20	<200	70
K4125S	N	15	N	200	150	N	20	N	70
K4126S	N	15	N	200	100	N	20	200	70
K4126SD	N	15	N	150	100	N	15	<200	300
K4127S	N	20	N	200	150	N	20	N	150
K4128S	N	30	N	300	300	N	20	<200	100
K4129S	N	20	N	300	200	N	30	200	200
K4130S	N	20	N	300	200	N	15	200	70
K4131S	N	20	N	300	200	N	15	200	50
K4132S	N	30	N	300	300	N	30	<200	300
K4133S	N	20	N	200	200	N	20	N	150
K4134S	N	30	N	300	300	N	20	<200	150
K4135S	N	30	N	200	300	N	15	200	50
K4136S	N	20	N	300	200	N	15	<200	70
K4137S	N	20	N	300	150	N	20	N	70
K4138S	N	20	N	500	150	N	15	N	150
K4139S	N	15	N	500	100	N	15	N	150
K4140S	N	15	N	300	100	N	15	N	100
K4141S	N	15	N	300	100	N	15	N	70
K4142S	N	10	N	300	100	N	15	N	150
K4142SD	N	20	N	500	150	N	20	N	70
K4143S	N	15	N	500	150	N	15	N	70
K4144S	N	15	N	500	150	N	15	N	70

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
5S	58 52 5	153 58 38	1.0	2.00	5.0	.70	1,000	N	N	N	70	700
6S	58 47 44	153 45 55	1.5	2.00	3.0	.50	1,000	N	N	N	100	500
7S	58 47 47	153 48 25	1.5	2.00	5.0	.50	1,000	N	N	N	100	700
8S	58 49 49	153 50 47	1.5	2.00	5.0	.20	1,500	N	N	N	10	300
9S	58 51 41	153 51 18	1.5	1.00	5.0	.30	1,000	N	N	N	100	700
0S	58 54 33	153 50 48	1.5	1.50	3.0	.30	1,000	N	N	N	30	700
1S	58 55 11	154 49 43	.7	1.00	2.0	.20	700	N	N	N	<10	500
2S	58 52 27	154 46 20	1.5	1.50	7.0	.70	1,500	<.5	N	N	15	500
3S	58 50 5	154 43 50	1.0	1.00	5.0	.30	1,000	N	N	N	15	500
4S	58 48 30	154 42 27	1.5	1.50	5.0	.50	500	N	N	N	<10	200
5S	58 49 58	154 50 45	1.0	1.50	10.0	.70	1,500	.5	N	N	10	200
6S	58 48 23	154 48 52	1.5	2.00	3.0	.30	1,000	N	N	N	10	500
7S	58 46 20	154 47 53	1.0	1.50	5.0	.70	1,500	N	N	N	10	300
8S	58 46 58	154 52 54	1.5	2.00	5.0	.50	1,500	N	N	N	15	500
9S	58 45 50	154 58 11	2.0	2.00	5.0	.50	1,500	N	N	N	10	500
0S	58 48 30	154 59 40	.7	1.00	2.0	.30	1,000	N	N	N	20	500
1S	58 51 37	154 9 38	1.5	1.50	5.0	.30	1,000	N	N	N	15	300
2S	59 1 28	154 7 9	.7	1.00	3.0	.20	700	N	N	N	10	300
3S	58 57 18	154 9 13	1.0	1.50	3.0	.30	1,000	N	N	N	20	500
4S	59 0 32	154 5 20	1.0	1.50	3.0	.20	1,000	N	N	N	20	500
5S	58 59 37	153 53 57	1.5	1.50	3.0	.30	700	N	N	N	20	300
5SD	58 59 37	153 53 57	1.5	2.00	5.0	.50	1,000	N	N	N	20	300
6S	58 45 0	154 0 34	1.5	1.50	7.0	.70	2,000	50.0	N	200	50	700
7S	58 46 36	154 3 58	1.5	1.50	5.0	.30	1,000	<.5	N	N	30	500
8S	58 44 0	153 52 54	2.0	3.00	10.0	.70	2,000	<.5	N	N	20	500
9S	58 43 52	153 54 51	1.5	.50	5.0	.50	2,000	1.0	<200.0	N	70	700
0S	58 46 3	154 7 0	1.5	2.00	5.0	.50	1,000	N	N	N	20	500
1S	58 50 41	154 0 59	2.0	5.00	5.0	.70	1,500	N	N	N	50	500
2S	58 48 38	154 7 1	1.5	2.00	3.0	.30	1,000	<.5	N	N	20	500
3S	58 47 20	154 15 30	1.5	2.00	5.0	.50	1,000	N	N	N	50	500
4S	58 44 3	154 16 0	2.0	3.00	5.0	.70	1,500	<.5	N	N	50	700
5S	58 40 33	154 27 14	1.5	2.00	5.0	.50	1,000	N	N	N	50	500
6S	58 44 20	154 22 25	1.0	2.00	3.0	.70	1,000	N	N	N	50	500
7S	58 56 55	154 58 4	2.0	2.00	7.0	.70	1,500	<.5	N	N	300	700
8S	58 56 40	154 45 30	2.0	2.00	5.0	.70	2,000	N	N	N	20	500
9S	58 56 42	154 45 42	3.0	1.50	5.0	.50	1,000	N	N	N	<10	700
0S	58 39 50	154 18 52	1.5	2.00	5.0	.50	1,000	N	N	N	50	700
0SD	58 39 50	154 18 52	2.0	2.00	5.0	.50	1,000	<.5	N	N	50	700
1S	58 41 20	154 18 30	1.5	2.00	3.0	.30	1,000	<.5	N	N	30	700
2S	58 45 37	154 21 12	1.5	2.00	3.0	.50	1,000	N	N	N	20	500
3S	58 49 12	154 18 40	1.0	1.50	3.0	.30	1,000	N	N	N	15	300
4S	58 47 28	154 27 36	1.0	1.50	3.0	.30	1,000	N	N	N	20	500
5S	58 49 10	154 26 50	1.5	1.50	10.0	.70	2,000	N	N	N	20	500
6S	58 50 0	154 32 10	2.0	2.00	7.0	.70	1,500	N	N	N	10	500
7S	58 52 10	154 21 35	.7	2.00	3.0	.50	1,000	N	N	N	10	500
8S	58 58 52	154 17 6	2.0	2.00	5.0	.50	2,000	N	N	N	20	300
9S	58 51 55	154 13 12	.7	1.50	3.0	.30	1,500	N	N	N	10	500
0S	58 53 49	154 18 24	1.0	1.50	3.0	.50	1,000	N	N	N	10	300
1S	58 59 8	154 23 40	1.5	3.00	5.0	.70	2,000	N	N	N	10	500
2S	58 55 45	154 26 48	1.0	1.50	5.0	.50	1,500	N	N	N	10	500
3S	58 55 50	154 26 36	1.0	2.00	5.0	.50	1,500	N	N	N	<10	500
4S	58 54 8	154 36 30	1.5	2.00	10.0	.50	2,000	N	N	N	15	500
5S	58 53 20	154 36 5	1.5	1.50	7.0	.70	1,500	N	N	N	<10	500
6S	58 50 28	155 8 30	1.0	2.00	7.0	.70	1,500	N	N	N	20	500
7S	58 58 29	154 58 48	1.0	1.50	5.0	.30	2,000	<.5	N	N	200	700
7SD	58 58 29	154 58 48	1.5	1.00	20.0	.50	2,000	<.5	N	N	200	700
8S	58 57 47	154 38 22	1.0	2.00	7.0	.70	1,500	N	N	N	200	300
9S	58 59 2	154 39 4	2.0	2.00	5.0	.70	2,000	N	N	N	10	300
0S	58 50 49	154 36 0	1.0	2.00	5.0	.50	1,500	N	N	N	20	500
1S	58 52 19	154 58 22	1.5	1.50	3.0	.30	1,500	<.5	N	N	150	700

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K41458	1.0	N	N	20	150	30	N	N	N	30
K41468	1.0	N	N	20	50	20	N	N	N	20
K41478	1.0	N	N	30	100	50	N	N	N	30
K41488	1.0	N	N	30	20	50	N	<5	N	15
K41498	1.0	N	N	20	100	30	N	N	N	50
K41505	1.0	N	N	15	70	15	N	N	N	20
K41515	1.0	N	N	10	10	30	N	<5	N	10
K41528	1.0	N	N	20	20	30	N	N	N	10
K41538	1.0	N	N	15	30	50	N	<5	N	10
K41548	N	N	N	20	50	200	N	N	N	15
K41558	N	N	N	15	70	50	N	N	N	20
K41568	1.0	N	N	20	30	200	N	<5	N	20
K41578	<1.0	N	N	15	20	15	N	N	N	10
K41588	1.0	N	N	20	10	30	N	N	N	10
K41598	<1.0	N	N	30	70	50	N	N	N	20
K41608	1.0	N	N	10	<10	30	N	<5	N	N
K41618	<1.0	N	N	15	50	20	N	N	N	30
K41628	<1.0	N	N	10	50	15	N	N	N	15
K41638	<1.0	N	N	15	50	10	N	N	N	20
K41648	<1.0	N	N	15	70	15	N	N	N	20
K41655	<1.0	N	N	20	50	20	N	N	N	20
K41655D	N	N	N	15	50	15	N	N	N	20
K41668	N	N	N	70	50	300	N	N	N	20
K41678	<1.0	N	N	20	50	30	N	N	N	20
K41688	N	N	N	70	200	100	N	N	N	30
K41698	1.0	N	N	50	70	70	N	N	N	30
K41708	N	N	N	20	150	20	N	N	N	30
K41718	N	N	N	20	300	50	N	N	N	30
K41728	<1.0	N	N	20	70	20	N	N	N	20
K41735	N	N	N	20	70	20	N	N	N	20
K41748	<1.0	N	N	50	100	50	N	N	N	20
K41758	<1.0	N	N	30	70	50	N	N	N	20
K41768	1.0	N	N	20	70	50	N	N	N	30
K41775	<1.0	N	N	30	100	200	N	10	N	20
K41788	<1.0	N	N	30	100	50	N	<5	N	20
K41795	N	N	N	15	200	150	N	<5	N	20
K41805	<1.0	N	N	20	70	50	N	N	N	20
K41805D	<1.0	N	N	20	100	70	N	N	N	30
K41818	<1.0	N	N	15	50	50	N	N	N	20
K41828	1.0	N	N	15	30	30	N	N	N	20
K41835	<1.0	N	N	10	50	10	N	N	N	20
K41845	<1.0	N	N	15	50	20	N	N	N	20
K41858	N	N	N	30	30	50	N	N	N	10
K41868	N	N	N	50	50	70	N	N	N	20
K41878	<1.0	N	N	10	30	15	N	N	N	15
K41888	N	N	N	30	100	50	N	N	N	30
K41898	1.0	N	N	10	30	15	N	N	N	10
K41905	<1.0	N	N	20	70	30	N	N	N	20
K41918	N	N	N	50	100	50	N	N	N	30
K41925	<1.0	N	N	15	50	20	N	N	N	20
K41938	N	N	N	30	30	20	N	N	N	15
K41948	<1.0	N	N	30	50	70	N	N	N	15
K41958	<1.0	N	N	30	50	50	N	<5	N	10
K41968	N	N	N	15	50	20	N	N	N	7
K41975	<1.0	N	N	20	70	150	N	<5	N	15
K41978D	N	N	N	30	150	200	50	<5	N	20
K41985	N	N	N	20	20	50	N	N	N	5
K41995	<1.0	N	N	30	30	15	N	N	N	10
K42005	<1.0	N	N	15	15	20	N	5	N	7
K42018	1.0	N	N	30	30	100	N	<5	N	20

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
45S	N	20	N	500	200	N	20	N	700	N
46S	N	20	N	500	100	N	15	N	70	N
47S	N	20	N	300	150	N	20	N	100	N
48S	N	15	N	500	200	N	15	N	70	N
49S	N	15	N	300	150	N	15	N	70	N
50S	N	15	N	300	100	N	15	N	100	N
51S	N	10	N	300	100	N	15	N	70	N
52S	N	20	N	200	200	N	20	<200	100	N
53S	N	15	N	200	200	N	20	N	100	N
54S	N	30	N	200	200	N	20	<200	70	N
55S	N	20	N	200	300	N	20	200	150	N
56S	N	20	N	500	100	N	30	N	100	N
57S	N	20	N	200	150	N	20	<200	70	N
58S	N	20	N	300	200	N	20	N	70	N
59S	N	20	N	300	150	N	20	N	100	N
60S	N	10	N	200	100	N	30	N	100	N
61S	N	20	N	300	150	N	15	N	70	N
62S	N	15	N	200	100	N	15	N	70	N
63S	N	15	N	300	150	N	20	N	70	N
64S	N	20	N	300	150	N	15	N	50	N
65S	N	20	N	300	150	N	15	N	50	N
65SD	N	20	N	500	150	N	15	N	70	N
66S	N	20	N	500	200	N	30	300	70	N
67S	N	20	N	300	150	N	20	N	70	N
68S	N	30	N	500	200	N	20	<200	70	N
69S	N	15	N	150	150	N	20	500	100	N
70S	N	20	N	300	150	N	20	N	150	N
71S	N	20	N	500	200	N	20	N	200	N
72S	N	20	N	300	150	N	15	N	50	N
73S	N	20	N	500	150	N	20	N	50	N
74S	N	20	N	500	150	N	20	<200	70	N
75S	N	20	N	500	150	N	20	<200	100	N
76S	N	20	N	300	200	N	20	N	70	N
77S	N	20	N	500	150	N	20	<200	100	N
78S	N	30	N	500	200	N	30	<200	150	N
79S	N	30	N	300	200	N	30	N	200	N
80S	N	20	N	300	150	N	20	<200	100	N
80SD	N	20	N	300	150	N	20	N	100	N
81S	N	20	N	300	150	N	20	N	100	N
82S	N	20	N	300	150	N	20	N	100	N
83S	N	15	N	200	10	N	15	N	100	N
84S	N	15	N	300	100	N	15	N	70	N
85S	N	30	N	100	300	N	30	<200	70	N
86S	N	30	N	300	200	N	30	N	100	N
87S	N	15	N	300	100	N	20	N	50	N
88S	500	20	N	200	200	N	20	N	100	N
89S	N	15	N	200	100	N	20	N	>1,000	N
90S	N	20	N	200	150	N	20	N	70	N
91S	N	30	N	300	200	N	30	N	150	N
92S	N	20	N	150	150	N	20	N	70	N
93S	N	20	N	300	150	N	30	<200	100	N
94S	N	20	N	200	300	N	30	N	150	N
95S	N	15	N	200	200	N	30	N	100	N
96S	N	20	N	300	200	N	20	<200	150	N
97S	N	10	N	300	150	N	30	200	100	N
97SD	N	15	N	300	200	N	15	300	100	N
98S	N	30	N	200	300	N	30	<200	100	N
99S	N	30	N	300	200	N	50	N	200	N
00S	N	15	N	300	200	N	20	N	100	N
01S	N	20	N	300	150	N	20	<200	100	N

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Latitude	Longitude	Mg-pct.	Ca-pct.	Fe-pct.	Ti-pct.	Mn-ppm	Ag-ppm	As-ppm	Au-ppm	B-ppm
			%	%	%	%	%	%	%	%	%
K42025	58 54 18	154 54 47	1.5	2.00	5.0	.50	2,000	.5	N	N	30
K45008	58 37 59	154 53 58	1.5	2.00	3.0	.70	2,000	.5	N	N	20
K45015	58 39 12	154 56 5	2.0	2.00	7.0	.70	2,000	N	N	N	10
K45028	58 41 55	154 53 11	1.0	1.50	5.0	.30	2,000	N	N	N	15
K45035	58 44 22	154 45 5	2.0	2.00	7.0	1.00	2,000	N	N	N	10
K45045	58 40 16	154 42 6	1.0	2.00	5.0	.70	1,500	N	N	N	30
K45058	58 32 40	154 25 25	1.0	2.00	7.0	1.00	3,000	N	N	N	10
K45068	58 38 18	154 38 32	2.0	2.00	5.0	.50	1,000	<.5	N	N	30
K45075	58 39 2	154 38 52	1.5	1.50	3.0	.50	1,000	N	N	N	20
K45088	58 44 30	154 34 55	2.0	2.00	5.0	.50	1,500	N	N	N	15
K45098	58 42 9	154 27 18	2.0	1.50	5.0	.50	1,000	N	N	N	50
K45108	58 43 55	154 8 20	5.0	2.00	5.0	.70	2,000	N	N	N	20
K45118	58 41 52	154 2 43	1.5	1.00	5.0	.30	1,000	N	N	N	50
K45128	58 41 55	154 3 0	1.5	1.50	3.0	.30	1,000	N	N	N	50
K45138	58 38 22	153 53 55	1.5	2.00	7.0	.70	1,500	.5	N	N	100
K45148	58 39 54	153 46 25	1.5	2.00	5.0	.70	1,500	N	<200.0	N	150
K45158	58 42 45	153 39 0	2.0	3.00	5.0	.70	1,500	N	N	N	10
K45168	58 41 27	153 36 40	1.0	1.00	3.0	.50	2,000	1.0	<200.0	N	700
K45178	58 41 50	153 33 41	.7	1.00	2.0	.30	1,000	N	<200.0	N	300
K45188	58 43 50	153 30 53	1.0	2.00	7.0	1.00	1,500	N	N	N	150
K45198	58 48 20	153 26 50	3.0	2.00	5.0	.50	2,000	N	<200.0	N	200
K45208	58 56 43	153 23 52	3.0	2.00	5.0	.50	1,500	<.5	N	N	100
K45208D	58 56 43	153 23 52	2.0	2.00	5.0	.50	1,500	N	N	N	200
K45218	58 51 26	153 23 30	3.0	2.00	5.0	.70	1,500	N	N	N	150
K45228	58 49 22	153 23 6	2.0	2.00	5.0	.70	1,500	N	N	N	100
K45238	58 46 4	153 23 56	3.0	2.00	10.0	1.00	>5,000	N	N	N	20
K45248	58 17 7	154 30 30	2.0	2.00	5.0	.50	2,000	N	N	N	20
K45258	58 28 43	154 13 12	3.0	3.00	5.0	.50	1,500	N	N	N	15
K45268	58 32 13	153 57 13	2.0	2.00	10.0	1.00	2,000	N	N	N	10
K45278	58 57 26	153 30 17	1.0	1.50	3.0	.30	700	N	N	N	20
K45288	58 56 2	153 36 54	3.0	2.00	5.0	.50	1,000	N	N	N	50
K45298	58 56 33	153 41 38	5.0	2.00	7.0	.50	1,000	3.0	N	N	20
K45308	58 53 37	153 45 9	2.0	2.00	5.0	.50	1,500	N	N	N	30
K45318	59 2 52	154 5 40	1.0	1.50	2.0	.20	1,000	N	N	N	10
K45328	59 3 30	153 52 56	.7	1.50	2.0	.20	700	N	N	N	10
K45338	58 57 34	153 49 45	1.0	1.50	5.0	.20	1,000	N	N	N	20
K45348	58 58 32	153 51 5	1.0	1.50	2.0	.20	1,000	N	N	N	30
K45358	58 55 59	153 54 22	1.0	1.50	3.0	.20	1,000	N	N	N	50
K45368	58 51 25	153 58 20	1.5	2.00	5.0	.50	500	N	N	N	100
K45368D	58 51 25	153 58 20	1.5	2.00	5.0	.70	1,000	N	N	N	100
K45378	58 47 20	153 48 20	3.0	2.00	3.0	.30	1,500	N	N	N	30
K45388	58 47 7	153 48 40	1.0	1.50	3.0	.70	1,000	N	N	N	50
K45398	58 47 16	153 49 10	1.5	2.00	5.0	.70	1,500	N	N	N	10
K45408	58 51 3	153 51 6	1.0	1.00	2.0	.30	1,000	N	N	N	100
K45418	58 52 16	153 50 41	1.5	1.00	3.0	.30	1,000	N	N	N	70
K45428	58 56 35	153 46 16	1.0	1.50	2.0	.30	1,000	N	N	N	50
K45438	58 53 50	154 50 57	1.0	2.00	3.0	.20	1,000	N	N	N	20
K45448	58 52 53	154 46 4	1.5	1.50	5.0	.30	700	N	N	N	20
K45458	58 51 5	154 43 25	1.5	2.00	5.0	.30	1,500	N	N	N	10
K45468	58 54 7	154 51 30	.7	1.00	3.0	.50	1,000	<.5	N	N	50
K45478	58 51 37	154 51 32	1.5	2.00	10.0	.50	2,000	.5	N	N	30
K45488	58 51 11	154 51 0	2.0	2.00	5.0	.30	1,500	.5	N	N	50
K45498	58 50 34	154 51 30	.7	1.00	3.0	.30	1,000	<.5	N	N	15
K45508	58 47 10	154 47 17	2.0	2.00	7.0	.70	2,000	N	N	N	10
K45518	58 45 21	154 42 8	2.0	3.00	10.0	1.00	2,000	N	N	N	10
K45528	58 45 43	154 52 30	1.5	1.50	5.0	.50	700	N	N	N	10
K45538	58 45 37	154 52 0	1.5	1.50	5.0	.50	1,500	N	N	N	10
K45548	58 45 48	155 0 45	1.5	1.50	5.0	.50	1,000	N	N	N	10
K45558	58 49 26	154 57 49	1.0	1.50	3.0	.30	1,000	N	N	N	10
K45568	58 49 42	154 8 55	1.0	1.00	3.0	.30	1,500	N	N	N	10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
12S	<1.0	N	N	20	30	100	N	10	N	7	70
10S	1.0	N	N	50	20	15	N	N	N	10	<10
11S	N	N	N	50	50	20	N	N	N	15	10
12S	<1.0	N	N	20	20	15	N	N	N	10	<10
13S	N	N	N	50	50	30	N	N	N	15	10
14S	<1.0	N	N	20	20	15	N	N	N	10	<10
15S	<1.0	N	N	30	70	10	N	N	N	10	<10
16S	<1.0	N	N	15	50	30	N	N	N	20	15
17S	1.0	N	N	20	50	20	N	N	N	15	10
18S	1.0	N	N	50	30	20	N	N	N	20	<10
19S	<1.0	N	N	20	100	50	N	N	N	30	10
10S	N	N	N	70	200	70	N	N	N	100	<10
11S	1.0	N	N	15	70	50	N	N	N	30	20
12S	1.0	N	N	15	20	30	N	N	N	20	10
13S	<1.0	N	N	30	70	200	N	7	N	20	<10
14S	<1.0	N	N	10	70	50	N	N	N	20	30
15S	N	N	N	20	70	70	N	<5	N	30	10
16S	<1.0	N	N	30	50	30	N	N	N	20	30
17S	1.0	N	N	30	50	50	N	<5	N	20	20
18S	<1.0	N	N	20	70	50	N	N	N	20	10
19S	<1.0	N	N	50	100	50	N	N	N	50	10
20S	<1.0	N	N	50	70	50	N	N	N	30	20
20SD	<1.0	N	N	50	100	50	N	<5	N	30	15
21S	N	N	N	50	50	20	N	N	N	30	<10
22S	<1.0	N	N	50	70	50	N	N	N	30	<10
23S	N	N	N	100	200	200	N	20	N	50	10
24S	<1.0	N	N	30	70	30	N	<5	N	20	10
25S	N	N	N	50	70	50	N	<5	N	20	<10
26S	N	N	N	70	30	20	N	N	N	15	10
27S	<1.0	N	N	10	30	30	N	<5	N	20	<10
28S	<1.0	N	N	50	300	50	N	N	N	50	10
29S	<1.0	N	N	70	200	50	N	N	N	50	10
30S	<1.0	N	N	50	100	70	N	N	N	30	15
31S	1.0	N	N	10	30	15	N	N	N	15	<10
32S	1.0	N	N	10	30	10	N	N	N	15	<10
33S	1.0	N	N	10	50	15	N	N	N	20	<10
34S	1.0	N	N	10	70	15	N	N	N	15	<10
35S	1.0	N	N	10	30	15	N	N	N	15	10
36S	1.0	N	N	20	70	50	N	N	N	30	20
36SD	1.5	N	N	20	200	50	N	N	N	50	20
37S	<1.0	N	N	50	100	50	N	N	N	30	10
38S	1.0	N	N	15	20	15	N	<5	N	10	10
39S	1.0	N	N	30	50	30	N	<5	N	20	15
40S	1.0	N	N	15	200	20	N	N	N	30	15
41S	1.0	N	N	20	100	20	N	N	N	30	10
42S	1.0	N	N	10	50	15	N	N	N	15	<10
43S	1.0	N	N	10	30	100	N	<5	N	15	20
44S	<1.0	N	N	15	70	70	N	<5	N	20	20
45S	1.0	N	N	20	20	50	N	5	N	15	15
46S	1.0	N	N	10	20	100	N	<5	N	7	50
47S	<1.0	N	N	20	30	20	N	N	N	15	50
48S	<1.0	N	N	20	30	30	N	<5	N	15	70
49S	1.0	N	N	10	30	70	N	20	N	10	30
50S	N	N	N	50	20	50	N	N	N	15	10
51S	N	N	N	50	20	20	N	N	N	10	<10
52S	<1.0	N	N	20	15	20	N	N	N	10	10
53S	<1.0	N	N	20	70	15	N	N	N	10	10
54S	<1.0	N	N	30	50	20	N	<5	N	15	10
55S	1.0	N	N	10	10	30	N	N	N	7	10
56S	<1.0	N	N	15	50	20	N	N	N	20	<10

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K42027S	N	20	N	300	150	N	30	200	70
K45008S	N	30	N	500	200	N	30	N	70
K45018S	N	30	N	200	300	N	30	200	70
K45028S	N	20	N	300	150	N	20	N	100
K45038S	N	30	N	200	300	N	20	<200	200
K45048S	N	20	N	300	200	N	20	N	70
K45058S	N	30	N	200	300	N	30	<200	500
K45068S	N	20	N	300	200	N	15	N	70
K45078S	N	20	N	200	100	N	20	N	70
K45088S	N	30	N	300	200	N	30	<200	100
K45098S	N	20	N	300	200	N	20	<200	100
K45108S	N	30	N	200	500	N	15	200	100
K45118S	N	20	N	200	100	N	20	N	50
K45128S	N	15	N	300	150	N	15	<200	100
K45138S	N	20	N	500	300	N	20	<200	70
K45148S	N	20	N	200	300	N	30	N	150
K45158S	N	20	N	300	300	N	30	<200	100
K45168S	N	15	N	300	200	N	20	300	50
K45178S	N	15	N	150	100	N	20	<200	70
K45188S	N	20	N	300	300	N	30	N	200
K45198S	N	30	N	300	200	N	20	<200	70
K45208S	N	20	N	300	100	N	20	<200	50
K45208SD	N	20	N	300	150	N	20	N	200
K45218S	N	30	N	200	150	N	20	N	70
K45228S	N	20	N	200	150	N	20	<200	70
K45238S	N	30	N	200	300	N	30	<200	70
K45248S	N	20	N	500	150	N	20	N	70
K45258S	N	30	N	300	200	N	20	N	70
K45268S	N	30	N	200	700	N	20	300	70
K45278S	N	15	N	200	150	N	15	N	70
K45288S	N	20	N	200	200	N	15	<200	100
K45298S	N	30	N	300	200	N	15	N	70
K45308S	N	20	N	300	200	N	15	<200	100
K45318S	N	15	N	300	100	N	10	N	70
K45328S	N	10	N	300	70	N	10	N	70
K45338S	N	15	N	300	100	N	10	N	100
K45348S	N	10	N	300	100	N	10	N	50
K45358S	N	10	N	500	100	N	10	N	50
K45368S	N	15	N	300	150	N	15	N	150
K45368SD	N	20	N	500	150	N	20	N	500
K45378S	N	20	N	300	200	N	20	<200	70
K45388S	N	15	N	300	100	N	30	N	200
K45398S	N	20	N	500	200	N	30	N	150
K45408S	N	15	N	300	100	N	15	<200	100
K45418S	N	15	N	300	100	N	20	N	70
K45428S	N	15	N	200	100	N	15	N	50
K45438S	N	15	N	500	150	N	20	N	70
K45448S	N	20	N	200	200	N	20	<200	70
K45458S	N	15	N	300	200	N	20	N	100
K45468S	N	20	N	200	100	N	20	<200	70
K45478S	N	20	N	200	300	N	20	200	70
K45488S	N	20	N	200	200	N	20	<200	70
K45498S	N	10	N	200	100	N	15	N	100
K45508S	N	30	N	300	300	N	20	<200	100
K45518S	N	50	N	200	300	N	30	200	50
K45528S	N	20	N	200	150	N	20	N	100
K45538S	N	20	N	200	150	N	20	<200	70
K45548S	N	20	N	300	200	N	20	<200	70
K45558S	N	15	N	300	100	N	20	N	100
K45568S	N	20	N	200	150	N	15	N	50

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
57S	58 50 28	154 5 57	1.5	1.50	5.0	.30	700	N	N	N	15	300
58S	58 55 40	154 9 50	1.0	1.00	2.0	.20	1,000	N	N	N	20	300
58SD	58 55 40	154 9 50	1.5	2.00	3.0	.30	1,000	N	N	N	15	500
59S	58 58 58	154 5 23	2.0	2.00	5.0	.50	1,000	N	N	N	15	500
60S	58 58 50	154 5 34	1.5	2.00	3.0	.30	1,000	N	<200.0	N	20	500
61S	58 59 27	153 54 0	1.5	1.50	5.0	.30	700	N	N	N	20	300
62S	58 44 35	153 58 42	2.0	1.50	10.0	.70	1,500	.5	200.0	N	100	1,000
63S	58 44 8	153 52 41	1.0	1.50	5.0	.70	1,500	N	N	N	<10	500
64S	58 44 41	153 57 19	2.0	1.00	5.0	.70	1,000	N	N	N	150	700
65S	58 47 18	154 6 59	2.0	2.00	5.0	.50	1,500	2.0	N	N	30	500
66S	58 51 0	153 59 5	.7	10.00	1.0	.30	500	N	N	N	70	300
67S	58 48 2	154 6 9	1.0	2.00	5.0	.50	1,000	N	N	N	100	700
68S	58 50 12	154 15 50	1.5	2.00	5.0	.50	1,500	N	N	N	10	500
69S	58 45 30	154 16 20	1.5	2.00	3.0	.30	1,000	N	N	N	50	700
70S	58 45 42	154 16 20	1.5	2.00	5.0	.50	1,000	N	N	N	50	700
71S	58 40 48	154 23 0	1.5	1.50	3.0	.50	1,000	N	N	N	30	700
72S	58 41 29	154 23 47	1.5	2.00	5.0	.70	1,500	<.5	N	N	70	700
73S	58 57 36	154 45 55	2.0	2.00	10.0	.70	1,500	2.0	N	N	30	500
74S	58 56 32	154 45 50	1.5	1.50	5.0	.50	1,000	N	N	N	50	500
75S	58 39 45	154 17 44	2.0	2.00	5.0	.50	1,500	<.5	N	N	50	700
76S	58 39 3	154 17 32	2.0	1.50	5.0	.30	1,000	<.5	N	N	50	700
77S	58 44 20	154 20 50	1.5	1.50	5.0	.50	1,000	N	N	N	50	700
78S	58 45 42	154 19 38	2.0	1.50	5.0	.50	1,500	N	N	N	50	700
79S	58 46 57	154 29 7	2.0	2.00	5.0	.70	2,000	N	N	N	10	500
79SD	58 46 57	154 29 7	1.0	2.00	3.0	.30	1,000	N	N	N	<10	700
80S	58 47 55	154 25 52	1.5	1.50	5.0	.50	1,000	N	N	N	20	700
81S	58 50 6	154 32 27	1.5	2.00	10.0	1.00	2,000	N	N	N	N	300
82S	58 52 25	154 22 59	2.0	2.00	7.0	.70	2,000	N	N	N	15	500
83S	58 55 30	154 18 50	1.5	1.50	3.0	.50	1,500	N	N	N	15	500
84S	58 53 4	154 13 15	.7	1.50	2.0	.20	700	N	N	N	<10	500
85S	58 57 35	154 13 35	1.0	1.50	5.0	.50	2,000	N	N	N	50	500
86S	58 58 35	154 17 17	1.5	2.00	3.0	.50	1,500	N	N	N	<10	300
87S	58 55 52	154 17 25	1.0	1.50	5.0	.30	2,000	N	N	N	10	500
88S	58 57 22	154 27 47	1.5	1.50	5.0	.50	1,500	N	N	N	10	500
89S	58 53 42	154 37 28	1.0	2.00	7.0	.50	1,500	N	N	N	10	500
90S	58 53 32	154 37 56	2.0	2.00	5.0	.50	1,500	N	N	N	<10	200
91S	58 59 37	155 1 42	.7	1.50	15.0	.70	1,500	N	N	N	500	500
92S	58 55 28	154 56 10	1.0	1.50	3.0	.30	1,500	N	N	N	100	500
93S	58 56 46	154 39 50	.7	1.50	3.0	.30	1,000	N	N	N	100	500
94S	58 56 48	154 39 59	1.0	2.00	20.0	1.00	2,000	N	N	N	N	150
95S	58 57 28	154 39 47	1.0	2.00	5.0	.50	1,500	N	N	N	10	500
96S	58 53 22	154 39 14	1.0	1.50	10.0	.50	1,000	<.5	N	N	10	300
96SD	58 53 22	154 39 14	1.5	1.50	5.0	.30	1,500	<.5	N	N	10	500
97S	58 50 32	154 58 16	1.5	.70	10.0	.30	1,500	N	N	N	500	300
98S	58 57 52	156 1 8	1.0	1.50	2.0	.50	1,000	N	N	N	10	500
99S	58 59 59	154 56 27	1.0	1.50	2.0	.30	1,000	N	N	N	50	500
00S	58 53 3	154 56 33	1.0	1.50	5.0	.30	1,500	<.5	N	N	20	500

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	P
K4557S	<1.0	N	N	20	50	20	20	N	N	20	
K4558S	<1.0	N	N	10	50	15	N	N	N	20	
K4558SD	<1.0	N	N	10	30	15	N	N	N	20	
K4559S	<1.0	N	N	20	100	20	N	N	N	20	
K4560S	1.0	N	N	15	70	20	N	N	N	20	
K4561S	<1.0	N	N	20	70	30	N	N	N	20	
K4562S	1.0	N	N	50	300	150	N	N	N	30	
K4563S	N	N	N	20	100	150	N	N	N	15	
K4564S	1.0	N	N	30	100	50	N	N	N	50	
K4565S	N	N	N	30	70	30	N	N	N	20	
K4566S	<1.0	N	N	7	30	20	N	N	N	15	
K4567S	<1.0	N	N	20	100	20	N	N	N	20	
K4568S	<1.0	N	N	20	70	20	N	N	N	20	
K4569S	<1.0	N	N	30	150	30	N	N	N	20	
K4570S	<1.0	N	N	20	70	50	N	N	N	20	
K4571S	1.0	N	N	15	70	50	N	N	N	20	
K4572S	N	N	N	70	100	50	N	N	N	30	
K4573S	N	N	N	50	200	200	N	10	N	30	
K4574S	N	N	N	20	100	100	N	10	N	20	
K4575S	<1.0	N	N	30	100	70	N	N	N	30	
K4576S	<1.0	N	N	20	100	70	N	N	N	20	
K4577S	<1.0	N	N	10	50	30	N	N	N	20	
K4578S	<1.0	N	N	30	50	50	N	N	N	20	
K4579S	N	N	N	50	20	30	N	N	N	10	
K4579SD	<1.0	N	N	10	30	10	N	N	N	10	
K4580S	<1.0	N	N	20	30	20	N	N	N	15	
K4581S	N	N	N	70	50	30	N	N	N	15	
K4582S	N	N	N	50	100	50	N	N	N	30	
K4583S	N	N	N	20	100	30	20	N	N	30	
K4584S	1.0	N	N	7	15	10	N	10	N	7	
K4585S	<1.0	N	N	20	70	15	N	N	N	20	
K4586S	<1.0	N	N	30	100	50	20	N	N	30	
K4587S	1.0	N	N	30	50	20	N	N	N	20	
K4588S	N	N	N	20	50	50	N	N	N	15	
K4589S	<1.0	N	N	20	50	50	N	7	N	10	
K4590S	N	N	N	15	70	50	N	N	N	20	
K4591S	1.0	N	N	50	200	50	N	N	N	30	
K4592S	1.0	N	N	15	50	300	N	<5	N	20	
K4593S	<1.0	N	N	15	20	20	N	N	N	10	
K4594S	N	N	N	50	200	30	N	N	N	30	
K4595S	N	N	N	15	50	50	N	<5	N	10	
K4596S	<1.0	N	N	20	100	200	N	10	N	20	
K4596SD	<1.0	N	N	20	30	300	N	15	N	15	
K4597S	N	N	N	20	50	300	N	30	N	7	
K4598S	N	N	N	15	50	10	N	<5	N	10	
K4599S	1.0	N	N	15	30	70	N	N	N	10	
K4600S	<1.0	N	N	20	20	50	N	<5	N	7	

