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Analytical results and sample locality maps of stream-sediment,
heavy-mineral-concentrate, and rock samples from the
Gulkana quadrangle, south-central 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 Alaskan 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 Gulkana quadrangle, Alaska.

INTRODUCTION

The study of the geochemistry of the Gulkana quadrangle (Fig.1) began in the mid-1980's as part of USGS AMRAP studies. Geologists from the Branch of Geochemistry collected stream-sediment and heavy-mineral-concentrate samples in the summers of 1986, 1988, and 1990. Rock samples were collected by geologists from the Branch of Alaskan Geology in the summers of 1983, 1985, and 1987.

The Gulkana quadrangle is located between latitudes 62° and 63° north and longitudes 144° and 147° west. The town of Gulkana is located in the south central part of the quadrangle (fig.2). The Richardson Highway runs north-south dividing the quadrangle into east and west halves. The Copper River crosses the center of the study area and flows to the southwest into the Gulf of Alaska (south of the study area). The crescent shaped drainage basin of the Copper River covers approximately 23,000 sq miles (Mendenhall, 1905), and is ringed by the Chugach Mountains to the south, the Alaska Range to the north, the Talkeetna Mountains to the west, and the Wrangell Mountains to the east. The basin is filled with unconsolidated soils, surficial glacial deposits, and swamp (Nokleberg and others, 1988). The Wrangell-St Elias National Preserve, National Park lands, and Wilderness areas comprise most of the SE quarter of the quadrangle (approximately 1800 sq miles) and includes the Wrangell Mountains. Much of the Wrangell Mountains are covered by glaciers and ice fields.

Three major belts of bedrock are present within the quadrangle. They are the Wrangellia Terrane, the Metamorphic Complex of the Gulkana River (MCGR), and the Peninsular Terrane (Nokleberg and others, 1986). The Wrangellia terrane, located along the northern boundary of the quadrangle, is composed chiefly of Late Paleozoic volcanic and sedimentary rocks that are overlain by the Nikolai Greenstone and gabbros of Late Triassic age. Cretaceous granodiorite and quartz diorite bodies locally intrude the Triassic and older rocks.

The MCGR is similar to the informally named Southern Wrangellia Terrane Margin as described by Plafker and others (1989) in the adjacent Valdez and McCarthy quadrangles (Nokleberg and others, 1989). The age of the MCGR is considered Pre-Late Jurassic (Nokleberg and others, 1986). This metamorphic complex is composed chiefly of metavolcanic and metasedimentary rocks, intruded by schistose hornblende diorite, gabbro, schistose granodiorite, schistose quartz monzonite, and schistose quartz diorite. The Wrangellia Terrane to the north is separated from the MCGR by the Paxson Lake Fault that is largely concealed by the sediments in the Copper River Basin. The MCGR is separated from the Peninsular terrane to the south by the West Fork Fault that is concealed and is projected to follow approximately the drainage of the West Fork of the Gulkana River until it crosses the Copper River and is projected to trend nearly north-south (Plafker and others, 1989).

The Peninsular Terrane is composed chiefly of the rhyodacite, dacite, and andesite flows and minor sandstone units of the Early Jurassic Talkeetna Formation; Late Jurassic granodiorite, quartz diorite, and schistose hornblende gabbro plutons are also present (Nokleberg and others, 1986).

Overlying the Wrangellia Terrane and MCGR in the southeast corner of the quadrangle is Cenozoic basalt and andesite of the Wrangell Mountains. Quaternary alluvium, colluvium, glacial, and glaciofluvial deposits cover much of the quadrangle.

Prospectors began exploring for gold in the Copper River Basin area during the late 1800's. The gold placer deposits of the Chistochina and the Slana River districts, located in the northeast corner of the quadrangle, were discovered in the late 1800's and were productive for several years (Mendenhall, 1905). The lode claims in

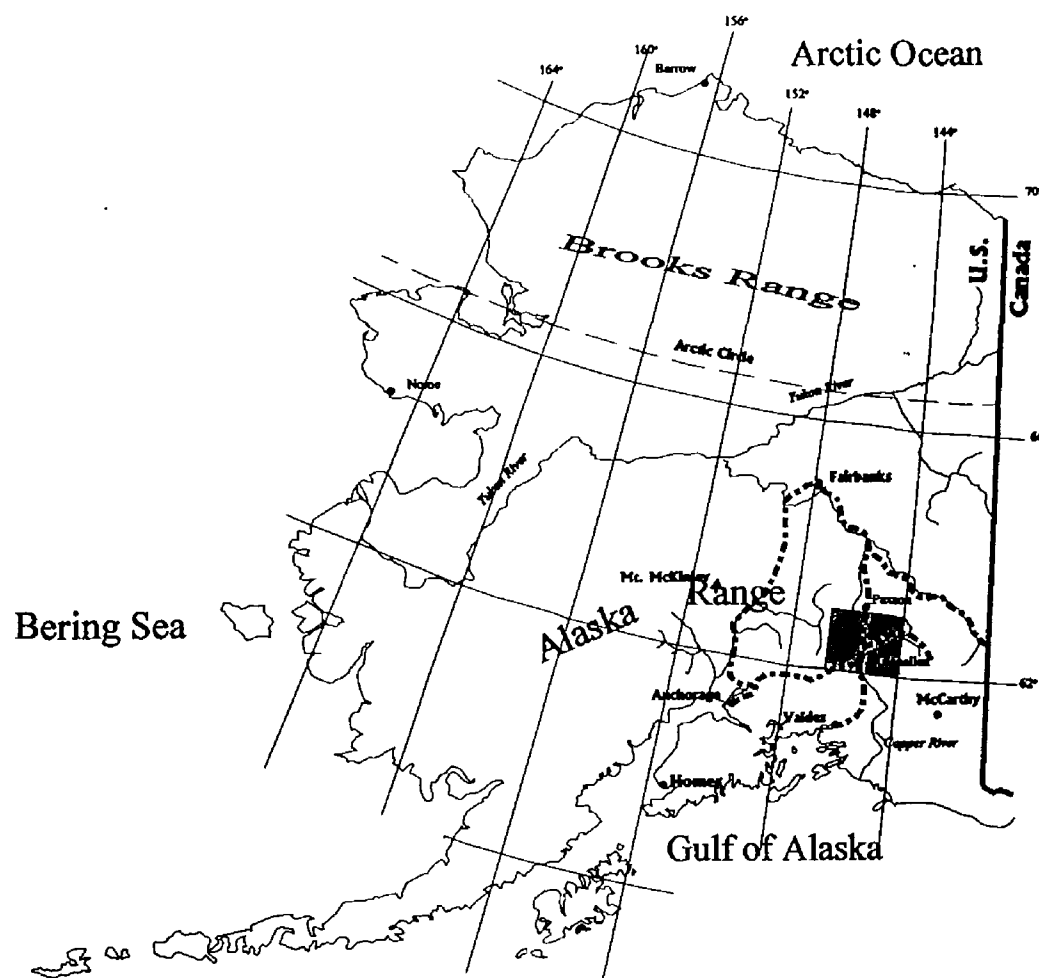


Figure 1. Index map showing the location of the Gulkana quadrangle (shaded area). Highways are shown as heavy dashed line.

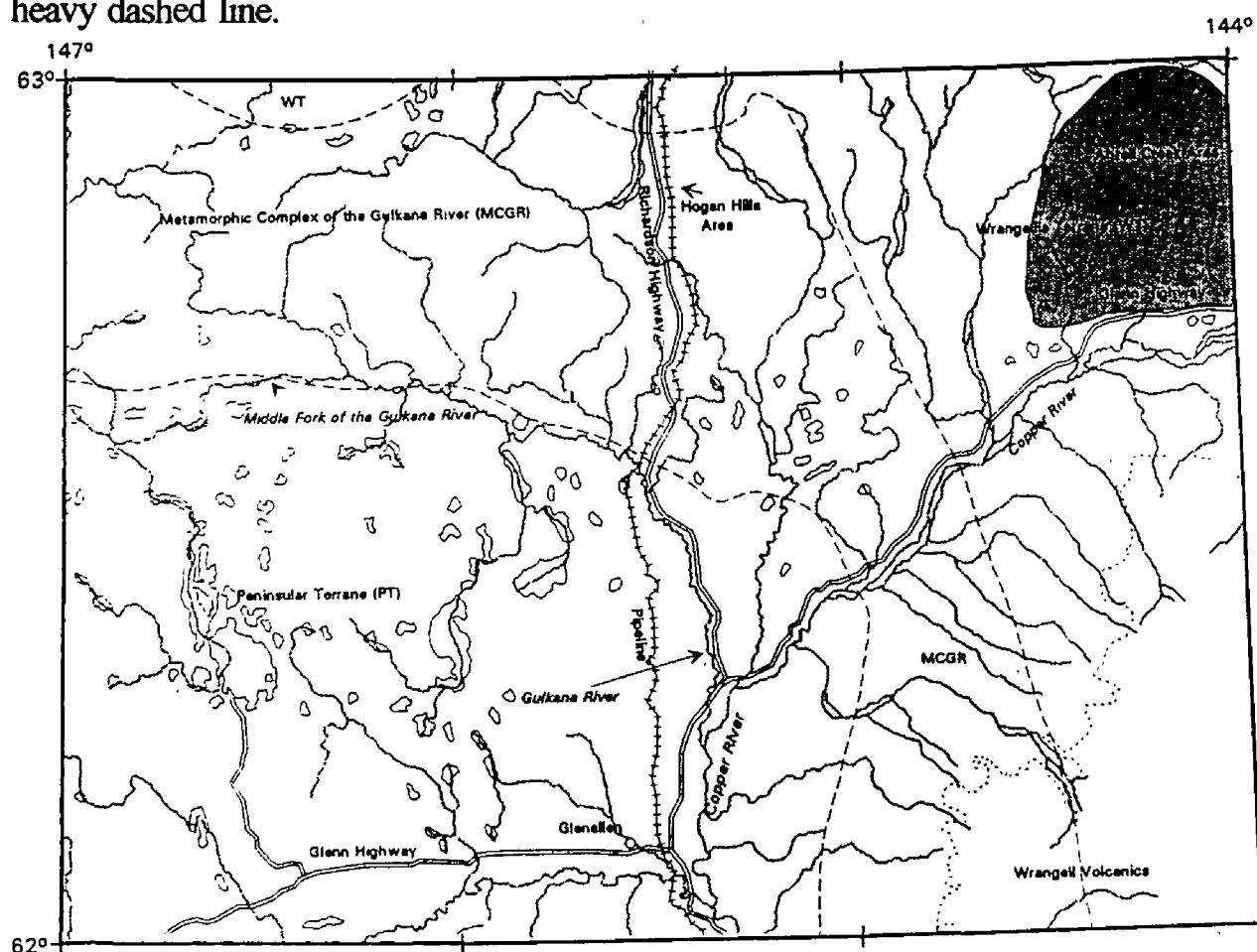


Figure 2. Generalized map showing geology and mining districts. Three bedrock terranes identified in the quadrangle are the Peninsular Terrane (PT), the Metamorphic Complex of Gulkana (MCGR), and the Wrangellia Terrane (WT). The quaternary volcanic rocks of the Wrangell Mountains overlie Wrangellia Terrane in the southeast corner of the quadrangle. The Ahtell Creek mineralized area is located in the northeast corner of the quadrangle and is shaded. The Hogan Hills mineralized area is located near the center of the quadrangle.

the Slana district are polymetallic quartz veins with variable amounts of chalcopyrite, galena, sphalerite, occasionally associated with argentiferous tetrahedrite, native bismuth, and rare traces of gold (Moffit, 1944). As of 1968, none of these lode deposits had been commercially developed (Richter, 1968). Small copper and silver-bearing quartz vein occurrences are hosted in volcanic rocks near Hogan Hills in the north-central part of the quadrangle (Rose and Saunders, 1970).

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 that contain concentrations of elements that may be related to mineral deposits. Heavy-mineral-concentrate samples provide information about the mineralogy and chemistry of each 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. Rock samples were collected from unaltered, altered, and mineralized outcrops.

Analyses of unaltered and unmineralized rock samples provide background geochemical data for individual rock units. On the other hand, analyses of altered and mineralized rocks, where present, may provide useful geochemical information about the major- and trace-element assemblages associated with the mineralized system.

Sample Collection

Stream-sediment and heavy-mineral concentrate samples were collected at approximately 550 sites (Plate 1). The average sample density is 1 site /4.6 sq. mi. in the Wrangell Mountains and 1 site/ 8.3 sq.mi. in the northern quarter of the study area. Due to the thick Quaternary cover, samples were not collected from the Copper River Basin. Bedrock grab samples were collected from an additional 146 sites (Plate 2).

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 the USGS topographic maps (scale = 1:63,360). Stream sediment samples are composites of fine-grained sediment collected along stream banks and below slow water and coarse-grained sediment collected along stream bottoms and channels of faster moving water. Each composite sample is taken from several locations within the stream-bed that may extend as much as 50 feet from the site plotted on the map.

Heavy-mineral-concentrate samples

Heavy-mineral-concentrate samples were collected from the same active alluvium as the stream-sediment samples. Each bulk sample was screened through a 2.0-mm (10 mesh) screen to remove coarse material. The less-than 2.0-mm fraction was panned until most of the quartz, feldspar, organic material, and clay-sized materials were removed.

Rock samples

Rock samples were collected from mineralized and unmineralized outcrops. Rock descriptions are listed in Table 5.

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, bromoform (specific gravity 2.8) was used 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 separator (in this case a modified

Frantz Isodynamic Separator). The most magnetic fraction, primarily magnetite, was not analyzed. The second-most magnetic fraction, largely ferromagnesian silicates and iron oxides, was saved for analysis/archival storage. The third and least magnetic fraction (which may include nonmagnetic ore minerals, zircon, sphene, etc.) was hand ground for spectrographic analysis.

Rock samples were reduced to 1/4 inch fragments in a jaw crusher. Crushed samples were split, if necessary, and fed into a Braun vertical pulverizer equipped with ceramic plates. Samples were pulverized to approximately minus 100-mesh (1.5 mm) and mixed to insure homogeneity.

Sample Analysis

Spectrographic method

The stream-sediment and rock samples were analyzed for 35 elements, and heavy-mineral concentrate samples for 37 elements using semiquantitative, direct-current arc emission spectrography (Grimes and Marranzino, 1968). The elements analyzed and their lower limits of determination are listed in Table 1. Sample spectra are recorded photographically and concentrations were determined 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 concentrations as follows: 100, 50, 20, 10, and so forth. Samples whose concentration 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 interval and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for major elements (iron, magnesium, calcium, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram). Analytical data for samples from the Gulkana quadrangle are listed in tables 3, 4, and 6.

Chemical methods

In addition to spectrographic analyses, stream-sediment and rock samples were analyzed for five-elements by atomic absorption spectrometry (AA) (O'Leary and Viets, 1986). Stream sediment samples were analyzed for an additional 10-elements and rocks samples were analyzed for an additional 5-elements by inductively-coupled plasma-atomic emission spectrometry (ICP-AES) (Motooka, 1990). These additional methods have lower limits of detection for these select elements than by the emission-spectrographic method. The 5-element AA method was used on the 1986 stream-sediment and rock samples. The 10-element ICP-AES method was used on the 1988 and 1991 stream-sediment samples. The limits of determination for each method are listed in table 2. Analytical results are listed in tables 3 and 6.

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 database 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 and publication (Van Trump and Miesch, 1977).

DESCRIPTION OF DATA TABLES

Tables 3, 4, and 6 list the results of analyses for stream-sediment, heavy-mineral-concentrate, and rock samples, respectively. In these three tables the data are arranged so that column 1 contains USGS-assigned sample numbers. These numbers correspond to the number shown on the site location map (plate 1 and 2). The next two columns contain latitude and longitude listed in degrees, minutes, and seconds. Columns in which the element headings show the letter "S" below or to the side of the element symbol indicate emission spectrographic analyses; "AA" to the side of an element symbol indicate atomic absorption analyses; "P" next to an element refers to the 10-element (for rocks only 5-elements were determined) ICP 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 (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 at in a sample, several dashes (--) are entered in tables 3, 4, and 6 in place of an analytical value. Table 5 lists the field number of the sample, the name of the 15 x 30 minute quadrangle in which the sample site is located (e.g. D-1) and petrographic descriptions of the samples collected and analyzed.

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Table 1. Limits of detection for DC-ARC emission spectrography.

<u>Element</u>	<u>DC-ARC Emission Spectrography - lower limit of detection based on 10-mg sample (Adrian and others, 1990)</u>
Ca	0.05 %
Fe	0.005 %
Mg	0.02 %
Na	0.2 %
P	0.2 %
Ti	0.002 %
Ag	0.5 ppm
As	200 ppm
Au	10 ppm
B	10 ppm
Ba	20 ppm
Be	1 ppm
Bi	10 ppm
Cd	20 ppm
Co	10 ppm
Cr	10 ppm
Cu	5 ppm
Ga	5 ppm
Ge	10 ppm
La	50 ppm
Mn	10 ppm
Mo	5 ppm
Nb	20 ppm
Ni	5 ppm
Pb	10 ppm
Sb	100 ppm
Sc	5 ppm
Sn	10 ppm
Sr	100 ppm
Th	100 ppm
V	10 ppm
W	20 ppm
Y	10 ppm
Zn	200 ppm
Zr	10 ppm
Pd *	5 ppm
Pt *	20 ppm

* Heavy-mineral-concentrate samples only

Table 2. Other methods of chemical analysis for stream-sediment and rock samples.

<u>Element</u>	<u>Atomic Absorption Spectrometry (AA) - lower limit of detection for five elements. (O'Leary and Viets, 1986)</u>	<u>Inductively coupled plasma - atomic emission spectrometry (ICP-AES) - lower limit of detection for ten elements. (Motooka, 1990)</u>
Ag	-----	0.045 ppm
As	10 ppm	0.600 ppm
Au	-----	0.150 ppm
Bi	3 ppm	0.600 ppm
Cd	0.10 ppm	0.050 ppm
Cu	-----	0.050 ppm
Mo	-----	0.090 ppm
Pb	-----	0.600 ppm
Sb	2 ppm	0.600 ppm
Zn	5 ppm	0.050 ppm

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska
 [N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown]

Sample	LATITUDE	LONGITUD	CA____S	FE____S	MG____S	NA____S	P____S	TI____S	AG_PPM_S	AS_PPM_S
001	62 55 20	145 41 48	1	5	2	--	--	.5	N	N
002	62 51 25	145 59 20	1	5	2	--	--	.5	N	N
003	62 51 57	146 6 10	1.5	5	2	--	--	.5	N	N
004	62 47 54	146 12 55	1	5	2	--	--	.5	N	N
005	62 48 18	146 14 17	1	5	1.5	--	--	.5	N	N
006	62 48 30	146 18 52	1	5	1.5	--	--	.5	N	N
007	62 46 38	146 23 5	1.5	5	1.5	--	--	.5	N	N
008	62 46 29	146 23 3	1	3	1.5	--	--	.5	N	N
009	62 45 24	146 17 10	1	2	1.5	--	--	.3	N	N
010	62 45 59	146 13 9	1	3	1	--	--	.7	<.5	N
011	62 45 38	146 13 58	1	.5	1	--	--	.2	N	N
012	62 45 27	146 15 10	1.5	5	2	--	--	.7	N	N
013	62 56 20	146 47 18	1.5	5	1	--	--	.3	N	N
014	62 56 30	146 46 50	1.5	5	1	--	--	.5	N	N
015	62 57 30	146 45 46	1	3	1	--	--	.5	N	N
016	62 59 12	146 47 50	1	5	1	--	--	.5	N	N
017	62 59 13	146 52 0	1.5	5	1	--	--	.7	N	N
018	62 48 26	146 51 0	1	5	1	--	--	.5	N	N
019	62 48 28	146 51 8	1.5	5	1	--	--	.5	N	N
020	62 47 22	146 48 32	.5	2	.3	--	--	.15	N	N
021	62 49 45	146 54 28	1.5	5	1.5	--	--	.5	N	N
022	62 50 12	146 53 22	1.5	5	2	--	--	.5	N	N
023	62 49 39	146 50 49	1.5	5	1.5	--	--	.5	N	N
024	62 47 38	146 59 20	1.5	5	1.5	--	--	.3	N	N
025	62 45 8	146 47 50	1	5	1.5	--	--	.3	N	N
026	62 45 6	146 52 40	1.5	5	1.5	--	--	.5	N	N
027	62 51 34	146 37 50	1	5	1	--	--	.5	<.5	N
028	62 49 58	146 33 38	1	3	1	--	--	.7	N	N
029	62 50 27	146 41 6	1	3	1	--	--	.5	<.5	N
030	62 43 29	146 54 30	1	3	1.5	--	--	.5	N	N
031	62 46 43	146 36 45	1	3	1.5	--	--	.5	N	N
032	62 47 21	146 38 39	1	3	1	--	--	.5	N	N
033	62 49 28	146 36 29	1	3	1	--	--	.5	N	N
034	62 44 6	146 4 39	1	3	1.5	--	--	.5	N	N
035	62 42 54	146 2 44	1	3	1	--	--	.5	N	N
037	62 43 13	145 52 58	1	3	1	--	--	.5	N	N
038	62 40 39	145 50 2	1.5	3	1	--	--	.5	N	N
039	62 44 15	144 2 42	1	3	1	--	--	.3	N	N
040	62 44 36	144 3 4	1	3	1	--	--	.3	N	N
041	62 44 8	144 0 38	1.5	5	1.5	--	--	.5	N	N
042	62 44 0	144 1 8	1.5	5	1.5	--	--	.5	N	N
043	62 45 40	144 4 0	.7	3	.7	--	--	.3	1	N
044	62 45 11	144 5 35	1	3	1	--	--	.5	<.5	N
045	62 48 21	144 6 0	1	3	1	--	--	.3	N	N
046	62 47 8	144 4 0	1	3	1	--	--	.2	<.5	N
047	62 46 48	144 5 5	1	5	1.5	--	--	.5	N	N
048	62 47 53	144 4 0	.5	5	1	--	--	.2	N	N
049	62 47 15	144 5 0	1	3	1	--	--	.3	N	N
050	62 47 12	144 4 50	1	3	1	--	--	.3	N	N
051	62 48 50	144 4 0	1	3	1	--	--	.3	N	N
052	62 48 52	144 3 42	.7	3	1	--	--	.3	N	N
053	62 49 20	144 6 37	1	5	2	--	--	.5	N	N
054	62 49 25	144 6 30	1	5	2	--	--	.5	N	N
055	62 48 42	144 8 36	.7	3	1	--	--	.2	N	N
056	62 48 52	144 8 48	.7	3	1	--	--	.2	N	N
057	62 50 21	144 7 52	.7	3	1.5	--	--	.3	N	N
058	62 50 30	144 7 39	1	2	1.5	--	--	.3	N	N
059	62 51 20	144 8 37	.7	3	1.5	--	--	.5	N	N
060	62 51 19	144 8 20	.7	3	1.5	--	--	.3	N	N
061	62 52 27	144 9 0	.5	3	1.5	--	--	.3	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
001	N	20	500	<1	N	N	20	150	30	--
002	N	20	300	<1	N	N	30	100	30	--
003	N	20	300	<1	N	N	30	100	30	--
004	N	20	300	<1	N	N	30	100	100	--
005	N	10	200	<1	N	N	30	70	200	--
006	N	20	200	<1	N	N	30	100	50	--
007	N	20	200	<1	N	N	20	100	30	--
008	N	50	300	<1	N	N	20	70	30	--
009	N	20	300	<1	N	N	20	30	10	--
010	N	50	300	<1	N	N	20	100	30	--
011	N	10	200	<1	N	N	5	200	10	--
012	N	20	200	<1	N	N	30	100	50	--
013	N	20	300	1	N	N	30	100	15	--
014	N	20	300	1	N	N	20	100	15	--
015	N	20	200	<1	N	N	20	100	30	--
016	N	20	200	<1	N	N	20	100	20	--
017	N	20	300	1	N	N	30	100	20	--
018	N	15	0	<1	N	N	30	70	50	--
019	N	10	100	<1	N	N	30	30	50	--
020	N	10	100	<1	N	N	10	100	50	--
021	N	20	500	1	N	N	30	150	50	--
022	N	20	500	<1	N	N	20	100	15	--
023	N	20	500	<1	N	N	20	100	20	--
024	N	70	500	1	N	N	20	100	20	--
025	N	20	300	<1	N	N	20	100	20	--
026	N	30	300	1	N	N	20	200	20	--
027	N	70	300	<1	N	N	30	200	100	--
028	N	20	200	<1	N	N	20	150	20	--
029	N	50	200	<1	N	N	20	100	30	--
030	N	50	200	<1	N	N	20	150	20	--
031	N	50	300	<1	N	N	20	200	20	--
032	N	50	300	<1	N	N	20	100	50	--
033	N	50	500	<1	N	N	20	200	20	--
034	N	20	300	<1	N	N	20	100	15	--
035	N	20	300	1	N	N	20	150	10	--
037	N	20	300	<1	N	N	20	70	20	--
038	N	30	300	<1	N	N	20	150	10	--
039	N	30	500	<1	N	N	20	70	30	--
040	N	50	500	<1	N	N	20	70	30	--
041	N	20	500	<1	N	N	20	100	20	--
042	N	20	500	<1	N	N	20	100	20	--
043	N	50	500	1	N	N	30	50	50	--
044	N	100	500	1	N	N	20	70	30	--
045	N	50	300	<1	N	N	15	70	20	--
046	N	30	500	1	N	N	20	50	150	--
047	N	20	500	<1	N	N	20	200	20	--
048	N	20	300	<1	N	N	20	50	200	--
049	N	70	500	1	N	N	20	70	30	--
050	N	50	500	<1	N	N	20	70	30	--
051	N	30	300	<1	N	N	20	100	30	--
052	N	20	300	<1	N	N	15	50	20	--
053	N	100	300	<1	N	N	20	50	30	--
054	N	20	200	N	N	N	20	150	20	--
055	N	30	200	<1	N	N	20	70	30	--
056	N	20	200	N	N	N	20	70	30	--
057	N	30	200	N	N	N	20	100	30	--
058	N	20	200	<1	N	N	20	700	20	--
059	N	20	200	<1	N	N	20	70	30	--
060	N	20	300	<1	N	N	20	70	50	--
061	N	20	300	<1	N	N	20	70	30	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
001	--	N	700	N	N	30	20	N	20	N
002	--	N	1,000	N	N	30	15	N	20	N
003	--	N	1,000	N	N	30	10	N	20	N
004	--	N	1,000	N	N	50	15	N	20	N
005	--	N	1,000	N	N	50	15	N	20	N
006	--	N	1,000	N	N	50	20	N	20	N
007	--	N	1,000	N	N	30	15	N	15	N
008	--	N	1,000	N	N	50	15	N	20	N
009	--	N	700	N	N	30	10	N	10	N
010	--	<20	1,000	N	N	30	15	N	20	N
011	--	N	700	N	N	5	10	N	5	N
012	--	N	1,000	N	<20	50	10	N	20	N
013	--	20	1,000	N	N	20	20	N	15	N
014	--	N	1,500	N	N	20	20	N	15	N
015	--	N	1,000	N	N	30	20	N	15	N
016	--	<20	1,000	<5	N	20	15	N	15	N
017	--	N	1,500	N	N	30	15	N	15	N
018	--	N	1,000	N	N	30	10	N	15	N
019	--	N	1,000	N	N	50	10	N	20	N
020	--	<20	500	N	N	20	10	N	10	N
021	--	<20	1,500	N	N	50	10	N	20	N
022	--	N	1,000	N	N	30	10	N	15	N
023	--	20	1,500	N	<20	50	15	N	15	N
024	--	N	1,000	N	N	30	20	N	15	N
025	--	N	1,000	N	N	30	15	N	15	N
026	--	N	1,500	N	N	50	<10	N	15	N
027	--	N	1,000	N	N	50	20	N	20	N
028	--	N	700	N	N	30	15	N	20	N
029	--	N	1,000	N	N	30	20	N	20	N
030	--	N	1,000	N	N	30	10	N	30	N
031	--	N	700	N	N	50	10	N	20	N
032	--	N	700	N	N	50	20	N	20	N
033	--	N	700	N	N	50	20	N	20	N
034	--	N	1,000	N	N	50	15	N	20	N
035	--	N	700	N	N	30	10	N	20	N
037	--	N	700	N	N	30	10	N	20	N
038	--	N	700	N	N	50	10	N	20	N
039	--	N	1,000	N	N	50	30	N	20	N
040	--	N	700	N	N	50	20	N	20	N
041	--	N	1,000	N	N	50	20	N	30	N
042	--	N	1,000	N	N	70	10	N	50	N
043	--	N	1,000	N	N	50	100	N	20	N
044	--	<20	1,000	N	N	50	50	N	20	N
045	--	N	500	N	N	30	15	N	15	N
046	--	N	700	10	N	30	30	N	15	N
047	--	N	1,000	N	N	50	20	N	20	N
048	--	N	500	10	N	20	30	N	20	N
049	--	N	700	N	N	50	20	N	20	N
050	--	N	1,000	N	N	50	10	N	20	N
051	--	N	1,000	N	N	50	20	N	20	N
052	--	N	500	N	N	20	10	N	15	N
053	--	20	700	N	N	30	50	N	15	N
054	--	<20	700	N	N	50	10	N	15	N
055	--	30	500	5	N	20	50	N	20	N
056	--	<20	500	N	N	50	20	N	15	N
057	--	N	700	N	N	50	20	N	10	N
058	--	N	700	N	N	30	15	N	15	N
059	--	N	700	N	N	30	20	N	15	N
060	--	N	700	N	N	30	20	N	15	N
061	--	N	700	N	N	50	20	N	15	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
001	300	N	300	N	20	N	500	--	--	--
002	300	N	200	N	20	N	200	--	--	--
003	200	N	200	N	20	N	100	--	--	--
004	200	N	200	N	20	N	200	--	--	--
005	150	N	200	N	20	N	100	--	--	--
006	200	N	200	N	20	N	300	--	--	--
007	300	N	200	N	15	N	100	--	--	--
008	300	N	200	N	20	N	150	--	--	--
009	200	N	200	N	10	N	100	--	--	--
010	300	N	200	N	30	N	200	--	--	--
011	300	N	50	N	<10	N	20	--	--	--
012	300	N	200	N	20	<200	200	--	--	--
013	500	N	150	N	20	<200	100	--	--	--
014	500	N	150	N	20	<200	70	--	--	--
015	300	N	200	N	15	N	70	--	--	--
016	500	N	200	N	20	N	100	--	--	--
017	500	N	150	N	20	<200	100	--	--	--
018	200	N	150	N	20	N	100	--	--	--
019	150	N	200	N	20	N	150	--	--	--
020	<100	N	100	N	15	N	30	--	--	--
021	300	N	200	N	20	N	200	--	--	--
022	300	N	200	N	20	N	300	--	--	--
023	300	N	200	N	20	N	200	--	--	--
024	500	N	200	N	20	N	200	--	--	--
025	300	N	200	N	20	N	200	--	--	--
026	300	N	200	N	30	<200	200	--	--	--
027	200	N	200	N	30	<200	500	--	--	--
028	300	N	200	N	20	N	700	--	--	--
029	300	N	200	N	20	N	200	--	--	--
030	300	N	200	N	20	N	200	--	--	--
031	300	N	200	N	20	N	100	--	--	--
032	300	N	200	N	30	N	200	--	--	--
033	300	N	200	N	30	N	150	--	--	--
034	300	N	200	N	20	N	500	--	--	--
035	300	N	150	N	20	N	200	--	--	--
037	300	N	150	N	20	N	200	--	--	--
038	300	N	200	N	20	N	100	--	--	--
039	200	N	200	N	20	N	100	--	--	--
040	200	N	200	N	20	N	150	--	--	--
041	300	N	200	N	20	<200	200	--	--	--
042	300	N	200	N	30	N	700	--	--	--
043	200	N	150	N	50	<200	200	--	--	--
044	300	N	150	N	30	<200	200	--	--	--
045	200	N	150	N	20	N	150	--	--	--
046	200	N	150	N	20	N	100	--	--	--
047	300	N	200	N	20	N	100	--	--	--
048	<100	N	150	N	30	N	70	--	--	--
049	300	N	200	N	20	N	100	--	--	--
050	200	N	150	N	30	N	200	--	--	--
051	300	N	200	N	15	N	200	--	--	--
052	100	N	100	N	20	N	100	--	--	--
053	300	N	300	N	15	<200	100	--	--	--
054	300	N	300	N	15	N	150	--	--	--
055	200	N	200	N	20	N	150	--	--	--
056	200	N	150	N	10	N	100	--	--	--
057	200	N	150	N	15	N	100	--	--	--
058	300	N	100	N	15	N	50	--	--	--
059	300	N	150	N	20	N	100	--	--	--
060	200	N	200	N	15	N	100	--	--	--
061	200	N	200	N	15	N	200	--	--	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
001	--	--	--	--	--	--	--	--	N	N	.1	N	30
002	--	--	--	--	--	--	--	--	10	N	.2	N	30
003	--	--	--	--	--	--	--	--	10	N	.2	N	30
004	--	--	--	--	--	--	--	--	10	N	.3	N	30
005	--	--	--	--	--	--	--	--	20	N	.3	N	30
006	--	--	--	--	--	--	--	--	20	N	.3	N	25
007	--	--	--	--	--	--	--	--	10	N	.2	N	35
008	--	--	--	--	--	--	--	--	10	N	.2	N	35
009	--	--	--	--	--	--	--	--	10	N	.2	N	20
010	--	--	--	--	--	--	--	--	10	N	.2	N	35
011	--	--	--	--	--	--	--	--	10	N	.2	N	30
012	--	--	--	--	--	--	--	--	10	N	.2	N	25
013	--	--	--	--	--	--	--	--	10	N	.3	N	50
014	--	--	--	--	--	--	--	--	10	N	.3	N	50
015	--	--	--	--	--	--	--	--	20	N	.3	N	25
016	--	--	--	--	--	--	--	--	20	N	.2	N	35
017	--	--	--	--	--	--	--	--	10	N	.3	N	40
018	--	--	--	--	--	--	--	--	10	N	.4	N	40
019	--	--	--	--	--	--	--	--	10	N	.4	N	35
020	--	--	--	--	--	--	--	--	10	N	.8	N	70
021	--	--	--	--	--	--	--	--	10	N	.4	N	35
022	--	--	--	--	--	--	--	--	10	N	.4	N	30
023	--	--	--	--	--	--	--	--	10	N	.4	N	40
024	--	--	--	--	--	--	--	--	N	N	.3	N	25
025	--	--	--	--	--	--	--	--	N	N	.3	N	35
026	--	--	--	--	--	--	--	--	10	N	.2	N	20
027	--	--	--	--	--	--	--	--	20	N	.6	N	55
028	--	--	--	--	--	--	--	--	10	N	.6	N	40
029	--	--	--	--	--	--	--	--	10	N	.6	N	50
030	--	--	--	--	--	--	--	--	10	N	.2	N	30
031	--	--	--	--	--	--	--	--	10	N	.2	N	35
032	--	--	--	--	--	--	--	--	N	N	.3	N	45
033	--	--	--	--	--	--	--	--	10	N	.3	N	40
034	--	--	--	--	--	--	--	--	10	N	.2	N	20
035	--	--	--	--	--	--	--	--	N	N	.2	N	25
037	--	--	--	--	--	--	--	--	10	N	.2	N	30
038	--	--	--	--	--	--	--	--	N	N	.2	N	25
039	--	--	--	--	--	--	--	--	20	N	.9	N	65
040	--	--	--	--	--	--	--	--	30	N	.3	N	35
041	--	--	--	--	--	--	--	--	10	N	.7	N	120
042	--	--	--	--	--	--	--	--	20	N	.3	N	25
043	--	--	--	--	--	--	--	--	30	N	2.2	4	120
044	--	--	--	--	--	--	--	--	30	N	.6	N	75
045	--	--	--	--	--	--	--	--	20	N	.3	N	25
046	--	--	--	--	--	--	--	--	10	N	.4	N	30
047	--	--	--	--	--	--	--	--	10	N	.3	N	30
048	--	--	--	--	--	--	--	--	10	N	.4	N	30
049	--	--	--	--	--	--	--	--	20	N	.3	N	30
050	--	--	--	--	--	--	--	--	40	N	.2	N	30
051	--	--	--	--	--	--	--	--	10	N	.2	N	20
052	--	--	--	--	--	--	--	--	40	N	.2	N	35
053	--	--	--	--	--	--	--	--	20	N	.4	N	30
054	--	--	--	--	--	--	--	--	10	N	.2	N	20
055	--	--	--	--	--	--	--	--	20	N	1.6	N	55
056	--	--	--	--	--	--	--	--	20	N	.3	N	20
057	--	--	--	--	--	--	--	--	10	N	.4	N	20
058	--	--	--	--	--	--	--	--	10	N	.3	N	20
059	--	--	--	--	--	--	--	--	20	N	.3	N	25
060	--	--	--	--	--	--	--	--	20	N	.4	N	35
061	--	--	--	--	--	--	--	--	20	N	.4	N	20

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUD	CA____S	FE____S	MG____S	NA____S	P____S	TI____S	AG_PPM_S	AS_PPM_S
062	62 52 22	144 8 45	.5	3	1	--	--	.3	N	N
063	62 52 35	144 4 32	1	5	1	--	--	.3	N	N
064	62 48 9	144 0 0	.7	3	1.5	--	--	.3	N	N
065	62 50 22	144 2 51	1	5	1.5	--	--	.5	N	N
066	62 50 40	144 2 35	.5	2	.5	--	--	.15	N	N
067	62 50 39	144 2 21	1	5	1	--	--	.3	N	N
068	62 51 15	144 0 25	1	3	1	--	--	.3	N	N
069	62 51 12	144 0 25	1.5	3	1	--	--	.3	N	N
070	62 51 21	144 0 50	.5	3	1	--	--	.3	N	N
071	62 52 1	144 3 40	.7	3	.7	--	--	.2	N	N
072	62 54 9	144 7 4	.3	5	2	--	--	.3	N	N
073	62 54 20	144 6 47	1	5	2	--	--	.3	N	N
074	62 53 33	144 5 18	.5	3	.7	--	--	.2	N	N
075	62 53 40	144 6 21	.7	5	1.5	--	--	.2	N	N
076	62 55 8	144 8 23	1	5	2	--	--	.2	N	N
077	62 55 2	144 8 49	.7	3	1.5	--	--	.3	N	N
078	62 56 33	144 9 30	1	5	1.5	--	--	.3	N	N
079	62 56 13	144 3 55	1	5	1.5	--	--	.2	N	N
080	62 56 15	144 4 5	1	5	1.5	--	--	.2	N	N
081	62 57 19	144 5 25	1	5	1.5	--	--	.3	N	N
082	62 55 30	144 4 7	1	5	1.5	--	--	.3	N	N
083	62 55 47	144 4 7	1	5	1.5	--	--	.3	N	N
084	62 59 10	144 8 23	1	5	1.5	--	--	.3	N	N
085	62 58 10	144 10 58	.7	5	1.5	--	--	.2	N	N
086	62 56 30	144 11 15	1	7	1.5	--	--	.3	N	N
087	62 56 35	144 14 53	1	3	1.5	--	--	.3	N	N
088	62 53 9	144 11 55	1	5	1.5	--	--	.5	N	N
089	62 58 3	144 16 12	1	3	1.5	--	--	.5	N	N
090	62 59 10	144 15 45	1	5	1.5	--	--	.3	N	N
091	62 58 35	144 13 50	1	5	1.5	--	--	.5	N	N
092	62 55 7	144 15 58	1	5	1.5	--	--	.7	N	N
093	62 55 0	144 11 53	1	5	2	--	--	.5	N	N
094	62 55 0	144 12 18	.7	5	1.5	--	--	.5	N	N
095	62 52 18	144 13 55	1	5	1.5	--	--	.7	N	N
096	62 51 45	144 15 0	1.5	5	2	--	--	.5	N	N
097	62 50 30	144 12 47	1	3	1.5	--	--	.5	N	N
098	62 50 24	144 12 52	1	3	2	--	--	.5	N	N
099	62 50 15	144 13 12	1	5	1.5	--	--	.5	<.5	N
100	62 50 5	144 14 22	1	5	2	--	--	.7	N	N
101	62 49 48	144 16 0	1	5	2	--	--	.5	N	N
102	62 54 21	144 23 52	1	5	1.5	--	--	.5	N	N
103	62 55 3	144 24 40	1	5	2	--	--	.5	N	N
104	62 55 35	144 23 12	1.5	7	2	--	--	.5	N	N
105	62 53 45	144 23 31	1	5	2	--	--	.5	N	N
107	62 55 51	144 20 18	.7	3	1	--	--	.2	N	N
108	62 52 53	144 25 42	1	5	2	--	--	.5	N	N
109	62 53 4	144 20 10	1	5	1.5	--	--	.3	N	N
110	62 53 0	144 19 25	1	5	1.5	--	--	.5	N	N
111	62 51 32	144 20 2	1	5	1.5	--	--	.3	N	N
112	62 51 0	144 22 55	1	5	1.5	--	--	.5	<.5	N
113	62 50 5	144 26 39	1	5	2	--	--	.5	N	N
114	62 50 13	144 17 42	1	5	2	--	--	.5	N	N
115	62 49 43	144 20 2	1	7	2	--	--	.5	<.5	N
116	62 48 17	144 19 21	1	5	2	--	--	.5	N	N
117	62 48 12	144 19 21	1	5	2	--	--	.5	N	N
118	62 48 25	144 21 45	1.5	5	2	--	--	.3	N	N
119	62 47 42	144 23 15	1.5	5	3	--	--	.5	N	N
120	62 47 5	144 21 19	1	5	1	--	--	.5	N	N
121	62 48 27	144 28 35	1	5	1	--	--	.3	N	N
122	62 45 29	144 20 15	1	5	1.5	--	--	.5	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
062	N	20	150	<1	N	N	20	30	50	--
063	N	50	200	1	N	N	30	20	100	--
064	N	20	300	<1	N	N	20	100	50	--
065	N	20	200	<1	N	N	20	200	50	--
066	N	30	200	<1	N	N	10	10	15	--
067	N	30	500	<1	N	N	15	70	30	--
068	N	10	200	N	N	N	15	50	30	--
069	N	30	300	1	N	N	15	20	20	--
070	N	20	300	<1	N	N	15	70	20	--
071	N	20	300	<1	N	N	10	10	20	--
072	N	20	300	<1	N	N	30	50	150	--
073	N	70	700	<1	N	N	20	150	100	--
074	N	50	700	<1	N	N	15	50	50	--
075	N	20	500	<1	N	N	30	100	100	--
076	N	100	700	<1	N	N	20	150	100	--
077	N	20	500	<1	N	N	20	70	50	--
078	N	20	300	<1	N	N	30	100	70	--
079	N	20	500	<1	N	N	20	50	50	--
080	N	20	500	<1	N	N	20	100	50	--
081	N	20	500	<1	N	N	20	150	30	--
082	N	20	500	<1	N	N	20	50	100	--
083	N	20	500	<1	N	N	20	200	50	--
084	N	20	500	N	N	N	20	100	50	--
085	N	20	500	N	N	N	20	100	20	--
086	N	20	500	<1	N	N	20	50	30	--
087	N	20	300	<1	N	N	15	100	30	--
088	N	100	500	2	N	N	20	70	50	--
089	N	20	300	<1	N	N	15	100	30	--
090	N	20	500	<1	N	N	20	200	70	--
091	N	20	300	<1	N	N	20	200	30	--
092	N	100	500	2	N	N	30	150	70	--
093	N	50	500	<1	N	N	30	150	30	--
094	N	50	500	1	N	N	30	150	30	--
095	N	100	300	<1	N	N	30	300	30	--
096	N	50	500	<1	N	N	30	200	30	--
097	N	50	300	<1	N	N	20	200	20	--
098	N	100	300	<1	N	N	20	100	30	--
099	N	30	500	1.5	N	N	20	70	50	--
100	N	20	500	<1	N	N	30	300	30	--
101	N	20	300	<1	N	N	20	100	20	--
102	N	20	500	<1	N	N	30	100	50	--
103	N	15	500	<1	N	N	30	200	50	--
104	N	10	500	<1	N	N	30	200	50	--
105	N	15	300	N	N	N	30	150	30	--
107	N	15	500	<1	N	N	20	100	30	--
108	N	20	500	<1	N	N	30	300	20	--
109	N	15	300	<1	N	N	30	100	20	--
110	N	20	300	<1	N	N	30	100	20	--
111	N	15	300	<1	N	N	30	150	20	--
112	N	10	300	<1	N	N	30	200	20	--
113	N	20	300	<1	N	N	30	150	20	--
114	N	20	500	1	N	N	30	150	30	--
115	N	10	300	<1	N	N	50	300	30	--
116	N	10	300	1	N	N	30	100	30	--
117	N	15	300	<1	N	N	30	200	30	--
118	N	15	500	<1	N	N	30	200	30	--
119	N	15	300	<1	N	N	30	300	20	--
120	N	10	300	<1	N	N	20	150	30	--
121	N	10	500	<1	N	N	20	100	30	--
122	N	10	300	<1	N	N	30	100	30	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
062	--	N	700	N	N	20	10	N	15	N
063	--	N	1,000	N	N	10	10	N	20	N
064	--	N	1,000	N	N	30	20	N	15	N
065	--	N	1,000	N	N	50	15	N	20	N
066	--	N	700	N	N	5	10	200	10	N
067	--	N	1,000	N	N	20	10	N	15	N
068	--	N	700	N	N	10	10	N	15	N
069	--	N	1,000	<5	N	7	10	N	15	N
070	--	N	1,000	N	N	20	10	N	15	N
071	--	N	700	N	N	7	<10	N	10	N
072	--	N	700	10	N	20	30	N	20	N
073	--	N	1,000	<5	N	50	10	N	20	N
074	--	N	700	N	N	20	10	N	15	N
075	--	N	700	N	N	50	20	N	20	N
076	--	N	1,000	20	N	50	<10	N	20	N
077	--	30	700	N	N	30	20	N	15	N
078	--	N	700	N	N	50	20	N	20	N
079	--	N	700	N	N	30	15	N	20	N
080	--	N	700	N	N	30	15	N	15	N
081	--	N	1,000	N	N	50	20	N	20	N
082	--	N	1,000	N	N	20	20	N	15	N
083	--	N	700	N	N	30	20	N	15	N
084	--	N	700	N	N	50	15	N	20	N
085	--	N	700	N	N	30	10	N	15	N
086	--	20	1,000	N	N	50	30	N	20	N
087	--	N	1,000	N	N	50	10	N	15	N
088	--	50	1,000	5	N	50	50	N	20	N
089	--	N	700	N	N	30	20	N	15	N
090	--	N	1,000	N	N	50	20	N	15	N
091	--	N	1,000	N	N	50	20	N	20	N
092	--	100	700	<5	N	50	50	N	30	N
093	--	20	700	<5	N	70	50	N	20	N
094	--	20	700	N	N	50	50	N	20	N
095	--	<20	700	N	N	100	20	N	30	N
096	--	N	700	N	N	100	30	N	30	N
097	--	N	1,000	N	N	50	20	N	20	N
098	--	N	1,000	<5	N	50	20	N	20	N
099	--	20	1,000	<5	N	30	50	N	20	N
100	--	<20	1,000	<5	N	50	70	N	20	N
101	--	N	1,000	N	N	50	15	N	20	N
102	--	N	1,000	N	N	50	20	N	20	N
103	--	N	700	N	N	50	30	N	20	N
104	--	N	1,000	N	N	70	30	N	20	N
105	--	N	500	N	N	50	10	N	20	N
107	--	N	700	N	N	50	20	N	15	N
108	--	N	700	N	N	100	10	N	20	N
109	--	N	700	N	N	50	20	N	20	N
110	--	N	700	N	N	50	15	N	20	N
111	--	N	700	N	N	50	15	N	20	N
112	--	N	1,000	N	N	50	15	N	20	N
113	--	N	700	N	N	50	10	N	20	N
114	--	<20	1,000	N	N	50	30	N	20	N
115	--	N	700	N	N	100	20	N	30	N
116	--	N	1,000	N	N	30	20	N	20	N
117	--	N	700	N	N	50	20	N	20	N
118	--	N	700	N	N	50	15	N	20	N
119	--	N	700	N	N	70	10	N	30	N
120	--	N	700	N	N	20	20	N	20	N
121	--	N	1,000	N	N	20	20	N	20	N
122	--	N	1,000	N	N	30	20	N	20	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
062	200	N	100	N	15	N	70	--	--	--
063	300	N	150	N	20	<200	50	--	--	--
064	200	N	100	N	15	<200	70	--	--	--
065	200	N	200	N	20	<200	100	--	--	--
066	100	N	50	N	20	N	50	--	--	--
067	200	N	100	N	20	N	100	--	--	--
068	200	N	100	N	15	N	50	--	--	--
069	300	N	100	N	20	N	70	--	--	--
070	100	N	70	N	20	N	100	--	--	--
071	100	N	70	N	20	N	70	--	--	--
072	<100	N	200	N	20	<200	70	--	--	--
073	100	N	200	N	20	N	200	--	--	--
074	<100	N	100	N	20	N	200	--	--	--
075	200	N	150	N	20	N	100	--	--	--
076	100	N	150	N	20	N	100	--	--	--
077	300	N	150	N	15	<200	100	--	--	--
078	200	N	150	N	15	N	50	--	--	--
079	200	N	150	N	20	N	70	--	--	--
080	100	N	150	N	15	N	200	--	--	--
081	300	N	150	N	15	<200	100	--	--	--
082	300	N	150	N	20	N	70	--	--	--
083	200	N	150	N	15	N	70	--	--	--
084	200	N	150	N	15	N	100	--	--	--
085	150	N	150	N	15	N	70	--	--	--
086	300	N	300	N	20	N	1,000	--	--	--
087	300	N	200	N	15	N	300	--	--	--
088	500	N	200	N	30	<200	200	--	--	--
089	300	N	200	N	10	N	100	--	--	--
090	200	N	200	N	15	N	500	--	--	--
091	200	N	200	N	50	<200	100	--	--	--
092	300	N	200	N	50	<200	200	--	--	--
093	300	N	200	N	20	N	500	--	--	--
094	200	N	200	N	20	N	300	--	--	--
095	300	N	200	N	20	N	700	--	--	--
096	300	N	200	N	20	N	150	--	--	--
097	300	N	200	N	15	N	100	--	--	--
098	300	N	150	N	20	N	200	--	--	--
099	300	N	200	N	20	N	200	--	--	--
100	300	N	200	N	20	N	100	--	--	--
101	300	N	200	N	15	N	100	--	--	--
102	300	N	200	N	20	N	200	--	--	--
103	200	N	200	N	20	<200	100	--	--	--
104	200	N	300	N	20	<200	200	--	--	--
105	200	N	200	N	20	<200	150	--	--	--
107	200	N	100	N	20	N	100	--	--	--
108	300	N	150	N	15	<200	200	--	--	--
109	200	N	150	N	15	N	100	--	--	--
110	200	N	150	N	20	N	100	--	--	--
111	200	N	150	N	15	N	50	--	--	--
112	200	N	200	N	20	N	100	--	--	--
113	200	N	150	N	20	N	100	--	--	--
114	200	N	200	N	20	N	150	--	--	--
115	200	N	200	N	20	<200	100	--	--	--
116	300	N	200	N	20	N	100	--	--	--
117	300	N	200	N	20	N	100	--	--	--
118	300	N	200	N	15	<200	100	--	--	--
119	300	N	200	N	20	<200	100	--	--	--
120	300	N	200	N	15	N	100	--	--	--
121	200	N	200	N	20	N	100	--	--	--
122	200	N	200	N	20	N	100	--	--	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
062	--	--	--	--	--	--	--	--	30	N	.3	N	15
063	--	--	--	--	--	--	--	--	30	N	.3	N	15
064	--	--	--	--	--	--	--	--	20	N	.5	N	60
065	--	--	--	--	--	--	--	--	20	N	.3	N	25
066	--	--	--	--	--	--	--	--	50	N	1	N	35
067	--	--	--	--	--	--	--	--	50	N	.3	N	35
068	--	--	--	--	--	--	--	--	20	N	.3	N	20
069	--	--	--	--	--	--	--	--	10	N	.2	N	10
070	--	--	--	--	--	--	--	--	40	N	.2	N	35
071	--	--	--	--	--	--	--	--	60	N	.3	N	30
072	--	--	--	--	--	--	--	--	30	N	.9	N	65
073	--	--	--	--	--	--	--	--	40	N	.9	N	20
074	--	--	--	--	--	--	--	--	60	N	.3	N	35
075	--	--	--	--	--	--	--	--	30	N	.3	N	20
076	--	--	--	--	--	--	--	--	40	N	.3	N	20
077	--	--	--	--	--	--	--	--	20	N	.9	N	80
078	--	--	--	--	--	--	--	--	--	--	--	--	--
079	--	--	--	--	--	--	--	--	90	N	.4	N	30
080	--	--	--	--	--	--	--	--	80	N	.4	N	25
081	--	--	--	--	--	--	--	--	--	--	--	--	--
082	--	--	--	--	--	--	--	--	80	N	.5	N	35
083	--	--	--	--	--	--	--	--	130	N	.3	2	20
084	--	--	--	--	--	--	--	--	20	N	.4	N	25
085	--	--	--	--	--	--	--	--	20	N	.3	N	15
086	--	--	--	--	--	--	--	--	20	N	.7	N	40
087	--	--	--	--	--	--	--	--	20	N	.6	N	35
088	--	--	--	--	--	--	--	--	60	N	.4	N	20
089	--	--	--	--	--	--	--	--	10	N	.3	N	35
090	--	--	--	--	--	--	--	--	20	N	.5	N	50
091	--	--	--	--	--	--	--	--	20	N	.4	N	35
092	--	--	--	--	--	--	--	--	30	N	.6	N	30
093	--	--	--	--	--	--	--	--	20	N	.3	N	20
094	--	--	--	--	--	--	--	--	30	N	.4	N	20
095	--	--	--	--	--	--	--	--	20	N	.3	N	20
096	--	--	--	--	--	--	--	--	10	N	.3	N	20
097	--	--	--	--	--	--	--	--	20	N	.3	N	25
098	--	--	--	--	--	--	--	--	10	N	.3	N	15
099	--	--	--	--	--	--	--	--	20	N	.5	N	30
100	--	--	--	--	--	--	--	--	20	N	.4	N	30
101	--	--	--	--	--	--	--	--	10	N	.3	N	25
102	--	--	--	--	--	--	--	--	30	N	.3	N	60
103	--	--	--	--	--	--	--	--	20	N	2.8	N	150
104	--	--	--	--	--	--	--	--	20	N	.9	N	80
105	--	--	--	--	--	--	--	--	20	N	.3	N	35
107	--	--	--	--	--	--	--	--	20	N	.6	N	60
108	--	--	--	--	--	--	--	--	20	N	.3	N	40
109	--	--	--	--	--	--	--	--	20	N	.4	N	50
110	--	--	--	--	--	--	--	--	20	N	.3	N	40
111	--	--	--	--	--	--	--	--	10	N	.3	N	45
112	--	--	--	--	--	--	--	--	30	N	.3	N	45
113	--	--	--	--	--	--	--	--	20	N	.4	N	40
114	--	--	--	--	--	--	--	--	20	N	.5	N	50
115	--	--	--	--	--	--	--	--	20	N	.3	N	50
116	--	--	--	--	--	--	--	--	30	N	.6	N	60
117	--	--	--	--	--	--	--	--	20	N	.3	N	50
118	--	--	--	--	--	--	--	--	20	N	.4	N	45
119	--	--	--	--	--	--	--	--	20	N	.2	N	35
120	--	--	--	--	--	--	--	--	20	N	.2	N	30
121	--	--	--	--	--	--	--	--	20	N	.4	N	55
122	--	--	--	--	--	--	--	--	20	N	.3	N	45

