UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Geochemical data and sample locality maps for stream-sediment and heavy-mineral-concentrate samples, and mineralogical data of nonmagnetic, heavy-mineral-concentrate samples, collected near five cinnabar-stibnite mineral occurrences in the Kuskokwim River region, southwestern Alaska

by

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Open-File Report 90-299A Paper copy
90-299B Diskette version

1990

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STUDIES RELATED TO AMRAP

The U.S. Geological Survey is required by the Alaska National Interests Lands Conservation Act (Public Law 96-487, 1980) to survey certain Federal lands to determine their mineral potential. Results of the Alaska Mineral Resource Assessment Program (AMRAP) must be made available to the public and be submitted to the President and Congress. This study presents results of a geochemical survey conducted around five cinnabar-stibnite mineral occurrences in the Kuskokwim River region, southwestern Alaska (fig. 1). Presented here are geochemical results for stream sediments and heavy-mineral concentrates, as well as mineralogical results from nonmagnetic, heavy-mineral concentrates, collected near these mineral occurrences. This information is also available in digital format in Gray and others (1990).

INTRODUCTION

This study was conducted in the summer of 1989 as an orientation survey for future regional geochemical assessment studies in a region containing widespread cinnabar and stibnite mineral occurrences. The occurrences evaluated in this study are located in the Sleetmute, McGrath, and Taylor Mountains $1^\circ \times 3^\circ$ quadrangles. The study area covers approximately 19,200 km^2 (7410 mi^2). The purpose of this study was to evaluate several different sample media for their efficiency in geochemical prospecting for Hg-Sb lode deposits. Another objective was to identify the most reliable and most cost-effective sampling methods and analytical techniques for use in AMRAP studies currently being conducted by the U.S. Geological Survey. The results of this study will be useful in exploration for similar mineral systems.

The terrain of the study area is dominated by low rolling hills with broad, sediment-filled lowlands as exemplified by the Kuskokwim Mountains in the central portion of the region. The most rugged topography occurs in the Kiokluk Mountains and a few other scattered mountain peaks. The maximum elevation in the area is 1248 m (4093 ft) and is located in the Kiokluk Mountains approximately 16 km (10 mi) south of the Mountain Top mine. Much of the study area is swampy, especially along portions of the Kuskokwim River basin. The minimum elevation occurs in these lowlands and is approximately 30 m (100 ft). The region is covered with vegetation that ranges from northern latitude forests to subarctic tundra.

GEOLOGY OF THE CINNABAR AND STIBNITE MINERAL OCCURRENCES

Most of the cinnabar and stibnite mineral occurrences are hosted in sedimentary rock of flysch association, but they are also found in mafic dikes, carbonate rock, and hypabyssal rhyolite. Cinnabar and stibnite are the dominant ore minerals at these mineral occurrences, with lesser amounts of realgar, orpiment, and rarely native mercury. Ore minerals are found primarily in quartz-