Table 2. Analyses of stream-sediment samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
7S	N	20	N	300	150	N	15	N	70	N
8S	N	15	N	200	150	N	15	N	70	N
8SD	N	15	N	500	150	N	15	N	100	N
9S	N	30	N	500	200	N	20	N	100	N
0S	N	15	N	300	150	N	15	N	100	N
1S	N	20	N	300	150	N	15	N	70	N
2S	N	20	N	300	200	N	20	500	200	N
3S	N	20	N	300	300	N	20	<200	70	N
4S	N	20	N	300	200	N	20	<200	150	N
5S	N	20	N	300	200	N	20	200	50	N
6S	N	10	N	500	100	N	15	N	50	N
7S	N	15	N	700	150	N	15	N	100	N
8S	N	20	N	300	150	N	30	N	70	N
9S	N	20	N	500	150	N	20	N	70	N
0S	N	20	N	500	150	N	20	N	70	N
1S	N	20	N	500	150	N	20	N	70	N
2S	N	20	N	500	200	N	20	<200	50	N
3S	N	20	N	500	200	N	30	<200	70	N
4S	N	20	N	200	150	N	20	N	150	N
5S	N	30	N	500	150	N	30	N	200	N
6S	N	20	N	500	150	N	20	<200	70	N
7S	N	20	N	300	200	N	20	N	100	N
8S	N	20	N	300	150	N	20	N	70	N
9S	N	30	N	300	200	N	20	<200	70	N
9SD	N	15	N	300	100	N	30	N	100	N
0S	N	15	N	200	150	N	20	N	500	N
1S	N	30	N	200	500	N	30	<200	150	N
2S	N	30	N	200	200	N	30	N	100	N
3S	N	20	N	300	150	N	20	N	70	N
4S	N	7	N	100	70	N	10	N	100	N
5S	N	15	N	200	100	N	20	N	70	N
6S	N	20	N	200	150	N	20	N	100	N
7S	N	20	N	300	150	N	20	N	100	N
8S	N	20	N	200	200	N	20	N	150	N
9S	N	20	N	200	200	N	20	N	100	N
0S	N	20	N	200	150	N	20	N	100	N
1S	N	20	N	300	500	N	30	<200	1,000	N
2S	N	10	N	300	200	N	15	N	100	N
3S	N	20	N	100	150	N	20	N	200	N
4S	N	30	N	200	700	N	30	<200	>1,000	N
5S	N	20	N	300	150	N	20	<200	100	N
6S	N	15	N	300	300	N	15	N	100	N
6SD	N	20	N	300	150	N	15	N	70	N
7S	N	20	N	100	100	N	20	N	150	N
8S	N	20	N	300	100	N	20	N	100	N
9S	N	15	N	300	150	N	20	N	100	N
0S	N	15	N	300	150	N	20	N	70	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska
(N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value sh

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K0001C	58 30 47	153 58 39	1.00	2.00	1.0	1.50	1,500	N	N	N	150
K0002C	58 29 36	154 2 8	.50	1.50	1.0	2.00	1,000	5.0	700	50	100
K0003C	58 32 4	154 5 47	1.50	2.00	2.0	1.50	2,000	N	N	N	150
K0004C	58 31 2	154 11 26	.70	1.00	5.0	.70	500	10.0	N	N	<20
K0005C	58 31 54	154 7 55	.50	1.50	2.0	1.00	1,000	<1.0	N	N	150
K0005CR1	58 31 54	154 7 55	.50	1.00	1.0	.50	500	N	N	N	200
K0005CR2	58 31 54	154 7 55	.50	1.00	1.0	.50	700	N	N	N	100
K0006C	58 32 38	154 14 42	1.00	2.00	1.5	1.50	1,500	N	N	N	50
K0007C	58 32 37	154 14 53	1.00	3.00	1.5	2.00	2,000	N	N	N	500
K0008C	58 32 9	154 13 39	2.00	3.00	10.0	1.50	2,000	<1.0	N	N	50
K0009C	58 31 54	154 13 55	.70	1.50	15.0	1.00	500	3.0	1,000	N	3,000
K0010C	58 31 29	154 15 59	1.00	1.50	2.0	1.00	1,000	N	N	N	200
K0011C	58 31 9	154 17 26	1.50	2.00	1.5	1.00	1,500	N	N	N	300
K0012C	58 30 52	154 18 27	1.50	3.00	3.0	2.00	2,000	N	N	N	200
K0013C	58 30 46	154 18 30	3.00	1.50	7.0	1.00	2,000	N	1,500	N	200
K0014C	58 30 29	154 17 41	.70	2.00	15.0	.50	200	3.0	<500	N	<20
K0015C	58 30 50	154 16 10	1.00	1.00	7.0	.70	500	15.0	500	N	100
K0015CR1	58 30 50	154 16 10	.50	2.00	1.0	.50	500	1.0	N	N	100
K0015CR2	58 30 50	154 16 10	.30	2.00	2.0	.50	700	1.0	N	N	100
K0016C	58 30 35	154 13 3	3.00	2.00	2.0	.50	1,500	N	N	N	50
K0017C	58 17 26	154 19 40	2.00	1.50	1.5	.50	1,500	N	N	N	<20
K0018C	58 17 19	154 20 6	.20	.30	20.0	.50	200	<1.0	<500	N	20
K0019C	58 17 7	154 21 8	2.00	2.00	10.0	.70	2,000	5.0	N	N	20
K0020C	58 19 24	154 19 40	5.00	2.00	7.0	.50	1,000	<1.0	N	N	20
K0021C	58 19 57	154 22 16	2.00	1.50	7.0	.50	1,000	1.0	700	N	30
K0023C	58 1 13	154 50 47	5.00	2.00	5.0	1.50	3,000	N	N	N	50
K0024C	58 2 3	154 53 4	1.50	2.00	1.5	1.00	1,000	N	N	N	100
K0025C	58 5 38	154 52 55	5.00	2.00	10.0	.70	2,000	N	N	N	30
K0025CR1	58 5 38	154 52 55	.07	5.00	1.5	.20	150	N	N	N	50
K0025CR2	58 5 38	154 52 55	.10	3.00	2.0	.10	150	N	N	N	20
K0026C	58 3 34	154 53 26	5.00	2.00	7.0	.70	3,000	N	N	N	300
K0027C	58 5 31	154 53 2	2.00	1.50	2.0	.30	1,500	1.0	N	N	<20
K0028C	58 7 57	154 52 23	2.00	2.00	1.5	.50	1,500	1.0	N	N	50
K0029C	58 9 20	154 51 8	.20	1.00	15.0	.70	200	5.0	500	N	50
K0030C	58 9 34	154 52 28	3.00	2.00	3.0	.50	1,500	N	N	N	70
K0031C	58 8 8	154 53 12	3.00	2.00	2.0	.30	2,000	N	N	N	20
K0032C	58 6 53	154 53 23	5.00	2.00	7.0	1.00	2,000	N	N	N	30
K0033C	58 5 35	154 55 11	2.00	1.50	2.0	.50	1,500	1.0	N	N	30
K0035C	58 12 22	154 41 28	3.00	1.50	5.0	.50	1,500	1.5	N	N	<20
K0035CR1	58 12 22	154 41 28	.07	5.00	2.0	.10	150	<1.0	N	N	50
K0035CR2	58 12 22	154 41 28	.10	3.00	3.0	.15	150	N	N	N	20
K0036C	58 7 22	155 0 26	3.00	1.50	2.0	.30	1,500	N	N	N	20
K0037C	58 12 18	154 41 34	2.00	1.50	3.0	.50	1,000	<1.0	N	N	<20
K0038C	58 11 38	154 42 53	5.00	2.00	7.0	.70	3,000	2.0	N	N	<20
K0039C	58 11 26	154 43 18	5.00	2.00	10.0	1.00	2,000	N	N	N	20
K0040C	58 4 32	154 32 59	3.00	2.00	2.0	.20	2,000	N	N	N	<20
K0041C	58 6 7	154 30 38	1.50	1.00	3.0	1.00	1,000	N	N	N	50
K0042C	58 6 44	154 32 45	1.50	1.00	1.5	1.50	700	N	N	N	70
K0043C	58 6 56	154 34 49	3.00	1.00	10.0	1.00	1,500	N	N	N	20
K0044C	58 6 54	154 36 36	2.00	1.50	3.0	.50	1,500	N	N	N	30
K0045C	58 5 44	154 34 51	3.00	1.50	2.0	.20	2,000	N	N	N	20
K0045CR1	58 5 44	154 34 51	.50	10.00	.7	.20	500	<1.0	N	N	100
K0045CR2	58 5 44	154 34 51	.20	3.00	.5	.15	300	N	N	N	50
K0046C	58 9 8	154 35 27	2.00	5.00	5.0	.50	1,500	1.0	N	N	20
K0047C	58 10 12	154 34 5	2.00	1.50	15.0	.70	1,000	5.0	500	N	30
K0048C	58 10 36	154 34 32	2.00	1.00	7.0	.70	1,000	1.5	<500	N	50
K0049C	58 10 36	154 34 18	1.00	.50	7.0	.70	500	3.0	<500	N	100
K0050C	58 10 40	154 36 24	3.00	1.00	7.0	.20	1,500	N	N	N	<20
K0051C	58 11 15	154 37 54	1.00	.70	20.0	.30	500	5.0	700	N	<20
K0052C	58 6 18	154 36 19	5.00	1.50	5.0	1.00	2,000	N	N	N	50

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
)1C	N	N	N	15	100	<10	200	N	<50	N	50
)2C	N	N	N	20	50	20	200	N	<50	10	50
)3C	N	N	N	20	100	100	300	10	<50	N	50
)4C	N	50	100	50	20	300	70	20	N	30	300
)5C	N	N	N	20	50	20	200	<10	<50	30	70
)5CR1	<2	N	N	10	20	50	N	N	N	N	<20
)5CR2	<2	N	N	<10	20	10	N	N	N	N	<20
)6C	N	N	N	30	30	15	200	N	<50	10	20
)7C	N	N	N	20	100	10	300	N	<50	10	70
)8C	N	N	N	50	100	100	200	10	<50	30	100
)9C	N	N	N	70	70	500	70	N	<50	70	150
10C	N	N	N	20	200	10	150	N	<50	30	20
11C	N	N	N	20	200	<10	200	N	<50	15	100
12C	N	N	N	30	200	20	200	N	<50	10	50
13C	N	N	N	50	100	70	70	N	<50	30	150
14C	N	N	N	70	30	70	N	N	N	30	200
15C	N	70	50	70	50	100	N	N	N	30	200
15CR1	N	50	N	10	20	20	N	<10	N	N	200
15CR2	N	20	N	10	20	20	N	N	N	N	70
16C	N	N	N	20	150	<10	N	N	N	30	<20
17C	N	N	N	30	70	10	N	N	N	10	N
18C	N	N	<50	50	50	200	N	N	N	100	70
19C	N	N	N	50	150	300	N	100	N	50	700
20C	N	N	N	50	700	100	N	N	N	70	70
21C	N	N	N	100	150	70	N	N	N	100	150
23C	N	N	N	30	200	100	100	N	<50	20	20
24C	N	N	N	20	50	70	150	N	<50	15	20
25C	N	N	N	70	150	70	70	N	N	50	50
25CR1	<2	N	N	20	<20	10	N	N	N	N	<20
25CR2	<2	N	N	10	<20	<10	N	N	N	N	<20
26C	N	N	N	50	100	20	N	N	<50	30	30
27C	N	N	N	50	70	30	50	N	N	30	70
28C	N	N	N	30	70	20	N	N	N	20	50
29C	N	20	N	100	<20	500	N	20	N	70	200
30C	N	70	N	30	70	20	N	N	N	20	100
31C	N	N	N	30	70	20	N	N	N	15	<20
32C	N	N	N	30	200	100	50	N	N	15	50
33C	N	N	N	30	70	10	N	N	N	20	<20
35C	N	N	N	50	50	50	N	N	N	30	50
35CR1	<2	N	N	20	<20	10	N	N	N	N	20
35CR2	<2	N	N	10	<20	10	N	N	N	N	20
36C	N	N	N	30	30	15	N	N	N	20	N
37C	N	N	N	50	30	50	N	<10	N	30	50
38C	N	N	N	50	100	150	N	N	N	30	30
39C	N	N	N	50	150	150	N	N	N	30	50
40C	N	N	N	30	50	15	N	N	N	10	<20
41C	N	N	N	50	200	20	100	N	<50	70	50
42C	N	N	<50	15	100	30	150	N	<50	20	20
43C	N	N	N	70	100	20	N	N	N	70	N
44C	N	N	<50	50	150	15	N	N	N	30	20
45C	N	N	N	30	180	15	N	N	N	20	<20
45CR1	<2	N	N	<10	<20	10	N	N	N	N	<20
45CR2	<2	N	N	<10	<20	<10	N	N	N	N	<20
46C	<2	N	N	30	200	100	N	N	N	50	150
47C	N	N	<50	100	500	200	N	<10	N	150	150
48C	N	N	<50	70	150	30	N	N	N	50	150
49C	N	N	<50	50	100	200	N	10	N	30	70
50C	N	N	N	50	100	20	N	N	N	50	<20
51C	N	N	N	70	100	200	N	15	N	150	200
52C	N	N	N	50	150	15	N	N	N	N	20

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Tl
K0001C	N	50	20	300	100	N	200	N	>2,000	
K0002C	N	70	20	<200	100	N	500	N	>2,000	
K0003C	N	70	N	500	200	N	300	N	>2,000	
K0004C	N	20	N	500	70	N	100	2,000	2,000	
K0005C	N	30	N	200	150	N	150	N	>2,000	
K0005CR1	N	<10	N	500	100	N	20	N	1,000	
K0005CR2	N	<10	N	200	100	N	20	N	500	
K0006C	N	50	<20	500	150	N	150	N	>2,000	
K0007C	N	50	<20	500	150	N	200	N	>2,000	
K0008C	N	70	N	500	200	N	150	N	>2,000	
K0009C	N	30	N	200	100	N	150	<500	>2,000	
K0010C	N	50	N	500	100	N	100	N	700	
K0011C	N	50	30	300	100	N	150	N	2,000	
K0012C	N	70	20	700	200	N	150	N	>2,000	
K0013C	N	70	N	300	150	N	100	N	>2,000	
K0014C	N	20	N	500	70	N	<20	<500	500	
K0015C	N	30	N	<200	70	N	50	1,000	700	
K0015CR1	N	<10	N	500	100	N	<20	N	100	
K0015CR2	N	<10	N	500	100	N	<20	N	300	
K0016C	N	70	N	<200	150	N	100	N	2,000	
K0017C	N	70	N	<200	100	N	100	N	2,000	
K0018C	N	20	N	<200	70	N	20	<500	700	
K0019C	N	100	N	300	150	N	100	N	>2,000	
K0020C	N	70	N	200	150	N	70	N	2,000	
K0021C	N	50	N	<200	100	N	50	N	500	
K0023C	N	100	N	500	200	N	150	N	>2,000	
K0024C	N	50	20	200	100	N	150	N	>2,000	
K0025C	N	150	N	200	150	N	100	N	>2,000	
K0025CR1	N	N	N	1,000	20	N	<20	N	200	
K0025CR2	N	N	N	1,000	20	N	<20	N	20	
K0026C	N	100	N	300	150	N	100	N	>2,000	
K0027C	N	70	N	200	70	N	70	N	2,000	
K0028C	N	70	N	<200	150	N	100	N	500	
K0029C	N	20	N	<200	70	N	70	<500	700	
K0030C	N	70	20	200	100	N	70	N	200	
K0031C	N	70	N	200	100	N	70	N	1,500	
K0032C	N	100	30	300	200	N	150	N	>2,000	
K0033C	N	70	N	200	100	N	70	N	700	
K0035C	N	50	N	<200	100	N	50	N	300	
K0035CR1	N	N	N	1,000	20	N	<20	N	500	
K0035CR2	N	N	N	1,000	20	N	20	N	50	
K0036C	N	50	N	<200	100	N	70	N	700	
K0037C	N	50	N	<200	70	N	70	N	300	
K0038C	N	100	N	300	150	N	100	N	>2,000	
K0039C	N	70	N	<200	100	N	100	N	300	
K0040C	N	70	N	<200	100	N	70	N	100	
K0041C	N	50	<20	1,000	100	N	100	700	>2,000	
K0042C	N	50	30	300	70	N	150	N	>2,000	
K0043C	N	30	N	<200	100	N	70	N	1,000	
K0044C	N	100	20	200	100	N	70	<500	1,500	
K0045C	N	70	N	N	100	N	70	N	300	
K0045CR1	N	<10	N	1,500	20	N	20	N	50	
K0045CR2	N	N	N	1,000	20	N	<20	N	50	
K0046C	N	50	N	700	150	N	50	N	200	
K0047C	N	20	N	300	100	N	70	500	500	
K0048C	N	70	N	300	100	N	100	500	>2,000	
K0049C	N	30	20	N	70	N	70	700	1,000	
K0050C	N	50	N	200	100	N	50	N	300	
K0051C	N	20	N	N	70	N	50	N	300	
K0052C	N	50	N	200	150	N	150	N	>2,000	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
3C	58 0 27	154 47 9	5.00	2.00	5.0	.70	2,000	N	N	N	20	50
4C	58 2 12	154 46 47	2.00	1.50	2.0	1.00	1,000	N	N	N	30	1,500
5C	58 2 16	154 46 42	1.50	1.00	2.0	1.00	700	N	N	N	50	3,000
5CR1	58 2 16	154 46 42	.20	2.00	.7	.30	200	N	N	N	100	1,000
5CR2	58 2 16	154 46 42	.30	2.00	1.0	.50	300	N	N	N	100	1,000
6C	58 0 55	154 44 12	1.50	1.50	2.0	1.00	1,000	N	N	N	50	3,000
7C	58 1 2	154 44 1	5.00	2.00	5.0	1.00	2,000	N	N	N	50	150
8C	58 2 14	154 43 44	1.50	1.00	2.0	1.00	1,000	N	N	N	50	3,000
9C	58 4 48	154 43 12	3.00	1.50	5.0	1.00	2,000	3.0	2,000	N	300	5,000
0C	58 4 50	154 42 1	5.00	1.00	5.0	.70	2,000	N	N	N	<20	70
1C	58 7 6	154 27 21	3.00	1.50	2.0	.50	2,000	N	N	N	<20	2,000
2C	58 7 32	154 27 39	5.00	2.00	3.0	.30	3,000	N	N	N	<20	1,000
3C	58 9 45	154 28 1	5.00	1.50	5.0	.50	2,000	<1.0	N	N	20	700
4C	58 10 55	154 29 2	5.00	2.00	5.0	.50	1,500	1.5	N	N	<20	1,000
5C	58 12 55	154 35 10	7.00	2.00	7.0	1.00	3,000	N	N	N	<20	200
5CR1	58 12 55	154 35 10	.30	5.00	.7	.20	200	N	N	N	100	700
5CR2	58 12 55	154 35 10	.50	3.00	1.0	.20	500	N	N	N	50	1,000
6C	58 13 0	154 35 5	3.00	1.50	3.0	.50	2,000	N	N	N	N	2,000
7C	58 8 33	154 38 29	2.00	1.50	3.0	.70	1,000	<1.0	N	N	<20	3,000
8C	58 9 40	154 36 27	3.00	2.00	7.0	1.00	1,500	N	N	N	20	1,000
9C	58 11 21	154 38 39	5.00	1.50	7.0	.70	1,500	1.0	N	N	<20	1,500
0C	58 10 27	154 42 8	2.00	1.50	2.0	.50	1,500	N	N	N	<20	150
1C	58 10 28	154 41 54	1.00	2.00	10.0	2.00	700	1.5	N	N	20	10,000
2C	58 9 42	154 41 57	2.00	1.50	2.0	.30	1,500	N	N	N	<20	<50
3C	58 9 37	154 41 40	3.00	2.00	5.0	1.00	1,500	3.0	N	N	<20	2,000
4C	58 6 7	154 43 58	5.00	2.00	5.0	1.00	2,000	<1.0	N	N	20	700
5C	58 5 55	154 43 57	1.00	1.00	3.0	.70	700	2.0	N	N	50	2,000
5CR1	58 5 55	154 43 57	.20	5.00	.7	.30	200	N	N	N	100	1,000
5CR2	58 5 55	154 43 57	.20	3.00	1.0	.20	200	N	N	N	50	700
6C	58 6 49	154 42 35	1.50	1.50	1.5	1.00	1,000	N	N	N	20	50
7C	58 7 39	154 42 31	2.00	1.00	7.0	1.50	1,000	N	<500	N	20	7,000
8C	58 9 4	154 42 4	1.00	1.50	15.0	1.00	700	1.0	N	N	20	10,000
9C	58 11 42	154 29 44	1.50	.70	2.0	.50	1,000	N	N	N	70	<50
0C	58 12 13	154 28 33	1.50	1.50	2.0	.50	1,000	N	N	N	20	100
1C	58 11 42	154 24 21	2.00	1.50	3.0	2.00	1,000	N	N	N	150	700
2C	58 12 6	154 24 40	2.00	2.00	7.0	2.00	1,000	1.0	N	N	30	1,000
3C	58 10 16	154 25 51	2.00	1.00	5.0	1.00	1,000	N	<500	N	70	300
4C	58 8 37	154 25 26	2.00	1.50	3.0	.70	1,000	1.5	N	N	20	1,000
5C	58 8 25	154 59 29	1.50	1.00	1.5	.70	1,000	N	<500	N	20	1,000
5CR1	58 8 25	154 59 29	.30	7.00	.7	.20	300	N	N	N	100	1,000
5CR2	58 8 25	154 59 29	.20	5.00	.7	.20	200	N	N	N	50	700
6C	58 5 56	154 20 39	3.00	2.00	5.0	1.00	1,500	N	N	N	30	1,000
7C	58 10 16	154 58 30	2.00	1.50	5.0	1.50	1,500	N	N	N	70	1,500
8C	58 11 43	154 59 40	1.00	1.00	5.0	.20	500	N	N	N	<20	1,000
9C	58 11 44	154 59 27	.70	.70	7.0	.20	500	N	N	N	<20	1,000
0C	58 10 58	155 1 0	2.00	1.50	1.5	.20	1,500	N	N	N	N	<50
1C	58 10 35	155 2 23	5.00	3.00	3.0	.70	2,000	N	N	N	20	300
2C	58 9 18	155 3 5	1.50	1.00	1.5	.50	700	N	N	N	<20	<50
3C	58 2 30	154 38 43	2.00	1.00	5.0	2.00	2,000	N	N	N	50	1,000
4C	58 3 38	154 38 27	1.50	1.00	1.5	.70	1,000	N	N	N	70	1,000
5C	58 6 2	155 17 8	2.00	1.50	7.0	1.50	1,000	N	N	N	100	10,000
5CR1	58 6 2	155 17 8	1.00	1.50	2.0	.50	1,500	N	N	N	150	1,500
5CR2	58 6 2	155 17 8	.30	1.00	1.0	.20	500	N	N	N	100	1,000
6C	58 4 13	154 39 20	1.50	1.50	2.0	.50	1,000	N	N	N	70	200
7C	58 2 28	154 33 23	1.00	1.00	1.0	1.00	700	N	N	N	50	700
8C	58 6 9	155 17 6	.20	.10	20.0	.20	200	1.0	N	N	<20	7,000
9C	58 1 34	155 13 27	.50	1.00	1.0	1.50	1,500	N	N	N	100	50
0C	58 10 27	154 49 45	1.50	2.00	3.0	1.50	1,000	2.0	N	N	20	70
1C	58 11 54	154 41 50	3.00	2.00	5.0	2.00	1,000	<1.0	N	N	<20	100
2C	58 10 27	154 48 1	3.00	2.00	10.0	1.50	1,500	N	500	N	20	150

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K0053C	N	N	N	30	150	10	N	N	N	15
K0054C	N	N	N	20	100	50	100	N	<50	20
K0055C	N	N	<50	20	100	10	N	N	<50	15
K0055CR1	<2	N	N	<10	20	<10	N	N	N	N
K0055CR2	<2	N	N	<10	20	15	N	N	N	N
K0056C	N	N	<50	30	150	30	100	N	<50	30
K0057C	N	N	N	30	200	30	70	N	N	20
K0058C	N	N	N	20	100	50	100	N	N	20
K0059C	N	20	N	50	150	100	100	50	<50	30
K0060C	N	N	N	30	100	20	N	N	N	20
K0061C	N	N	<50	30	150	20	N	N	N	20
K0062C	N	N	N	30	150	15	N	N	N	20
K0063C	N	N	N	30	150	70	N	30	N	30
K0064C	N	N	N	30	1,000	200	N	N	N	150
K0065C	N	N	N	50	200	20	N	N	N	30
K0065CR1	<2	N	N	<10	20	<10	N	50	N	N
K0065CR2	<2	N	N	<10	<20	10	N	N	N	N
K0066C	N	N	<50	30	150	30	N	N	N	30
K0067C	N	N	N	30	200	150	N	<10	N	30
K0068C	N	N	N	50	200	70	N	N	N	50
K0069C	N	N	N	50	200	100	N	<10	N	50
K0070C	N	N	N	20	150	15	N	N	N	<10
K0071C	N	N	N	50	100	300	100	15	<50	50
K0072C	N	30	N	30	50	15	N	N	N	20
K0073C	N	N	N	50	300	150	N	N	N	30
K0074C	N	N	N	50	300	30	70	10	N	50
K0075C	N	N	N	30	50	100	100	N	N	20
K0075CR1	N	N	N	<10	20	<10	N	N	N	N
K0075CR2	<2	N	N	<10	<20	<10	N	N	N	N
K0076C	N	N	N	20	150	10	70	N	N	20
K0077C	N	N	N	50	200	50	<50	10	N	50
K0078C	N	N	N	50	150	300	N	N	N	100
K0079C	N	N	N	30	20	30	N	N	N	15
K0080C	N	N	N	20	50	20	N	N	N	20
K0081C	N	N	N	50	200	70	70	100	N	20
K0082C	N	N	70	30	200	100	N	10	N	50
K0083C	N	N	N	50	100	50	100	50	N	30
K0084C	N	N	N	20	100	20	70	N	N	N
K0085C	N	20	N	50	70	20	N	N	N	20
K0085CR1	<2	N	N	<10	20	<10	N	N	N	N
K0085CR2	<2	N	N	<10	<20	<10	N	N	N	N
K0086C	N	N	N	30	500	20	100	N	N	70
K0087C	N	30	N	50	150	50	N	N	N	20
K0088C	N	N	N	50	150	50	N	N	N	20
K0089C	N	N	N	50	30	100	N	N	N	20
K0090C	N	N	N	30	50	<10	N	N	N	20
K0091C	N	N	N	30	200	30	70	N	N	20
K0092C	N	N	N	20	100	50	150	N	N	15
K0093C	N	N	N	30	100	20	200	N	<50	N
K0094C	N	N	N	30	50	15	100	N	N	15
K0095C	N	N	N	70	200	70	200	N	<50	50
K0095CR1	<2	N	N	20	50	20	N	N	N	N
K0095CR2	<2	N	N	<10	<20	<10	N	N	N	N
K0096C	N	N	N	20	70	15	N	N	N	N
K0097C	N	N	N	15	70	10	150	N	<50	20
K0098C	N	N	N	100	70	150	N	N	N	100
K0099C	N	N	N	<10	20	50	500	<10	<50	10
K0100C	N	N	N	15	200	200	N	100	N	20
K0101C	N	N	N	50	150	200	N	10	N	30
K0102C	N	N	N	50	100	150	N	<10	N	50

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
3C	N	30	N	<200	150	N	150	N	>2,000	N
4C	N	50	70	200	100	N	200	N	>2,000	N
5C	N	50	N	200	100	N	150	N	>2,000	N
5CR1	N	<10	N	700	50	N	<20	N	200	N
5CR2	N	N	N	1,000	70	N	<20	N	500	N
6C	N	50	50	200	70	N	150	N	>2,000	N
7C	N	20	N	300	100	N	200	N	>2,000	N
8C	N	50	50	200	70	N	150	N	>2,000	N
9C	N	50	30	500	100	N	150	N	>2,000	N
0C	N	50	N	N	100	N	500	N	>2,000	N
1C	N	100	<20	<200	100	N	100	N	2,000	N
2C	N	100	N	<200	100	N	70	N	700	N
3C	N	50	N	500	150	N	70	N	300	N
4C	N	30	N	1,000	100	N	50	N	1,000	N
5C	N	50	<20	<200	150	N	100	N	1,000	N
5CR1	N	<10	N	700	50	N	<20	N	50	N
5CR2	N	N	N	1,000	30	N	20	N	100	N
6C	N	70	N	<200	70	N	50	N	500	N
7C	N	50	N	300	100	N	100	N	2,000	N
8C	N	70	N	500	150	N	70	N	300	N
9C	N	70	N	200	150	N	70	<500	500	N
0C	N	70	N	<200	100	N	100	N	500	N
1C	N	50	<20	500	150	N	100	N	700	N
2C	N	70	N	300	150	N	70	N	300	N
3C	N	100	30	500	200	N	100	N	500	N
4C	N	200	50	300	200	N	150	N	>2,000	N
5C	N	30	30	200	100	N	150	N	>2,000	N
5CR1	N	<10	N	700	50	N	<20	N	500	N
5CR2	N	N	N	1,000	50	N	<20	N	70	N
6C	N	70	50	300	150	N	100	N	>2,000	N
7C	N	70	<20	500	150	<100	100	N	>2,000	N
8C	N	70	<20	500	150	N	100	N	1,000	N
9C	N	70	N	N	70	N	50	N	1,000	N
0C	N	50	<20	300	100	N	70	N	700	N
1C	N	70	20	500	200	N	70	N	>2,000	N
2C	N	100	20	500	200	N	100	500	500	N
3C	N	50	100	500	150	N	200	N	>2,000	N
4C	N	70	30	500	200	N	100	N	>2,000	N
5C	N	70	N	200	100	N	100	N	>2,000	N
5CR1	N	N	N	1,000	30	N	<20	N	100	N
5CR2	N	N	N	1,000	20	N	<20	N	200	N
6C	N	100	30	500	200	N	150	N	>2,000	N
7C	N	100	100	700	200	N	100	N	2,000	N
8C	N	50	50	<200	70	N	50	N	700	N
9C	N	20	20	<200	70	N	30	N	300	N
0C	N	100	20	N	100	N	70	N	300	N
1C	N	200	50	300	200	N	150	N	>2,000	<200
2C	N	70	30	200	70	N	150	N	>2,000	N
3C	N	70	50	<200	200	N	200	N	>2,000	N
4C	N	70	N	200	100	N	150	N	>2,000	N
5C	N	70	20	500	150	N	300	500	>2,000	N
5CR1	N	N	N	500	150	N	50	N	1,000	N
5CR2	N	N	N	N	50	N	<20	N	1,000	N
6C	N	50	70	200	100	N	100	N	>2,000	N
7C	N	50	50	200	100	N	100	N	>2,000	N
8C	N	20	N	<200	50	N	30	N	700	N
9C	N	50	50	<200	70	N	500	N	>2,000	N
0C	N	70	N	1,000	200	<100	70	N	500	N
1C	N	70	N	300	200	N	100	N	2,000	N
2C	N	70	N	200	150	N	70	N	200	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	B
K0103C	58 10 28	154 45 39	3.00	2.00	3.0	.50	1,500	<1.0	N	N	<20	
K0104C	58 10 17	154 45 58	1.50	1.50	7.0	2.00	700	3.0	N	N	20	
K0105C	58 10 15	154 51 19	3.00	2.00	2.0	1.00	1,500	<1.0	N	N	<20	
K0105CR1	58 10 15	154 51 19	.30	5.00	1.0	.20	200	N	N	N	100	
K0105CR2	58 10 15	154 51 19	.20	5.00	.5	.20	200	N	N	N	50	
K0106C	58 8 36	154 47 33	3.00	2.00	5.0	2.00	1,500	1.0	N	N	20	
K0107C	58 12 54	154 29 37	5.00	2.00	5.0	.70	2,000	N	N	N	<20	
K0108C	58 12 35	154 32 16	1.50	1.50	10.0	1.00	700	1.5	N	N	<20	
K0109C	58 12 20	154 33 57	2.00	1.50	3.0	.70	1,000	3.0	N	N	20	
K0110C	58 10 59	154 37 37	3.00	2.00	5.0	2.00	1,500	<1.0	N	N	20	
K0111C	58 10 24	154 37 9	1.50	2.00	7.0	.50	700	N	N	N	<20	
K0112C	58 5 59	154 40 28	2.00	1.50	2.0	.50	1,000	N	N	N	30	
K0113C	58 7 12	154 40 52	3.00	3.00	3.0	1.00	1,500	N	N	N	100	
K0114C	58 8 33	154 42 36	3.00	2.00	5.0	1.00	1,500	N	N	N	20	
K0115C	58 8 1	154 41 18	3.00	1.50	2.0	.30	1,500	N	N	N	<20	
K0115CR1	58 8 1	154 41 18	.20	7.00	.5	.10	200	N	N	N	100	
K0115CR2	58 8 1	154 41 18	.10	5.00	.5	.10	200	N	N	N	50	
K0116C	58 8 53	154 41 46	3.00	2.00	3.0	.70	1,000	2.0	N	N	<20	
K0117C	58 8 14	154 21 13	2.00	1.50	7.0	2.00	1,000	N	N	N	<20	1
K0118C	58 9 31	154 20 10	3.00	2.00	2.0	.70	1,500	N	N	N	<20	
K0119C	58 9 10	154 18 50	5.00	2.00	2.0	.70	2,000	N	N	N	20	
K0120C	58 7 51	154 15 34	3.00	1.50	5.0	2.00	1,500	N	N	N	200	
K0121C	58 10 41	154 17 6	3.00	2.00	5.0	.70	2,000	N	N	N	20	
K0122C	58 11 58	154 20 37	5.00	2.00	5.0	1.50	2,000	N	N	N	50	
K0123C	58 12 32	154 19 5	5.00	2.00	2.0	.50	2,000	N	N	N	<20	
K0124C	58 12 7	154 16 44	5.00	2.00	5.0	.70	2,000	N	N	N	150	
K0125C	58 12 0	154 13 45	5.00	2.00	5.0	1.00	2,000	N	N	N	30	
K0125CR1	58 12 0	154 13 45	.30	3.00	.5	.15	200	N	N	N	100	
K0125CR2	58 12 0	154 13 45	.15	5.00	.5	.15	200	N	N	N	70	
K0126C	58 11 49	154 15 38	3.00	2.00	3.0	1.00	2,000	N	N	N	100	
K0127C	58 18 15	154 11 7	3.00	2.00	3.0	1.00	1,500	N	N	N	500	
K0128C	58 17 22	154 12 58	5.00	2.00	7.0	1.50	1,500	N	N	N	200	
K0129C	58 21 35	154 9 1	3.00	1.50	2.0	.50	1,500	N	N	N	<20	
K0131C	58 19 56	154 13 28	1.50	1.50	2.0	.50	1,000	N	N	N	300	
K0132C	58 19 23	154 15 12	.10	.15	10.0	.10	150	<1.0	N	N	20	
K0133C	58 18 47	154 16 49	1.50	1.50	3.0	.30	700	3.0	N	N	20	
K0134C	58 16 25	154 15 12	2.00	1.00	2.0	.50	1,000	N	N	N	300	
K0135C	58 19 7	154 22 32	2.00	1.50	3.0	.50	1,000	3.0	N	N	<20	
K0135CR1	58 19 7	154 22 32	.30	5.00	.7	.15	200	2.0	N	N	100	
K0135CR2	58 19 7	154 22 32	.15	2.00	.5	.10	150	N	N	N	50	
K0136C	58 19 45	154 27 11	.50	1.00	7.0	.50	300	2.0	<500	N	20	
K0137C	58 19 52	154 27 21	1.00	1.50	1.0	1.00	1,000	N	N	N	20	
K0138C	58 20 46	154 24 8	1.50	1.50	1.0	.50	1,000	N	N	N	20	
K0139C	58 20 50	154 23 57	1.00	1.00	1.5	.70	1,000	2.0	500	N	<20	
K0140C	58 14 57	154 16 43	1.00	.70	5.0	.70	300	N	N	N	1,000	
K0141C	58 14 43	154 14 23	3.00	2.00	2.0	.50	2,000	N	N	N	20	
K0142C	58 14 37	154 13 58	2.00	1.00	1.5	.50	1,500	<1.0	N	N	20	
K0143C	58 15 43	154 13 32	2.00	1.50	2.0	.20	2,000	N	N	N	100	
K0144C	58 15 49	154 11 14	2.00	1.00	2.0	.15	2,000	N	N	N	<20	
K0145C	58 13 38	154 10 42	3.00	1.50	2.0	.50	1,500	N	N	N	20	
K0145CR1	58 13 38	154 10 42	.30	5.00	.7	.15	200	N	N	N	100	1
K0145CR2	58 13 38	154 10 42	.20	2.00	.5	.15	200	N	N	N	50	
K0146C	58 12 51	154 12 23	2.00	1.00	2.0	.15	1,500	N	N	N	<20	
K0147C	58 11 31	154 11 27	1.00	1.00	1.0	1.00	1,000	N	N	N	150	
K0148C	58 17 31	154 8 15	3.00	2.00	2.0	.30	1,500	N	N	N	<20	
K0149C	58 14 36	154 33 46	.70	.50	1.5	2.00	500	N	N	N	<20	>1
K0150C	58 14 39	154 33 58	1.00	1.00	5.0	.20	500	<1.0	<500	N	<20	2
K0151C	58 14 51	154 33 9	.50	.70	7.0	.70	500	N	N	N	70	2
K0152C	58 13 32	154 29 51	1.00	1.50	5.0	.70	1,000	2.0	N	N	<20	1
K0153C	58 14 14	154 27 18	1.50	1.50	5.0	.30	1,000	5.0	N	N	<20	3