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUDE	CA_____S	FE_____S	MG_____S	NA_____S	P_____S	TI_____S	AG_PPM_S	AS_PPM_S
123	62 45 17	144 18 31	1	5	1	--	--	.5	N	N
124	62 48 32	144 12 49	.5	3	1	--	--	.5	N	N
125	62 47 50	144 12 50	1	5	1.5	--	--	.5	N	N
126	62 46 19	144 14 32	1	5	1.5	--	--	.5	N	N
127	62 46 4	144 15 30	1	5	1.5	--	--	.3	N	N
128	62 46 28	144 9 50	.7	5	1.5	--	--	.5	<.5	N
129	62 46 25	144 9 38	1	5	1.5	--	--	.3	N	N
130	62 47 33	144 9 49	1	5	1.5	--	--	.5	.5	N
131	62 47 34	144 9 31	.7	5	1	--	--	.3	N	N
132	62 44 53	144 9 53	.7	5	1	--	--	.5	<.5	N
133	62 45 25	144 9 45	.7	5	1	--	--	.5	<.5	N
134	62 44 28	144 12 50	1	5	1	--	--	.5	N	N
135	62 44 39	144 12 18	1	5	1	--	--	.5	N	N
136	62 44 2	144 14 2	1	7	1	--	--	.5	N	N
137	62 43 12	144 21 7	1	3	2	--	--	.5	N	N
138	62 42 58	144 21 48	1	3	2	--	--	.7	N	N
139	62 24 38	144 9 12	1.5	5	2	--	--	.7	N	N
140	62 24 28	144 9 19	1.5	3	2	--	--	.3	N	N
141	62 23 56	144 10 11	1	3	2	--	--	.7	N	N
142	62 23 45	144 10 5	1	2	3	--	--	.2	N	N
143	62 23 32	144 10 57	1.5	3	2	--	--	.5	N	N
144	62 23 22	144 10 48	1.5	3	2	--	--	.3	N	N
145	62 22 35	144 9 23	1.5	3	3	--	--	.5	N	N
146	62 22 42	144 9 10	1.5	3	2	--	--	.3	N	N
147	62 23 52	144 7 30	1	3	2	--	--	.3	N	N
148	62 23 49	144 7 12	1	5	3	--	--	.5	N	N
149	62 14 4	144 39 18	1	3	2	--	--	.2	N	N
150	62 11 47	144 39 43	1	3	2	--	--	.2	N	N
151	62 13 40	144 37 12	1.5	3	2	--	--	.3	N	N
152	62 13 48	144 37 33	1.5	3	2	--	--	.3	N	N
153	62 13 18	144 35 20	1	3	1	--	--	.2	N	N
154	62 7 21	144 15 35	1.5	5	2	--	--	.3	N	N
155	62 6 50	144 15 0	1	3	1.5	--	--	.3	N	N
156	62 6 12	144 14 18	1	3	2	--	--	.3	N	N
157	62 25 44	144 11 35	1	2	2	--	--	.3	N	N
158	62 25 42	144 12 21	1	3	2	--	--	.3	N	N
159	62 21 29	144 7 59	1.5	5	2	--	--	.5	N	N
160	62 21 51	144 8 18	1	3	1.5	--	--	.3	N	N
161	62 22 43	144 4 49	1	3	1.5	--	--	.3	N	N
162	62 22 45	145 5 0	1	3	2	--	--	.3	N	N
163	62 23 0	144 5 5	1	3	2	--	--	.3	N	N
164	62 22 42	144 0 55	1	3	2	--	--	.3	N	N
165	62 24 18	144 3 7	1	3	2	--	--	.3	N	N
166	62 24 29	144 2 51	1	5	2	--	--	.5	N	N
167	62 24 50	144 5 42	1	5	2	--	--	.5	N	N
168	62 24 40	144 0 42	1	3	1.5	--	--	.3	N	N
169	62 24 30	144 0 21	1	3	1.5	--	--	.3	N	N
170	62 42 42	144 39 55	1	5	2	--	--	.5	N	N
171	62 42 37	144 38 0	1	7	2	--	--	.5	N	N
172	62 42 49	144 31 29	1	5	2	--	--	.5	N	N
173	62 44 3	144 34 11	1	3	1.5	--	--	.3	N	N
174	62 43 42	144 33 55	1	2	1.5	--	--	.3	N	N
177	62 43 7	144 6 18	1	3	1.5	--	--	.5	N	N
178	62 43 5	144 7 39	1	5	1	--	--	.5	N	N
179	62 43 8	144 14 21	1	3	1.5	--	--	.5	N	N
183	62 0 1	144 50 0	1	5	1	--	--	.5	N	N
184	62 2 3	144 32 59	1	7	1	--	--	.5	N	N
185	62 2 10	144 32 50	1	2	1	--	--	.5	N	N
186	62 3 5	144 33 31	1	3	1.5	--	--	.5	N	N
187	62 3 9	144 33 21	.7	2	1	--	--	.2	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
123	N	15	300	<1	N	N	30	70	30	--
124	N	10	500	1	N	N	20	50	20	--
125	N	10	500	<1	N	N	20	100	30	--
126	N	20	300	<1	N	N	30	200	30	--
127	N	10	300	<1	N	N	20	70	20	--
128	N	10	300	<1	N	N	30	100	50	--
129	N	10	500	<1	N	N	20	100	30	--
130	N	10	500	1	N	N	50	300	100	--
131	N	10	300	1	N	N	30	70	50	--
132	N	200	500	1	N	N	20	100	50	--
133	N	20	500	<1	N	N	20	150	30	--
134	N	20	300	<1	N	N	30	150	50	--
135	N	10	300	<1	N	N	20	150	30	--
136	N	15	300	<1	N	N	20	150	30	--
137	N	30	300	<1	N	N	30	100	30	--
138	N	20	300	<1	N	N	30	200	50	--
139	N	10	300	<1	N	N	30	70	70	--
140	N	10	200	1	N	N	30	70	70	--
141	N	10	200	<1	N	N	30	70	50	--
142	N	10	150	<1	N	N	30	100	50	--
143	N	10	300	<1	N	N	30	70	50	--
144	N	10	150	<1	N	N	20	70	30	--
145	N	15	300	<1	N	N	30	100	50	--
146	N	15	200	<1	N	N	20	70	50	--
147	N	15	200	<1	N	N	20	70	50	--
148	N	15	200	<1	N	N	30	100	30	--
149	N	15	200	<1	N	N	20	70	20	--
150	N	15	200	<1	N	N	20	100	20	--
151	N	15	300	<1	N	N	30	100	30	--
152	N	15	300	<1	N	N	20	50	20	--
153	N	15	200	<1	N	N	15	50	30	--
154	N	15	200	<1	N	N	20	70	30	--
155	N	15	200	<1	N	N	20	50	30	--
156	N	10	150	<1	N	N	20	70	30	--
157	N	10	150	<1	N	N	20	70	30	--
158	N	15	150	N	N	N	20	70	30	--
159	N	15	200	N	N	N	30	100	50	--
160	N	15	200	<1	N	N	20	50	50	--
161	N	15	200	<1	N	N	20	30	50	--
162	N	15	200	<1	N	N	20	50	50	--
163	N	10	150	N	N	N	20	50	30	--
164	N	15	200	<1	N	N	20	50	30	--
165	N	15	150	N	N	N	20	70	50	--
166	N	15	150	<1	N	N	30	100	50	--
167	N	15	200	<1	N	N	30	100	50	--
168	N	15	200	<1	N	N	20	50	30	--
169	N	20	200	<1	N	N	15	30	30	--
170	N	20	300	<1	N	N	30	100	20	--
171	N	50	200	<1	N	N	30	200	20	--
172	N	20	200	N	N	N	20	100	20	--
173	N	20	300	N	N	N	20	100	20	--
174	N	20	200	N	N	N	20	150	10	--
177	N	50	300	N	N	N	30	200	30	--
178	N	300	300	<1	N	N	30	100	50	--
179	N	20	200	<1	N	N	30	200	20	--
183	N	15	300	<1	N	N	20	70	50	--
184	N	10	200	N	N	N	30	100	30	--
185	N	10	300	<1	N	N	20	50	15	--
186	N	20	200	<1	N	N	30	50	30	--
187	N	10	200	<1	N	N	15	50	20	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
123	--	N	1,000	N	N	30	20	N	20	N
124	--	N	1,000	N	N	20	30	N	15	N
125	--	20	1,000	N	N	50	30	N	20	N
126	--	N	700	N	N	50	15	N	15	N
127	--	N	1,000	N	N	30	15	N	15	N
128	--	<20	1,500	<5	N	50	100	N	20	N
129	--	N	1,000	N	N	50	30	N	15	N
130	--	20	1,500	5	N	50	100	N	15	N
131	--	N	2,000	10	N	50	70	N	15	N
132	--	N	700	<5	N	30	70	N	15	N
133	--	N	1,000	<5	N	50	70	N	15	N
134	--	N	700	N	N	50	20	N	20	N
135	--	N	700	N	N	50	50	N	15	N
136	--	N	700	N	N	50	100	N	15	N
137	--	N	1,000	N	N	50	20	N	20	N
138	--	N	700	N	N	50	15	N	20	N
139	--	N	1,000	<5	N	50	10	N	20	N
140	--	N	1,000	<5	N	70	<10	N	15	N
141	--	N	1,000	<5	N	50	10	N	20	N
142	--	N	700	<5	N	50	10	N	20	N
143	--	N	1,000	<5	N	50	10	N	20	N
144	--	N	700	N	N	70	10	N	20	N
145	--	N	1,000	<5	N	70	20	N	30	N
146	--	N	700	<5	N	50	15	N	15	N
147	--	N	700	N	N	70	10	N	15	N
148	--	N	1,000	N	N	70	10	N	20	N
149	--	N	700	N	N	50	10	N	15	N
150	--	N	1,000	N	N	50	10	N	10	N
151	--	N	1,000	N	N	50	15	N	15	N
152	--	N	700	N	N	50	15	N	15	N
153	--	N	500	N	N	50	10	N	10	N
154	--	N	700	N	N	70	10	N	15	N
155	--	N	500	N	N	50	10	N	15	N
156	--	N	500	N	N	70	<10	N	15	N
157	--	N	500	N	N	50	10	N	15	N
158	--	N	500	N	N	50	10	N	15	N
159	--	N	700	N	N	70	15	N	20	N
160	--	N	500	<5	N	50	15	N	10	N
161	--	N	500	<5	N	30	15	N	10	N
162	--	N	700	N	N	50	15	N	15	N
163	--	N	700	N	N	50	10	N	10	N
164	--	N	700	N	N	30	10	N	10	N
165	--	N	700	N	N	50	10	N	15	N
166	--	N	700	N	N	100	10	N	15	N
167	--	N	1,000	N	N	100	10	N	15	N
168	--	N	700	N	N	50	10	N	15	N
169	--	N	700	N	N	30	10	N	10	N
170	--	N	700	N	N	70	10	N	20	N
171	--	N	700	N	N	70	15	N	20	N
172	--	N	500	N	N	50	15	N	20	N
173	--	N	500	N	N	50	10	N	20	N
174	--	N	700	N	N	50	10	N	15	N
177	--	N	700	N	N	70	15	N	20	N
178	--	20	700	5	N	70	50	N	20	N
179	--	N	700	N	N	70	20	N	20	N
183	--	N	500	N	N	70	10	N	10	N
184	--	N	500	N	N	70	10	N	15	N
185	--	N	500	N	N	50	10	N	15	N
186	--	N	700	N	N	50	10	N	20	N
187	--	N	500	N	N	20	15	N	7	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
123	500	N	200	N	20	N	200	--	--	--
124	200	N	300	N	15	N	100	--	--	--
125	500	N	300	N	20	N	200	--	--	--
126	500	N	200	N	20	N	100	--	--	--
127	500	N	200	N	20	N	100	--	--	--
128	200	N	200	N	30	<200	100	--	--	--
129	500	N	200	N	15	N	100	--	--	--
130	200	N	200	N	50	200	150	--	--	--
131	300	N	200	N	20	N	100	--	--	--
132	300	N	200	N	20	<200	200	--	--	--
133	200	N	200	N	20	<200	150	--	--	--
134	300	N	200	N	20	N	100	--	--	--
135	200	N	200	N	15	N	100	--	--	--
136	300	N	200	N	20	<200	100	--	--	--
137	300	N	200	N	20	N	150	--	--	--
138	300	N	200	N	20	N	200	--	--	--
139	500	N	200	N	20	<200	150	--	--	--
140	500	N	150	N	20	N	100	--	--	--
141	500	N	200	N	15	N	150	--	--	--
142	500	N	200	N	15	N	100	--	--	--
143	500	N	150	N	15	<200	100	--	--	--
144	500	N	200	N	10	N	100	--	--	--
145	700	N	200	N	20	N	150	--	--	--
146	500	N	100	N	15	N	100	--	--	--
147	300	N	150	N	15	N	100	--	--	--
148	500	N	200	N	15	N	100	--	--	--
149	700	N	100	N	<10	N	70	--	--	--
150	500	N	100	N	<10	<200	70	--	--	--
151	700	N	150	N	15	<200	100	--	--	--
152	700	N	150	N	15	N	100	--	--	--
153	700	N	100	N	N	N	70	--	--	--
154	300	N	150	N	10	N	70	--	--	--
155	300	N	150	N	15	N	100	--	--	--
156	200	N	150	N	10	N	100	--	--	--
157	500	N	100	N	10	N	100	--	--	--
158	500	N	100	N	15	N	100	--	--	--
159	500	N	200	N	20	N	150	--	--	--
160	300	N	150	N	10	N	150	--	--	--
161	500	N	100	N	20	N	100	--	--	--
162	500	N	100	N	15	N	100	--	--	--
163	500	N	100	N	10	N	100	--	--	--
164	500	N	100	N	10	N	100	--	--	--
165	500	N	100	N	10	N	100	--	--	--
166	500	N	200	N	10	N	100	--	--	--
167	500	N	200	N	15	N	100	--	--	--
168	500	N	100	N	10	N	100	--	--	--
169	500	N	100	N	10	N	100	--	--	--
170	300	N	200	N	20	<200	200	--	--	--
171	200	N	300	N	20	<200	100	--	--	--
172	300	N	200	N	15	N	100	--	--	--
173	300	N	200	N	15	N	70	--	--	--
174	2,000	N	150	N	10	N	200	--	--	--
177	200	N	200	N	20	N	100	--	--	--
178	200	N	200	N	30	N	200	--	--	--
179	200	N	150	N	20	N	100	--	--	--
183	500	N	100	N	10	N	100	--	--	--
184	300	N	200	N	10	N	70	--	--	--
185	500	N	100	N	15	N	100	--	--	--
186	300	N	100	N	20	N	70	--	--	--
187	300	N	50	N	10	N	70	--	--	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
123	--	--	--	--	--	--	--	--	10	N	.3	N	40
124	--	--	--	--	--	--	--	--	--	--	--	--	--
125	--	--	--	--	--	--	--	--	10	N	.5	N	60
126	--	--	--	--	--	--	--	--	10	N	.3	N	45
127	--	--	--	--	--	--	--	--	20	N	.3	N	40
128	--	--	--	--	--	--	--	--	10	N	2.9	N	260
129	--	--	--	--	--	--	--	--	20	N	.5	N	50
130	--	--	--	--	--	--	--	--	10	N	5.1	N	380
131	--	--	--	--	--	--	--	--	10	N	3	N	120
132	--	--	--	--	--	--	--	--	10	N	1.1	N	130
133	--	--	--	--	--	--	--	--	10	N	1.8	N	170
134	--	--	--	--	--	--	--	--	10	N	.4	N	60
135	--	--	--	--	--	--	--	--	10	N	.6	N	60
136	--	--	--	--	--	--	--	--	20	N	2.2	N	200
137	--	--	--	--	--	--	--	--	10	N	.4	N	40
138	--	--	--	--	--	--	--	--	10	N	.3	N	35
139	--	--	--	--	--	--	--	--	10	N	.2	N	40
140	--	--	--	--	--	--	--	--	10	N	.3	N	30
141	--	--	--	--	--	--	--	--	N	N	.2	N	40
142	--	--	--	--	--	--	--	--	10	N	.2	N	25
143	--	--	--	--	--	--	--	--	10	N	.2	N	35
144	--	--	--	--	--	--	--	--	N	N	.2	N	25
145	--	--	--	--	--	--	--	--	10	N	.2	N	20
146	--	--	--	--	--	--	--	--	10	N	.2	N	25
147	--	--	--	--	--	--	--	--	10	N	.2	N	30
148	--	--	--	--	--	--	--	--	10	N	.2	N	30
149	--	--	--	--	--	--	--	--	10	N	.2	N	15
150	--	--	--	--	--	--	--	--	10	N	.2	N	10
151	--	--	--	--	--	--	--	--	10	N	.1	N	10
152	--	--	--	--	--	--	--	--	10	N	.1	N	10
153	--	--	--	--	--	--	--	--	N	N	.1	N	5
154	--	--	--	--	--	--	--	--	N	N	.1	N	N
155	--	--	--	--	--	--	--	--	N	N	.1	N	<5
156	--	--	--	--	--	--	--	--	N	N	.1	N	<5
157	--	--	--	--	--	--	--	--	N	N	.2	N	15
158	--	--	--	--	--	--	--	--	N	N	.2	N	10
159	--	--	--	--	--	--	--	--	N	N	.2	N	15
160	--	--	--	--	--	--	--	--	N	N	.2	N	5
161	--	--	--	--	--	--	--	--	N	N	.2	N	5
162	--	--	--	--	--	--	--	--	N	N	.2	N	5
163	--	--	--	--	--	--	--	--	N	N	.2	N	10
164	--	--	--	--	--	--	--	--	N	N	.2	N	10
165	--	--	--	--	--	--	--	--	N	N	.2	N	10
166	--	--	--	--	--	--	--	--	N	N	.4	N	25
167	--	--	--	--	--	--	--	--	N	N	.3	N	30
168	--	--	--	--	--	--	--	--	N	N	.2	N	20
169	--	--	--	--	--	--	--	--	N	N	.2	N	10
170	--	--	--	--	--	--	--	--	N	N	.2	N	30
171	--	--	--	--	--	--	--	--	N	N	.3	N	35
172	--	--	--	--	--	--	--	--	N	N	.2	N	35
173	--	--	--	--	--	--	--	--	10	N	.2	N	30
174	--	--	--	--	--	--	--	--	N	N	.3	N	25
177	--	--	--	--	--	--	--	--	50	N	.4	N	45
178	--	--	--	--	--	--	--	--	190	3	1.2	N	95
179	--	--	--	--	--	--	--	--	10	N	.4	N	35
183	--	--	--	--	--	--	--	--	10	N	.2	N	20
184	--	--	--	--	--	--	--	--	N	N	.2	N	50
185	--	--	--	--	--	--	--	--	N	N	.2	N	25
186	--	--	--	--	--	--	--	--	N	N	.2	N	30
187	--	--	--	--	--	--	--	--	N	N	.2	N	20

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUD	CA____S	FE____S	MG____S	NA____S	P____S	TI____S	AG_PPM_S	AS_PPM_S
188	62 3 21	144 33 55	1.5	5	1	--	--	.5	N	N
189	62 3 25	144 33 50	.7	2	1	--	--	.15	N	N
190	62 2 10	144 30 15	1	5	1.5	--	--	.5	N	N
191	62 2 43	144 28 48	1	5	1.5	--	--	.5	N	N
200	62 57 57	146 52 54	3	5	3	3	<.2	1	N	N
201	62 54 34	146 48 30	2	7	2	3	<.2	.7	N	N
202	62 54 26	146 57 0	2	2	1.5	3	<.2	.3	N	N
203	62 49 57	146 58 55	2	3	2	2	.2	.7	N	N
204	62 46 28	146 57 12	2	2	2	3	<.2	.2	N	N
205	62 45 59	146 55 22	2	7	3	2	<.2	.7	N	N
206	62 42 33	146 52 20	2	3	2	2	<.2	.5	N	N
207	62 41 51	146 39 9	2	3	3	3	<.2	1	N	N
208	62 44 4	146 38 55	2	7	2	3	<.2	>1	N	N
209	62 46 16	146 32 36	2	5	2	3	<.2	.5	N	N
210	62 47 39	146 28 14	2	2	2	3	<.2	.3	N	N
211	62 49 18	146 31 4	2	5	2	2	N	1	N	N
212	62 55 22	146 41 14	2	5	2	3	<.2	.5	N	N
213	62 53 42	146 42 51	2	2	2	3	<.2	.5	N	N
214	62 50 44	146 41 57	2	7	3	3	N	.5	N	N
215	62 48 45	146 48 32	1	5	2	2	<.2	.5	N	N
216	62 47 53	146 45 17	2	5	2	2	.2	.5	N	N
217	62 46 29	146 41 11	1.5	3	1.5	5	<.2	.3	N	N
218	62 48 56	146 39 35	1.5	5	3	3	N	.5	N	N
219	62 50 0	146 43 25	1.5	2	1.5	2	<.2	.5	N	N
220	62 55 17	146 39 25	2	3	2	3	N	.5	N	N
221	62 55 55	146 38 44	1.5	3	2	2	<.2	.5	N	N
222	62 55 45	146 37 32	2	3	3	3	<.2	.7	N	N
223	62 54 18	146 36 3	2	5	2	2	N	.5	N	N
224	62 52 53	146 29 49	1.5	5	1.5	3	<.2	.5	N	N
225	62 47 47	146 9 47	1	5	2	2	N	.5	N	N
226	62 52 6	146 15 51	1.5	3	2	2	<.2	.5	N	N
227	62 52 1	146 18 48	2	2	2	3	<.2	.2	N	N
228	62 46 56	146 26 23	1.5	2	2	2	<.2	.2	N	N
229	62 42 2	146 19 18	1.5	3	2	2	<.2	.5	N	N
230	62 43 7	146 21 7	2	5	2	2	<.2	1	N	N
231	62 39 43	146 16 11	2	3	3	2	<.2	1	N	N
232	62 40 34	146 23 26	2	5	2	3	N	.5	N	N
233	62 38 49	146 7 51	2	5	3	3	N	.5	N	N
234	62 39 52	146 6 48	3	5	2	2	N	1	N	N
235	62 46 26	146 4 21	2	5	3	3	<.2	.5	N	N
236	62 49 47	146 3 21	1.5	2	3	3	.2	.2	N	N
237	62 51 8	146 2 2	1.5	3	2	2	<.2	.5	N	N
238	62 51 7	146 1 47	1.5	5	2	3	N	.5	N	N
239	62 47 40	145 55 1	1.5	3	2	2	<.2	.2	N	N
240	62 47 31	145 54 58	1.5	5	3	3	<.2	.5	N	N
241	62 46 22	145 52 12	3	5	3	3	<.2	.5	N	N
242	62 45 0	145 57 49	2	3	2	2	<.2	.5	N	N
243	62 43 1	145 47 55	2	2	2	3	<.2	.5	N	N
244	62 37 24	145 40 32	2	3	5	2	<.2	.3	N	N
245	62 38 38	145 36 38	1.5	2	1.5	2	<.2	.3	N	N
246	62 42 9	145 38 4	1.5	5	3	2	<.2	.5	N	N
247	62 41 4	145 41 45	1.5	5	5	2	N	.7	N	N
248	62 44 15	145 37 31	3	5	5	2	N	>1	N	N
249	62 51 6	145 34 44	2	3	1.5	2	.7	.3	N	N
250	62 48 48	145 46 4	2	3	2	3	<.2	.3	N	N
251	62 51 10	145 47 20	1	2	1	2	<.2	.2	N	N
252	62 52 47	145 52 27	1.5	2	1.5	2	<.2	.2	N	N
253	62 55 23	145 42 57	2	5	5	2	<.2	.5	N	N
254	62 57 25	145 48 29	2	3	3	2	<.2	1	N	N
255	62 59 43	145 52 11	2	5	3	3	<.2	.5	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
188	N	15	300	<1	N	N	20	30	20	--
189	N	15	200	<1	N	N	15	50	10	--
190	N	15	200	<1	N	N	30	100	30	--
191	N	15	200	<1	N	N	30	100	20	--
200	N	30	500	<1	N	N	30	150	70	20
201	N	20	300	N	N	N	30	100	50	20
202	N	20	500	<1	N	N	20	70	20	20
203	N	20	300	N	N	N	20	100	50	30
204	N	20	500	N	N	N	20	150	50	20
205	N	10	500	N	N	N	30	100	70	20
206	N	30	500	N	N	N	30	100	20	20
207	N	50	500	N	N	N	50	200	50	20
208	N	30	200	N	N	N	50	500	15	15
209	N	30	500	N	N	N	30	150	50	30
210	N	30	300	<1	N	N	20	100	30	20
211	N	20	300	N	N	N	30	200	30	20
212	N	20	300	N	N	N	30	70	50	20
213	N	20	500	<1	N	N	20	150	30	20
214	N	30	300	N	N	N	50	150	100	20
215	N	20	300	N	N	N	30	100	150	20
216	N	20	500	<1	N	N	20	150	100	20
217	N	20	300	N	N	N	30	150	50	20
218	N	10	300	N	N	N	15	70	100	20
219	N	20	500	<1	N	N	15	70	30	15
220	N	20	200	N	N	N	20	100	30	30
221	N	20	300	N	N	N	20	100	30	15
222	N	30	500	N	N	N	30	150	30	20
223	N	20	300	N	N	N	30	150	30	20
224	N	20	300	<1	N	N	20	100	30	15
225	N	10	300	N	N	N	20	100	50	15
226	N	20	300	N	N	N	20	200	30	15
227	N	30	300	N	N	N	30	100	30	20
228	N	20	500	N	N	N	30	150	30	20
229	N	15	200	N	N	N	20	100	30	15
230	N	20	500	N	N	N	30	100	30	15
231	N	20	300	N	N	N	30	200	20	20
232	N	10	300	N	N	N	30	100	30	20
233	N	20	300	N	N	N	30	200	50	20
234	N	20	300	N	N	N	30	150	20	20
235	N	20	300	N	N	N	30	150	50	20
236	N	20	300	N	N	N	20	100	50	20
237	N	50	300	N	N	N	30	200	50	20
238	N	30	200	N	N	N	30	200	30	20
239	N	20	300	N	N	N	20	100	30	20
240	N	20	300	N	N	N	20	150	30	30
241	N	30	500	N	N	N	30	100	30	30
242	N	20	300	N	N	N	20	150	30	20
243	N	30	300	N	N	N	20	100	30	20
244	N	15	300	N	N	N	20	100	30	20
245	N	10	300	N	N	N	15	150	20	20
246	N	20	300	N	N	N	30	300	50	15
247	N	<10	300	N	N	N	20	300	20	20
248	N	10	200	N	N	N	20	500	10	15
249	N	15	1,000	N	N	N	20	100	50	15
250	N	30	500	N	N	N	30	150	50	30
251	N	15	300	<1	N	N	15	100	50	15
252	N	15	500	N	N	N	20	100	30	20
253	N	20	300	N	N	N	30	200	30	15
254	N	30	300	N	N	N	30	1,500	50	15
255	N	30	700	N	N	N	30	1,000	50	20

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
188	--	N	700	N	N	50	10	N	10	N
189	--	N	500	N	N	20	10	N	7	N
190	--	N	500	N	N	50	10	N	20	N
191	--	N	1,000	N	N	50	10	N	20	N
200	N	N	1,500	N	N	30	15	N	20	N
201	N	<50	1,000	N	N	70	10	N	20	N
202	N	<50	1,000	N	N	30	10	N	10	N
203	N	N	700	N	N	30	10	N	15	N
204	N	N	700	N	N	50	10	N	20	N
205	N	N	1,500	N	N	70	10	N	15	N
206	N	N	700	N	N	50	<10	N	15	N
207	N	N	2,000	N	N	70	10	N	15	N
208	N	<50	1,000	N	N	70	<10	N	20	N
209	N	N	1,000	N	N	70	10	N	20	N
210	N	N	1,000	N	N	30	10	N	15	N
211	N	N	1,000	N	N	70	<10	N	20	N
212	N	N	1,000	N	N	50	10	N	15	N
213	N	<50	700	N	N	30	<10	N	20	N
214	N	N	1,000	N	N	70	<10	N	20	N
215	N	N	1,000	N	N	50	10	N	15	N
216	N	N	1,000	N	N	50	10	N	20	N
217	N	N	1,000	N	N	50	10	N	20	N
218	N	N	700	N	N	20	10	N	10	N
219	N	<50	1,500	N	N	20	<10	N	10	N
220	N	<50	500	N	N	50	<10	N	15	N
221	N	N	1,500	N	N	50	<10	N	10	N
222	N	<50	1,000	N	N	50	10	N	20	N
223	N	N	1,000	N	N	50	10	N	15	N
224	N	N	1,000	N	N	50	<10	N	15	N
225	N	N	1,000	N	N	70	10	N	15	N
226	N	N	700	N	N	50	<10	N	15	N
227	N	N	1,000	N	N	50	10	N	15	N
228	N	<50	700	N	N	50	10	N	15	N
229	N	N	700	N	N	50	<10	N	15	N
230	N	N	2,000	N	N	50	10	N	15	N
231	N	<50	1,000	N	N	50	10	N	15	N
232	N	N	1,500	N	N	70	15	N	20	N
233	N	<50	1,000	N	N	50	<10	N	20	N
234	N	N	1,000	N	N	70	<10	N	20	N
235	N	N	1,000	N	N	50	15	N	20	N
236	N	N	500	N	N	30	10	N	15	N
237	N	N	1,000	N	N	70	10	N	20	N
238	N	N	700	N	N	70	<10	N	20	N
239	N	<50	700	N	N	50	10	N	15	N
240	N	N	1,000	N	N	50	<10	N	15	N
241	N	<50	700	N	N	70	10	N	20	N
242	N	N	1,000	N	N	70	<10	N	20	N
243	N	<50	1,000	N	N	50	10	N	15	N
244	N	N	1,000	N	N	50	N	N	15	N
245	N	N	700	N	N	30	<10	N	10	N
246	N	N	1,000	N	N	70	<10	N	20	N
247	N	N	1,000	N	N	50	N	N	15	N
248	N	<50	1,500	N	N	50	N	N	20	N
249	N	N	3,000	N	N	30	<10	N	15	N
250	N	N	1,000	N	N	70	<10	N	15	N
251	N	N	700	N	N	50	<10	N	15	N
252	N	N	1,500	N	N	50	<10	N	10	N
253	N	<50	1,500	N	N	50	<10	N	15	N
254	N	N	1,000	N	N	100	10	N	15	N
255	N	N	1,000	N	N	150	15	N	15	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
188	500	N	150	N	10	N	70	--	--	--
189	300	N	50	N	<10	N	50	--	--	--
190	300	N	100	N	10	N	70	--	--	--
191	300	N	100	N	15	N	100	--	--	--
200	300	N	150	N	20	N	200	.046	7	N
201	300	N	150	N	30	N	200	.084	8.3	N
202	300	N	100	N	20	N	150	N	4.7	N
203	300	N	150	N	20	N	100	.055	2.8	N
204	300	N	200	N	30	N	100	.099	4.4	N
205	200	N	200	N	20	N	200	N	3.5	N
206	300	N	150	N	20	N	100	N	5.4	N
207	300	N	200	N	20	N	150	N	7.1	N
208	200	N	200	N	20	N	500	N	3.3	N
209	300	N	150	N	20	N	150	.066	2.2	N
210	300	N	100	N	15	200	70	N	2.8	N
211	300	N	200	N	20	N	200	N	2.4	N
212	200	N	150	N	20	N	100	N	9	N
213	300	N	150	N	20	N	100	N	1.9	N
214	200	N	200	N	30	N	100	.096	2.4	N
215	150	N	200	N	20	N	100	.2	2.5	N
216	200	N	200	N	20	<200	100	.15	1.3	N
217	200	N	150	N	20	N	100	.083	7.7	N
218	<100	N	100	N	15	N	70	.22	2.3	N
219	200	N	100	N	20	N	70	.2	4	.51
220	100	N	100	N	20	N	150	N	2.9	N
221	200	N	150	N	15	N	100	N	6.7	N
222	300	N	150	N	20	N	150	N	2.9	N
223	300	N	200	N	15	N	100	N	8.8	N
224	300	N	150	N	20	N	150	.093	2.2	N
225	200	N	150	N	10	N	150	N	3.7	N
226	200	N	150	N	20	N	100	N	1.6	N
227	200	N	150	N	20	N	100	.06	11	N
228	200	N	100	N	20	N	150	N	2.4	N
229	200	N	150	N	15	N	100	.73	4.4	4.6
230	300	N	200	N	15	N	100	N	5.4	N
231	200	N	200	N	20	N	200	N	2.3	N
232	300	N	150	N	20	N	200	N	5.1	N
233	300	N	200	N	30	<200	200	.057	3.4	N
234	200	N	200	N	20	N	150	N	1.8	N
235	200	N	150	N	20	<200	100	N	4.3	N
236	200	N	150	N	20	N	150	.057	6.1	N
237	200	N	150	N	30	N	150	.054	4.9	N
238	200	N	200	N	20	N	150	.066	4.1	N
239	200	N	150	N	15	N	100	.063	5.9	N
240	300	N	100	N	15	N	100	N	3.5	N
241	300	N	150	N	30	N	100	.059	5.4	N
242	200	N	150	N	20	N	200	.046	4	N
243	300	N	150	N	20	N	150	.057	5.6	N
244	200	N	150	N	20	<200	100	N	4.1	N
245	200	N	100	N	20	N	100	N	2.1	N
246	200	N	200	N	20	<200	100	.069	4.3	N
247	150	N	200	N	20	N	300	N	2.7	N
248	200	N	200	N	20	N	300	N	1.4	N
249	200	N	150	N	20	N	100	.069	18	N
250	200	N	150	N	20	N	70	.061	5.4	N
251	100	N	100	N	20	N	50	.17	6.8	N
252	300	N	100	N	15	N	100	N	8.2	N
253	300	N	150	N	20	N	70	N	4.2	N
254	300	N	200	N	15	N	150	N	3.6	N
255	200	N	200	N	20	N	200	N	14	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
188	--	--	--	--	--	--	--	--	N	N	.2	N	45
189	--	--	--	--	--	--	--	--	N	N	.2	N	25
190	--	--	--	--	--	--	--	--	N	N	.2	N	15
191	--	--	--	--	--	--	--	--	N	N	.2	N	15
200	N	.16	30	.44	5.7	.62	42	--	--	--	--	--	--
201	N	.16	27	.65	5.9	.67	44	--	--	--	--	--	--
202	N	.12	21	.25	3.7	N	32	--	--	--	--	--	--
203	N	.13	49	.44	7.4	N	39	--	--	--	--	--	--
204	N	.17	57	.5	8.8	.67	52	--	--	--	--	--	--
205	N	.15	70	.45	8.1	N	45	--	--	--	--	--	--
206	N	.086	14	.13	4	N	34	--	--	--	--	--	--
207	N	.14	35	.4	9.3	N	57	--	--	--	--	--	--
208	N	.082	14	.31	5.5	N	40	--	--	--	--	--	--
209	N	.093	30	.31	5.9	.61	45	--	--	--	--	--	--
210	N	.09	14	.22	4.4	N	29	--	--	--	--	--	--
211	N	.097	18	.34	4.8	N	40	--	--	--	--	--	--
212	N	.17	36	.68	5	N	47	--	--	--	--	--	--
213	N	.078	15	.26	4.2	N	29	--	--	--	--	--	--
214	N	.13	26	.27	5.2	N	39	--	--	--	--	--	--
215	N	.15	84	.98	12	.63	65	--	--	--	--	--	--
216	N	.2	62	.77	10	.71	90	--	--	--	--	--	--
217	N	.16	41	.4	8.9	.6	51	--	--	--	--	--	--
218	N	.19	62	.68	11	N	52	--	--	--	--	--	--
219	N	.63	30	.87	8.7	N	98	--	--	--	--	--	--
220	N	.15	23	.22	4.6	N	42	--	--	--	--	--	--
221	N	.19	34	.5	5.7	N	52	--	--	--	--	--	--
222	N	.11	20	.27	4.4	N	37	--	--	--	--	--	--
223	N	.15	19	.47	6.1	N	47	--	--	--	--	--	--
224	N	.15	32	.78	5	N	42	--	--	--	--	--	--
225	N	.13	50	.42	8.2	N	41	--	--	--	--	--	--
226	N	.21	23	.21	5.1	N	49	--	--	--	--	--	--
227	N	.12	15	1.2	4.7	.61	46	--	--	--	--	--	--
228	N	.11	23	.21	5.2	N	37	--	--	--	--	--	--
229	N	.11	32	.25	7.5	N	54	--	--	--	--	--	--
230	N	.1	26	.28	6.6	N	43	--	--	--	--	--	--
231	N	.066	17	.26	4.4	N	36	--	--	--	--	--	--
232	N	.087	22	.29	8	N	43	--	--	--	--	--	--
233	N	.081	22	.35	5.2	N	41	--	--	--	--	--	--
234	N	.059	16	.25	3.7	N	32	--	--	--	--	--	--
235	N	.093	22	.38	5.6	N	39	--	--	--	--	--	--
236	N	.22	28	.52	9.8	.91	81	--	--	--	--	--	--
237	N	.14	24	.58	7.5	.68	54	--	--	--	--	--	--
238	N	.087	20	.35	5.5	N	42	--	--	--	--	--	--
239	N	.11	18	.81	6.3	.82	41	--	--	--	--	--	--
240	N	.11	17	.74	6.2	.66	41	--	--	--	--	--	--
241	N	.093	22	1.7	6.7	.63	39	--	--	--	--	--	--
242	N	.081	15	.4	5.4	N	36	--	--	--	--	--	--
243	N	.095	16	.39	7.5	N	38	--	--	--	--	--	--
244	N	.1	21	.28	5	.68	37	--	--	--	--	--	--
245	N	.076	15	.15	4.9	N	39	--	--	--	--	--	--
246	N	.11	32	.34	6.6	N	45	--	--	--	--	--	--
247	N	.078	13	.3	4.5	.68	31	--	--	--	--	--	--
248	N	.086	9.1	.18	4	.62	28	--	--	--	--	--	--
249	N	.15	24	.26	7.7	N	48	--	--	--	--	--	--
250	N	.27	29	.43	8	N	62	--	--	--	--	--	--
251	N	.32	47	.62	12	.87	75	--	--	--	--	--	--
252	N	.12	15	.31	4.8	.84	37	--	--	--	--	--	--
253	N	.13	24	.38	7.8	.75	43	--	--	--	--	--	--
254	N	.13	38	.35	6.2	N	44	--	--	--	--	--	--
255	N	.12	47	.5	9.1	6.8	81	--	--	--	--	--	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUD	CA____S	FE____S	MG____S	NA____S	P____S	TI____S	AG_PPM_S	AS_PPM_S
256	62 58 59	145 53 54	2	3	2	3	N	.5	N	N
257	62 59 26	146 1 5	2	3	2	2	<.2	.3	N	N
258	62 58 14	146 0 54	1.5	2	2	2	<.2	.5	N	N
259	62 56 6	145 56 11	1.5	2	1	2	<.2	.2	N	N
260	62 55 11	145 52 42	2	5	3	2	<.2	.7	N	N
261	62 53 50	145 49 15	2	3	3	2	<.2	.3	N	N
262	62 58 50	145 35 18	2	5	3	2	<.2	.5	N	N
263	62 55 4	145 32 47	3	3	3	5	N	.5	N	N
264	62 52 20	145 37 59	1.5	3	7	2	<.2	.5	N	N
265	62 48 52	145 23 54	1	2	2	2	<.2	.2	N	N
266	62 51 50	145 10 22	2	7	3	2	N	.5	N	N
267	62 54 4	145 12 2	2	3	2	3	<.2	.3	N	N
268	62 56 49	145 5 35	2	2	3	2	N	.3	N	N
269	62 56 47	145 5 28	1.5	5	3	2	N	.7	N	N
270	62 59 23	145 11 17	2	3	3	2	<.2	.5	N	N
271	62 57 40	145 17 21	5	5	3	3	N	1	N	N
272	62 56 37	145 22 22	1.5	2	2	2	<.2	.5	N	N
273	62 57 1	145 25 50	2	2	1.5	3	<.2	.2	N	N
274	62 52 57	145 31 31	2	5	3	2	N	1	N	N
275	62 54 40	145 29 44	2	7	3	2	<.2	.7	N	N
276	62 59 15	145 30 3	2	3	2	2	<.2	.2	N	N
300	62 59 21	146 56 42	1.5	5	2	3	<.2	.5	N	N
301	62 55 51	146 50 59	1.5	3	1.5	2	<.2	.3	N	N
302	62 52 9	146 56 3	2	5	2	3	<.2	.3	N	N
303	62 52 16	146 56 3	2	7	3	2	<.2	>1	N	N
304	62 48 23	146 59 2	2	5	2	3	<.2	1	N	N
305	62 44 28	146 51 29	2	5	3	3	N	.7	N	N
306	62 43 30	146 49 33	2	5	2	2	N	>1	N	N
307	62 41 51	146 49 34	2	7	3	3	N	.7	N	N
308	62 44 27	146 40 13	1	3	2	2	<.2	1	N	N
309	62 44 19	146 32 52	2	7	3	3	<.2	.7	N	N
310	62 48 18	146 29 40	1.5	3	1.5	2	<.2	.5	N	N
311	62 49 42	146 31 14	2	7	3	3	<.2	.7	N	N
312	62 58 54	146 44 14	1.5	2	1.5	2	.2	.3	N	N
313	62 52 45	146 41 17	1.5	3	1.5	2	<.2	.5	N	N
314	62 51 7	146 45 22	3	3	2	3	<.2	.3	N	N
315	62 48 0	146 41 27	2	5	2	2	<.2	.7	N	N
316	62 49 25	146 42 41	2	3	2	2	<.2	.5	N	N
317	62 52 46	146 37 3	3	5	3	3	<.2	.3	N	N
318	62 56 56	146 35 4	2	2	2	2	<.2	1	N	N
319	62 56 42	146 31 23	2	5	5	3	<.2	.5	N	N
320	62 53 8	146 32 12	1.5	3	1	2	<.2	.7	N	N
321	62 51 15	146 28 53	2	3	1.5	2	<.2	.3	N	N
322	62 49 13	146 11 2	3	5	3	3	<.2	.5	N	N
323	62 49 9	146 11 2	1.5	5	2	2	N	.5	N	N
324	62 49 32	146 16 59	2	7	3	2	<.2	>1	N	N
325	62 49 34	146 22 49	3	5	3	3	N	.7	N	N
326	62 50 48	146 25 59	5	5	5	3	N	.5	N	N
327	62 46 8	146 25 56	2	5	2	3	N	.5	N	N
328	62 46 5	146 25 49	1.5	3	1.5	2	N	.3	N	N
329	62 43 27	146 22 1	1.5	3	2	2	<.2	.5	N	N
330	62 42 38	146 15 26	2	5	2	3	N	.5	N	N
331	62 38 42	146 11 54	2	3	3	3	<.2	.5	N	N
332	62 42 16	146 9 16	1.5	5	2	3	N	.5	N	N
333	62 46 1	146 8 20	2	2	2	2	<.2	.3	N	N
334	62 48 28	146 3 58	2	5	2	2	<.2	.7	N	N
335	62 48 6	145 59 48	2	7	5	5	N	1	N	N
336	62 48 19	145 58 25	3	5	2	3	N	.7	N	N
337	62 48 2	145 53 55	1.5	2	2	3	<.2	.3	N	N
338	62 41 37	145 56 6	1.5	3	3	2	N	.7	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
256	N	20	200	N	N	N	30	1,500	30	20
257	N	<10	500	N	N	N	20	200	50	20
258	N	10	300	N	N	N	20	1,000	20	20
259	N	10	500	N	N	N	20	300	30	20
260	N	20	300	N	N	N	30	1,500	30	20
261	N	15	300	N	N	N	20	300	30	20
262	N	10	500	N	N	N	20	700	70	20
263	N	<10	300	N	N	N	20	500	30	30
264	N	15	300	N	N	N	20	700	30	20
265	N	10	200	N	N	N	20	300	20	15
266	N	10	500	N	N	N	20	500	30	20
267	N	20	300	N	N	N	20	100	30	30
268	N	10	300	N	N	N	20	300	10	20
269	N	10	200	N	N	N	30	700	20	20
270	N	10	300	N	N	N	20	500	30	20
271	N	<10	500	N	N	N	20	700	30	20
272	N	10	200	N	N	N	30	500	15	15
273	N	20	500	<1	N	N	15	150	70	20
274	N	<10	500	N	N	N	30	700	50	20
275	N	<10	500	N	N	N	20	700	50	20
276	N	10	300	N	N	N	20	500	70	20
300	N	30	500	<1	N	N	30	100	30	20
301	N	15	500	<1	N	N	20	100	30	20
302	N	20	300	N	N	N	30	150	30	20
303	N	50	300	N	N	N	50	200	20	15
304	N	20	300	<1	N	N	30	150	50	20
305	N	50	300	N	N	N	50	200	30	20
306	N	20	200	N	N	N	30	200	15	15
307	N	15	300	N	N	N	20	150	20	20
308	N	50	300	N	N	N	30	150	20	20
309	N	15	200	N	N	N	30	200	30	20
310	N	20	300	N	N	N	20	100	20	20
311	N	30	300	N	N	N	50	200	30	20
312	N	20	300	<1	N	N	20	100	30	20
313	N	15	200	N	N	N	20	100	20	15
314	N	30	500	N	N	N	20	100	30	20
315	N	30	300	N	N	N	50	150	50	20
316	N	20	500	N	N	N	30	150	30	20
317	N	20	300	N	N	N	30	150	50	20
318	N	30	300	N	N	N	30	100	30	15
319	N	20	300	N	N	N	20	100	15	20
320	N	20	200	N	N	N	20	150	15	20
321	N	15	300	N	N	N	20	70	30	20
322	N	30	300	N	N	N	30	200	30	30
323	N	15	200	N	N	N	20	100	20	15
324	N	20	200	N	N	N	30	200	30	20
325	N	20	300	N	N	N	30	150	50	20
326	N	20	500	<1	N	N	30	150	30	30
327	N	20	300	N	N	N	30	150	20	20
328	N	15	300	N	N	N	20	100	20	20
329	N	15	300	N	N	N	20	100	20	15
330	N	15	300	N	N	N	30	150	30	20
331	N	30	300	N	N	N	30	150	30	20
332	N	30	200	N	N	N	30	150	30	20
333	N	20	300	N	N	N	20	100	30	15
334	N	30	300	N	N	N	30	200	30	20
335	N	30	200	N	N	N	30	300	50	30
336	N	20	300	N	N	N	30	200	30	30
337	N	15	300	N	N	N	20	100	20	20
338	N	15	200	N	N	N	30	200	30	20