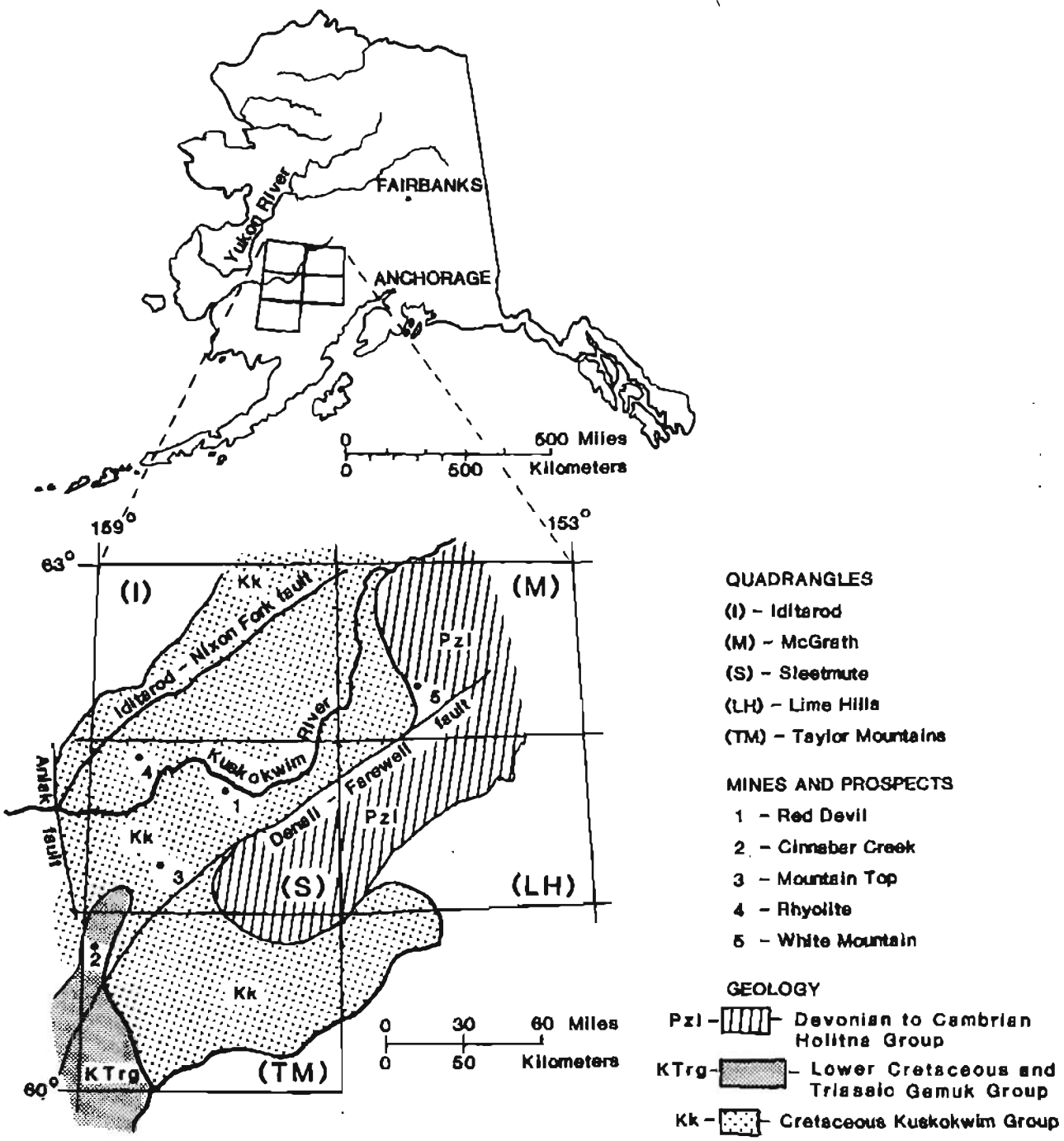

Figure 1. Location of the cinnabar-stibnite mineral occurrences studied.

carbonate veins and stockworks. Most of these mineral occurrences appear to have formed along faults and fractures, or at the contacts between dikes and surrounding sedimentary rocks (Sainsbury and MacKevett, 1960).

Many of the cinnabar and stibnite mineral occurrences, including the large Red Devil deposit, are hosted by rocks of the Cretaceous Kuskokwim Group. In the Red Devil area, rocks of the Kuskokwim Group consist primarily of interbedded graywacke and shale that are intruded by numerous Cretaceous-Tertiary mafic dikes. Mineralized epithermal veins at Red Devil are found in altered dikes and at the intersection of bedding plane faults with the dikes (Sainsbury and MacKevett, 1965). Cinnabar and stibnite are the most common ore minerals at Red Devil, but minor amounts of realgar, orpiment, pyrite, and hematite also occur (MacKevett and Berg, 1963). The cinnabar and stibnite are found primarily as open-space fillings in quartz-rich veins that also contain carbonate, limonite, and dickite gangue minerals. Individual veins are often small and less than 2.5 cm thick, but occasionally reach 1 m in width and several tens of meters in length (Sainsbury and MacKevett, 1965).

The Mountain Top mine is also located within rocks of the Kuskokwim Group. At Mountain Top, mineralized veins have only been recognized within Cretaceous-Tertiary mafic dikes that intrude the graywacke and shale of the Kuskokwim Group (Sorg and Estlund, 1972). The dikes, where mineralized, are brecciated and faulted. Cinnabar is found primarily as vug fillings in veins up to 0.3 m wide, along with quartz, dolomite, pyrite, solid and liquid hydrocarbons, and dickite. Stibnite is found only as finely-crystalline fragments in some small quartz veins or in highly weathered float (Sorg and Estlund, 1972).