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

le	Ba-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
C	N	N	N	30	70	70	N	10	N	30	50
C	N	N	N	20	150	50	N	15	N	30	70
C	N	N	N	30	100	70	N	30	N	20	200
CR1	<2	N	N	<10	20	<10	N	20	N	N	<20
CR2	<2	N	N	<10	<20	<10	N	10	N	N	50
C	N	N	N	30	200	30	N	N	N	30	30
C	N	N	N	30	70	15	N	N	N	15	<20
C	N	N	50	70	100	200	N	N	N	70	100
C	N	N	N	30	100	20	70	15	N	20	300
C	N	N	N	30	100	20	N	N	N	30	20
C	N	N	<50	50	70	30	N	N	N	30	30
C	N	N	N	30	70	30	100	N	N	20	20
C	N	N	N	20	150	15	N	N	N	20	50
C	N	N	N	30	150	100	N	N	N	20	50
C	N	N	N	50	50	15	N	N	N	20	<20
CR1	<2	N	N	<10	<20	<10	N	20	N	N	<20
CR2	<2	N	N	<10	<20	<10	N	N	N	N	N
C	N	N	<50	30	300	150	N	N	N	50	100
C	N	N	N	20	200	30	N	15	N	30	50
C	N	50	N	30	100	15	N	20	N	15	70
C	N	<20	N	30	70	20	N	50	N	20	150
C	N	N	N	20	200	<10	150	N	<50	<10	20
C	N	N	N	50	70	50	N	30	N	20	100
C	N	N	N	30	150	70	N	200	N	20	500
C	N	N	N	30	50	20	N	N	N	20	30
C	N	N	N	20	150	20	N	N	N	20	<20
C	N	N	N	30	150	20	N	N	N	20	30
CR1	N	N	N	N	<20	<10	N	N	N	N	<20
CR2	<2	N	N	<10	<20	<10	N	N	N	N	<20
C	N	N	N	30	70	20	N	N	N	20	<20
C	N	N	N	50	100	10	N	N	N	20	30
C	N	N	N	70	150	20	70	N	N	50	<20
C	N	N	N	30	200	50	N	N	N	30	<20
C	N	N	N	20	30	50	N	N	N	15	20
C	N	N	N	70	<20	50	N	N	N	70	50
C	N	N	50	30	100	300	N	N	N	50	1,000
C	N	N	N	30	70	10	N	N	N	30	<20
C	N	N	N	30	150	100	N	10	N	30	200
CR1	<2	N	N	<10	<20	20	N	N	N	N	200
CR2	<2	N	N	<10	<20	20	N	10	N	N	<20
C	N	N	<50	70	<20	200	N	N	N	30	150
C	N	N	N	20	20	150	70	15	N	20	200
C	N	N	N	20	30	70	100	N	N	15	100
C	N	N	70	20	<20	300	100	20	N	15	300
C	N	N	N	50	20	50	70	N	N	30	<20
C	N	N	N	30	70	20	N	N	N	15	<20
C	N	N	N	30	50	10	N	N	N	15	<20
C	N	N	N	50	50	20	N	N	N	20	N
C	N	N	N	30	20	20	N	N	N	20	<20
C	N	20	N	20	50	20	N	N	N	10	N
CR1	<2	N	N	<10	<20	15	N	N	N	N	<20
CR2	<2	N	N	<10	<20	<10	N	N	N	N	<20
C	N	N	N	30	20	15	N	N	N	10	N
C	N	N	N	20	100	10	100	N	<50	15	50
C	N	N	N	30	200	<10	N	N	N	30	<20
C	N	N	N	20	200	50	N	10	<50	N	30
C	N	N	N	50	70	100	N	10	N	100	50
C	N	N	N	100	30	300	N	N	N	70	20
C	N	N	N	50	50	500	N	N	N	30	300
C	N	N	50	30	20	500	N	10	N	30	300

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K0103C	N	50	20	<200	100	N	70	N	500
K0104C	N	50	N	500	200	N	50	N	500
K0105C	N	50	N	500	150	N	70	N	200
K0105CR1	N	N	N	1,000	50	N	<20	N	50
K0105CR2	N	N	N	1,000	20	N	<20	N	200
K0106C	N	150	70	200	200	N	200	N	700
K0107C	N	100	N	<200	100	N	100	N	2,000
K0108C	N	70	N	200	150	N	100	700	700
K0109C	N	70	20	700	150	N	70	500	300
K0110C	N	100	N	300	200	N	100	N	700
K0111C	N	50	<20	<200	100	N	70	500	700
K0112C	N	50	20	<200	100	N	200	N	>2,000
K0113C	N	70	N	300	200	N	100	N	1,000
K0114C	N	100	50	300	150	N	100	N	1,000
K0115C	N	70	<20	<200	100	N	70	N	1,000
K0115CR1	N	N	N	1,000	20	N	<20	N	100
K0115CR2	N	N	N	1,000	20	N	<20	N	100
K0116C	N	50	N	200	100	N	70	<500	700
K0117C	N	70	N	300	200	N	70	N	500
K0118C	N	100	30	200	150	N	100	N	2,000
K0119C	N	70	N	<200	150	N	100	N	1,500
K0120C	N	100	20	<200	150	N	150	N	>2,000
K0121C	N	70	30	<200	150	N	70	N	>2,000
K0122C	N	150	<20	200	200	N	150	N	2,000
K0123C	N	50	<20	200	100	N	100	N	>2,000
K0124C	N	100	N	200	150	N	100	N	1,000
K0125C	N	100	N	200	200	N	150	N	2,000
K0125CR1	N	N	N	700	20	N	N	N	50
K0125CR2	N	N	N	1,000	30	N	<20	N	100
K0126C	N	50	N	200	100	N	100	N	>2,000
K0127C	N	70	20	200	150	N	100	N	2,000
K0128C	N	100	50	<200	200	N	150	N	>2,000
K0129C	N	70	N	N	150	N	70	N	2,000
K0131C	N	50	N	500	100	N	50	N	500
K0132C	N	10	N	<200	20	N	20	<500	20
K0133C	N	50	N	500	300	N	70	700	700
K0134C	N	30	N	200	100	N	50	N	300
K0135C	N	50	N	300	100	N	50	N	300
K0135CR1	N	N	N	1,000	30	N	<20	N	100
K0135CR2	N	N	N	700	20	N	<20	N	200
K0136C	N	15	N	200	50	N	100	500	2,000
K0137C	N	50	<20	300	100	N	150	N	2,000
K0138C	N	50	N	200	70	N	200	N	>2,000
K0139C	N	50	N	<200	70	N	500	1,000	>2,000
K0140C	N	20	N	<200	70	N	50	N	500
K0141C	N	70	N	<200	70	N	100	<500	700
K0142C	N	70	N	<200	100	N	150	N	>2,000
K0143C	N	50	N	200	100	N	70	N	500
K0144C	N	50	N	200	70	N	50	N	150
K0145C	N	70	N	200	100	N	70	N	1,000
K0145CR1	N	N	N	1,000	30	N	<20	N	50
K0145CR2	N	N	N	1,000	20	N	<20	N	50
K0146C	N	50	N	N	50	N	50	N	200
K0147C	N	50	N	200	70	N	150	<500	>2,000
K0148C	N	70	N	<200	100	N	100	N	700
K0149C	N	30	20	700	150	N	30	<500	100
K0150C	N	30	N	200	50	N	50	N	200
K0151C	N	30	N	200	70	N	50	N	150
K0152C	N	30	N	300	150	N	50	<500	300
K0153C	N	30	N	500	70	N	50	700	100

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
54C	58 13 10	154 28 1	1.00	1.00	2.0	.30	1,000	N	N	N	30	150
55C	58 13 46	154 24 41	.50	1.00	5.0	.70	500	N	N	N	20	200
55CR1	58 13 46	154 24 41	.30	5.00	2.0	.50	200	N	N	N	100	1,500
55CR2	58 13 46	154 24 41	.15	2.00	.7	.30	100	N	N	N	50	700
56C	58 14 12	154 21 32	2.00	1.50	3.0	.70	1,000	N	N	N	50	150
57C	58 44 20	153 46 43	.10	.10	2.0	1.50	100	N	N	N	100	2,000
58C	58 43 36	153 45 18	.30	2.00	10.0	2.00	200	N	N	N	50	5,000
59C	58 43 0	153 45 30	.50	1.00	>50.0	1.50	200	N	N	N	20	5,000
60C	58 42 50	153 45 40	.30	1.00	5.0	>2.00	150	20.0	N	N	50	10,000
61C	58 42 11	153 44 35	.30	5.00	1.0	>2.00	500	N	N	N	100	200
62C	58 42 22	153 44 21	.20	3.00	20.0	1.50	200	N	700	N	100	100
62CD	58 42 25	153 44 15	.07	1.50	20.0	1.00	100	N	N	N	100	700
63C	58 42 22	153 45 42	.30	.50	50.0	1.00	100	N	N	N	20	>10,000
64C	58 36 9	154 11 31	.20	3.00	1.5	>2.00	1,000	5.0	N	30	5,000	1,000
65C	58 35 30	154 14 23	.10	2.00	3.0	>2.00	500	N	N	N	500	>10,000
66C	58 35 32	154 15 7	.20	5.00	2.0	>2.00	1,000	N	N	N	500	2,000
67C	58 36 14	154 13 50	.10	2.00	2.0	2.00	500	N	N	N	1,000	200
68C	58 36 52	154 13 22	.20	5.00	1.0	>2.00	1,000	N	N	N	>5,000	300
69C	58 37 29	154 12 58	.20	3.00	1.5	>2.00	1,000	N	N	N	2,000	500
70C	58 37 28	154 12 46	.20	2.00	2.0	2.00	500	N	N	N	2,000	>10,000
71C	58 36 48	154 11 13	.20	3.00	3.0	>2.00	1,000	N	N	N	>5,000	5,000
72C	58 36 37	154 8 52	.20	5.00	1.0	>2.00	1,000	N	N	N	50	200
73C	58 35 46	154 7 57	.20	2.00	.7	>2.00	500	N	N	N	5,000	1,000
74C	58 37 2	154 6 41	.50	5.00	1.5	.30	500	N	N	N	50	300
75C	58 37 32	154 6 51	.50	5.00	2.0	>2.00	1,000	N	N	N	>5,000	150
76C	58 38 4	154 6 12	.30	5.00	1.0	>2.00	1,000	N	N	N	>5,000	700
77C	58 36 21	154 4 31	.50	5.00	2.0	1.00	700	2.0	N	N	200	1,000
78C	58 18 7	154 30 33	.50	5.00	15.0	>2.00	700	<1.0	N	N	100	5,000
79C	58 18 12	154 30 13	.50	2.00	2.0	>2.00	500	50.0	N	150	100	700
80C	58 16 28	154 36 39	.50	5.00	2.0	.20	300	N	N	N	70	700
81C	58 16 11	154 31 55	.50	2.00	2.0	>2.00	500	N	N	N	500	5,000
82C	58 17 7	154 26 42	.50	5.00	3.0	1.00	500	5.0	N	N	50	700
83C	58 17 2	154 24 44	.70	3.00	7.0	1.50	500	2.0	N	N	50	1,000
84C	58 15 25	154 29 57	1.00	5.00	2.0	2.00	500	N	N	N	50	700
85C	58 22 42	154 14 36	.30	3.00	1.5	>2.00	300	N	N	N	50	700
85CD	58 22 42	154 14 38	.07	1.50	.5	.20	100	N	N	N	100	1,000
86C	58 22 46	154 14 27	1.50	7.00	2.0	2.00	1,000	N	N	N	50	2,000
87C	58 22 53	154 13 21	.30	3.00	5.0	>2.00	300	N	N	20	500	1,000
88C	58 22 1	154 17 17	.30	2.00	2.0	>2.00	200	N	500	N	300	2,000
89C	58 21 16	154 16 4	.30	3.00	2.0	.70	300	N	N	N	50	>10,000
90C	58 20 52	154 15 26	.50	2.00	20.0	>2.00	500	20.0	N	N	1,000	>10,000
94C	58 23 52	154 1 48	.30	7.00	2.0	1.00	500	N	N	N	50	700
95C	58 25 39	154 12 0	.30	2.00	7.0	>2.00	200	<1.0	N	N	150	>10,000
96C	58 26 28	154 11 9	1.50	5.00	3.0	2.00	700	N	10,000	N	500	700
97C	58 22 52	154 8 10	.70	3.00	2.0	>2.00	500	N	N	N	3,000	>10,000
98C	58 8 17	155 18 40	.30	2.00	20.0	.70	200	N	N	N	50	5,000
99C	58 6 56	155 18 3	2.00	1.00	2.0	>2.00	700	N	N	N	100	1,500
00C	58 6 34	155 16 32	.50	2.00	2.0	>2.00	1,000	N	N	N	200	700
01C	58 5 23	155 15 43	.20	2.00	1.5	>2.00	1,000	N	N	N	200	200
02C	58 4 45	155 13 24	.20	3.00	2.0	>2.00	700	N	N	N	1,500	700
03C	58 4 17	155 13 59	.15	3.00	1.5	>2.00	700	N	N	N	500	1,000
04C	58 3 13	155 15 8	.15	3.00	1.0	>2.00	500	N	N	N	500	500
05C	58 3 13	155 13 31	.20	2.00	2.0	>2.00	500	N	N	N	1,000	500
06C	58 1 29	155 16 10	.10	7.00	1.0	>2.00	1,500	N	N	N	150	1,000
07C	58 1 38	155 16 13	.10	2.00	1.0	>2.00	500	N	N	N	>5,000	1,000
08C	58 0 2	155 18 44	.10	3.00	.5	>2.00	1,000	N	N	N	300	200
09C	58 0 0	155 12 0	.30	5.00	1.0	>2.00	1,500	N	N	N	50	1,000
10C	58 1 37	155 10 15	.10	3.00	.5	>2.00	1,000	N	N	N	2,000	200
11C	58 1 44	155 9 0	.05	3.00	1.0	>2.00	700	N	N	N	>5,000	100
12C	58 0 34	155 8 20	.10	3.00	1.0	>2.00	700	N	N	N	5,000	1,000

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Kataai study area, Alaska—(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pt
K0154C	N	N	N	30	20	20	N	N	N	20	
K0155C	N	N	N	50	20	70	N	N	N	20	
K0155CR1	<2	N	N	20	20	20	N	N	N	N	
K0155CR2	N	N	N	<10	20	<10	N	N	N	N	
K0156C	N	N	N	30	150	50	N	<10	N	50	
K0157C	<2	N	N	10	700	50	N	<10	N	N	
K0158C	<2	N	N	150	70	500	<50	50	N	100	
K0159C	N	N	N	500	20	1,000	N	30	N	200	
K0160C	N	30	500	50	300	1,000	N	20	N	10	2
K0161C	<2	N	N	N	50	20	1,000	200	N	N	1
K0162C	N	N	N	500	70	200	200	N	N	200	
K0162CD	N	N	N	200	20	200	N	20	N	100	
K0163C	<2	N	N	1,000	150	200	N	20	N	500	
K0164C	N	70	N	<10	<20	10	200	N	N	N	
K0165C	<2	N	N	20	<20	20	200	N	N	N	
K0166C	N	N	N	70	<20	200	300	N	N	N	
K0167C	<2	N	N	20	<20	10	100	N	N	N	
K0168C	N	N	N	<10	<20	<10	200	N	N	N	
K0169C	<2	N	N	<10	<20	10	150	N	N	N	
K0170C	N	N	N	10	50	70	100	N	N	50	
K0171C	N	N	300	20	<20	50	200	N	N	10	
K0172C	N	N	N	N	<20	<10	200	N	N	N	
K0173C	<2	N	N	<10	<20	<10	70	N	N	N	
K0174C	<2	N	N	<10	<20	<10	N	N	N	N	
K0175C	<2	N	N	10	<20	15	200	N	<50	N	
K0176C	<2	<20	N	<10	20	20	150	N	N	N	
K0177C	<2	N	N	10	<20	20	70	N	N	N	
K0178C	N	N	N	200	70	200	N	N	N	200	
K0179C	<2	N	N	50	100	50	N	50	N	<10	
K0180C	<2	N	N	10	N	10	N	N	N	N	
K0181C	N	N	N	20	200	20	50	<10	50	N	
K0182C	<2	N	N	10	20	2,000	N	200	N	N	
K0183C	<2	N	100	50	70	100	N	<10	N	20	5
K0184C	<2	N	N	<10	20	10	70	N	N	N	
K0185C	<2	N	N	<10	30	10	<50	N	<50	N	
K0185CD	N	N	N	N	<20	<10	N	N	N	N	
K0186C	<2	N	N	15	50	10	100	N	N	N	
K0187C	N	N	150	50	50	50	<50	N	N	20	
K0188C	<2	N	N	10	<20	20	50	N	N	N	
K0189C	<2	N	N	10	<20	<10	N	N	N	N	
K0190C	<2	N	N	150	70	150	N	N	N	100	2
K0194C	<2	N	N	<10	20	15	50	N	N	N	
K0195C	<2	30	N	100	100	20	100	20	N	150	
K0196C	<2	N	N	100	<20	20	500	N	N	50	
K0197C	N	N	N	15	100	100	200	N	N	20	
K0198C	<2	N	N	100	20	100	N	<10	N	150	
K0199C	N	N	N	20	200	200	N	20	70	N	
K0200C	<2	N	N	20	150	10	200	10	100	N	
K0201C	<2	N	N	10	20	10	100	N	N	N	
K0202C	N	N	N	30	20	10	50	N	<50	<10	
K0203C	<2	N	N	<10	70	15	150	N	N	N	
K0204C	N	N	N	<10	50	30	100	N	N	N	
K0205C	N	N	N	20	50	<10	50	N	N	N	
K0206C	<2	N	N	<10	50	<10	200	N	50	N	
K0207C	<2	N	N	<10	20	<10	100	N	N	N	
K0208C	N	N	N	<10	50	<10	200	N	<50	N	
K0209C	N	N	N	<10	50	<10	200	N	<50	N	
K0210C	N	N	N	<10	30	<10	100	N	<50	N	
K0211C	<2	N	N	20	50	<10	100	N	N	N	
K0212C	<2	N	N	<10	100	<10	200	N	N	N	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
4C	N	30	N	300	100	N	50	N	70	N
5C	N	20	N	300	70	N	50	N	100	N
5CR1	N	N	N	1,000	50	N	20	N	100	N
5CR2	N	N	N	700	50	N	<20	N	50	N
6C	N	70	N	<200	100	N	70	N	1,000	N
7C	N	20	20	500	1,000	N	200	N	>2,000	N
8C	N	50	N	200	150	N	1,000	N	>2,000	N
9C	N	20	N	<200	150	N	200	N	>2,000	N
0C	N	50	N	<200	300	N	1,000	5,000	>2,000	N
1C	N	70	N	N	300	N	1,500	N	>2,000	N
2C	N	30	N	<200	200	N	300	N	>2,000	N
2CD	N	20	N	<200	200	N	100	<500	>2,000	N
3C	N	10	N	300	200	N	100	700	>2,000	N
4C	N	100	N	N	200	N	1,000	N	>2,000	N
5C	N	100	N	N	200	N	1,500	N	>2,000	N
6C	N	100	N	N	300	N	2,000	N	>2,000	N
7C	N	100	N	N	150	N	1,500	N	>2,000	N
8C	N	70	N	<200	150	N	1,000	N	>2,000	N
9C	N	70	<20	<200	200	N	1,000	N	>2,000	N
0C	N	50	N	500	100	N	1,000	N	>2,000	N
1C	N	70	N	N	200	N	1,000	2,000	>2,000	N
2C	N	100	N	N	300	N	1,500	N	>2,000	N
3C	N	200	N	N	200	N	2,000	N	>2,000	N
4C	N	10	N	700	20	N	100	N	>2,000	N
5C	N	50	N	N	200	N	1,000	N	>2,000	N
6C	N	50	N	<200	200	N	1,000	N	>2,000	N
7C	N	20	N	700	150	N	300	N	>2,000	N
8C	N	50	N	200	300	N	200	N	>2,000	N
9C	N	70	50	N	300	N	1,000	N	>2,000	N
0C	N	N	N	1,000	20	N	100	N	>2,000	N
1C	N	50	50	500	500	N	300	N	>2,000	N
2C	N	10	N	1,000	100	N	300	N	>2,000	N
3C	N	20	N	500	150	N	200	10,000	>2,000	N
4C	N	20	N	700	100	N	200	N	>2,000	N
5C	N	20	N	700	100	N	150	N	>2,000	N
5CD	N	N	N	500	20	N	70	N	>2,000	N
6C	N	20	N	500	150	N	200	N	>2,000	N
7C	N	50	N	N	200	N	1,500	1,000	>2,000	N
8C	N	50	N	N	100	N	1,000	N	>2,000	N
9C	N	<10	N	2,000	50	N	100	N	>2,000	N
0C	N	20	N	1,000	200	N	150	1,000	>2,000	N
4C	N	<10	N	700	50	N	200	N	>2,000	N
5C	N	50	50	1,000	200	N	1,000	N	>2,000	N
6C	N	50	N	200	100	N	1,000	N	>2,000	N
7C	N	20	N	>10,000	200	N	200	N	>2,000	N
8C	N	10	N	700	100	N	150	N	>2,000	N
9C	N	70	100	500	1,000	N	200	N	>2,000	N
0C	N	70	70	N	500	N	1,000	N	>2,000	N
1C	N	100	N	N	150	N	1,500	N	>2,000	N
2C	N	50	N	N	200	N	1,000	N	>2,000	N
3C	N	100	20	N	200	N	1,500	N	>2,000	N
4C	N	70	N	N	200	N	1,500	N	>2,000	N
5C	N	100	N	N	200	N	1,500	N	>2,000	N
6C	N	70	20	N	300	N	1,500	N	>2,000	N
7C	N	100	N	N	200	N	1,500	N	>2,000	N
8C	N	100	<20	N	200	N	1,500	N	>2,000	N
9C	N	100	<20	N	200	N	1,500	N	>2,000	N
0C	N	100	<20	N	200	N	1,500	N	>2,000	N
1C	N	100	N	N	300	N	1,500	N	>2,000	N
2C	N	100	<20	N	200	N	1,000	N	>2,000	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct.	Ca-pct.	Fe-pct.	Ti-pct.	Mn-ppm	Ag-ppm	As-ppm	Au-ppm	B-ppm	Ba
			s	s	s	s	s	s	s	s	s	
K0213C	58 1 6	155 5 54	.05	5.00	1.0	2.00	150	N	N	N	>5,000	>1
K0214C	58 2 8	155 33 26	.30	2.00	2.0	1.00	300	20.0	N	N	500	>1
K0215C	58 2 12	155 33 27	.30	3.00	7.0	1.50	500	N	N	N	500	>1
K0216C	58 2 23	155 32 39	.50	5.00	20.0	>2.00	1,000	N	N	N	200	1
K0217C	58 1 40	155 30 55	1.00	7.00	5.0	2.00	1,000	N	N	N	70	>1
K0217CD	58 1 40	155 30 55	.07	2.00	1.0	.05	200	N	N	N	150	>1
K0218C	58 1 31	155 30 36	.30	3.00	5.0	2.00	500	N	N	N	200	>1
K0219C	58 2 34	155 36 2	.70	3.00	10.0	>2.00	1,000	N	N	N	2,000	1
K0220C	58 1 6	155 29 48	.20	7.00	20.0	>2.00	1,000	1.0	N	N	100	
K0221C	58 0 25	155 29 6	.20	5.00	2.0	>2.00	1,500	N	N	N	5,000	
K0222C	58 0 43	155 33 58	.50	10.00	2.0	>2.00	1,000	N	N	N	2,000	
K0223C	58 1 2	155 35 20	.50	7.00	15.0	>2.00	1,000	N	N	N	>5,000	1
K0224C	58 0 3	155 37 9	.50	5.00	2.0	1.50	500	N	N	N	50	1
K0225C	58 0 5	155 39 22	.50	.20	30.0	.50	200	10.0	<500	N	50	>1
K0226C	58 0 53	155 26 16	.10	3.00	.5	>2.00	1,000	N	N	N	30	
K0227C	58 4 50	155 29 18	.20	10.00	3.0	>2.00	2,000	700.0	N	>1,000	1,000	
K0228C	58 4 51	155 29 11	.20	5.00	5.0	>2.00	1,000	N	N	N	1,000	
K0229C	58 4 6	155 29 11	.20	5.00	2.0	>2.00	700	N	N	N	200	
K0230C	58 3 23	155 29 11	.30	5.00	5.0	>2.00	1,000	N	N	N	500	
K0231C	58 3 18	155 29 0	.20	3.00	20.0	>2.00	1,000	N	N	N	20	
K0232C	58 3 13	155 29 16	.50	10.00	7.0	>2.00	1,500	N	N	N	>5,000	
K0233C	58 3 32	155 9 11	.20	5.00	2.0	>2.00	1,000	N	N	N	>5,000	
K0234C	58 3 27	155 9 13	.10	3.00	1.5	>2.00	700	N	N	N	5,000	
K0235C	58 2 44	155 7 50	.20	5.00	1.0	>2.00	500	N	N	N	2,000	
K0236C	58 1 28	155 4 21	.20	2.00	1.0	>2.00	500	N	N	N	2,000	
K0237C	58 3 56	155 2 10	.20	2.00	1.0	.70	200	N	N	N	5,000	3
K0238C	58 6 46	155 27 39	.20	7.00	10.0	>2.00	1,000	N	N	N	200	
K0239C	58 6 48	155 27 39	.20	1.00	50.0	1.00	150	N	N	N	200	>1
K0240C	58 6 42	155 27 15	.50	3.00	2.0	>2.00	700	N	N	N	50	2
K0241C	58 4 38	155 25 58	.20	3.00	3.0	>2.00	1,000	N	N	N	500	1
K0242C	58 3 44	155 24 42	.10	10.00	3.0	>2.00	1,000	N	N	N	5,000	1
K0243C	58 6 13	155 24 24	.10	3.00	15.0	1.50	500	20.0	500	N	500	1
K0244C	58 6 15	155 24 14	.30	7.00	3.0	>2.00	1,500	N	N	N	3,000	
K0245C	58 4 14	155 23 58	.20	7.00	2.0	>2.00	1,500	N	N	N	50	
K0246C	58 3 8	155 23 59	.10	2.00	15.0	>2.00	500	N	N	N	50	
K0247C	58 2 21	155 24 47	.10	5.00	2.0	>2.00	700	N	N	N	700	
K0248C	58 1 23	155 27 50	.20	7.00	2.0	>2.00	1,000	N	N	N	200	
K0249C	58 1 44	155 27 41	.05	3.00	1.0	>2.00	500	N	N	N	70	
K0249CD	58 1 44	155 27 41	.07	1.00	.5	.70	200	50.0	N	200	200	1
K0250C	58 13 46	154 43 21	1.50	7.00	20.0	1.50	1,000	2.0	1,000	N	50	
K0251C	58 13 42	154 43 17	.50	2.00	30.0	.30	200	20.0	10,000	N	<20	1
K0252C	58 13 26	154 44 24	.70	5.00	2.0	.50	500	N	N	N	50	3
K0253C	58 13 33	154 45 4	1.00	5.00	20.0	.70	1,000	<1.0	700	N	50	2
K0254C	58 13 9	154 46 57	1.50	10.00	15.0	2.00	1,000	<1.0	700	N	20	
K0255C	58 13 17	154 47 57	.30	3.00	15.0	.30	200	N	N	N	50	
K0256C	58 14 15	154 46 35	.50	1.00	30.0	1.00	500	N	N	N	<20	1
K0257C	58 14 6	154 47 46	.50	.50	30.0	.70	150	N	N	N	<20	1
K0258C	58 13 21	154 48 59	1.00	5.00	20.0	2.00	500	<1.0	N	N	20	
K0259C	58 14 4	154 50 2	.50	5.00	20.0	>2.00	700	N	N	N	50	1
K0260C	58 13 17	154 50 41	.05	.70	30.0	.30	50	N	N	N	<20	
K0261C	58 12 51	154 53 52	.50	3.00	20.0	2.00	200	N	N	N	20	2
K0262C	58 13 24	154 54 1	.70	5.00	2.0	.30	500	N	N	N	50	
K0263C	58 14 38	154 53 27	.30	2.00	20.0	1.00	200	N	5,000	N	50	1
K0264C	58 14 38	154 53 39	.20	1.00	30.0	.20	200	N	N	N	<20	2
K0265C	58 13 20	154 55 9	.70	5.00	10.0	.30	300	N	N	N	50	2
K0266C	58 12 50	154 56 4	.30	1.00	30.0	.70	300	<1.0	700	N	<20	1
K0267C	58 13 18	154 56 8	1.00	5.00	5.0	.50	1,000	N	N	N	20	>1
K0268C	58 12 32	154 57 18	1.00	5.00	10.0	1.00	700	N	N	N	50	3
K0269C	58 11 32	154 57 41	.50	5.00	2.0	.30	200	N	N	N	50	
K0270C	58 12 43	155 4 24	.30	1.00	20.0	.50	200	N	N	N	<20	1

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

le	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
3C	<2	N	N	N	20	10	50	N	N	N	N
3C	N	N	N	<10	<20	150	N	N	N	N	1,500
3C	N	N	300	20	<20	100	N	N	<50	N	300
3C	N	N	N	70	50	200	500	N	70	100	70
7C	N	N	N	10	20	70	100	N	<50	N	N
7CD	N	N	N	N	<20	<10	50	N	N	N	N
3C	<2	N	N	10	<20	20	<50	N	N	N	N
9C	N	N	N	50	50	200	150	<10	50	N	<20
9C	N	N	N	50	20	150	200	N	<50	200	150
1C	N	N	N	10	<20	70	300	N	<50	10	<20
2C	N	N	N	<10	50	10	300	<10	<50	N	N
3C	N	N	N	50	30	150	200	10	70	200	100
3C	<2	N	N	<10	20	10	<50	N	N	N	N
3C	N	N	150	150	N	200	N	N	N	50	300
3C	N	N	N	N	<20	<10	70	N	N	N	N
7C	N	N	N	15	50	50	300	N	<50	20	20
8C	N	N	N	70	20	50	200	N	N	<10	<20
9C	<2	N	N	20	50	30	150	N	N	20	<20
9C	N	N	N	50	20	10	300	<10	<50	100	30
1C	N	N	N	30	<20	150	100	N	<50	150	70
2C	N	N	N	10	50	100	300	N	50	100	50
3C	<2	N	N	50	50	70	200	<10	<50	<10	<20
3C	N	N	N	<10	20	20	100	N	<50	N	<20
3C	<2	N	N	<10	20	<10	100	N	<50	N	N
3C	<2	N	N	<10	20	<10	100	N	N	N	<20
7C	<2	N	N	N	<20	10	N	N	N	N	<20
8C	<2	N	N	15	20	150	500	N	<50	100	50
9C	N	N	N	200	<20	200	N	N	N	150	150
9C	<2	N	N	50	50	15	100	N	N	N	<20
1C	N	N	N	<10	20	50	200	N	N	20	20
2C	N	N	N	<10	50	30	200	N	<50	20	20
3C	<2	N	N	100	<20	300	50	N	N	<10	150
3C	<2	N	N	50	20	50	300	N	50	N	<20
3C	N	N	N	<10	100	20	300	N	70	N	N
3C	<2	N	N	100	<20	200	70	N	N	70	70
7C	<2	N	N	50	20	50	200	N	<50	50	20
8C	<2	N	N	<10	70	15	200	N	<50	<10	<20
9C	N	N	N	<10	<20	<10	100	N	N	N	N
9CD	N	N	N	N	<20	<10	N	N	N	N	50
0C	N	N	N	70	150	150	300	N	N	70	70
1C	N	N	N	300	70	2,000	N	30	N	200	200
2C	<2	N	N	10	<20	10	N	N	N	N	N
3C	<2	N	N	100	20	100	70	N	N	100	50
3C	<2	N	N	100	20	100	200	N	N	150	100
3C	<2	N	N	100	<20	150	N	N	N	50	70
3C	N	N	N	200	100	150	N	100	N	500	70
7C	N	N	N	500	20	150	N	N	N	500	50
8C	<2	N	N	100	100	1,000	N	N	N	200	100
9C	<2	N	N	100	50	200	50	N	<50	150	1,000
0C	N	N	N	500	<20	150	N	N	N	300	200
1C	<2	N	N	100	100	150	N	N	N	200	70
2C	<2	N	N	10	20	<10	N	N	N	N	N
3C	<2	N	N	100	<20	100	N	N	N	150	150
3C	N	N	N	150	<20	200	N	N	N	50	<20
3C	<2	N	N	20	20	30	N	N	N	N	<20
3C	N	1,000	N	150	<20	200	N	<10	N	100	200
7C	<2	N	N	20	100	20	N	10	N	10	<20
8C	<2	N	N	50	100	20	N	N	N	10	N
9C	<2	N	N	<10	<20	15	N	N	N	N	70
0C	N	N	N	150	<20	200	N	<10	N	50	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Kateai study area, Alaska—(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K0213C	N	20	N	N	200	N	500	N	>2,000
K0214C	N	10	N	10,000	50	N	200	2,000	>2,000
K0215C	N	20	N	10,000	100	N	200	10,000	>2,000
K0216C	N	20	N	1,000	200	N	1,000	2,000	>2,000
K0217C	N	30	N	1,500	200	N	500	N	>2,000
K0217CD	N	20	N	1,000	50	N	200	N	>2,000
K0218C	N	20	N	1,000	100	N	500	500	>2,000
K0219C	N	30	N	500	300	N	500	5,000	>2,000
K0220C	N	50	N	700	200	N	1,500	N	>2,000
K0221C	N	50	<20	200	200	N	1,000	N	>2,000
K0222C	N	50	<20	200	200	N	1,000	N	>2,000
K0223C	N	30	N	500	200	N	1,000	N	>2,000
K0224C	N	20	N	1,000	70	N	150	N	>2,000
K0225C	N	N	N	2,000	50	N	20	20,000	300
K0226C	N	100	N	N	300	N	2,000	N	>2,000
K0227C	N	70	20	<200	200	N	1,500	N	>2,000
K0228C	N	50	<20	N	200	N	1,000	N	>2,000
K0229C	N	100	N	<200	200	N	1,500	N	>2,000
K0230C	N	50	N	200	200	N	1,500	N	>2,000
K0231C	N	50	N	200	200	N	1,000	N	>2,000
K0232C	N	30	N	500	200	N	700	N	>2,000
K0233C	N	50	20	N	200	N	1,500	N	>2,000
K0234C	N	100	N	N	200	N	1,500	N	>2,000
K0235C	N	70	N	N	200	N	1,000	N	>2,000
K0236C	N	50	N	N	150	N	500	N	>2,000
K0237C	N	<10	N	500	20	N	100	N	>2,000
K0238C	N	50	N	500	200	N	1,000	N	>2,000
K0239C	N	<10	N	10,000	100	N	150	N	>2,000
K0240C	N	70	N	200	200	N	1,500	N	>2,000
K0241C	N	70	N	N	200	N	1,500	N	>2,000
K0242C	N	50	20	1,000	200	N	1,000	500	>2,000
K0243C	N	50	N	N	70	N	700	500	>2,000
K0244C	N	70	<20	N	200	N	1,500	<500	>2,000
K0245C	N	50	20	N	200	N	1,500	N	>2,000
K0246C	N	70	N	N	200	N	1,500	N	>2,000
K0247C	N	70	<20	200	200	N	1,500	N	>2,000
K0248C	N	100	20	N	500	N	1,500	N	>2,000
K0249C	N	70	N	N	150	N	1,500	N	>2,000
K0249CD	N	70	N	N	50	N	700	N	>2,000
K0250C	N	30	N	300	200	N	500	N	>2,000
K0251C	500	N	N	200	50	N	70	N	>2,000
K0252C	N	<10	N	1,000	50	N	50	N	500
K0253C	N	<10	N	700	100	N	300	N	>2,000
K0254C	N	30	N	200	300	N	500	<500	2,000
K0255C	N	N	N	500	20	N	30	N	700
K0256C	N	N	N	<200	150	N	100	<500	>2,000
K0257C	N	N	N	N	100	N	30	500	100
K0258C	N	30	N	200	200	N	200	<500	500
K0259C	N	50	N	200	300	N	200	N	>2,000
K0260C	N	N	N	N	20	N	50	500	300
K0261C	N	20	N	300	200	N	100	N	>2,000
K0262C	N	10	N	1,000	50	N	100	N	1,000
K0263C	N	<10	N	500	50	N	100	N	>2,000
K0264C	N	N	N	N	50	N	20	N	500
K0265C	N	N	N	700	50	N	70	N	>2,000
K0266C	N	N	N	200	50	N	100	<500	>2,000
K0267C	N	15	N	2,000	300	N	100	N	>2,000
K0268C	N	10	N	700	70	N	150	N	>2,000
K0269C	N	<10	N	700	50	N	30	N	700
K0270C	N	N	N	<200	70	N	100	<500	>2,000