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
256	N	N	500	N	N	100	<10	N	20	N
257	N	N	700	N	N	50	<10	N	10	N
258	N	N	700	N	N	70	<10	N	20	N
259	N	N	700	N	N	30	10	N	10	N
260	N	N	1,000	N	N	100	<10	N	20	N
261	N	N	500	N	N	70	<10	N	15	N
262	N	N	1,000	N	N	70	10	N	20	N
263	N	N	500	N	N	50	10	N	15	N
264	N	N	500	N	N	100	N	N	15	N
265	N	N	700	N	N	50	N	N	15	N
266	N	N	1,000	N	N	50	10	N	20	N
267	N	N	700	N	N	50	10	N	15	N
268	N	N	700	N	N	30	<10	N	15	N
269	N	N	1,000	N	N	70	N	N	20	N
270	N	N	1,000	N	N	50	<10	N	15	N
271	N	N	1,000	N	N	50	<10	N	20	N
272	N	N	700	N	N	50	N	N	15	N
273	N	N	1,500	N	N	50	10	N	15	N
274	N	N	1,000	N	N	70	<10	N	20	N
275	N	<50	1,000	N	N	70	<10	N	15	N
276	N	N	500	N	N	50	10	N	15	N
300	N	<50	1,000	N	N	50	10	N	20	N
301	N	N	1,000	N	N	30	10	N	15	N
302	N	<50	1,500	N	N	50	10	N	20	N
303	N	50	1,500	N	N	30	<10	N	20	N
304	N	<50	1,000	N	N	50	10	N	20	N
305	N	<50	1,500	N	N	70	<10	N	30	N
306	N	<50	1,500	N	N	50	<10	N	20	N
307	N	N	1,500	N	N	50	<10	N	15	N
308	N	<50	1,000	N	N	50	<10	N	15	N
309	N	N	1,500	N	N	50	<10	N	15	N
310	N	N	500	N	N	50	<10	N	15	N
311	N	N	1,000	N	N	70	<10	N	20	N
312	N	N	1,000	N	N	30	10	N	15	N
313	N	N	700	N	N	50	<10	N	10	N
314	N	50	1,500	N	N	30	15	N	20	N
315	N	N	1,000	N	N	70	10	N	15	N
316	N	N	1,500	N	N	50	10	N	15	N
317	N	N	1,500	N	N	50	15	N	20	N
318	N	<50	1,000	N	N	50	10	N	15	N
319	N	<50	1,500	N	N	30	<10	N	15	N
320	N	N	1,000	N	N	20	<10	N	15	N
321	N	<50	700	N	N	30	10	N	10	N
322	N	<50	700	N	N	50	10	N	20	N
323	N	N	1,500	N	N	50	<10	N	15	N
324	N	<50	1,000	N	N	50	<10	N	20	N
325	N	<50	1,000	N	N	50	<10	N	20	N
326	N	N	1,000	N	N	50	10	N	20	N
327	N	N	1,500	N	N	50	10	N	20	N
328	N	N	1,000	N	N	50	<10	N	15	N
329	N	N	1,000	N	N	30	<10	N	15	N
330	N	N	1,000	N	N	50	10	N	15	N
331	N	<50	700	N	N	50	<10	N	20	N
332	N	<50	700	N	N	50	15	N	20	N
333	N	N	1,500	N	N	50	<10	N	20	N
334	N	<50	700	N	N	70	<10	N	20	N
335	N	<50	500	N	N	100	<10	N	20	N
336	N	N	1,000	N	N	70	<10	N	20	N
337	N	N	1,000	N	N	30	N	N	15	N
338	N	N	1,000	N	N	50	N	N	20	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
256	100	N	150	N	20	N	150	N	3	N
257	200	N	100	N	20	N	150	.049	1.5	N
258	150	N	150	N	20	<200	150	N	2.2	N
259	200	N	150	N	20	N	100	.062	9.9	N
260	300	N	200	N	30	200	100	N	4.6	N
261	200	N	100	N	20	N	70	N	5.9	N
262	200	N	150	N	20	<200	100	N	4.4	N
263	200	N	200	N	20	<200	100	N	5	N
264	150	N	150	N	15	N	150	N	7.4	N
265	150	N	150	N	15	N	100	N	4.1	N
266	200	N	200	N	15	200	100	.3	13	2.2
267	300	N	100	N	20	<200	100	N	4.8	N
268	200	N	150	N	20	N	100	N	10	N
269	200	N	200	N	20	N	300	N	7.9	N
270	200	N	150	N	20	<200	100	N	13	N
271	300	N	150	N	20	N	200	N	4.8	N
272	200	N	150	N	20	N	150	N	9	N
273	150	N	100	N	20	N	50	.098	10	N
274	200	N	200	N	20	<200	200	N	7.5	N
275	200	N	200	N	20	<200	150	N	8.2	N
276	200	N	200	N	20	<200	100	.049	11	N
300	300	N	200	N	20	<200	100	N	6.4	N
301	300	N	150	N	30	N	100	.083	2.5	N
302	300	N	150	N	30	200	150	.061	3	N
303	300	N	200	N	30	N	1,000	.29	2.5	1.9
304	300	N	200	N	30	<200	150	.083	2.1	N
305	200	N	200	N	30	N	150	.093	3.5	.34
306	300	N	200	N	30	N	300	N	1.4	N
307	200	N	150	N	20	N	150	N	2.7	N
308	200	N	150	N	20	N	200	N	2.2	N
309	200	N	150	N	15	200	200	.12	2.2	1.9
310	200	N	150	N	20	N	100	N	3.2	N
311	200	N	200	N	30	<200	150	.046	2.9	N
312	500	N	150	N	20	N	100	N	2.6	N
313	200	N	150	N	10	N	100	N	2.4	N
314	300	N	150	N	30	N	150	.066	4	N
315	300	N	200	N	20	N	200	N	3.7	N
316	300	N	150	N	20	N	100	N	2.5	N
317	300	N	150	N	20	<200	100	.069	10	N
318	300	N	200	N	20	N	150	N	3.3	N
319	300	N	150	N	20	<200	100	N	2.3	N
320	200	N	150	N	20	N	300	N	2.9	N
321	200	N	150	N	15	N	70	N	1.8	N
322	300	N	150	N	20	N	150	.05	3.6	N
323	150	N	150	N	15	N	150	.84	5.7	2.4
324	200	N	200	N	20	<200	200	N	4	N
325	200	N	200	N	20	<200	100	N	2.2	N
326	300	N	200	N	20	<200	50	.047	2	N
327	300	N	150	N	20	N	200	N	3.2	N
328	200	N	150	N	20	N	100	N	2.1	N
329	300	N	150	N	15	N	100	N	3.7	N
330	200	N	150	N	20	N	150	N	1.7	N
331	300	N	200	N	30	N	200	N	2.2	N
332	200	N	200	N	30	N	150	.047	3.3	N
333	300	N	150	N	20	N	100	.053	6.3	N
334	200	N	150	N	20	N	150	.054	5.5	N
335	100	N	200	N	30	N	200	.047	1.6	N
336	300	N	150	N	30	<200	200	N	6.1	N
337	200	N	150	N	20	N	150	N	6	N
338	200	N	200	N	20	N	200	N	4.3	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
256	N	.11	26	.21	4.4	N	34	--	--	--	--	--	--
257	N	.17	25	.32	6.2	.61	58	--	--	--	--	--	--
258	N	.097	13	.22	4.5	.67	38	--	--	--	--	--	--
259	N	.15	22	.35	8.6	.78	58	--	--	--	--	--	--
260	N	.088	19	.26	4.4	N	36	--	--	--	--	--	--
261	N	.091	21	.31	4.1	N	34	--	--	--	--	--	--
262	N	.23	54	.39	6.8	N	59	--	--	--	--	--	--
263	N	.082	10	.24	4.5	.76	30	--	--	--	--	--	--
264	N	.17	21	.35	5.4	.72	58	--	--	--	--	--	--
265	N	.1	16	.38	5.2	.63	34	--	--	--	--	--	--
266	N	.11	22	.54	6.7	N	44	--	--	--	--	--	--
267	N	.14	18	.26	6.5	.69	42	--	--	--	--	--	--
268	N	.074	7.5	.2	3.7	N	34	--	--	--	--	--	--
269	N	.091	12	.29	4.7	.66	34	--	--	--	--	--	--
270	N	.14	19	.37	6.7	.72	39	--	--	--	--	--	--
271	N	.072	14	.26	4.3	.75	31	--	--	--	--	--	--
272	N	.11	13	.3	5.8	.65	37	--	--	--	--	--	--
273	N	.41	57	.7	11	.82	75	--	--	--	--	--	--
274	N	.18	23	.37	5.2	N	56	--	--	--	--	--	--
275	N	.071	27	.51	4.8	N	37	--	--	--	--	--	--
276	N	.12	52	.34	5.6	N	48	--	--	--	--	--	--
300	N	.19	20	.64	7.4	N	62	--	--	--	--	--	--
301	N	.092	17	.46	4.6	N	40	--	--	--	--	--	--
302	N	.1	18	.34	3.9	.72	33	--	--	--	--	--	--
303	N	.083	13	.24	3.1	3.5	27	--	--	--	--	--	--
304	N	.23	33	.36	6.4	N	64	--	--	--	--	--	--
305	N	.11	18	.43	5.3	N	41	--	--	--	--	--	--
306	N	.056	10	.15	4.2	N	31	--	--	--	--	--	--
307	N	.13	12	.18	5.4	N	37	--	--	--	--	--	--
308	N	.093	15	.24	5.2	N	36	--	--	--	--	--	--
309	N	.077	15	.38	4.1	.65	40	--	--	--	--	--	--
310	N	.086	19	.74	5.1	N	33	--	--	--	--	--	--
311	N	.16	20	.48	6.5	N	48	--	--	--	--	--	--
312	N	.15	21	.39	6.5	N	61	--	--	--	--	--	--
313	N	.13	19	.71	5.2	N	38	--	--	--	--	--	--
314	N	.14	19	.36	5	1.1	36	--	--	--	--	--	--
315	N	.15	30	.4	8.1	.88	47	--	--	--	--	--	--
316	N	.16	20	.49	5.6	N	47	--	--	--	--	--	--
317	N	.16	22	.7	4.9	.8	41	--	--	--	--	--	--
318	N	.18	26	.3	3.8	N	40	--	--	--	--	--	--
319	N	.071	11	.13	2.5	N	26	--	--	--	--	--	--
320	N	.1	14	.26	4	N	37	--	--	--	--	--	--
321	N	.074	23	.54	6.4	N	29	--	--	--	--	--	--
322	N	.087	16	.3	5.2	N	37	--	--	--	--	--	--
323	N	.12	19	.27	4.7	N	39	--	--	--	--	--	--
324	N	.11	19	.35	4.5	N	40	--	--	--	--	--	--
325	N	.095	17	.27	4.2	N	39	--	--	--	--	--	--
326	N	.11	8.9	.26	4.4	N	37	--	--	--	--	--	--
327	N	.07	15	.2	3.8	N	33	--	--	--	--	--	--
328	N	.13	19	.2	4.6	N	39	--	--	--	--	--	--
329	N	.085	20	.25	5.9	N	35	--	--	--	--	--	--
330	N	.055	12	.18	4.2	N	32	--	--	--	--	--	--
331	N	.067	15	.37	4.8	.62	41	--	--	--	--	--	--
332	N	.091	13	.32	5	N	37	--	--	--	--	--	--
333	N	.096	19	.47	6	N	39	--	--	--	--	--	--
334	N	.099	15	.41	5.7	N	43	--	--	--	--	--	--
335	N	.092	15	.39	5.9	.69	47	--	--	--	--	--	--
336	N	.086	14	.45	5.3	.65	38	--	--	--	--	--	--
337	N	.13	16	.55	6.1	.72	40	--	--	--	--	--	--
338	N	.09	18	.47	6	N	40	--	--	--	--	--	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUD	CA_____S	FE_____S	MG_____S	NA_____S	P_____S	TI_____S	AG_PPM_S	AS_PPM_S
339	62 40 35	145 46 31	2	5	7	2	N	1	N	N
340	62 36 30	145 37 39	2	5	3	2	N	1	N	N
341	62 42 21	145 37 36	2	5	2	2	<.2	1	N	N
342	62 41 26	145 38 50	2	5	2	2	N	.5	N	N
343	62 48 43	145 33 15	2	3	3	3	N	.5	N	N
344	62 46 24	145 37 28	2	3	5	3	N	.3	N	N
345	62 49 6	145 39 47	1	2	2	2	N	.2	N	N
346	62 48 19	145 45 45	2	7	5	2	N	1	N	N
347	62 48 58	145 49 55	2	3	2	2	N	.7	N	N
348	62 51 56	145 53 47	1.5	5	3	2	N	.3	N	N
349	62 51 54	145 53 36	2	3	2	2	<.2	.2	N	N
350	62 55 21	145 48 8	2	2	1	2	<.2	.2	N	N
351	62 55 20	145 47 57	2	5	5	2	<.2	.3	N	N
352	62 59 11	145 47 11	1	5	2	2	<.2	.3	N	N
353	62 59 16	145 47 17	2	5	2	3	N	.5	N	N
354	62 58 28	145 51 22	2	3	2	3	N	.3	N	N
355	62 57 45	146 0 3	1.5	5	3	3	<.2	.5	N	N
356	62 56 18	145 58 59	2	5	2	2	<.2	.7	N	N
357	62 55 36	145 57 45	1.5	3	2	2	N	.5	N	N
358	62 54 21	145 57 15	1.5	7	3	2	N	1	N	N
359	62 54 16	145 57 12	2	3	2	2	N	.5	N	N
360	62 59 44	145 39 9	1.5	2	2	2	<.2	.2	N	N
361	62 52 21	145 34 9	1	5	3	2	N	1	N	N
362	62 52 37	145 39 52	1.5	3	2	2	<.2	.3	N	N
363	62 48 25	145 17 11	1.5	2	.7	1.5	.2	.15	N	N
364	62 53 2	145 2 43	2	2	2	2	<.2	.3	N	N
365	62 55 46	145 7 26	1.5	3	2	2	<.2	.5	N	N
366	62 58 40	145 4 21	3	5	3	3	N	.5	N	N
367	62 58 39	145 4 31	2	7	3	2	<.2	.7	N	N
368	62 59 31	145 15 41	1.5	7	3	2	N	.7	N	N
369	62 55 47	145 23 4	2	3	2	2	N	.7	N	N
370	62 59 56	145 30 23	3	3	5	2	N	.3	N	N
400	62 13 33	144 22 14	5	10	3	2	<.2	1	<.5	N
401	62 12 0	144 28 58	5	5	2	2	<.2	1	N	N
402	62 10 24	144 24 59	3	5	3	2	N	.7	N	N
403	62 13 14	144 18 6	3	10	2	1.5	<.2	1	<.5	N
404	62 13 39	144 14 49	3	5	2	1.5	<.2	.7	N	N
405	62 11 23	144 19 0	3	5	2	1.5	<.2	.7	N	N
406	62 8 37	144 26 59	5	5	3	3	N	.5	<.5	N
407	62 8 31	144 27 16	3	5	2	2	<.2	.7	N	N
408	62 10 1	144 16 1	5	5	3	2	N	.7	N	N
409	62 10 24	144 10 58	5	7	2	2	N	.5	<.5	N
410	62 8 40	144 14 45	3	10	3	1.5	N	.5	N	N
411	62 6 7	144 14 6	5	7	5	2	N	.7	.7	N
412	62 8 1	144 19 9	5	5	2	1.5	N	.5	N	N
413	62 8 51	144 28 27	5	10	3	2	<.2	.7	<.5	N
414	62 5 14	144 21 10	5	5	2	2	<.2	1	N	N
415	62 2 52	144 23 0	3	7	3	1	N	.5	<.5	N
416	62 2 53	144 16 47	3	5	3	1.5	<.2	.7	N	N
417	62 2 53	144 27 25	3	5	1.5	2	<.2	.7	N	N
418	62 0 41	144 21 49	3	3	2	2	<.2	.7	N	N
419	62 3 25	144 33 52	7	5	2	5	N	.7	N	N
420	62 2 20	144 33 10	5	5	2	2	<.2	.7	N	N
421	62 0 55	144 31 32	2	3	1.5	1.5	<.2	.3	N	N
422	62 1 39	144 37 29	3	7	1.5	2	N	1	N	N
423	62 1 49	144 41 32	3	3	2	2	<.2	.5	.7	N
424	62 1 52	144 41 20	3	5	2	2	<.2	.7	1.5	N
425	62 4 44	144 38 49	5	7	3	2	N	.7	<.5	N
426	62 0 17	144 49 28	3	7	1.5	2	N	1	N	N
427	62 1 20	144 50 13	3	7	3	2	N	.7	<.5	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
339	N	10	300	N	N	N	30	500	30	20
340	N	<10	500	N	N	N	20	500	20	20
341	N	15	300	N	N	N	30	1,000	30	20
342	N	10	300	N	N	N	20	200	30	20
343	N	10	500	N	N	N	15	200	20	20
344	N	10	300	N	N	N	20	200	20	20
345	N	15	200	N	N	N	20	100	10	15
346	N	20	500	N	N	N	50	300	30	20
347	N	15	500	N	N	N	30	200	20	20
348	N	20	300	N	N	N	30	100	30	20
349	N	20	500	N	N	N	30	100	20	20
350	N	15	500	<1	N	N	15	150	20	15
351	N	15	300	N	N	N	50	300	30	20
352	N	20	300	N	N	N	30	700	50	20
353	N	20	300	N	N	N	30	700	30	20
354	N	10	500	N	N	N	20	500	20	30
355	N	20	300	N	N	N	20	500	50	20
356	N	10	500	N	N	N	30	500	30	20
357	N	20	300	N	N	N	20	700	20	20
358	N	20	200	N	N	N	30	1,000	50	20
359	N	10	500	N	N	N	20	200	50	20
360	N	<10	200	N	N	N	20	700	30	20
361	N	10	300	N	N	N	30	1,000	30	20
362	N	20	300	N	N	N	20	500	20	20
363	N	10	300	<1	N	N	10	50	50	15
364	N	10	500	N	N	N	20	150	30	20
365	N	10	200	N	N	N	20	500	20	20
366	N	20	300	N	N	N	30	300	30	30
367	N	10	300	N	N	N	50	500	30	20
368	N	<10	200	N	N	N	30	500	20	15
369	N	10	300	N	N	N	20	700	20	20
370	N	<10	200	N	N	N	20	1,000	30	20
400	N	<10	500	N	N	N	30	200	50	20
401	N	N	1,000	<1	N	N	30	100	50	50
402	N	<10	700	<1	N	N	30	200	30	50
403	N	<10	500	<1	N	N	20	50	50	15
404	N	N	700	<1	N	N	50	100	50	50
405	N	10	700	<1	N	N	30	150	30	30
406	N	10	1,000	<1	N	N	30	200	30	70
407	N	N	700	<1	N	N	20	150	50	30
408	N	<10	700	<1	N	N	50	150	200	50
409	N	10	700	<1	N	N	20	70	50	15
410	N	10	500	<1	N	N	50	150	50	15
411	N	<10	1,000	N	N	N	50	200	50	15
412	N	<10	700	<1	N	N	30	150	30	50
413	N	<10	700	N	N	N	30	300	70	20
414	N	15	700	<1	N	N	30	150	50	30
415	N	<10	500	N	N	N	30	100	30	10
416	N	10	700	<1	N	N	50	200	30	50
417	N	10	700	<1	N	N	30	150	30	20
418	N	10	700	<1	N	N	20	100	30	50
419	N	<10	1,500	<1	N	N	15	150	30	50
420	N	<10	700	<1	N	N	30	150	50	50
421	N	<10	700	<1	N	N	30	100	30	50
422	N	N	700	N	N	N	30	300	50	30
423	N	<10	700	1	N	N	20	100	50	50
424	N	10	700	<1	N	N	30	200	50	50
425	N	15	700	<1	N	N	30	70	70	20
426	N	10	1,000	<1	N	N	30	150	50	30
427	N	10	500	<1	N	N	30	200	50	15

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
339	N	<50	1,000	N	N	50	N	N	20	N
340	N	N	1,000	N	N	50	<10	N	15	N
341	N	<50	1,000	N	N	50	10	N	15	N
342	N	N	1,000	N	N	50	<10	N	15	N
343	N	N	1,000	N	N	30	N	N	10	N
344	N	<50	1,000	N	N	50	N	N	15	N
345	N	N	300	N	N	30	N	N	10	N
346	N	N	1,000	N	N	70	<10	N	20	N
347	N	N	1,000	N	N	50	10	N	20	N
348	N	N	1,500	N	N	50	<10	N	15	N
349	N	N	1,000	N	N	50	<10	N	15	N
350	N	N	1,500	N	N	30	<10	N	10	N
351	N	N	1,000	N	N	70	<10	N	15	N
352	N	N	1,000	N	N	70	<10	N	15	N
353	N	N	1,000	N	N	70	<10	N	15	N
354	N	N	700	N	N	70	<10	N	20	N
355	N	N	1,000	N	N	70	10	N	15	N
356	N	<50	1,500	N	N	30	<10	N	20	N
357	N	N	700	N	N	50	<10	N	15	N
358	N	N	1,000	N	N	70	<10	N	20	N
359	N	N	1,000	N	N	50	<10	N	15	N
360	N	N	700	N	N	70	N	N	15	N
361	N	N	1,000	N	N	50	N	N	15	N
362	N	N	1,000	N	N	50	<10	N	15	N
363	N	N	500	N	N	15	<10	N	7	N
364	N	N	1,000	N	N	30	10	N	15	N
365	N	N	1,000	N	N	50	N	N	15	N
366	N	N	1,000	N	N	70	<10	N	20	N
367	N	N	1,000	N	N	70	<10	N	20	N
368	N	N	1,000	N	N	50	N	N	15	N
369	N	N	700	N	N	50	<10	N	20	N
370	N	N	700	N	N	70	N	N	15	N
400	N	N	2,000	N	N	50	<10	N	15	N
401	N	<50	1,500	N	N	50	15	N	20	N
402	N	<50	1,000	<5	N	70	10	N	20	N
403	N	N	1,500	N	N	30	<10	N	15	N
404	N	<50	1,000	N	N	70	10	N	20	N
405	N	N	1,000	N	N	70	10	N	15	N
406	N	<50	1,000	<5	N	50	15	N	20	N
407	N	<50	1,000	N	N	50	10	N	10	N
408	N	N	1,000	N	N	70	15	N	20	N
409	N	N	1,000	N	N	30	<10	N	20	N
410	N	N	1,500	N	N	70	<10	N	20	N
411	N	N	1,500	N	N	70	<10	N	20	N
412	N	N	1,000	N	N	70	10	N	20	N
413	N	N	1,500	N	N	100	<10	N	20	N
414	N	<50	1,000	N	N	100	20	N	20	N
415	N	N	1,500	N	N	50	N	N	20	N
416	N	N	1,000	N	N	100	10	N	20	N
417	N	<50	1,000	N	N	70	10	N	15	N
418	N	<50	1,000	N	N	50	15	N	15	N
419	N	<50	1,000	N	N	30	15	N	10	N
420	N	<50	1,500	N	N	30	10	N	20	N
421	N	N	700	N	N	50	10	N	15	N
422	N	N	1,000	N	N	70	10	N	15	N
423	N	N	700	N	N	30	15	N	15	N
424	N	N	1,000	N	N	70	10	N	15	N
425	N	N	2,000	70	N	50	15	N	10	N
426	N	<50	1,000	N	N	50	15	N	15	N
427	N	N	1,500	N	N	70	<10	N	15	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
339	200	N	200	N	20	N	200	N	2.3	N
340	200	N	150	N	20	<200	200	N	2.4	N
341	300	N	200	N	20	N	150	N	3	N
342	200	N	200	N	20	N	150	N	2.5	N
343	200	N	150	N	15	N	50	.049	3.4	N
344	200	N	150	N	20	<200	100	N	2.7	N
345	200	N	100	N	20	N	100	N	3.4	N
346	300	N	200	N	30	<200	150	.076	1.9	.64
347	300	N	150	N	20	N	150	N	3.2	N
348	300	N	150	N	15	N	100	N	9	N
349	300	N	150	N	20	N	100	N	5.8	N
350	200	N	100	N	10	N	50	.057	4.7	N
351	300	N	150	N	20	N	100	N	3.2	.51
352	300	N	150	N	20	<200	50	4.8	4.5	9.1
353	300	N	200	N	20	N	200	N	6.6	N
354	200	N	150	N	20	<200	150	N	3.6	N
355	200	N	150	N	15	N	50	N	5.3	N
356	200	N	150	N	30	<200	200	N	2.7	N
357	200	N	100	N	15	N	70	N	9.9	N
358	200	N	200	N	20	<200	100	.073	6.6	N
359	200	N	150	N	20	N	100	N	2.9	N
360	200	N	150	N	20	N	100	N	3.4	N
361	200	N	200	N	20	N	200	N	10	N
362	300	N	150	N	20	N	30	N	4.6	N
363	<100	N	100	N	20	<200	50	.16	3.9	N
364	200	N	150	N	15	<200	100	N	7.2	N
365	200	N	200	N	20	N	200	N	14	N
366	300	N	150	N	20	<200	50	N	7.6	.22
367	300	N	200	N	20	N	150	N	6.6	N
368	150	N	200	N	15	N	150	N	10	N
369	200	N	150	N	20	N	100	N	8.5	N
370	200	N	150	N	15	<200	70	N	3.1	N
400	300	N	200	N	20	N	200	N	N	N
401	700	N	300	N	30	N	200	N	N	N
402	700	N	200	N	20	N	150	N	N	N
403	300	N	200	N	20	N	150	N	N	N
404	500	N	200	N	30	N	150	N	N	N
405	500	N	300	N	15	N	150	N	N	N
406	700	N	200	N	20	N	150	N	N	N
407	700	N	200	N	20	N	150	N	N	N
408	1,000	N	200	N	20	N	150	N	N	N
409	500	N	70	N	10	N	100	N	.67	N
410	500	N	150	N	20	N	100	N	N	N
411	500	N	100	N	20	N	150	N	N	N
412	700	N	150	N	15	N	150	N	N	N
413	500	N	200	N	15	N	300	N	1.5	N
414	500	N	200	N	20	N	150	N	1.1	N
415	300	N	100	N	15	N	100	N	N	N
416	500	N	200	N	20	N	150	N	N	N
417	700	N	200	N	15	N	100	.087	1.2	N
418	500	N	150	N	20	N	100	N	8.1	N
419	1,000	N	300	N	20	N	200	N	3.2	N
420	300	N	200	N	20	N	200	N	N	N
421	700	N	150	N	15	N	70	N	N	N
422	1,000	N	700	N	20	200	150	.072	N	N
423	500	N	150	N	15	N	100	N	.86	N
424	500	N	200	N	10	N	150	N	N	N
425	500	N	100	N	10	N	100	.14	19	N
426	700	N	300	N	15	N	150	.16	21	N
427	300	N	100	N	10	N	150	N	.8	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
339	N	.077	12	.29	4.4	N	33	--	--	--	--	--	--
340	N	.047	9.4	.2	3.9	N	35	--	--	--	--	--	--
341	N	.088	22	.32	4.7	.81	35	--	--	--	--	--	--
342	N	.084	17	.21	4.1	N	33	--	--	--	--	--	--
343	N	.11	16	.34	5.8	N	39	--	--	--	--	--	--
344	N	.082	16	.21	4.7	.75	34	--	--	--	--	--	--
345	N	.078	13	.32	4.4	N	32	--	--	--	--	--	--
346	N	.077	13	.51	3.4	.69	36	--	--	--	--	--	--
347	N	.066	8.7	.24	3.1	N	28	--	--	--	--	--	--
348	N	.15	17	.5	7	N	55	--	--	--	--	--	--
349	N	.14	11	.28	4.7	N	54	--	--	--	--	--	--
350	N	.31	19	.63	6.5	N	55	--	--	--	--	--	--
351	N	.1	16	.31	5.2	N	34	--	--	--	--	--	--
352	N	.14	26	.31	6.2	N	46	--	--	--	--	--	--
353	N	.093	21	.34	5.2	N	39	--	--	--	--	--	--
354	N	.11	9.9	.16	4.7	N	43	--	--	--	--	--	--
355	N	.18	24	.55	7.6	.7	85	--	--	--	--	--	--
356	N	.12	15	.33	4.1	.72	36	--	--	--	--	--	--
357	N	.12	16	.23	4.6	N	44	--	--	--	--	--	--
358	N	.098	35	.25	4.9	.7	29	--	--	--	--	--	--
359	N	.065	22	.22	3.4	N	34	--	--	--	--	--	--
360	N	.14	32	.3	6.6	.7	46	--	--	--	--	--	--
361	N	.11	14	.61	5.4	.67	38	--	--	--	--	--	--
362	N	.11	12	.31	4.7	N	35	--	--	--	--	--	--
363	N	.48	67	1.4	7.1	.94	51	--	--	--	--	--	--
364	N	.16	19	.58	8.3	N	49	--	--	--	--	--	--
365	N	.2	14	.5	5.4	.77	39	--	--	--	--	--	--
366	N	.091	14	.33	5	.64	37	--	--	--	--	--	--
367	N	.1	19	.4	5.8	.65	42	--	--	--	--	--	--
368	N	.09	12	.33	4.3	.62	35	--	--	--	--	--	--
369	N	.11	12	.31	5	.69	37	--	--	--	--	--	--
370	N	.092	30	.26	3.9	.74	37	--	--	--	--	--	--
400	N	.027	21	.41	N	N	28	--	--	--	--	--	--
401	N	.041	25	.79	1	N	45	--	--	--	--	--	--
402	N	.035	20	.31	.86	N	20	--	--	--	--	--	--
403	N	N	9.8	.24	N	N	14	--	--	--	--	--	--
404	N	.039	43	.23	1.2	N	28	--	--	--	--	--	--
405	N	.032	21	.2	.72	N	22	--	--	--	--	--	--
406	N	.038	19	.19	1	N	17	--	--	--	--	--	--
407	N	.038	29	.5	1.1	N	27	--	--	--	--	--	--
408	N	.098	23	.18	.85	N	9.9	--	--	--	--	--	--
409	N	N	15	.43	N	N	6.5	--	--	--	--	--	--
410	N	.026	29	.35	N	N	28	--	--	--	--	--	--
411	N	N	16	.28	N	N	5.8	--	--	--	--	--	--
412	N	.024	16	.22	.74	N	6.8	--	--	--	--	--	--
413	N	N	28	.42	.93	N	32	--	--	--	--	--	--
414	N	N	9.8	.17	N	N	5.3	--	--	--	--	--	--
415	N	N	13	.23	N	N	7.8	--	--	--	--	--	--
416	N	N	12	.16	N	N	5.6	--	--	--	--	--	--
417	N	.046	29	.34	1.7	N	30	--	--	--	--	--	--
418	N	.051	29	.69	1.7	N	27	--	--	--	--	--	--
419	N	.035	17	.93	1.2	N	38	--	--	--	--	--	--
420	N	N	49	.5	1.2	N	39	--	--	--	--	--	--
421	N	.029	26	.31	.69	N	16	--	--	--	--	--	--
422	N	.065	42	2.8	.89	N	92	--	--	--	--	--	--
423	N	.046	40	.3	1.3	N	17	--	--	--	--	--	--
424	N	N	29	.3	.87	N	26	--	--	--	--	--	--
425	N	.13	56	4.8	4.2	1	53	--	--	--	--	--	--
426	N	.17	46	1.2	5.1	.94	64	--	--	--	--	--	--
427	N	.064	17	.46	1.4	N	33	--	--	--	--	--	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUDE	CA_____S	FE_____S	MG_____S	NA_____S	P_____S	TI_____S	AG_PPM_S	AS_PPM_S
428	62 6 48	144 49 10	3	3	2	1.5	<.2	.5	N	N
429	62 9 1	144 47 44	3	5	2	1.5	<.2	.7	N	N
430	62 8 14	144 34 40	5	7	2	2	<.2	.7	<.5	N
431	62 9 0	144 35 38	3	5	2	1.5	N	.7	N	N
432	62 14 6	144 34 5	7	5	3	2	N	1	N	N
433	62 12 36	144 41 1	3	15	3	2	<.2	1	<.5	N
434	62 9 38	144 38 47	5	7	3	2	N	.7	<.5	N
435	62 11 30	144 44 32	2	5	2	1.5	N	.7	N	N
436	62 9 51	144 41 20	5	5	2	3	N	1	N	N
437	62 16 3	144 29 49	5	5	3	2	<.2	1	N	N
438	62 16 41	144 21 47	3	5	3	2	<.2	.7	N	N
439	62 16 38	144 16 5	3	5	2	2	<.2	1	N	N
440	62 19 14	144 18 35	3	5	3	1.5	<.2	.7	N	N
441	62 21 45	144 16 45	5	10	2	2	<.2	.7	<.5	N
442	62 21 39	144 16 42	5	10	5	1.5	<.2	.7	<.5	N
443	62 22 42	144 9 16	5	5	3	1.5	<.2	.7	N	N
444	62 14 35	144 0 0	3	5	1.5	2	<.2	1	N	N
445	62 14 56	144 1 28	2	5	1.5	5	<.2	.7	N	N
446	62 15 56	144 0 35	3	5	2	1.5	<.2	.7	N	N
447	62 18 35	144 3 47	5	5	3	2	N	1	N	N
448	62 20 13	144 1 52	2	5	2	1.5	<.2	1	N	N
449	62 19 27	144 10 46	7	5	2	3	<.2	1	N	N
450	62 20 1	144 9 44	5	5	1.5	5	N	1	N	N
451	62 22 26	144 1 28	5	5	3	2	N	1	N	N
452	62 26 47	144 3 56	5	5	2	2	<.2	.7	N	N
453	62 26 42	144 3 55	5	5	3	2	N	1	N	N
454	62 27 22	144 14 8	3	5	3	1.5	<.2	1	N	N
455	62 25 41	144 15 32	5	5	3	2	N	1	N	N
456	62 24 11	144 27 50	5	7	3	1.5	N	>1	N	N
457	62 32 4	144 10 56	5	5	3	2	<.2	1	N	N
459	62 32 20	144 6 0	5	7	3	2	N	>1	N	N
460	62 43 3	144 7 41	2	3	1.5	5	<.2	.5	N	N
461	62 43 7	144 14 24	3	3	2	1.5	<.2	.7	N	N
462	62 43 17	144 25 39	5	5	2	1.5	<.2	1	N	N
463	62 45 15	144 26 27	3	5	1.5	1.5	<.2	1	N	N
464	62 43 42	144 31 34	3	3	1.5	2	<.2	.7	N	N
465	62 45 10	144 44 9	3	5	2	2	N	>1	N	N
466	62 59 17	144 17 5	3	5	2	1.5	N	>1	N	N
467	62 56 17	144 29 16	3	5	1.5	1.5	N	1	N	N
468	62 53 51	144 28 35	3	5	2	1.5	N	1	N	N
469	62 48 42	144 34 21	5	5	2	1.5	N	>1	N	N
470	62 54 11	144 37 15	3	5	2	1.5	<.2	1	N	N
471	62 54 13	144 37 5	3	5	1.5	1.5	<.2	1	N	N
472	62 53 6	144 40 26	3	5	2	1.5	N	1	N	N
473	62 52 41	144 51 41	7	5	3	3	N	1	N	N
500	62 14 24	144 17 15	7	5	3	3	<.2	1	N	N
501	62 14 51	144 20 34	3	7	2	2	N	.5	1	N
502	62 10 32	144 22 38	3	5	3	1.5	<.2	.7	N	N
503	62 12 8	144 18 7	3	10	2	2	N	.5	<.5	N
504	62 12 9	144 15 3	3	7	2	1	N	.5	.5	N
505	62 6 45	144 29 49	1.5	2	1	2	<.2	.3	N	N
506	62 6 41	144 29 53	3	5	1.5	2	N	.7	N	N
507	62 9 48	144 17 10	3	5	2	2	<.2	.7	N	N
508	62 10 2	144 13 22	3	3	2	2	<.2	.5	N	N
509	62 7 47	144 13 26	5	5	3	2	N	.7	N	N
510	62 7 21	144 15 33	5	5	3	1.5	N	.7	N	N
511	62 6 51	144 21 10	5	5	3	1.5	N	.7	N	N
512	62 8 0	144 28 34	5	5	2	3	<.2	.5	N	N
513	62 11 52	144 35 10	5	3	2	2	<.2	.7	N	N
514	62 5 46	144 27 32	7	5	3	2	N	.7	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
428	N	10	700	<1	N	N	20	100	50	30
429	N	<10	700	<1	N	N	30	150	50	30
430	N	<10	700	N	N	N	20	150	50	20
431	N	N	700	<1	N	N	30	150	30	30
432	N	10	1,000	<1	N	N	20	200	30	30
433	N	<10	500	N	N	N	50	300	50	20
434	N	<10	700	<1	N	N	20	150	50	15
435	N	<10	700	<1	N	N	50	200	50	30
436	N	<10	700	<1	N	N	20	200	50	50
437	N	<10	700	<1	N	N	50	200	50	50
438	N	10	1,000	<1	N	N	30	200	50	50
439	N	10	700	<1	N	N	30	100	50	30
440	N	N	700	<1	N	N	50	300	30	50
441	N	10	700	<1	N	N	20	100	70	15
442	N	<10	500	N	N	N	50	150	70	15
443	N	<10	700	<1	N	N	50	200	50	50
444	N	10	1,000	1	N	N	20	50	50	50
445	N	20	1,500	1.5	N	N	20	70	50	50
446	N	10	700	1	N	N	30	100	30	50
447	N	10	700	<1	N	N	30	150	50	50
448	N	<10	700	1	N	N	30	150	50	50
449	N	<10	1,000	<1	N	N	20	70	30	50
450	N	10	1,000	1	N	N	15	100	30	50
451	N	<10	700	<1	N	N	50	200	50	50
452	N	<10	700	<1	N	N	30	150	30	50
453	N	<10	700	<1	N	N	50	300	50	50
454	N	<10	500	<1	N	N	30	200	30	50
455	N	10	700	<1	N	N	50	200	30	50
456	N	15	1,000	<1	N	N	30	1,000	20	50
457	N	10	1,000	<1	N	N	30	150	50	50
459	N	N	700	<1	N	N	50	500	50	50
460	N	200	1,000	1	<10	N	20	200	50	50
461	N	10	700	1	N	N	30	50	30	50
462	N	20	1,000	<1	N	N	30	500	30	50
463	N	20	1,000	<1	N	N	30	200	20	50
464	N	10	700	<1	N	N	15	100	30	50
465	N	15	700	<1	N	N	30	1,000	20	50
466	N	15	700	<1	N	N	30	1,000	30	30
467	N	10	1,000	<1	N	N	30	500	30	50
468	N	20	700	<1	N	N	30	700	20	30
469	N	20	700	<1	N	N	30	300	20	50
470	N	20	1,000	<1	N	N	20	300	20	50
471	N	15	1,000	<1	N	N	20	500	20	50
472	N	20	700	<1	N	N	20	500	20	30
473	N	20	1,000	<1	N	N	20	500	20	50
500	N	N	1,000	<1	N	N	30	150	50	50
501	N	10	700	<1	N	N	20	70	50	15
502	N	10	500	<1	N	N	50	500	50	20
503	N	10	500	<1	N	N	30	100	70	20
504	N	<10	300	<1	N	N	20	100	50	15
505	N	<10	700	<1	N	N	15	70	15	20
506	N	N	1,000	<1	N	N	20	150	30	50
507	N	<10	700	<1	N	N	30	150	50	30
508	N	10	500	<1	N	N	20	100	50	30
509	N	<10	700	<1	N	N	50	200	50	30
510	N	<10	700	<1	N	N	50	200	30	50
511	N	<10	700	<1	N	N	50	200	30	50
512	N	N	700	<1	N	N	30	150	50	30
513	N	<10	700	<1	N	N	20	150	50	50
514	N	<10	1,000	<1	N	N	20	150	50	30