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
71C	58 11 43	155 4 26	1.50	3.00	30.0	.70	1,000	N	N	N	<20	10,000
72C	58 11 50	155 4 54	1.00	7.00	2.0	.50	1,000	N	N	N	50	300
73C	58 12 57	155 9 51	1.50	5.00	5.0	.50	1,000	N	N	N	50	1,000
74C	58 12 55	155 10 5	1.00	5.00	3.0	>2.00	1,500	N	N	N	50	10,000
76C	58 10 59	155 6 59	.70	5.00	2.0	>2.00	1,000	N	N	N	50	1,000
77C	58 11 20	155 9 7	.20	5.00	1.5	.20	150	N	N	N	50	500
78C	58 9 59	155 10 0	1.00	7.00	7.0	>2.00	2,000	N	N	N	200	150
79C	58 9 59	155 10 12	1.00	3.00	5.0	>2.00	700	N	N	N	30	1,500
80C	58 9 35	155 11 46	.20	1.00	30.0	.20	100	N	N	N	<20	10,000
81C	58 9 17	155 9 54	.20	1.00	50.0	.50	200	N	N	N	<20	>10,000
82C	58 8 14	155 15 25	.30	.50	30.0	.70	300	N	N	N	<20	>10,000
83C	58 8 44	155 3 23	.50	2.00	1.0	.70	300	N	N	N	70	1,000
84C	58 8 14	155 12 45	1.00	5.00	2.0	>2.00	1,500	N	N	N	50	10,000
85C	58 7 38	155 13 50	.50	2.00	5.0	>2.00	700	N	N	N	2,000	>10,000
86C	58 6 27	155 11 56	.30	5.00	1.5	>2.00	1,000	N	N	N	200	200
87C	58 6 38	155 9 10	.50	5.00	3.0	>2.00	1,000	N	N	N	5,000	700
88C	58 8 30	155 9 9	.70	2.00	20.0	>2.00	1,000	N	N	N	500	1,000
89C	58 7 13	155 22 51	.30	5.00	15.0	1.00	200	N	N	N	<20	>10,000
90C	58 5 51	155 21 2	1.00	3.00	2.0	2.00	1,000	N	N	N	100	700
91C	58 5 27	155 20 11	.20	2.00	30.0	>2.00	700	N	N	N	200	200
92C	58 4 34	155 20 15	.20	7.00	3.0	>2.00	1,500	N	N	N	500	300
93C	58 2 53	155 20 13	.30	5.00	2.0	>2.00	2,000	N	N	N	1,000	1,000
94C	58 3 50	155 21 18	.20	3.00	2.0	>2.00	1,500	N	N	N	50	150
95C	58 2 14	155 22 22	.20	5.00	1.0	>2.00	1,000	N	N	N	100	700
96C	58 1 9	155 22 24	.10	5.00	1.0	>2.00	1,000	N	N	N	50	200
97C	58 7 46	155 27 23	.20	.50	30.0	.70	150	N	N	N	<20	>10,000
98C	58 5 38	155 4 35	.50	3.00	3.0	>2.00	1,000	N	N	N	500	1,000
00C	58 15 58	155 20 20	.30	3.00	1.0	.30	200	N	N	N	50	700
01C	58 16 16	155 20 12	.30	3.00	1.0	.50	200	N	N	N	100	700
02C	58 17 12	155 20 4	.30	5.00	1.5	.30	200	N	N	N	50	700
03C	58 17 46	155 20 1	.50	3.00	2.0	2.00	500	N	N	N	50	500
04C	58 18 8	155 20 6	.50	5.00	2.0	.70	500	N	N	N	50	1,000
05C	58 20 28	155 20 51	.20	5.00	1.5	.50	300	N	N	N	50	700
06C	58 20 44	155 21 55	.50	3.00	2.0	.70	500	N	N	N	50	1,000
07C	58 15 11	155 19 36	.30	5.00	1.5	.20	150	N	N	N	50	500
08C	58 15 12	155 19 31	.30	2.00	2.0	1.50	300	N	N	N	50	2,000
09C	58 15 20	155 19 0	.50	3.00	2.0	2.00	500	N	N	N	70	10,000
10C	58 16 3	155 19 9	.50	5.00	1.5	2.00	500	N	N	N	200	700
11C	58 16 30	155 19 0	.30	5.00	1.0	1.50	500	N	N	N	50	1,000
12C	58 17 31	155 18 12	.30	5.00	1.5	.50	200	N	N	N	50	1,000
13C	58 17 26	155 18 16	.30	3.00	3.0	>2.00	500	N	N	N	50	700
14C	58 18 7	155 19 19	.30	3.00	1.0	.50	200	N	N	N	50	700
15C	58 18 36	155 19 40	.30	3.00	2.0	.50	300	N	N	N	50	700
16C	58 19 43	155 19 32	.50	5.00	2.0	.70	500	N	N	N	50	700
16CD	58 19 43	155 19 32	.50	3.00	2.0	1.00	300	N	N	N	50	700
17C	58 17 1	155 22 45	.50	5.00	2.0	.20	300	N	N	N	50	500
18C	58 17 8	155 22 50	1.00	5.00	2.0	.50	700	N	N	N	50	500
19C	58 18 55	155 23 32	.20	5.00	1.0	.20	200	200.0	N	150	50	300
20C	58 18 50	155 23 12	2.00	10.00	5.0	.50	1,000	N	N	N	50	500
21C	58 19 45	155 25 0	.50	7.00	2.0	.50	500	N	N	N	100	700
22C	58 17 8	155 28 5	1.50	10.00	2.0	1.00	1,000	N	N	N	100	500
23C	58 17 13	155 27 55	.30	3.00	3.0	2.00	200	10.0	N	30	50	700
24C	58 18 0	155 28 35	.30	10.00	1.5	.30	500	50.0	N	300	50	500
25C	58 18 10	155 32 0	1.50	7.00	2.0	.20	1,000	N	N	N	70	500
26C	58 18 8	155 31 30	.50	10.00	1.5	.30	500	N	N	N	50	500
27C	58 18 0	155 33 15	.50	10.00	2.0	.70	700	N	N	N	70	300
28C	58 19 46	155 37 5	.50	5.00	1.5	.50	500	N	N	N	50	500
29C	58 19 42	155 37 0	.30	5.00	2.0	.10	200	N	N	N	50	700
30C	58 19 30	155 37 40	.50	7.00	2.0	.50	500	N	N	N	50	700
31C	58 20 35	155 38 40	.50	7.00	1.5	2.00	700	N	N	N	50	500

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K0271C	N	N	N	150	70	200	N	N	N	50
K0272C	<2	N	N	10	30	<10	N	N	N	N
K0273C	<2	N	N	10	50	10	N	N	N	N
K0274C	N	N	N	20	50	50	200	N	<50	N
K0276C	<2	N	N	20	20	10	70	N	<50	N
K0277C	<2	N	N	<10	<20	<10	N	N	N	N
K0278C	N	N	N	100	50	100	500	<10	<50	100
K0279C	<2	N	N	20	100	30	100	N	N	20
K0280C	<2	N	N	100	<20	150	N	N	N	50
K0281C	N	N	N	100	<20	150	N	N	N	50
K0282C	N	N	N	100	50	300	N	N	N	100
K0283C	<2	N	N	<10	<20	<10	N	N	N	N
K0284C	N	N	N	10	100	20	300	<10	<50	20
K0285C	N	N	N	30	100	100	200	N	50	<10
K0286C	N	N	N	N	30	<10	200	N	<50	N
K0287C	N	N	N	20	70	30	300	10	<50	70
K0288C	<2	N	N	50	30	300	100	30	50	200
K0289C	N	N	N	50	<20	100	N	20	N	50
K0290C	<2	N	N	20	100	20	50	50	N	50
K0291C	N	N	N	150	20	500	500	20	<50	100
K0292C	N	N	N	100	50	300	300	<10	<50	20
K0293C	N	N	N	50	50	200	500	10	<50	N
K0294C	N	N	N	50	20	20	200	N	<50	<10
K0295C	N	N	N	N	30	<10	150	N	<50	N
K0296C	N	N	N	N	20	<10	100	N	N	N
K0297C	N	N	N	200	<20	150	N	N	N	200
K0298C	<2	N	N	50	20	20	100	<10	70	30
K1000C	<2	N	N	<10	<20	<10	N	N	N	N
K1001C	<2	N	N	<10	<20	<10	N	<10	N	N
K1002C	<2	N	N	<10	<20	<10	N	N	N	N
K1003C	<2	N	N	10	<20	30	50	N	N	N
K1004C	<2	N	N	10	<20	20	<50	N	N	N
K1005C	<2	N	N	<10	<20	<10	<50	N	N	N
K1006C	<2	N	N	<10	50	10	<50	N	N	<10
K1007C	<2	N	N	<10	<20	<10	N	N	N	N
K1008C	<2	N	N	<10	20	<10	N	N	N	N
K1009C	<2	N	N	10	20	20	<50	N	N	N
K1010C	<2	N	N	<10	20	10	50	N	N	N
K1011C	<2	N	N	<10	20	<10	50	N	N	N
K1012C	<2	N	N	<10	<20	<10	N	<10	N	N
K1013C	<2	N	N	10	30	15	100	<10	<50	N
K1014C	<2	N	N	<10	20	10	N	10	N	N
K1015C	<2	N	N	<10	20	<10	<50	N	N	N
K1016C	<2	N	N	<10	<20	70	N	N	N	N
K1016CD	<2	N	N	<10	20	10	N	<10	N	N
K1017C	<2	N	N	10	<20	20	N	N	N	<10
K1018C	<2	N	N	10	20	30	N	20	N	N
K1019C	<2	N	N	<10	<20	<10	N	N	N	N
K1020C	<2	N	N	20	30	30	N	N	N	<10
K1021C	<2	N	N	10	<20	10	<50	N	N	N
K1022C	<2	N	N	10	50	70	100	N	N	N
K1023C	<2	50	N	50	100	200	N	500	N	N
K1024C	<2	N	N	<10	<20	15	1,000	N	N	N
K1025C	<2	N	N	10	<20	15	100	N	N	N
K1026C	<2	N	N	N	<20	10	700	N	N	N
K1027C	<2	N	N	<10	50	15	700	N	N	N
K1028C	<2	N	N	<10	<20	10	<50	N	N	N
K1029C	<2	N	N	<10	<20	10	N	N	N	N
K1030C	<2	N	N	<10	<20	10	N	N	N	N
K1031C	<2	N	N	<10	20	10	100	N	N	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
1C	N	50	N	<200	100	N	200	<500	>2,000	N
2C	N	20	N	700	70	N	100	N	>2,000	N
3C	N	20	N	1,000	70	N	150	N	>2,000	N
4C	N	50	<20	200	200	N	700	N	>2,000	N
6C	N	30	N	300	200	N	500	N	>2,000	N
7C	N	N	N	1,000	<20	N	20	N	1,000	N
8C	N	50	20	N	300	N	1,000	N	>2,000	N
9C	N	50	50	200	500	N	500	N	>2,000	N
0C	N	N	N	200	50	N	100	<500	>2,000	N
1C	N	N	N	300	100	N	100	<500	>2,000	N
2C	N	N	N	1,500	70	N	100	3,000	>2,000	N
3C	N	15	N	N	20	N	100	N	>2,000	N
4C	N	70	30	N	300	N	1,500	N	>2,000	N
5C	N	50	20	200	300	N	1,500	N	>2,000	N
6C	N	100	<20	N	300	N	1,500	N	>2,000	N
7C	N	50	<20	<200	300	N	1,000	N	>2,000	N
8C	N	20	N	500	200	N	700	N	>2,000	N
9C	N	10	N	1,000	100	N	200	N	>2,000	N
0C	N	50	N	500	200	N	500	N	>2,000	N
1C	N	50	N	N	200	N	1,500	N	>2,000	N
2C	N	100	50	N	300	N	2,000	N	>2,000	N
3C	N	100	70	N	200	N	2,000	N	>2,000	N
4C	N	100	<20	N	300	N	2,000	N	>2,000	N
5C	N	150	200	N	200	N	2,000	N	>2,000	N
6C	N	100	N	N	200	N	1,500	N	>2,000	N
7C	N	N	N	3,000	100	N	200	N	>2,000	N
8C	N	50	<20	<200	200	N	700	N	>2,000	N
0C	N	<10	N	700	50	N	100	N	>2,000	N
1C	N	10	N	1,000	50	N	100	N	>2,000	N
2C	N	<10	N	1,000	20	N	70	N	>2,000	N
3C	N	10	N	200	100	N	200	N	>2,000	N
4C	N	10	N	1,000	30	N	100	N	>2,000	N
5C	N	<10	N	700	50	N	100	N	>2,000	N
6C	N	10	N	1,000	50	N	100	N	>2,000	N
7C	N	<10	N	1,000	<20	N	20	N	2,000	N
8C	N	10	N	1,000	50	N	100	N	>2,000	N
9C	N	20	N	1,000	100	N	200	N	>2,000	N
0C	N	20	N	500	100	N	500	N	>2,000	N
1C	N	<10	N	300	100	N	200	N	>2,000	N
2C	N	<10	N	1,000	20	N	100	N	>2,000	N
3C	N	20	N	200	150	N	500	N	>2,000	N
4C	N	10	N	500	50	N	100	N	>2,000	N
5C	N	15	N	500	50	N	100	N	>2,000	N
6C	N	<10	N	1,000	30	N	70	N	>2,000	N
6CD	N	<10	N	700	100	N	100	N	>2,000	N
7C	N	<10	N	1,000	20	N	30	N	>2,000	N
8C	N	15	N	1,000	70	N	50	N	1,000	N
9C	N	<10	N	700	<20	N	30	N	>2,000	N
0C	N	30	N	700	100	N	20	N	500	N
1C	N	<10	N	1,000	50	N	70	N	>2,000	N
2C	N	20	100	1,000	200	N	200	N	>2,000	N
3C	N	15	N	700	200	200	70	1,000	>2,000	N
4C	N	20	N	1,000	50	N	1,000	N	>2,000	<200
5C	N	20	N	500	20	N	150	N	>2,000	N
6C	N	20	N	500	30	N	1,000	N	>2,000	N
7C	N	10	N	1,000	100	N	500	N	>2,000	N
8C	N	<10	N	1,000	50	N	100	N	>2,000	N
9C	N	N	N	1,000	20	N	50	N	>2,000	N
0C	N	<10	N	1,000	20	N	100	N	>2,000	N
1C	N	15	N	1,000	200	N	500	N	>2,000	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K1032C	58 27 5	155 32 35	.50	5.00	1.5	>2.00	1,000	N	N	N	70
K1033C	58 27 10	155 32 30	.50	5.00	2.0	>2.00	700	N	N	N	50
K1034C	58 28 55	155 26 40	2.00	7.00	5.0	2.00	1,500	N	N	N	50
K1035C	58 28 58	155 26 48	1.00	7.00	3.0	>2.00	700	N	N	500	50
K1036C	58 29 25	155 0 40	1.00	3.00	2.0	1.00	1,000	N	N	N	70
K1037C	58 29 18	155 0 45	1.00	7.00	3.0	>2.00	1,000	N	N	N	50
K1038C	58 29 43	154 55 0	3.00	5.00	5.0	2.00	2,000	N	N	N	100
K1038CR1	58 29 43	154 55 0	.50	2.00	3.0	>2.00	500	N	N	N	50
K1039C	58 27 51	154 58 45	1.00	7.00	2.0	.70	700	N	N	N	50
K1040C	58 24 58	154 56 28	2.00	10.00	5.0	2.00	2,000	<1.0	N	N	500
K1041C	58 23 52	154 56 35	1.00	1.00	3.0	.50	500	N	N	N	300
K1042C	58 26 15	154 53 55	2.00	10.00	5.0	2.00	1,500	N	N	N	100
K1043C	58 27 18	154 56 10	2.00	5.00	5.0	1.00	1,500	N	N	N	50
K1044C	58 22 30	154 49 50	1.00	7.00	5.0	1.00	1,000	1.0	N	N	50
K1045C	58 24 9	154 48 37	.50	7.00	2.0	2.00	700	N	N	N	50
K1049C	58 22 33	154 41 44	.50	3.00	5.0	1.00	200	N	N	N	20
K1050C	58 29 49	154 52 30	.20	7.00	1.0	.10	200	N	N	N	50
K1051C	58 24 1	154 39 12	.20	.30	>50.0	.70	200	<1.0	500	N	<20
K1052C	58 23 40	154 40 38	3.00	10.00	20.0	1.50	1,000	N	N	N	50
K1053C	58 22 5	154 43 55	.30	7.00	10.0	.70	300	N	N	N	30
K1054C	58 26 59	154 35 32	10.00	10.00	10.0	.70	5,000	N	N	N	20
K1055C	58 28 8	154 37 50	.20	5.00	1.5	>2.00	1,000	N	N	N	50
K1056C	58 31 58	154 39 5	1.00	7.00	7.0	>2.00	1,500	N	N	N	500
K1057C	58 32 15	154 35 8	.70	7.00	15.0	>2.00	700	N	N	N	70
K1058C	58 30 32	154 53 52	.50	5.00	2.0	.50	500	N	N	N	50
K1059C	58 26 28	154 44 53	.50	3.00	7.0	.50	500	7.0	N	N	50
K1059CD	58 26 28	154 44 53	.50	3.00	15.0	1.00	300	5.0	500	N	50
K1060C	58 29 8	154 41 39	.50	3.00	2.0	2.00	500	N	N	N	200
K1061C	58 35 25	154 32 31	5.00	10.00	5.0	.30	1,000	N	N	N	50
K1062C	58 36 37	154 26 37	.50	7.00	10.0	.70	500	N	N	N	2,000
K1063C	58 36 55	154 26 41	2.00	7.00	20.0	2.00	1,500	2.0	5,000	N	>5,000
K1064C	58 21 26	155 49 10	1.00	1.00	1.0	2.00	1,000	N	N	N	100
K1065C	58 24 10	155 46 47	.70	.50	1.0	.07	300	N	N	N	100
K1066C	58 23 58	155 45 39	.70	1.00	1.5	1.50	700	N	N	N	300
K1067C	58 24 22	155 41 56	.70	1.50	1.0	>2.00	1,000	<1.0	N	N	100
K1068C	58 17 17	155 44 10	.50	1.00	1.5	>2.00	700	N	N	N	100
K1069C	58 16 43	155 41 45	1.50	2.00	1.5	>2.00	1,000	N	N	N	100
K1070C	58 16 40	155 41 40	.70	2.00	1.5	1.00	300	N	N	N	100
K1072C	58 18 45	155 52 10	2.00	2.00	2.0	>2.00	2,000	N	N	N	100
K1073C	58 18 50	155 52 12	.20	1.00	1.0	>2.00	700	N	N	N	100
K1074C	58 15 15	155 48 31	.20	1.50	1.0	>2.00	300	N	N	N	100
K1076C	58 15 41	156 0 27	.70	1.50	1.0	1.50	500	N	N	N	100
K1078C	58 22 12	156 0 21	.70	1.00	1.0	>2.00	500	N	N	N	100
K1079C	58 28 31	156 7 45	.70	2.00	1.0	>2.00	1,500	N	N	N	200
K1080C	58 29 40	156 13 20	.70	1.50	1.0	2.00	1,000	N	N	N	100
K1081C	58 29 32	156 13 30	.70	1.50	1.0	>2.00	1,000	N	N	N	150
K2001C	58 55 42	155 46 56	.20	2.00	.7	>2.00	700	N	N	N	50
K2002C	58 54 53	155 48 51	.20	3.00	1.0	>2.00	700	N	N	N	20
K2003C	58 54 51	155 49 0	.30	3.00	1.0	>2.00	700	N	N	N	70
K2004C	58 51 39	155 48 43	.20	2.00	.5	>2.00	500	N	N	N	50
K2008C	58 48 51	155 48 41	.20	2.00	1.0	>2.00	500	N	N	N	50
K2011C	58 23 42	156 17 3	.30	2.00	1.5	2.00	500	N	N	N	50
K2012C	58 20 52	155 59 52	.10	2.00	1.0	2.00	500	N	N	N	50
K2013C	58 21 45	155 55 37	.30	.50	1.0	2.00	500	N	N	N	100
K2014C	58 26 21	155 48 16	.20	2.00	1.0	.20	500	N	N	N	50
K2016C	58 26 9	155 40 57	.15	3.00	.7	.70	200	N	N	N	50
K2017C	58 26 3	155 40 56	.20	5.00	1.0	1.00	500	N	N	N	50
K2018C	58 26 12	155 40 10	.20	3.00	1.0	.50	200	N	N	N	70
K2020C	58 34 10	155 54 48	.30	5.00	2.0	>2.00	1,000	50.0	N	500	50
K2022C	58 35 33	155 55 0	.20	5.00	1.5	>2.00	500	N	3,000	N	50

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
2C	N	N	N	<10	20	15	100	N	N	N	50
3C	<2	N	N	<10	50	15	70	N	N	N	20
4C	<2	N	N	50	50	100	50	N	N	10	<20
5C	<2	N	N	70	100	150	200	N	N	N	N
6C	<2	N	N	20	100	20	N	N	N	N	<20
7C	<2	N	N	20	50	50	<50	N	N	<10	<20
8C	<2	N	N	50	200	50	50	N	<50	20	N
8CR1	<2	N	N	20	50	30	20	N	20	30	<20
9C	<2	N	N	10	30	20	<50	N	N	N	N
0C	<2	N	N	50	70	500	N	20	N	<10	300
1C	<2	N	N	10	20	70	N	10	N	<10	20
2C	<2	N	N	50	100	100	100	N	<50	20	300
3C	<2	N	N	50	100	50	N	N	N	20	<20
4C	<2	N	N	50	50	70	N	N	N	10	150
5C	<2	N	N	<10	30	100	N	70	N	N	500
9C	<2	N	N	N	20	10	N	N	N	N	150
0C	<2	N	N	<10	<20	15	N	N	N	N	N
1C	N	N	N	1,000	20	200	N	N	N	500	70
2C	<2	N	N	100	200	50	200	N	N	100	20
3C	<2	N	N	20	<20	100	N	N	N	10	<20
4C	<2	N	N	50	1,000	50	N	N	N	100	N
5C	<2	N	N	10	50	15	300	10	70	N	70
6C	<2	N	N	10	50	150	200	<10	<50	20	<20
7C	<2	N	N	30	100	150	150	<10	50	100	20
8C	<2	N	N	<10	<20	10	50	N	N	N	<20
9C	<2	N	N	20	<20	100	N	N	N	N	5,000
9CD	<2	N	N	50	<20	150	N	N	N	20	1,500
0C	<2	N	N	10	20	15	<50	<10	<50	N	N
1C	<2	N	N	50	700	50	N	N	N	50	N
2C	<2	N	N	50	20	100	50	N	N	100	50
3C	<2	N	N	50	200	200	500	15	50	200	150
4C	<2	N	N	10	50	10	300	N	N	N	300
5C	N	N	N	<10	20	<10	N	N	N	N	20
6C	N	N	N	10	70	20	N	N	N	N	100
7C	<2	N	N	10	30	10	100	N	N	N	2,000
8C	N	N	N	20	20	10	50	N	<50	N	500
9C	N	N	N	15	70	<10	200	N	N	N	50
0C	<2	N	N	<10	50	10	50	N	N	N	70
2C	N	N	N	30	100	<10	300	15	70	N	70
3C	N	N	N	<10	<20	<10	100	N	N	N	20
4C	N	N	N	<10	20	<10	N	100	N	N	<20
6C	N	N	N	<10	20	<10	200	N	N	N	50
8C	N	N	N	<10	70	<10	50	N	N	N	70
9C	N	N	N	10	100	<10	200	N	N	N	100
0C	N	N	N	<10	100	<10	<50	N	N	N	<20
1C	<2	N	N	10	100	<10	100	N	N	N	300
1C	<2	N	N	<10	20	20	50	N	N	N	<20
2C	<2	N	N	N	<20	15	200	N	N	N	<20
3C	<2	N	N	<10	50	10	100	N	N	N	20
4C	<2	N	N	N	30	<10	70	N	N	N	<20
8C	<2	N	N	<10	30	<10	100	10	N	N	N
1C	<2	N	N	<10	50	10	<50	N	N	N	20
2C	<2	N	N	<10	<20	<10	<50	N	N	N	<20
3C	N	N	N	N	20	<10	300	N	N	N	70
4C	<2	N	N	10	<20	<10	N	N	N	N	N
6C	N	N	N	<10	N	20	50	N	N	N	<20
7C	<2	N	N	<10	<20	15	50	N	N	N	20
8C	<2	N	N	<10	N	10	50	N	N	N	<20
9C	<2	N	100	20	100	150	100	N	N	N	20
2C	N	N	N	15	300	100	300	N	N	N	>50,000

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Yb
K1032C	N	50	N	N	200	N	1,000	N	>2,000	
K1033C	N	70	<20	200	500	N	700	N	>2,000	
K1034C	N	30	N	500	200	N	150	N	>2,000	
K1035C	N	50	70	500	500	100	500	N	>2,000	
K1036C	N	20	N	500	200	N	100	N	>2,000	
K1037C	N	30	N	500	200	N	150	N	>2,000	
K1038C	N	50	N	500	500	N	200	N	>2,000	
K1038CR1	N	15	N	200	150	N	100	N	>2,000	
K1039C	N	20	N	1,000	100	N	100	N	>2,000	
K1040C	N	30	N	1,000	500	N	100	<500	>2,000	
K1041C	N	15	N	200	50	N	20	N	>2,000	
K1042C	N	50	N	700	500	N	200	N	>2,000	
K1043C	N	20	N	700	300	N	50	N	2,000	
K1044C	N	20	N	1,000	150	N	50	700	1,500	
K1045C	N	20	N	500	300	N	100	1,500	>2,000	
K1049C	N	<10	N	3,000	50	N	20	N	>2,000	
K1050C	N	N	N	1,000	<20	N	20	N	2,000	
K1051C	N	10	N	N	50	N	20	500	2,000	
K1052C	N	50	N	700	100	N	200	N	>2,000	
K1053C	N	<10	N	1,000	20	N	100	N	>2,000	
K1054C	N	70	N	300	300	N	70	N	>2,000	
K1055C	N	20	20	500	300	N	700	N	>2,000	
K1056C	N	30	N	500	200	N	500	N	>2,000	
K1057C	N	30	20	500	300	N	500	N	>2,000	
K1058C	N	<10	N	1,000	20	N	100	N	>2,000	
K1059C	N	<10	N	700	50	N	50	1,000	>2,000	
K1059CD	N	<10	N	500	50	N	150	1,500	>2,000	
K1060C	N	<10	N	500	150	N	100	N	>2,000	
K1061C	N	30	N	1,500	200	N	50	N	>2,000	
K1062C	N	20	N	1,000	100	N	200	N	>2,000	
K1063C	N	50	N	1,000	200	N	500	N	>2,000	
K1064C	N	50	20	N	100	N	700	N	>2,000	
K1065C	N	50	N	N	50	N	1,000	N	>2,000	
K1066C	N	100	N	N	100	N	1,500	N	>2,000	
K1067C	N	70	<20	N	200	N	1,000	N	>2,000	
K1068C	N	30	50	<200	100	N	200	N	>2,000	
K1069C	N	30	N	500	100	N	200	N	>2,000	
K1070C	N	15	N	1,000	50	N	150	N	>2,000	
K1072C	N	100	100	N	200	N	1,500	N	>2,000	
K1073C	N	50	20	N	100	N	1,000	N	>2,000	
K1074C	N	50	N	<200	70	300	500	<500	>2,000	
K1076C	N	20	N	200	70	<100	150	N	>2,000	
K1078C	N	100	<20	N	100	N	1,000	N	>2,000	
K1079C	N	70	20	N	200	N	1,000	N	>2,000	
K1080C	N	20	N	700	100	N	500	N	>2,000	
K1081C	N	30	<20	N	200	N	500	N	>2,000	
K2001C	N	70	N	<200	200	N	1,000	N	>2,000	
K2002C	N	70	N	N	200	N	1,000	N	>2,000	
K2003C	N	50	N	<200	300	N	500	N	>2,000	
K2004C	N	70	N	<200	300	N	1,000	N	>2,000	
K2008C	N	70	N	<200	200	N	700	N	>2,000	
K2011C	N	30	N	200	200	N	500	N	>2,000	
K2012C	N	150	N	N	50	N	1,500	N	>2,000	
K2013C	N	50	N	N	100	N	1,000	N	>2,000	
K2014C	N	15	N	500	20	N	200	N	>2,000	
K2016C	N	100	N	<200	50	N	1,000	N	>2,000	
K2017C	N	70	N	<200	70	N	1,000	N	>2,000	
K2018C	N	70	N	<200	20	N	1,000	N	>2,000	
K2020C	N	70	<20	200	500	N	700	5,000	>2,000	
K2022C	N	50	<20	300	300	N	500	N	>2,000	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
23C	58 36 7	155 51 52	.30	2.00	1.0	>2.00	500	N	N	N	200	3,000
23CD	58 36 7	155 51 52	.70	2.00	2.0	>2.00	1,000	100.0	N	700	500	3,000
25C	58 33 50	156 13 40	.70	1.00	1.5	>2.00	700	N	N	N	100	700
26C	58 37 47	154 41 35	.20	1.00	1.0	>2.00	500	N	N	N	100	200
27C	58 37 18	154 41 55	.70	2.00	1.0	>2.00	1,500	N	N	N	100	700
28C	58 38 17	154 44 35	.20	1.50	1.0	>2.00	1,000	N	N	N	100	1,500
29C	58 38 28	154 47 20	.20	1.00	.7	>2.00	500	N	N	N	100	100
30C	58 40 30	154 49 20	.20	1.50	2.0	>2.00	1,000	N	N	N	500	70
30CD	58 40 30	154 49 20	.50	2.00	7.0	>2.00	1,000	2.0	N	100	5,000	500
31C	58 41 10	154 47 10	.50	2.00	1.0	>2.00	1,500	N	N	N	100	300
32C	58 42 10	154 44 50	.20	1.50	1.5	>2.00	1,000	N	N	N	500	700
33C	58 43 0	154 43 10	.10	.50	30.0	.50	200	N	N	N	<20	50
34C	58 42 58	154 43 0	.50	2.00	1.0	>2.00	1,000	N	N	N	100	100
36C	58 1 33	155 43 28	.20	1.50	20.0	.30	200	N	N	N	50	>10,000
38C	58 5 19	155 43 17	.50	1.50	2.0	>2.00	1,500	N	N	N	70	500
39C	58 4 57	155 53 0	2.00	5.00	3.0	1.00	1,000	N	N	N	50	200
40C	58 4 55	155 52 35	3.00	5.00	5.0	2.00	1,500	N	N	N	50	500
41C	58 5 0	155 51 58	1.00	2.00	1.5	2.00	700	N	N	N	50	300
43C	58 0 59	155 49 10	2.00	5.00	20.0	.70	1,000	<1.0	N	N	50	1,000
44C	58 1 10	155 49 12	7.00	7.00	10.0	.70	2,000	N	N	N	20	100
45C	58 51 32	155 31 12	.10	.70	.5	.70	100	N	N	N	50	300
46C	58 37 1	154 21 15	.20	1.50	10.0	1.50	1,000	N	N	N	50	>10,000
47C	58 37 15	154 21 14	.10	1.00	10.0	2.00	500	300.0	N	>1,000	50	>10,000
48C	58 37 15	154 21 40	.30	2.00	15.0	2.00	1,000	N	N	N	3,000	3,000
49C	58 36 35	154 23 45	.50	2.00	30.0	.70	1,000	2.0	N	N	50	>10,000
50C	58 34 57	154 27 5	.70	5.00	5.0	1.50	1,000	N	N	N	50	>10,000
51C	58 36 40	154 31 9	.50	5.00	3.0	2.00	700	N	N	N	3,000	>10,000
52C	58 36 53	154 35 12	.30	3.00	1.5	1.00	500	N	N	N	70	3,000
53C	58 41 3	154 35 11	.30	1.50	2.0	>2.00	1,000	N	N	N	100	1,000
54C	58 41 12	154 35 41	.30	2.00	2.0	>2.00	500	N	N	N	70	500
55C	58 14 17	155 17 9	.50	5.00	15.0	.30	200	N	N	N	50	1,500
58C	58 14 3	155 22 15	.30	.50	20.0	.50	300	N	N	N	20	>10,000
59C	58 12 46	155 23 39	.30	1.00	.7	.10	100	N	N	N	30	300
60C	58 12 2	155 25 30	.30	1.00	20.0	.70	200	N	N	N	20	5,000
61C	58 14 35	155 25 19	.30	1.00	.7	.10	200	5.0	N	N	30	500
62C	58 14 33	155 27 22	1.00	5.00	1.5	>2.00	1,000	70.0	N	300	100	1,000
63C	58 14 53	155 31 32	.50	2.00	1.5	2.00	500	N	N	N	200	500
64C	58 12 11	155 36 11	.50	1.00	1.0	1.00	500	N	N	N	50	700
65C	58 11 17	155 38 0	.30	1.50	1.0	>2.00	700	N	N	N	50	1,000
66C	58 8 43	155 30 27	.20	1.00	20.0	1.00	500	N	N	N	30	5,000
66CD	58 8 43	155 30 27	.10	.70	10.0	.70	300	N	N	N	100	>10,000
67C	58 9 4	155 35 8	.20	1.00	1.0	1.50	500	N	N	N	100	1,000
68C	58 7 50	155 31 0	.30	5.00	3.0	>2.00	1,000	N	N	N	70	500
69C	58 7 41	155 32 8	.30	5.00	3.0	>2.00	1,000	N	N	N	500	200
70C	58 8 10	155 34 44	1.00	1.50	2.0	1.50	2,000	N	N	N	100	1,000
71C	58 6 40	155 33 9	.20	2.00	2.0	>2.00	700	N	N	N	50	300
72C	58 45 21	155 33 11	.10	1.00	1.0	.50	500	N	N	N	300	500
73C	58 44 17	155 22 35	.70	1.50	1.0	2.00	500	N	N	N	100	>10,000
74C	58 49 55	155 34 50	3.00	1.50	1.5	>2.00	1,500	N	N	N	70	>10,000
76C	58 44 38	155 23 53	.50	1.50	1.0	.70	300	N	N	N	100	>10,000
77C	58 40 58	155 22 0	.50	1.50	1.0	1.00	700	N	N	N	100	500
78C	58 33 54	155 37 10	1.00	1.50	1.0	>2.00	1,000	N	N	N	100	200
79C	58 48 27	155 43 52	.05	1.00	.2	.05	150	N	N	N	100	200
81C	58 50 50	155 43 51	1.00	1.50	1.0	>2.00	1,000	N	N	N	100	700
81CD	58 50 50	155 43 51	.50	1.00	1.0	>2.00	700	N	N	N	100	700
82C	58 15 47	155 57 21	.15	1.00	.7	>2.00	200	N	N	N	100	700
83C	58 8 1	156 16 10	.20	1.00	1.0	>2.00	1,000	N	N	N	100	1,000
84C	58 5 19	156 17 57	.50	1.00	1.5	>2.00	700	N	N	N	100	700
85C	58 4 34	156 19 40	.07	.50	.5	.03	150	N	N	N	100	500
86C	58 4 19	156 8 58	.07	.70	.5	.20	150	N	N	N	100	500

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	P
K2023C	N	200	N	70	70	100	200	<10	50	N	
K2023CD	N	500	N	200	150	50	500	20	70	10	
K2025C	N	N	N	10	70	<10	<50	N	N	N	
K2026C	N	N	N	<10	20	<10	300	<10	<50	N	
K2027C	N	N	N	10	100	<10	500	<10	50	N	
K2028C	N	N	N	10	30	<10	300	<10	50	N	
K2029C	N	N	N	10	50	<10	200	N	70	N	
K2030C	N	N	N	100	<20	100	300	<10	N	<10	
K2030CD	N	N	N	100	50	150	300	15	N	30	
K2031C	N	N	N	10	50	10	700	<10	<50	N	
K2032C	N	N	N	70	50	50	300	<10	N	<10	
K2033C	N	N	N	150	<20	200	N	<10	N	100	
K2034C	N	N	N	50	50	15	300	N	N	N	
K2036C	N	N	N	200	<20	100	N	N	N	20	
K2038C	N	N	N	50	50	20	300	<10	70	N	
K2039C	N	N	N	20	50	20	N	N	N	<10	
K2040C	N	N	N	30	100	50	N	70	N	20	
K2041C	N	N	N	20	100	10	<50	N	<50	N	
K2043C	N	N	N	50	50	100	<50	N	N	100	
K2044C	N	N	N	70	200	15	N	N	N	100	
K2045C	N	N	N	N	N	<10	N	N	N	N	
K2046C	N	N	N	70	30	300	200	20	<50	200	
K2047C	<2	N	200	50	<20	100	<50	N	N	100	
K2048C	N	N	N	70	100	200	200	20	50	200	
K2049C	<2	N	N	100	20	500	N	50	N	500	
K2050C	N	N	N	30	30	70	150	N	N	100	
K2051C	<2	N	N	10	50	20	100	N	N	20	
K2052C	<2	N	N	10	20	10	N	N	N	N	
K2053C	N	N	N	20	30	20	200	<10	N	N	
K2054C	<2	N	N	10	<20	10	200	N	<50	N	
K2055C	<2	N	N	50	<20	50	N	N	N	N	
K2058C	N	N	N	200	20	300	N	N	N	200	
K2059C	N	N	N	<10	<20	20	N	N	N	N	
K2060C	N	N	N	100	<20	500	N	N	N	100	
K2061C	N	N	N	<10	20	20	N	N	N	N	
K2062C	N	N	N	20	30	50	50	N	N	<10	
K2063C	<2	N	N	<10	<20	15	<50	N	N	N	
K2064C	N	N	N	<10	30	200	N	N	N	N	
K2065C	N	N	N	<10	20	10	100	N	<50	N	
K2066C	N	N	N	50	<20	500	N	10	N	N	
K2066CD	N	N	N	20	N	20	N	N	N	N	
K2067C	N	N	N	<10	<20	15	N	N	N	N	
K2068C	<2	N	N	50	<20	15	150	N	<50	10	
K2069C	<2	N	N	15	20	20	150	N	<50	20	
K2070C	N	N	N	15	100	50	<50	N	N	N	
K2071C	<2	N	N	20	<20	20	50	N	N	30	
K2072C	N	N	N	N	<20	<10	N	N	N	N	
K2073C	N	N	N	10	70	10	50	N	N	N	
K2074C	N	N	N	50	500	10	100	N	N	<10	
K2076C	N	N	N	10	100	<10	N	N	N	N	
K2077C	N	N	N	<10	20	15	100	N	N	N	
K2078C	N	N	N	10	70	10	200	10	N	N	
K2079C	N	N	N	N	N	<10	N	<10	N	N	
K2081C	N	N	N	10	100	10	200	<10	N	N	
K2081CD	N	N	N	10	100	10	150	N	N	N	
K2082C	N	N	N	<10	<20	<10	N	N	N	N	
K2083C	N	N	N	<10	30	<10	<50	N	N	N	
K2084C	N	N	N	10	50	15	N	N	N	N	
K2085C	N	N	N	N	N	<10	N	N	N	N	
K2086C	N	N	N	N	<20	<10	N	<10	N	N	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