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
428	N	<50	1,000	N	N	50	10	N	15	N
429	N	<50	1,000	N	N	70	15	N	20	N
430	N	N	1,500	N	N	30	<10	N	10	N
431	N	N	1,000	N	N	70	10	N	15	N
432	N	<50	1,500	N	N	50	10	N	20	N
433	N	N	2,000	N	N	70	<10	N	20	N
434	N	N	2,000	N	N	70	N	N	20	N
435	N	N	1,000	N	N	100	<10	N	15	N
436	N	N	1,500	N	N	70	15	N	20	N
437	N	<50	1,000	N	N	70	<10	N	15	N
438	N	N	1,000	N	N	70	15	N	20	N
439	N	<50	1,000	<5	N	50	15	N	20	N
440	N	N	1,000	N	N	100	10	N	30	N
441	N	N	1,500	N	N	70	<10	N	20	N
442	N	<50	2,000	N	N	70	<10	N	20	N
443	N	N	1,000	N	N	100	10	N	15	N
444	N	<50	1,000	N	N	30	15	N	15	N
445	N	50	1,000	7	20	70	30	N	20	<10
446	N	<50	1,000	N	N	70	10	N	15	N
447	N	N	1,000	<5	N	100	10	N	20	N
448	N	<50	1,000	N	N	100	10	N	20	N
449	N	<50	1,500	N	<20	20	10	N	20	N
450	N	50	1,000	5	<20	20	20	N	20	N
451	N	<50	1,000	N	<20	100	10	N	20	N
452	N	<50	1,000	N	N	50	10	N	20	N
453	N	<50	1,500	N	N	70	10	N	20	N
454	N	N	1,000	N	N	70	10	N	20	N
455	N	<50	1,000	N	N	70	15	N	20	N
456	N	<50	1,500	N	N	70	15	N	20	N
457	N	<50	1,000	N	N	50	15	N	20	N
459	N	<50	1,500	N	<20	100	10	N	20	N
460	N	50	1,000	<5	N	50	50	N	20	N
461	N	<50	1,000	N	N	50	15	N	15	N
462	N	<50	1,000	N	N	100	10	N	20	N
463	N	<50	1,000	N	N	70	15	N	20	N
464	N	<50	700	N	N	20	15	N	15	N
465	N	70	1,500	N	N	70	15	N	20	N
466	N	<50	1,000	N	<20	100	10	N	20	N
467	N	<50	1,000	N	N	70	15	N	20	N
468	N	<50	1,000	N	<20	70	15	N	20	N
469	N	<50	1,000	N	<20	70	10	N	20	N
470	N	<50	1,000	N	N	50	20	N	20	N
471	N	<50	1,000	N	<20	50	15	N	20	N
472	N	50	2,000	<5	<20	50	10	N	20	N
473	N	<50	1,000	N	<20	30	10	N	20	N
500	N	<50	1,000	<5	<20	50	15	N	20	N
501	N	N	1,500	N	N	50	<10	N	15	N
502	N	N	1,000	N	N	150	<10	N	20	N
503	N	N	1,000	N	N	50	<10	N	15	N
504	N	N	1,000	N	N	50	<10	N	20	N
505	N	<50	1,000	N	N	20	15	N	7	N
506	N	<50	1,000	N	N	70	15	N	15	N
507	N	N	1,000	N	N	70	<10	N	15	N
508	N	<50	700	N	N	70	10	N	15	N
509	N	<50	1,000	N	N	100	10	N	20	N
510	N	N	1,000	N	N	100	10	N	30	N
511	N	N	1,000	N	N	100	10	N	30	N
512	N	<50	1,000	N	<20	50	15	N	20	N
513	N	N	1,000	N	N	70	15	N	15	N
514	N	<50	1,500	N	N	50	15	N	15	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
428	1,000	N	150	N	15	N	100	.074	N	N
429	700	N	300	N	15	N	100	N	N	N
430	500	N	150	N	10	N	100	N	N	N
431	700	N	300	N	15	N	150	N	N	N
432	700	N	300	N	20	N	200	.068	.72	N
433	500	N	300	N	15	N	200	N	N	N
434	500	N	150	N	15	N	200	N	N	N
435	700	N	300	N	15	<200	200	.074	N	N
436	1,000	N	200	N	15	N	100	N	N	N
437	500	N	200	N	20	<200	300	N	N	N
438	500	N	200	N	20	N	150	N	N	N
439	500	N	200	N	30	N	200	.072	N	N
440	700	N	200	N	30	N	150	N	N	N
441	500	N	200	N	20	N	200	N	N	N
442	500	N	300	N	30	N	200	N	N	N
443	500	N	300	N	20	N	150	N	N	N
444	500	N	150	N	30	N	300	N	N	N
445	500	N	100	N	70	N	700	N	N	N
446	500	N	150	N	20	N	300	N	N	N
447	500	N	200	N	30	N	300	N	N	N
448	500	N	200	N	30	N	300	N	N	N
449	500	N	200	N	30	N	300	N	N	N
450	700	N	150	N	50	N	300	N	.77	N
451	1,000	N	150	N	20	N	200	N	N	N
452	500	N	200	N	15	N	100	N	N	N
453	700	N	200	N	15	<200	150	N	N	N
454	500	N	200	N	20	N	200	N	N	N
455	700	N	200	N	20	N	200	N	1.1	N
456	500	N	500	N	30	N	500	N	1.4	N
457	700	N	200	N	20	N	200	N	N	N
459	700	N	300	N	20	<200	300	N	N	N
460	500	N	200	N	30	N	150	.23	180	N
461	500	N	150	N	20	N	150	N	N	N
462	500	N	300	N	20	N	500	N	3.5	.13
463	500	N	300	N	20	N	150	N	4	N
464	500	N	200	N	30	N	100	N	4.4	N
465	500	N	200	N	20	N	300	N	2.7	N
466	300	N	300	N	30	N	700	N	6.1	.16
467	500	N	200	N	30	N	150	N	4	N
468	500	N	300	N	20	N	200	N	4.7	N
469	500	N	300	N	20	N	150	N	3.3	N
470	500	N	200	N	30	<200	200	N	4.9	N
471	500	N	200	N	20	N	150	N	3.9	N
472	500	N	200	N	30	N	200	N	5.9	N
473	1,000	N	200	N	20	N	150	N	6.7	N
500	700	N	200	N	50	N	200	N	N	N
501	300	N	100	N	15	N	150	N	.69	N
502	500	N	150	N	20	N	150	N	N	N
503	300	N	100	N	15	N	100	N	N	N
504	500	N	100	N	10	N	70	N	N	N
505	500	N	150	N	10	N	70	N	2.6	N
506	700	N	300	N	20	N	500	.068	4.1	N
507	500	N	200	N	20	N	150	N	.69	N
508	700	N	200	N	20	N	100	.076	N	N
509	700	N	300	N	20	N	150	N	.91	N
510	700	N	200	N	20	N	150	N	.95	N
511	500	N	200	N	20	N	150	N	.77	N
512	1,000	N	200	N	20	N	150	N	N	N
513	1,000	N	150	N	15	N	100	N	N	N
514	1,500	N	300	N	20	N	200	N	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
428	N	.026	22	.25	.73	N	10	--	--	--	--	--	--
429	N	.023	16	.24	.84	N	14	--	--	--	--	--	--
430	N	N	20	.29	N	N	16	--	--	--	--	--	--
431	N	.03	23	.31	N	N	23	--	--	--	--	--	--
432	N	.045	20	.3	1.4	N	24	--	--	--	--	--	--
433	N	.024	18	.3	.77	N	26	--	--	--	--	--	--
434	N	N	18	.29	.77	N	22	--	--	--	--	--	--
435	N	.034	22	.29	N	N	35	--	--	--	--	--	--
436	N	.031	19	.24	N	N	14	--	--	--	--	--	--
437	N	N	32	.49	N	N	51	--	--	--	--	--	--
438	N	N	14	.19	N	N	12	--	--	--	--	--	--
439	N	.052	25	.28	1.5	N	24	--	--	--	--	--	--
440	N	.029	33	.42	.78	N	33	--	--	--	--	--	--
441	N	.023	14	.29	N	N	14	--	--	--	--	--	--
442	N	N	25	.18	N	N	40	--	--	--	--	--	--
443	N	.045	33	.43	1.2	N	28	--	--	--	--	--	--
444	N	N	20	.62	N	N	35	--	--	--	--	--	--
445	N	N	26	1.5	4.3	N	37	--	--	--	--	--	--
446	N	N	20	.45	N	N	33	--	--	--	--	--	--
447	N	N	28	.29	.72	N	17	--	--	--	--	--	--
448	N	N	24	.36	.85	N	26	--	--	--	--	--	--
449	N	N	23	.33	N	N	28	--	--	--	--	--	--
450	N	N	15	.77	1.8	N	21	--	--	--	--	--	--
451	N	N	27	.23	N	N	22	--	--	--	--	--	--
452	N	N	29	.27	.99	N	26	--	--	--	--	--	--
453	N	N	39	.57	1.5	N	42	--	--	--	--	--	--
454	N	.069	25	.27	1.2	N	33	--	--	--	--	--	--
455	N	.071	22	.31	1.5	N	29	--	--	--	--	--	--
456	N	.063	17	.3	2.3	N	43	--	--	--	--	--	--
457	N	N	25	.37	1.7	N	21	--	--	--	--	--	--
459	N	N	23	.46	1.1	N	49	--	--	--	--	--	--
460	5.5	.85	64	3.1	41	1.3	100	--	--	--	--	--	--
461	N	N	35	.55	2.1	N	29	--	--	--	--	--	--
462	N	.097	22	.45	4.5	N	46	--	--	--	--	--	--
463	N	.12	21	.34	3.8	N	41	--	--	--	--	--	--
464	N	.35	49	.6	4.8	N	43	--	--	--	--	--	--
465	N	N	11	.15	2.4	N	33	--	--	--	--	--	--
466	N	.17	30	.77	5.5	N	59	--	--	--	--	--	--
467	N	.14	33	.3	4.2	N	48	--	--	--	--	--	--
468	N	.13	19	.33	3.4	N	50	--	--	--	--	--	--
469	N	.09	14	.4	2.3	N	37	--	--	--	--	--	--
470	N	.48	24	.64	5.1	N	82	--	--	--	--	--	--
471	N	.14	14	.49	4.1	N	43	--	--	--	--	--	--
472	N	.16	15	1.6	3.2	N	46	--	--	--	--	--	--
473	N	.11	15	.28	3.2	N	41	--	--	--	--	--	--
500	N	.039	31	.23	.79	N	22	--	--	--	--	--	--
501	N	.033	15	.23	.69	N	8.1	--	--	--	--	--	--
502	N	.042	13	.14	.73	N	25	--	--	--	--	--	--
503	N	.037	26	.31	.69	N	13	--	--	--	--	--	--
504	N	N	26	.12	N	N	11	--	--	--	--	--	--
505	N	.029	9.9	.46	.82	N	18	--	--	--	--	--	--
506	N	.047	24	1.1	1.6	N	59	--	--	--	--	--	--
507	N	.041	23	.16	N	N	11	--	--	--	--	--	--
508	N	.042	25	.42	.86	N	14	--	--	--	--	--	--
509	N	.023	14	.19	N	N	10	--	--	--	--	--	--
510	N	.023	9.7	.13	N	N	4.6	--	--	--	--	--	--
511	N	N	11	.19	N	N	6.4	--	--	--	--	--	--
512	N	.03	26	.22	.83	N	16	--	--	--	--	--	--
513	N	.036	24	.21	.95	N	18	--	--	--	--	--	--
514	N	.051	18	.28	1	N	12	--	--	--	--	--	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE			LONGITUD			CA_____S	FE_____S	MG_____S	NA_____S	P_____S	TI_____S	AG_PPM_S	AS_PPM_S
515	62	3	58	144	18	45	3	5	3	1.5	<.2	1	N	N
516	62	2	17	144	18	31	5	3	2	2	<.2	.5	<.5	N
517	62	2	5	144	27	50	3	3	1.5	1.5	<.2	.5	5	N
518	62	0	12	144	21	14	5	10	2	1	<.2	.7	<.5	N
519	62	0	19	144	21	22	3	5	2	1.5	N	1	N	N
520	62	3	19	144	33	15	3	5	1.5	2	N	1	N	N
521	62	4	11	144	29	25	5	5	3	2	N	1	N	N
522	62	4	8	144	29	33	5	10	3	1.5	<.2	1	.5	N
523	62	1	28	144	37	39	3	5	2	2	N	.7	N	N
524	62	0	34	144	36	23	15	5	3	5	N	1	N	N
525	62	0	26	144	39	25	5	3	2	2	<.2	.7	N	N
526	62	5	5	144	38	43	5	10	2	1.5	<.2	.7	.5	N
527	62	4	9	144	41	53	3	7	3	1.5	N	.5	.5	N
528	62	2	13	144	53	3	3	5	2	2	N	.5	.5	N
529	62	7	34	144	48	26	5	10	3	2	<.2	1	.5	N
530	62	10	27	144	47	33	5	10	3	1.5	<.2	.7	.7	N
531	62	8	10	144	32	7	2	3	2	1.5	<.2	.5	N	N
532	62	7	30	144	33	8	1.5	3	.7	1.5	N	.2	<.5	N
533	62	10	28	144	31	6	5	5	2	2	N	1	<.5	N
534	62	12	35	144	36	8	5	3	2	2	<.2	.5	N	N
535	62	11	18	144	39	58	5	10	3	1.5	<.2	.7	.5	N
536	62	13	59	144	50	59	5	7	3	1.5	<.2	1	N	N
537	62	9	56	144	42	36	3	3	2	1.5	<.2	.5	N	N
538	62	16	51	144	26	42	5	5	2	2	N	>1	N	N
539	62	16	15	144	19	32	3	10	3	1.5	<.2	.7	N	N
540	62	15	55	144	16	46	5	5	2	3	<.2	1	N	N
541	62	19	13	144	25	32	3	5	2	1	<.2	.7	N	N
542	62	20	28	144	19	0	7	5	3	2	<.2	1	N	N
543	62	23	10	144	21	46	3	5	2	1.5	N	.7	N	N
544	62	24	46	144	19	0	15	5	3	5	N	1	N	N
545	62	22	10	144	11	11	10	5	3	5	N	1	N	N
546	62	14	43	144	0	57	5	3	2	2	<.2	.7	N	N
547	62	15	19	144	1	27	7	5	2	2	<.2	1	N	N
548	62	17	8	144	3	40	3	5	1.5	2	.2	1	N	N
549	62	17	48	144	1	37	3	3	2	2	N	.7	N	N
550	62	17	50	144	5	12	5	5	3	5	N	>1	N	N
551	62	21	7	144	3	28	5	5	2	3	N	1	N	N
552	62	18	46	144	8	58	2	3	1.5	1.5	.2	1	N	N
553	62	20	53	144	8	5	3	5	2	2	<.2	1	N	N
554	62	29	6	144	0	54	5	5	2	2	N	.7	N	N
555	62	28	8	144	6	57	7	5	3	2	N	1	N	N
556	62	27	27	144	17	38	5	5	3	2	N	1	N	N
557	62	26	9	144	14	46	10	5	3	5	N	>1	N	N
558	62	26	58	144	25	59	3	5	2	1.5	N	1	N	N
559	62	30	50	144	13	24	3	7	3	2	<.2	1	N	N
560	62	31	8	144	8	28	2	5	2	1.5	N	1	N	N
561	62	31	54	144	1	55	5	5	3	2	N	1	N	N
562	62	42	59	144	17	23	5	5	2	1.5	<.2	.7	N	N
563	62	42	22	144	21	32	3	5	3	1.5	<.2	.7	N	N
564	62	43	41	144	28	15	3	5	2	1.5	N	1	N	N
565	62	45	51	144	46	56	5	5	2	1.5	<.2	1	N	N
566	62	39	23	145	27	46	1.5	3	1.5	1.5	<.2	.7	N	N
567	62	57	12	144	24	10	2	5	1.5	1.5	<.2	1	N	N
568	62	56	27	144	31	39	2	5	1.5	1.5	<.2	1	N	N
569	62	49	58	144	25	19	5	7	1.5	2	N	.5	N	<200
570	62	56	33	144	43	42	3	5	2	2	N	1	N	N
571	62	54	32	144	42	41	3	5	2	1.5	N	1	N	N
572	62	52	49	144	42	58	7	5	3	3	N	>1	N	N
573	62	51	6	144	54	41	3	5	1.5	1.5	N	1	N	N
574	62	51	52	144	58	53	5	5	3	2	N	>1	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
515	N	N	700	<1	N	N	50	500	50	50
516	N	<10	700	<1	N	N	20	70	30	50
517	N	N	500	<1	N	N	30	150	30	30
518	N	<10	500	N	N	N	30	70	50	20
519	N	N	700	<1	N	N	30	150	30	50
520	N	N	1,000	<1	N	N	30	200	30	70
521	N	<10	700	<1	N	N	30	200	50	50
522	N	<10	700	N	N	N	20	100	50	15
523	N	<10	700	<1	N	N	30	150	50	50
524	N	N	1,000	<1	N	N	20	200	30	50
525	N	10	1,000	<1	N	N	20	150	50	50
526	N	<10	700	<1	N	N	20	70	70	20
527	N	<10	500	<1	N	N	20	100	50	15
528	N	10	700	<1	N	N	20	100	50	15
529	N	10	700	<1	N	N	20	100	70	20
530	N	<10	500	N	N	N	30	200	50	30
531	N	<10	1,000	1	N	N	20	100	50	50
532	N	<10	700	1	N	N	<10	15	15	15
533	N	10	700	<1	N	N	20	150	50	15
534	N	N	700	<1	N	N	20	150	50	30
535	N	<10	500	N	N	N	30	200	50	20
536	N	<10	700	<1	N	N	50	500	50	30
537	N	<10	500	<1	N	N	20	100	50	20
538	N	15	1,000	<1	N	N	30	500	30	50
539	N	<10	500	N	N	N	20	70	70	20
540	N	<10	700	1	N	N	20	70	50	50
541	N	10	500	<1	N	N	20	100	50	20
542	N	<10	1,000	<1	N	N	30	200	50	30
543	N	<10	700	<1	N	N	50	200	30	30
544	N	10	1,000	<1	N	N	30	300	30	50
545	N	10	1,000	<1	N	N	30	150	50	50
546	N	<10	700	<1	N	N	20	70	30	50
547	N	<10	1,000	<1	N	N	30	150	50	50
548	N	<10	700	1	N	N	20	50	30	50
549	N	<10	1,000	1	N	N	20	100	30	50
550	N	<10	1,000	<1	N	N	20	200	50	50
551	N	15	700	<1	N	N	30	200	50	50
552	N	10	700	<1	N	N	20	70	50	50
553	N	10	1,000	<1	N	N	30	150	50	50
554	N	10	700	<1	N	N	30	300	30	50
555	N	<10	700	<1	N	N	30	300	50	50
556	N	<10	1,000	<1	N	N	30	200	50	50
557	N	15	700	<1	N	N	30	200	50	50
558	N	<10	700	<1	N	N	50	200	50	50
559	N	15	1,000	<1	N	N	50	500	50	50
560	N	<10	700	<1	N	N	50	300	30	50
561	N	N	700	<1	N	N	30	300	30	50
562	N	10	700	<1	N	N	30	300	50	50
563	N	N	700	1	N	N	30	150	30	50
564	N	15	700	<1	N	N	20	700	20	50
565	N	10	700	<1	N	N	30	700	20	50
566	N	15	700	<1	N	N	20	200	20	30
567	N	20	700	<1	N	N	20	300	20	30
568	N	20	500	<1	N	N	30	300	20	30
569	N	20	1,000	<1	N	N	20	150	20	50
570	N	20	1,000	<1	N	N	30	300	20	50
571	N	15	1,000	<1	N	N	30	500	30	50
572	N	20	1,000	<1	N	N	30	700	20	50
573	N	15	700	<1	N	N	30	700	30	50
574	N	20	1,000	<1	N	N	30	500	30	50

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
515	N	<50	1,000	N	<20	100	10	N	30	N
516	N	<50	1,000	N	N	50	10	N	15	N
517	N	<50	1,000	N	N	50	<10	N	15	N
518	N	N	1,500	N	N	50	<10	N	20	N
519	N	N	1,000	N	<20	70	10	N	20	N
520	N	<50	1,000	N	<20	70	10	N	20	N
521	N	<50	1,000	N	N	70	10	N	20	N
522	N	N	2,000	N	N	50	<10	N	20	N
523	N	<50	1,000	N	N	70	10	N	20	N
524	N	<50	1,500	N	N	50	15	N	15	N
525	N	<50	1,000	<5	N	50	15	N	15	N
526	N	N	1,000	5	N	50	10	N	15	N
527	N	N	1,500	N	N	50	<10	N	10	N
528	N	N	1,000	N	N	50	<10	N	20	N
529	N	N	2,000	N	N	50	<10	N	20	N
530	N	N	1,500	N	N	50	<10	N	20	N
531	N	<50	700	N	N	70	15	N	15	N
532	N	50	1,000	N	N	5	10	N	7	N
533	N	<50	1,000	N	N	70	<10	N	20	N
534	N	<50	1,000	N	N	70	15	N	15	N
535	N	N	1,500	N	N	70	<10	N	15	N
536	N	N	1,500	N	N	100	<10	N	20	N
537	N	N	1,000	N	<20	50	10	N	15	N
538	N	<50	1,000	N	<20	50	20	N	20	N
539	N	N	1,500	N	N	50	<10	N	20	N
540	N	<50	1,000	N	<20	30	15	N	20	N
541	N	N	1,500	N	N	70	10	N	20	N
542	N	<50	1,000	N	N	100	10	N	20	N
543	N	N	1,000	N	N	70	10	N	20	N
544	N	<50	1,500	N	N	70	10	N	20	N
545	N	<50	1,500	N	N	50	10	N	20	N
546	N	<50	1,000	<5	N	30	15	N	15	N
547	N	<50	1,000	N	<20	50	10	N	20	N
548	N	<50	1,000	<5	<20	30	10	N	15	N
549	N	<50	1,000	N	N	50	15	N	20	N
550	N	50	1,500	N	20	100	15	N	20	N
551	N	<50	1,000	N	N	70	15	N	15	N
552	N	<50	700	N	N	50	15	N	15	N
553	N	<50	1,000	<5	N	70	15	N	20	N
554	N	<50	1,000	N	N	70	15	N	20	N
555	N	N	1,000	N	<20	100	10	N	20	N
556	N	<50	1,500	N	N	50	15	N	20	N
557	N	<50	1,500	N	N	70	10	N	20	N
558	N	<50	1,000	N	N	70	10	N	20	N
559	N	<50	1,000	<5	N	100	10	N	20	N
560	N	N	1,000	N	N	100	10	N	20	N
561	N	<50	1,000	N	<20	100	10	N	20	N
562	N	<50	1,000	N	N	70	10	N	20	N
563	N	<50	1,000	N	N	70	10	N	15	N
564	N	<50	1,000	N	N	50	10	N	20	N
565	N	<50	1,000	N	<20	70	10	N	20	N
566	N	<50	700	N	N	50	10	N	20	N
567	N	<50	1,000	N	<20	50	15	N	20	N
568	N	<50	700	N	N	70	10	N	20	N
569	N	N	1,000	N	N	50	15	N	15	N
570	N	N	1,000	N	N	50	15	N	20	N
571	N	N	1,000	<5	<20	70	15	N	20	N
572	N	50	1,500	N	<20	70	15	N	20	N
573	N	<50	1,000	N	N	70	10	N	20	N
574	N	50	1,500	N	<20	70	15	N	20	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
515	500	N	200	N	30	N	150	N	N	N
516	500	N	100	N	15	N	70	N	.91	N
517	700	N	150	N	15	N	100	N	2.2	N
518	300	N	200	N	15	N	200	N	.85	N
519	700	N	200	N	20	N	150	N	N	N
520	500	N	300	N	20	<200	700	N	3.6	N
521	700	N	200	N	20	N	300	N	N	N
522	500	N	200	N	15	N	200	N	1.3	N
523	1,000	N	200	N	20	N	150	N	N	N
524	1,000	N	150	N	20	N	150	N	.8	N
525	700	N	150	N	20	N	200	N	1.4	N
526	500	N	200	N	10	N	150	N	22	N
527	500	N	100	N	10	N	150	N	N	N
528	500	N	100	N	10	N	100	N	1.2	N
529	500	N	200	N	10	N	200	N	.76	N
530	500	N	200	N	15	N	100	N	N	N
531	700	N	150	N	15	N	100	N	.76	N
532	300	N	50	N	10	N	150	N	2.7	N
533	700	N	100	N	10	N	150	N	N	N
534	1,500	N	150	N	15	N	150	.071	N	N
535	500	N	200	N	10	N	200	N	N	N
536	700	N	300	N	20	N	150	N	N	N
537	700	N	150	N	15	N	100	.067	N	N
538	500	N	300	N	20	<200	200	N	8.4	N
539	500	N	200	N	20	N	150	N	N	N
540	700	N	200	N	50	N	300	N	N	N
541	300	N	100	N	15	N	100	N	N	N
542	500	N	300	N	20	N	200	N	N	N
543	300	N	200	N	20	N	100	N	N	N
544	1,000	N	300	N	20	N	300	N	N	N
545	700	N	200	N	20	N	500	N	N	N
546	700	N	150	N	30	N	150	N	N	N
547	700	N	200	N	20	N	150	N	N	N
548	500	N	150	N	20	N	200	N	N	N
549	700	N	150	N	30	N	200	N	N	N
550	1,000	N	200	N	50	N	700	N	N	N
551	700	N	200	N	20	N	150	N	N	N
552	500	N	150	N	30	N	200	N	.9	N
553	500	N	200	N	20	N	200	N	N	N
554	700	N	200	N	20	N	150	N	.93	N
555	1,000	N	200	N	20	N	150	N	N	N
556	700	N	300	N	15	N	150	N	N	N
557	1,000	N	200	N	20	N	200	N	N	N
558	700	N	200	N	20	<200	150	N	N	N
559	700	N	300	N	20	N	500	N	N	N
560	500	N	200	N	20	N	150	N	2	N
561	1,000	N	300	N	20	N	200	N	N	N
562	500	N	300	N	20	N	150	N	2.7	N
563	500	N	200	N	20	N	150	N	N	N
564	500	N	200	N	20	N	150	N	2.9	N
565	500	N	200	N	30	N	300	N	2.8	N
566	500	N	150	N	20	N	70	N	2	N
567	500	N	200	N	20	N	150	N	3.2	N
568	300	N	150	N	20	N	150	N	5.4	N
569	500	N	200	N	20	N	150	N	120	.17
570	500	N	200	N	30	N	200	N	4.5	N
571	500	N	300	N	50	N	300	N	1.2	N
572	700	N	300	N	30	N	300	.071	4.1	1.5
573	500	N	300	N	20	N	300	N	4.6	N
574	500	N	300	N	30	N	300	N	4.9	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
515	N	N	10	.17	N	N	6.8	--	--	--	--	--	--
516	N	N	7.4	.15	N	N	4.9	--	--	--	--	--	--
517	N	.028	21	.24	1.3	N	24	--	--	--	--	--	--
518	N	N	15	.41	N	N	18	--	--	--	--	--	--
519	N	.033	18	.57	.92	N	28	--	--	--	--	--	--
520	N	.066	30	.83	2.1	N	61	--	--	--	--	--	--
521	N	N	37	.28	N	N	23	--	--	--	--	--	--
522	N	N	21	.52	N	N	22	--	--	--	--	--	--
523	N	.041	28	.24	1.1	N	15	--	--	--	--	--	--
524	N	.024	17	.44	N	N	20	--	--	--	--	--	--
525	N	.053	21	.31	1.2	N	12	--	--	--	--	--	--
526	N	.086	50	3.4	4.3	.8	46	--	--	--	--	--	--
527	N	N	20	.31	N	N	14	--	--	--	--	--	--
528	N	.068	19	.41	1.5	N	19	--	--	--	--	--	--
529	N	.043	17	.31	1.2	N	10	--	--	--	--	--	--
530	N	N	29	.23	N	N	24	--	--	--	--	--	--
531	N	.026	23	.23	.73	N	7.5	--	--	--	--	--	--
532	N	N	4.3	.66	.67	N	18	--	--	--	--	--	--
533	N	N	33	.19	N	N	12	--	--	--	--	--	--
534	N	.041	27	.19	.71	N	11	--	--	--	--	--	--
535	N	.02	19	.15	N	N	24	--	--	--	--	--	--
536	N	.038	25	.3	.67	N	35	--	--	--	--	--	--
537	N	.037	22	.13	.74	N	12	--	--	--	--	--	--
538	N	.17	21	.45	7.3	N	54	--	--	--	--	--	--
539	N	.022	19	N	N	N	21	--	--	--	--	--	--
540	N	.044	23	.3	1.6	N	22	--	--	--	--	--	--
541	N	.043	11	.12	.72	N	17	--	--	--	--	--	--
542	N	.038	22	.25	1.1	N	20	--	--	--	--	--	--
543	N	.036	15	.25	.95	N	31	--	--	--	--	--	--
544	N	N	17	.28	1.2	N	24	--	--	--	--	--	--
545	N	N	24	.22	N	N	14	--	--	--	--	--	--
546	N	N	34	.49	2.1	N	28	--	--	--	--	--	--
547	N	N	34	.18	N	N	15	--	--	--	--	--	--
548	N	N	30	.79	N	N	37	--	--	--	--	--	--
549	N	N	11	.76	1.4	N	28	--	--	--	--	--	--
550	N	.056	22	1.2	1.7	N	48	--	--	--	--	--	--
551	N	N	22	.21	N	N	11	--	--	--	--	--	--
552	N	.053	57	.52	1.3	N	14	--	--	--	--	--	--
553	N	N	23	.27	1.1	N	14	--	--	--	--	--	--
554	N	N	20	.23	1.1	N	26	--	--	--	--	--	--
555	N	N	30	.19	.9	N	23	--	--	--	--	--	--
556	N	N	25	.38	1.1	N	35	--	--	--	--	--	--
557	N	N	29	.19	N	N	20	--	--	--	--	--	--
558	N	N	19	.35	1.2	N	40	--	--	--	--	--	--
559	N	.057	22	.43	1.9	N	36	--	--	--	--	--	--
560	N	N	28	.43	1.4	N	39	--	--	--	--	--	--
561	N	N	23	.37	1.4	N	33	--	--	--	--	--	--
562	N	.21	47	.49	4.5	N	49	--	--	--	--	--	--
563	N	N	19	.22	.82	N	22	--	--	--	--	--	--
564	N	.071	12	.17	2.4	N	33	--	--	--	--	--	--
565	N	.061	13	.22	2.6	N	35	--	--	--	--	--	--
566	N	.08	17	.38	2.4	N	31	--	--	--	--	--	--
567	N	.19	23	.66	5.5	N	48	--	--	--	--	--	--
568	N	.38	16	.39	3.8	N	54	--	--	--	--	--	--
569	.92	.27	20	.46	N	1.3	2.7	--	--	--	--	--	--
570	N	.17	15	.58	3.8	N	46	--	--	--	--	--	--
571	N	.12	27	1.7	5.7	N	50	--	--	--	--	--	--
572	N	.24	29	.54	5.1	N	66	--	--	--	--	--	--
573	N	.075	18	.41	2.5	N	39	--	--	--	--	--	--
574	N	.16	28	.62	5.3	N	65	--	--	--	--	--	--

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUD	CA____S	FE____S	MG____S	NA____S	P____S	TI____S	AG_PPM_S	AS_PPM_S
575	62 41 58	145 6 29	7	5	2	2	N	1	N	N
600	62 14 43	144 18 5	5	7	2	2	.2	1	N	N
601	62 11 7	144 27 22	5	5	3	2	N	1	.7	N
602	62 10 50	144 26 8	3	3	2	1.5	<.2	.7	N	N
603	62 12 6	144 21 7	3	5	3	1.5	N	1	N	N
604	62 12 29	144 14 38	7	5	3	3	<.2	1	N	N
605	62 6 16	144 30 53	2	5	1.5	1.5	N	.5	<.5	N
606	62 5 40	144 33 8	7	5	2	3	N	.7	N	N
607	62 10 46	144 13 50	3	5	2	2	<.2	.5	N	N
608	62 11 22	144 10 24	3	3	2	2	<.2	.5	N	N
609	62 7 22	144 12 16	5	7	3	1.5	N	.5	5	N
610	62 6 56	144 14 18	2	3	2	1.5	<.2	.5	N	N
611	62 6 13	144 23 56	3	3	2	1.5	<.2	.7	N	N
612	62 9 0	144 29 6	7	5	3	3	N	.7	<.5	N
613	62 11 45	144 35 10	5	5	3	2	N	1	N	N
614	62 8 35	144 21 51	5	7	3	2	N	.7	<.5	N
615	62 2 45	144 24 22	5	7	3	2	N	1	N	N
616	62 2 35	144 24 18	5	5	2	2	<.2	.7	.7	N
617	62 2 57	144 25 19	3	5	2	2	<.2	.7	N	N
618	62 1 9	144 20 11	3	5	2	2	<.2	.7	N	N
619	62 3 21	144 33 56	2	5	1	2	N	1	N	N
620	62 2 6	144 30 13	3	5	2	1.5	<.2	.7	N	N
621	62 1 38	144 29 26	3	7	5	1.5	<.2	.7	<.5	N
622	62 1 36	144 37 19	5	5	3	2	N	1	N	N
623	62 2 17	144 44 22	3	5	2	2	N	1	N	N
624	62 2 11	144 44 33	3	5	2	1.5	N	1	N	N
625	62 5 4	144 39 22	3	5	2	1.5	N	.5	.5	N
626	62 3 3	144 44 56	3	3	2	2	<.2	.7	N	N
627	62 4 25	144 46 21	3	5	3	1.5	<.2	.5	N	N
628	62 6 8	144 48 5	3	10	2	1.5	<.2	.5	<.5	N
629	62 5 27	144 54 36	3	5	2	1.5	N	.7	N	N
630	62 9 9	144 54 40	7	5	3	2	N	.7	N	N
631	62 7 36	144 35 6	3	5	1.5	1.5	<.2	.5	N	N
632	62 9 16	144 36 2	3	7	2	2	<.2	.7	.7	N
633	62 14 4	144 26 36	3	10	3	1	<.2	.7	.5	N
634	62 13 16	144 43 37	3	7	3	2	N	.5	<.5	N
635	62 9 18	144 37 39	3	3	1.5	1.5	<.2	.3	N	N
636	62 10 32	144 54 12	10	5	3	3	N	1	N	N
637	62 9 32	144 43 11	5	7	3	2	<.2	.7	<.5	N
638	62 15 47	144 24 25	3	5	3	2	<.2	.7	N	N
639	62 17 22	144 17 57	7	5	5	3	N	.7	N	N
640	62 18 21	144 17 54	5	5	2	1.5	<.2	.7	N	N
641	62 20 58	144 27 37	5	5	3	2	N	1	N	N
642	62 21 47	144 15 54	5	5	2	3	<.2	1	N	N
643	62 23 16	144 13 29	7	5	2	3	<.2	1	N	N
644	62 23 23	144 13 35	2	5	3	1.5	<.2	1	N	N
645	62 23 28	144 11 3	5	5	3	2	<.2	>1	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	AU_PPM_S	B_PPM_S	BA_PPM_S	BE_PPM_S	BI_PPM_S	CD_PPM_S	CO_PPM_S	CR_PPM_S	CU_PPM_S	GA_PPM_S
575	N	20	700	<1	N	N	20	1,000	20	50
600	N	10	700	<1	N	N	20	50	70	15
601	N	<10	700	<1	N	N	30	200	50	70
602	N	<10	700	<1	N	N	20	100	30	50
603	N	N	700	<1	N	N	30	200	30	50
604	N	<10	1,000	<1	N	N	30	150	50	50
605	N	10	700	<1	N	N	15	100	30	20
606	N	N	1,000	<1	N	N	20	100	50	50
607	N	10	700	<1	N	N	50	200	50	20
608	N	10	700	<1	N	N	30	150	50	50
609	N	10	500	<1	N	N	30	100	70	15
610	N	<10	700	<1	N	N	30	100	30	20
611	N	10	700	<1	N	N	30	150	30	30
612	N	N	1,000	<1	N	N	30	200	30	50
613	N	N	700	<1	N	N	30	300	50	50
614	N	10	1,000	<1	N	N	20	70	70	20
615	N	N	700	N	N	N	50	300	50	30
616	N	10	700	<1	N	N	30	150	30	50
617	N	<10	700	1	N	N	30	150	50	30
618	N	10	700	<1	N	N	20	100	50	50
619	N	N	700	<1	N	N	50	150	50	50
620	N	<10	500	<1	N	N	30	150	30	30
621	N	<10	500	N	N	N	30	200	50	20
622	N	N	700	<1	N	N	50	300	50	50
623	N	N	700	<1	N	N	50	300	50	50
624	N	N	700	<1	N	N	30	200	30	30
625	N	<10	500	<1	N	N	20	70	50	15
626	N	N	700	<1	N	N	30	200	30	50
627	N	N	1,000	<1	N	N	30	200	50	30
628	N	<10	500	N	N	N	30	300	50	15
629	N	N	700	<1	N	N	50	300	50	30
630	N	N	700	<1	N	N	50	300	50	30
631	N	<10	700	<1	N	N	20	100	50	30
632	N	10	500	N	N	N	20	150	50	30
633	N	10	500	N	N	N	50	200	50	20
634	N	<10	1,000	<1	N	N	30	100	50	20
635	N	<10	1,000	<1	N	N	20	150	50	30
636	N	<10	1,000	<1	N	N	30	200	50	50
637	N	<10	700	N	N	N	20	200	50	15
638	N	<10	700	<1	N	N	50	200	50	30
639	N	<10	700	<1	N	N	50	500	50	50
640	N	10	700	<1	N	N	30	150	50	30
641	N	<10	1,000	<1	N	N	30	300	30	50
642	N	<10	1,000	<1	N	N	30	150	70	50
643	N	10	1,000	<1	N	N	20	150	50	50
644	N	<10	700	<1	N	N	30	200	50	50
645	N	<10	700	<1	N	N	30	200	50	30

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	GE_PPM_S	LA_PPM_S	MN_PPM_S	MO_PPM_S	NB_PPM_S	NI_PPM_S	PB_PPM_S	SB_PPM_S	SC_PPM_S	SN_PPM_S
575	N	<50	1,000	N	N	50	10	N	20	N
600	N	<50	2,000	N	N	20	<10	N	15	N
601	N	<50	1,000	N	N	70	15	N	30	N
602	N	<50	1,000	N	N	50	10	N	15	N
603	N	<50	1,500	N	N	70	10	N	20	N
604	N	<50	1,000	N	N	70	15	N	20	N
605	N	N	1,000	N	N	30	10	N	10	N
606	N	<50	1,500	<5	N	30	15	N	10	N
607	N	N	1,000	N	N	100	10	N	20	N
608	N	<50	1,000	<5	N	50	10	N	15	N
609	N	N	1,000	N	N	30	N	N	20	N
610	N	N	700	<5	N	70	10	N	15	N
611	N	<50	1,000	N	N	50	10	N	20	N
612	N	<50	1,500	N	N	70	10	N	20	N
613	N	<50	1,000	<5	<20	70	15	N	20	N
614	N	N	1,500	N	N	70	<10	N	15	N
615	N	N	1,000	N	N	100	10	N	20	N
616	N	<50	1,000	N	N	70	15	N	20	N
617	N	<50	1,000	N	N	50	10	N	15	N
618	N	N	1,000	N	N	70	10	N	15	N
619	N	N	1,000	<5	<20	50	10	N	15	N
620	N	N	1,000	N	N	50	<10	N	20	N
621	N	N	1,500	N	N	100	<10	N	20	N
622	N	<50	1,000	N	N	70	10	N	20	N
623	N	N	1,000	N	N	100	10	N	20	N
624	N	N	1,000	N	N	70	10	N	20	N
625	N	N	1,000	N	N	50	<10	N	10	N
626	N	<50	1,000	N	N	70	10	N	15	N
627	N	<50	1,000	N	N	100	10	N	20	N
628	N	N	1,500	N	N	100	<10	N	20	N
629	N	<50	1,000	N	N	100	10	N	20	N
630	N	<50	1,000	N	N	100	10	N	20	N
631	N	<50	1,000	N	N	50	10	N	10	N
632	N	N	1,500	N	N	50	<10	N	15	N
633	N	N	2,000	N	N	70	<10	N	20	N
634	N	N	1,500	N	N	70	<10	N	20	N
635	N	N	1,000	N	N	50	10	N	7	N
636	N	<50	1,500	N	N	70	15	N	20	N
637	N	N	1,500	N	N	50	<10	N	15	N
638	N	<50	1,000	N	<20	70	15	N	20	N
639	N	<50	1,500	N	N	70	<10	N	30	N
640	N	<50	1,000	<5	N	70	15	N	20	N
641	N	<50	1,000	N	<20	70	15	N	20	N
642	N	<50	1,000	N	<20	70	10	N	30	N
643	N	<50	1,500	<5	<20	50	15	N	20	N
644	N	<50	1,000	N	N	100	10	N	15	N
645	N	<50	1,500	N	N	70	10	N	15	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	SR_PPM_S	TH_PPM_S	V_PPM_S	W_PPM_S	Y_PPM_S	ZN_PPM_S	ZR_PPM_S	AG_P_PPM	AS_P_PPM	AU_P_PPM
575	500	N	300	N	30	N	200	N	4.9	N
600	500	N	100	N	20	N	300	N	N	N
601	700	N	200	N	30	N	150	N	N	N
602	500	N	150	N	15	N	150	N	N	N
603	500	N	300	N	20	<200	200	N	N	N
604	500	N	200	N	20	N	300	N	N	N
605	300	N	100	N	10	N	100	N	2.1	N
606	2,000	N	300	N	15	N	150	N	4	N
607	500	N	200	N	20	N	150	N	N	N
608	500	N	150	N	15	N	100	N	1.4	N
609	300	N	150	N	10	N	150	N	N	N
610	500	N	150	N	20	N	150	N	.97	N
611	500	N	200	N	20	N	150	N	1.2	N
612	1,500	N	200	N	20	N	100	N	1.7	N
613	700	N	300	N	15	N	150	N	N	N
614	500	N	100	N	15	N	200	N	1.9	N
615	1,000	N	300	N	20	N	150	N	N	N
616	700	N	200	N	20	N	200	N	5	N
617	500	N	150	N	20	N	100	N	5.3	N
618	700	N	200	N	15	N	150	N	1.1	N
619	500	N	500	N	20	<200	150	N	2.1	N
620	500	N	200	N	20	N	100	N	N	N
621	300	N	200	N	15	N	100	N	1.4	N
622	700	N	300	N	15	<200	150	N	N	N
623	700	N	300	N	15	<200	300	N	N	N
624	500	N	300	N	20	N	150	N	N	N
625	500	N	100	N	10	N	200	N	6.6	N
626	500	N	150	N	15	N	150	N	N	N
627	700	N	300	N	15	N	150	N	N	N
628	500	N	200	N	10	N	100	N	N	N
629	1,000	N	200	N	15	<200	100	.087	N	N
630	1,000	N	300	N	20	N	150	N	N	N
631	700	N	200	N	15	N	150	N	2.4	N
632	500	N	200	N	10	N	200	N	N	N
633	300	N	200	N	15	N	150	N	N	N
634	500	N	150	N	15	N	150	N	N	N
635	700	N	200	N	10	N	150	N	N	N
636	1,500	N	300	N	20	N	150	N	.87	N
637	300	N	200	N	10	N	100	N	N	N
638	700	N	200	N	30	N	150	N	.7	N
639	1,000	N	200	N	20	N	150	N	N	N
640	700	N	200	N	20	N	150	N	N	N
641	1,000	N	300	N	30	N	200	N	1	N
642	700	N	300	N	50	N	200	N	N	N
643	1,000	N	200	N	30	N	200	N	.81	N
644	500	N	150	N	20	<200	200	N	N	N
645	500	N	300	N	20	N	150	.073	N	N

Table 3. Data from stream-sediment samples, Gulkana quadrangle, Alaska--Continued