le	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
6C	N	20	30	200	300	200	200	700	>2,000	N
6CD	N	30	200	<200	500	<100	500	N	>2,000	N
6C	N	30	N	N	200	N	300	N	>2,000	N
6C	N	30	<20	N	200	N	1,000	N	>2,000	N
6C	N	50	20	N	200	N	500	N	>2,000	N
6C	N	30	20	N	200	N	1,000	N	>2,000	N
6C	N	30	20	N	200	N	1,000	N	>2,000	N
6C	N	50	20	N	200	N	1,000	N	>2,000	N
6CD	N	50	<20	N	200	N	1,000	N	>2,000	<200
6C	N	70	30	N	200	N	1,500	N	>2,000	N
6C	N	50	<20	N	200	N	1,000	N	>2,000	N
6C	N	N	N	N	30	N	150	<500	>2,000	N
6C	N	50	<20	N	200	N	1,500	N	>2,000	N
6C	N	10	N	5,000	50	N	70	N	>2,000	N
6C	N	50	20	N	300	N	1,000	N	>2,000	N
6C	N	20	N	1,000	100	N	70	N	>2,000	N
6C	N	30	N	1,000	200	N	150	N	>2,000	N
6C	N	20	N	<200	200	N	300	N	>2,000	N
6C	N	20	N	700	200	N	150	N	>2,000	N
6C	N	70	N	700	200	N	50	N	>2,000	N
6C	N	200	N	N	100	N	1,500	N	>2,000	N
6C	N	<10	N	500	100	N	200	500	>2,000	N
6C	N	70	N	200	150	N	1,000	2,000	>2,000	N
6C	N	10	N	500	200	N	200	N	>2,000	N
6C	N	<10	N	1,000	100	N	200	N	>2,000	N
6C	N	30	N	500	150	N	200	N	>2,000	N
6C	N	20	N	500	150	N	300	1,500	>2,000	N
6C	N	10	N	700	100	N	100	N	>2,000	N
6C	N	50	<20	N	200	N	1,000	5,000	>2,000	N
6C	N	50	<20	N	300	N	700	N	>2,000	N
6C	N	<10	N	700	20	N	100	N	>2,000	N
6C	N	10	N	<200	100	N	100	<500	>2,000	N
6C	N	10	N	500	20	N	50	N	500	N
6C	N	<10	N	<200	100	N	50	N	>2,000	N
6C	N	<10	N	500	20	N	50	N	200	N
6C	N	30	N	1,000	200	N	200	N	>2,000	<200
6C	N	20	N	200	100	N	200	N	>2,000	N
6C	N	20	20	<200	70	N	200	N	>2,000	N
6C	N	30	<20	N	150	N	500	N	>2,000	N
6C	N	10	N	N	50	N	200	<500	>2,000	N
6CD	N	20	N	700	50	N	300	1,000	>2,000	N
7C	N	20	N	<200	100	N	200	N	>2,000	N
8C	N	100	<20	N	200	N	1,000	N	>2,000	N
9C	N	70	20	N	200	N	1,000	N	>2,000	N
9C	N	20	<20	<200	100	N	200	N	>2,000	N
1C	N	100	N	N	200	N	1,000	N	>2,000	N
2C	N	50	N	N	30	N	700	N	>2,000	N
3C	N	20	N	200	150	<100	200	N	>2,000	N
3C	N	50	20	200	200	N	200	N	>2,000	N
3C	N	10	N	1,000	50	N	100	N	>2,000	N
7C	N	50	<20	N	100	<100	500	N	>2,000	N
8C	N	50	50	N	200	N	500	N	>2,000	N
9C	N	70	N	N	30	N	1,000	N	>2,000	N
1C	N	30	<20	500	200	N	500	N	>2,000	N
1CD	N	50	N	N	100	N	500	N	>2,000	N
2C	N	20	N	N	100	N	200	N	>2,000	N
3C	N	20	N	500	100	N	300	N	>2,000	N
4C	N	50	N	N	100	N	1,000	N	>2,000	N
5C	N	50	N	N	20	N	200	N	>2,000	N
6C	N	20	N	N	30	N	200	N	>2,000	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	B
K2088C	58 2 49	156 1 22	.20	1.50	1.0	.20	500	N	N	N	100	
K2090C	58 6 58	156 0 30	<.05	.50	.2	.02	50	N	N	N	100	
K2091C	58 4 5	155 34 59	.07	1.50	1.0	.05	200	N	N	N	200	
K2092C	58 4 14	155 34 30	.20	2.00	1.0	>2.00	1,000	N	N	N	100	
K2093C	58 4 27	155 34 30	.20	1.50	1.5	>2.00	1,500	N	N	N	500	
K2094C	58 4 21	155 41 42	.30	1.50	2.0	1.00	500	N	N	N	100	>1
K2095C	58 13 21	155 54 20	.20	1.00	1.0	>2.00	500	70.0	N	300	100	
K2096C	58 12 10	156 13 35	.50	1.50	1.0	>2.00	1,000	N	N	N	100	
K2097C	58 10 9	156 8 5	1.00	1.50	1.0	>2.00	1,000	N	N	N	100	
K2098C	58 9 40	156 3 27	.50	2.00	1.0	>2.00	1,000	N	N	N	100	
K2099C	58 12 10	156 1 30	.70	1.50	1.5	>2.00	1,000	N	N	N	150	
K2100C	58 14 5	156 6 0	.20	2.00	2.0	>2.00	500	N	N	N	50	
K2102C	58 2 12	156 24 0	.70	1.50	1.0	>2.00	1,000	N	N	N	100	
K2103C	58 3 12	156 26 22	.70	2.00	1.0	>2.00	1,500	N	N	N	100	
K2109C	58 35 23	155 17 42	.50	3.00	1.5	2.00	500	N	N	N	200	
K2113C	58 39 0	155 10 32	.50	5.00	1.5	>2.00	1,000	N	N	N	50	
K2114C	58 40 12	155 13 50	1.50	2.00	2.0	2.00	1,000	N	N	N	100	
K2115C	58 40 2	155 5 39	1.00	2.00	1.5	>2.00	2,000	N	N	N	100	
K2118C	58 42 0	155 6 21	.70	5.00	3.0	2.00	700	N	N	N	1,500	
K2119C	58 43 5	155 4 7	1.00	2.00	1.5	>2.00	2,000	N	N	N	700	
K2120C	58 42 50	155 1 24	.50	2.00	1.0	2.00	500	5.0	N	N	100	
K2121C	58 41 52	154 59 20	2.00	2.00	2.0	1.00	1,500	N	N	N	100	
K2122C	58 44 0	154 54 45	.50	7.00	2.0	1.00	700	N	N	N	50	
K2123C	58 47 25	156 24 0	.20	2.00	1.0	>2.00	300	N	N	N	100	
K2124C	58 48 24	156 23 1	.30	3.00	1.0	>2.00	700	N	N	N	150	
K2128C	58 51 8	156 18 30	.50	3.00	1.0	>2.00	500	N	N	N	200	
K2129C	58 49 33	156 18 0	.30	2.00	1.0	>2.00	200	N	N	N	100	
K2131C	58 46 42	156 4 55	.20	2.00	1.5	>2.00	500	N	N	N	100	
K2131CD	58 46 42	156 4 55	.30	3.00	1.0	>2.00	500	N	N	N	50	
K2132C	58 50 19	156 4 38	.50	5.00	1.5	>2.00	1,000	N	N	N	70	
K2133C	58 52 17	156 0 45	.05	1.00	.5	.20	500	<1.0	N	N	50	
K2134C	58 52 12	156 7 10	.20	2.00	1.0	2.00	500	N	N	N	50	
K2135C	58 52 21	156 7 11	.20	2.00	.7	1.50	500	N	N	N	50	
K2136C	58 53 2	156 13 56	.30	7.00	1.5	>2.00	1,000	N	N	N	70	
K2137C	58 56 7	156 17 38	.07	2.00	.5	2.00	200	N	N	N	200	
K2139C	58 58 0	156 6 56	.20	2.00	.7	>2.00	200	N	N	N	100	
K2140C	58 57 49	156 4 18	.20	2.00	.5	>2.00	300	50.0	N	200	70	
K2141C	58 57 52	156 4 30	.30	3.00	1.0	>2.00	700	N	N	N	200	
K2142C	58 43 19	155 8 30	.20	3.00	1.0	1.00	300	N	N	N	50	
K2143C	58 44 31	155 10 30	.50	5.00	2.0	2.00	500	N	N	N	70	
K2144C	58 43 57	155 13 0	.10	2.00	.5	.70	200	N	N	N	50	
K2145C	58 47 50	155 12 30	.30	5.00	1.5	1.50	700	N	N	N	70	
K2146C	58 49 17	155 14 11	.50	3.00	2.0	1.00	500	N	N	N	100	
K2147C	58 52 39	155 17 11	.20	2.00	1.5	.20	300	N	N	N	50	
K2147CD	58 52 39	155 17 11	.10	3.00	1.0	.20	150	1,500.0	N	>1,000	50	
K2148C	58 52 45	155 17 0	.30	3.00	1.0	>2.00	500	N	N	N	50	
K2149C	58 53 44	155 23 30	.10	2.00	1.0	1.00	700	N	N	N	50	
K2150C	58 46 54	155 54 5	.10	2.00	.5	.20	150	N	N	N	50	
K2151C	58 53 8	155 24 35	.10	2.00	.5	.20	200	N	N	N	50	
K2152C	58 46 23	155 51 48	.30	2.00	1.0	2.00	500	N	N	N	50	
K2501C	58 19 34	155 17 15	.70	5.00	2.0	.50	500	1.5	N	N	50	
K2502C	58 18 47	155 16 28	.20	5.00	1.5	.50	300	N	N	N	50	
K2503C	58 16 43	155 16 21	.20	3.00	1.0	.70	200	N	N	N	50	
K2504C	58 15 57	155 16 25	.30	3.00	1.5	>2.00	700	N	N	N	50	
K2507C	58 16 58	155 5 5	.30	1.00	50.0	.20	200	N	N	N	<20	
K2508C	58 18 16	155 4 40	1.50	5.00	2.0	.30	1,500	N	N	N	100	
K2509C	58 18 30	155 5 10	.20	5.00	5.0	.20	300	2.0	N	N	50	
K2511C	58 19 20	155 9 11	.20	7.00	20.0	.20	200	N	N	N	20	
K2512C	58 21 0	155 11 11	.30	5.00	10.0	.30	300	N	N	N	20	
K2513C	58 21 0	155 11 21	.10	2.00	1.0	.10	200	N	N	N	N	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

mple	Ba-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
88C	N	N	N	N	<20	<10	N	N	N	N	<20
90C	N	N	N	N	N	<10	N	N	N	N	N
91C	N	N	N	N	<20	<10	N	N	N	N	20
92C	N	N	N	50	20	15	200	N	N	N	50
93C	N	N	N	30	<20	10	200	N	N	N	50
94C	N	N	N	20	20	20	N	N	N	N	N
95C	N	N	N	100	<20	<10	N	N	N	N	100
96C	N	N	N	20	100	<10	50	N	50	N	N
97C	N	N	N	70	100	10	100	<10	<50	N	20
98C	N	N	N	10	100	<10	150	<10	50	N	<20
99C	N	N	N	20	100	<10	100	<10	50	N	<20
00C	<2	N	N	<10	<20	<10	<50	N	N	N	N
02C	N	N	N	10	100	100	200	<10	50	N	N
03C	N	N	N	15	150	<10	200	<10	<50	N	20
09C	<2	N	N	<10	50	50	50	N	N	N	200
13C	<2	N	N	<10	20	<10	100	N	<50	N	N
14C	N	N	N	50	100	20	100	N	N	N	20
15C	N	N	N	20	150	20	150	N	50	N	N
18C	<2	N	100	50	100	200	<50	N	N	N	N
19C	N	N	N	20	100	300	300	<10	<50	N	20
20C	N	N	N	30	70	2,000	300	50	N	N	N
21C	N	N	N	50	150	50	<50	N	N	N	N
22C	<2	N	N	<10	<20	<10	50	N	N	N	N
23C	<2	N	N	<10	30	<10	100	N	N	N	N
24C	<2	N	N	N	50	<10	50	N	N	N	N
28C	<2	N	N	<10	70	10	100	N	N	N	200
29C	<2	N	N	<10	30	<10	<50	N	N	N	N
31C	<2	N	N	<10	50	10	<50	10	N	20	N
31CD	<2	N	N	N	20	10	100	N	N	N	N
32C	<2	N	N	<10	50	10	200	N	N	N	N
33C	N	N	N	N	N	10	<50	N	N	N	N
34C	<2	N	N	N	20	10	<50	N	N	N	N
35C	<2	N	N	N	20	10	<50	N	N	N	N
36C	N	N	N	<10	50	<10	700	N	N	N	N
37C	N	N	N	N	50	<10	<50	N	N	N	N
39C	<2	N	N	N	20	10	100	N	N	N	N
40C	<2	N	N	<10	20	10	<50	N	N	N	N
41C	<2	N	N	<10	50	<10	150	N	N	N	N
42C	<2	N	N	N	<20	10	100	N	N	N	N
43C	<2	N	N	20	20	15	<50	N	N	N	N
44C	N	N	N	N	N	<10	<50	N	N	N	N
45C	<2	N	N	N	<20	10	150	N	N	N	N
46C	<2	N	N	N	<20	20	N	N	N	N	N
47C	<2	N	N	<10	20	<10	<50	N	N	N	N
47CD	<2	N	N	N	<20	10	N	N	N	N	N
48C	<2	N	N	N	20	<10	200	N	N	N	N
49C	<2	N	N	N	<20	<10	<50	N	N	N	N
50C	<2	N	N	<10	N	15	50	N	N	N	N
51C	<2	N	N	N	<20	<10	<50	N	N	N	N
52C	<2	N	N	<10	<20	15	<50	N	N	N	N
01C	<2	N	N	<10	20	15	N	N	N	N	N
02C	<2	N	N	<10	<20	<10	<50	N	N	N	20
03C	<2	N	N	<10	<20	10	N	N	N	N	N
04C	<2	N	N	<10	20	10	50	N	<50	N	N
07C	<2	N	N	200	<20	200	N	N	N	100	30
08C	<2	N	N	10	20	200	N	N	N	N	100
09C	<2	N	N	20	<20	15	<50	N	N	N	1,500
11C	<2	N	N	100	<20	200	N	N	N	30	50
12C	<2	N	N	20	<20	20	N	N	N	N	N
13C	<2	N	N	N	<20	<10	N	N	N	N	<20

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th
K2088C	N	50	N	N	50	N	500	N	>2,000	
K2090C	N	20	N	N	20	N	150	N	>2,000	
K2091C	N	50	N	N	30	N	1,000	N	>2,000	
K2092C	N	50	N	N	150	N	1,500	N	>2,000	
K2093C	N	70	N	N	200	N	1,500	N	>2,000	
K2094C	N	20	N	1,000	50	N	200	N	>2,000	
K2095C	N	30	N	N	50	N	500	N	>2,000	
K2096C	N	20	20	N	150	N	500	N	>2,000	
K2097C	N	20	30	N	200	N	700	N	>2,000	
K2098C	N	20	50	N	200	N	1,000	N	>2,000	
K2099C	N	30	20	N	200	N	500	N	>2,000	
K2100C	N	50	N	<200	200	N	700	N	>2,000	
K2102C	N	20	20	N	200	N	500	N	>2,000	
K2103C	N	30	30	<200	200	N	500	N	>2,000	
K2109C	N	50	N	<200	200	N	500	N	>2,000	
K2113C	N	10	N	500	200	N	300	N	>2,000	
K2114C	N	30	<20	<200	200	200	300	N	>2,000	
K2115C	N	30	<20	500	300	N	300	N	>2,000	
K2118C	N	50	N	200	150	N	700	1,000	>2,000	
K2119C	N	20	<20	N	500	N	500	N	>2,000	
K2120C	N	20	<20	<200	200	1,000	200	N	>2,000	
K2121C	N	30	N	1,000	200	N	100	N	>2,000	
K2122C	N	<10	N	1,000	50	N	150	N	>2,000	
K2123C	N	70	<20	<200	200	N	700	N	>2,000	
K2124C	N	50	N	200	200	N	500	N	>2,000	
K2128C	N	30	N	200	200	N	500	N	>2,000	
K2129C	N	30	N	<200	150	N	500	N	>2,000	
K2131C	N	70	N	<200	200	N	1,000	N	>2,000	
K2131CD	N	70	N	N	200	N	1,000	N	>2,000	
K2132C	N	100	N	N	300	N	1,000	N	>2,000	
K2133C	N	100	N	N	20	N	1,000	N	>2,000	
K2134C	N	50	N	N	100	N	1,000	N	>2,000	
K2135C	N	30	N	<200	70	N	500	N	>2,000	
K2136C	N	50	<20	<200	300	N	700	N	>2,000	
K2137C	N	100	N	N	100	N	1,000	N	>2,000	
K2139C	N	70	N	N	300	N	2,000	N	>2,000	
K2140C	N	70	N	N	200	N	1,500	N	>2,000	
K2141C	N	100	<20	N	300	N	1,000	N	>2,000	
K2142C	N	30	N	<200	50	N	500	N	>2,000	
K2143C	N	30	N	<200	100	N	500	N	>2,000	
K2144C	N	50	N	<200	20	N	500	N	>2,000	
K2145C	N	30	N	<200	70	N	500	N	>2,000	
K2146C	N	20	N	500	70	N	200	N	>2,000	
K2147C	N	20	N	700	20	N	200	N	>2,000	
K2147CD	N	N	N	1,000	<20	N	20	N	>2,000	
K2148C	N	50	N	<200	200	<100	1,000	N	>2,000	
K2149C	N	70	N	<200	50	N	1,000	N	>2,000	
K2150C	N	50	N	N	20	<100	700	N	>2,000	
K2151C	N	50	N	<200	20	N	700	N	>2,000	
K2152C	N	50	N	<200	70	N	500	N	>2,000	
K2501C	N	<10	N	700	70	N	70	N	2,000	
K2502C	N	<10	N	500	50	N	100	N	>2,000	
K2503C	N	<10	N	700	50	N	150	N	>2,000	
K2504C	N	10	N	500	200	N	200	N	>2,000	
K2507C	N	N	N	<200	50	N	20	500	500	
K2508C	N	20	N	700	50	N	70	N	>2,000	
K2509C	N	<10	N	700	20	N	100	N	>2,000	
K2511C	N	N	N	1,000	20	N	100	N	>2,000	
K2512C	N	<10	N	1,500	20	N	150	N	>2,000	
K2513C	N	N	N	500	<20	N	50	700	>2,000	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

le	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
6C	58 20 45	155 12 40	.30	3.00	1.5	>2.00	700	N	N	N	70	1,000
6C	58 21 39	155 15 40	.20	5.00	1.0	.10	200	N	N	N	50	500
7C	58 22 10	155 17 0	.20	3.00	1.0	.50	200	N	N	N	50	700
8C	58 24 8	155 23 51	.30	2.00	1.5	>2.00	300	N	N	N	50	700
9C	58 25 55	155 12 6	.50	2.00	2.0	.70	500	N	N	N	50	5,000
0C	58 26 48	155 11 50	.50	5.00	1.5	1.00	300	N	N	N	50	500
1C	58 25 42	155 8 32	.30	3.00	1.5	1.00	300	N	N	N	50	500
2C	58 25 40	155 8 45	.30	5.00	2.0	.50	300	N	N	N	50	700
6C	58 25 28	155 1 55	.70	5.00	2.0	.70	500	N	N	N	50	1,000
6C	58 22 36	154 58 47	.20	2.00	20.0	1.00	100	3.0	N	N	100	200
7C	58 21 43	154 58 22	.20	5.00	10.0	.50	200	30.0	N	N	50	7,000
7CD	58 21 43	154 58 22	.50	5.00	5.0	1.00	500	20.0	N	N	100	3,000
8C	58 20 41	154 57 18	.30	3.00	2.0	>2.00	500	10.0	N	N	100	5,000
9C	58 20 12	154 55 15	.50	5.00	10.0	.50	500	5.0	N	N	50	2,000
0C	58 19 32	154 59 10	.50	3.00	20.0	.30	300	5.0	<500	N	20	1,000
1C	58 19 36	154 59 22	.20	2.00	30.0	.30	200	2,000.0	N	>1,000	30	10,000
2C	58 20 9	154 59 10	.07	.50	50.0	.10	200	20.0	500	N	<20	>10,000
5C	58 22 2	155 33 1	.30	3.00	1.5	>2.00	300	N	N	N	50	1,500
6C	58 22 5	155 33 12	1.00	3.00	3.0	>2.00	1,000	N	N	N	50	700
8C	58 21 58	155 30 42	.50	3.00	2.0	2.00	700	N	N	N	50	1,000
6C	58 25 48	155 29 50	.30	1.50	1.5	2.00	300	700.0	N	>1,000	20	1,000
7C	58 25 54	155 29 52	.50	5.00	2.0	>2.00	500	5.0	N	N	100	700
8C	58 19 42	155 27 20	.50	3.00	1.5	1.50	500	N	N	N	70	700
9C	58 18 40	155 27 50	.30	7.00	1.5	.50	300	N	N	N	70	500
0C	58 17 37	155 31 50	1.00	5.00	2.0	1.00	700	N	N	N	200	700
1C	58 17 10	155 35 24	.30	7.00	1.5	.50	700	N	N	N	30	500
2C	58 17 50	155 39 0	1.00	7.00	2.0	1.00	1,000	N	N	N	50	200
5C	58 22 5	155 38 50	.20	2.00	2.0	.50	200	N	N	N	50	700
6C	58 21 58	155 38 30	.50	3.00	1.5	>2.00	700	N	N	N	70	500
5C	58 22 25	155 37 52	.50	3.00	2.0	>2.00	700	N	N	N	50	300
5C	58 29 12	155 31 20	.30	2.00	1.5	>2.00	300	200.0	N	700	200	2,000
8C	58 28 8	155 20 32	1.00	5.00	2.0	2.00	700	N	N	N	50	500
7C	58 27 8	155 16 48	3.00	10.00	3.0	>2.00	2,000	N	N	N	100	500
9C	58 29 30	155 10 23	1.50	3.00	2.0	1.00	1,000	N	N	N	100	700
8C	58 25 35	154 58 5	1.00	10.00	2.0	.30	1,000	N	N	N	50	300
5C	58 23 50	154 54 45	1.00	7.00	10.0	2.00	1,000	1.0	N	N	100	700
6C	58 25 0	154 52 10	.50	5.00	2.0	1.00	500	5.0	N	N	100	500
6CD	58 25 0	154 52 10	1.00	7.00	10.0	1.50	1,500	N	N	N	100	500
8C	58 24 52	154 52 30	.70	5.00	20.0	1.00	700	7.0	N	N	100	10,000
5C	58 24 52	154 52 57	.70	3.00	5.0	1.50	700	5.0	N	N	200	2,000
7C	58 23 38	154 48 6	1.00	3.00	20.0	2.00	300	<1.0	<500	N	50	300
8C	58 23 35	154 45 43	.70	3.00	30.0	.50	500	2.0	1,000	N	20	1,500
7C	58 25 16	154 45 40	3.00	5.00	15.0	1.00	2,000	100.0	5,000	N	50	300
6C	58 27 0	154 46 1	1.50	5.00	10.0	2.00	1,000	5.0	20,000	N	2,000	500
C	58 29 40	154 52 41	.70	5.00	5.0	1.00	700	N	N	N	100	700
8CD	58 29 40	154 52 41	2.00	7.00	7.0	2.00	2,000	N	N	N	200	500
7C	58 24 0	154 37 48	.30	1.00	50.0	1.00	200	N	N	N	50	2,000
6C	58 22 30	154 41 10	1.00	3.00	15.0	1.00	500	N	N	N	50	>10,000
6C	58 22 40	154 41 20	1.00	3.00	2.0	1.50	500	N	N	N	50	>10,000
8C	58 26 39	154 37 21	5.00	5.00	15.0	1.00	2,000	N	N	N	50	700
C	58 30 8	154 42 30	2.00	7.00	2.0	>2.00	1,500	N	N	N	100	200
7C	58 32 38	154 40 20	2.00	5.00	10.0	1.50	1,000	N	N	N	50	3,000
8C	58 32 27	154 38 56	.30	2.00	1.5	1.50	700	N	N	N	70	700
8C	58 31 0	154 33 18	1.00	5.00	20.0	1.50	700	1.0	N	N	70	500
6C	58 31 10	154 33 22	3.00	5.00	7.0	>2.00	2,000	<1.0	N	N	50	500
C	58 30 55	155 2 27	.50	3.00	2.0	2.00	500	N	N	N	50	700
C	58 30 48	154 57 34	.50	5.00	2.0	2.00	500	N	N	N	50	5,000
6C	58 32 14	154 54 25	2.00	5.00	5.0	>2.00	2,000	N	N	N	100	200
6C	58 34 16	154 39 31	1.50	5.00	30.0	2.00	1,000	N	N	N	20	>10,000
8C	58 34 27	154 35 37	.30	2.00	30.0	.50	500	2.0	N	N	20	>10,000

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Ba-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K2514C	<2	N	N	<10	20	15	50	N	N	N
K2516C	<2	N	N	<10	<20	10	N	N	N	N
K2517C	<2	N	N	<10	<20	<10	N	N	N	N
K2518C	<2	N	N	<10	<20	10	50	N	N	N
K2519C	<2	N	N	<10	50	15	N	N	N	N
K2520C	<2	N	N	<10	<20	<10	50	N	N	N
K2521C	<2	N	N	<10	<20	10	<50	N	N	<10
K2522C	<2	N	N	<10	<20	100	<50	N	N	N
K2524C	<2	N	N	<10	20	15	N	N	N	N
K2526C	<2	N	N	200	50	500	N	300	N	150
K2527C	<2	70	N	70	20	200	N	500	N	20
K2527CD	<2	30	N	50	30	150	N	100	N	10
K2528C	<2	N	N	50	50	20	N	500	N	N
K2529C	<2	20	N	20	30	70	N	<10	N	50
K2530C	<2	150	N	200	<20	200	<50	<10	N	100
K2531C	<2	N	N	200	<20	150	N	500	N	200
K2532C	N	70	N	500	N	700	N	10	N	300
K2533C	<2	N	N	10	<20	20	<50	20	N	N
K2534C	<2	N	N	30	70	300	50	N	<50	N
K2535C	<2	N	N	<10	20	10	70	N	N	N
K2536C	N	N	N	N	<20	<10	<50	N	N	N
K2537C	<2	N	N	10	20	15	50	<10	N	N
K2538C	<2	N	N	<10	20	<10	50	<10	N	<10
K2539C	<2	N	N	<10	<20	10	N	N	N	N
K2540C	<2	N	N	10	20	15	<50	<10	N	N
K2541C	<2	N	N	<10	<20	<10	500	N	N	N
K2542C	<2	N	N	10	<20	15	500	N	N	N
K2543C	<2	N	N	<10	<20	15	N	N	N	N
K2544C	<2	N	N	<10	70	10	50	N	<50	N
K2545C	<2	N	N	<10	150	10	150	<10	<50	N
K2546C	<2	N	N	<10	<20	10	<50	N	N	N
K2548C	<2	N	N	<10	100	10	100	N	N	N
K2549C	<2	N	N	50	200	50	100	N	<50	70
K2550C	<2	N	N	20	50	20	<50	N	N	N
K2552C	<2	N	N	10	<20	<10	300	N	N	N
K2553C	<2	N	N	70	70	500	<50	<10	N	70
K2554C	<2	N	N	10	20	30	N	100	N	N
K2554CD	<2	N	N	50	70	200	N	<10	N	20
K2555C	<2	N	N	100	20	1,000	N	150	N	70
K2556C	<2	N	50	70	50	3,000	N	2,000	N	20
K2557C	<2	N	N	150	100	500	N	N	N	200
K2558C	<2	N	N	200	50	1,000	N	N	N	200
K2559C	<2	500	N	1,000	500	200	50	N	N	100
K2560C	N	30	N	1,500	70	500	N	70	N	300
K2561C	<2	N	N	50	50	20	N	N	N	N
K2561CD	<2	N	N	50	100	150	<50	N	N	<10
K2562C	N	N	N	200	20	500	N	N	N	200
K2563C	<2	N	N	70	150	100	<50	<10	N	20
K2564C	<2	N	N	<10	100	20	150	N	N	N
K2565C	<2	N	N	50	500	70	N	N	N	100
K2566C	N	N	N	20	150	50	200	N	50	20
K2567C	<2	N	N	30	100	100	100	N	N	30
K2568C	<2	N	N	<10	<20	15	N	N	N	N
K2569C	<2	N	N	100	100	150	<50	10	<50	150
K2570C	N	N	N	50	300	150	200	10	100	150
K2571C	<2	N	N	10	<20	15	50	N	<50	N
K2572C	<2	N	N	10	30	20	N	N	N	N
K2573C	N	N	N	20	100	20	200	N	70	N
K2574C	N	N	N	30	150	200	200	<10	<50	100
K2575C	<2	N	N	20	<20	200	N	<10	N	150

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
4C	N	20	N	500	200	N	300	N	>2,000	N
6C	N	N	N	1,000	<20	N	50	N	>2,000	N
7C	N	<10	N	700	20	N	200	N	>2,000	N
8C	N	50	N	200	200	N	500	N	>2,000	N
9C	N	30	N	500	50	N	300	N	>2,000	N
0C	N	15	N	700	50	N	150	N	>2,000	N
1C	N	10	N	500	70	N	150	N	>2,000	N
2C	N	10	N	700	50	N	100	N	>2,000	N
4C	N	10	N	1,000	150	N	100	N	>2,000	N
6C	N	20	N	500	100	N	200	N	>2,000	N
7C	N	N	N	1,000	20	N	100	<500	>2,000	N
7CD	N	10	N	700	100	N	100	500	>2,000	N
8C	N	30	N	500	200	N	300	N	>2,000	N
9C	N	<10	N	1,000	50	N	70	<500	>2,000	N
0C	N	N	N	500	50	1,000	100	N	>2,000	N
1C	N	<10	N	500	20	N	500	<500	>2,000	N
2C	N	N	N	1,500	<20	N	20	7,000	>2,000	N
3C	N	20	N	500	100	N	500	<500	>2,000	N
4C	N	30	N	500	200	N	500	N	>2,000	N
5C	N	30	N	500	200	N	300	N	>2,000	N
6C	N	70	N	<200	150	N	1,000	N	>2,000	N
7C	N	20	<20	300	200	N	200	N	>2,000	N
8C	N	20	N	500	100	N	300	N	>2,000	N
9C	N	10	<20	1,000	70	N	100	N	>2,000	N
0C	N	10	N	1,000	100	N	150	N	>2,000	N
1C	N	20	N	1,000	50	N	700	N	>2,000	N
2C	N	30	N	500	100	N	500	N	>2,000	<200
3C	N	15	N	200	30	N	300	N	>2,000	N
4C	N	30	N	300	200	N	500	N	>2,000	N
5C	N	50	N	200	200	N	1,000	N	>2,000	N
6C	N	100	N	<200	200	N	1,000	N	>2,000	200
8C	N	50	N	500	100	N	700	N	>2,000	N
9C	N	50	N	700	300	N	500	N	>2,000	N
0C	N	30	N	500	150	N	200	N	>2,000	N
2C	N	20	N	1,000	50	N	500	N	>2,000	N
3C	N	30	N	1,000	200	N	100	N	>2,000	N
4C	N	20	N	700	100	N	100	N	>2,000	N
4CD	N	20	N	1,000	300	N	70	500	>2,000	N
5C	N	10	N	700	150	N	70	1,000	>2,000	N
6C	N	15	N	700	150	N	100	5,000	>2,000	N
7C	N	20	N	700	100	N	100	N	>2,000	N
8C	N	<10	N	500	100	N	50	N	>2,000	N
9C	N	50	N	500	200	N	200	N	>2,000	N
0C	N	30	N	700	500	N	150	N	>2,000	N
1C	N	20	N	500	200	N	70	N	>2,000	N
1CD	N	50	N	1,000	500	N	200	N	>2,000	N
2C	N	N	N	N	70	N	100	500	>2,000	N
3C	N	20	N	1,500	150	N	150	N	>2,000	N
4C	N	20	N	3,000	70	N	200	N	>2,000	N
5C	N	50	N	700	200	N	100	N	>2,000	N
6C	N	50	<20	500	300	N	500	N	>2,000	N
7C	N	30	<20	700	200	N	200	N	>2,000	N
8C	N	<10	N	700	100	N	100	N	>2,000	N
9C	N	15	N	500	200	N	200	N	>2,000	N
0C	N	50	N	500	500	N	500	N	>2,000	N
1C	N	10	N	500	100	N	150	<500	>2,000	N
2C	N	20	N	500	100	N	200	2,000	>2,000	N
3C	N	50	N	200	500	N	1,000	N	>2,000	N
4C	N	20	N	500	200	N	200	N	>2,000	N
5C	N	N	N	700	20	N	150	N	>2,000	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Latitude	Longitude	Mg-pct.	Ca-pct.	Fe-pct.	Ti-pct.	Mn-ppm	Ag-ppm	As-ppm	Au-ppm	B-ppm
			s	s	s	s	s	s	s	s	s
K2576C	58 34 42	154 36 27	.50	3.00	20.0	1.00	1,000	1.0	N	N	50
K2577C	58 37 33	154 34 26	.70	5.00	3.0	>2.00	1,000	N	N	N	50
K2578C	58 37 30	154 34 24	.50	5.00	5.0	1.50	700	N	N	N	200
K2578CD	58 37 30	154 34 24	.50	5.00	2.0	.70	700	N	N	N	100
K2579C	58 31 48	154 29 39	.30	1.00	50.0	.70	500	N	N	N	20
K2581C	58 35 5	155 32 48	.20	5.00	1.0	>2.00	700	20.0	N	150	50
K2582C	58 34 51	155 29 20	.30	5.00	1.5	.50	700	N	N	N	50
K2584C	58 30 0	155 28 30	.30	5.00	1.5	1.50	500	N	N	N	50
K2584CD	58 30 0	155 28 30	.20	5.00	1.5	.70	500	N	N	N	200
K2585C	58 40 18	155 47 0	.20	2.00	1.5	2.00	700	N	N	N	50
K2586C	58 41 52	155 48 1	.20	1.00	1.0	2.00	500	N	N	N	100
K2590C	58 49 20	155 58 52	.20	.70	1.0	2.00	500	N	N	N	100
K2592C	58 48 50	155 53 1	.30	1.00	1.0	>2.00	500	N	N	N	100
K2593C	58 49 0	155 52 30	.70	1.50	2.0	1.50	1,000	N	N	N	100
K2594C	58 1 50	155 45 0	.50	10.00	5.0	.70	1,000	N	N	N	200
K2595C	58 3 30	155 46 22	.30	5.00	1.0	.50	500	N	N	N	50
K2596C	58 5 53	155 48 30	1.00	2.00	3.0	>2.00	1,000	N	N	N	50
K2600C	58 0 40	155 50 58	1.00	10.00	3.0	.20	500	N	N	N	50
K2602C	58 49 32	155 29 0	.50	5.00	2.0	2.00	2,000	N	N	N	50
K2603C	58 47 54	155 25 22	.20	2.00	1.0	.20	500	N	N	N	50
K2604C	58 48 0	155 25 0	.30	.70	.7	.20	200	N	N	N	30
K2606C	58 35 0	154 21 13	.50	7.00	30.0	.50	1,500	2.0	N	N	100
K2607C	58 35 2	154 20 49	.05	2.00	1.0	>2.00	300	N	N	N	100
K2608C	58 36 4	154 24 39	.20	3.00	10.0	>2.00	1,000	N	N	N	500
K2609C	58 37 3	154 31 56	.30	3.00	15.0	.70	200	N	N	N	700
K2610C	58 38 55	154 31 36	.70	2.00	10.0	2.00	1,000	N	N	N	200
K2611C	58 38 32	154 32 32	.50	5.00	10.0	1.50	1,000	N	N	N	50
K2614C	58 41 49	154 34 42	.50	5.00	2.0	>2.00	1,000	N	N	N	50
K2615C	58 41 58	154 34 47	.20	2.00	1.0	>2.00	1,500	N	N	N	100
K2616C	58 14 25	155 15 15	1.00	2.00	2.0	.50	700	N	N	N	50
K2617C	58 14 28	155 14 4	2.00	2.00	3.0	1.00	1,000	N	N	N	50
K2618C	58 14 19	155 22 48	.70	1.50	1.0	1.00	500	N	N	N	100
K2619C	58 13 51	155 20 58	1.00	2.00	10.0	.70	1,000	N	N	N	100
K2620C	58 13 45	155 20 59	2.00	3.00	5.0	.70	1,500	N	N	N	100
K2620CD	58 13 45	155 20 59	.10	2.00	1.0	.10	150	N	N	N	100
K2621C	58 11 34	155 31 42	.50	1.50	1.0	>2.00	1,000	N	N	N	100
K2622C	58 11 39	155 31 19	.50	2.00	1.5	>2.00	1,000	N	N	N	100
K2623C	58 10 50	155 28 5	.50	1.50	2.0	>2.00	1,000	N	N	N	100
K2624C	58 10 57	155 27 53	.20	.50	30.0	1.00	150	N	N	N	30
K2625C	58 12 35	155 32 42	1.00	2.00	2.0	>2.00	1,500	N	N	N	100
K2626C	58 12 11	155 34 10	1.00	2.00	2.0	2.00	1,500	N	N	N	100
K2627C	58 11 40	155 39 30	.20	1.50	1.0	>2.00	700	N	N	N	50
K2628C	58 9 36	155 39 30	.30	2.00	1.0	>2.00	500	N	N	N	70
K2629C	58 9 39	155 33 29	.50	2.00	1.5	>2.00	1,000	N	N	N	100
K2630C	58 9 12	155 37 10	.20	2.00	3.0	>2.00	500	N	N	N	70
K2631C	58 8 7	155 36 45	.20	2.00	.7	2.00	700	N	N	N	50
K2632C	58 6 55	155 34 3	.10	1.00	1.0	2.00	500	N	N	N	50
K2633C	58 5 52	155 33 0	.20	3.00	7.0	>2.00	700	N	N	N	50
K2634C	58 46 0	155 30 0	1.50	1.00	1.0	>2.00	700	N	N	N	500
K2637C	58 52 38	155 32 40	.15	<.10	.5	1.00	100	50.0	N	300	50
K2637CD	58 52 38	155 32 40	.05	.10	.2	.02	70	N	N	N	100
K2638C	58 48 22	155 21 25	2.00	1.50	2.0	>2.00	1,500	N	N	N	100
K2639C	58 44 20	155 18 0	.50	1.00	1.0	>2.00	500	N	N	N	100
K2641C	58 43 27	155 35 38	.30	1.00	.7	>2.00	500	N	N	N	100
K2642C	58 32 36	155 34 35	2.00	1.50	1.0	2.00	1,000	2.0	N	N	200
K2643C	58 32 26	155 31 49	1.50	1.50	1.0	>2.00	1,000	N	N	N	100
K2644C	58 47 31	155 44 47	.50	1.00	.5	>2.00	700	N	N	N	100
K2645C	58 49 48	155 44 50	.70	1.00	1.0	>2.00	1,000	N	N	N	100
K2649C	58 22 43	155 47 26	.20	.50	1.0	1.00	200	N	N	N	100
K2650C	58 23 15	155 45 10	.50	1.00	1.0	.20	200	N	N	N	100