Sample	BI_P_PPM	CD_P_PPM	CU_P_PPM	MO_P_PPM	PB_P_PPM	SB_P_PPM	ZN_P_PPM	AU_AA	AS_AA	BI_AA	CD_AA	SB_AA	ZN_AA
575	N	.079	14	.24	3.1	N	51	--	--	--	--	--	--
600	N	.051	22	.39	N	N	30	--	--	--	--	--	--
601	N	.048	17	.24	1.1	N	19	--	--	--	--	--	--
602	N	.029	20	.38	.75	N	23	--	--	--	--	--	--
603	N	N	16	.22	N	N	24	--	--	--	--	--	--
604	N	N	29	.15	N	N	18	--	--	--	--	--	--
605	N	.031	16	.74	.85	N	30	--	--	--	--	--	--
606	N	.067	32	1.3	1.6	.78	38	--	--	--	--	--	--
607	N	.047	21	.22	.73	N	13	--	--	--	--	--	--
608	N	N	37	1.3	.84	N	28	--	--	--	--	--	--
609	N	N	13	.18	N	N	7.7	--	--	--	--	--	--
610	N	N	4.9	.16	N	N	3.2	--	--	--	--	--	--
611	N	.025	14	.23	.73	N	6.9	--	--	--	--	--	--
612	N	.034	28	.31	1.2	N	25	--	--	--	--	--	--
613	N	N	36	.47	.73	N	34	--	--	--	--	--	--
614	N	.028	39	.56	1.1	N	22	--	--	--	--	--	--
615	N	.032	21	.4	.71	N	27	--	--	--	--	--	--
616	N	N	29	.61	1.2	N	33	--	--	--	--	--	--
617	N	.045	23	.31	1.1	N	22	--	--	--	--	--	--
618	N	.029	22	.22	1.2	N	20	--	--	--	--	--	--
619	N	.06	37	2.8	1.5	N	120	--	--	--	--	--	--
620	N	.049	23	.28	.71	N	30	--	--	--	--	--	--
621	N	N	19	.11	N	N	19	--	--	--	--	--	--
622	N	N	41	.26	N	N	63	--	--	--	--	--	--
623	N	.026	38	.22	N	N	35	--	--	--	--	--	--
624	N	.021	34	.18	N	N	27	--	--	--	--	--	--
625	N	.049	37	.99	2	N	31	--	--	--	--	--	--
626	N	N	30	.25	.83	N	16	--	--	--	--	--	--
627	N	.022	22	.62	N	N	25	--	--	--	--	--	--
628	N	N	17	.13	N	N	16	--	--	--	--	--	--
629	N	.037	23	1	.79	N	43	--	--	--	--	--	--
630	N	.022	23	.33	N	N	16	--	--	--	--	--	--
631	N	.056	33	1.2	2.2	N	33	--	--	--	--	--	--
632	N	N	24	.24	N	N	13	--	--	--	--	--	--
633	N	.033	16	.24	N	N	20	--	--	--	--	--	--
634	N	.026	15	.28	.8	N	19	--	--	--	--	--	--
635	N	.028	25	.22	.84	N	13	--	--	--	--	--	--
636	N	.31	24	.29	1.6	N	27	--	--	--	--	--	--
637	N	.022	19	.2	N	N	9.4	--	--	--	--	--	--
638	N	.052	19	.24	.69	N	16	--	--	--	--	--	--
639	N	.08	31	.24	.96	N	17	--	--	--	--	--	--
640	N	.04	33	.26	.93	N	13	--	--	--	--	--	--
641	N	.055	25	.42	1	N	34	--	--	--	--	--	--
642	N	.046	22	.33	1.2	N	23	--	--	--	--	--	--
643	N	.075	35	.34	1.6	N	22	--	--	--	--	--	--
644	N	N	40	.46	N	N	45	--	--	--	--	--	--
645	N	.064	49	.95	2.4	N	48	--	--	--	--	--	--

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK
 [N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown]

Sample	LATITUDE	LONGITUD	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
001	62 55 20	145 41 48	7		1.5		1.5		.5		1.5		>2		N	N
002	62 51 25	145 59 20	7		2		.7		1		3		>2		N	N
003	62 51 57	146 6 10	7		1.5		.7		N		2		>2		N	N
007	62 46 38	146 23 5	10		1.5		1		.7		1.5		>2		N	N
008	62 46 29	146 23 3	15		2		1.5		.7		3		>2		N	N
009	62 45 24	146 17 10	7		1.5		1		N		5		>2		N	N
010	62 45 59	146 13 9	7		.3		.5		.5		5		>2		N	N
011	62 45 38	146 13 58	10		2		1.5		.5		3		>2		N	N
013	62 56 20	146 47 18	10		1		.5		N		5		>2		N	N
015	62 57 30	146 45 46	10		1		.5		1		7		>2		N	N
016	62 59 12	146 47 50	15		.5		.2		N		10		2		N	N
017	62 59 13	146 52 0	7		1		.3		N		7		2		15	N
021	62 49 45	146 54 28	7		1.5		1		1		3		>2		N	N
022	62 50 12	146 53 22	7		.2		.3		.7		5		>2		N	N
023	62 49 39	146 50 49	1.5		.3		.3		1.5		1		2		N	N
024	62 47 38	146 59 20	10		1		1		N		7		>2		N	N
025	62 45 8	146 47 50	7		1		.5		1		3		>2		N	N
026	62 45 6	146 52 40	7		.7		.5		<.5		3		>2		N	N
027	62 51 34	146 37 50	7		1		.7		.7		5		>2		N	N
028	62 49 58	146 33 38	7		.5		.7		.7		1		>2		N	N
029	62 50 27	146 41 6	7		.5		.7		.5		5		>2		N	N
030	62 43 29	146 54 30	7		.5		.7		.5		2		>2		N	N
031	62 46 43	146 36 45	10		.7		.7		.5		5		>2		N	N
032	62 47 21	146 38 39	20		3		1.5		2		1.5		>2		N	N
033	62 49 28	146 36 29	7		2		1.5		.5		.7		>2		N	N
034	62 44 6	146 4 39	7		5		2		1		2		>2		N	N
035	62 42 54	146 2 49	10		5		1.5		.7		.5		>2		N	N
036	62 43 16	145 53 29	10		1.5		.7		1		5		>2		N	N
037	62 43 13	145 52 58	10		1.5		1.5		1		1.5		>2		N	N
038	62 40 39	145 50 2	7		.7		.3		.5		2		>2		N	N
039	62 44 15	144 2 42	7		7		1		.5		1.5		>2		30	N
040	62 44 36	144 3 4	7		1.5		.7		.5		5		>2		N	N
041	62 44 8	144 0 38	10		2		.7		1		1.5		2		N	N
042	62 44 0	144 1 8	7		1.5		.7		.7		1		>2		N	N
043	62 45 42	144 4 9	7		1.5		1		.7		5		>2		N	N
044	62 45 11	144 5 35	7		1.5		.7		.5		7		>2		N	N
045	62 48 21	144 6 0	10		1.5		1		.7		7		>2		N	N
046	62 47 8	144 4 0	5		5		.7		.7		2		>2		N	N
047	62 46 48	144 5 5	7		.5		.3		N		5		>2		N	N
048	62 47 53	144 4 0	3		15		.15		.5		2		1.5		N	N
049	62 47 15	144 15 0	10		1.5		1		.5		7		>2		N	N
050	62 47 12	144 4 50	7		1.5		.3		.7		5		>2		N	<500
051	62 48 50	144 4 0	7		1		.3		1		1.5		2		N	N
052	62 48 52	144 3 42	2		10		.2		.5		1.5		>2		N	2,000
053	62 49 20	144 6 37	10		.7		.5		<.5		10		>2		N	N
054	62 49 25	144 6 30	10		.7		.3		.7		3		>2		N	N
055	62 48 42	144 8 36	5		.2		.15		N		7		2		N	N
056	62 48 52	144 8 48	10		.1		.15		N		7		2		N	N
057	62 50 21	144 7 52	7		.7		.3		.5		2		2		N	N
058	62 50 30	144 7 39	7		1		.3		1		5		2		N	N
059	62 51 20	144 8 37	10		.5		.3		.5		7		>2		N	N
060	62 51 19	144 8 20	10		1		.5		1		7		2		N	N
061	62 52 27	144 9 0	.3		.1		.07		N		1		>2		N	N
062	62 52 22	144 8 45	15		5		.07		<.5		7		>2		N	N
063	62 52 35	144 4 32	15		1.5		.3		1		10		1		N	N
064	62 48 9	144 0 0	5		7		.2		<.5		5		>2		15	N
065	62 50 22	144 2 51	10		.5		.3		.5		7		2		N	N
066	62 50 40	144 2 35	1.5		1.5		.07		<.5		1		1		N	N
067	62 50 39	144 2 21	2		10		.07		<.5		N		1.5		N	10,000
068	62 51 15	144 0 25	7		1		.15		.5		7		>2		N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
001	N	30	200	N	N	N	<20	200	N
002	N	50	700	N	N	N	<20	200	<10
003	N	20	300	N	N	N	<20	200	<10
007	N	30	700	N	N	N	<20	150	N
008	N	50	300	N	N	N	<20	300	N
009	N	20	500	N	N	N	<20	500	N
010	N	20	300	N	N	N	N	200	N
011	N	70	300	<2	N	N	<20	300	<10
013	N	<20	700	N	N	N	N	300	N
015	N	<20	700	N	50	N	N	200	N
016	N	N	200	N	N	N	N	70	N
017	30	30	500	N	N	N	N	300	N
021	N	<20	1,000	N	N	N	<20	300	N
022	N	<20	700	N	N	N	N	150	N
023	N	20	1,000	N	N	N	N	300	N
024	N	50	1,500	N	N	N	N	200	N
025	N	50	500	N	N	N	N	100	N
026	N	30	500	N	N	N	N	200	<10
027	N	50	300	N	N	N	N	300	N
028	N	30	300	N	N	N	N	200	N
029	N	30	500	N	N	N	N	300	N
030	N	30	500	N	N	N	N	200	N
031	N	20	300	N	N	N	N	200	N
032	N	20	500	N	N	N	N	200	<10
033	N	30	300	N	N	N	N	500	<10
034	N	50	1,500	N	N	N	20	200	N
035	N	30	200	N	N	N	20	200	<10
036	N	<20	500	N	N	N	N	200	N
037	N	30	500	N	N	N	N	200	N
038	N	<20	300	N	N	N	N	150	N
039	N	50	7,000	N	N	N	50	300	70
040	N	100	5,000	N	N	N	<20	100	<10
041	N	70	2,000	N	N	N	N	100	<10
042	N	150	5,000	N	N	N	N	150	N
043	N	50	10,000	N	N	N	30	200	<10
044	N	70	>10,000	N	N	N	N	200	N
045	N	20	1,500	N	N	N	<20	300	N
046	N	<20	>10,000	N	N	N	50	150	100
047	N	70	2,000	N	N	N	N	150	N
048	N	N	>10,000	N	N	N	200	50	70
049	N	30	1,500	N	N	N	N	200	N
050	N	200	7,000	N	N	N	<20	70	N
051	N	70	5,000	N	N	N	N	50	N
052	N	150	>10,000	N	N	N	100	30	50
053	N	300	1,000	N	30	N	N	100	N
054	N	30	2,000	N	50	N	<20	70	N
055	N	100	2,000	N	N	N	N	20	N
056	N	200	2,000	N	N	N	N	<20	N
057	N	100	300	N	N	N	N	20	N
058	N	70	1,500	N	N	N	N	70	15
059	N	100	2,000	N	N	N	N	70	N
060	N	150	2,000	N	N	N	N	100	<10
061	N	50	150	N	N	N	N	70	<10
062	N	100	3,000	N	N	N	50	50	20
063	N	5,000	2,000	N	N	N	50	N	200
064	100	30	>10,000	N	20	N	50	30	15
065	N	500	7,000	N	N	N	N	50	<10
066	N	700	>10,000	N	N	N	N	20	20
067	N	1,000	>10,000	N	N	N	70	20	50
068	N	100	>10,000	N	150	N	N	100	<10

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
001	15	N	<100	500	N	50	20	70	N	50
002	10	N	<100	300	N	<50	<10	N	N	30
003	<10	N	<100	300	N	50	15	N	N	70
007	15	N	<100	500	N	<50	15	N	N	50
008	20	N	<100	500	N	70	30	<20	N	50
009	15	N	<100	500	N	70	15	<20	N	70
010	10	N	<100	300	N	50	N	<20	N	50
011	20	N	<100	500	N	70	20	N	N	50
013	20	N	<100	300	N	50	N	<20	N	30
015	15	N	<100	300	N	70	N	<20	N	50
016	<10	N	<100	200	N	<50	N	30	N	50
017	30	N	100	200	N	<50	N	N	N	30
021	20	N	<100	300	N	70	15	N	N	50
022	<10	N	<100	200	N	70	N	N	N	50
023	70	N	N	50	N	70	N	N	N	<10
024	10	N	<100	150	N	100	N	<20	N	20
025	15	N	<100	300	N	50	N	N	N	15
026	15	N	<100	200	N	70	N	N	N	30
027	15	N	N	200	N	50	N	N	N	50
028	20	N	<100	200	N	70	N	<20	N	20
029	15	N	<100	300	N	50	N	N	N	50
030	10	N	<100	300	N	50	N	N	N	70
031	10	N	<100	3,000	N	70	N	N	N	50
032	50	N	<100	500	N	70	15	30	N	30
033	15	N	<100	300	N	50	20	N	N	70
034	20	N	<100	700	N	70	50	<20	N	70
035	15	N	<100	500	N	70	30	<20	N	50
036	15	N	<100	500	N	50	N	<20	N	70
037	20	N	<100	500	N	70	N	<20	N	30
038	10	N	<100	300	N	50	N	N	N	50
039	10	N	<100	300	N	<50	50	5,000	N	70
040	<10	N	100	300	N	50	15	50	N	70
041	10	N	<100	300	N	50	10	30	N	30
042	10	N	<100	300	N	<50	N	20	N	50
043	10	N	<100	300	N	100	N	150	N	70
044	<10	N	<100	300	N	70	N	30	N	70
045	15	N	150	500	N	50	20	<20	N	70
046	<10	N	<100	300	10	<50	<10	150	N	30
047	<10	N	<100	100	N	<50	N	20	N	70
048	15	N	<100	200	200	<50	100	500	N	10
049	10	N	100	300	N	<50	10	<20	N	50
050	10	N	<100	200	N	<50	N	20	N	70
051	15	N	<100	300	N	<50	N	<20	N	20
052	15	N	N	200	N	<50	70	150	N	70
053	<10	N	150	300	N	<50	N	50	N	50
054	10	N	<100	200	N	<50	N	50	N	50
055	<10	N	100	70	N	<50	<10	<20	N	100
056	N	N	100	50	N	<50	<10	N	N	70
057	10	N	N	100	N	<50	15	N	N	70
058	10	N	<100	200	N	N	N	N	N	10
059	<10	N	<100	100	N	<50	N	N	N	50
060	10	N	<100	200	N	<50	N	<20	N	20
061	<10	N	N	N	N	<50	10	N	N	100
062	10	N	<100	200	N	<50	N	20	N	70
063	<10	N	N	300	N	N	N	50	N	<10
064	10	N	<100	150	N	<50	50	N	N	30
065	<10	N	<100	150	N	<50	N	200	N	50
066	<10	N	N	70	N	N	N	20	N	30
067	<10	N	<100	70	N	<50	30	500	N	<10
068	<10	N	<100	150	N	70	N	500	N	50

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
001	N	700	N	300	N	150	N	>2,000	N	N
002	N	700	N	300	200	150	N	>2,000	N	N
003	N	N	<200	300	N	300	N	>2,000	N	N
007	N	700	N	300	200	150	N	>2,000	N	N
008	N	700	N	300	N	200	N	>2,000	N	N
009	N	500	N	300	N	300	N	>2,000	N	N
010	N	700	N	300	N	300	N	>2,000	N	N
011	30	700	N	300	N	200	N	>2,000	N	N
013	70	200	N	300	70	200	N	>2,000	N	N
015	N	500	N	300	70	150	N	>2,000	N	N
016	N	<200	N	200	N	300	N	>2,000	N	N
017	N	N	N	300	200	150	N	>2,000	N	N
021	N	500	N	300	N	200	N	>2,000	N	N
022	70	500	N	300	<50	200	N	>2,000	N	N
023	N	N	N	300	N	100	N	>2,000	N	N
024	30	700	N	300	<50	200	N	>2,000	N	N
025	N	700	N	200	100	150	N	>2,000	N	N
026	N	700	N	300	N	200	N	>2,000	N	N
027	N	700	N	300	N	150	N	>2,000	N	N
028	N	700	N	300	200	100	N	>2,000	N	N
029	N	700	N	300	N	150	N	>2,000	N	N
030	70	700	N	300	N	300	N	>2,000	N	N
031	N	700	N	300	N	300	N	>2,000	N	N
032	N	1,000	N	300	N	150	N	>2,000	N	N
033	N	700	N	300	N	200	N	>2,000	N	N
034	N	700	N	300	N	150	N	>2,000	N	N
035	N	700	N	300	N	150	N	>2,000	N	N
036	N	700	N	300	N	300	N	>2,000	N	N
037	N	700	N	300	N	150	N	>2,000	N	N
038	N	300	N	300	N	150	N	>2,000	N	N
039	N	1,000	N	300	200	150	N	>2,000	N	N
040	N	1,000	N	300	N	500	N	>2,000	N	N
041	N	700	N	300	N	50	N	>2,000	N	N
042	N	700	N	200	N	150	N	>2,000	N	N
043	N	700	N	300	N	200	N	>2,000	N	N
044	<20	700	N	300	150	200	N	>2,000	N	N
045	N	700	N	300	N	200	N	>2,000	N	N
046	N	1,000	N	200	N	100	N	>2,000	N	N
047	N	200	N	200	70	300	N	>2,000	N	N
048	N	2,000	N	100	500	150	N	>2,000	N	N
049	N	700	N	200	N	150	N	>2,000	N	N
050	N	700	N	150	N	200	N	>2,000	N	N
051	N	700	N	150	50	100	N	>2,000	N	N
052	N	1,000	N	100	<50	700	N	>2,000	N	N
053	N	700	N	200	N	300	N	>2,000	N	N
054	N	500	N	200	N	200	N	>2,000	N	N
055	N	N	N	150	N	300	N	>2,000	N	N
056	N	N	N	150	150	150	N	>2,000	N	N
057	N	N	N	200	N	200	N	>2,000	N	N
058	N	700	N	200	N	70	N	>2,000	N	N
059	N	700	N	150	N	200	N	>2,000	N	N
060	N	700	N	150	N	150	N	>2,000	N	N
061	N	N	N	150	N	300	N	>2,000	N	N
062	N	N	N	150	50	500	N	>2,000	N	N
063	N	<200	N	100	N	70	N	>2,000	N	N
064	N	2,000	N	200	1,500	150	N	>2,000	N	N
065	N	700	N	200	200	200	N	>2,000	N	N
066	N	10,000	N	50	300	100	N	>2,000	N	N
067	N	10,000	N	70	2,000	50	N	>2,000	N	N
068	N	1,500	N	300	300	150	N	>2,000	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	LATITUDE	LONGITUD	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
069	62 51 12	144 0 25	3		10			.2	N		2		>2		N	N
070	62 51 21	144 0 50	3		7			.1	<.5		1.5		2		N	2,000
072	62 54 9	144 7 4		.5	10			.15	N		.5		>2		N	N
073	62 54 20	144 6 47	7		3			.07	.5		.5		.7		N	2,000
074	62 53 33	144 5 18	2		2			.1	.5		5		.7		N	3,000
075	62 53 40	144 6 21	5		2			.2	.5		5		1.5		N	5,000
076	62 55 8	144 8 23	7		2			.3	.7		5		2		N	<500
077	62 55 2	144 8 49	7		.3			.15	N		7		>2		N	N
078	62 56 33	144 9 30	7		2		1		1.5		5		2		N	N
079	62 56 13	144 3 55	7		1.5			.2	1.5		1		.3		N	N
080	62 56 15	144 4 5	10		1			.3	1.5		1.5		.5		N	N
081	62 57 19	144 5 25	10		.7			.3	1		7		2		N	N
082	62 55 30	144 4 7	10		.7			.2	1		7		.7		N	N
083	62 55 47	144 4 7	10		.7			.15	1		7		1		30	N
084	62 59 10	144 8 23	5		.7			.2	1		7		2		N	N
085	62 58 10	144 10 58	7		.7			.3	1.5		3		>2		N	N
086	62 56 30	144 11 15	1.5		.3			.15	N		2		.5		N	N
087	62 56 35	144 14 53		.7	.3			.2	.5		5		2		N	N
088	62 53 9	144 11 55	5		.2			.15	N		10		1.5		N	N
089	62 58 3	144 16 12	7		.3			.2	.5		7		>2		N	N
090	62 59 10	144 15 45	7		.3			.3	.5		7		>2		N	N
091	62 58 35	144 13 50	1.5		.2			.2	.5		3		>2		N	N
092	62 55 7	144 15 58	5		.3			.15	<.5		7		.5		N	N
093	62 55 0	144 11 53	3		.7			.5	.5		7		.7		N	N
094	62 55 0	144 12 18	5		.5			.3	<.5		10		1.5		N	N
095	62 52 18	144 13 55		.7	.5			.15	.5		1.5		1		N	N
096	62 51 45	144 15 0	7		.7			.3	1		3		2		N	N
097	62 50 30	144 12 47	5		1.5			.5	1.5		.7		2		N	N
098	62 50 24	144 12 52	7		1.5			.5	1.5		N		1.5		N	N
099	62 50 15	144 13 12	10		.7			.5	.5		7		2		N	N
100	62 50 5	144 14 22	5		.7			.5	.5		5		2		N	N
101	62 49 48	144 16 0	5		5		2		.5		.5		2		N	N
102	62 54 21	144 23 52	7		1.5		1.5		.5		5		>2		N	N
103	62 55 3	144 24 40	5		1		1		<.5		2		>2		N	N
104	62 55 35	144 23 12	7		1			.5	.7		1.5		>2		N	N
105	62 53 45	144 23 31	1		.15			.1	.7		5		2		15	N
106	62 54 58	144 20 12	10		.5			.5	.5		10		1.5		N	N
107	62 55 50	144 20 18	10		.3			.3	.7		10		2		N	N
108	62 52 53	144 25 42	2		.3			.15	.7		5		2		N	N
109	62 53 4	144 20 10	5		.3			.15	.7		7		2		N	N
110	62 53 0	144 19 25	3		.3			.15	.7		5		2		N	N
111	62 51 32	144 20 2	7		.3			.3	1		7		2		N	N
112	62 51 0	144 22 55	10		.5			.5	3		7		1.5		N	N
113	62 50 5	144 26 39	7		.2			.15	<.5		7		>2		N	N
114	62 50 13	144 17 42	5		.3			.2	.7		7		2		N	N
115	62 49 43	144 20 2		.7	.3			.15	.5		3		2		N	N
116	62 48 17	144 19 21	7		.7			.5	.5		10		2		N	N
117	62 48 12	144 19 21	7		.3			.3	<.5		10		2		N	N
119	62 47 42	144 23 15	2		.5			.15	1.5		5		1.5		N	N
120	62 47 5	144 21 19	10		1		1		1		7		2		N	N
121	62 48 27	144 28 35	10		1			.5	1.5		7		1.5		N	N
122	62 45 29	144 20 15	3		.5			.3	.7		5		2		N	N
123	62 45 17	144 18 31	5		.5			.3	.5		7		2		N	N
124	62 48 32	144 12 49	5		.7			.15	.7		5		1		N	N
125	62 47 50	144 12 50	7		.7			.3	2		3		1.5		N	N
126	62 46 19	144 14 32	7		.3			.3	<.5		7		>2		N	N
127	62 46 4	144 15 30	7		.7			.2	2		7		1.5		N	N
128	62 46 28	144 9 50	2		.3			.1	<.5		7		>2		N	N
129	62 46 25	144 9 38	7		.5			.3	1.5		5		>2		N	N
130	62 47 33	144 9 49	5		.7			.15	N		5		2		N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
069	N	70	>10,000	N	50	N	30	150	<10
070	N	300	>10,000	N	N	N	50	20	20
072	N	<20	>10,000	N	<20	N	70	200	30
073	N	5,000	>10,000	N	N	N	100	30	50
074	N	700	>10,000	N	N	N	50	<20	10
075	N	700	>10,000	N	N	N	70	50	20
076	N	5,000	>10,000	N	<20	N	50	100	20
077	N	20	3,000	N	N	N	N	100	N
078	N	100	>10,000	N	N	N	20	100	N
079	N	<20	5,000	<2	N	N	N	<20	N
080	N	<20	1,000	N	N	N	N	20	<10
081	N	50	5,000	N	N	N	N	50	N
082	N	20	2,000	N	N	N	N	30	N
083	70	N	1,500	N	N	N	N	N	N
084	N	30	>10,000	N	N	N	N	70	N
085	N	20	2,000	N	N	N	<20	200	N
086	N	N	>10,000	2	N	N	N	<20	N
087	N	N	2,000	<2	N	N	N	70	N
088	N	<20	500	<2	N	N	N	50	N
089	N	N	1,500	N	N	N	N	70	N
090	N	20	>10,000	N	N	N	N	150	N
091	N	20	2,000	N	N	N	N	100	N
092	N	20	300	N	N	N	N	30	<10
093	N	N	150	N	N	N	N	100	<10
094	N	<20	150	N	N	N	N	30	N
095	N	50	1,000	N	N	N	N	20	<10
096	N	20	1,000	N	N	N	N	70	N
097	N	30	500	N	N	N	N	70	N
098	N	70	10,000	N	500	N	N	70	10
099	N	50	2,000	N	100	N	N	70	<10
100	N	<20	10,000	N	N	N	N	70	N
101	N	30	700	N	N	N	30	700	N
102	N	50	500	N	N	N	<20	300	N
103	N	30	700	N	N	N	N	200	N
104	N	20	3,000	N	N	N	N	100	N
105	150	<20	1,500	<2	N	N	N	50	20
106	N	<20	2,000	N	N	N	N	100	20
107	N	<20	10,000	N	N	N	N	100	15
108	N	N	1,500	N	N	N	N	70	<10
109	N	N	2,000	N	N	N	N	70	<10
110	N	<20	3,000	N	N	N	N	70	15
111	N	50	>10,000	N	N	N	N	100	<10
112	N	<20	7,000	N	N	N	N	70	N
113	N	20	1,500	N	N	N	N	100	N
114	N	<20	>10,000	N	N	N	N	100	N
115	<20	<20	5,000	N	N	N	N	100	N
116	N	N	10,000	N	N	N	N	100	150
117	N	N	3,000	N	N	N	N	70	<10
119	N	N	700	N	N	N	N	30	<10
120	N	20	700	N	N	N	N	150	N
121	N	N	1,500	N	N	N	N	50	N
122	N	N	700	N	N	N	N	100	N
123	N	<20	700	N	N	N	N	150	N
124	N	N	>10,000	N	N	N	N	30	50
125	N	20	7,000	N	N	N	N	20	N
126	N	N	2,000	N	N	N	N	200	N
127	N	20	1,000	N	N	N	N	50	<10
128	N	20	>10,000	N	N	N	N	70	<10
129	N	<20	>10,000	N	200	N	N	100	N
130	N	<20	>10,000	N	200	N	<20	50	10

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
069	<10	N	N	70	150	70	10	300	N	70
070	10	N	N	100	N	<50	70	150	N	70
072	15	N	N	20	70	<50	20	20	N	70
073	<10	N	<100	100	300	N	30	200	N	30
074	<10	N	N	70	N	N	N	20	N	<10
075	<10	N	N	150	50	<50	20	2,000	N	<10
076	<10	N	<100	150	10	N	N	70	N	50
077	<10	N	100	70	N	N	<10	20	N	70
078	10	N	<100	200	N	<50	15	30	N	30
079	20	N	N	200	N	N	N	<20	N	20
080	20	N	N	300	N	N	N	<20	N	30
081	15	N	<100	150	N	<50	<10	<20	N	50
082	15	N	<100	150	N	N	N	200	N	50
083	15	N	<100	200	N	N	N	30	N	50
084	<10	N	<100	150	70	<50	N	100	N	20
085	15	N	N	150	100	<50	N	20	N	50
086	<10	N	<100	30	20	N	N	50	N	100
087	<10	N	<100	50	N	<50	N	30	N	70
088	<10	N	100	70	10	N	N	20	N	70
089	<10	N	100	70	N	<50	N	20	N	50
090	<10	N	<100	100	N	<50	N	50	N	70
091	10	N	<100	200	N	<50	N	20	N	50
092	<10	N	1,000	200	30	N	N	20	N	100
093	<10	N	700	200	N	N	N	50	N	50
094	<10	N	1,000	300	N	N	N	50	N	50
095	<10	N	<100	100	N	N	<10	20	N	70
096	10	N	100	150	N	<50	<10	100	N	30
097	15	N	N	200	N	<50	N	<20	N	20
098	20	N	N	300	30	N	N	70	N	20
099	<10	N	500	300	150	<50	<10	100	N	50
100	<10	N	200	200	<10	N	N	100	N	50
101	10	N	N	500	N	<50	70	20	N	70
102	10	N	100	300	N	<50	50	20	N	50
103	<10	N	<100	300	N	<50	30	<20	N	70
104	15	N	<100	500	<10	<50	N	20	N	20
105	<10	N	<100	100	N	N	N	<20	N	30
106	<10	N	500	300	N	N	20	<20	N	50
107	10	N	<100	300	N	N	N	<20	N	30
108	<10	N	<100	150	N	N	N	<20	N	50
109	<10	N	<100	300	N	N	N	N	N	30
110	10	N	<100	200	N	N	N	70	N	50
111	10	N	<100	200	N	N	<10	100	N	20
112	20	N	<100	300	N	<50	N	30	N	30
113	<10	N	<100	300	N	<50	N	20	N	70
114	10	N	<100	300	<10	<50	N	100	N	30
115	<10	N	N	100	N	N	N	<20	N	50
116	<10	N	100	300	N	N	15	20	N	70
117	<10	N	<100	300	N	N	N	<20	N	50
119	10	N	N	150	N	N	N	N	N	10
120	20	N	<100	300	N	N	20	30	N	70
121	<10	N	100	300	N	N	<10	N	N	10
122	10	N	<100	200	N	N	N	N	N	50
123	<10	N	<100	200	N	N	N	N	N	70
124	<10	N	<100	300	N	N	N	300	N	<10
125	15	N	<100	200	N	<50	N	30	N	10
126	<10	N	<100	200	N	<50	N	50	N	70
127	15	N	100	200	N	N	N	N	N	30
128	<10	N	<100	200	N	<50	N	30	N	50
129	<10	N	100	300	N	<50	N	700	N	30
130	<10	N	<100	300	10	<50	N	100	N	30

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
069	N	3,000	N	300	N	150	N	>2,000	N	N
070	N	2,000	N	100	300	500	N	>2,000	N	N
072	20	500	N	500	N	70	N	>2,000	N	N
073	N	3,000	N	70	100	150	N	>2,000	N	N
074	N	10,000	N	70	<50	30	1,000	>2,000	N	N
075	N	7,000	N	150	2,000	150	700	>2,000	N	N
076	N	7,000	N	200	N	150	N	>2,000	N	N
077	N	N	N	300	N	300	N	>2,000	N	N
078	N	1,000	N	150	1,500	100	N	>2,000	N	N
079	N	700	N	100	200	50	N	>2,000	N	N
080	N	700	N	70	N	100	N	>2,000	N	N
081	N	700	N	200	50	150	N	>2,000	N	N
082	N	200	N	70	N	200	N	>2,000	N	N
083	N	<200	N	100	N	200	N	>2,000	N	N
084	N	1,000	N	150	1,000	150	N	>2,000	N	N
085	N	300	N	150	N	100	N	>2,000	N	N
086	N	500	N	30	N	150	N	>2,000	N	N
087	N	N	N	150	<50	150	N	>2,000	N	N
088	N	N	N	100	<50	200	N	>2,000	N	N
089	N	500	N	150	N	200	N	>2,000	N	N
090	N	1,000	N	150	N	150	N	>2,000	N	N
091	N	N	N	200	<50	200	N	>2,000	N	N
092	N	N	N	70	N	500	N	>2,000	N	N
093	N	N	N	150	N	300	N	>2,000	N	N
094	N	N	N	150	N	500	N	>2,000	N	N
095	N	N	200	150	N	150	N	>2,000	N	N
096	N	500	N	150	N	150	N	>2,000	N	N
097	N	1,000	N	200	N	50	N	>2,000	N	N
098	N	1,000	N	200	500	50	N	>2,000	N	N
099	N	700	N	200	700	500	N	>2,000	N	N
100	N	700	N	150	<50	300	N	>2,000	N	N
101	N	500	N	300	<50	100	N	>2,000	N	N
102	N	700	N	200	N	200	N	>2,000	N	N
103	N	700	N	200	N	300	N	>2,000	N	N
104	N	1,000	N	300	50	150	N	>2,000	N	N
105	N	500	N	150	N	200	N	>2,000	N	N
106	N	700	N	150	N	500	N	>2,000	N	N
107	N	1,500	N	200	150	150	N	>2,000	N	N
108	N	500	N	200	N	300	N	>2,000	N	N
109	N	500	N	150	N	200	N	>2,000	N	N
110	N	700	N	150	100	200	N	>2,000	N	N
111	N	1,000	N	200	N	150	N	>2,000	N	N
112	1,000	700	N	200	N	150	N	>2,000	N	N
113	N	500	N	200	N	200	N	>2,000	N	N
114	N	1,000	N	200	300	150	N	>2,000	N	N
115	N	200	N	150	N	200	N	>2,000	N	N
116	N	700	N	200	N	200	N	>2,000	N	N
117	N	700	N	200	N	300	N	>2,000	N	N
119	N	700	N	100	N	150	N	>2,000	N	N
120	N	700	N	200	N	500	N	>2,000	N	N
121	N	700	N	150	N	150	N	>2,000	N	N
122	N	700	N	200	N	200	N	>2,000	N	N
123	N	500	N	200	N	500	N	>2,000	N	N
124	N	2,000	N	200	N	100	N	>2,000	N	N
125	N	1,000	N	150	N	70	N	>2,000	N	N
126	N	700	N	200	N	300	N	>2,000	N	N
127	N	700	N	150	N	150	N	>2,000	N	N
128	N	2,000	N	200	N	150	N	>2,000	N	N
129	N	5,000	N	200	200	150	N	>2,000	N	N
130	N	5,000	N	200	500	150	<500	>2,000	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	LATITUDE	LONGITUD	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
132	62 44 53	144 9 53	5			.5		.15		.7		10	>2		N	N
133	62 45 25	144 9 45	3			.7		.15		<.5		3	2		N	N
134	62 44 28	144 12 50	5			.7		.5		1		3	1.5		N	N
135	62 44 39	144 12 18	30			.7		.7		<.5		10	.3		N	N
136	62 44 2	144 14 2	7			.5		.5		2		7	.7		N	N
137	62 43 12	144 21 7	5			.3		.3		1		3	1		N	N
138	62 42 58	144 21 48	3			.1		.15		N		7	>2		N	N
139	62 24 38	144 9 12	1.5		3			.5		.7		<.5	.3		N	N
141	62 23 56	144 10 11	.5		2			.5		<.5		<.5	.1		N	N
142	62 23 45	144 10 5	2		1			1.5		2		N	.1		N	N
143	62 23 32	144 10 57	5		7			.3		2		<.5	.05	7		N
145	62 22 35	144 9 23	7		2			1.5		3		N	.15		N	N
146	62 22 42	144 9 10	7		3			1		3		<.5	.2		N	N
149	62 14 4	144 39 18	5		.3			.2		.7		7	.5		N	N
150	62 11 47	144 39 43	7		1			.2		3		2	.15		N	N
151	62 13 40	144 37 12	5		.3			.3		1.5		15	1		N	N
152	62 13 48	144 37 33	10		1			.5		1.5		7	.7		N	N
153	62 13 18	144 35 20	5		.5			.3		3		7	.05		N	N
156	62 6 12	144 14 18	7		1			.2		3		N	.05		N	N
200	62 57 57	146 52 54	15		1.5			1.5		.5		3	>2	150		N
201	62 54 34	146 48 30	10		5			1.5		1		2	>2		N	N
203	62 49 57	146 58 55	15		1.5			1		<.5		3	>2		N	N
204	62 46 28	146 57 12	15		2			2		.7		.7	2		N	N
205	62 45 59	146 55 22	15		1.5			1		.7		1.5	>2		N	N
206	62 42 33	146 52 20	15		1.5			1.5		1.5		1.5	>2		N	N
207	62 41 51	146 39 9	15		2			1		1.5		.5	>2		N	N
208	62 44 4	146 38 55	20		1.5			1.5		1.5		.7	>2		N	N
209	62 46 16	146 32 36	15		1.5			1		1.5		1	>2		N	N
211	62 49 18	146 31 4	15		1.5			2		1		.5	>2		N	N
212	62 55 22	146 41 14	15		.5			1		.7		3	>2	20		N
217	62 46 29	146 41 11	15		2			1.5		1.5		.7	>2		N	N
219	62 50 0	146 43 25	15		1.5			1.5		.5		1.5	>2		N	N
221	62 55 55	146 38 44	15		2			.7		1.5		3	>2		N	N
222	62 55 45	146 37 32	15		1.5			1.5		.5		.7	>2		N	N
223	62 54 18	146 36 3	15		1.5			1.5		.7		2	>2		N	N
224	62 52 53	146 29 49	15		1.5			1		1.5		3	>2		N	N
225	62 47 47	146 9 47	10		1.5			1.5		1		1	>2		N	N
226	62 52 6	146 15 51	15		1.5			.7		1		7	>2		N	N
227	62 52 1	146 18 48	15		2			.7		1.5		1.5	2		N	N
229	62 42 2	146 19 18	20		3			1		1.5		.7	>2		N	N
230	62 43 7	146 21 7	15		2			1		1.5		.7	>2		N	N
231	62 39 43	146 16 11	20		2			1		1		1.5	>2		N	N
232	62 40 34	146 23 26	15		1.5			1		1		1.5	>2		N	N
233	62 38 49	146 7 51	15		7			1.5		1.5		<.5	>2		N	N
234	62 39 52	146 6 48	15		1.5			1.5		.7		1	>2		N	N
235	62 46 26	146 4 21	15		2			1		.7		.7	>2		N	N
236	62 49 47	146 3 21	15		1.5			1		1		.5	>2		N	N
237	62 51 8	146 2 2	15		1			1.5		.7		1	>2		N	N
238	62 51 7	146 1 47	30		1.5			2		1.5		.7	>2		N	N
239	62 47 40	145 55 1	15		1.5			1.5		1.5		3	>2		N	N
240	62 47 31	145 54 58	20		1.5			1.5		1.5		1.5	>2		N	N
241	62 46 22	145 52 12	20		2			1.5		1.5		.5	>2		N	N
242	62 45 0	145 57 49	20		1			1		.7		2	>2		N	N
243	62 43 1	145 47 55	15		2			1		1.5		<.5	>2		N	N
244	62 37 24	145 40 32	15		3			1.5		1		1	>2		N	N
245	62 38 38	145 36 38	15		1.5			1		1.5		.7	2		N	N
246	62 42 9	145 38 4	20		2			1.5		1.5		.5	>2		N	N
247	62 41 4	145 41 45	15		2			1		1		2	>2		N	N
248	62 44 15	145 37 31	15		1.5			1		.7		1.5	>2		N	N
250	62 48 48	145 46 4	15		2			1.5		1.5		1	>2		N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
132	N	30	>10,000	N	500	N	N	50	N
133	N	20	>10,000	N	200	N	N	70	<10
134	N	50	>10,000	N	N	N	N	70	N
135	300	N	>10,000	<2	N	N	N	150	N
136	N	N	2,000	N	N	N	N	150	N
137	N	<20	7,000	N	N	N	N	100	<10
138	N	N	1,000	<2	N	N	N	100	N
139	N	N	>10,000	N	N	N	<20	70	20
141	N	N	>10,000	<2	N	N	N	20	20
142	N	N	3,000	N	N	N	N	<20	N
143	N	N	>10,000	N	N	N	30	<20	70
145	N	<20	3,000	<2	N	N	N	150	70
146	N	N	2,000	N	N	N	<20	100	50
149	N	N	1,000	<2	N	N	N	20	<10
150	N	N	1,500	<2	N	N	N	<20	15
151	N	N	1,000	N	N	N	N	<20	N
152	N	200	700	N	N	N	N	50	15
153	N	N	300	<2	N	N	N	<20	<10
156	N	N	700	<2	N	N	N	<20	20
200	700	70	500	N	N	N	N	200	N
201	N	100	700	N	N	N	N	300	N
203	N	100	700	N	N	N	N	200	N
204	N	70	300	N	N	N	<20	300	<10
205	N	30	200	N	N	N	N	150	<10
206	N	50	700	<2	N	N	N	150	N
207	N	70	200	<2	N	N	<20	150	<10
208	N	70	300	N	N	N	20	200	N
209	N	70	300	N	N	N	N	200	N
211	N	30	300	N	N	N	<20	300	<10
212	50	70	1,000	N	N	N	N	200	<10
217	N	70	500	<2	N	N	<20	300	N
219	N	70	700	N	N	N	N	300	N
221	N	30	1,000	<2	N	N	N	200	N
222	N	70	700	N	N	N	<20	200	N
223	N	70	500	N	N	N	N	300	<10
224	<20	30	700	N	N	N	N	200	<10
225	N	70	300	N	N	N	N	150	10
226	N	20	500	N	N	N	<20	100	N
227	N	30	500	N	N	N	<20	70	N
229	<20	50	700	N	N	N	50	100	N
230	N	70	700	N	N	N	<20	150	N
231	N	50	300	N	N	N	<20	200	N
232	N	70	200	N	N	N	<20	150	<10
233	N	70	700	N	N	N	70	200	<10
234	N	70	500	N	N	N	N	300	N
235	N	70	1,000	<2	N	N	20	200	<10
236	N	50	200	N	N	N	<20	150	10
237	N	30	150	N	N	N	<20	200	<10
238	N	70	200	N	N	N	<20	300	<10
239	N	100	300	N	N	N	N	200	N
240	N	70	300	<2	N	N	<20	200	<10
241	N	30	700	<2	N	N	N	150	N
242	N	50	300	N	N	N	N	150	N
243	N	70	300	N	N	N	N	150	N
244	N	50	1,000	N	N	N	30	150	<10
245	N	70	300	<2	N	N	<20	150	<10
246	N	50	300	N	N	N	N	200	<10
247	N	50	500	N	N	N	N	200	<10
248	N	30	300	N	N	N	N	150	N
250	N	50	200	N	N	N	N	200	<10

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
132	<10	N	100	200	N	<50	N	200	N	30
133	<10	N	<100	200	N	50	N	200	N	30
134	10	N	N	200	N	N	N	20	N	<10
135	<10	N	200	500	N	N	N	50	N	50
136	N	N	<100	500	N	N	N	30,000	N	50
137	10	N	<100	200	N	N	N	<20	N	20
138	<10	N	<100	200	N	<50	N	<20	N	70
139	<10	N	N	100	N	N	50	20	N	20
141	N	N	N	150	N	N	10	<20	N	15
142	<10	N	N	200	N	N	N	<20	N	<10
143	30	N	N	100	N	N	50	<20	N	10
145	<10	N	N	200	N	N	N	<20	N	30
146	20	N	N	300	N	N	50	<20	N	10
149	<10	N	<100	200	N	N	N	N	N	100
150	20	N	N	150	N	N	N	<20	N	20
151	<10	N	<100	300	N	N	N	N	N	100
152	20	N	<100	300	15	N	N	N	N	30
153	<10	N	N	70	N	N	N	N	N	20
156	20	N	N	50	N	N	N	<20	N	10
200	15	N	<100	500	N	70	15	20	N	30
201	20	N	100	1,000	N	150	15	<20	N	30
203	20	N	<100	500	N	70	15	<20	N	50
204	30	N	<100	700	N	50	30	30	N	70
205	20	N	<100	500	N	70	15	<20	N	30
206	30	N	<100	1,000	N	70	15	30	N	30
207	20	N	<100	700	N	70	15	<20	N	20
208	30	N	100	700	N	70	50	20	N	50
209	15	N	<100	500	N	70	15	<20	N	20
211	30	N	<100	700	N	70	50	20	N	50
212	50	N	<100	700	N	150	N	20	N	20
217	30	N	<100	700	N	70	20	20	N	30
219	20	N	100	700	N	70	20	30	N	50
221	20	N	<100	700	N	70	10	<20	N	30
222	15	N	<100	500	N	70	<10	<20	N	30
223	20	N	<100	500	N	70	15	<20	N	50
224	30	N	<100	700	N	70	15	20	N	30
225	15	N	<100	700	N	100	15	20	N	15
226	10	N	<100	300	N	50	15	30	N	15
227	20	N	N	500	N	70	10	20	N	15
229	20	N	<100	700	N	70	20	20	N	30
230	20	N	<100	700	N	70	20	20	N	20
231	20	N	<100	500	N	50	20	50	N	30
232	20	N	<100	500	N	70	<10	<20	N	30
233	20	N	<100	500	N	70	70	30	N	30
234	20	N	<100	1,000	<10	70	10	30	N	30
235	15	N	<100	1,000	N	70	20	<20	N	30
236	15	N	<100	700	N	70	<10	20	N	30
237	15	N	<100	500	N	50	20	50	N	30
238	70	N	<100	1,500	N	50	30	30	N	50
239	20	N	100	500	N	70	15	20	N	30
240	20	N	<100	700	N	70	15	20	N	30
241	20	N	<100	700	N	50	30	70	N	20
242	15	N	<100	300	N	50	<10	30	N	30
243	20	N	<100	700	N	70	30	<20	N	30
244	20	N	100	700	N	50	30	<20	N	30
245	30	N	N	700	N	50	20	20	N	30
246	20	N	<100	500	N	50	50	70	N	30
247	20	N	<100	500	N	50	20	N	N	20
248	15	N	<100	700	N	50	10	<20	N	30
250	20	N	<100	700	N	70	20	<20	N	20