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
76C	<2	N	N	20	100	200	N	10	N	100	100
77C	<2	N	N	20	100	100	150	<10	<50	100	20
78C	<2	N	N	10	<20	100	100	N	N	20	20
78CD	<2	N	N	10	20	20	50	N	N	N	N
79C	<2	N	N	150	20	200	N	N	N	100	50
81C	<2	N	N	<10	20	15	150	50	N	N	<20
82C	<2	N	N	10	<20	50	N	50	N	N	N
84C	<2	N	N	<10	<20	70	<50	N	N	N	100
84CD	<2	N	N	<10	N	15	<50	N	N	N	20
85C	N	N	N	<10	<20	10	<50	N	N	N	N
86C	N	N	N	N	20	<10	<50	N	N	N	200
90C	N	N	N	N	30	<10	50	<10	N	N	50
92C	N	N	N	N	50	<10	<50	<10	N	N	50
93C	N	N	N	10	100	10	N	N	N	N	100
94C	N	N	N	<10	<20	15	200	N	N	N	N
95C	N	N	N	N	100	10	100	N	N	N	N
96C	N	N	N	20	100	15	50	<10	50	<10	50
00C	N	N	N	10	20	20	N	N	N	N	N
02C	<2	N	N	<10	20	<10	100	N	N	N	N
03C	N	N	N	<10	<20	30	N	N	N	N	50
04C	N	N	N	<10	20	20	N	N	N	N	50
06C	<2	N	N	50	20	300	300	10	N	200	50
07C	N	N	N	N	N	10	100	N	N	N	N
08C	<2	N	N	30	<20	100	300	N	N	100	<20
09C	<2	N	N	20	20	70	N	20	N	50	N
10C	N	N	N	50	50	200	100	10	<50	50	100
11C	N	N	N	10	<20	50	300	10	N	50	<20
14C	N	N	N	10	20	10	200	N	<50	N	<20
15C	N	N	N	N	20	<10	500	<10	N	N	50
16C	N	N	N	20	30	20	N	N	N	N	20
17C	N	N	N	30	100	200	N	N	N	N	70
18C	N	N	N	10	20	10	<50	<10	N	N	20
19C	2	N	N	50	20	200	N	N	N	50	70
20C	N	N	N	30	50	200	N	N	N	N	70
20CD	N	N	N	N	<20	<10	N	N	N	N	<20
21C	N	N	N	10	50	10	200	15	<50	N	70
22C	N	N	N	10	100	15	200	<10	N	N	20
23C	N	N	N	20	50	20	100	N	N	20	50
24C	<2	N	N	200	<20	150	N	N	N	200	<20
25C	N	N	N	20	100	200	100	N	<50	N	100
26C	N	N	N	20	100	300	50	N	<50	N	50
27C	N	N	N	<10	20	20	50	N	<50	N	N
28C	<2	N	N	<10	<20	<10	<50	N	N	N	N
29C	N	N	N	15	70	20	100	N	<50	N	30
30C	<2	N	N	15	<20	10	<50	N	N	N	N
31C	<2	N	N	N	20	<10	<50	N	N	N	N
32C	N	N	N	N	<20	<10	N	N	N	N	N
33C	<2	N	N	50	<20	70	200	N	<50	100	20
34C	N	N	N	30	200	10	100	N	N	N	20
37C	N	N	N	N	<20	<10	N	N	N	N	N
37CD	N	N	N	N	N	<10	N	N	N	N	N
38C	N	N	N	50	100	10	50	N	N	N	20
39C	N	N	N	70	50	10	50	N	N	N	20
41C	N	N	N	<10	70	10	100	<10	N	N	50
42C	N	N	N	20	50	10	50	<10	N	N	50
43C	N	N	N	10	50	10	50	<10	N	N	50
44C	N	N	N	<10	50	10	100	<10	N	N	50
45C	N	N	N	10	100	10	100	N	N	N	30
49C	N	N	N	N	<20	<10	N	N	N	N	N
50C	N	N	N	<10	20	<10	N	N	N	N	50

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th
K2576C	N	N	N	1,000	50	N	100	N	>2,000	
K2577C	N	30	N	2,000	200	N	500	N	>2,000	
K2578C	N	10	N	2,000	100	N	200	N	>2,000	
K2578CD	N	10	N	1,000	150	N	150	N	>2,000	
K2579C	N	N	N	700	70	N	70	<500	>2,000	
K2581C	N	100	N	<200	200	N	1,000	N	>2,000	
K2582C	N	20	N	500	500	200	200	N	>2,000	
K2584C	N	20	N	500	150	<100	200	N	>2,000	
K2584CD	N	20	N	700	50	N	300	N	>2,000	
K2585C	N	100	<20	<200	100	N	1,000	N	>2,000	
K2586C	N	30	N	N	150	N	300	N	>2,000	
K2590C	N	50	N	N	150	N	700	N	>2,000	
K2592C	N	30	N	N	200	N	700	N	>2,000	
K2593C	N	20	N	1,000	100	N	150	N	>2,000	
K2594C	N	10	N	1,000	100	N	200	N	>2,000	
K2595C	N	20	N	300	50	N	200	N	>2,000	
K2596C	N	30	<20	<200	200	N	300	N	>2,000	
K2600C	N	<10	N	1,000	50	N	100	N	>2,000	
K2602C	N	50	N	500	150	N	500	N	>2,000	
K2603C	N	<10	N	1,000	30	N	70	N	>2,000	
K2604C	N	<10	<20	500	50	N	50	N	>2,000	
K2606C	N	20	N	700	70	N	300	N	>2,000	
K2607C	N	100	N	N	200	N	1,000	N	>2,000	
K2608C	N	70	N	<200	200	N	1,000	700	>2,000	
K2609C	N	<10	N	1,000	50	N	200	1,000	>2,000	
K2610C	N	15	N	700	200	N	300	N	>2,000	
K2611C	N	15	N	3,000	100	N	200	N	>2,000	
K2614C	N	50	<20	300	200	N	700	N	>2,000	
K2615C	N	50	30	N	500	N	1,500	N	>2,000	
K2616C	N	15	N	1,000	100	N	50	N	2,000	
K2617C	N	30	20	700	150	N	100	N	>2,000	
K2618C	N	10	<20	500	100	N	100	N	>2,000	
K2619C	N	10	N	1,000	100	N	100	N	>2,000	
K2620C	N	30	N	1,000	200	N	100	N	>2,000	
K2620CD	N	<10	N	1,000	20	N	100	N	>2,000	
K2621C	N	30	30	N	200	N	500	N	>2,000	
K2622C	N	30	<20	N	200	N	500	N	>2,000	
K2623C	N	30	<20	N	200	N	500	N	>2,000	
K2624C	N	<10	N	1,000	70	N	200	N	>2,000	
K2625C	N	50	20	500	200	N	500	N	>2,000	
K2626C	N	50	30	<200	200	N	500	N	>2,000	
K2627C	N	20	<20	N	100	N	300	N	>2,000	
K2628C	N	70	N	N	100	N	1,000	N	>2,000	
K2629C	N	30	20	N	200	N	500	N	>2,000	
K2630C	N	50	N	N	100	N	700	N	>2,000	
K2631C	N	70	N	N	150	N	700	N	>2,000	
K2632C	N	100	N	N	150	N	1,000	N	>2,000	
K2633C	N	100	N	N	200	N	1,000	N	>2,000	
K2634C	N	30	<20	N	200	N	300	N	>2,000	
K2637C	N	30	N	N	50	N	500	N	>2,000	
K2637CD	N	70	N	N	20	N	1,000	N	>2,000	
K2638C	N	50	N	2,000	200	N	300	N	>2,000	
K2639C	N	50	<20	N	150	N	700	N	>2,000	
K2641C	N	50	<20	N	150	N	500	N	>2,000	
K2642C	N	50	20	N	150	<100	700	N	>2,000	
K2643C	N	50	30	N	200	N	500	N	>2,000	
K2644C	N	50	<20	N	100	N	500	N	>2,000	
K2645C	N	50	<20	N	200	N	700	N	>2,000	
K2649C	N	70	N	N	50	N	700	N	>2,000	
K2650C	N	50	N	N	50	N	500	N	>2,000	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
1C	58 24 22	155 42 18	.70	1.00	1.0	.70	500	N	N	N	100	500
2C	58 18 50	155 44 0	.20	1.50	1.0	2.00	300	N	N	N	100	1,000
3C	58 16 9	155 40 53	1.50	3.00	1.0	2.00	1,000	N	N	N	100	1,000
5C	58 16 30	155 48 35	.30	1.50	1.5	>2.00	700	N	N	N	100	1,000
6C	58 14 10	155 58 20	.50	1.00	1.0	>2.00	1,000	70.0	N	200	100	700
8C	58 16 22	156 0 47	.20	1.00	1.0	2.00	300	200.0	N	1,000	200	700
9C	58 16 53	156 3 43	1.00	1.50	1.5	2.00	1,000	N	N	N	100	1,000
0C	58 16 56	156 4 9	.70	1.50	1.0	1.00	700	N	N	N	150	1,000
1C	58 21 27	156 2 41	.70	1.00	1.0	>2.00	700	N	N	N	150	300
2C	58 27 50	156 9 46	.50	1.00	.7	2.00	300	N	N	N	150	300
5C	58 11 25	156 12 32	.50	1.50	1.0	>2.00	1,000	N	N	N	100	500
5CD	58 11 25	156 12 32	.70	1.50	1.0	>2.00	1,000	N	N	N	100	700
7C	58 9 56	156 6 30	.70	1.50	1.0	>2.00	1,000	N	N	N	100	700
8C	58 10 42	156 1 0	1.00	2.00	2.0	>2.00	2,000	N	N	N	100	1,000
9C	58 12 10	156 3 45	.70	1.50	1.0	>2.00	2,000	N	N	N	100	1,000
0C	58 14 43	156 12 5	.50	3.00	1.5	>2.00	700	N	N	N	50	500
2C	58 2 39	156 25 16	2.00	2.00	2.0	.70	1,000	N	N	N	100	500
3C	58 5 47	156 21 20	.70	1.50	1.5	2.00	1,000	N	N	N	100	1,000
4C	58 8 32	156 32 25	.50	1.00	1.0	>2.00	500	N	N	N	100	700
6C	58 40 1	155 23 12	.50	5.00	1.5	1.50	1,000	N	N	N	50	300
8C	58 36 27	155 7 7	.50	5.00	1.5	>2.00	700	N	N	N	50	700
9C	58 38 17	155 2 9	1.00	10.00	10.0	>2.00	1,500	N	N	N	100	500
0C	58 38 46	155 3 38	.70	1.50	1.5	>2.00	1,500	N	N	N	100	500
1C	58 42 20	155 4 0	2.00	2.00	2.0	2.00	2,000	N	N	N	70	500
2C	58 42 24	155 1 13	.50	7.00	1.5	2.00	500	N	N	N	50	500
3C	58 43 1	155 0 0	.30	7.00	1.5	2.00	700	N	N	N	50	300
4C	58 42 40	154 58 42	.50	5.00	1.5	2.00	700	20.0	N	50	50	500
5C	58 48 0	156 28 17	.20	2.00	1.0	>2.00	500	N	N	N	50	300
4C	58 52 42	155 45 12	.10	2.00	.5	>2.00	500	N	N	N	20	100
8C	58 46 3	155 44 36	.20	2.00	1.0	>2.00	700	N	N	N	50	200
9C	58 1 30	156 16 52	.20	2.00	1.0	1.00	200	N	N	N	50	700
9CD	58 1 30	156 16 52	.20	2.00	.7	>2.00	300	N	N	N	50	700
0C	58 1 42	156 19 21	.20	2.00	1.0	>2.00	300	N	N	N	50	700
1C	58 1 0	156 14 50	1.00	5.00	2.0	>2.00	700	N	N	N	50	700
2C	58 1 0	156 14 22	.30	2.00	2.0	2.00	500	N	N	N	50	5,000
3C	58 0 40	156 12 0	.30	2.00	1.5	2.00	300	N	N	N	50	500
4C	58 0 7	156 10 40	.50	2.00	1.5	>2.00	700	N	N	N	50	700
5C	58 0 6	156 9 8	.30	2.00	1.0	1.50	500	N	N	N	50	700
7C	58 26 36	155 23 37	.50	3.00	1.5	>2.00	700	N	N	N	50	500
8C	58 26 41	155 23 19	.30	2.00	1.0	>2.00	500	N	N	N	70	700
9C	58 26 1	155 23 49	.30	5.00	1.0	>2.00	500	N	N	N	50	200
0C	58 25 33	155 22 28	.50	3.00	1.5	>2.00	1,000	N	N	N	50	300
1C	58 22 30	155 14 0	.30	3.00	10.0	.70	500	1,000.0	N	>1,000	50	1,500
2C	58 23 44	155 12 22	.50	5.00	3.0	.70	700	200.0	N	200	50	500
3C	58 23 52	155 12 19	.50	5.00	1.0	.30	300	N	N	N	70	700
4C	58 25 48	155 13 59	.20	5.00	1.5	.50	300	N	N	N	50	700
5C	58 25 45	155 13 30	.30	5.00	2.0	1.00	300	N	N	N	70	700
6C	58 24 22	155 4 20	5.00	10.00	7.0	1.00	2,000	N	N	N	50	500
7C	58 24 22	155 4 42	1.00	5.00	3.0	.30	500	N	N	N	50	700
8C	58 24 32	155 6 40	.70	7.00	3.0	.30	500	N	N	N	50	700
9C	58 23 41	155 2 40	.20	5.00	1.5	.30	200	N	N	N	100	500
0C	58 22 50	155 0 57	.20	3.00	2.0	.30	500	100.0	N	N	50	>10,000
1C	58 21 11	154 59 13	.20	7.00	5.0	.10	200	50.0	N	N	50	5,000
2C	58 20 19	154 59 10	.20	3.00	20.0	.30	300	2.0	N	N	20	10,000
3C	58 20 14	155 33 35	.50	7.00	2.0	.15	300	N	N	N	50	700
4C	58 20 12	155 34 0	.70	5.00	1.5	.50	700	N	N	N	50	1,000
7C	58 19 16	155 28 10	.70	20.00	1.0	.10	1,000	N	N	N	50	300
8C	58 16 25	155 34 0	.70	5.00	2.0	>2.00	1,500	N	N	N	50	100
9C	58 16 15	155 34 10	.50	3.00	1.5	2.00	300	N	N	N	200	1,000
0C	58 16 55	155 38 30	.50	7.00	1.5	.50	700	N	N	N	30	300

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K2651C	N	N	N	<10	50	15	<50	N	N	N
K2652C	N	N	N	<10	<20	<10	N	N	N	N
K2653C	N	N	N	10	100	10	200	N	N	N
K2655C	N	N	N	<10	<20	<10	N	N	N	N
K2656C	<2	N	N	10	50	30	N	N	N	N
K2658C	N	N	N	<10	<20	<10	N	N	N	N
K2659C	N	70	N	<10	100	<10	N	N	N	N
K2660C	N	N	N	20	50	<10	<50	N	N	N
K2661C	N	N	N	<10	70	<10	1,000	N	N	N
K2662C	N	N	N	<10	50	<10	<50	N	N	N
K2665C	N	N	N	10	100	<10	150	<10	<50	N
K2665CD	N	N	N	10	100	<10	100	N	50	N
K2667C	N	N	N	<10	150	<10	100	N	<50	N
K2668C	N	N	N	20	100	10	100	20	50	N
K2669C	N	N	N	<10	50	<10	500	N	N	N
K2670C	<2	N	N	<10	20	<10	50	N	50	N
K2672C	N	N	N	20	30	<10	<50	N	N	N
K2673C	N	N	N	10	100	<10	50	N	<50	N
K2674C	N	N	N	<10	50	<10	50	N	<50	N
K2676C	<2	N	N	<10	20	<10	50	<10	N	N
K2678C	<2	N	N	<10	30	10	50	N	N	N
K2679C	<2	N	N	50	50	1,500	200	N	N	20
K2680C	N	N	N	20	100	10	200	N	70	N
K2681C	N	N	N	20	150	150	50	N	<50	N
K2682C	<2	N	N	<10	20	20	100	N	N	N
K2683C	<2	N	N	<10	20	200	200	10	N	N
K2684C	<2	N	N	10	300	15	50	70	N	N
K2685C	<2	N	N	<10	20	<10	100	N	N	N
K3004C	<2	N	N	N	150	10	180	50	N	N
K3008C	<2	N	N	N	20	10	100	N	N	N
K3009C	<2	N	N	<10	20	<10	N	N	N	N
K3009CD	<2	N	N	<10	<20	<10	<50	N	N	N
K3010C	<2	N	N	<10	20	10	<50	N	N	N
K3011C	<2	N	N	20	100	10	100	<10	50	N
K3012C	<2	N	N	<10	20	50	<50	N	N	N
K3013C	<2	N	N	<10	50	<10	<50	N	N	N
K3014C	<2	N	N	<10	100	<10	50	<10	N	N
K3015C	<2	N	N	<10	<20	<10	<50	N	N	N
K3017C	<2	N	N	<10	20	15	50	N	N	N
K3018C	<2	N	N	<10	50	10	50	N	N	N
K3019C	<2	N	N	<10	<20	20	150	N	N	N
K3020C	<2	N	N	<10	70	10	100	N	N	N
K3021C	<2	N	N	100	30	150	<50	200	N	50
K3022C	<2	N	N	<10	<20	20	150	<10	N	N
K3023C	<2	N	N	<10	50	10	<50	N	N	N
K3024C	<2	N	N	<10	<20	<10	N	N	N	N
K3025C	<2	N	N	10	<20	20	<50	N	N	N
K3026C	<2	N	N	50	150	100	N	N	N	<10
K3027C	<2	N	N	10	100	15	<50	<10	N	N
K3028C	<2	N	N	10	20	20	N	N	N	N
K3029C	<2	N	N	<10	<20	<10	N	N	N	N
K3030C	<2	N	N	<10	<20	15	N	N	N	N
K3031C	2	N	N	20	<20	100	N	50	N	<10
K3032C	<2	N	N	100	<20	150	N	N	N	100
K3033C	<2	N	N	<10	<20	10	150	<10	N	N
K3034C	<2	N	N	<10	<20	<10	100	N	N	N
K3037C	<2	N	N	<10	<20	10	2,000	N	N	N
K3038C	N	N	N	<10	50	10	300	N	N	N
K3039C	<2	N	N	<10	20	10	<50	N	N	N
K3040C	<2	N	N	<10	<20	<10	500	N	N	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

ample	Sb-ppm s	Sc-ppm s	Sm-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
51C	N	70	N	N	100	N	700	N	>2,000	N
52C	N	10	N	500	50	N	100	N	>2,000	N
53C	N	50	N	1,000	100	N	300	N	>2,000	N
55C	N	30	N	500	200	N	150	N	>2,000	N
56C	N	50	20	N	150	N	1,000	N	>2,000	N
58C	N	50	N	N	70	N	1,000	N	>2,000	N
59C	N	50	N	<200	100	N	200	N	>2,000	N
60C	N	20	<20	500	100	N	700	N	>2,000	500
61C	N	70	<20	N	150	N	2,000	N	>2,000	N
62C	N	50	N	N	100	N	700	N	>2,000	N
65C	N	30	<20	N	150	N	500	N	>2,000	N
65CD	N	30	20	N	150	N	500	N	>2,000	N
67C	N	30	30	N	200	N	1,000	N	>2,000	N
68C	N	30	20	500	200	N	1,000	N	>2,000	N
69C	N	50	20	N	200	N	1,500	N	>2,000	N
70C	N	50	N	<200	200	N	500	N	>2,000	N
72C	N	15	N	700	70	N	20	N	200	N
73C	N	20	<20	500	150	N	200	N	>2,000	N
74C	N	20	<20	<200	150	N	300	N	>2,000	N
76C	N	30	N	500	100	<100	500	N	>2,000	N
78C	N	20	N	500	100	N	200	N	>2,000	N
79C	N	30	<20	200	300	N	300	500	>2,000	N
80C	N	30	<20	<200	200	<100	200	N	>2,000	N
81C	N	50	N	500	300	N	200	N	>2,000	N
82C	N	N	N	700	100	<100	100	N	>2,000	N
83C	N	10	N	700	150	2,000	200	N	>2,000	N
84C	N	20	N	500	150	5,000	200	N	>2,000	N
85C	N	70	N	N	200	N	700	N	>2,000	N
04C	N	100	N	N	200	150	1,000	N	>2,000	N
08C	N	100	N	<200	200	N	1,000	N	>2,000	N
09C	N	30	N	200	70	N	200	N	>2,000	N
09CD	N	70	N	500	150	N	500	N	>2,000	N
10C	N	20	>2,000	500	150	N	300	N	>2,000	N
11C	N	50	N	300	200	N	1,000	N	>2,000	N
12C	N	70	N	<200	100	N	1,000	1,000	>2,000	N
13C	N	50	N	<200	100	N	500	N	>2,000	N
14C	N	50	<20	500	300	N	500	N	>2,000	N
15C	N	15	N	300	100	N	200	N	>2,000	N
17C	N	50	N	300	300	150	300	N	>2,000	N
18C	N	30	20	500	200	N	500	N	>2,000	N
19C	N	50	N	<200	300	N	700	N	>2,000	N
20C	N	20	N	N	300	N	1,000	N	>2,000	N
21C	N	10	N	700	50	N	200	N	>2,000	N
22C	N	10	N	1,000	500	N	200	N	>2,000	N
23C	N	10	N	1,000	20	N	70	N	>2,000	N
24C	N	<10	N	700	50	100	100	N	>2,000	N
25C	N	30	N	500	50	N	300	N	>2,000	N
26C	N	50	N	700	200	N	100	N	>2,000	N
27C	N	10	N	1,500	50	N	100	N	>2,000	N
28C	N	<10	N	1,000	50	N	70	N	>2,000	N
29C	N	<10	N	1,000	20	N	50	N	>2,000	N
30C	N	N	N	1,000	100	N	100	N	>2,000	N
31C	N	N	N	1,000	<20	N	20	700	>2,000	N
32C	N	N	N	1,000	20	N	50	<500	>2,000	N
33C	N	<10	N	1,000	20	N	200	N	>2,000	N
34C	N	15	N	1,000	70	N	150	N	>2,000	N
37C	N	20	N	700	50	N	1,000	N	>2,000	N
38C	N	70	N	N	500	N	1,500	N	>2,000	N
39C	N	50	N	200	100	N	500	N	>2,000	N
40C	N	20	N	1,000	30	N	700	N	>2,000	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K3042C	58 23 10	155 38 25	.30	5.00	1.0	2.00	500	N	N	N	100
K3043C	58 23 20	155 38 36	.50	3.00	1.5	2.00	300	N	N	N	50
K3044C	58 23 31	155 35 53	.50	5.00	1.5	1.50	700	5.0	N	N	50
K3045C	58 27 45	155 31 0	.20	5.00	1.0	>2.00	500	30.0	N	200	70
K3046C	58 29 40	155 22 42	.50	5.00	2.0	>2.00	700	N	N	N	3,000
K3048C	58 28 15	155 1 5	2.00	10.00	3.0	.50	1,000	N	N	N	70
K3049C	58 25 38	154 57 9	1.00	5.00	2.0	>2.00	1,500	1,000.0	N	700	70
K3051C	58 23 11	154 55 26	1.50	3.00	10.0	2.00	700	2.0	N	N	50
K3053C	58 26 49	154 54 45	2.00	7.00	5.0	1.00	2,000	10.0	N	N	50
K3054C	58 23 14	154 49 32	1.00	7.00	5.0	1.00	1,000	N	N	N	50
K3055C	58 23 49	155 26 2	.30	2.00	1.5	2.00	500	20.0	N	100	50
K3062C	58 23 36	156 11 29	.20	1.00	1.0	2.00	300	N	N	N	150
K3065C	58 21 33	155 55 45	.30	.50	1.0	2.00	300	N	N	N	100
K3067C	58 24 32	155 55 28	.15	.20	.5	1.50	200	N	N	N	100
K3069C	58 33 50	155 50 36	2.00	2.00	2.0	>2.00	1,500	N	2,000	N	300
K3069CD	58 33 50	155 50 36	1.50	2.00	2.0	>2.00	1,000	N	5,000	N	1,000
K3070C	58 34 53	155 48 55	.70	1.00	1.0	>2.00	1,000	100.0	N	1,000	150
K3071C	58 34 59	155 48 59	1.00	2.00	1.5	>2.00	1,500	N	N	N	200
K3074C	58 32 33	155 59 50	.50	5.00	1.5	>2.00	1,000	100.0	N	500	100
K3075C	58 20 15	155 44 0	.20	2.00	1.0	.30	200	N	N	N	50
K3076C	58 19 57	155 44 10	.50	3.00	2.0	>2.00	500	N	N	N	50
K3076CD	58 19 57	155 44 10	.50	1.50	1.5	2.00	700	N	N	N	50
K3077C	58 2 42	155 46 10	.50	5.00	2.0	.70	300	N	N	N	50
K3078C	58 6 30	155 51 12	1.00	5.00	2.0	>2.00	700	N	N	N	50
K3079C	58 5 22	155 56 30	3.00	5.00	2.0	2.00	1,500	N	N	N	50
K3080C	58 1 30	155 57 58	1.50	5.00	2.0	.50	700	N	N	N	50
K3081C	58 0 4	155 47 10	1.00	7.00	2.0	.50	500	N	N	N	50
K3082C	58 0 3	155 46 28	.50	2.00	20.0	1.00	700	N	N	N	20
K3102C	58 50 0	156 27 5	.70	5.00	1.5	>2.00	1,000	N	N	N	100
K3102CD	58 50 0	156 27 5	.50	5.00	1.5	>2.00	700	N	N	N	100
K3104C	58 51 23	156 14 56	.50	3.00	1.5	>2.00	500	N	N	N	50
K3105C	58 51 10	156 14 40	.50	2.00	2.0	>2.00	500	N	N	N	70
K3106C	58 49 50	156 11 55	.30	2.00	1.5	2.00	300	N	N	20	100
K3108C	58 46 29	156 6 5	2.00	5.00	2.0	2.00	1,000	N	N	N	200
K3109C	58 49 41	156 7 2	.20	2.00	1.5	>2.00	500	N	N	N	70
K3110C	58 51 23	156 5 59	.20	2.00	1.5	2.00	700	N	N	N	70
K3111C	58 52 27	156 5 0	.50	3.00	1.0	2.00	700	N	N	N	70
K3112C	58 52 26	156 4 41	.20	2.00	1.5	2.00	700	N	N	N	70
K3113C	58 51 46	156 4 12	.10	2.00	.7	2.00	300	N	N	N	70
K3114C	58 55 25	156 13 0	.10	1.00	.5	>2.00	150	N	N	N	70
K3116C	58 55 12	156 13 6	.30	2.00	1.0	>2.00	500	N	N	N	70
K3117C	58 58 13	156 14 35	.20	3.00	1.0	>2.00	300	N	N	N	100
K3118C	58 58 2	156 2 2	.20	2.00	.7	1.50	200	500.0	N	1,000	50
K3119C	58 58 0	156 1 30	.30	2.00	1.0	>2.00	500	30.0	N	150	100
K3120C	58 43 3	155 11 30	.10	2.00	.5	.30	200	N	N	N	100
K3121C	58 43 34	155 8 40	.10	2.00	.5	1.00	200	N	N	N	50
K3122C	58 46 8	155 11 44	.30	2.00	2.0	1.00	300	N	N	N	50
K3122CD	58 46 8	155 11 44	.10	3.00	1.0	1.50	200	N	N	N	50
K3123C	58 48 42	155 13 0	.10	1.00	.5	.20	100	N	N	N	70
K3124C	58 50 45	155 17 13	.20	1.50	.5	1.00	200	N	N	N	50
K3125C	58 50 49	155 17 18	.50	3.00	1.5	2.00	500	N	N	N	50
K3126C	58 53 20	155 18 50	.10	2.00	.5	.70	200	700.0	N	>1,000	50
K3127C	58 52 2	155 18 0	.30	3.00	1.0	>2.00	500	N	N	N	70
K3128C	58 53 21	155 23 12	.10	1.50	.7	.30	300	N	N	N	100
K3129C	58 54 17	155 27 35	.10	2.00	.5	1.50	200	N	N	N	200
K3130C	58 47 17	155 49 32	.05	.50	.5	1.00	100	N	N	N	30
K3132C	58 50 20	155 52 30	.07	2.00	.5	.50	300	N	N	N	50
K3133C	58 55 18	155 57 22	.10	1.00	1.0	1.00	200	N	N	N	50
K3134C	58 55 18	155 57 14	.20	2.00	1.0	2.00	1,000	N	N	N	50
K3136C	58 56 32	155 28 12	.10	2.00	1.0	>2.00	500	N	N	N	50

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
2C	<2	N	N	<10	<20	<10	<50	N	N	N	N
3C	<2	N	N	<10	<20	10	<50	N	N	N	N
4C	<2	N	N	<10	20	10	100	N	N	N	<20
5C	<2	N	N	<10	<20	10	<50	N	N	N	N
6C	<2	N	N	10	30	20	100	N	N	N	N
8C	<2	N	N	20	30	10	N	N	N	10	<20
9C	<2	N	N	50	100	200	50	N	<50	10	2,000
1C	<2	N	N	70	70	150	<50	50	N	50	1,500
3C	<2	N	N	50	100	100	N	N	N	10	7,000
4C	<2	N	N	20	20	100	N	N	N	<10	300
5C	<2	N	N	<10	50	20	50	N	N	N	N
2C	N	N	N	N	20	<10	<50	N	N	N	100
5C	N	N	N	N	20	<10	1,000	N	N	N	150
7C	N	N	N	N	<20	<10	N	N	N	N	70
9C	N	N	N	50	200	150	100	<10	50	10	20,000
9CD	N	N	N	50	200	200	100	<10	70	N	>50,000
0C	N	N	N	10	100	<10	100	N	N	N	100
1C	N	N	N	<10	100	10	200	N	N	N	150
4C	<2	N	N	<10	50	<10	100	N	N	N	20
5C	N	N	N	N	200	20	50	N	N	N	N
6C	N	N	N	30	30	15	N	N	N	N	N
6CD	N	N	N	20	20	300	N	N	N	N	70
7C	N	N	N	<10	<20	10	N	N	N	N	N
8C	<2	N	N	<10	100	<10	50	<10	<50	N	<20
9C	N	N	N	20	150	10	50	N	N	20	30
0C	N	N	N	15	70	10	N	N	N	N	N
1C	<2	N	N	10	50	500	N	N	N	N	N
2C	N	N	N	20	100	200	<50	50	N	50	50
2C	<2	N	N	<10	100	<10	200	<10	N	N	N
2CD	<2	N	N	<10	100	<10	150	N	<50	N	<20
4C	<2	N	N	<10	70	<10	50	N	N	N	N
5C	<2	N	N	<10	50	10	<50	<10	N	N	N
6C	<2	N	N	N	20	10	50	N	N	N	N
8C	<2	N	N	15	200	20	70	N	N	N	N
9C	<2	N	N	<10	20	<10	50	N	N	N	N
0C	<2	N	N	<10	20	<10	50	20	N	N	<20
1C	<2	N	N	<10	20	10	50	<10	N	N	N
2C	<2	N	N	<10	20	15	<50	N	N	N	N
3C	N	N	N	N	20	10	100	20	N	N	N
4C	N	N	N	N	30	<10	<50	N	N	N	N
6C	<2	N	N	N	50	10	<50	N	N	N	N
7C	N	N	N	N	50	<10	50	N	N	N	N
8C	N	N	N	N	30	10	<50	N	N	N	N
9C	<2	N	N	N	<20	10	<50	N	N	N	N
0C	<2	N	N	N	N	10	50	N	N	N	N
1C	<2	N	N	N	<20	<10	<50	15	N	N	N
2C	<2	N	N	30	<20	10	N	N	N	N	N
2CD	<2	N	N	30	N	<10	<50	N	N	N	N
3C	<2	N	N	N	N	<10	<50	N	N	N	N
4C	N	N	N	N	<20	<10	<50	N	N	N	N
5C	<2	N	N	N	20	10	50	N	N	N	N
6C	<2	N	N	N	<20	<10	50	N	N	N	N
7C	<2	N	N	N	<20	<10	100	N	N	N	N
8C	N	N	N	N	N	15	N	N	N	N	N
9C	N	N	N	N	<20	<10	<50	N	N	N	N
0C	<2	N	N	N	50	<10	50	N	N	N	70
2C	N	N	N	N	N	10	50	N	N	N	N
3C	<2	N	N	N	<20	10	<50	N	N	N	N
4C	N	N	N	N	<20	10	150	N	N	N	N
6C	N	N	N	N	50	<10	50	N	N	N	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th
K3042C	N	20	N	500	100	N	300	N	>2,000	
K3043C	N	15	N	500	100	N	200	N	>2,000	
K3044C	N	20	N	500	100	N	200	N	>2,000	
K3045C	N	50	N	200	200	N	700	N	>2,000	
K3046C	N	50	N	200	300	N	700	N	>2,000	
K3048C	N	20	N	700	100	N	70	N	200	
K3049C	N	30	N	500	1,000	N	200	N	>2,000	
K3051C	N	20	N	700	200	N	100	N	>2,000	
K3053C	N	20	N	700	300	N	100	1,500	>2,000	
K3054C	N	15	N	700	70	N	50	N	>2,000	
K3055C	N	70	N	200	200	N	500	N	>2,000	
K3062C	N	70	N	N	150	N	1,000	N	>2,000	
K3065C	N	50	<20	N	50	N	1,000	N	>2,000	
K3067C	N	70	N	N	100	N	1,000	N	>2,000	
K3069C	N	70	20	500	1,500	<100	500	N	>2,000	
K3069CB	N	30	N	200	3,000	N	500	N	>2,000	
K3070C	N	50	20	N	500	N	500	N	>2,000	
K3071C	N	30	<20	300	200	N	500	N	>2,000	
K3074C	N	100	20	<200	200	N	1,000	N	>2,000	
K3075C	N	70	N	<200	50	N	500	N	>2,000	
K3076C	N	50	N	200	500	N	300	N	>2,000	
K3076CB	N	20	30	200	100	N	200	N	>2,000	
K3077C	N	10	N	500	70	N	100	N	>2,000	
K3078C	N	30	N	200	200	N	500	N	>2,000	
K3079C	N	30	N	1,000	200	N	200	N	>2,000	
K3080C	N	20	N	1,000	100	N	100	N	>2,000	
K3081C	N	10	N	700	100	N	100	N	>2,000	
K3082C	N	15	N	500	200	N	150	N	>2,000	
K3102C	N	100	<20	N	500	N	1,000	N	>2,000	
K3102CD	N	50	20	<200	300	N	500	N	>2,000	
K3104C	N	50	N	<200	200	N	500	N	>2,000	
K3105C	N	20	N	500	200	N	300	N	>2,000	
K3106C	N	50	N	<200	100	N	500	N	>2,000	
K3108C	N	50	N	N	200	N	700	N	>2,000	
K3109C	N	50	N	N	100	N	700	N	>2,000	
K3110C	N	70	N	<200	100	N	700	N	>2,000	
K3111C	N	50	N	200	100	150	700	N	>2,000	
K3112C	N	30	N	200	100	N	500	N	>2,000	
K3113C	N	100	N	N	100	N	1,500	N	>2,000	
K3114C	N	100	N	N	100	N	1,500	N	>2,000	
K3116C	N	70	N	N	200	N	1,500	N	>2,000	
K3117C	N	50	N	200	150	N	700	N	>2,000	
K3118C	N	100	N	N	70	N	1,500	N	>2,000	
K3119C	N	50	N	<200	200	N	1,000	N	>2,000	
K3120C	N	50	N	200	20	N	500	N	>2,000	
K3121C	N	50	N	N	50	100	700	N	>2,000	
K3122C	N	<10	N	<200	50	<100	100	N	>2,000	
K3122CD	N	10	N	<200	50	N	200	N	>2,000	
K3123C	N	20	N	<200	20	N	200	N	>2,000	
K3124C	N	100	N	N	70	N	1,500	N	>2,000	
K3125C	N	30	N	200	100	N	500	N	>2,000	
K3126C	N	70	N	N	50	N	700	N	>2,000	
K3127C	N	30	N	<200	200	N	700	N	>2,000	
K3128C	N	50	N	<200	20	N	700	N	>2,000	
K3129C	N	100	N	N	100	N	1,000	N	>2,000	
K3130C	N	30	N	200	500	<100	300	N	>2,000	
K3132C	N	100	N	N	50	N	2,000	N	>2,000	
K3133C	N	100	N	N	70	N	1,000	N	>2,000	
K3134C	N	200	N	N	100	N	2,000	N	>2,000	
K3136C	N	100	N	N	200	N	1,500	N	>2,000	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

le	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
7C	58 56 14	155 21 42	.20	2.00	.5	2.00	1,000	N	N	N	3,000	1,000
9C	58 54 19	155 18 52	.05	2.00	.5	.30	300	N	N	N	50	50
7C	58 54 2	155 14 49	.10	2.00	.7	.70	500	N	N	N	150	200
1C	58 52 32	155 12 2	.20	5.00	1.0	1.00	300	N	N	N	30	100
1CD	58 52 32	155 12 2	.10	3.00	.5	1.50	500	10.0	N	50	20	100
3C	58 46 24	155 17 56	.10	3.00	.5	1.00	300	N	N	N	20	150
3C	58 50 40	155 22 25	.05	1.00	.5	.70	300	N	N	N	20	>10,000
3C	58 51 8	155 24 33	.15	3.00	.7	2.00	500	N	N	N	50	200
9C	58 42 17	154 49 43	.15	2.00	2.0	>2.00	1,000	N	N	N	50	1,000
1C	58 44 5	154 40 27	.15	3.00	7.0	2.00	500	50.0	N	150	500	5,000
2C	58 44 10	154 40 34	.20	3.00	1.0	>2.00	500	N	N	N	5,000	3,000
3C	58 43 56	154 41 0	<.05	2.00	10.0	.50	300	100.0	1,000	1,000	500	>10,000
4C	58 42 11	154 39 50	.20	1.50	5.0	1.50	300	N	N	N	50	500
3C	58 43 0	154 32 30	.20	3.00	.5	>2.00	1,000	N	N	N	100	200
6C	58 40 38	154 11 46	.20	2.00	7.0	.20	500	N	N	N	2,000	>10,000
8C	58 40 16	154 6 8	.10	2.00	7.0	1.00	500	N	N	N	5,000	500
9C	58 40 50	153 52 20	.05	1.00	50.0	.50	100	10.0	1,000	<20	30	7,000
0C	58 40 49	153 52 2	.10	1.50	20.0	.70	500	2.0	<500	N	20	500
1C	58 37 44	153 48 58	.20	3.00	2.0	>2.00	300	5.0	500	N	3,000	2,000
2C	58 39 36	153 41 50	.30	2.00	5.0	>2.00	300	>10,000.0	3,000	>1,000	300	>10,000
3C	58 42 43	153 39 3	.20	1.50	15.0	1.00	500	1.0	1,000	N	50	5,000
4C	58 41 2	153 34 10	.15	2.00	1.0	.50	300	10.0	N	N	100	2,000
8C	58 42 43	153 30 15	.20	2.00	1.0	1.00	700	N	N	N	100	200
5C	58 45 5	153 27 25	.05	3.00	.7	>2.00	300	N	5,000	N	2,000	500
7C	58 54 47	153 22 57	.10	1.00	1.0	1.00	200	N	N	N	200	500
8C	58 53 14	153 20 45	.15	1.50	1.0	>2.00	500	N	500	N	300	1,500
0C	58 51 3	153 24 15	.10	2.00	2.0	2.00	200	N	500	N	100	200
9CD	58 51 3	153 24 15	.05	1.00	1.5	.30	200	N	<500	N	70	500
0C	58 47 30	153 26 3	.05	1.00	15.0	.30	300	N	1,000	N	50	3,000
1C	58 56 25	153 32 48	.10	1.00	1.0	1.00	200	N	N	N	100	500
2C	58 56 50	153 34 10	.15	.50	20.0	1.00	200	N	N	N	50	10,000
3C	58 56 48	153 34 32	.50	2.00	2.0	.70	300	N	N	N	70	2,000
6C	58 53 57	153 43 14	.10	2.00	5.0	1.00	300	10.0	1,000	30	200	5,000
5C	58 53 45	153 43 20	.05	.50	10.0	.50	200	2.0	1,500	N	50	3,000
7C	59 2 16	154 0 2	.15	3.00	1.0	>2.00	2,000	N	N	N	200	100
9C	58 57 0	153 53 30	.15	3.00	3.0	>2.00	1,500	N	N	N	1,000	700
0C	58 53 30	153 55 42	.05	2.00	3.0	>2.00	300	N	N	N	50	5,000
1C	58 49 13	153 59 33	.15	2.00	2.0	>2.00	300	N	N	N	3,000	>10,000
2C	58 49 0	153 59 40	.10	2.00	20.0	1.00	300	1.0	N	N	20	>10,000
3C	58 48 59	153 59 52	.05	3.00	2.0	.30	500	N	N	N	1,000	>10,000
4C	58 49 1	153 51 43	.05	1.00	5.0	2.00	200	N	N	20	70	>10,000
5C	58 52 28	153 52 45	.15	3.00	5.0	>2.00	1,000	N	N	N	5,000	7,000
6C	58 50 47	153 46 50	.10	3.00	1.0	>2.00	500	N	N	N	100	5,000
7C	58 54 18	154 47 52	.10	1.00	.7	.20	200	N	N	N	50	500
8C	58 52 36	154 40 35	.20	2.00	1.0	.20	200	N	N	N	70	500
9C	58 50 50	154 41 25	.20	3.00	1.5	>2.00	500	N	N	N	70	1,500
0C	58 48 26	154 40 12	.70	3.00	2.0	1.00	1,000	N	N	N	50	200
0CD	58 48 26	154 40 12	.20	2.00	1.0	2.00	500	N	N	N	50	200
1C	58 48 32	154 40 32	.20	2.00	.5	.70	100	5.0	N	20	50	500
2C	58 49 48	154 51 37	.30	7.00	5.0	>2.00	1,000	50.0	N	N	50	1,000
6C	58 46 29	154 46 40	.20	5.00	1.0	.50	200	N	N	N	50	1,000
8C	58 48 5	154 52 50	.30	2.00	2.0	.50	200	N	N	N	70	300
5C	58 45 37	155 1 58	.50	3.00	2.0	>2.00	1,000	N	2,000	N	50	300
6C	58 49 58	154 8 18	.15	3.00	1.0	2.00	1,000	N	N	N	1,500	1,000
7C	58 54 19	154 9 48	.20	7.00	7.0	1.00	500	N	<500	N	5,000	7,000
8C	58 56 41	154 4 25	.20	5.00	5.0	>2.00	700	N	N	N	200	100
9C	58 56 44	154 4 10	.10	5.00	7.0	1.00	500	N	500	N	200	150
1C	58 46 10	154 2 38	.05	3.00	1.0	.70	700	N	N	N	>5,000	>10,000
2C	58 44 1	153 52 38	.05	2.00	5.0	.10	300	N	N	N	1,000	3,000
3C	58 46 57	154 4 11	1.00	5.00	1.0	.50	700	N	N	N	>5,000	5,000