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
132	N	1,000	N	200	1,000	200	N	>2,000	N	N
133	N	3,000	N	200	N	150	N	>2,000	N	N
134	N	1,000	N	150	N	50	N	>2,000	N	N
135	N	1,500	N	150	N	150	N	>2,000	N	N
136	N	N	N	3,000	N	200	N	>2,000	N	N
137	N	200	N	100	70	100	N	>2,000	N	N
138	N	N	N	200	<50	300	N	>2,000	N	N
139	N	2,000	N	50	N	50	N	>2,000	N	N
141	N	3,000	N	30	N	30	N	>2,000	N	N
142	N	N	N	50	N	<20	N	>2,000	N	N
143	N	1,500	N	50	N	50	N	>2,000	N	N
145	N	1,000	N	70	N	50	N	>2,000	N	N
146	N	1,000	N	70	N	20	N	>2,000	N	N
149	N	700	N	70	N	150	N	>2,000	N	N
150	N	1,000	N	30	N	70	N	>2,000	N	N
151	N	1,000	N	150	N	150	N	>2,000	N	N
152	N	1,000	N	100	N	100	N	>2,000	N	N
153	N	1,500	N	100	N	70	N	>2,000	N	N
156	N	1,000	N	20	N	<20	N	200	N	N
200	150	1,000	N	300	200	300	N	>2,000	N	N
201	N	1,000	N	300	N	300	N	>2,000	N	N
203	150	700	N	300	N	500	N	>2,000	N	N
204	N	700	N	300	N	150	N	>2,000	N	N
205	N	700	N	300	N	150	N	>2,000	N	N
206	N	1,000	N	300	N	200	N	>2,000	N	N
207	N	700	N	300	N	150	N	>2,000	N	N
208	100	1,000	N	300	N	300	N	>2,000	N	N
209	N	700	N	300	N	150	N	>2,000	N	N
211	N	1,000	N	300	N	300	N	>2,000	N	N
212	100	1,000	N	300	N	300	N	>2,000	N	N
217	N	1,000	N	300	N	150	N	>2,000	N	N
219	N	700	N	300	100	500	N	>2,000	N	N
221	N	1,000	N	300	N	150	N	>2,000	N	N
222	N	700	N	300	N	200	N	>2,000	N	N
223	N	1,000	N	300	N	300	N	>2,000	N	N
224	N	700	N	300	N	200	N	>2,000	N	N
225	N	1,000	N	300	N	200	N	>2,000	N	N
226	N	700	N	200	N	150	N	>2,000	N	N
227	N	700	N	300	N	150	N	>2,000	N	N
229	N	700	N	300	N	150	N	>2,000	N	N
230	N	700	N	300	N	150	N	>2,000	N	N
231	<20	700	N	200	N	200	N	>2,000	N	N
232	N	700	N	300	50	200	N	>2,000	N	N
233	N	700	N	300	N	150	N	>2,000	N	N
234	N	700	N	300	50	200	N	>2,000	N	N
235	N	700	N	300	N	150	N	>2,000	N	N
236	N	700	N	300	N	150	N	>2,000	N	N
237	N	700	N	300	N	150	N	>2,000	N	N
238	N	1,500	N	500	N	300	N	>2,000	N	N
239	N	700	N	300	<50	300	N	>2,000	N	N
240	N	1,000	N	300	200	150	N	>2,000	N	N
241	N	700	N	200	N	150	N	>2,000	N	N
242	N	700	N	300	N	200	N	>2,000	N	N
243	N	700	N	300	N	150	N	>2,000	N	N
244	N	700	N	300	N	150	N	>2,000	N	N
245	N	1,000	N	300	N	100	N	2,000	N	N
246	70	700	N	300	N	100	N	>2,000	N	N
247	200	700	N	300	N	300	N	>2,000	N	N
248	N	700	N	300	N	200	N	>2,000	N	N
250	N	700	N	300	N	150	N	>2,000	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	LATITUDE	LONGITUDE	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
251	62 51 10	145 47 20	15		1.5		1.5		1.5		<.5		>2		N	N
252	62 52 47	145 52 27	15		1.5		1.5		1.5		.7		>2		N	N
253	62 55 23	145 42 57	15		1.5		1		1		1		>2		N	N
254	62 57 25	145 48 29	15		1		1.5		1.5		.5		2		N	N
255	62 59 43	145 52 11	20		3		1.5		1.5		<.5		>2		N	N
256	62 58 59	145 53 54	15		1.5		1		1.5		1		>2		N	N
257	62 59 26	146 1 5	15		1.5		1.5		1.5		1.5		>2		N	N
258	62 58 14	146 0 54	10		1.5		.7		1.5		1.5		>2		N	N
259	62 56 6	145 56 11	10		2		1.5		1.5		.5		>2		N	N
260	62 55 11	145 52 42	15		1.5		1		1.5		1		>2		N	N
261	62 53 50	145 49 15	15		2		1		1.5		.5		2		N	N
262	62 58 50	145 35 18	15		2		1		2		1		>2		N	N
263	62 55 4	145 32 47	15		2		1		2		1		>2		N	N
264	62 52 20	145 37 59	15		2		1		2		.5		>2		N	N
265	62 48 52	145 23 54	15		1.5		1		1.5		.5		>2		N	N
266	62 51 50	145 10 22	15		1.5		1		2		1.5		>2		N	N
267	62 54 4	145 12 2	15		1.5		1		2		1		2		N	N
268	62 56 49	145 5 35	20		1.5		1		2		1		>2		N	N
269	62 56 47	145 5 28	15		2		1		2		1.5		>2		N	N
270	62 59 23	145 11 17	15		2		1		2		1.5		>2		N	N
271	62 57 40	145 17 21	10		1.5		1		1.5		1		2		N	N
272	62 56 37	145 22 22	15		2		1		1.5		1.5		>2		N	N
273	62 57 1	145 25 50	15		2		1		1.5		1.5		>2		N	N
274	62 52 57	145 31 31	15		1.5		1		.3		.5		>2		N	N
275	62 54 40	145 29 44	15		2		.7		2		1.5		>2		N	N
276	62 59 15	145 30 3	15		1.5		1		1.5		2		>2		N	N
300	62 59 21	146 56 42	15		3		1		.7		3		>2		N	N
301	62 55 51	146 50 59	20		2		1.5		1		7		>2		N	N
302	62 52 9	146 56 3	15		1.5		1.5		.5		1.5		>2		N	N
303	62 52 16	146 56 3	15		1.5		.7		N		3		>2		N	N
304	62 48 23	146 59 2	7		.7		.7		<.5		3		>2	100		N
305	62 44 28	146 51 29	15		1.5		1		1		2		>2	N		N
306	62 43 30	146 49 33	15		1.5		.7		N		3		>2	N		N
307	62 41 51	146 49 34	15		1.5		1		.5		3		>2	N		N
308	62 44 27	146 40 13	7		.7		1		N		1.5		>2	N		N
309	62 44 19	146 32 52	15		2		1.5		<.5		1.5		>2	N		N
310	62 48 18	146 29 40	15		1.5		1		1.5		2		>2	N		N
311	62 49 42	146 31 14	15		1.5		1.5		<.5		1.5		>2	N		N
312	62 58 54	146 44 14	15		1.5		.7		<.5		7		>2	N		N
314	62 51 7	146 45 22	15		1.5		1		<.5		3		>2	N		N
315	62 48 0	146 41 27	15		2		1.5		1.5		.7		>2	N		N
316	62 49 25	146 42 41	15		1.5		1		.7		3		>2	N		N
317	62 52 46	146 37 3	15		1.5		1.5		1		2		>2	N		N
319	62 56 42	146 31 23	15		.5		1.5		.5		3		>2	N		N
320	62 53 8	146 32 12	15		.3		.7		<.5		5		>2	N		N
322	62 49 13	146 11 2	15		5		1.5		1.5		.5		>2	N		N
323	62 49 9	146 11 2	10		1.5		1		.5		2		>2	N		N
324	62 49 32	146 16 59	20		2		1.5		1		.5		>2	N		N
325	62 49 34	146 22 49	15		1.5		1.5		.7		1.5		>2	N		N
326	62 50 48	146 25 59	15		1.5		1.5		1		1		>2	N		N
327	62 46 8	146 25 56	15		1.5		1		1		1.5		>2	N		N
328	62 46 5	146 25 49	15		1.5		1		1		1.5		>2	70		N
329	62 43 27	146 22 1	15		1.5		1.5		1.5		1.5		>2	N		N
330	62 42 38	146 15 26	15		1.5		1.5		.7		1.5		>2	N		N
331	62 38 42	146 11 54	15		3		1.5		.7		1		>2	N		N
332	62 42 16	146 9 16	15		1		1		.7		2		>2	300		N
333	62 46 1	146 8 20	15		2		1		1		.5		>2	N		N
334	62 48 28	146 3 58	15		1.5		1		2		3		>2	N		N
335	62 48 6	145 59 48	15		1.5		1		<.5		1.5		>2	N		N
336	62 48 19	145 58 25	15		1.5		1		.7		2		>2	N		N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
251	N	30	150	N	N	N	N	150	N
252	N	70	300	N	N	N	<20	150	<10
253	N	50	500	N	N	N	N	150	N
254	N	50	300	N	N	N	N	150	N
255	N	50	500	N	N	N	<20	150	N
256	N	70	500	N	N	N	<20	200	N
257	N	50	200	N	N	N	<20	150	N
258	N	50	300	N	N	N	N	150	<10
259	<20	50	300	<2	N	N	<20	150	<10
260	N	30	300	N	N	N	N	150	N
261	N	30	700	<2	N	N	N	150	<10
262	N	30	500	N	N	N	N	150	<10
263	N	30	500	N	N	N	N	100	N
264	N	50	500	N	N	N	<20	150	N
265	N	20	500	N	N	N	N	100	N
266	N	30	1,000	N	N	N	N	150	N
267	N	30	500	<2	N	N	N	100	N
268	N	30	500	N	N	N	<20	100	N
269	20	30	500	N	N	N	N	100	<10
270	N	20	500	N	N	N	N	150	N
271	N	30	500	N	N	N	N	100	N
272	N	30	300	N	N	N	N	150	N
273	N	50	500	N	N	N	N	150	<10
274	N	30	300	N	N	N	<20	100	N
275	N	50	700	N	N	N	<20	70	N
276	N	30	200	N	N	N	<20	50	N
300	N	150	500	N	N	N	N	300	N
301	N	150	500	N	N	N	N	200	N
302	N	50	500	N	N	N	N	200	<10
303	N	50	500	N	N	N	N	200	N
304	150	70	300	N	N	N	N	150	N
305	N	50	300	N	N	N	N	150	N
306	N	50	200	N	N	N	N	200	N
307	N	50	200	N	N	N	<20	200	<10
308	N	30	500	N	N	N	N	200	N
309	N	70	500	N	N	N	<20	300	N
310	N	70	700	N	N	N	N	150	N
311	N	50	200	N	N	N	N	200	N
312	N	100	300	N	N	N	N	200	N
314	N	100	700	N	N	N	<20	300	N
315	N	70	500	N	N	N	N	300	N
316	N	50	500	N	N	N	N	150	N
317	N	70	500	N	N	N	N	200	N
319	<20	50	700	N	N	N	N	200	N
320	N	30	300	N	N	N	N	150	N
322	N	70	200	N	N	N	<20	300	N
323	N	50	700	N	N	N	N	150	N
324	N	70	500	N	N	N	N	300	N
325	N	70	700	N	N	N	N	200	<10
326	N	70	200	N	N	N	N	200	<10
327	N	70	300	N	N	N	N	150	N
328	200	50	300	N	N	N	N	150	<10
329	N	70	300	N	N	N	N	200	N
330	N	70	300	N	N	N	<20	200	N
331	N	50	700	N	N	N	<20	200	N
332	300	70	500	N	N	N	<20	150	N
333	N	30	300	<2	N	N	<20	150	N
334	N	30	150	N	N	N	N	150	N
335	N	20	500	N	N	N	<20	200	N
336	N	50	200	N	N	N	N	300	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
251	20	N	N	1,000	N	<50	30	20	N	30
252	20	N	N	700	N	50	30	<20	N	20
253	15	N	<100	700	N	50	15	<20	N	30
254	15	N	N	1,000	N	<50	30	20	N	20
255	15	N	N	500	N	50	50	30	N	20
256	20	N	N	700	N	50	30	20	N	30
257	20	N	<100	1,000	N	50	20	30	N	30
258	15	N	100	700	N	70	15	<20	N	30
259	20	N	N	1,000	N	<50	15	30	N	20
260	20	N	<100	1,000	15	70	20	<20	N	30
261	30	N	N	1,000	N	<50	15	20	N	30
262	30	N	<100	700	N	50	30	20	N	20
263	50	N	<100	1,000	N	50	30	<20	N	20
264	30	N	<100	700	N	50	50	20	N	20
265	20	N	<100	700	N	50	15	20	N	50
266	30	N	<100	700	N	50	20	20	N	20
267	30	N	<100	700	N	50	20	20	N	20
268	50	N	<100	1,000	N	50	<10	30	N	30
269	30	N	<100	1,000	N	50	20	20	N	20
270	30	N	<100	700	N	50	20	30	N	20
271	20	N	<100	500	N	<50	15	N	N	20
272	30	N	<100	700	N	50	20	20	N	30
273	30	N	<100	700	N	50	30	20	N	20
274	20	N	N	700	N	50	15	20	N	20
275	50	N	<100	1,000	N	50	15	20	N	15
276	30	N	<100	700	N	<50	15	30	N	20
300	20	N	100	700	N	70	10	20	N	30
301	20	N	<100	700	N	100	15	<20	N	30
302	20	N	100	700	N	70	10	<20	N	50
303	<10	N	<100	300	N	70	N	<20	N	50
304	10	N	<100	300	N	70	N	<20	N	30
305	20	N	<100	700	N	70	<10	20	N	30
306	<10	N	<100	300	N	70	N	<20	N	70
307	15	N	<100	700	N	70	<10	20	N	50
308	10	N	<100	500	N	70	N	<20	N	50
309	15	N	<100	700	N	50	30	20	N	70
310	20	N	<100	700	N	70	<10	20	N	30
311	15	N	<100	700	N	70	20	<20	N	50
312	15	N	<100	500	N	70	10	<20	N	50
314	20	N	100	700	N	100	10	20	N	30
315	20	N	<100	500	N	70	30	<20	N	50
316	15	N	<100	500	N	70	10	<20	N	30
317	50	N	<100	700	N	50	15	30	N	30
319	15	N	<100	700	N	70	N	<20	N	50
320	15	N	<100	700	N	<50	N	30	N	50
322	20	N	<100	1,000	N	70	30	<20	N	30
323	15	N	<100	500	N	70	15	<20	N	50
324	50	N	<100	1,000	N	50	30	20	N	70
325	15	N	<100	700	N	70	30	20	N	50
326	20	N	<100	700	N	70	20	20	N	50
327	10	N	100	1,000	N	70	10	<20	N	30
328	20	N	<100	700	N	70	15	<20	N	20
329	20	N	<100	700	N	70	15	20	N	30
330	20	N	<100	500	N	70	20	<20	N	50
331	20	N	<100	700	N	70	15	<20	N	50
332	20	N	<100	700	N	100	<10	<20	N	20
333	20	N	<100	700	N	50	30	70	N	20
334	10	N	100	700	N	70	10	<20	N	30
335	10	N	100	300	N	50	<10	30	N	50
336	20	N	100	700	N	70	20	<20	N	30

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
251	N	700	N	300	N	50	N	>2,000	N	N
252	N	1,000	N	300	N	100	N	>2,000	N	N
253	N	700	N	300	N	150	N	>2,000	N	N
254	N	700	N	300	N	50	N	>2,000	N	N
255	N	700	N	300	N	50	N	>2,000	N	N
256	N	700	N	300	N	150	N	>2,000	N	N
257	N	700	N	300	N	150	N	>2,000	N	N
258	N	700	N	300	N	500	N	>2,000	N	N
259	N	700	N	300	N	70	N	>2,000	N	N
260	N	1,000	N	200	150	100	N	>2,000	N	N
261	N	700	N	300	N	70	N	>2,000	N	N
262	N	700	N	300	<50	150	N	>2,000	N	N
263	N	1,000	N	300	N	150	N	>2,000	N	N
264	N	1,000	N	300	N	150	N	>2,000	N	N
265	150	1,000	N	300	N	100	N	>2,000	N	N
266	N	700	N	300	200	150	N	>2,000	N	N
267	N	1,000	N	300	N	100	N	>2,000	N	N
268	N	1,000	N	300	N	150	N	>2,000	N	N
269	N	700	N	300	N	150	N	>2,000	N	N
270	N	1,000	N	300	N	100	N	>2,000	N	N
271	N	700	N	200	50	100	N	>2,000	N	N
272	N	1,000	N	300	50	150	N	>2,000	N	N
273	N	700	N	300	N	100	N	>2,000	N	N
274	N	1,000	N	200	N	100	N	>2,000	N	N
275	N	1,000	N	300	N	150	N	>2,000	N	N
276	N	1,000	N	300	100	150	N	>2,000	N	N
300	N	1,000	N	300	N	300	N	>2,000	N	N
301	N	1,000	N	300	N	300	N	>2,000	N	N
302	500	1,000	N	300	N	300	N	>2,000	N	N
303	20	500	N	300	N	500	N	>2,000	N	N
304	N	700	N	300	N	500	N	>2,000	N	N
305	70	700	N	300	N	300	N	>2,000	N	N
306	N	N	N	300	N	500	N	>2,000	N	N
307	<20	700	N	300	N	300	N	>2,000	N	N
308	N	700	N	300	N	300	N	>2,000	N	N
309	100	700	N	300	N	500	N	>2,000	N	N
310	N	700	N	300	N	200	N	>2,000	N	N
311	N	700	N	300	N	500	N	>2,000	N	N
312	N	700	N	300	N	300	N	>2,000	N	N
314	20	700	N	300	N	300	N	>2,000	N	N
315	N	700	N	300	N	150	N	>2,000	N	N
316	N	700	N	300	N	300	N	>2,000	N	N
317	N	1,000	N	300	<50	150	N	>2,000	N	N
319	20	1,000	N	300	N	700	N	>2,000	N	N
320	N	700	N	300	N	700	N	>2,000	N	N
322	N	1,000	N	300	N	200	N	>2,000	N	N
323	N	700	N	300	1,000	150	N	>2,000	N	N
324	N	1,000	N	300	N	150	N	>2,000	N	N
325	N	700	N	300	N	200	N	>2,000	N	N
326	N	700	N	300	N	200	N	>2,000	N	N
327	N	700	N	300	N	500	N	>2,000	N	N
328	N	700	N	300	N	150	N	>2,000	N	N
329	<20	700	N	300	N	150	N	>2,000	N	N
330	N	700	N	300	N	300	N	>2,000	N	N
331	N	700	N	300	N	150	N	>2,000	N	N
332	30	700	N	300	N	300	N	>2,000	N	N
333	N	700	N	300	N	100	N	>2,000	N	N
334	50	700	N	300	N	300	N	>2,000	N	N
335	<20	500	N	300	50	300	N	>2,000	N	N
336	N	700	N	300	N	300	N	>2,000	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	LATITUDE	LONGITUD	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
337	62 48 2	145 53 55	15		1.5		1.5		.7		1		>2		N	N
338	62 41 37	145 56 6	15		1.5		1		<.5		1		>2		N	N
339	62 40 35	145 46 31	15		.7		1		.5		7		>2		N	N
340	62 36 30	145 37 39	15		1.5		1		1		1.5		>2		N	N
341	62 42 21	145 37 36	15		5		1.5		1		.7		>2		N	N
342	62 41 26	145 38 50	15		1.5		1		1.5		2		>2		N	N
343	62 48 43	145 33 15	15		1.5		1		.7		2		>2		N	N
345	62 49 6	145 39 47	20		2		1.5		1.5		1.5		>2		N	N
346	62 48 19	145 45 45	15		1.5		1		.2		1.5		>2		N	N
347	62 48 58	145 49 55	15		1.5		1.5		.5		1.5		>2		N	N
348	62 51 56	145 53 47	15		1.5		1.5		1		.7		>2		N	N
349	62 51 54	145 53 36	15		1.5		1		1		1.5		>2		N	N
350	62 55 21	145 48 8	10		1.5		1		1.5		1		>2		N	N
351	62 55 20	145 47 57	15		1.5		1		.2		1.5		>2		N	N
352	62 59 11	145 47 11	10		1.5		1		1.5		1		>2		N	N
353	62 59 16	145 47 17	15		1.5		.7		1.5		1.5		>2		N	N
354	62 58 28	145 51 22	20		2		1.5		1.5		.7		>2		N	N
355	62 57 45	146 0 3	15		1.5		1		1.5		1.5		>2		N	N
356	62 56 18	145 58 59	15		1		.7		N		1.5		>2		N	N
357	62 55 36	145 57 45	20		1.5		1.5		.5		3		>2		N	N
358	62 54 21	145 57 15	10		1.5		1		1.5		1.5		>2		N	N
359	62 54 16	145 57 12	15		1.5		1		.7		1.5		>2		N	N
360	62 59 44	145 39 9	15		2		1		1.5		.5		>2		N	N
361	62 52 21	145 34 9	10		2		1		1		1		>2		N	N
362	62 52 37	145 39 52	10		1.5		.7		1.5		1.5		>2		N	N
364	62 53 2	145 2 43	15		1.5		1.5		1.5		1.5		>2		N	N
365	62 55 46	145 7 26	15		2		1		1.5		1		>2		N	N
366	62 58 40	145 4 21	15		2		1		1.5		1.5		>2		N	N
367	62 58 39	145 4 31	15		2		1.5		2		.7		>2		N	N
368	62 59 31	145 15 41	15		1.5		.7		1		1.5		>2		N	N
369	62 55 47	145 23 4	15		1.5		.7		2		1.5		>2		N	N
160	62 21 51	144 8 18	.7		1.5		1.5		1		<.5		.15		N	N
164	62 22 42	144 0 55	7		3		2		2		.5		.3		N	N
165	62 24 18	144 3 7	15		5		3		5		N		.3		N	N
166	62 24 29	144 2 51	5		3		1		3		<.5		.3		N	N
167	62 24 50	144 5 42	2		10		1.5		1		.5		1		N	N
168	62 24 44	144 0 32	3		5		2		2		.5		.5		N	N
169	62 24 43	144 0 28	5		3		2		2		1		.5		N	N
171	62 42 37	144 38 0	5		.3		.3		1.5		1.5		2		N	N
172	62 42 49	144 31 29	7		.3		.3		N		5		>2		N	N
173	62 44 3	144 34 11	15		1.5		1.5		3		1.5		>2		N	N
174	62 43 42	144 33 55	7		.5		.5		N		7		>2		N	N
177	62 43 7	144 6 18	7		1		.5		1.5		3		>2		N	N
179	62 43 8	144 14 21	7		.7		.5		1		3		>2		N	N
184	62 2 3	144 32 59	7		1.5		.5		1		5		2		N	N
185	62 2 10	144 32 50	10		2		.7		1.5		7		2		N	N
186	62 3 5	144 33 31	15		3		.3		1		10		1.5		N	N
187	62 3 9	144 33 21	15		2		.2		.7		7		2		N	N
188	62 3 21	144 33 55	7		3		1		2		2		1		N	N
189	62 3 25	144 33 50	10		10		1.5		2		5		1		N	N
190	62 2 10	144 30 15	7		3		1.5		2		2		.3		N	N
191	62 2 43	144 28 48	7		1.5		.7		2		.5		.3		N	N
370	62 59 56	145 30 23	15		1.5		.7		1.5		1.5		>2		N	N
400	62 13 33	144 22 14	10		3		1.5		2		.5		.3		N	N
401	62 12 0	144 28 58	5		15		7		1		.5		1		N	N
402	62 10 24	144 24 59	10		3		3		2		<.5		1		N	N
403	62 13 14	144 18 6	5		3		3		<.5		.5		1.5		N	N
404	62 13 39	144 14 49	3		1		1		<.5		.5		.5		N	N
405	62 11 23	144 19 0	15		1.5		.5		2		.7		.7		N	N
406	62 8 37	144 26 59	10		5		1		2		.5		.2		<1	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
337	N	70	500	N	N	N	N	200	N
338	N	30	300	N	N	N	N	150	N
339	N	50	300	N	N	N	N	150	N
340	N	70	500	N	N	N	N	200	N
341	N	30	500	N	N	N	<20	300	<10
342	N	70	500	<2	N	N	<20	300	<10
343	N	50	700	N	N	N	<20	200	<10
345	N	70	500	2	N	N	N	200	N
346	20	30	700	N	N	N	N	200	N
347	N	70	150	N	N	N	N	300	N
348	<20	50	200	N	N	N	N	200	<10
349	N	50	300	N	N	N	<20	150	N
350	N	70	300	N	N	N	N	200	N
351	N	30	300	N	N	N	N	200	N
352	N	70	300	N	N	N	<20	300	N
353	N	70	500	N	N	N	N	200	N
354	N	30	500	N	N	N	<20	300	N
355	N	100	500	<2	N	N	<20	150	<10
356	N	30	700	N	N	N	<20	200	N
357	N	70	300	N	N	N	N	300	<10
358	N	70	300	<2	N	N	<20	150	N
359	<20	30	300	N	N	N	N	200	<10
360	N	50	300	10	N	N	N	150	<10
361	N	30	500	N	N	N	<20	500	<10
362	N	20	500	<2	N	N	N	70	N
364	N	30	300	N	N	N	<20	150	N
365	N	30	500	N	N	N	<20	200	N
366	N	50	500	N	N	N	N	100	N
367	N	30	300	N	N	N	N	200	<10
368	N	30	300	N	N	N	N	100	N
369	N	30	300	N	N	N	N	100	10
160	N	N	50	N	N	N	N	30	70
164	N	N	300	N	N	N	30	200	15
165	N	N	700	N	N	N	30	200	100
166	N	N	>10,000	N	N	N	N	70	30
167	N	N	>10,000	N	70	N	50	200	100
168	N	N	5,000	N	N	N	20	300	50
169	N	N	1,000	N	N	N	20	200	50
171	N	20	1,000	N	N	N	N	100	<10
172	N	<20	700	N	N	N	N	200	N
173	N	20	500	N	N	N	N	500	10
174	N	<20	700	N	N	N	N	200	N
177	N	20	>10,000	N	70	N	N	100	N
179	N	30	1,500	N	N	N	N	100	N
184	N	N	3,000	N	N	N	<20	50	N
185	N	N	3,000	N	N	N	30	50	70
186	N	N	5,000	N	N	N	50	30	50
187	N	N	5,000	N	N	N	20	20	<10
188	N	N	2,000	N	N	N	<20	50	10
189	N	N	10,000	N	N	N	50	150	70
190	N	N	500	N	N	N	30	200	20
191	N	N	300	N	N	N	N	30	15
370	N	30	300	N	N	N	N	150	N
400	N	N	2,000	N	N	N	<20	30	50
401	N	N	1,500	N	50	N	100	200	1,000
402	N	N	300	N	N	N	20	150	20
403	N	N	100	N	N	N	<20	100	20
404	N	50	150	N	N	N	N	N	10
405	N	N	500	N	N	N	N	<20	20
406	N	N	1,000	N	N	N	<20	50	30

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
337	20	N	<100	1,000	N	70	10	20	N	50
338	10	N	100	700	N	50	15	<20	N	50
339	15	N	<100	300	N	50	15	20	N	30
340	15	N	<100	700	N	50	15	<20	N	50
341	20	N	<100	1,000	N	50	20	20	N	30
342	30	N	<100	700	N	70	20	20	N	50
343	20	N	100	500	N	50	20	70	N	30
345	30	N	<100	700	N	70	15	20	N	30
346	15	N	<100	700	N	70	15	20	N	30
347	15	N	<100	1,000	N	50	20	20	N	50
348	15	N	<100	1,000	N	<50	10	<20	N	20
349	20	N	<100	700	N	70	10	<20	N	30
350	20	N	<100	700	N	70	10	20	N	30
351	20	N	<100	700	15	70	15	20	N	30
352	15	N	N	700	N	70	15	<20	N	30
353	15	N	<100	500	10	70	20	<20	N	30
354	30	N	<100	500	N	50	50	70	N	30
355	20	N	<100	700	N	70	20	30	N	30
356	<10	N	<100	300	N	50	N	50	N	70
357	15	N	<100	1,000	N	50	15	20	N	50
358	20	N	<100	700	N	70	15	<20	N	20
359	20	N	<100	700	<10	70	<10	70	N	30
360	20	N	<100	700	N	50	30	20	N	20
361	15	N	<100	300	N	50	15	<20	N	50
362	15	N	<100	500	N	50	<10	<20	N	20
364	20	N	<100	1,000	N	50	N	30	N	30
365	20	N	<100	700	N	50	15	<20	N	50
366	30	N	<100	700	N	50	30	20	N	20
367	20	N	N	700	N	50	20	30	N	20
368	20	N	<100	500	N	50	10	20	N	50
369	20	N	<100	700	15	70	15	20	N	20
160	N	N	N	300	N	N	70	N	N	10
164	15	N	N	500	N	N	200	N	N	50
165	50	N	N	500	N	N	200	N	N	15
166	30	N	N	200	N	N	<10	<20	N	<10
167	20	N	<100	300	20	N	150	<20	N	20
168	20	N	N	500	N	N	150	<20	N	20
169	20	N	N	300	N	N	150	N	N	30
171	15	N	<100	200	N	N	N	N	N	30
172	<10	N	<100	200	N	<50	N	<20	N	70
173	50	N	<100	500	N	70	10	30	N	20
174	<10	N	<100	300	N	<50	N	N	N	50
177	20	N	<100	300	N	50	<10	20	N	30
179	15	N	<100	200	N	50	<10	20	N	50
184	20	N	<100	300	10	<50	15	N	N	50
185	20	N	100	300	15	50	20	20	N	30
186	10	N	<100	200	70	N	30	20	N	70
187	10	N	<100	200	N	50	<10	50	N	50
188	15	N	N	300	N	<50	20	<20	N	20
189	20	N	<100	500	N	N	100	70	N	50
190	20	N	N	300	N	N	70	N	N	20
191	20	N	N	200	N	N	<10	N	N	10
370	20	N	<100	500	N	50	20	<20	N	15
400	30	N	N	150	N	N	30	N	N	10
401	20	N	N	2,000	N	N	150	N	N	10
402	50	N	N	200	N	N	50	N	N	10
403	N	N	N	500	N	N	50	N	N	15
404	<10	N	N	150	N	N	<10	N	N	<10
405	30	N	N	150	N	N	<10	N	N	N
406	30	N	N	150	N	N	30	N	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
337	N	700	N	300	300	500	N	>2,000	N	N
338	N	700	N	300	N	300	N	>2,000	N	N
339	N	700	N	300	70	300	N	>2,000	N	N
340	N	700	N	300	N	200	N	>2,000	N	N
341	N	700	N	300	N	150	N	>2,000	N	N
342	N	700	N	300	N	300	N	>2,000	N	N
343	<20	700	N	200	N	200	N	>2,000	N	N
345	N	1,000	N	300	N	200	N	>2,000	N	N
346	N	700	N	300	N	150	N	>2,000	N	N
347	N	1,000	N	300	N	300	N	>2,000	N	N
348	<20	1,000	N	300	100	150	N	>2,000	N	N
349	N	700	N	300	N	150	N	>2,000	N	N
350	N	1,000	N	300	N	150	N	>2,000	N	N
351	N	700	N	300	N	200	N	>2,000	N	N
352	N	700	N	300	N	150	N	>2,000	N	N
353	N	700	N	300	<50	200	N	>2,000	N	N
354	N	700	N	200	N	150	N	>2,000	N	N
355	N	1,000	N	300	N	150	N	>2,000	N	N
356	30	300	N	200	N	300	N	>2,000	N	N
357	150	1,000	N	300	N	500	N	>2,000	N	N
358	N	700	N	300	N	150	N	>2,000	N	N
359	N	700	N	200	200	150	N	>2,000	N	N
360	N	1,000	N	300	N	150	N	>2,000	N	N
361	<20	700	N	300	<50	300	N	>2,000	N	N
362	N	700	N	300	N	100	N	>2,000	N	N
364	N	1,000	N	300	N	150	N	>2,000	N	N
365	N	700	N	300	100	150	N	>2,000	N	N
366	N	1,000	N	300	N	150	N	>2,000	N	N
367	N	1,000	N	300	N	100	N	>2,000	N	N
368	N	1,000	N	300	70	150	N	>2,000	N	N
369	N	1,000	N	300	N	200	N	>2,000	N	N
160	N	N	N	70	N	30	N	>2,000	N	N
164	N	1,000	N	100	N	50	N	>2,000	N	N
165	N	1,000	N	70	N	30	N	>2,000	N	N
166	N	1,000	N	50	N	<20	N	1,500	N	N
167	N	3,000	N	100	N	70	N	>2,000	N	N
168	N	700	N	100	N	50	N	>2,000	N	N
169	N	700	N	100	N	70	N	>2,000	N	N
171	N	700	N	150	N	100	N	>2,000	N	N
172	N	<200	N	200	N	300	N	>2,000	N	N
173	N	700	N	300	N	150	N	>2,000	N	N
174	N	500	N	200	N	150	N	>2,000	N	N
177	N	1,000	N	200	500	100	N	>2,000	N	N
179	N	700	N	200	N	100	N	>2,000	N	N
184	N	700	N	150	N	150	N	>2,000	N	N
185	N	700	N	200	N	150	N	>2,000	N	N
186	N	500	N	150	N	200	N	>2,000	N	N
187	N	700	N	150	N	200	N	>2,000	N	N
188	20	700	N	100	N	70	N	>2,000	N	N
189	N	1,000	N	100	N	100	N	>2,000	N	N
190	N	1,000	N	150	N	50	N	>2,000	N	N
191	N	1,000	N	70	N	30	N	>2,000	N	N
370	N	700	N	300	N	100	N	>2,000	N	N
400	N	1,500	N	50	N	20	N	>2,000	N	N
401	N	700	N	150	N	50	N	>2,000	N	N
402	N	700	N	100	N	30	N	>2,000	N	N
403	N	300	N	100	N	20	N	2,000	N	N
404	N	200	N	70	N	N	N	50	N	N
405	N	1,000	N	50	N	20	N	700	N	N
406	N	700	N	30	N	20	N	300	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	LATITUDE			LONGITUD			CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
407	62	8	31	144	27	16	2		15		.2		.5		<.5		.01		N	N
408	62	10	1	144	16	1	10		2		2		1.5		.7		.5		N	N
409	62	10	24	144	10	58	10		15		.3		2		<.5		.15		N	N
410	62	8	40	144	14	45	7		7		5		2		<.5		1		N	N
411	62	6	7	144	14	6	15		2		1.5		3		<.5		.2		N	N
412	62	8	1	144	19	9	10		1		.2		3		N		.2		N	N
413	62	8	51	144	28	27	10		5		2		.7		2		1		N	N
414	62	5	14	144	21	10	10		1.5		1.5		2		.7		.3		N	N
415	62	2	52	144	23	0	10		.7		.5		2		1		.2		N	N
416	62	2	53	144	16	47	10		5		3		2		.5		.5		N	N
417	62	2	53	144	27	25	10		1.5		2		3		7		.7		N	N
418	62	0	41	144	21	49	15		1.5		.15		1		3		1		N	N
419	62	3	25	144	33	52	20		1		.5		2		2		.3		N	N
420	62	2	20	144	33	10	20		1		.7		.5		7		.7		N	N
421	62	0	55	144	31	32	15		5		3		.7		2		2		N	N
422	62	1	39	144	37	29	15		.7		1.5		2		1.5		.5		N	N
423	62	1	49	144	41	32	20		1		1.5		3		3		.5		N	N
424	62	1	52	144	41	20	10		3		2		2		1.5		1		N	N
425	62	4	44	144	38	49	20		50		.2		<.5		N		.02		1.5	N
426	62	0	17	144	49	28	.5		50		<.05		N		N		.2		1	500
427	62	1	20	144	50	13	15		2		1.5		1.5		1		.7		N	N
428	62	6	48	144	49	10	20		1.5		2		2		2		.2		N	N
429	62	9	1	144	47	44	20		1		.3		3		1		.7		N	N
430	62	8	14	144	34	40	10		3		2		1.5		7		.3		N	N
431	62	9	0	144	35	38	10		.2		.1		2		1		.07		N	N
432	62	14	6	144	34	5	10		3		1.5		1.5		5		>2		N	N
433	62	12	36	144	41	1	10		3		3		1.5		3		>2		N	N
434	62	9	38	144	38	47	15		3		3		.7		10		2		N	N
435	62	11	30	144	44	32	15		5		5		3		2		.7		N	N
436	62	9	51	144	41	20	20		5		3		3		5		.7		N	N
437	62	16	3	144	29	49	15		7		3		2		1		2		N	N
438	62	16	41	144	21	47	15		7		7		3		.7		1		N	N
439	62	16	38	144	16	5	15		10		5		3		1		1.5		N	N
440	62	19	14	144	18	35	15		7		5		2		<.5		1		N	N
441	62	21	45	144	16	45	15		7		2		2		1.5		2		N	N
442	62	21	39	144	16	42	20		15		10		2		N		1		N	N
443	62	22	42	144	9	16	15		20		15		1.5		<.5		.7		N	N
444	62	14	35	144	0	0	5		2		1		3		.7		.3		N	N
445	62	14	56	144	1	28	1		.3		.2		.7		<.5		.2		N	N
446	62	15	56	144	0	35	10		3		3		1.5		.7		.7		N	N
447	62	18	35	144	3	47	7		2		.7		2		1.5		.3		N	N
448	62	20	13	144	1	52	10		5		5		1.5		1.5		.7		N	N
449	62	19	27	144	10	46	20		5		2		3		<.5		.5		N	N
450	62	20	1	144	9	44	7		1.5		.5		2		.7		.5		N	N
451	62	22	26	144	1	28	10		7		7		3		<.5		.7		N	N
452	62	26	47	144	3	56	10		5		3		1.5		2		1		N	N
453	62	26	42	144	3	55	3		7		7		1.5		N		.7		<1	N
454	62	27	22	144	14	8	15		1		1		.5		1.5		>2		N	N
455	62	25	41	144	15	32	15		5		2		1.5		1		>2		N	N
456	62	24	11	144	27	50	10		.3		.2		<.5		2		>2		N	N
457	62	32	4	144	10	56	15		1		3		1.5		1		>2		N	N
458	62	30	41	144	8	9	20		1		1.5		1.5		1		>2		300	N
459	62	32	20	144	6	0	15		.3		.7		.5		2		>2		N	N
460	62	43	3	144	7	41	10		2		.7		1.5		5		>2		30	700
461	62	43	7	144	14	24	20		.15		.3		.5		2		>2		N	N
462	62	43	17	144	25	39	7		.1		.2		<.5		1.5		>2		N	N
463	62	45	15	144	26	27	20		1		1.5		1.5		.5		>2		N	N
465	62	45	10	144	44	9	10		.15		.2		<.5		1		>2		N	N
466	62	59	17	144	17	5	7		.2		.3		<.5		1		>2		N	N
467	62	56	17	144	29	16	15		.7		.7		1		.7		>2		N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
407	N	N	>10,000	N	N	N	20	N	30
408	N	N	3,000	N	N	N	20	70	50
409	N	N	5,000	<2	N	N	70	N	70
410	N	N	500	N	N	N	70	150	1,500
411	N	N	500	N	N	N	N	30	30
412	N	N	700	<2	N	N	N	N	<10
413	N	N	>10,000	N	N	N	<20	150	50
414	N	N	700	<2	N	N	N	50	10
415	N	N	500	<2	N	N	N	N	10
416	N	N	1,000	N	N	N	<20	100	15
417	N	500	>10,000	N	N	N	20	150	1,000
418	N	N	5,000	N	N	N	N	N	100
419	N	N	>10,000	N	N	N	N	N	15
420	N	N	700	N	N	N	N	50	15
421	N	N	200	N	N	N	30	200	20
422	N	<20	300	N	N	N	<20	200	<10
423	N	N	300	N	N	N	<20	50	30
424	N	N	1,000	N	N	N	<20	100	100
425	N	N	>10,000	N	N	N	70	20	200
426	N	N	5,000	N	N	<50	200	N	200
427	N	N	1,000	N	N	N	<20	100	10
428	N	N	500	<2	N	N	N	100	20
429	N	N	500	<2	N	N	N	N	20
430	N	N	300	<2	N	N	20	200	15
431	N	N	500	N	N	N	N	N	15
432	N	20	500	N	N	N	<20	200	30
433	N	<20	300	N	N	N	20	300	30
434	N	N	1,500	N	N	N	20	500	30
435	N	N	500	N	N	N	20	500	100
436	N	N	700	N	N	N	20	150	50
437	N	<20	700	N	N	N	30	100	1,500
438	N	N	700	N	N	N	50	700	70
439	N	<20	2,000	<2	N	N	50	150	200
440	N	N	500	N	N	N	30	500	300
441	N	N	500	N	N	N	30	150	100
442	N	<20	500	N	N	N	100	1,000	150
443	N	<20	2,000	N	N	N	150	1,500	70
444	N	N	700	<2	N	N	N	50	50
445	N	<20	1,000	N	N	N	N	20	<10
446	N	N	700	N	N	N	20	150	700
447	N	N	500	<2	N	N	<20	100	30
448	N	N	500	<2	N	N	20	300	50
449	N	N	700	N	N	N	<20	30	700
450	N	<20	700	3	N	N	N	20	15
451	N	<20	500	<2	N	N	50	700	50
452	N	30	500	N	N	N	30	500	30
453	N	N	300	N	N	N	50	700	20
454	N	30	1,000	N	N	N	<20	200	10
455	<20	50	700	N	N	N	<20	300	30
456	N	<20	150	N	N	N	N	50	<10
457	N	30	500	N	N	N	<20	200	15
458	N	70	500	N	<20	N	N	100	1,500
459	N	20	150	N	N	N	<20	70	50
460	<20	150	>10,000	N	>2,000	N	N	100	30
461	N	<20	1,500	N	N	N	N	70	<10
462	N	<20	300	N	N	N	N	30	<10
463	N	70	300	N	N	N	N	150	20
465	N	<20	700	N	N	N	N	30	N
466	N	20	2,000	N	N	N	N	100	<10
467	N	20	500	N	N	N	N	70	<10

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
407	<10	N	N	50	N	N	N	N	N	N
408	30	N	N	700	N	N	70	N	N	10
409	30	N	N	100	N	N	15	N	N	N
410	15	N	N	1,000	N	N	150	N	N	15
411	30	N	N	150	N	N	10	N	N	N
412	20	N	N	50	N	N	N	N	N	N
413	15	N	N	500	N	N	50	N	N	20
414	30	N	<100	100	N	N	10	N	N	N
415	20	N	N	100	N	N	N	N	N	N
416	20	N	N	300	N	N	30	N	N	<10
417	N	N	100	500	50	N	30	<20	N	15
418	10	N	<100	200	N	N	N	N	N	<10
419	20	N	<100	200	N	N	<10	N	N	10
420	10	N	N	500	100	N	N	N	N	<10
421	15	N	<100	1,000	50	N	100	70	N	15
422	20	N	100	500	N	N	50	N	N	15
423	30	N	<100	500	N	N	30	N	N	15
424	50	N	N	300	N	N	30	N	N	10
425	N	N	N	70	N	N	70	<20	N	N
426	<10	N	N	70	N	N	300	N	N	N
427	20	N	N	500	N	N	20	N	N	10
428	30	N	200	500	N	N	30	N	N	<10
429	30	N	<100	100	N	N	N	N	N	<10
430	30	N	<100	700	N	N	100	N	N	30
431	20	N	N	70	N	N	N	N	N	N
432	30	N	<100	500	N	50	70	N	N	20
433	30	N	<100	1,500	N	<50	70	N	N	30
434	20	N	300	1,500	N	<50	100	N	N	70
435	30	N	<100	700	N	N	70	N	N	30
436	30	N	<100	1,500	N	N	70	<20	N	20
437	30	N	<100	2,000	N	N	30	N	N	15
438	30	N	<100	2,000	N	N	200	N	N	30
439	20	N	<100	3,000	N	N	70	<20	N	20
440	30	N	N	1,500	N	N	100	N	N	20
441	30	N	<100	700	N	N	100	70	N	20
442	30	N	N	3,000	N	N	500	N	N	50
443	20	N	N	5,000	N	N	1,000	N	N	100
444	30	N	N	500	N	N	20	N	N	10
445	<10	N	N	150	50	N	N	<20	N	10
446	20	N	N	700	N	N	100	N	N	10
447	30	N	N	300	N	N	70	N	N	20
448	30	N	<100	1,500	N	N	200	N	N	50
449	30	N	N	200	N	N	30	N	N	<10
450	30	N	N	300	N	N	10	N	N	10
451	30	N	N	2,000	N	N	300	N	N	50
452	30	N	<100	1,000	<10	N	200	N	N	50
453	20	N	N	2,000	N	N	300	N	N	50
454	15	N	<100	500	N	N	30	N	N	10
455	50	N	<100	1,000	N	50	50	N	N	30
456	<10	N	100	100	N	N	N	N	N	<10
457	20	N	100	500	N	N	20	N	N	15
458	15	N	100	300	N	N	10	N	500	15
459	20	N	100	150	N	N	N	N	N	10
460	30	N	100	700	30	N	<10	3,000	N	20
461	15	N	100	300	N	N	N	<20	N	20
462	N	N	100	100	50	N	N	3,000	N	15
463	20	N	<100	500	N	<50	10	N	N	10
465	<10	N	<100	100	N	<50	N	N	N	<10
466	<10	N	200	200	N	<50	N	20	N	<10
467	10	N	<100	300	N	<50	N	N	N	20

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
407	N	2,000	N	<20	N	N	N	>2,000	N	N
408	N	700	N	100	N	20	N	2,000	N	N
409	N	1,000	N	30	N	N	N	200	N	N
410	N	700	N	150	N	20	N	>2,000	N	N
411	N	1,000	N	20	N	N	N	300	N	N
412	N	1,000	N	<20	N	N	N	1,000	N	N
413	N	700	N	100	N	150	N	>2,000	N	N
414	N	2,000	N	50	N	20	N	500	N	N
415	N	1,000	N	20	N	20	N	>2,000	N	N
416	N	2,000	N	70	N	N	N	100	N	N
417	N	5,000	N	100	N	150	N	>2,000	N	N
418	N	1,500	N	50	N	50	N	>2,000	N	N
419	N	2,000	N	<20	N	100	N	>2,000	N	N
420	N	500	N	50	N	500	N	>2,000	N	N
421	N	1,000	N	100	N	200	N	>2,000	N	N
422	N	1,000	N	50	N	100	N	>2,000	N	N
423	N	700	N	50	N	70	N	>2,000	N	N
424	N	1,000	N	100	N	70	N	>2,000	N	N
425	N	7,000	N	N	N	N	N	100	N	N
426	N	200	N	<20	N	<20	2,000	>2,000	N	N
427	N	1,500	N	100	N	30	N	>2,000	N	N
428	N	1,500	N	50	N	100	N	>2,000	N	N
429	N	1,000	N	30	N	50	N	>2,000	N	N
430	N	1,000	N	150	N	100	N	>2,000	N	N
431	N	1,500	N	<20	N	<20	N	>2,000	N	N
432	N	1,000	N	300	N	200	N	>2,000	N	N
433	N	1,000	N	300	N	150	N	>2,000	N	N
434	N	1,000	N	300	N	300	N	>2,000	N	N
435	N	7,000	N	200	N	100	N	>2,000	N	N
436	N	5,000	N	200	N	100	N	>2,000	N	N
437	N	5,000	N	300	N	150	N	>2,000	N	N
438	N	500	N	500	N	50	N	>2,000	N	N
439	N	5,000	N	500	N	50	N	>2,000	N	N
440	N	3,000	N	200	N	20	N	1,500	N	N
441	N	3,000	N	300	N	50	N	>2,000	N	N
442	N	700	N	500	N	20	N	1,500	N	N
443	N	300	N	500	N	20	N	1,500	N	N
444	N	1,000	N	100	N	50	N	>2,000	N	N
445	<20	N	N	<20	N	700	N	>2,000	N	N
446	N	500	N	70	N	100	N	>2,000	N	N
447	N	1,000	N	70	N	70	N	>2,000	N	N
448	100	1,000	N	200	N	150	N	>2,000	N	N
449	N	700	N	50	N	50	N	>2,000	N	N
450	100	500	<200	30	N	700	N	>2,000	N	N
451	N	1,000	N	100	N	30	N	>2,000	N	N
452	N	700	N	200	N	70	N	>2,000	N	N
453	N	500	N	150	N	20	N	1,000	N	N
454	N	300	N	300	N	150	N	>2,000	N	N
455	N	700	N	300	N	150	N	>2,000	N	N
456	N	500	N	100	N	100	N	>2,000	N	N
457	N	700	N	200	N	150	N	>2,000	N	N
458	N	1,000	N	200	N	200	N	>2,000	N	N
459	N	700	N	200	N	300	N	>2,000	N	N
460	20	1,000	N	150	1,500	150	N	>2,000	N	N
461	N	700	N	200	N	500	N	>2,000	N	N
462	N	200	N	2,000	N	700	N	>2,000	N	N
463	N	700	N	200	N	100	N	>2,000	N	N
465	N	300	N	100	N	70	N	>2,000	N	N
466	N	300	N	200	N	700	N	>2,000	N	N
467	N	500	N	150	N	100	N	>2,000	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	LATITUDE	LONGITUD	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
468	62 53 51	144 28 35	10			.3		.2		<.5		2		>2	N	N
469	62 48 42	144 34 21	15		3			1.5		1		2		>2	N	N
470	62 54 11	144 37 15	20			.7		.7		.5		1.5		>2	N	N
471	62 54 13	144 37 5	10		3			1		1.5		1.5		>2	N	N
472	62 53 6	144 40 26	20			.5		.7		1		2		>2	N	N
473	62 52 41	144 51 41	15		1			1		1		.5		2	N	N
500	62 14 24	144 17 15	15		5			3		2		.7		.7	N	N
501	62 14 51	144 20 34	15		2			1		3		1.5		.3	N	N
502	62 10 32	144 22 38	7		5			10		1		<.5		.5	N	N
503	62 12 8	144 18 7	15			1.5		2		2		.7		.3	N	N
504	62 12 9	144 15 3	10		2			2		1.5		.5		.5	N	N
505	62 6 45	144 29 49	7			1.5		.5		.5		2		2	N	N
506	62 6 41	144 29 53	3		5			.05		.5		2		.3	N	N
507	62 9 48	144 17 10	10		5			3		1.5		.7		.3	N	N
508	62 10 2	144 13 22	7		7			1.5		2		N		.2	N	N
509	62 7 47	144 13 26	10		1.5			1.5		2		.5		.3	N	N
510	62 7 21	144 15 33	10		2			3		2		<.5		.5	N	N
511	62 6 51	144 21 10	15		2			.5		3		<.5		1	N	N
512	62 8 0	144 28 34	20		2			2		2		1.5		.5	2	N
513	62 11 52	144 35 10	10			.7		1		1.5		1		1	N	N
514	62 5 46	144 27 32	5			.7		2		.5		1		.7	N	N
515	62 3 58	144 18 45	10		5			7		2		.7		.5	N	N
516	62 2 17	144 18 31	15		1			.1		3		<.5		.2	N	N
517	62 2 5	144 27 50	10			.7		3		1.5		1.5		1	N	N
518	62 0 12	144 21 14	20		1			.2		2		2		.3	N	N
519	62 0 19	144 21 22	10		1.5			.7		2		2		1	N	N
520	62 3 19	144 33 15	5			.3		.07		<.5		1.5		1	N	N
521	62 4 11	144 29 25	10		5			7		2		1.5		.7	N	N
522	62 4 8	144 29 33	10		5			3		1.5		3		>2	N	N
523	62 1 28	144 37 39	15			1.5		1		2		2		1	N	N
524	62 0 34	144 36 23	15		2			2		2		1		.7	N	N
525	62 0 26	144 39 25	20		3			2		10		7		.3	N	N
526	62 5 5	144 38 43	1		15			.2		<.5		<.5		.15	2	700
527	62 4 9	144 41 53	10		15			7		1.5		.5		1	N	N
528	62 2 13	144 53 3	10		2			2		1.5		5		.5	N	N
529	62 7 34	144 48 26	20		5			7		1.5		15		.7	N	N
530	62 10 27	144 47 33	15			1.5		1.5		2		5		.7	N	N
531	62 8 10	144 32 7	20		10			3		.2		5		1	N	N
532	62 7 30	144 33 8	7		1			.7		N		5		>2	N	N
533	62 10 28	144 31 6	10		3			5		1.5		3		.7	N	N
534	62 12 35	144 36 8	15		2			1		.7		3		.7	N	N
535	62 11 18	144 39 58	20			.5		.3		1.5		2		.7	N	N
536	62 13 59	144 50 59	20		10			10		.5		5		.7	N	N
537	62 9 56	144 42 36	20		5			3		3		5		.7	N	N
538	62 16 51	144 26 42	20		10			7		1.5		3		1	N	N
539	62 16 15	144 19 32	<.1			<.1		<.05		N		N		N	N	N
540	62 15 55	144 16 46	15		20			15		2		<.5		>2	N	N
541	62 19 13	144 25 32	20		10			10		1.5		1.5		>2	N	N
542	62 20 28	144 19 0	15		5			1.5		2		2		2	15	N
543	62 23 10	144 21 46	20		10			7		1		3		>2	N	N
544	62 24 46	144 19 0	20		7			3		1.5		2		>2	N	N
545	62 22 10	144 11 11	20		15			15		3		1		2	N	N
546	62 14 43	144 0 57	5		7			7		1.5		<.5		.7	N	N
547	62 15 19	144 1 27	3		1			1		<.5		<.5		1.5	N	N
548	62 17 8	144 3 40	5			1.5		.2		1		<.5		.1	N	N
549	62 17 48	144 1 37	7		1			2		.7		.5		.7	N	N
550	62 17 50	144 5 12	10		15			7		1.5		.5		2	N	N
551	62 21 7	144 3 28	10		5			7		.7		1		.5	N	N
552	62 18 46	144 8 58	10		5			3		2		<.5		.7	N	N
553	62 20 53	144 8 5	10		7			7		1.5		1.5		.7	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
468	N	20	500	N	N	N	N	200	20
469	N	30	700	N	N	N	N	200	20
470	N	30	2,000	N	N	N	N	150	15
471	N	30	500	N	N	N	<20	200	15
472	N	30	1,000	N	N	N	N	70	10
473	N	30	300	N	N	N	N	50	N
500	N	N	700	N	N	N	20	70	50
501	N	N	700	<2	N	N	N	30	30
502	N	N	300	N	N	N	50	500	20
503	N	N	500	N	N	N	<20	100	20
504	N	N	1,500	N	N	N	<20	50	1,000
505	N	N	150	N	N	N	N	50	N
506	N	N	5,000	N	N	N	30	20	10
507	N	N	3,000	N	N	N	30	100	50
508	N	N	7,000	N	N	N	N	20	20
509	N	N	500	N	N	N	<20	50	20
510	N	N	500	N	N	N	<20	150	10
511	N	N	700	N	N	N	<20	100	20
512	N	N	500	N	N	N	<20	100	15
513	N	N	300	N	N	N	N	100	20
514	N	N	300	<2	N	N	N	70	<10
515	N	N	300	N	N	N	20	700	70
516	N	N	500	<2	N	N	N	N	15
517	N	N	10,000	N	N	N	<20	<20	50
518	N	N	500	N	N	N	N	N	10
519	N	N	>10,000	N	N	N	N	30	15
520	N	N	5,000	N	N	N	N	N	N
521	N	N	300	N	N	N	20	700	50
522	N	N	300	N	N	N	20	300	70
523	N	N	300	N	N	N	<20	70	15
524	N	N	500	N	N	N	<20	100	10
525	N	20	700	N	N	N	20	70	100
526	N	N	>10,000	<2	N	N	30	20	300
527	N	N	300	N	N	N	30	200	50
528	N	N	200	N	N	N	<20	200	20
529	N	N	300	N	N	N	20	200	50
530	N	N	500	<2	N	N	<20	70	20
531	N	N	300	<2	N	N	20	150	50
532	N	N	70	N	N	N	N	50	30
533	N	N	300	<2	N	N	20	150	50
534	N	N	100	N	N	N	<20	100	20
535	N	N	500	N	N	N	N	<20	<10
536	N	N	200	N	N	N	70	2,000	700
537	N	N	700	N	N	N	30	200	1,500
538	N	N	500	N	N	N	70	700	100
539	N	N	N	<2	N	N	N	20	N
540	N	<20	700	N	N	N	150	1,000	2,000
541	N	20	300	N	N	N	70	1,500	50
542	<20	N	700	N	N	N	<20	150	150
543	N	30	500	N	N	N	70	700	50
544	N	30	300	N	N	N	30	500	150
545	N	<20	700	N	N	N	100	1,500	1,500
546	N	N	200	<2	N	N	30	200	30
547	N	N	500	N	N	N	<20	70	15
548	N	N	700	N	N	N	N	<20	15
549	N	N	1,000	<2	N	N	<20	100	300
550	N	<20	700	2	N	N	50	700	3,000
551	N	N	200	N	N	N	50	500	15
552	N	N	300	<2	N	N	20	100	50
553	N	<20	500	N	N	N	30	700	2,000

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
468	<10	N	200	150	N	N	N	30	N	20
469	30	N	<100	1,000	N	50	15	N	N	30
470	20	N	150	300	N	<50	<10	<20	N	20
471	20	N	<100	500	N	50	10	N	N	20
472	15	N	100	500	N	<50	N	N	N	15
473	30	N	N	500	N	N	N	<20	N	10
500	30	N	N	300	N	N	50	N	N	<10
501	30	N	<100	100	N	N	10	N	N	<10
502	10	N	N	1,000	N	N	500	N	N	10
503	30	N	N	150	N	N	50	N	N	10
504	20	N	N	200	N	N	50	N	N	N
505	N	N	<100	200	N	N	15	N	N	20
506	<10	N	N	100	N	N	N	N	N	10
507	20	N	N	200	N	N	70	N	N	15
508	20	N	N	100	N	N	15	N	N	N
509	30	N	N	150	N	N	20	N	N	N
510	30	N	N	500	N	N	50	N	N	10
511	30	N	N	100	N	N	20	N	N	N
512	50	N	<100	150	N	N	30	N	N	10
513	20	N	<100	150	N	N	20	N	N	10
514	15	N	N	300	N	N	20	N	N	10
515	30	N	N	1,500	<10	N	200	N	N	70
516	20	N	N	70	N	N	N	N	N	N
517	20	N	<100	150	N	N	<10	N	N	N
518	20	N	100	150	N	N	N	N	N	<10
519	20	N	N	150	N	N	15	N	N	<10
520	<10	N	N	70	N	N	N	N	N	50
521	30	N	N	1,000	N	N	150	<20	N	70
522	30	N	<100	700	N	<50	100	<20	N	50
523	20	N	<100	150	N	N	20	N	N	10
524	20	N	N	500	N	N	30	N	N	10
525	50	N	N	500	N	N	30	20	N	N
526	30	N	N	200	N	N	100	30	N	N
527	20	N	N	1,500	N	N	150	N	N	20
528	20	N	<100	700	N	N	100	N	N	30
529	30	N	200	1,500	N	N	150	<20	N	70
530	50	N	<100	500	N	<50	30	<20	N	15
531	10	N	100	1,000	N	N	50	N	N	30
532	10	N	1,500	1,500	10	N	N	N	N	150
533	20	N	<100	1,500	N	N	100	N	N	30
534	15	N	<100	200	N	N	50	N	N	20
535	20	N	100	200	N	N	N	N	N	20
536	20	N	<100	2,000	N	N	500	N	N	100
537	30	N	<100	1,500	N	N	70	30	N	20
538	20	N	<100	2,000	N	N	300	N	N	70
539	N	N	N	N	N	N	N	N	N	N
540	30	N	N	3,000	N	N	700	N	N	100
541	30	N	<100	2,000	N	<50	300	N	N	100
542	20	N	<100	700	N	N	50	1,000	N	20
543	30	N	<100	1,500	N	<50	150	20	N	50
544	30	N	<100	1,000	N	<50	150	N	N	50
545	20	N	<100	3,000	N	N	700	<20	N	100
546	20	N	N	2,000	N	N	200	N	N	50
547	<10	N	N	100	N	N	50	N	N	10
548	10	N	N	70	N	N	<10	N	N	N
549	10	N	N	200	N	N	100	N	N	<10
550	15	N	<100	2,000	N	N	500	N	N	30
551	10	N	N	1,000	N	N	200	N	N	30
552	20	N	N	1,500	N	N	70	N	N	15
553	30	N	N	2,000	N	N	300	N	N	100

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
468	N	500	N	70	N	300	N	>2,000	N	N
469	N	1,000	N	300	N	150	N	>2,000	N	N
470	N	700	N	300	N	150	N	>2,000	N	N
471	N	700	300	300	N	150	N	>2,000	N	N
472	N	700	N	200	N	150	N	>2,000	N	N
473	N	1,000	N	100	N	50	N	500	N	N
500	N	1,000	N	70	N	20	N	500	N	N
501	N	1,000	N	50	N	50	N	200	N	N
502	N	700	N	50	N	N	N	30	N	N
503	N	1,000	N	50	N	<20	N	500	N	N
504	N	700	N	50	N	<20	N	20	N	N
505	N	500	N	100	N	500	N	>2,000	N	N
506	N	1,000	N	<20	N	150	N	>2,000	N	N
507	N	1,000	N	70	N	20	N	200	N	N
508	N	700	N	50	N	<20	N	>2,000	N	N
509	N	1,000	N	50	N	20	N	1,500	N	N
510	N	1,000	N	70	N	<20	N	>2,000	N	N
511	N	1,000	N	100	N	N	N	50	N	N
512	N	1,500	N	50	N	100	N	>2,000	N	N
513	N	1,000	N	50	N	50	N	>2,000	N	N
514	N	700	N	30	N	300	N	>2,000	N	N
515	N	700	N	200	N	30	N	200	N	N
516	N	2,000	N	20	N	<20	N	30	N	N
517	N	2,000	N	30	N	50	N	>2,000	N	N
518	N	1,000	N	<20	N	70	N	>2,000	N	N
519	N	1,000	N	70	N	100	N	>2,000	N	N
520	N	500	N	50	N	500	N	>2,000	N	N
521	N	700	N	300	N	100	N	1,000	N	N
522	N	1,000	N	300	N	300	N	>2,000	N	N
523	N	1,000	N	50	N	50	N	>2,000	N	N
524	N	1,500	N	70	N	50	N	>2,000	N	N
525	N	2,000	N	50	N	30	N	2,000	N	N
526	N	1,500	N	20	N	20	N	2,000	N	N
527	N	1,500	N	200	N	20	N	>2,000	N	N
528	N	1,000	N	100	N	50	N	>2,000	N	N
529	N	1,000	N	200	N	200	N	>2,000	N	N
530	N	1,000	N	100	N	70	N	>2,000	N	N
531	N	2,000	N	300	N	200	N	>2,000	N	N
532	N	N	N	300	N	700	N	>2,000	N	N
533	N	700	N	150	N	70	N	>2,000	N	N
534	N	500	N	150	N	100	N	>2,000	N	N
535	N	1,000	N	20	N	150	N	>2,000	N	N
536	N	500	N	500	N	150	N	>2,000	N	N
537	N	5,000	N	150	N	70	N	>2,000	N	N
538	N	500	N	700	N	150	N	>2,000	N	N
539	N	N	N	<20	N	N	N	N	N	N
540	N	300	N	700	N	100	N	>2,000	N	N
541	N	500	N	700	N	200	N	>2,000	N	N
542	N	5,000	N	200	N	150	N	>2,000	N	N
543	N	2,000	N	700	N	300	N	>2,000	N	N
544	N	500	N	500	N	300	N	>2,000	N	N
545	N	3,000	N	700	N	100	N	>2,000	N	N
546	N	300	N	150	N	50	N	>2,000	N	N
547	N	300	N	100	N	<20	N	>2,000	N	N
548	N	700	N	<20	N	N	N	700	N	N
549	N	700	N	50	N	100	N	>2,000	N	N
550	300	500	N	150	N	1,500	N	>2,000	N	N
551	N	700	N	100	N	20	N	2,000	N	N
552	700	700	N	150	N	30	N	2,000	N	N
553	N	700	N	200	N	70	N	>2,000	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	LATITUDE	LONGITUD	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
554	62 29 6	144 0 54	15		5		3		1.5		2		>2		N	N
555	62 28 8	144 6 57	7		5		5		1		.7		2		N	N
556	62 27 27	144 17 38	20		.5		.5		1		1.5		>2		N	N
557	62 26 9	144 14 46	15		5		7		3		.7		1.5		5	N
558	62 26 58	144 25 59	10		5		3		.7		2		>2		N	N
559	62 30 50	144 13 24	10		.7		3		.7		1.5		>2		N	N
560	62 31 8	144 8 28	15		3		2		1		3		>2		N	N
561	62 31 54	144 1 55	15		1.5		2		1.5		.5		>2		N	N
562	62 42 59	144 17 23	10		2		1.5		.7		2		>2		N	N
563	62 42 22	144 21 32	15		.7		1		.5		.7		>2		N	N
564	62 43 41	144 28 15	20		.7		.7		1		.7		>2		N	N
565	62 45 51	144 46 56	15		.3		.3		.5		2		2		N	N
566	62 39 23	145 27 46	20		1		1		1.5		.5		>2		N	N
567	62 57 12	144 24 10	10		.5		.3		.7		.7		>2		N	N
568	62 56 27	144 31 39	15		.2		.7		<.5		1.5		>2		N	N
570	62 56 33	144 43 42	15		.5		.5		1		1.5		>2		N	N
571	62 54 32	144 42 41	15		.7		1		1		1		>2		N	N
572	62 52 49	144 42 58	15		.3		.3		.7		1.5		>2		N	N
573	62 51 6	144 54 41	15		.7		.7		1		.7		>2		N	N
574	62 51 52	144 58 53	15		.5		.7		.7		2		>2		N	N
575	62 41 58	145 6 29	20		.7		1		1		.5		>2		<1	N
600	62 14 43	144 18 5	15		2		.7		2		1		.5		N	N
601	62 11 7	144 27 22	15		2		2		1		1.5		1		N	N
602	62 10 50	144 26 8	10		7		1		2		.7		1		N	N
603	62 12 6	144 21 7	10		2		3		1.5		.5		.2		N	N
604	62 12 29	144 14 38	15		5		5		1		.7		.7		1	N
605	62 6 16	144 30 53	15		5		.5		1		3		1		N	N
606	62 5 40	144 33 8	20		1.5		1		1.5		5		.05		N	N
607	62 10 46	144 13 50	7		1		.1		3		.5		.07		N	N
608	62 11 22	144 10 24	15		50		.2		N		N		.005		N	N
609	62 7 22	144 12 16	15		5		3		2		<.5		.7		N	N
610	62 6 56	144 14 18	15		1.5		.5		2		<.5		.3		N	N
611	62 6 13	144 23 56	15		5		2		3		1		1		<1	N
612	62 9 0	144 29 6	20		1.5		1.5		2		3		.5		N	N
613	62 11 45	144 35 10	20		1		.7		2		3		.2		N	N
614	62 8 35	144 21 51	15		1.5		.5		2		<.5		.3		N	N
615	62 2 45	144 24 22	10		10		2		1		.5		.7		5	N
616	62 2 35	144 24 18	15		3		1		2		1.5		1.5		N	N
617	62 2 57	144 25 19	15		10		2		2		1		1.5		N	N
618	62 1 9	144 20 11	15		2		1.5		2		1.5		.5		N	N
619	62 3 21	144 33 56	10		7		2		.7		1		1.5		N	N
620	62 2 6	144 30 13	15		3		3		2		10		.7		N	N
621	62 1 38	144 29 26	5		1.5		1.5		1.5		5		.5		N	N
622	62 1 36	144 37 19	20		.7		.3		2		5		.15		N	N
623	62 2 17	144 44 22	15		.2		.07		3		1.5		.02		N	N
624	62 2 11	144 44 33	10		.2		.2		3		.7		.1		N	N
625	62 5 4	144 39 22	30		10		1		<.5		.7		.2		<1	N
626	62 3 3	144 44 56	15		7		7		2		2		1		N	N
627	62 4 25	144 46 21	7		5		5		1.5		<.5		.7		<1	N
628	62 6 8	144 48 5	15		2		2		2		N		.5		N	N
629	62 5 27	144 54 36	7		.2		3		.7		1		1.5		N	N
630	62 9 9	144 54 40	15		3		5		1.5		7		1		N	N
631	62 7 36	144 35 6	10		5		2		1		7		.3		N	N
632	62 9 16	144 36 2	20		.5		.5		3		3		.3		N	N
633	62 14 4	144 26 36	7		3		1.5		2		2		1		N	N
634	62 13 16	144 43 37	20		.7		.3		2		1		1		N	N
635	62 9 18	144 37 39	10		7		5		1		7		.7		N	N
636	62 10 32	144 54 12	20		10		7		1.5		.7		>2		N	N
637	62 9 32	144 43 11	20		7		10		2		3		.7		N	N
638	62 15 47	144 24 25	20		15		15		1		1		1		N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
554	N	30	300	N	N	N	20	300	30
555	N	<20	300	N	N	N	30	500	30
556	N	100	500	N	N	N	N	70	10
557	N	<20	300	<2	N	N	20	700	30
558	N	<20	300	N	N	N	<20	300	30
559	N	300	150	N	N	N	<20	200	20
560	N	30	300	N	N	N	<20	300	30
561	N	20	300	N	N	N	<20	70	10
562	N	30	3,000	N	N	N	N	100	15
563	N	20	500	N	N	N	N	150	10
564	N	20	500	N	N	N	N	100	20
565	N	30	200	<2	N	N	N	70	<10
566	N	30	300	N	N	N	N	70	<10
567	N	20	500	N	N	N	N	100	<10
568	N	20	500	N	N	N	N	100	N
570	N	30	500	N	N	N	N	70	<10
571	N	20	300	N	N	N	N	150	<10
572	N	30	300	N	N	N	N	100	10
573	N	20	700	N	N	N	N	50	<10
574	N	20	300	N	N	N	N	100	<10
575	N	30	200	N	N	N	N	50	N
600	N	N	500	<2	N	N	<20	<20	1,500
601	N	500	200	N	N	N	30	150	10
602	N	50	5,000	<2	N	N	<20	70	1,000
603	N	1,500	500	N	N	N	<20	200	30
604	N	N	700	N	N	N	20	500	20,000
605	N	N	7,000	N	N	N	50	N	10
606	N	N	>10,000	N	N	N	<20	<20	15
607	N	N	1,500	<2	N	N	N	20	20
608	N	<20	10,000	N	N	N	50	N	20
609	N	N	500	N	N	N	20	150	30
610	N	N	1,000	<2	N	N	<20	50	30
611	N	N	700	<2	N	N	<20	100	20
612	N	N	3,000	<2	N	N	N	70	30
613	N	N	200	N	N	N	N	50	20
614	N	70	500	N	N	N	N	20	10
615	N	N	>10,000	N	N	N	50	70	20,000
616	N	N	>10,000	N	N	N	<20	70	1,000
617	N	N	500	N	N	N	100	200	30
618	N	N	>10,000	<2	N	N	<20	50	50
619	N	N	5,000	N	N	N	<20	200	20
620	N	N	300	N	N	N	20	200	30
621	N	<20	1,000	N	N	N	<20	150	20
622	N	N	300	N	N	N	N	20	15
623	N	N	500	<2	N	N	N	N	10
624	N	N	200	<2	N	N	N	<20	<10
625	N	N	>10,000	N	N	N	20	30	50
626	N	20	500	N	N	N	30	1,500	50
627	N	N	300	N	N	N	30	1,000	1,500
628	N	N	300	<2	N	N	<20	200	15
629	N	<20	200	N	N	N	<20	200	15
630	N	<20	300	N	N	N	20	700	30
631	N	N	>10,000	N	N	N	20	300	30
632	N	N	500	<2	N	N	N	N	10
633	N	N	500	N	N	N	<20	200	20
634	N	N	700	N	N	N	N	20	10
635	N	20	1,000	<2	N	N	30	500	70
636	N	20	500	N	N	N	50	700	100
637	N	N	700	N	N	N	70	700	150
638	N	<20	200	N	N	N	150	1,500	70

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
554	50	N	<100	1,000	N	50	100	<20	N	50
555	30	N	<100	1,500	N	<50	200	N	N	30
556	15	N	200	300	N	N	N	N	N	10
557	50	N	<100	2,000	N	N	100	<20	N	50
558	30	N	<100	1,000	N	<50	70	N	N	70
559	10	N	100	700	N	N	100	N	N	10
560	30	N	<100	700	N	N	70	N	N	50
561	30	N	<100	200	N	<50	50	N	N	30
562	30	N	<100	700	N	<50	15	N	N	20
563	15	N	150	500	N	N	N	N	N	15
564	20	N	100	500	N	<50	N	N	N	10
565	15	N	<100	300	N	N	N	N	N	<10
566	20	N	<100	700	N	<50	N	<20	N	20
567	15	N	<100	150	N	N	N	<20	N	30
568	15	N	<100	300	N	<50	N	<20	N	20
570	20	N	100	200	N	<50	N	<20	N	15
571	15	N	100	500	N	N	N	<20	N	15
572	30	N	100	300	N	<50	N	<20	N	<10
573	30	N	<100	300	N	<50	N	N	N	<10
574	20	N	<100	200	N	N	N	<20	N	15
575	20	N	100	700	N	<50	N	N	N	20
600	50	N	N	200	N	N	<10	N	N	<10
601	20	N	<100	200	N	N	100	N	N	15
602	30	N	N	500	N	N	20	N	N	<10
603	20	N	N	300	N	N	100	N	N	N
604	20	N	N	200	N	N	100	N	N	20
605	10	N	<100	150	N	N	N	N	N	30
606	10	N	200	200	N	N	10	N	N	<10
607	50	N	N	70	N	N	N	N	N	N
608	N	N	N	50	N	N	100	N	N	N
609	20	N	N	500	N	N	50	N	N	<10
610	50	N	N	100	N	N	N	N	N	N
611	50	N	N	200	N	N	50	N	N	10
612	20	N	<100	300	N	N	30	N	N	10
613	15	N	100	200	N	N	<10	N	N	15
614	30	N	N	150	N	N	10	N	N	N
615	<10	N	N	300	N	N	70	N	N	10
616	15	N	N	200	700	N	10	N	N	<10
617	30	N	N	500	N	N	100	N	N	15
618	30	N	N	300	N	N	20	50	N	<10
619	20	N	N	200	N	N	100	N	N	30
620	50	N	200	1,000	N	N	70	N	N	20
621	15	N	<100	500	N	N	100	<20	N	15
622	20	N	150	200	N	N	N	N	N	N
623	15	N	N	100	N	N	N	N	N	<10
624	20	N	N	70	N	N	N	N	N	N
625	<10	N	N	300	N	N	30	N	N	N
626	50	N	<100	2,000	N	N	300	N	N	70
627	20	N	N	1,000	N	N	200	N	N	30
628	50	N	N	500	N	N	70	N	N	<10
629	15	N	<100	300	N	N	70	N	N	15
630	30	N	100	1,000	N	N	150	N	N	100
631	15	N	100	1,500	N	N	100	N	N	50
632	20	N	100	200	N	N	N	N	N	<10
633	20	N	N	300	N	N	50	N	N	15
634	30	N	<100	150	N	N	N	N	N	10
635	20	N	<100	1,500	<10	N	500	N	N	70
636	30	N	<100	2,000	N	<50	200	20	N	50
637	30	N	<100	2,000	N	N	200	N	N	50
638	20	N	<100	3,000	N	<50	700	N	N	150

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
554	N	1,000	N	300	N	150	N	>2,000	N	N
555	N	700	N	150	N	70	N	>2,000	N	N
556	N	500	N	200	N	200	N	>2,000	N	N
557	N	1,000	N	200	N	70	N	2,000	N	N
558	N	700	<200	300	N	300	N	>2,000	N	N
559	N	700	N	200	N	200	N	>2,000	N	N
560	N	1,000	N	300	N	300	N	>2,000	N	N
561	N	700	N	150	N	70	N	>2,000	N	N
562	N	1,000	N	150	N	150	N	>2,000	N	N
563	N	700	N	300	N	300	N	>2,000	N	N
564	N	500	N	200	N	150	N	>2,000	N	N
565	N	500	N	100	N	100	N	1,000	N	N
566	N	700	N	100	N	70	N	>2,000	N	N
567	N	700	N	150	N	300	N	>2,000	N	N
568	N	1,000	N	200	N	150	N	>2,000	N	N
570	N	1,000	N	200	N	200	N	>2,000	N	N
571	N	700	N	200	N	200	N	>2,000	N	N
572	N	500	N	150	N	100	N	>2,000	N	N
573	N	1,000	N	150	N	100	N	>2,000	N	N
574	N	700	N	200	N	500	N	>2,000	N	N
575	N	700	N	300	N	200	N	>2,000	N	N
600	>2,000	700	N	50	N	30	N	>2,000	N	N
601	N	700	N	100	N	50	N	>2,000	N	N
602	N	1,500	N	70	N	50	N	>2,000	N	N
603	N	1,000	N	30	N	30	N	>2,000	N	N
604	N	1,000	N	100	N	30	5,000	>2,000	N	N
605	N	300	N	70	N	500	N	>2,000	N	N
606	N	2,000	N	<20	N	100	N	>2,000	N	N
607	N	1,000	N	<20	N	<20	N	1,000	N	N
608	N	5,000	N	<20	N	N	N	<20	N	N
609	N	700	N	100	N	N	N	1,500	N	N
610	N	1,500	N	50	N	N	N	20	N	N
611	N	1,000	N	100	N	30	N	200	N	N
612	N	1,500	N	50	N	100	N	>2,000	N	N
613	N	1,500	N	30	N	100	N	>2,000	N	N
614	N	1,000	N	30	N	<20	N	700	N	N
615	N	3,000	N	100	N	20	N	>2,000	N	N
616	N	2,000	N	70	N	50	N	2,000	N	N
617	N	1,500	N	1,000	N	50	N	>2,000	N	N
618	N	2,000	N	100	N	30	N	>2,000	N	N
619	N	2,000	N	100	N	200	N	>2,000	N	N
620	N	1,000	N	150	N	150	N	>2,000	N	N
621	N	700	N	150	N	50	N	>2,000	N	N
622	N	1,500	N	<20	N	50	N	>2,000	N	N
623	N	2,000	N	N	N	30	N	>2,000	N	N
624	N	1,000	N	<20	N	20	N	>2,000	N	N
625	N	10,000	N	20	N	20	N	2,000	N	N
626	N	1,000	N	300	N	70	N	>2,000	N	N
627	N	700	N	150	N	20	N	1,500	N	N
628	N	2,000	N	50	N	<20	N	>2,000	N	N
629	N	500	N	100	N	50	N	>2,000	N	N
630	N	1,000	N	150	N	150	N	>2,000	N	N
631	N	1,000	N	150	N	100	N	>2,000	N	N
632	N	2,000	N	20	N	100	N	>2,000	N	N
633	N	700	N	150	N	70	N	>2,000	N	N
634	N	1,000	N	50	N	150	N	>2,000	N	N
635	N	700	N	200	N	100	N	>2,000	N	N
636	N	500	N	700	N	300	N	>2,000	N	N
637	N	700	N	500	N	150	N	>2,000	N	N
638	N	300	N	700	N	100	N	>2,000	N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	LATITUDE	LONGITUD	CA	%-S	FE	%-S	MG	%-S	NA	%-S	P	%-S	TI	%-S	AG PPM-S	AS PPM-S
639	62 17 22	144 17 57	15		15		7		2			<.5	.7		N	N
640	62 18 21	144 17 54	15		10		7		1			.5	.3		N	N
641	62 20 58	144 27 37	15		10		2		.7			1.5	>2		10	N
642	62 21 47	144 15 54	20		15		10		3			1	>2		N	N
643	62 23 16	144 13 29	20		10		7		2			1	>2		<1	N
644	62 23 23	144 13 35	15		10		5		2			.5	>2		N	N
645	62 23 28	144 11 3	7		20		7		.7			<.5	1.5		N	N

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	AU PPM-S	B PPM-S	BA PPM-S	BE PPM-S	BI PPM-S	CD PPM-S	CO PPM-S	CR PPM-S	CU PPM-S
639	N	N	700	N	N	N	50	1,000	700
640	N	N	300	N	N	N	50	1,000	1,500
641	N	30	1,000	N	N	N	200	200	150
642	N	20	700	N	N	N	70	2,000	500
643	N	30	700	N	N	N	100	500	1,000
644	N	50	700	N	N	N	70	200	1,500
645	N	20	>10,000	N	N	N	100	1,000	200

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	GA PPM-S	GE PPM-S	LA PPM-S	MN PPM-S	MO PPM-S	NB PPM-S	NI PPM-S	PB PPM-S	SB PPM-S	SC PPM-S
639	30	N	N	2,000	N	N	300	<20	N	50
640	20	N	N	2,000	N	N	200	N	N	50
641	20	N	<100	500	N	<50	100	150	N	30
642	30	N	<100	3,000	N	<50	500	<20	N	100
643	30	N	<100	2,000	N	<50	200	150	N	50
644	30	N	<100	2,000	N	<50	150	100	N	30
645	20	N	N	3,000	N	N	700	<20	N	20

Table 4. Data from heavy-mineral-concentrate samples, Gulkana quadrangle, AK--Continued

Sample	SN PPM-S	SR PPM-S	TH PPM-S	V PPM-S	W PPM-S	Y PPM-S	ZN PPM-S	ZR PPM-S	PD PPM-S	PT PPM-S
639	N	500	N	500	N	30	N	1,500	N	N
640	1,000	500	N	500	N	20	N	2,000	N	N
641	N	2,000	N	500	N	300	N	>2,000	N	N
642	N	300	N	500	N	150	N	>2,000	N	N
643	N	5,000	N	500	N	150	N	>2,000	N	N
644	N	3,000	N	700	N	150	N	>2,000	N	N
645	N	10,000	N	200	N	<20	N	>2,000	N	N

Table 5. Petrographic descriptions of rock samples, Gulkana quadrangle, Alaska

Seq.	Sample Number	Quad	Petrographic Description
1	83BR001A	D1	Bi Quartz Monzonite
2	83BR002A	D1	Hb Granodiorite
3	83BR003A	D1	Schistose Agglomerate
4	83BR12	D1	Pc Hb Porphyry Dike
5	83BR039B	D1	Quartz Vein
6	83BR039A	D1	Silica-Carbonate Rock
7	83BR46A	D6	Green Schistose Metaandesite
8	83BR49A	D6	Metagabbro
9	83BR54A	D5	Hb Granodiorite
10	83IL002A	D1	Bi Hb Quartz Monzonite
11	83IL002B	D1	fg Pc Px Porphyry
12	83IL019A	D1	Hb Gabbro
13	83IL023A	D1	meta Bi Hb Dacite Porphyry
14	83IL038A	D1	Msv mg Bi Granodiorite
15	83NK011A	D1	Bi Hb porphyritic Quartz Monzonite
16	83NK046A	D1	Meta Hb Cpx Basalt
17	83NK060A	D1	Fe-stained meta Bi Hb Andesite
18	83NK078B	D1	Dacite Porphyry Dike
19	83NK079B	D1	Fe-stained Bi Dacite Porphyry
20	83NK082A	D1	Fe-stained Bi Dacite Porphyry
21	83NK084A	D1	Fe-stained meta Bi Hb Dacite
22	83NK084C	D1	Fe-stained meta Bi Hb Dacite
23	83NK086A	D1	Altered meta Bi Hb Andesite
24	83NK088A	D1	Altered meta Px Andesite
25	83NK091A	D1	Diorite
26	83NK094A	D1	Diorite
27	83NK095A	D1	Fe-stained Bi Granodiorite
28	83NK095B	D1	Fe-stained Bi Granodiorite
29	83NK096A	D1	Fe-stained Bi Quartz Monzonite
30	83NK096B	D1	Quartz Vein
31	83NK098A	D5	Amygdaloidal Metabasalt
32	83NK103B	D5	Meta Hb Gabbro
33	83NK104A	D1	Metagabbro
34	83NK108A	D1	Bi Hb Diorite
35	83NK116A	D5	Meta Hb Gabbro
36	83NK121A	D5	Fine-grained Metagabbro
37	83NK126A	C5	Meta Hb Gabbro
38	83NK141A	D1	Bi Hb Diorite
39	83NK143A	D1	Bi Hb Quartz Monzonite
40	83NK161A	D3	Bi Hb Quartz Monzonite
41	83NK172A	D3	Bi Quartz Diorite
42	83NK178A	D4	Greenstone
43	83NK183A	D3	Bi Quartz Diorite
44	83NK186A	C3	Bi Quartz Diorite
45	83NK187A	C3	Bi Granodiorite

46	83NK213A	D4	Gabbro
47	83SB013A	C1	Amygdaloidal Bi Hb Andesite
48	83SB021A	D1	Bi Hb Quartz Monzonite
49	83SB044A	D1	Porphyritic Basalt
50	83SB050A	D4	Granodiorite
51	83SB077B	D3	Hb Diorite
52	83SB081A	D6	Greenschist Metabasalt
53	83SB094A	D6	Hb Granodiorite
54	83IL001A	D1	Bi Hb fg Quartz Monzonite
55	83IL002A	D1	Bi Hb Quartz Monzonite
56	83IL003A	D1	Altered Pyritic Intrusive Rock
57	83IL004A	D1	Altered Quartz Monzonite
58	83IL004B	D1	Altered Quartz Monzonite
59	83IL005A	D1	Altered Pc-Porphyritic Igneous Rock
60	83IL006A	D1	Altered Porphyritic Granitoid
61	83IL008A	D1	Conglomerate/Breccia
62	83IL008B	D1	Gossan
63	83IL012A	D1	Altered Fs-Porphyritic Volcanic Rock
64	83IL012B	D1	Altered Volcanic Rock
65	83IL012C	D1	Altered Porphyritic Felsic Volcanic Rock
66	83IL015A	D1	Altered Granitoid
67	83IL016A	D1	vfg Layered Rock
68	83IL021B	D1	Quartz-Fe-Carbonate Vein
69	83IL028A	D1	Hb Granodiorite
70	83IL029A	D1	Sulfide-bearing vfg Silicified Volcanic Rock
71	83IL032A	D1	Altered Volcaniclastic Rock
72	83IL032B	D1	Altered Volcanic Rock
73	83IL035A	D1	Altered Felsic Intrusive Rock
74	83IL035B	D1	Altered Quartz Monzonite
75	83IL042A	D1	Altered Felsic Granitoid
76	83IL043A	D1	Felsic Hypabyssal Igneous Rock
77	83IL051C	D1	Bi Granodiorite
78	83IL051D	D1	Py-bearing Quartz Vein
79	83IL052A	D1	Altered Metavolcanic Rock
80	83IL053A	D1	Altered Metavolcanic Rock
81	83IL056A	D1	Altered Hb Andesite
82	83IL056B	D1	Altered Tonalite
83	83IL057A	D1	Altered Volcanic Rock
84	83IL057B	D1	Altered Tonalite
85	83IL058A	D1	Py-rich Altered Quartz Vein
86	83NK002A	C1	Bi Hb Andesite
87	83NK004B	D1	Py Magnetite Gossan
88	83NK006A	D1	Altered Silicified Hb Andesite
89	83NK007A	D1	Altered Bi Hb Andesite
90	83NK009A	D1	Bi Hb Diorite
91	83NK009B	D1	Fe-stained Bi Hb Quartz Diorite
92	83NK009C	D1	Bi Hb Diorite
93	83NK009D	D1	Bi Hb Andesite Dike
94	83NK009E	D1	Bi Hb Diorite Dike
95	83NK010A	D1	Altered Bi Hb Diorite
96	83NK011A	D1	Porphyritic Bi Hb Quartz Monzonite

97	83NK013A	D1	Bi Hb Quartz Monzonite
98	83NK056A	D1	Bi Quartz Monzonite
99	83NK056B	D1	Quartz Vein
100	83NK056C	D1	Fe-stained Metabasalt
101	83NK104D	D1	Quartz Vein
102	83NK108A	D1	Bi Hb Diorite
103	83NK109A	D1	Fe-stained Bi Quartz Monzonite
104	83NK109B	D1	Fe-stained Quartz-Carbonate Vein
105	83NK109C	D1	Malichite-stained Quartz Monzonite
106	83NK110A	D1	Fe-Stained Bi Quartz Monzonite
107	83NK111B	D1	Fe-Stained Bi Quartz Monzonite
108	83NK112A	D1	Bi Quartz Monzonite
109	83NK113B	D1	Bi Quartz Monzonite
110	83NK118A	D5	Schistose Metagabbro
111	83NK122A	D5	Hb Px Metagabbro
112	83NK143A	D1	Bi Hb Quartz Monzonite
113	83NK171B	D3	Fe-stained Chlorite Schist
114	83PB103A	D1	Metavolcanic Rock
115	83PB105A	D1	Altered Quartz Diorite
116	83PB106B	D1	Metavolcanic Rock
117	83SB002A	D1	Fe-stained vfg Hb Px Andesite
118	83SB003C	C1	Fe-stained sulfide-bearing Chert
119	83SB004A	C1	Amygduloidal Green Volcanic Rock
120	83SB007A	C1	Bi Hb Quartz Diorite
121	83SB008B	C1	Hb Granodiorite Dike
122	83SB009A	C1	Limestone
123	83SB012A	C1	Hb Px Diabase
124	83SB014A	C1	Amgdaloidal Bi Hb Px Andesite
125	83SB020A	C1	Quartz Vein
126	83SB029B	D1	Hb Px Andesite Tuff
127	83SB029C	D1	Porphyritic Bi Hb Quartz Diorite
128	83SB030D	D1	Bi Hb Quartz Diorite
129	83SB035A	D1	Fe-Stained Metatuff
130	83SB036A	D1	Hb Andesite Tuff(?)
131	83SB036B	D1	Fe-stained Aphanitic Rhyolite Dike
132	83SB042A	D1	Porphyritic Hb Andesite
133	83SB045A	D1	Porphyritic Hb Diorite Dike
134	83SB079A	D3	Fe-stained Hb Diorite
135	83SB080D	D4	Fe-stained Bi Quartz Porphyry
136	83SB080E	D4	Hb Px Basalt
137	83SB095A	D6	Hb Quartz Porphyry
138	83SB095B	D6	Hb Quartz Porphyry
139	83SB096A	D6	Meta-andesite Tuff
140	85DC006A	C6	Quartz Monzonite Schist
141	87DB016	A1	Silicified Volcanic Rock
142	87DB017A	A1	Silicified and Altered Andesite
143	87DB017B	A1	Silicified and Altered Andesite
144	87NK001A	B1	Px Andesite Breccia
145	87NK001B	B1	Metavolcanic Rock
146	87NK010A	D1	Massive Barite
147	87NK010B	D1	Quartz Porphyry

148	87RH005A	D1	Massive Magnetite with Cu-stain
149	87RH005B	D1	Pyrite/Magnetite Rock

Key to Abbreviations Used

Bi	Biotite
Fe	Iron
fg	Fine-grained
Fs	Feldspar
Hb	Hornblende
msv	Massive
Pc	Plagioclase
Px	Pyroxene
Py	Pyrite
vfg	very fine-grained

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska
 [N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown]

Sample	LATITUDE	LONGITUD	S_CA_PER	S_FE_PER	S_MG_PER	S_NA_PER	S_P_PERC	S_TI_PER
83BR001A	62 46 36	144 3 16	.5	1	1.5	--	--	.7
83BR002A	62 46 23	144 1 56	1.5	1	1.5	--	--	.2
83BR003A	62 46 20	144 1 30	1	1.5	1	--	--	.1
83BR012	62 45 18	144 1 48	.2	7	1.5	--	--	.3
83BR039B	62 52 45	144 0 47	7	1	.15	--	--	.05
83BR039A	62 52 45	144 0 47	2	2	.3	--	--	.15
83BR046A	62 48 18	146 35 3	3	10	5	--	--	1
83BR049A	62 48 32	146 39 10	3	7	5	--	--	.3
83BR054A	62 51 42	146 24 20	1	1	.5	--	--	.1
83IL001A	62 48 18	144 10 37	1.5	2	1.5	--	--	.3
83IL002A	62 48 28	144 10 12	2	3	2	--	--	.3
83IL002B	62 48 28	144 10 12	2	7	2	--	--	.5
83IL003A	62 48 20	144 10 20	<.05	3	.5	--	--	.1
83IL004A	62 48 13	144 10 0	<.05	2	.7	--	--	.2
83IL004B	62 48 13	144 10 0	<.05	1	.5	--	--	.3
83IL005A	62 47 48	144 9 40	<.05	1	.7	--	--	.2
83IL006A	62 47 47	144 9 53	<.05	1.5	.7	--	--	.3
83IL008A	62 46 48	144 10 50	.3	2	1	--	--	.3
83IL008B	62 46 48	144 10 50	.05	2	.7	--	--	.7
83IL012A	62 48 27	144 5 11	3	7	1	--	--	.7
83IL012B	62 48 27	144 5 11	3	7	.5	--	--	.7
83IL012C	62 48 27	144 5 11	7	5	3	--	--	.5
83IL015A	62 48 36	144 4 55	1.5	3	2	--	--	.7
83IL016A	62 46 25	144 2 18	3	.7	2	--	--	.7
83IL019A	62 46 17	144 33 7	3	10	5	--	--	.5
83IL021B	62 45 56	144 1 57	5	.5	.1	--	--	.05
83IL023A	62 45 41	144 1 45	.2	1	.3	--	--	.1
83IL028A	62 47 28	144 2 7	5	3	2	--	--	.3
83IL029A	62 46 59	144 2 24	5	5	2	--	--	.7
83IL032A	62 45 13	144 1 54	5	1.5	.7	--	--	.1
83IL032B	62 45 13	144 1 54	.2	2	.3	--	--	.5
83IL035A	62 53 0	144 2 0	5	1	2	--	--	.05
83IL035B	62 53 0	144 2 0	1	3	.2	--	--	.5
83IL038A	62 52 23	144 1 47	.7	5	.2	--	--	.2
83IL042A	62 52 47	144 1 0	10	7	5	--	--	.15
83IL043A	62 52 44	144 0 42	1.5	3	.7	--	--	.5
83IL051C	62 52 53	144 6 41	.15	7	.3	--	--	.3
83IL051D	62 52 53	144 6 41	10	10	.2	--	--	.3
83IL052A	62 53 26	144 7 54	.3	7	2	--	--	.5
83IL053A	62 53 22	144 7 42	.15	7	2	--	--	.5
83IL056A	62 53 52	144 7 40	7	7	2	--	--	.5
83IL056B	62 53 52	144 7 40	N	1	.7	--	--	.5
83IL057A	62 54 6	144 7 45	.3	5	1.5	--	--	.5
83IL057B	62 54 6	144 7 45	.15	5	2	--	--	.5
83IL058A	62 54 8	144 7 17	<.05	10	.7	--	--	.7
83NK002A	62 42 57	144 18 1	5	7	3	--	--	.5
83NK004B	62 54 12	144 3 42	<.05	>20	.05	--	--	.05
83NK006A	62 48 33	144 14 50	5	7	2	--	--	.5
83NK007A	62 48 17	144 15 7	5	5	2	--	--	.5
83NK009A	62 48 5	144 15 24	5	5	2	--	--	.5
83NK009B	62 48 5	144 15 24	1	7	2	--	--	.7
83NK009C	62 48 5	144 15 24	5	7	2	--	--	.5
83NK009D	62 48 5	144 15 24	5	7	2	--	--	.3
83NK009E	62 48 5	144 15 24	.7	7	2	--	--	.5
83NK010A	62 48 8	144 14 37	1.5	7	1.5	--	--	.5
83NK011A	62 53 45	144 12 22	2	7	2	--	--	.5
83NK013A	62 53 45	144 15 21	2	7	3	--	--	.5
83NK046A	62 48 17	144 13 32	1	5	1	--	--	.3
83NK056A	62 52 12	144 18 9	.7	5	2	--	--	.5
83NK056B	62 52 12	144 18 9	10	7	5	--	--	.15