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	P
K3137C	N	N	N	N	50	<10	100	N	N	N	
K3138C	N	N	N	N	<20	<10	50	N	N	N	
K3139C	N	N	N	N	<20	<10	100	N	N	N	
K3141C	N	N	N	N	20	<10	200	20	N	N	
K3141CD	N	N	N	N	<20	<10	200	N	N	N	
K3143C	N	N	N	N	<20	<10	100	N	N	N	
K3144C	N	N	N	N	<20	<10	<50	N	N	N	
K3145C	N	N	N	N	<20	10	150	N	N	N	
K3300C	N	N	N	10	20	15	500	N	<50	N	
K3301C	<2	N	N	150	<20	100	50	N	N	15	
K3302C	N	N	N	20	30	10	100	N	N	<10	
K3303C	N	N	N	70	<20	50	50	N	N	50	
K3304C	N	N	N	N	N	<10	100	N	N	N	
K3305C	N	N	N	N	<20	<10	500	N	N	N	
K3306C	N	N	N	10	<20	50	N	10	N	50	
K3308C	<2	N	N	20	<20	200	N	10	N	100	
K3309C	N	20	N	500	<20	500	N	50	N	300	
K3310C	N	N	N	200	<20	100	100	N	N	200	
K3311C	N	500	N	70	30	500	100	200	<50	10	
K3312C	N	N	150	500	20	200	N	500	<50	20	
K3313C	N	N	N	100	20	100	N	N	N	150	
K3314C	<2	N	N	<10	<20	100	N	1,000	N	N	
K3315C	2	N	N	10	50	10	N	N	N	N	
K3316C	N	<20	N	100	100	70	50	20	50	10	
K3317C	<2	N	N	20	20	20	N	50	N	N	
K3318C	<2	N	N	50	30	15	N	N	N	N	
K3319C	N	N	N	70	20	200	N	N	N	15	
K3319CD	N	N	N	50	<20	20	N	N	N	N	
K3320C	N	N	N	70	<20	300	N	N	N	70	
K3321C	N	N	N	<10	<20	300	N	N	N	N	
K3322C	N	N	N	50	100	200	N	N	N	100	
K3323C	<2	N	N	10	50	200	N	N	N	50	
K3325C	<2	N	N	200	<20	200	N	N	N	100	1
K3326C	N	N	N	500	<20	20	N	N	N	500	
K3327C	N	N	N	<10	<20	<10	300	N	<50	N	
K3329C	<2	N	N	10	30	30	300	<10	<50	10	
K3330C	N	N	N	<10	<20	15	100	N	N	10	
K3331C	<2	N	N	15	30	15	200	N	N	50	
K3332C	N	500	N	70	<20	100	50	N	N	500	
K3333C	N	N	N	<10	<20	15	200	N	N	10	
K3334C	2	N	N	100	<20	20	N	N	N	70	
K3335C	N	N	N	10	50	30	200	N	N	10	
K3336C	<2	N	N	<10	20	10	70	N	N	N	
K3337C	<2	N	N	<10	<20	20	N	N	N	N	
K3338C	<2	N	N	<10	N	50	N	N	N	N	
K3339C	<2	N	N	10	<20	70	50	N	N	N	
K3340C	<2	N	N	20	20	20	200	N	N	N	
K3340CD	<2	N	N	10	20	100	200	N	N	N	
K3341C	<2	N	N	N	<20	20	<50	N	N	N	
K3342C	<2	1,000	50	100	20	200	200	20	N	20	
K3343C	N	N	N	<10	<20	<10	N	N	N	N	
K3344C	N	N	N	15	20	50	N	N	50	N	
K3345C	<2	<20	<50	50	50	20	100	N	N	N	
K3346C	N	N	N	<10	<20	15	200	N	N	N	
K3347C	N	N	50	20	<20	50	70	<10	N	20	
K3348C	N	N	N	10	20	150	200	N	N	20	
K3349C	N	N	N	<10	<20	100	N	N	N	N	
K3351C	<2	N	N	N	<20	30	500	N	N	N	
K3352C	N	N	N	50	<20	10	300	N	N	50	
K3353C	N	N	N	N	<20	10	300	N	N	N	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
7C	N	100	N	N	70	N	2,000	N	>2,000	N
8C	N	70	N	N	50	N	1,500	N	>2,000	N
9C	N	100	N	N	50	N	1,500	N	>2,000	N
1C	N	100	N	N	70	N	1,500	N	>2,000	N
1CD	N	100	N	N	100	N	1,500	N	>2,000	N
3C	N	100	N	<200	50	N	1,500	N	>2,000	N
4C	N	70	N	700	20	N	1,500	N	>2,000	N
5C	N	150	N	N	100	N	2,000	N	>2,000	N
0C	N	50	<20	N	500	N	1,000	N	>2,000	N
1C	N	50	N	N	100	N	700	N	>2,000	N
2C	N	30	N	200	200	N	300	N	>2,000	N
3C	N	50	N	500	50	N	1,000	700	>2,000	200
4C	N	50	N	N	70	N	1,500	N	>2,000	N
5C	N	70	N	N	200	N	1,000	N	>2,000	N
6C	N	N	N	2,000	50	N	70	N	>2,000	N
8C	N	30	N	N	100	N	300	N	>2,000	N
9C	N	N	N	<200	50	500	50	500	2,000	N
0C	N	<10	N	N	100	N	200	2,000	>2,000	N
1C	N	20	N	<200	300	N	200	N	2,000	N
2C	N	50	N	1,000	100	200	200	10,000	>2,000	N
3C	N	<10	N	N	100	N	150	500	>2,000	N
4C	N	10	N	200	100	N	100	7,000	>2,000	N
5C	N	<10	N	500	100	N	50	N	>2,000	N
6C	N	50	N	N	200	N	200	700	>2,000	N
7C	N	10	N	<200	100	N	200	500	>2,000	N
8C	N	30	N	500	100	N	150	N	>2,000	N
9C	N	<10	20	300	70	N	150	N	>2,000	N
9CD	N	10	N	N	20	N	100	N	>2,000	N
0C	N	N	N	N	30	N	50	N	>2,000	N
1C	N	30	N	N	70	N	700	N	>2,000	N
2C	N	N	N	N	100	N	200	1,000	>2,000	N
3C	N	10	N	300	70	N	150	N	>2,000	N
5C	N	20	N	<200	100	N	200	N	>2,000	N
6C	N	N	N	N	50	N	100	<500	>2,000	N
7C	N	50	<20	N	300	N	1,000	N	>2,000	N
9C	N	30	20	<200	200	N	700	N	>2,000	N
0C	N	70	50	N	100	N	1,000	N	>2,000	N
1C	N	50	N	200	200	N	500	N	>2,000	N
2C	N	<10	N	3,000	70	N	300	2,000	>2,000	N
3C	N	50	N	2,000	20	N	700	2,000	>2,000	N
4C	N	50	N	200	100	N	700	N	>2,000	N
5C	N	70	30	1,500	200	N	1,000	1,000	>2,000	N
6C	N	30	N	<200	200	N	200	N	>2,000	N
7C	N	N	N	200	30	N	50	N	>2,000	N
8C	N	N	N	500	50	1,000	20	N	>2,000	N
9C	N	50	<20	N	200	N	200	N	>2,000	N
0C	N	<10	N	500	150	200	200	N	>2,000	500
0CD	N	20	N	<200	100	<100	200	N	>2,000	300
1C	N	N	N	500	70	100	100	N	>2,000	N
2C	N	20	N	<200	300	1,500	500	2,000	>2,000	N
3C	N	N	N	500	30	N	100	N	>2,000	N
4C	N	<10	N	<200	100	100	70	N	>2,000	N
5C	N	20	N	N	200	300	500	N	>2,000	N
6C	N	30	N	2,000	100	N	300	2,000	>2,000	N
7C	N	20	N	2,000	100	N	500	700	>2,000	N
8C	N	15	N	N	200	N	500	N	>2,000	N
9C	N	15	N	<200	100	N	200	N	>2,000	N
1C	N	20	N	3,000	70	N	500	N	>2,000	N
2C	N	20	N	200	50	N	700	N	>2,000	N
3C	N	70	N	500	50	N	700	N	>2,000	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K3356C	58 50 5	154 13 28	.70	2.00	5.0	.10	1,000	N	N	N	>5,000
K3358CD	58 46 53	154 13 36	.20	2.00	2.0	.50	700	N	N	N	1,000
K3360C	58 42 50	154 14 44	.05	3.00	7.0	.50	500	N	N	N	>5,000
K3362C	58 59 0	154 47 12	.05	2.00	.5	.10	300	N	N	30	100
K3363C	58 57 23	154 51 10	.10	.70	1.0	.10	200	N	N	N	70
K3364C	58 38 48	154 16 47	.10	2.00	2.0	.70	500	N	N	N	500
K3365C	58 56 17	154 56 57	<.05	1.00	.2	.20	200	N	N	N	70
K3366C	58 38 42	154 16 50	.10	1.50	5.0	2.00	700	N	N	N	200
K3368C	58 51 31	154 14 1	<.05	1.00	.1	.30	300	N	N	N	200
K3370C	58 46 23	154 31 55	.10	1.50	1.0	1.50	500	N	N	N	1,000
K3372CD	58 52 3	154 27 45	.15	3.00	.7	>2.00	500	1,500.0	N	>1,000	200
K3373C	58 53 56	154 19 49	.07	2.00	.7	.30	300	N	N	N	50
K3374C	58 56 53	154 18 6	.10	2.00	.7	2.00	500	N	N	N	100
K3375C	58 55 6	154 14 12	.10	2.00	.5	>2.00	500	N	N	N	100
K3377C	58 58 50	154 24 52	.15	1.50	1.5	1.00	500	500.0	N	>1,000	100
K3378C	58 59 39	154 16 50	.05	1.00	2.0	.50	300	20.0	N	200	30
K3380C	58 58 33	154 27 10	.07	2.00	5.0	.50	300	N	N	N	5,000
K3381C	58 57 13	154 31 36	.05	1.50	.2	.05	200	N	N	N	70
K3382C	58 57 9	154 31 35	<.05	1.00	.2	>2.00	300	N	N	N	50
K3384C	58 47 26	155 5 30	.70	2.00	1.0	2.00	1,000	N	N	N	500
K3385C	58 58 58	154 35 35	.30	3.00	1.0	>2.00	1,000	N	N	N	100
K3386C	58 59 56	154 32 58	.10	1.50	10.0	1.50	200	N	N	N	150
K3387C	58 59 48	154 36 45	.20	2.00	1.0	2.00	300	N	N	N	70
K3388C	58 50 36	154 36 49	.15	2.00	.5	2.00	300	N	N	N	50
K3390C	58 51 3	154 57 50	.20	2.00	.7	.70	500	N	N	N	50
K3390CD	58 51 3	154 57 50	.30	2.00	1.5	1.00	500	N	N	N	50
K3391C	58 57 55	156 1 0	.15	2.00	1.0	>2.00	500	300.0	N	1,000	500
K3394C	58 53 29	154 37 48	.15	1.50	2.0	2.00	300	N	N	N	100
K3395C	58 59 59	154 58 47	.20	2.00	.7	>2.00	500	N	N	N	500
K3402C	58 36 57	154 19 25	<.05	2.00	2.0	.70	300	N	N	N	50
K3403C	58 37 12	154 26 56	.15	2.00	5.0	.70	500	N	N	N	30
K3404C	58 33 42	154 31 45	.10	2.00	1.5	.50	300	N	N	N	50
K3405C	58 41 14	155 1 15	.15	3.00	.7	2.00	500	N	N	N	50
K3413C	58 16 18	155 26 22	<.05	1.50	10.0	2.00	200	N	N	N	<20
K3414C	58 16 10	155 26 20	.50	10.00	10.0	>1.00	500	10.0	N	N	70
K3418C	58 25 36	155 27 55	.15	3.00	.7	>2.00	1,000	N	N	N	50
K3421C	58 25 32	155 27 50	.20	2.00	1.0	.30	300	N	N	N	50
K3422C	58 26 40	154 48 32	.20	3.00	1.0	.30	300	N	N	N	50
K4001C	58 26 20	154 44 50	.50	3.00	20.0	1.00	500	20.0	500	N	50
K4002C	58 29 8	154 47 20	.70	10.00	2.0	.30	500	N	N	N	70
K4003C	58 24 13	154 40 40	1.50	7.00	3.0	1.00	1,000	N	N	N	50
K4004C	58 26 11	154 36 50	.50	5.00	2.0	.70	300	N	N	N	50
K4005C	58 24 50	154 35 5	.30	3.00	30.0	.30	700	N	N	N	<20
K4006C	58 31 43	154 40 39	.50	3.00	30.0	2.00	1,000	N	N	N	50
K4007C	58 31 42	154 40 51	1.00	3.00	30.0	2.00	1,000	<1.0	N	N	5,000
K4008C	58 31 52	154 36 36	1.00	5.00	20.0	2.00	1,000	1.0	N	N	300
K4009C	58 31 40	154 35 10	.70	2.00	2.0	>2.00	700	N	N	N	100
K4010C	58 30 50	154 34 5	.70	5.00	20.0	2.00	1,000	<1.0	N	N	70
K4011C	58 30 28	155 4 38	.30	2.00	2.0	1.00	300	N	N	N	70
K4012C	58 31 36	155 0 24	.50	5.00	2.0	2.00	700	N	N	N	50
K4013C	58 32 20	154 56 50	1.50	5.00	2.0	1.00	700	N	N	N	50
K4014C	58 33 52	154 40 47	1.00	2.00	30.0	2.00	700	N	N	N	<20
K4015C	58 34 37	154 38 7	.30	5.00	5.0	.50	500	N	N	N	50
K4016C	58 34 18	154 30 35	1.00	2.00	30.0	.70	700	N	<500	N	20
K4017C	58 33 37	154 29 27	5.00	10.00	7.0	.70	1,000	N	N	N	50
K4018C	58 34 25	154 26 52	1.50	2.00	50.0	.70	2,000	7.0	<500	N	20
K4018CD	58 34 25	154 26 52	.30	2.00	30.0	1.00	1,000	5.0	N	N	50
K4034C	58 35 16	155 34 40	.30	5.00	1.5	1.50	700	N	N	N	50
K4036C	58 33 22	155 24 5	.50	5.00	1.5	2.00	700	N	N	N	200
K4037C	58 30 12	155 25 20	.50	2.00	2.0	>2.00	700	N	3,000	N	100

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
56C	N	N	N	<10	<20	20	N	N	N	N	N
58CD	<2	N	N	<10	<20	20	50	N	N	N	N
60C	5	N	N	30	<20	70	<50	N	N	30	<20
62C	N	N	N	<10	<20	20	300	N	N	N	N
63C	N	N	N	<10	<20	15	N	300	N	N	300
64C	N	N	N	10	100	15	<50	N	N	N	N
65C	N	N	N	<10	<20	20	N	15	N	N	20
66C	N	N	N	20	<20	20	100	N	N	N	N
68C	N	N	N	N	<20	N	<50	N	N	N	N
70C	N	N	N	N	<20	10	<50	N	N	N	N
72CD	<2	N	N	<10	<20	20	<50	N	<50	N	20
73C	N	N	N	<10	<20	<10	70	N	N	N	200
74C	<2	N	N	N	50	<10	N	N	N	N	<20
75C	N	N	N	N	20	<10	<50	N	N	N	<20
77C	<2	N	N	10	<20	20	N	N	N	N	N
78C	<2	N	N	<10	20	<10	N	N	N	N	N
80C	<2	N	N	100	N	20	N	N	N	50	N
81C	<2	N	N	N	<20	<10	N	N	N	N	N
82C	<2	N	N	N	<20	<10	50	N	N	N	N
84C	N	N	N	<10	<20	30	30	20	N	N	N
85C	<2	N	N	<10	<20	20	100	<10	<50	N	N
86C	<2	20	N	100	<20	20	N	N	N	10	N
87C	N	N	N	15	<20	70	50	<10	N	20	N
88C	N	N	N	<10	<20	50	100	N	N	N	50
90C	<2	N	N	<10	<20	30	<50	N	N	N	N
90CD	<2	1,000	N	15	<20	50	50	N	N	N	50
91C	<2	N	N	<10	50	20	100	N	N	N	N
94C	<2	N	N	20	50	500	50	50	N	N	70
95C	N	N	N	<10	30	10	50	N	N	N	20
02C	N	N	N	10	N	20	100	N	N	<10	20
03C	<2	N	N	10	<20	50	100	N	N	50	20
04C	<2	N	N	<10	N	15	N	<10	N	<10	<20
05C	2	N	N	<10	20	20	100	10	N	N	N
13C	N	N	N	30	<20	200	N	N	N	50	<20
14C	2	N	N	70	50	500	<50	500	N	<10	700
18C	<2	N	N	<10	<20	10	100	N	N	N	<20
21C	2	N	N	<10	<20	<10	N	N	N	N	N
22C	<2	N	N	<10	<20	15	N	N	N	N	100
01C	<2	N	N	50	<20	500	N	N	N	20	15,000
02C	<2	N	N	<10	<20	20	N	N	N	N	20
03C	<2	N	N	10	70	20	50	N	N	N	N
04C	<2	N	N	10	50	20	N	N	N	10	<20
05C	<2	N	N	100	<20	200	N	N	N	50	100
06C	N	N	N	20	20	200	50	<10	<50	100	50
07C	<2	N	N	50	100	200	100	<10	<50	200	100
08C	<2	N	N	70	100	200	200	50	50	200	100
09C	N	N	N	20	150	100	100	10	50	20	150
10C	<2	N	N	50	70	150	100	10	70	150	50
11C	<2	N	N	10	<20	10	N	N	<50	N	50
12C	<2	N	N	10	100	20	100	N	<50	N	N
13C	<2	N	N	10	30	20	N	N	N	N	N
14C	N	N	N	10	70	200	<50	<10	N	20	<20
15C	<2	N	N	10	<20	20	N	N	N	N	N
16C	<2	N	N	200	100	200	N	N	N	150	70
17C	<2	N	N	50	100	30	N	N	N	50	30
18C	<2	N	N	100	50	1,000	N	30	N	500	200
18CD	<2	N	N	70	50	500	<50	20	N	200	150
54C	<2	N	N	<10	<20	15	50	<10	N	N	<20
56C	<2	N	N	<10	<20	30	<50	50	N	N	150
57C	N	N	N	50	20	50	300	20	N	<10	100

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K3356C	N	<10	N	<200	50	N	150	N	>2,000
K3358CD	N	20	N	300	100	N	150	N	>2,000
K3360C	N	10	N	1,000	50	N	200	N	>2,000
K3362C	N	30	N	200	30	N	300	N	>2,000
K3363C	N	15	N	200	50	N	200	N	>2,000
K3364C	N	50	N	N	70	N	500	N	>2,000
K3365C	N	N	N	N	20	N	70	N	>2,000
K3366C	N	50	N	N	200	N	500	N	>2,000
K3368C	N	10	N	N	30	N	100	N	>2,000
K3370C	N	30	N	N	100	N	500	N	>2,000
K3372CD	N	20	N	N	200	N	500	N	>2,000
K3373C	N	<10	N	500	30	100	150	N	>2,000
K3374C	N	50	N	200	150	N	300	N	>2,000
K3375C	N	50	N	N	150	N	500	N	>2,000
K3377C	N	30	N	<200	150	N	200	N	>2,000
K3378C	N	10	N	N	100	N	150	N	>2,000
K3380C	N	20	N	N	70	N	200	N	>2,000
K3381C	N	N	N	N	20	N	100	N	>2,000
K3382C	N	30	N	N	150	N	300	N	>2,000
K3384C	N	20	N	N	150	100	300	N	>2,000
K3385C	N	50	50	<200	200	300	500	N	>2,000
K3386C	N	20	N	<200	150	200	200	N	>2,000
K3387C	N	10	N	200	70	200	200	N	>2,000
K3388C	N	10	<20	200	150	N	200	N	>2,000
K3390C	N	<10	N	<200	100	N	100	N	>2,000
K3390CD	N	20	N	500	100	N	200	N	>2,000
K3391C	N	70	<20	N	200	N	700	N	>2,000
K3394C	N	10	N	1,500	100	N	100	N	>2,000
K3395C	N	50	N	N	200	N	1,000	N	>2,000
K3402C	N	100	N	N	50	N	1,500	N	>2,000
K3403C	N	<10	N	2,000	70	N	200	N	>2,000
K3404C	N	N	N	700	50	N	50	N	>2,000
K3405C	N	10	N	1,000	100	<100	150	N	>2,000
K3413C	N	10	N	N	100	N	200	N	>2,000
K3414C	<200	<10	1,500	1,000	150	N	70	N	2,000
K3418C	N	20	N	N	200	N	500	N	>2,000
K3421C	N	<10	N	700	70	N	30	N	>2,000
K3422C	N	<10	N	500	70	N	20	N	700
K4001C	N	N	N	500	50	N	100	2,000	>2,000
K4002C	N	<10	N	1,000	30	N	50	N	500
K4003C	N	30	N	1,000	100	N	150	N	>2,000
K4004C	N	10	N	1,000	50	N	50	N	>2,000
K4005C	N	N	N	1,000	20	N	50	N	>2,000
K4006C	N	<10	N	200	100	N	500	N	>2,000
K4007C	N	10	N	500	200	N	200	N	>2,000
K4008C	N	20	N	500	300	N	500	N	>2,000
K4009C	N	10	<20	500	200	N	200	N	>2,000
K4010C	N	15	N	500	300	N	300	N	>2,000
K4011C	N	10	N	200	70	N	100	N	>2,000
K4012C	N	20	N	500	100	N	200	N	>2,000
K4013C	N	20	N	700	100	N	100	N	>2,000
K4014C	N	<10	N	500	100	N	200	N	>2,000
K4015C	N	N	N	1,000	20	N	100	N	>2,000
K4016C	N	<10	N	500	100	N	100	500	>2,000
K4017C	N	20	N	1,500	100	N	50	N	>2,000
K4018C	N	20	N	500	100	N	200	<500	>2,000
K4018CD	N	30	N	1,500	100	N	500	5,000	>2,000
K4034C	N	70	N	500	200	N	500	N	>2,000
K4036C	N	50	N	N	200	100	1,000	N	>2,000
K4037C	N	30	N	1,000	200	500	300	N	>2,000

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
8C	58 40 32	155 48 58	.50	3.00	1.5	2.00	500	N	N	N	50	100
0C	58 44 19	156 0 40	.70	1.50	1.0	>2.00	700	N	N	N	100	700
1C	58 47 37	155 56 30	.20	1.00	.5	>2.00	500	N	N	N	100	500
3C	58 51 27	155 57 18	.20	1.00	1.5	1.50	200	N	N	N	100	500
5C	58 51 40	155 53 31	1.00	1.50	1.5	>2.00	700	N	N	N	100	700
6C	58 51 32	155 53 13	.20	1.00	1.0	>2.00	700	N	N	N	100	700
7C	58 35 38	155 44 0	.10	1.50	.5	1.00	200	N	N	N	70	700
8C	58 21 45	155 41 45	.30	2.00	1.0	1.00	500	N	N	N	50	300
8CD	58 21 45	155 41 45	1.00	1.50	1.5	1.50	1,000	N	N	N	50	700
9C	58 21 32	155 42 0	.30	2.00	1.0	.70	300	N	N	N	70	300
0C	58 21 12	155 41 28	.50	5.00	2.0	.70	500	N	N	N	70	1,500
2C	58 9 13	156 18 18	.10	1.00	.5	.03	700	N	N	N	100	1,000
3C	58 4 50	156 12 40	.30	1.00	1.5	>2.00	700	N	N	N	100	700
4C	58 4 41	156 12 39	.10	1.00	.5	1.00	200	N	N	N	100	1,000
5C	58 4 42	156 12 14	.10	.70	.5	.05	100	N	N	N	100	500
6C	58 3 10	156 4 30	.10	.50	.7	.02	200	N	N	N	100	700
7C	58 1 25	156 0 8	.70	1.50	1.5	1.00	300	N	N	N	100	100
8C	58 6 38	156 3 40	.70	1.50	1.5	>2.00	700	N	N	N	100	700
9C	58 4 45	155 37 59	.07	1.50	.5	.20	200	N	N	N	100	1,000
0C	58 5 23	155 35 4	.05	.50	.2	.07	150	N	N	N	500	100
1C	58 5 23	155 40 22	.07	1.50	.5	.10	200	N	N	N	100	700
2C	58 7 37	155 47 42	.10	1.50	.2	.10	200	N	N	N	100	700
3C	58 11 39	155 42 11	.10	.50	.3	1.00	150	N	N	N	100	700
4C	58 13 55	155 50 12	<.05	.50	1.0	.30	200	N	N	N	100	50
2C	58 55 40	155 3 55	.20	2.00	.5	1.00	200	20.0	N	200	70	500
3C	58 54 57	155 3 13	.50	2.00	1.5	.70	500	N	N	N	50	500
4C	58 54 16	155 3 42	.50	3.00	.7	2.00	500	N	N	N	300	500
5C	58 53 31	155 6 10	.50	1.50	1.0	>2.00	500	N	N	N	500	300
6C	58 52 0	155 5 10	.50	1.50	2.0	>2.00	500	100.0	N	700	1,000	300
7C	58 51 42	155 5 8	2.00	5.00	1.0	>2.00	1,500	N	N	N	1,500	2,000
8C	58 48 48	155 3 37	.50	2.00	1.0	>2.00	700	50.0	N	500	100	700
9C	58 46 52	155 0 15	.30	3.00	1.0	>2.00	500	N	N	N	50	500
0C	58 38 9	154 54 29	.10	2.00	.7	>2.00	300	N	N	N	50	500
1C	58 39 17	154 57 12	.10	5.00	1.0	.50	300	N	N	N	50	500
2C	58 41 32	154 54 36	.30	3.00	.7	.70	300	N	N	N	70	500
3C	58 44 2	154 45 25	.20	3.00	.7	>2.00	1,000	N	N	N	100	300
4C	58 32 52	154 25 8	.10	3.00	5.0	1.00	500	N	N	N	700	700
5C	58 31 22	154 26 17	.05	1.50	7.0	1.00	300	5.0	1,000	N	100	5,000
6C	58 37 33	154 39 54	.15	3.00	.7	>2.00	500	N	N	N	1,500	300
7C	58 39 35	154 35 0	.20	3.00	1.0	1.50	500	N	N	N	100	5,000
8C	58 39 44	154 35 0	.50	2.00	2.0	1.00	1,000	N	N	N	500	3,000
9C	58 42 4	154 29 35	.50	3.00	7.0	2.00	1,000	5.0	N	N	50	>10,000
0C	58 40 30	154 11 47	.05	1.50	5.0	.10	300	N	N	N	>5,000	>10,000
1C	58 42 48	154 8 11	.15	2.00	1.0	1.50	500	N	N	N	200	500
2C	58 40 5	154 1 38	.10	5.00	1.0	>2.00	1,000	N	N	N	5,000	>10,000
3C	58 38 49	153 56 30	.20	3.00	7.0	.50	500	5.0	3,000	20	500	>10,000
4C	58 38 54	153 56 35	.10	5.00	7.0	.50	300	1.0	N	N	>5,000	1,000
5C	58 38 5	153 45 37	.15	5.00	.7	>2.00	500	N	N	N	2,000	1,000
6C	58 40 22	153 39 40	.15	1.00	10.0	1.00	300	2.0	2,000	N	50	>10,000
6CD	58 40 22	153 39 40	.20	1.50	5.0	2.00	500	10.0	700	30	100	10,000
7C	58 38 30	153 38 25	.50	1.50	2.0	>2.00	300	N	N	N	2,000	700
8C	58 43 34	153 35 45	.15	2.00	10.0	.50	300	N	N	N	50	5,000
9C	58 44 22	153 28 34	.10	2.00	2.0	>2.00	500	N	<500	N	300	300
0C	58 55 37	153 23 17	.10	1.50	2.0	>2.00	200	N	N	N	100	1,000
1C	58 51 50	153 22 13	.10	2.00	10.0	.50	300	200.0	3,000	300	50	1,500
2C	58 48 57	153 23 15	.15	1.00	3.0	>2.00	300	N	<500	N	50	10,000
3C	58 45 45	153 27 10	.15	3.00	1.5	>2.00	300	N	3,000	N	200	200
4C	58 16 45	154 30 15	.10	1.00	30.0	.50	200	N	N	N	20	2,000
5C	58 29 20	154 13 40	.15	2.00	20.0	.20	300	2.0	1,500	N	20	5,000
6C	58 57 41	153 27 40	.15	2.00	3.0	>2.00	300	<1.0	N	N	1,500	3,000

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K4038C	<2	N	N	<10	50	20	200	N	N	N
K4040C	N	N	N	<10	100	10	<50	N	N	N
K4041C	N	N	N	N	30	10	<50	30	N	10
K4043C	N	N	N	N	20	<10	N	N	N	N
K4045C	N	N	N	<10	50	<10	<50	N	N	N
K4046C	N	N	N	N	20	<10	50	N	N	N
K4047C	N	N	N	N	N	10	N	N	N	N
K4048C	N	N	N	<10	<20	<10	200	N	N	N
K4048CD	N	N	N	20	30	300	N	N	N	N
K4049C	<2	N	N	N	<20	<10	<50	N	N	N
K4050C	<2	N	N	<10	<20	<10	N	N	N	N
K4052C	N	N	N	N	<20	<10	N	N	N	N
K4053C	N	N	N	10	50	10	<50	N	N	N
K4054C	N	N	N	<10	<20	<10	N	N	N	N
K4055C	N	N	N	N	N	<10	N	N	N	N
K4056C	N	N	N	N	<20	20	N	N	N	N
K4057C	N	N	N	<10	100	<10	N	N	N	N
K4058C	N	N	N	15	50	<10	<50	N	N	N
K4059C	N	N	N	N	<20	<10	N	N	N	N
K4060C	N	N	N	<10	N	<10	N	N	N	N
K4061C	N	N	N	N	<20	<10	N	N	N	N
K4062C	N	N	N	N	N	<10	N	N	N	N
K4063C	N	N	N	N	<20	<10	N	N	N	N
K4064C	N	N	N	N	N	<10	N	N	N	N
K4102C	N	N	N	<10	20	<10	<50	N	N	N
K4103C	<2	N	N	10	20	50	50	N	N	<10
K4104C	<2	N	N	<10	20	20	50	N	N	N
K4105C	N	N	N	10	70	10	50	N	N	N
K4106C	N	N	N	10	200	30	N	N	N	N
K4107C	N	N	N	10	<20	<10	N	N	<50	<10
K4108C	<2	N	N	<10	20	30	N	N	N	N
K4109C	<2	N	N	<10	<20	20	200	N	N	N
K4110C	<2	N	N	<10	<20	10	50	N	<50	N
K4111C	<2	N	N	<10	<20	10	50	N	N	N
K4112C	N	N	N	<10	<20	10	100	N	N	N
K4113C	N	N	N	<10	<20	<10	500	N	<50	N
K4114C	<2	N	N	20	<20	100	50	<10	N	70
K4115C	N	N	N	50	<20	70	50	N	N	100
K4116C	<2	N	N	<10	20	<10	100	N	N	N
K4117C	N	N	N	N	<20	20	100	N	N	N
K4118C	<2	N	N	10	<20	20	50	N	N	N
K4119C	N	N	N	15	50	50	100	10	<50	50
K4120C	<2	N	N	10	<20	100	N	10	N	50
K4121C	<2	N	N	<10	<20	10	100	N	<50	N
K4122C	N	N	N	20	50	30	100	N	<50	<10
K4123C	<2	N	N	70	20	100	N	N	N	100
K4124C	5	N	N	50	<20	100	N	N	N	70
K4125C	N	N	N	<10	50	70	100	N	<50	N
K4126C	N	N	100	300	50	500	N	200	N	50
K4126CD	<2	N	N	100	30	500	N	500	N	50
K4127C	<2	N	N	20	150	1,000	200	30	50	<10
K4128C	N	N	N	70	<20	100	<50	N	N	70
K4129C	<2	N	N	20	<20	500	200	10	N	N
K4130C	N	N	N	100	100	20	50	N	50	50
K4131C	N	N	N	100	<20	30	N	N	N	10
K4132C	N	N	N	50	100	70	N	N	N	<10
K4133C	N	N	N	100	70	30	200	N	N	70
K4134C	N	N	N	200	<20	200	N	N	N	300
K4135C	N	N	N	100	<20	70	N	15	N	50
K4136C	<2	N	N	50	70	500	50	100	N	30