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	S_AG	S_AS	S_AU	S_B	S_BA	S_BE	S_BI	S_CD	S_CO	S_CR	S_CU	S_GA	S_GE	S_LA
83BR001A	.5	N	N	<10	100	1	N	N	<5	<10	10	--	--	N
83BR002A	N	N	N	10	2,000	1	N	N	N	N	<5	--	--	N
83BR003A	N	N	N	10	3,000	<1	N	N	<5	N	N	--	--	70
83BR012	N	N	N	10	300	<1	N	N	N	30	30	--	--	N
83BR039B	1.5	N	N	<10	20	N	N	N	N	N	300	--	--	N
83BR039A	N	N	N	10	300	<1	N	N	10	<10	20	--	--	N
83BR046A	N	N	N	30	200	<1	N	N	50	200	200	--	--	N
83BR049A	N	N	N	20	50	N	N	N	100	200	100	--	--	N
83BR054A	N	N	N	50	700	2	N	N	N	<10	<5	--	--	N
83IL001A	N	N	N	20	2,000	7	N	N	20	10	5	--	--	200
83IL002A	<.5	N	N	30	3,000	5	N	N	30	30	20	--	--	150
83IL002B	<.5	N	N	50	1,500	1	N	N	50	15	500	--	--	<20
83IL003A	1.5	N	N	30	700	5	10	N	20	10	20	--	--	N
83IL004A	1	N	N	50	5,000	7	<10	N	10	N	20	--	--	150
83IL004B	.5	N	N	50	5,000	7	<10	N	N	20	15	--	--	100
83IL005A	<.5	N	N	50	500	10	N	N	N	10	7	--	--	200
83IL006A	<.5	N	N	50	2,000	7	N	N	N	10	5	--	--	200
83IL008A	N	N	N	150	2,000	5	N	N	5	10	<5	--	--	70
83IL008B	7	N	N	100	3,000	2	10	N	N	N	30	--	--	N
83IL012A	N	N	N	10	500	2	N	N	70	10	100	--	--	N
83IL012B	N	N	N	10	200	1	N	N	100	<10	10	--	--	N
83IL012C	N	N	N	<10	1,500	1	N	N	50	200	15	--	--	N
83IL015A	N	N	N	15	100	1	N	N	N	<10	<5	--	--	N
83IL016A	N	N	N	10	300	5	N	N	N	10	<5	--	--	100
83IL019A	N	N	N	50	700	N	N	N	50	50	100	--	--	N
83IL021B	N	N	N	<10	70	N	N	N	N	N	20	--	--	N
83IL023A	N	N	N	100	1,000	2	N	N	<5	<10	7	--	--	N
83IL028A	N	N	N	15	300	<1	N	N	20	200	100	--	--	N
83IL029A	<.5	N	N	N	300	<1	N	N	20	N	300	--	--	N
83IL032A	N	N	N	70	700	1.5	N	N	5	N	N	--	--	N
83IL032B	1.5	200	N	100	1,000	1.5	N	N	N	N	20	--	--	N
83IL035A	N	N	N	50	50	1	N	N	N	20	15	--	--	N
83IL035B	<.5	N	N	70	1,500	2	N	N	7	10	15	--	--	N
83IL038A	N	N	N	50	2,000	2	N	N	<5	<10	5	--	--	N
83IL042A	N	300	N	20	1,000	1.5	N	N	10	10	5	--	--	N
83IL043A	N	<200	N	50	2,000	1.5	N	N	15	20	15	--	--	N
83IL051C	N	N	N	<10	2,000	1.5	N	N	<5	N	100	--	--	N
83IL051D	<.5	N	N	10	300	1	N	N	5	N	30	--	--	N
83IL052A	.7	N	N	N	2,000	N	N	N	<5	30	200	--	--	N
83IL053A	3	N	N	15	700	N	N	N	50	100	300	--	--	N
83IL056A	<.5	N	N	10	500	<1	N	N	50	30	70	--	--	N
83IL056B	<.5	N	N	100	1,500	N	N	N	N	50	<5	--	--	N
83IL057A	N	N	N	10	1,500	<1	N	N	30	30	7	--	--	N
83IL057B	N	N	N	10	2,000	N	N	N	20	30	15	--	--	N
83IL058A	.7	N	N	<10	2,000	N	N	N	20	10	10	--	--	N
83NK002A	N	N	N	<10	70	<1	N	N	70	200	10	--	--	N
83NK004B	N	N	N	N	20	<1	N	N	30	N	50	--	--	N
83NK006A	N	N	N	15	2,000	2	N	N	30	20	5	--	--	70
83NK007A	N	N	N	10	3,000	2	N	N	30	15	10	--	--	70
83NK009A	N	N	N	10	2,000	1.5	N	N	30	20	7	--	--	70
83NK009B	.5	N	N	<10	3,000	1.5	N	N	15	70	5	--	--	150
83NK009C	N	N	N	<10	2,000	1	N	N	20	10	5	--	--	70
83NK009D	N	N	N	<10	1,500	<1	N	N	20	10	30	--	--	<20
83NK009E	1.5	N	N	10	5,000	2	N	N	30	100	50	--	--	200
83NK010A	N	N	N	10	5,000	1.5	N	N	20	70	100	--	--	200
83NK011A	<.5	N	N	15	3,000	2	N	N	50	150	30	--	--	200
83NK013A	N	N	N	20	2,000	2	N	N	50	100	30	--	--	200
83NK046A	N	N	N	50	2,000	2	N	N	20	20	50	--	--	<20
83NK056A	N	N	N	20	2,000	3	N	N	30	30	15	--	--	200
83NK056B	3	N	N	15	2,000	2	N	N	50	10	500	--	--	N

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	S_MN	S_MO	S_NB	S_NI	S_PB	S_SB	S_SC	S_SN	S_SR	S_TH	S_V	S_W	S_Y	S_ZN	S_ZR
83BR001A	150	N	N	5	<10	N	50	N	500	N	100	N	70	N	100
83BR002A	1,000	N	N	N	N	N	30	N	300	N	70	N	50	N	100
83BR003A	500	N	N	<5	15	N	20	N	200	N	20	N	100	N	100
83BR012	200	N	N	<5	<10	N	50	N	300	N	200	N	N	N	70
83BR039B	200	N	N	N	15	N	7	N	200	N	100	N	<10	N	10
83BR039A	700	N	N	10	20	N	10	N	150	N	70	N	30	N	70
83BR046A	1,000	5	N	100	<10	N	50	N	500	N	300	N	70	200	150
83BR049A	1,000	<5	N	200	<10	N	50	N	200	N	300	N	50	<200	20
83BR054A	500	N	N	<5	10	N	7	N	500	N	15	N	20	N	150
831L001A	1,000	7	20	7	100	N	15	N	1,000	N	100	N	50	N	200
831L002A	1,500	N	N	20	100	N	30	N	2,000	N	200	N	50	N	100
831L002B	1,000	<5	N	10	70	N	20	N	1,000	N	300	N	70	200	200
831L003A	100	<5	N	10	150	N	7	20	N	N	100	<50	N	N	300
831L004A	70	100	20	<5	20	N	10	15	150	N	100	<50	N	N	200
831L004B	50	30	20	N	50	N	15	<10	150	N	150	N	10	N	300
831L005A	150	10	30	N	20	N	10	N	N	N	100	N	30	N	300
831L006A	100	30	30	N	200	N	10	N	100	N	100	<50	15	N	200
831L008A	2,000	N	N	<5	20	N	30	N	100	N	100	N	50	N	150
831L008B	150	N	N	N	300	N	50	15	N	N	50	N	70	N	150
831L012A	100	<5	N	<5	<10	N	15	N	300	N	150	N	30	N	100
831L012B	200	5	N	5	<10	N	15	N	500	N	100	N	20	N	100
831L012C	2,000	N	N	30	15	N	50	N	1,000	N	200	N	30	N	100
831L015A	1,000	N	N	5	15	N	50	N	500	N	500	N	50	N	100
831L016A	200	N	N	N	<10	N	50	N	700	N	300	N	100	N	300
831L019A	1,500	<5	N	15	20	N	50	N	500	N	500	N	50	<200	100
831L021B	300	N	N	N	N	N	5	N	N	N	20	N	20	N	20
831L023A	1,000	N	<20	5	100	N	<5	N	300	N	20	N	20	N	70
831L028A	1,500	N	N	20	<10	N	50	N	700	N	200	N	70	N	100
831L029A	1,000	N	N	N	<10	N	50	N	500	N	300	N	50	N	70
831L032A	700	N	N	<5	<10	N	10	N	100	N	30	N	50	N	100
831L032B	300	7	N	7	70	N	50	N	N	N	200	N	30	500	100
831L035A	1,000	N	N	N	<10	N	5	N	N	N	70	N	N	N	20
831L035B	1,500	N	N	7	20	N	30	N	500	N	100	N	100	N	100
831L038A	1,000	N	N	5	30	N	20	N	300	N	10	N	100	N	300
831L042A	2,000	N	N	20	15	N	15	N	300	N	100	N	150	N	50
831L043A	1,500	N	N	10	20	N	30	N	300	N	150	N	70	N	150
831L051C	300	N	N	N	<10	N	30	N	200	N	15	N	70	N	70
831L051D	1,000	N	N	N	<10	N	30	N	1,000	N	70	N	70	N	100
831L052A	1,500	N	N	7	20	N	50	N	150	N	200	N	20	N	70
831L053A	500	20	N	10	1,500	N	50	N	N	N	200	N	30	<200	50
831L056A	2,000	N	N	10	20	N	50	N	500	N	200	N	50	N	100
831L056B	70	5	N	5	20	N	50	N	N	N	300	N	15	N	100
831L057A	700	10	N	<5	30	N	50	N	200	N	200	N	10	N	70
831L057B	700	5	N	5	<10	N	50	10	N	N	200	N	50	N	70
831L058A	100	N	N	5	10	N	70	15	N	N	700	N	50	N	50
83NK002A	2,000	N	N	70	100	N	70	N	500	N	500	N	50	N	50
83NK004B	150	N	N	10	10	N	N	N	N	N	100	N	N	N	<10
83NK006A	2,000	N	N	15	50	N	50	N	300	N	200	N	70	N	150
83NK007A	1,500	N	N	10	30	N	30	N	1,000	N	200	N	50	N	150
83NK009A	2,000	N	N	10	50	N	30	N	2,000	N	200	N	50	N	150
83NK009B	2,000	20	N	10	150	N	50	N	1,000	N	300	N	50	N	200
83NK009C	2,000	N	N	5	50	N	30	N	2,000	N	200	N	50	N	150
83NK009D	2,000	N	N	7	15	N	30	N	1,500	N	200	N	30	N	100
83NK009E	2,000	N	N	20	150	N	70	N	500	N	500	N	50	N	150
83NK010A	2,000	N	N	10	70	N	50	N	1,000	N	300	N	50	N	200
83NK011A	2,000	N	N	30	100	N	30	N	1,500	N	300	N	70	N	200
83NK013A	2,000	N	N	30	100	N	50	N	2,000	N	200	N	50	N	200
83NK046A	1,500	5	N	5	100	N	20	N	300	N	100	N	50	200	200
83NK056A	1,000	N	N	15	70	N	30	N	500	N	150	N	50	N	300
83NK056B	2,000	N	N	30	150	N	20	N	200	N	150	N	50	N	100

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	AA_AS	AA_BI	AA_CD	AA_SB	AA_ZN	AS_P_PPM	BI_P_PPM	CD_P_PPM	SB_P_PPM	ZN_P_PPM
83BR001A	N	N	<.1	N	10	--	--	--	--	--
83BR002A	N	N	N	N	15	--	--	--	--	--
83BR003A	N	N	.1	N	20	--	--	--	--	--
83BR012	N	N	N	N	10	--	--	--	--	--
83BR039B	N	N	.6	N	75	--	--	--	--	--
83BR039A	30	N	.1	N	65	--	--	--	--	--
83BR046A	N	N	N	N	45	--	--	--	--	--
83BR049A	N	N	N	N	35	--	--	--	--	--
83BR054A	N	N	N	2	N	--	--	--	--	--
83IL001A	N	N	.1	N	25	--	--	--	--	--
83IL002A	N	N	.1	N	45	--	--	--	--	--
83IL002B	N	N	.6	N	110	--	--	--	--	--
83IL003A	N	6	N	N	5	--	--	--	--	--
83IL004A	N	6	N	N	5	--	--	--	--	--
83IL004B	N	2	N	N	5	--	--	--	--	--
83IL005A	N	N	N	N	5	--	--	--	--	--
83IL006A	N	N	N	N	5	--	--	--	--	--
83IL008A	60	N	N	N	25	--	--	--	--	--
83IL008B	10	10	N	N	20	--	--	--	--	--
83IL012A	10	N	N	N	5	--	--	--	--	--
83IL012B	100	N	N	N	5	--	--	--	--	--
83IL012C	N	N	N	N	30	--	--	--	--	--
83IL015A	N	N	N	N	25	--	--	--	--	--
83IL016A	N	N	N	N	10	--	--	--	--	--
83IL019A	N	N	N	N	55	--	--	--	--	--
83IL021B	N	N	N	10	15	--	--	--	--	--
83IL023A	N	N	.2	N	25	--	--	--	--	--
83IL028A	N	N	N	N	10	--	--	--	--	--
83IL029A	N	N	N	N	10	--	--	--	--	--
83IL032A	N	N	N	N	15	--	--	--	--	--
83IL032B	140	N	1.3	4	250	--	--	--	--	--
83IL035A	40	N	N	2	75	--	--	--	--	--
83IL035B	20	N	N	N	55	--	--	--	--	--
83IL038A	N	N	N	N	40	--	--	--	--	--
83IL042A	300	N	N	N	40	--	--	--	--	--
83IL043A	10	N	N	N	50	--	--	--	--	--
83IL051C	70	N	N	N	10	--	--	--	--	--
83IL051D	N	N	N	N	5	--	--	--	--	--
83IL052A	N	N	N	N	40	--	--	--	--	--
83IL053A	40	N	.7	2	160	--	--	--	--	--
83IL056A	N	N	.1	N	30	--	--	--	--	--
83IL056B	10	N	N	N	5	--	--	--	--	--
83IL057A	10	N	N	N	15	--	--	--	--	--
83IL057B	N	N	N	N	20	--	--	--	--	--
83IL058A	180	4	N	N	5	--	--	--	--	--
83NK002A	10	N	.4	N	100	--	--	--	--	--
83NK004B	30	N	.1	N	20	--	--	--	--	--
83NK006A	N	N	N	N	80	--	--	--	--	--
83NK007A	N	N	N	N	30	--	--	--	--	--
83NK009A	N	N	N	N	35	--	--	--	--	--
83NK009B	N	N	N	N	45	--	--	--	--	--
83NK009C	N	N	N	N	35	--	--	--	--	--
83NK009D	N	N	N	N	30	--	--	--	--	--
83NK009E	30	N	N	N	50	--	--	--	--	--
83NK010A	N	N	N	N	45	--	--	--	--	--
83NK011A	N	N	N	N	30	--	--	--	--	--
83NK013A	10	N	N	N	40	--	--	--	--	--
83NK046A	80	N	N	N	140	--	--	--	--	--
83NK056A	10	N	N	N	35	--	--	--	--	--
83NK056B	30	N	.8	30	85	--	--	--	--	--

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUD	S_CA_PER	S_FE_PER	S_MG_PER	S_NA_PER	S_P_PERC	S_TI_PER
83NK056C	62 52 12	144 18 9	1	10	3	--	--	.7
83NK060A	62 51 30	144 18 0	.1	10	3	--	--	.7
83NK078B	62 54 10	144 19 55	2	5	5	--	--	.3
83NK079B	62 54 13	144 20 35	1	5	1.5	--	--	.3
83NK082A	62 55 40	144 18 59	2	5	2	--	--	.2
83NK084A	62 56 11	144 20 26	1	5	3	--	--	.3
83NK084C	62 56 11	144 20 26	10	3	3	--	--	.2
83NK086A	62 57 22	144 20 30	1	3	2	--	--	.2
83NK088A	62 56 57	144 24 32	.2	5	2	--	--	.5
83NK091A	62 59 8	144 9 42	1	5	2	--	--	.3
83NK094A	62 57 2	144 9 25	.7	1	.5	--	--	.2
83NK095A	62 53 47	144 3 21	1	2	.3	--	--	.2
83NK095B	62 53 47	144 3 21	1	1	.2	--	--	.2
83NK096A	62 54 8	144 3 58	5	5	1.5	--	--	.3
83NK096B	62 54 8	144 3 58	3	.5	.1	--	--	.007
83NK098A	62 48 12	146 16 47	5	10	3	--	--	1
83NK103B	62 51 7	146 14 24	5	10	3	--	--	1
83NK104A	62 56 36	144 6 2	1	5	2	--	--	.3
83NK104D	62 56 36	144 6 2	2	15	1	--	--	.05
83NK108A	62 54 42	144 1 46	5	7	2	--	--	.3
83NK109A	62 54 42	144 2 2	2	3	.7	--	--	.15
83NK109B	62 54 42	144 2 2	N	20	.05	--	--	.03
83NK109C	62 54 42	144 2 2	.3	2	.7	--	--	.2
83NK110A	62 54 39	144 5 21	5	5	1	--	--	.5
83NK111B	62 54 38	144 5 50	10	3	2	--	--	.15
83NK112A	62 54 18	144 5 35	15	10	5	--	--	.05
83NK113B	62 55 44	144 7 21	3	3	1.5	--	--	.3
83NK116A	62 50 28	146 5 58	2	5	5	--	--	.1
83NK118A	62 50 45	146 5 1	2	7	10	--	--	.15
83NK121A	62 52 3	146 2 35	5	10	5	--	--	1
83NK122A	62 52 10	146 1 56	10	7	5	--	--	.5
83NK126A	62 52 50	145 57 50	5	5	5	--	--	.5
83NK141A	62 57 15	144 6 25	2	5	2	--	--	.2
83NK143A	62 52 25	144 15 35	2	3	2	--	--	.5
83NK161A	62 56 5	144 10 52	2	3	1	--	--	.2
83NK171B	62 49 47	145 28 18	10	3	1	--	--	.7
83NK172A	62 49 35	145 28 30	1	1	.5	--	--	.1
83NK178A	62 59 45	145 49 12	2	7	5	--	--	.5
83NK183A	62 49 4	145 28 32	1	1	.3	--	--	.1
83NK186A	62 40 9	145 27 58	.5	.7	.3	--	--	.1
83NK187A	62 41 13	145 26 45	.7	1.5	.5	--	--	.15
83NK213A	62 51 5	145 46 10	2	10	3	--	--	.7
83PB103A	62 52 47	144 6 53	.5	3	.7	--	--	.2
83PB105A	62 53 53	144 7 36	1.5	3	2	--	--	.3
83PB106B	62 47 30	144 1 16	.2	1.5	1	--	--	.2
83SB002A	62 45 1	144 14 52	3	3	2	--	--	.5
83SB003C	62 44 44	144 15 39	5	2	2	--	--	.7
83SB004A	62 44 36	144 15 42	5	10	2	--	--	1
83SB007A	62 44 31	144 22 38	5	3	2	--	--	.5
83SB008B	62 44 27	144 20 50	>20	1.5	10	--	--	.05
83SB009A	62 44 20	144 21 5	>20	.15	3	--	--	.02
83SB012A	62 43 21	144 17 38	7	7	5	--	--	.7
83SB013A	62 43 17	144 16 8	3	10	5	--	--	.5
83SB014A	62 44 58	144 13 22	2	3	1.5	--	--	.2
83SB020A	62 44 0	144 3 33	1	1	.3	--	--	.03
83SB021A	62 55 23	144 12 28	3	15	5	--	--	.7
83SB029B	62 58 53	144 14 53	5	7	2	--	--	.5
83SB029C	62 58 53	144 14 53	5	7	2	--	--	.5
83SB030D	62 58 28	144 15 0	5	7	2	--	--	.5
83SB035A	62 57 29	144 13 46	.5	5	2	--	--	.3

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	S_AG	S_AS	S_AU	S_B	S_BA	S_BE	S_BI	S_CD	S_CO	S_CR	S_CU	S_GA	S_GE	S_LA
83NK056C	1	N	N	10	1,500	N	N	N	70	N	200	--	--	N
83NK060A	1.5	N	N	15	1,000	<1	N	N	30	<10	50	--	--	<20
83NK078B	N	N	N	70	2,000	N	N	N	50	100	70	--	--	N
83NK079B	<.5	N	N	20	3,000	3	N	N	20	20	7	--	--	200
83NK082A	N	N	N	50	1,000	2	N	N	15	10	15	--	--	50
83NK084A	N	N	N	50	1,500	<1	N	N	50	70	70	--	--	N
83NK084C	N	N	N	15	500	1	N	N	20	N	<5	--	--	<20
83NK086A	N	N	N	10	1,000	1	N	N	20	N	7	--	--	N
83NK088A	N	N	N	<10	50	1	N	N	30	N	15	--	--	N
83NK091A	.5	N	N	20	1,500	N	N	N	20	150	200	--	--	N
83NK094A	N	N	N	20	1,500	1	N	N	7	10	50	--	--	70
83NK095A	N	N	N	10	2,000	1	N	N	N	N	<5	--	--	N
83NK095B	N	N	N	50	3,000	1	N	N	N	N	<5	--	--	N
83NK096A	.5	N	N	70	200	<1	N	N	50	200	500	--	--	N
83NK096B	1	N	N	<10	>5,000	N	N	N	N	N	700	--	--	N
83NK098A	N	N	N	<10	150	<1	N	N	100	300	150	--	--	N
83NK103B	N	N	N	<10	20	N	N	N	150	100	200	--	--	N
83NK104A	N	N	N	50	500	<1	N	N	20	150	50	--	--	N
83NK104D	.7	N	N	<10	2,000	1.5	N	N	15	10	150	--	--	N
83NK108A	<.5	N	N	10	1,500	N	N	N	30	300	20	--	--	N
83NK109A	N	N	N	15	2,000	<1	N	N	N	N	5	--	--	N
83NK109B	50	1,000	N	N	700	N	N	N	N	N	200	--	--	N
83NK109C	<.5	N	N	15	2,000	1	N	N	70	N	15,000	--	--	N
83NK110A	N	N	N	15	2,000	1	N	N	10	10	200	--	--	N
83NK111B	N	N	N	20	1,000	<1	N	N	15	N	20	--	--	N
83NK112A	N	N	N	10	>5,000	N	N	N	30	10	20	--	--	N
83NK113B	N	N	N	50	300	N	N	N	15	20	<5	--	--	N
83NK116A	N	N	N	10	<20	N	N	N	50	300	70	--	--	N
83NK118A	N	N	N	N	<20	N	N	N	100	3,000	50	--	--	N
83NK121A	N	N	N	20	50	N	N	N	50	300	50	--	--	N
83NK122A	N	N	N	<10	50	<1	N	N	70	500	30	--	--	N
83NK126A	N	N	N	50	100	N	N	N	50	200	20	--	--	N
83NK141A	N	N	N	100	2,000	<1	N	N	30	200	50	--	--	N
83NK143A	N	N	N	1,000	2,000	5	N	N	20	30	20	--	--	100
83NK161A	N	N	N	20	1,500	<1	N	N	10	10	10	--	--	N
83NK171B	N	N	N	100	70	<1	N	N	30	300	7	--	--	N
83NK172A	N	N	N	30	1,500	1	N	N	5	<10	<5	--	--	N
83NK178A	N	N	N	10	300	N	N	N	50	700	100	--	--	N
83NK183A	<.5	N	N	50	1,500	<1	N	N	<5	10	<5	--	--	N
83NK186A	<.5	N	N	20	1,500	<1	N	N	<5	N	<5	--	--	N
83NK187A	N	N	N	100	2,000	<1	N	N	5	<10	5	--	--	N
83NK213A	N	N	N	20	300	N	N	N	100	200	70	--	--	N
83PB103A	N	N	N	10	70	1.5	N	N	20	N	30	--	--	N
83PB105A	N	N	N	<10	200	1	N	N	20	30	30	--	--	N
83PB106B	N	N	N	20	3,000	1.5	N	N	N	<10	7	--	--	N
83SB002A	N	N	N	10	2,000	1.5	N	N	30	50	20	--	--	N
83SB003C	<.5	N	N	50	500	2	N	N	50	100	30	--	--	N
83SB004A	1	N	N	<10	700	1	N	N	70	10	300	--	--	N
83SB007A	N	N	N	10	1,500	2	N	N	30	<10	30	--	--	N
83SB008B	N	N	N	10	N	N	N	N	15	15	50	--	--	N
83SB009A	N	N	N	N	N	N	N	N	N	N	N	--	--	N
83SB012A	N	N	N	10	70	<1	N	N	50	700	30	--	--	N
83SB013A	N	N	N	20	500	N	N	N	70	700	20	--	--	N
83SB014A	N	N	N	70	3,000	2	N	N	<5	N	5	--	--	N
83SB020A	1.5	1,500	N	<10	50	2	N	20	<5	N	30	--	--	N
83SB021A	N	N	N	70	2,000	1	N	N	50	100	200	--	--	100
83SB029B	N	N	N	15	2,000	1.5	N	N	20	10	150	--	--	N
83SB029C	N	N	N	15	500	1	N	N	50	50	10	--	--	N
83SB030D	<.5	N	N	<10	2,000	1	N	N	30	200	70	--	--	N
83SB035A	2	N	N	15	1,500	<1	N	N	10	30	7	--	--	N

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	S_MN	S_MO	S_NB	S_NI	S_PB	S_SB	S_SC	S_SN	S_SR	S_TH	S_V	S_W	S_Y	S_ZN	S_ZR
83NK056C	2,000	N	N	15	20	N	70	N	<100	N	700	N	70	N	100
83NK060A	1,500	N	N	5	100	N	50	N	N	N	300	N	50	<200	100
83NK078B	1,500	<5	N	100	50	N	30	N	2,000	N	200	N	50	<200	50
83NK079B	2,000	N	30	15	100	N	20	N	300	N	200	N	70	N	500
83NK082A	1,500	N	N	7	50	N	15	N	1,000	N	150	N	30	N	150
83NK084A	2,000	<5	N	20	20	N	50	N	500	N	300	N	50	200	100
83NK084C	2,000	N	N	10	50	N	30	N	300	N	100	N	50	N	100
83NK086A	1,000	N	N	N	<10	N	30	N	200	N	200	N	50	N	100
83NK088A	2,000	N	N	5	<10	N	50	N	100	N	200	N	50	N	150
83NK091A	1,000	N	N	20	30	N	30	N	300	N	150	N	50	N	100
83NK094A	500	N	N	5	20	N	10	N	300	N	30	N	20	N	150
83NK095A	300	N	N	<5	10	N	20	N	300	N	20	N	70	N	100
83NK095B	500	N	N	<5	<10	N	20	N	500	N	100	N	50	N	150
83NK096A	1,500	30	N	30	<10	N	50	N	150	N	200	N	50	N	50
83NK096B	300	20	N	N	N	N	N	N	300	N	<10	N	N	N	N
83NK098A	1,500	N	N	100	N	N	70	N	500	N	700	N	70	N	100
83NK103B	2,000	N	N	50	N	N	70	N	200	N	1,500	N	70	N	50
83NK104A	1,000	N	N	20	20	N	30	N	300	N	200	N	50	N	150
83NK104D	300	70	N	N	20	N	20	50	200	N	150	N	15	N	100
83NK108A	1,500	N	N	50	10	N	50	N	500	N	200	N	50	N	70
83NK109A	1,000	N	N	N	N	N	20	N	300	N	70	N	50	N	150
83NK109B	50	10	N	N	<10	N	5	N	500	N	20	N	N	N	20
83NK109C	700	N	N	10	N	N	15	<10	300	N	50	N	50	300	100
83NK110A	1,000	7	N	5	15	N	30	N	700	N	100	N	50	N	50
83NK111B	1,000	N	N	20	10	N	15	N	700	N	50	N	50	N	100
83NK112A	3,000	N	N	20	15	N	15	N	1,000	N	100	N	70	N	N
83NK113B	2,000	N	N	5	10	N	30	N	200	N	150	N	50	N	70
83NK116A	1,000	N	N	200	N	N	20	N	200	N	50	N	<10	<200	<10
83NK118A	1,000	N	N	1,000	N	N	30	N	N	N	100	N	N	N	N
83NK121A	1,500	<5	N	100	50	N	50	N	500	N	200	N	70	200	100
83NK122A	2,000	N	N	100	10	N	70	N	500	N	200	N	50	N	30
83NK126A	1,000	N	N	50	10	N	50	N	500	N	200	N	70	<200	20
83NK141A	1,000	<5	N	50	50	N	30	N	500	N	200	N	50	<200	50
83NK143A	1,500	300	N	20	100	N	20	N	1,000	N	150	N	50	N	100
83NK161A	1,000	N	N	5	70	N	20	N	1,500	N	200	N	20	<200	50
83NK171B	1,500	N	N	50	<10	N	50	N	200	N	300	N	70	N	70
83NK172A	500	N	N	5	50	N	<5	N	1,500	N	20	N	N	N	100
83NK178A	1,000	<5	N	100	10	N	50	N	200	200	200	N	30	<200	30
83NK183A	500	N	N	5	50	N	10	N	1,500	N	20	N	N	N	100
83NK186A	300	N	N	<5	50	N	<5	N	1,000	N	10	N	N	N	50
83NK187A	700	N	N	5	50	N	<5	N	1,000	N	10	N	N	N	100
83NK213A	1,000	5	N	100	100	N	100	N	300	N	500	N	70	500	100
83PB103A	500	N	N	5	<10	N	20	N	300	N	20	N	70	N	100
83PB105A	1,000	N	N	5	20	N	30	N	300	N	200	N	20	200	70
83PB106B	200	N	N	N	15	N	20	<10	300	N	70	N	50	N	150
83SB002A	1,500	N	N	15	100	N	50	N	300	N	300	N	30	N	150
83SB003C	100	5	N	100	20	N	30	N	1,500	N	300	N	30	N	150
83SB004A	2,000	N	N	30	N	N	70	N	300	N	500	N	70	N	70
83SB007A	2,000	<5	N	10	15	N	20	N	1,000	N	200	N	50	N	100
83SB008B	200	N	N	20	<10	N	N	N	200	N	100	N	N	N	20
83SB009A	300	N	N	N	N	N	N	N	500	N	20	N	N	N	15
83SB012A	2,000	N	N	100	N	N	50	N	500	N	500	N	50	N	100
83SB013A	1,000	N	N	150	N	N	50	N	500	N	300	N	30	N	20
83SB014A	5,000	N	N	<5	10	N	20	N	200	N	50	N	50	N	100
83SB020A	300	10	N	N	15	200	N	N	N	N	15	N	N	1,500	10
83SB021A	2,000	<5	N	20	200	N	50	N	1,000	N	500	N	100	<200	200
83SB029B	2,000	N	N	7	10	N	50	N	500	N	500	N	30	N	30
83SB029C	2,000	N	N	20	<10	N	30	N	1,000	N	300	N	30	N	70
83SB030D	2,000	N	N	30	<10	N	30	N	1,500	N	300	N	30	N	100
83SB035A	2,000	N	N	15	100	N	30	N	100	N	150	N	30	200	100

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	AA_AS	AA_BI	AA_CD	AA_SB	AA_ZN	AS_P_PPM	BI_P_PPM	CD_P_PPM	SB_P_PPM	ZN_P_PPM
83NK056C	10	N	N	4	100	--	--	--	--	--
83NK060A	80	N	N	24	120	--	--	--	--	--
83NK078B	N	N	N	N	30	--	--	--	--	--
83NK079B	10	N	.7	2	95	--	--	--	--	--
83NK082A	N	N	N	N	30	--	--	--	--	--
83NK084A	N	N	N	N	90	--	--	--	--	--
83NK084C	N	N	1.7	N	110	--	--	--	--	--
83NK086A	N	N	N	N	30	--	--	--	--	--
83NK088A	N	N	N	N	85	--	--	--	--	--
83NK091A	N	N	N	N	30	--	--	--	--	--
83NK094A	N	N	N	N	15	--	--	--	--	--
83NK095A	N	N	N	N	15	--	--	--	--	--
83NK095B	10	N	N	N	25	--	--	--	--	--
83NK096A	20	N	.1	N	35	--	--	--	--	--
83NK096B	10	N	.3	N	20	--	--	--	--	--
83NK098A	N	N	<.1	N	45	--	--	--	--	--
83NK103B	N	N	<.1	N	20	--	--	--	--	--
83NK104A	N	N	N	N	40	--	--	--	--	--
83NK104D	10	2	.1	N	25	--	--	--	--	--
83NK108A	N	N	.1	N	25	--	--	--	--	--
83NK109A	10	N	.2	N	20	--	--	--	--	--
83NK109B	1,000	2	N	N	5	--	--	--	--	--
83NK109C	30	N	.9	N	230	--	--	--	--	--
83NK110A	80	N	N	N	20	--	--	--	--	--
83NK111B	10	N	N	N	20	--	--	--	--	--
83NK112A	10	N	.4	N	90	--	--	--	--	--
83NK113B	10	N	<.1	N	45	--	--	--	--	--
83NK116A	N	N	N	N	10	--	--	--	--	--
83NK118A	N	N	N	N	10	--	--	--	--	--
83NK121A	N	N	N	N	5	--	--	--	--	--
83NK122A	N	N	N	N	5	--	--	--	--	--
83NK126A	N	N	N	N	5	--	--	--	--	--
83NK141A	N	N	N	N	20	--	--	--	--	--
83NK143A	30	N	.2	N	40	--	--	--	--	--
83NK161A	N	N	N	N	25	--	--	--	--	--
83NK171B	20	N	.2	N	--	--	--	--	--	--
83NK172A	N	N	N	N	20	--	--	--	--	--
83NK178A	N	N	N	N	15	--	--	--	--	--
83NK183A	N	N	N	N	20	--	--	--	--	--
83NK186A	N	N	N	N	20	--	--	--	--	--
83NK187A	N	N	N	N	40	--	--	--	--	--
83NK213A	N	N	N	N	55	--	--	--	--	--
83PB103A	N	N	N	N	15	--	--	--	--	--
83PB105A	N	N	N	N	110	--	--	--	--	--
83PB106B	N	N	.8	N	5	--	--	--	--	--
83SB002A	20	N	<.1	10	40	--	--	--	--	--
83SB003C	N	N	N	4	10	--	--	--	--	--
83SB004A	10	N	.2	4	60	--	--	--	--	--
83SB007A	N	N	.1	N	20	--	--	--	--	--
83SB008B	N	N	.4	N	15	--	--	--	--	--
83SB009A	N	N	N	2	5	--	--	--	--	--
83SB012A	N	N	N	N	30	--	--	--	--	--
83SB013A	N	N	N	N	55	--	--	--	--	--
83SB014A	N	N	.1	2	75	--	--	--	--	--
83SB020A	610	N	12	28	760	--	--	--	--	--
83SB021A	N	N	.3	N	90	--	--	--	--	--
83SB029B	N	N	N	N	20	--	--	--	--	--
83SB029C	N	N	N	N	10	--	--	--	--	--
83SB030D	N	N	N	N	15	--	--	--	--	--
83SB035A	10	N	.6	2	140	--	--	--	--	--

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	LATITUDE	LONGITUD	S_CA_PER	S_FE_PER	S_MG_PER	S_NA_PER	S_P_PERC	S_TI_PER
83SB036A	62 57 28	144 13 30	1.5	7	3	--	--	.3
83SB036B	62 57 28	144 13 30	.5	5	3	--	--	.3
83SB042A	62 49 48	144 4 27	5	7	2	--	--	.5
83SB044A	62 50 5	144 5 7	2	7	1.5	--	--	.5
83SB045A	62 50 2	144 5 57	2	5	1	--	--	.3
83SB050A	62 56 56	145 42 49	.7	2	.5	--	--	.3
83SB077B	62 48 3	145 19 42	3	10	3	--	--	.7
83SB079A	62 48 14	145 7 47	5	10	2	--	--	>1
83SB080D	62 54 4	145 45 28	2	2	1	--	--	.2
83SB080E	62 54 4	145 45 28	1	10	2	--	--	.2
83SB081A	62 47 10	146 23 57	3	10	5	--	--	1
83SB094A	62 52 25	146 40 42	1	2	1	--	--	.2
83SB095A	62 51 23	146 39 47	1	1.5	.7	--	--	.15
83SB095B	62 51 23	146 39 47	2	1.5	.7	--	--	.1
83SB096A	62 50 46	146 39 4	7	7	3	--	--	.5
85DC006A	62 33 54	146 40 15	1.5	5	.5	--	--	.2
85IL027A	62 41 12	145 26 37	<.05	20	N	--	--	.002
87DB016	62 0 41	144 22 16	1.5	7	5	>5	N	.7
87DB017A	62 0 42	144 21 43	3	5	2	>5	N	.5
87DB017B	62 0 42	144 21 43	.2	5	1	>5	N	.5
87NK001A	62 24 14	144 9 20	2	7	1	2	N	.7
87NK001B	62 24 14	144 9 20	3	7	2	5	N	.7
87NK010A	62 56 47	144 29 3	<.05	.3	<.02	N	N	.003
87NK010B	62 56 47	144 29 3	.05	.5	.3	N	N	.1
87RH005A	62 59 2	144 3 34	1.5	>20	.5	N	N	.005
87RH005B	62 58 0	144 7 0	<.05	>20	.3	N	N	.02

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	S_AG	S_AS	S_AU	S_B	S_BA	S_BE	S_BI	S_CD	S_CO	S_CR	S_C'I	S_GA	S_GE	S_LA
83SB036A	1	N	N	10	1,000	<1	N	N	100	100	20	--	--	N
83SB036B	1	N	N	10	200	N	N	N	20	30	10	--	--	N
83SB042A	N	N	N	<10	30	<1	N	N	15	<10	30	--	--	N
83SB044A	N	N	N	50	2,000	<1	N	N	30	<10	300	--	--	20
83SB045A	<.5	N	N	15	3,000	2	N	<20	15	N	7	--	--	N
83SB050A	N	N	N	50	2,000	1	N	N	7	10	5	--	--	N
83SB077B	N	N	N	15	50	N	N	N	100	200	200	--	--	N
83SB079A	.5	N	N	<10	20	1	N	N	100	N	200	--	--	N
83SB080D	N	N	N	<10	70	1.5	N	N	15	N	15	--	--	N
83SB080E	N	N	N	<10	300	2	N	N	<5	50	50	--	--	N
83SB081A	N	N	N	10	20	N	N	N	100	300	150	--	--	N
83SB094A	N	N	N	50	1,500	1	N	N	5	15	50	--	--	N
83SB095A	N	N	N	<10	1,500	1.5	N	N	N	<10	<5	--	--	N
83SB095B	N	N	N	<10	1,500	2	N	N	5	<10	10	--	--	N
83SB096A	.5	N	N	10	1,500	1	N	N	70	150	50	--	--	N
85DC006A	2	N	N	10	300	<1	10	N	15	N	300	--	--	N
85IL027A	1,000	1,000	<10	N	N	N	1,000	50	15	N	>20,000	--	--	N
87DB016	N	N	N	<10	700	<1	N	N	30	100	100	30	N	<50
87DB017A	N	N	N	10	1,000	N	N	N	20	70	30	30	N	<50
87DB017B	N	N	N	10	700	N	N	N	N	30	15	30	N	N
87NK001A	N	N	N	10	500	<1	N	N	15	150	50	20	N	N
87NK001B	N	N	N	10	70	N	N	N	15	150	20	30	N	N
87NK010A	20	N	N	N	>5,000	N	N	N	N	N	30	N	N	N
87NK010B	1.5	N	N	<10	>5,000	N	N	N	N	<10	<5	10	N	N
87RH005A	N	N	N	N	700	N	N	N	70	10	700	N	N	N
87RH005B	15	N	N	N	300	N	N	N	200	15	2,000	N	N	N

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	S_MN	S_MO	S_NB	S_NI	S_PB	S_SB	S_SC	S_SN	S_SR	S_TH	S_V	S_W	S_Y	S_ZN	S_ZR
83SB036A	2,000	N	N	20	50	N	50	N	200	N	200	N	20	500	50
83SB036B	2,000	N	N	10	100	N	20	<10	<100	N	200	N	50	N	100
83SB042A	2,000	N	N	5	N	N	50	N	500	N	300	N	70	N	70
83SB044A	1,000	<5	N	5	70	N	30	N	1,000	N	200	N	50	<200	200
83SB045A	2,000	N	N	<5	50	N	10	N	2,000	N	150	N	20	700	100
83SB050A	700	N	N	<5	50	N	10	N	500	N	70	N	70	N	200
83SB077B	1,000	<5	N	100	10	N	50	N	200	N	300	N	70	<200	150
83SB079A	2,000	N	N	15	N	N	50	N	300	N	700	N	150	N	150
83SB080D	2,000	<5	N	N	N	N	20	N	500	N	70	N	20	N	100
83SB080E	2,000	N	N	30	N	N	10	N	<100	N	300	N	70	N	70
83SB081A	1,000	5	N	100	<10	N	70	N	700	N	300	N	70	200	150
83SB094A	500	N	N	5	20	N	10	N	500	N	50	N	20	N	100
83SB095A	1,000	N	N	<5	15	N	10	N	300	N	70	N	20	N	150
83SB095B	1,500	10	N	5	15	N	10	N	300	N	70	N	20	N	100
83SB096A	3,000	N	N	50	20	N	50	N	1,000	N	500	N	30	200	50
85OC006A	500	N	N	15	10	N	20	N	200	N	70	N	30	N	100
85IL027A	100	N	N	N	300	<100	N	N	N	N	N	N	N	10,000	N
87DB016	1,000	N	N	50	20	N	20	N	700	N	200	N	15	N	150
87DB017A	1,000	N	N	30	<10	N	15	N	700	N	200	N	15	N	150
87DB017B	200	15	N	5	10	N	10	N	500	N	150	N	<10	N	70
87NK001A	500	N	N	30	<10	N	15	N	500	N	200	N	15	N	70
87NK001B	500	N	N	50	<10	N	15	N	500	N	200	N	15	N	70
87NK010A	N	30	N	N	150	N	N	N	>5,000	N	<10	N	N	N	<10
87NK010B	20	N	N	N	100	N	<5	N	1,000	N	<10	N	10	N	70
87RH005A	1,000	N	N	70	10	N	N	N	N	N	50	70	N	N	N
87RH005B	200	N	N	10	<10	N	N	N	N	N	50	N	N	N	N

Table 6. Geochemical data for rock samples, Gulkana quadrangle, Alaska--Continued

Sample	AA_AS	AA_BI	AA_CD	AA_SB	AA_ZN	AS_P_PPM	BI_P_PPM	CD_P_PPM	SB_P_PPM	ZN_P_PPM
83SB036A	N	N	.7	N	200	--	--	--	--	--
83SB036B	10	N	.4	N	90	--	--	--	--	--
83SB042A	N	N	N	N	20	--	--	--	--	--
83SB044A	N	N	N	N	60	--	--	--	--	--
83SB045A	10	N	1.8	N	280	--	--	--	--	--
83SB050A	N	N	N	N	15	--	--	--	--	--
83SB077B	N	N	N	N	5	--	--	--	--	--
83SB079A	N	N	.1	N	20	--	--	--	--	--
83SB080D	N	N	N	2	10	--	--	--	--	--
83SB080E	N	N	N	N	45	--	--	--	--	--
83SB081A	N	N	N	N	30	--	--	--	--	--
83SB094A	N	N	N	N	10	--	--	--	--	--
83SB095A	N	N	N	N	10	--	--	--	--	--
83SB095B	N	N	N	N	100	--	--	--	--	--
83SB096A	N	N	1.1	N	190	--	--	--	--	--
85DC006A	N	1	.1	N	15	--	--	--	--	--
85IL027A	300	930	28	10	1,800	--	--	--	--	--
87DB016	--	--	--	--	--	8.3	<.6	.15	<.6	66
87DB017A	--	--	--	--	--	8.2	<.6	.05	<.6	29
87DB017B	--	--	--	--	--	30	<.6	<.03	<.6	19
87NK001A	--	--	--	--	--	<.6	<.6	<.03	<.6	7.3
87NK001B	--	--	--	--	--	<.6	<.6	<.03	<.6	4.6
87NK010A	--	--	--	--	--	13	3.3	.5	10	60
87NK010B	--	--	--	--	--	29	<.6	.11	3	11
87RH005A	--	--	--	--	--	8.9	.7	.57	1.5	<.03
87RH005B	--	--	--	--	--	<.6	<.6	.25	<.6	<.03