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Kataai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
8C	N	100	<20	N	200	N	1,500	N	>2,000	N
0C	N	30	N	N	200	N	300	N	>2,000	N
1C	N	50	N	N	100	<100	500	N	>2,000	N
3C	N	30	N	N	100	N	500	N	>2,000	N
5C	N	50	N	<200	200	N	200	N	>2,000	N
6C	N	50	N	N	300	N	700	N	>2,000	N
7C	N	70	N	<200	70	N	700	N	>2,000	N
8C	N	70	N	N	100	N	1,000	N	>2,000	N
8CD	N	30	20	N	100	N	200	N	>2,000	N
9C	N	50	N	<200	50	N	500	N	>2,000	N
0C	N	10	N	500	70	N	200	N	>2,000	N
2C	N	N	N	<200	30	N	100	N	>2,000	N
3C	N	70	N	N	200	N	500	N	>2,000	N
4C	N	15	N	200	50	N	150	N	>2,000	N
5C	N	20	N	N	30	N	200	N	>2,000	N
6C	N	20	N	N	20	N	300	N	>2,000	N
7C	N	50	N	<200	50	N	500	N	>2,000	N
8C	N	30	N	N	150	N	300	N	>2,000	N
9C	N	10	N	N	20	N	300	N	>2,000	N
0C	N	70	N	N	30	N	1,000	N	>2,000	N
1C	N	50	N	N	20	N	500	N	>2,000	N
2C	N	50	N	N	50	N	1,000	N	>2,000	N
3C	N	50	N	N	50	N	500	N	>2,000	N
4C	N	50	N	N	50	N	500	N	>2,000	N
2C	N	10	N	300	70	N	100	N	>2,000	N
3C	N	20	N	<200	70	N	100	N	>2,000	N
4C	N	30	N	200	100	N	150	N	>2,000	N
5C	N	30	N	500	100	N	100	N	>2,000	N
6C	N	20	N	200	500	2,000	70	N	>2,000	N
7C	N	15	N	N	150	N	150	N	>2,000	N
8C	N	50	N	N	100	<100	500	N	>2,000	N
9C	N	15	N	200	200	150	200	N	>2,000	<200
0C	N	30	N	<200	100	N	300	N	>2,000	N
1C	N	N	N	500	30	N	100	N	>2,000	N
2C	N	<10	N	500	70	N	150	N	>2,000	N
3C	N	20	N	N	200	N	500	N	>2,000	N
4C	N	30	N	200	70	N	300	700	>2,000	N
5C	N	50	N	N	70	N	500	N	>2,000	N
6C	N	50	N	N	100	N	700	N	>2,000	N
7C	N	15	N	500	70	N	150	N	>2,000	N
8C	N	10	N	500	70	N	100	N	>2,000	N
9C	N	15	N	1,000	100	N	300	N	>2,000	N
0C	N	N	N	1,000	20	N	50	5,000	>2,000	N
1C	N	10	N	200	100	N	150	N	>2,000	N
2C	N	30	N	500	200	N	500	N	>2,000	N
3C	N	10	N	2,000	100	N	100	N	>2,000	N
4C	N	10	N	N	30	N	50	1,000	>2,000	N
5C	N	50	N	<200	200	N	300	N	>2,000	N
6C	N	10	N	1,000	100	N	200	10,000	>2,000	N
6CD	N	30	N	500	150	N	200	2,000	>2,000	N
7C	N	50	N	N	200	N	200	N	>2,000	N
8C	N	N	N	300	50	N	150	2,000	>2,000	N
9C	N	20	N	N	100	N	700	N	>2,000	N
0C	N	30	20	<200	200	N	100	2,000	>2,000	N
1C	N	N	N	300	50	N	200	N	>2,000	N
2C	N	15	N	200	200	N	150	N	>2,000	N
3C	N	30	N	N	300	N	500	N	>2,000	N
4C	N	N	N	<200	100	N	20	500	500	N
5C	N	N	N	200	20	N	20	N	2,000	N
6C	N	30	N	200	200	N	200	2,000	>2,000	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Kataai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct.	Ca-pct.	Fe-pct.	Ti-pct.	Mn-ppm	Ag-ppm	As-ppm	Au-ppm	B-ppm	[illegible]
			%	%	%	%	%	%	%	%	%	
K4138C	58 57 23	153 40 30	.70	2.00	2.0	.70	500	N	N	N	150	
K4139C	58 53 9	153 47 10	.10	3.00	10.0	>2.00	700	N	N	N	700	
K4140C	59 3 30	154 5 0	.15	3.00	2.0	>2.00	1,000	N	N	N	1,000	
K4141C	59 3 3	153 57 26	.15	3.00	2.0	>2.00	700	N	N	N	50	
K4142C	59 2 8	153 50 53	.10	5.00	5.0	>2.00	500	N	N	N	500	
K4142CD	59 2 8	153 50 53	.10	3.00	7.0	>2.00	500	N	N	N	500	
K4143C	59 0 33	153 51 29	.10	3.00	5.0	2.00	1,000	N	N	N	50	
K4144C	58 57 15	153 51 24	.15	3.00	1.0	>2.00	1,000	N	N	N	5,000	
K4145C	58 52 5	153 58 38	.10	3.00	3.0	1.50	500	N	N	N	50	[illegible]
K4146C	58 47 44	153 45 55	.10	5.00	2.0	>2.00	1,000	N	N	N	100	
K4147C	58 47 47	153 48 25	.10	1.50	20.0	1.00	300	10.0	N	N	50	
K4148C	58 49 49	153 50 47	.15	2.00	10.0	.70	300	N	N	N	50	
K4149C	58 51 41	153 51 18	.20	3.00	1.0	>2.00	500	N	N	N	2,000	
K4150C	58 54 33	153 50 48	.15	3.00	1.0	>2.00	700	N	N	N	>5,000	
K4151C	58 55 11	154 49 43	.70	5.00	2.0	2.00	1,000	N	N	N	50	
K4152C	58 52 27	154 46 20	.30	7.00	1.0	2.00	500	N	N	N	70	
K4153C	58 50 5	154 43 50	.10	2.00	.7	2.00	200	N	N	N	50	
K4154C	58 48 30	154 42 27	.20	1.50	2.0	.70	100	N	N	N	50	
K4155C	58 49 58	154 50 45	.20	2.00	3.0	.30	200	5.0	N	N	100	
K4156C	58 48 23	154 48 52	.30	7.00	1.5	>2.00	700	N	N	N	50	
K4157C	58 46 20	154 47 53	.30	2.00	1.0	>2.00	700	N	N	N	50	
K4158C	58 46 58	154 52 54	.50	5.00	2.0	2.00	500	N	N	N	50	
K4159C	58 45 50	154 58 11	.20	3.00	1.0	1.00	500	N	N	200	50	
K4160C	58 48 30	154 59 40	.50	2.00	2.0	2.00	500	N	N	N	70	
K4161C	58 51 37	154 9 38	.10	5.00	1.0	.50	1,000	N	N	N	5,000	
K4162C	59 1 28	154 7 9	.20	5.00	2.0	2.00	500	N	N	N	100	
K4163C	58 57 18	154 9 13	.70	7.00	3.0	>2.00	1,500	N	N	N	100	
K4165C	58 59 37	153 53 57	<.05	1.50	5.0	2.00	70	N	N	N	1,000	
K4165CD	58 59 37	153 53 57	1.00	5.00	2.0	.30	700	N	N	N	2,000	
K4166C	58 45 0	154 0 34	.15	3.00	3.0	1.00	500	>10,000.0	N	>1,000	>5,000	>1
K4167C	58 46 36	154 3 58	<.05	3.00	2.0	.70	500	700.0	N	N	>5,000	>1
K4168C	58 44 0	153 52 54	<.05	.30	20.0	.10	100	10.0	N	N	200	>1
K4169C	58 43 52	153 54 51	.10	2.00	.7	.70	300	1,000.0	5,000	>1,000	20	>1
K4170C	58 46 3	154 7 0	.10	3.00	.7	.70	1,000	N	N	N	2,000	
K4171C	58 50 41	154 0 59	<.05	3.00	.7	.30	700	N	N	N	50	
K4176C	58 44 20	154 22 25	1.00	3.00	2.0	.30	500	N	N	N	>5,000	>1
K4177C	58 56 55	154 58 4	<.05	1.00	.1	.20	200	N	N	N	70	
K4178C	58 56 40	154 45 30	<.05	2.00	2.0	1.00	300	N	N	N	50	
K4179C	58 56 42	154 45 42	.05	1.00	2.0	.20	200	N	N	N	30	
K4180C	58 39 50	154 18 52	.10	2.00	3.0	.50	300	N	N	N	1,000	>1
K4180CD	58 49 50	154 18 52	.15	3.00	3.0	>2.00	1,000	N	N	N	1,000	>1
K4181C	58 41 20	154 18 30	.10	3.00	1.0	2.00	1,000	N	N	N	1,500	
K4182C	58 45 37	154 21 12	.15	3.00	1.0	1.00	1,000	N	N	N	700	
K4183C	58 49 12	154 18 40	.05	1.50	.3	.50	300	N	N	N	5,000	
K4184C	58 47 28	154 27 36	.05	3.00	1.0	1.00	500	N	N	N	>5,000	
K4186C	58 50 0	154 32 10	.10	2.00	1.0	2.00	300	N	N	N	2,000	
K4187C	58 52 10	154 21 35	.10	3.00	.7	>2.00	1,000	N	N	N	700	
K4188C	58 58 52	154 17 6	.20	2.00	3.0	.70	1,000	N	N	N	50	
K4189C	58 51 53	154 13 12	.05	1.50	.2	1.00	300	N	N	N	3,000	
K4190C	58 53 49	154 18 24	.15	2.00	.5	>2.00	500	N	N	N	50	
K4191C	58 59 8	154 23 40	.15	1.00	.5	.20	200	N	N	N	70	
K4192C	58 55 45	154 26 48	.20	3.00	1.5	>2.00	1,000	N	N	N	100	
K4193C	58 55 50	154 26 36	.20	3.00	2.0	>2.00	500	N	N	N	70	
K4194C	58 54 8	154 36 38	.10	2.00	.5	2.00	200	N	N	N	50	
K4195C	58 53 20	154 36 5	.10	1.50	.5	.50	300	N	N	N	50	
K4196C	58 50 28	155 8 30	.15	2.00	.5	2.00	500	N	N	N	50	
K4197C	58 58 29	154 58 48	.20	3.00	3.0	>2.00	1,000	N	N	N	500	>1
K4197CD	58 58 29	154 58 48	.10	1.50	2.0	1.50	300	15.0	N	30	500	
K4198C	58 57 47	154 38 22	.20	2.00	1.0	>2.00	500	N	N	N	50	
K4199C	58 59 2	154 39 4	.15	1.50	.5	>2.00	300	N	N	N	100	

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
8C	<2	N	N	20	100	200	100	N	N	50	N
9C	N	N	N	70	100	700	<50	N	N	20	500
0C	N	N	N	20	<20	50	300	<10	<50	<10	N
1C	<2	N	N	10	<20	30	200	N	<50	10	N
2C	N	N	N	50	<20	70	100	<10	N	10	<20
2CD	N	N	N	10	<20	200	200	N	N	50	20
3C	N	N	N	<10	20	30	70	N	N	<10	N
4C	<2	N	N	10	30	<10	200	N	50	N	N
5C	N	N	N	<10	<20	15	200	N	N	20	N
6C	N	N	N	<10	50	20	<50	N	N	N	N
7C	N	N	N	70	30	500	N	50	N	100	3,000
8C	N	N	N	100	<20	70	N	30	N	70	N
9C	<2	N	N	<10	50	15	100	50	<50	N	N
0C	N	N	N	N	30	<10	200	N	N	N	N
1C	<2	N	70	20	50	20	300	50	N	N	100
2C	<2	N	N	<10	<20	50	300	20	N	N	100
3C	N	20	N	N	<20	20	200	N	N	N	N
4C	<2	N	N	50	<20	70	N	N	N	N	N
5C	2	N	N	10	<20	200	N	N	N	N	<20
6C	<2	30	<50	<10	20	300	500	N	N	N	30
7C	N	N	50	<10	<20	<10	100	N	N	N	20
8C	<2	N	N	10	20	50	100	N	N	N	N
9C	<2	N	N	<10	20	15	150	N	N	N	N
0C	N	100	N	15	20	50	200	N	N	<10	N
1C	N	N	N	N	<20	15	200	<10	N	N	N
2C	N	N	<50	<10	<20	20	50	N	N	N	N
3C	N	N	N	<10	100	30	200	N	70	N	N
5C	N	N	N	<10	<20	20	N	N	N	<10	N
5CD	N	N	N	<10	<20	20	200	N	N	N	<20
6C	<2	150	N	50	<20	200	100	100	N	10	300
7C	N	100	150	20	<20	10	100	N	N	N	700
8C	N	N	N	100	<20	30	N	N	N	100	5,000
9C	N	N	N	10	<20	10	50	N	N	N	5,000
0C	N	N	N	N	<20	10	200	N	N	N	N
1C	N	N	N	N	N	10	200	N	N	N	N
6C	N	N	N	N	<20	20	100	N	N	N	N
7C	N	N	N	N	<20	20	N	10	N	N	N
8C	N	N	N	10	<20	50	300	N	N	10	N
9C	N	N	N	20	<20	20	N	N	N	N	N
0C	N	N	N	N	N	30	<50	N	N	20	<20
0CD	<2	N	N	10	<20	100	200	N	N	100	20
1C	N	N	N	N	<20	10	200	N	N	N	<20
2C	<2	N	N	<10	20	10	200	N	N	N	<20
3C	<2	N	N	N	<20	<10	N	N	N	N	N
4C	5	N	N	N	<20	10	200	N	N	N	<20
6C	<2	N	N	10	<20	10	N	N	N	N	<20
7C	<2	N	N	<10	<20	<10	200	N	N	N	N
8C	<2	N	N	10	50	15	<50	N	N	N	N
9C	N	N	N	N	N	10	50	N	N	N	<20
0C	N	N	N	N	20	10	50	N	N	N	20
1C	<2	N	N	<10	<20	10	N	N	N	N	N
2C	N	N	N	10	30	15	50	10	<50	N	50
3C	<2	N	N	15	50	20	50	N	<50	N	N
4C	<2	N	N	<10	<20	15	N	N	N	N	N
5C	<2	N	N	<10	<20	20	<50	10	N	N	N
6C	<2	N	N	<10	<20	10	50	N	N	N	N
7C	<2	30	<50	100	30	100	100	700	N	<10	1,000
7CD	<2	100	N	70	<20	50	50	700	N	N	1,000
8C	<2	N	N	<10	<20	30	<50	N	N	N	<20
9C	N	N	N	N	<20	10	<50	N	N	N	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K4138C	N	20	N	200	200	N	200	N	>2,000
K4139C	N	50	N	<200	500	N	300	<500	>2,000
K4140C	N	50	<20	N	200	N	1,000	N	>2,000
K4141C	N	30	N	N	200	N	500	N	>2,000
K4142C	N	30	N	N	150	N	700	N	>2,000
K4142CD	N	30	N	N	100	N	500	N	>2,000
K4143C	N	20	N	<200	150	N	500	N	>2,000
K4144C	N	20	<20	N	200	N	500	N	>2,000
K4145C	N	30	N	200	100	N	500	N	>2,000
K4146C	N	30	N	N	500	N	100	N	>2,000
K4147C	N	<10	N	N	100	N	50	5,000	>2,000
K4148C	N	N	N	1,000	100	N	100	N	>2,000
K4149C	N	30	N	200	200	N	300	N	>2,000
K4150C	N	30	N	N	200	N	500	N	>2,000
K4151C	N	70	N	N	200	300	700	N	>2,000
K4152C	N	<10	N	500	150	N	200	N	>2,000
K4153C	N	20	N	N	200	N	500	N	>2,000
K4154C	N	20	N	<200	50	500	200	N	>2,000
K4155C	N	<10	N	500	50	N	50	N	>2,000
K4156C	N	50	N	<200	200	N	1,000	N	>2,000
K4157C	N	50	N	N	150	N	1,000	N	>2,000
K4158C	N	<10	N	500	150	N	150	N	>2,000
K4159C	N	10	N	500	70	100	150	N	>2,000
K4160C	N	15	20	N	200	200	500	N	>2,000
K4161C	N	20	N	300	70	N	200	N	>2,000
K4162C	N	30	N	N	200	N	500	N	>2,000
K4163C	N	50	20	200	500	N	500	N	>2,000
K4165C	N	<10	N	N	70	N	100	N	>2,000
K4165CD	N	50	N	<200	50	N	500	N	>2,000
K4166C	N	20	N	3,000	100	200	300	N	>2,000
K4167C	N	30	N	3,000	50	N	500	5,000	>2,000
K4168C	N	N	N	7,000	20	100	100	<500	>2,000
K4169C	N	20	N	10,000	70	<100	200	N	>2,000
K4170C	N	20	N	300	100	N	300	N	>2,000
K4171C	N	30	N	1,000	30	N	500	N	>2,000
K4176C	N	10	N	3,000	50	N	200	N	>2,000
K4177C	N	N	N	<200	20	500	50	N	>2,000
K4178C	N	30	N	N	70	N	1,000	N	>2,000
K4179C	N	N	N	200	50	N	20	N	2,000
K4180C	N	50	N	<200	50	N	700	N	>2,000
K4180CD	N	30	<20	<200	100	N	500	N	>2,000
K4181C	N	100	N	N	200	N	1,000	N	>2,000
K4182C	N	50	N	<200	100	N	500	N	>2,000
K4183C	N	20	N	N	70	N	150	N	>2,000
K4184C	N	20	N	N	70	N	500	N	>2,000
K4186C	N	30	N	300	100	N	300	N	>2,000
K4187C	N	50	N	N	200	N	500	N	>2,000
K4188C	N	50	N	<200	200	N	500	N	>2,000
K4189C	N	70	N	N	100	N	1,000	N	>2,000
K4190C	N	30	N	<200	150	N	500	N	>2,000
K4191C	N	<10	N	<200	30	N	100	N	>2,000
K4192C	N	30	N	300	200	N	200	N	>2,000
K4193C	N	20	N	500	200	N	200	N	>2,000
K4194C	N	N	N	200	20	N	50	N	>2,000
K4195C	N	N	N	<200	50	200	50	N	>2,000
K4196C	N	15	N	500	100	N	150	N	>2,000
K4197C	N	20	N	1,000	200	N	1,000	5,000	>2,000
K4197CD	N	10	N	200	150	N	200	700	>2,000
K4198C	N	20	20	N	500	N	1,000	N	>2,000
K4199C	N	100	N	N	200	N	1,000	N	>2,000

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Kataai study area, Alaska—(cont.)

ple	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
0C	58 50 49	154 36 0	.15	3.00	.7	2.00	300	N	N	N	50	500
1C	58 52 19	154 58 22	.20	1.50	1.0	>2.00	500	N	N	N	1,000	700
2C	58 54 18	154 54 47	.15	3.00	2.0	>2.00	500	N	N	N	50	200
0C	58 37 59	154 53 58	1.00	3.00	2.0	>2.00	2,000	N	N	N	100	300
1C	58 39 12	154 56 5	.20	3.00	2.0	1.00	500	N	N	N	500	300
2C	58 41 55	154 33 11	.30	2.00	10.0	>2.00	500	N	N	N	50	500
3C	58 44 22	154 45 5	.10	2.00	.7	2.00	300	50.0	N	N	20	>10,000
4C	58 40 16	154 42 6	.20	2.00	.5	>2.00	1,000	N	N	N	50	200
5C	58 32 40	154 25 25	.05	2.00	1.0	>2.00	500	N	N	N	2,000	700
6C	58 38 18	154 38 32	.20	3.00	5.0	2.00	1,000	N	N	N	100	10,000
7C	58 39 2	154 38 52	.10	2.00	20.0	2.00	300	N	N	N	5,000	200
8C	58 44 30	154 34 55	.20	3.00	2.0	>2.00	1,000	N	N	N	>5,000	>10,000
9C	58 42 9	154 27 18	.50	3.00	5.0	>2.00	3,000	N	N	N	1,000	1,000
0C	58 43 53	154 8 20	.50	3.00	5.0	>2.00	1,000	2.0	700	N	5,000	700
2C	58 41 55	154 3 0	.20	2.00	2.0	>2.00	1,000	N	N	N	>5,000	3,000
3C	58 38 22	153 53 55	.20	3.00	10.0	>2.00	500	50.0	700	>1,000	700	3,000
4C	58 39 54	153 46 25	.10	2.00	1.0	>2.00	500	N	500	N	1,000	10,000
5C	58 42 45	153 39 0	.20	5.00	2.0	1.50	500	N	N	N	50	700
6C	58 41 27	153 36 40	.15	2.00	1.0	2.00	500	N	N	N	500	3,000
7C	58 41 50	153 33 41	.20	1.50	5.0	1.00	500	N	N	N	200	>10,000
8C	58 43 50	153 30 53	.10	2.00	5.0	.70	200	N	3,000	N	200	1,000
9C	58 48 20	153 26 50	.15	2.00	2.0	1.00	300	N	10,000	N	200	1,000
0C	58 56 43	153 23 52	.20	2.00	5.0	1.00	500	N	N	N	100	3,000
0CD	58 56 43	153 23 52	.15	2.00	3.0	1.00	300	N	N	N	500	700
1C	58 51 26	153 23 30	.20	2.00	2.0	1.50	300	N	N	N	500	300
2C	58 49 22	153 23 6	.70	1.50	2.0	>2.00	1,000	N	N	N	700	1,000
4C	58 17 7	154 30 30	.05	1.00	20.0	.50	300	N	N	N	20	1,000
5C	58 28 43	154 13 12	1.00	5.00	3.0	.10	500	N	N	N	50	700
6C	58 32 13	153 57 13	.15	2.00	1.5	2.00	300	N	N	N	70	1,000
7C	58 57 26	153 30 17	.15	.20	30.0	.50	300	2.0	500	N	50	10,000
8C	58 56 2	153 36 54	.70	1.50	30.0	.70	300	1.0	3,000	N	1,000	100
9C	58 56 33	153 41 38	2.00	5.00	5.0	.70	1,000	N	N	N	>5,000	200
0C	58 53 37	153 45 9	.20	1.00	20.0	.30	300	10.0	1,000	N	50	2,000
1C	59 2 52	154 5 40	.05	3.00	7.0	>2.00	500	N	N	N	50	10,000
2C	59 3 30	153 52 56	.10	3.00	.7	>2.00	500	N	N	N	50	3,000
3C	58 57 34	153 49 45	.20	3.00	1.0	>2.00	1,000	N	N	N	200	300
5C	58 55 59	153 54 22	.15	2.00	2.0	>2.00	500	N	N	N	5,000	200
6C	58 51 25	153 58 20	.05	1.50	20.0	.30	500	<1.0	N	N	200	>10,000
7C	58 47 20	153 48 20	.20	1.50	20.0	1.00	500	5.0	N	N	200	2,000
8C	58 47 7	153 48 40	.10	3.00	1.0	>2.00	300	N	N	N	700	500
9C	58 47 16	153 49 10	.10	2.00	7.0	1.00	300	5.0	1,000	N	50	2,000
0C	58 51 3	153 51 6	.20	3.00	15.0	>2.00	500	N	N	N	>5,000	>10,000
1C	58 52 16	153 50 41	.70	10.00	1.0	2.00	300	N	N	N	>5,000	100
2C	58 36 35	153 46 16	3.00	2.00	20.0	2.00	5,000	N	N	N	20	2,000
3C	58 55 50	154 50 57	.20	1.00	.5	.30	100	N	N	N	200	500
4C	58 52 53	154 46 4	.30	2.00	1.0	.50	300	N	N	N	150	700
5C	58 51 5	154 43 25	.30	7.00	1.5	>2.00	500	N	N	N	70	200
6C	58 54 7	154 51 30	.50	2.00	2.0	>2.00	500	50.0	N	100	2,000	300
7C	58 51 37	154 51 32	.10	1.50	5.0	1.50	500	10.0	<500	N	50	>10,000
8C	58 51 11	154 51 0	.30	2.00	2.0	>2.00	500	N	N	N	50	1,500
9C	58 50 34	154 51 30	.20	1.00	1.5	2.00	200	N	N	N	50	1,500
0C	58 47 10	154 47 17	.30	2.00	3.0	>2.00	500	N	N	N	70	10,000
1C	58 45 21	154 42 8	.70	5.00	2.0	>2.00	700	N	N	N	100	300
3C	58 45 37	154 52 0	.07	2.00	.7	>2.00	500	N	N	N	50	1,000
4C	58 45 48	155 0 45	.10	2.00	1.0	.70	200	N	N	N	50	200
7C	58 50 28	154 5 57	.15	5.00	.5	.20	700	N	N	N	>5,000	50
8C	58 55 40	154 9 50	.20	5.00	5.0	1.00	500	1.0	N	N	500	10,000
BCD	58 55 40	154 9 50	.05	3.00	3.0	.05	300	N	N	N	>5,000	>10,000
9C	58 58 58	154 5 23	.10	2.00	1.0	1.50	300	N	N	N	700	200
0C	58 58 50	154 5 34	.20	5.00	3.0	>2.00	1,000	N	N	N	1,000	100

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K4200C	2	N	N	<10	<20	30	50	N	N	N
K4201C	<2	20	N	15	150	50	200	20	<50	N
K4202C	<2	N	N	70	20	70	100	50	N	N
K4500C	<2	N	N	10	100	10	50	N	N	N
K4501C	<2	N	N	<10	20	50	100	N	N	N
K4502C	<2	N	N	20	20	10	100	N	N	50
K4503C	N	N	N	10	<20	20	100	N	N	10
K4504C	N	N	N	N	<20	10	200	N	N	N
K4505C	N	N	N	<10	<20	15	50	N	N	N
K4506C	N	N	N	<10	<20	50	200	N	N	N
K4507C	<2	N	N	10	<20	100	30	N	N	10
K4508C	<2	N	N	15	20	15	200	N	N	N
K4509C	N	N	N	20	200	100	50	N	<50	50
K4510C	N	N	N	20	50	500	200	20	50	200
K4512C	<2	N	N	10	50	500	50	N	<50	20
K4513C	N	300	N	70	70	500	200	200	N	70
K4514C	N	200	N	10	100	200	50	200	N	N
K4515C	<2	N	N	10	50	700	300	N	N	N
K4516C	N	N	N	10	20	20	100	N	N	N
K4517C	<2	N	N	100	20	300	N	N	N	100
K4518C	<2	N	N	100	<20	100	100	N	N	50
K4519C	<2	N	N	70	20	50	N	N	N	10
K4520C	<2	N	N	500	50	30	N	N	N	10
K4520CD	<2	N	N	100	50	20	N	N	N	<10
K4521C	<2	N	N	50	50	500	N	N	N	N
K4522C	N	N	N	10	200	15	N	N	N	10
K4524C	N	N	N	150	<20	100	N	N	N	200
K4525C	N	N	N	20	70	20	N	N	N	N
K4526C	N	N	N	<10	<20	10	50	N	N	N
K4527C	N	N	N	200	20	200	N	N	N	500
K4528C	N	N	N	500	100	100	N	N	N	500
K4529C	2	N	N	20	300	30	N	<10	N	70
K4530C	N	N	N	200	50	50	N	N	N	300
K4531C	N	N	N	<10	<20	20	100	N	N	20
K4532C	N	N	N	N	<20	10	200	N	N	N
K4533C	<2	N	N	<10	20	10	200	10	<50	N
K4535C	<2	N	N	<10	20	20	300	N	<50	N
K4536C	N	N	N	100	<20	100	N	N	N	500
K4537C	N	N	N	150	20	500	N	N	N	200
K4538C	<2	N	N	<10	<20	10	200	N	N	N
K4539C	<2	N	N	70	<20	700	50	150	N	10
K4540C	<2	N	N	100	70	70	200	20	<50	150
K4541C	7	N	N	N	200	10	100	<10	N	10
K4542C	N	N	N	100	500	30	N	N	N	100
K4543C	2	N	N	<10	<20	50	<50	N	N	N
K4544C	<2	N	N	<10	<20	30	N	N	N	N
K4545C	N	N	N	10	<20	200	500	15	<50	N
K4546C	<2	300	50	10	100	70	<50	20	N	N
K4547C	N	200	70	70	<20	30	N	N	N	N
K4548C	<2	N	N	70	<20	20	<50	10	N	<10
K4549C	<2	N	N	<10	<20	100	N	500	N	N
K4550C	N	N	<50	<10	20	50	100	N	N	N
K4551C	N	N	<50	10	30	20	100	N	<50	N
K4553C	N	N	N	N	<20	20	200	N	N	N
K4554C	N	N	N	10	<20	20	50	N	N	N
K4557C	N	N	N	N	<20	<10	200	N	N	N
K4558C	N	N	N	15	<20	70	<50	N	N	N
K4558CD	N	N	N	50	N	30	<50	N	N	<10
K4559C	<2	N	N	N	N	70	<50	N	N	N
K4560C	N	N	N	10	20	70	300	N	50	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

ple	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
00C	N	<10	N	500	100	200	150	N	>2,000	N
01C	N	50	<20	1,000	500	N	200	N	>2,000	N
02C	N	20	N	<200	200	N	500	N	>2,000	N
00C	N	50	N	200	500	N	500	N	>2,000	N
01C	N	15	N	200	70	N	200	N	>2,000	N
02C	N	30	N	N	200	N	500	1,000	>2,000	N
03C	N	15	N	2,000	70	N	500	3,000	>2,000	N
04C	N	50	N	N	200	N	500	N	>2,000	N
05C	N	100	N	N	150	N	1,000	N	>2,000	N
06C	N	20	N	<200	100	N	500	N	>2,000	N
07C	N	10	N	N	100	N	500	N	>2,000	N
08C	N	50	N	1,500	200	N	500	N	>2,000	N
09C	N	50	N	200	500	N	300	N	>2,000	N
10C	N	15	N	500	200	N	200	N	>2,000	N
12C	N	50	N	N	200	N	200	N	>2,000	N
13C	N	30	<20	<200	300	1,500	500	N	>2,000	N
14C	N	50	N	500	500	N	700	N	>2,000	N
15C	N	20	N	200	150	N	500	N	2,000	N
16C	N	20	N	N	70	N	500	1,500	>2,000	N
17C	N	20	N	500	100	N	200	7,000	>2,000	N
18C	N	10	N	N	100	N	300	N	>2,000	<200
19C	N	10	N	500	50	N	150	N	>2,000	N
20C	N	20	N	N	100	N	200	N	>2,000	N
20CD	N	20	N	200	100	N	100	N	>2,000	N
21C	N	20	N	200	200	100	200	N	>2,000	N
22C	N	30	N	200	200	N	150	N	>2,000	N
24C	N	N	N	N	70	N	50	N	1,500	N
25C	N	15	N	500	50	N	20	N	1,000	N
26C	N	20	N	N	100	N	200	N	>2,000	N
27C	N	N	N	N	200	N	50	700	1,000	N
28C	N	10	N	N	100	<100	150	N	>2,000	N
29C	N	30	N	N	100	N	70	N	>2,000	N
30C	N	N	N	N	70	N	30	1,500	500	N
31C	N	20	<20	N	100	N	500	N	>2,000	N
32C	N	50	N	N	150	N	500	N	>2,000	N
33C	N	30	<20	N	300	N	700	N	>2,000	N
35C	N	30	N	<200	150	N	500	N	>2,000	N
36C	N	<10	N	1,000	50	N	100	N	>2,000	N
37C	N	N	N	<200	200	N	70	2,000	2,000	N
38C	N	20	<20	N	200	N	200	N	>2,000	N
39C	N	10	N	N	100	N	200	5,000	>2,000	N
40C	N	50	N	1,000	200	N	500	N	>2,000	N
41C	N	20	N	N	100	N	100	N	>2,000	N
42C	N	50	N	N	1,000	N	50	500	700	N
43C	N	N	N	200	50	N	20	N	>2,000	N
44C	N	N	N	300	70	<100	50	N	>2,000	N
45C	N	<10	50	<200	500	500	700	N	>2,000	<200
46C	N	100	N	N	300	100	500	N	>2,000	N
47C	N	50	N	1,000	70	N	200	2,000	>2,000	N
48C	N	20	N	N	200	N	200	N	>2,000	N
49C	N	N	N	N	70	100	100	2,000	>2,000	N
50C	N	20	N	500	200	N	500	N	>2,000	N
51C	N	15	30	<200	200	N	200	N	>2,000	N
53C	N	20	N	N	100	N	500	N	>2,000	N
54C	N	N	N	N	100	200	100	N	>2,000	N
57C	N	50	N	200	50	N	500	N	>2,000	N
58C	N	20	N	200	100	N	300	500	>2,000	N
58CD	N	20	N	5,000	20	N	200	<500	>2,000	N
59C	N	<10	N	N	100	N	150	N	>2,000	N
60C	N	20	20	N	200	N	700	N	>2,000	N

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska--(cont.)

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
K4561C	58 59 27	153 54 0	.20	5.00	7.0	2.00	1,000	N	N	N	1,000
K4562C	58 44 35	153 58 42	<.05	1.50	2.0	.30	200	200.0	1,500	1,000	700
K4563C	58 44 8	153 52 41	1.00	2.00	.7	.10	300	N	N	N	100
K4564C	58 44 41	153 57 19	<.05	1.50	3.0	.50	300	N	N	<20	3,000
K4566C	58 51 0	153 59 5	1.00	5.00	1.0	.30	1,000	N	N	N	<20
K4567C	58 48 2	154 6 9	.05	5.00	.7	.10	1,000	N	N	N	1,000
K4572C	58 41 29	154 23 47	.05	1.00	20.0	.10	300	N	500	N	20
K4573C	58 57 36	154 45 55	.05	2.00	.5	.10	300	N	N	<20	100
K4574C	58 56 32	154 45 50	.20	1.00	10.0	>2.00	200	N	N	N	200
K4575C	58 39 45	154 17 44	.10	2.00	.7	1.00	700	N	N	N	2,000
K4579C	58 46 57	154 29 7	.05	2.00	3.0	>2.00	500	5.0	N	N	2,000
K4579CD	58 46 57	154 29 7	.15	2.00	5.0	>2.00	500	N	N	N	1,000
K4580C	58 47 55	154 25 52	<.05	3.00	.5	1.00	500	N	N	N	1,000
K4581C	58 50 6	154 32 27	<.05	1.00	<.1	.50	200	N	N	N	50
K4582C	58 52 25	154 22 59	.20	2.00	2.0	2.00	1,000	N	N	N	150
K4583C	58 55 30	154 18 50	.20	2.00	1.0	1.50	1,000	N	N	N	50
K4585C	58 57 35	154 13 35	.20	2.00	1.0	>2.00	1,000	N	N	20	100
K4586C	58 58 35	154 17 17	.20	3.00	1.5	>2.00	500	N	N	N	50
K4587C	58 55 52	154 17 25	.20	3.00	.7	>2.00	1,000	N	N	N	50
K4588C	58 57 22	154 27 47	1.00	3.00	5.0	>2.00	1,000	N	N	N	2,000
K4589C	58 53 42	154 37 28	.10	1.50	.7	.70	200	N	N	N	50
K4590C	58 53 32	154 37 56	.15	2.00	.5	1.50	300	N	N	N	50
K4591C	58 59 37	155 1 42	.30	2.00	3.0	>2.00	500	N	N	N	5,000
K4592C	58 55 28	154 56 10	.15	2.00	10.0	>2.00	300	N	N	N	1,500
K4593C	58 56 45	154 39 50	.50	3.00	7.0	>2.00	1,000	N	N	N	200
K4594C	58 56 48	154 39 59	<.05	1.00	2.0	1.00	200	N	N	N	20
K4595C	58 57 28	154 39 47	.70	2.00	1.0	>2.00	1,000	N	N	N	200
K4596C	58 53 22	154 39 14	.20	2.00	.7	2.00	300	N	N	N	1,000
K4596CD	58 53 22	154 39 14	.20	3.00	1.0	>2.00	500	N	N	N	1,500
K4599C	58 59 59	154 56 27	.15	1.00	.2	1.00	300	N	N	N	2,000
K4600C	58 53 3	154 56 33	.50	3.00	1.0	>2.00	1,000	N	N	N	100

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

ple	Ba-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
61C	N	N	<50	20	20	100	100	<10	N	50	<20
62C	N	N	N	50	<20	10	N	50	N	N	500
63C	<2	N	N	<10	<20	15	N	N	N	N	N
64C	N	N	N	<10	<20	20	<50	N	N	N	N
66C	N	N	N	<10	<20	<10	300	N	N	N	N
67C	N	N	N	N	<20	<10	300	N	N	N	<20
72C	N	N	N	70	<20	50	N	N	N	100	20
73C	N	N	N	N	20	50	200	N	N	N	20
74C	N	N	N	70	300	100	N	N	N	100	<20
75C	N	N	N	N	N	10	100	N	N	N	N
79C	<2	N	N	20	<20	20	150	10	<50	N	N
79CD	<2	N	N	100	<20	200	200	50	<50	50	20
80C	N	N	N	N	<20	<10	100	N	N	N	N
81C	<2	N	N	N	<20	<10	50	N	N	N	N
82C	<2	N	N	50	<20	20	50	N	N	N	200
83C	<2	N	N	<10	<20	15	<50	N	N	N	<20
85C	<2	N	N	<10	20	10	N	N	N	N	<20
86C	<2	30	N	<10	50	50	<50	10	<50	N	N
87C	N	N	N	<10	20	10	50	N	N	N	<20
88C	N	N	N	20	20	50	150	N	<50	N	20
89C	N	<20	N	<10	<20	<10	50	10	N	N	20
90C	N	20	N	N	<20	20	100	N	N	N	N
91C	N	N	N	20	100	70	N	100	N	<10	70
92C	<2	N	N	100	20	200	200	N	N	15	N
93C	<2	N	N	70	<20	30	N	N	N	20	30
94C	N	N	N	50	N	20	<50	N	N	N	N
95C	<2	N	N	10	100	50	100	N	N	N	50
96C	<2	N	N	10	20	200	100	100	N	N	100
96CD	N	500	N	50	100	200	200	500	N	N	1,000
99C	N	N	N	N	<20	10	N	N	N	N	N
00C	N	N	N	15	<20	20	150	10	N	N	50

Table 3. Analyses of heavy-mineral-concentrate samples from the Mt. Katmai study area, Alaska—(cont.)

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s
K4561C	N	10	N	N	200	N	200	N	>2,000
K4562C	N	N	N	5,000	70	N	100	1,500	>2,000
K4563C	N	N	N	500	20	N	50	N	>2,000
K4564C	N	<10	N	5,000	50	N	150	10,000	>2,000
K4566C	N	10	N	2,000	70	N	200	N	>2,000
K4567C	N	50	N	1,500	50	N	700	N	>2,000
K4572C	N	N	N	<200	50	N	70	N	>2,000
K4573C	N	50	N	200	100	100	700	N	>2,000
K4574C	N	50	N	1,000	1,000	N	150	N	>2,000
K4575C	N	100	N	N	150	N	1,000	N	>2,000
K4579C	N	30	N	<200	200	N	200	N	>2,000
K4579CD	N	50	N	N	200	N	1,000	N	>2,000
K4580C	N	20	N	N	100	N	300	N	>2,000
K4581C	N	N	N	N	50	N	100	N	>2,000
K4582C	N	20	N	1,000	200	N	300	N	>2,000
K4583C	N	30	N	500	100	N	200	2,000	>2,000
K4585C	N	10	N	500	100	N	150	N	>2,000
K4586C	N	30	N	700	200	N	200	N	>2,000
K4587C	N	20	N	500	200	N	300	N	>2,000
K4588C	N	50	N	500	500	N	200	N	>2,000
K4589C	N	10	N	<200	50	200	200	N	>2,000
K4590C	N	20	N	N	100	N	500	N	>2,000
K4591C	N	30	<20	1,000	300	N	200	N	>2,000
K4592C	N	20	N	300	150	<100	200	700	>2,000
K4593C	N	20	N	N	200	N	200	1,000	>2,000
K4594C	N	70	N	N	100	N	1,000	N	>2,000
K4595C	N	70	<20	N	500	N	500	N	>2,000
K4596C	N	15	N	500	100	100	200	N	>2,000
K4596CD	N	50	20	N	100	<100	1,000	N	>2,000
K4599C	N	<10	N	N	100	N	150	N	>2,000
K4600C	N	10	<20	300	200	N	500	N	>2,000