The cinnabar-bearing veins at the Rhyolite prospect are hosted within Cretaceous-Tertiary rhyolite dikes that intrude graywacke and shale of the Kuskokwim Group. These dikes are part of the large porphyritic rhyolite stock at Juninggulra Mountain (Sainsbury and MacKevett, 1965). Cinnabar is the only sulfide recognized at this locality and occurs as open-space fillings in quartz-dolomite veins, and as disseminations within the veins and the adjacent graywacke (Sainsbury and MacKevett, 1965). Gangue minerals include quartz, carbonate, kaolinite, dickite, and limonite.

The Cinnabar Creek prospects are located within rocks of the Triassic to Cretaceous Gemuk Group. In the vicinity of these prospects, rocks consist primarily of interbedded graywacke and siltstone, with lesser lavas, tuff, chert, and limestone, all of Triassic age (Sainsbury and MacKevett, 1965). Cretaceous-Tertiary mafic dikes that exhibit silica-carbonate alteration cut these rocks near the prospect, however, these altered dikes do not constitute high-grade ore (Sainsbury and MacKevett, 1965). High-grade cinnabar ore occurs as massive replacements, disseminations, and vug fillings within small quartz-carbonate stockworks that are found along faults cross-cutting siltstone and graywacke of the Gemuk Group. Native mercury, and lesser stibnite and pyrite are associated with the cinnabar. Native mercury is particularly

visible within sheared and brecciated sedimentary rocks and in streams in the area.

The White Mountain prospects are hosted within the rocks of the Cambrian to Devonian Holitna Group. Cinnabar, the only ore mineral recognized, is spatially associated with faults, most commonly where shale is faulted against limestone (Sainsbury and MacKevett, 1965). Cretaceous-Tertiary mafic dikes are also found in the White Mountain area, but they have not been reported to be mineralized. Cinnabar is most commonly hosted by brecciated and silicified limestone and dolomite, occurring as disseminations and within veins up to 10 cm wide. Carbonate, limonite, dickite, and minor quartz comprise the gangue minerals (Sainsbury and MacKevett, 1965).

METHODS OF STUDY

Geochemical Sampling Techniques

Detailed geochemical sampling was conducted proximal to the five mineral occurrences described above, which we considered to be representative of cinnabar-stibnite mineralization throughout southwestern Alaska. Samples were collected on approximately one to two kilometer intervals from first- and second-order stream drainages below known mineral occurrences. In addition, samples were collected upstream from known mineral occurrences when possible. Sample site locality maps are shown for the areas studied in figures 2-6.

At each site a composite stream-sediment sample was taken from the active channel. The stream sediment was wet sieved through a 2.0-mm (10-mesh) stainless steel screen to remove the coarse-grained material and the less than 2.0-mm sediment was retained in a 14-inch gold pan. A representative split of the sediment, approximately 1.5-2 kg, was then saved as the stream-sediment sample. The gold pan was refilled with more screened sediment and this material was panned to remove light minerals, organic material, and clay-sized material. This sample was then saved as the heavy-mineral-concentrate sample.

Sample Preparation

Each stream-sediment sample was air dried and then sieved through successive 30-mesh, 80-mesh, and 230-mesh sieves. From this procedure we saved three size fractions: a) a coarse stream-sediment size fraction of minus-30 to plus-80-mesh material, b) a medium stream-sediment size fraction consisting of minus-80 to plus-230-mesh material, and c) a fine stream-sediment size fraction of minus-230-mesh material. Each sample was saved separately and the coarse and medium size fractions were pulverized prior to chemical analysis. All three sediment size fractions were chemically analyzed.

In the laboratory, the panned concentrate samples were first passed through a 30-mesh sieve. The minus-30-mesh material was separated using bromoform (specific gravity of 2.85 g/ml) to remove the remaining lighter minerals, primarily quartz and feldspar. The residual heavy-mineral concentrates were then separated

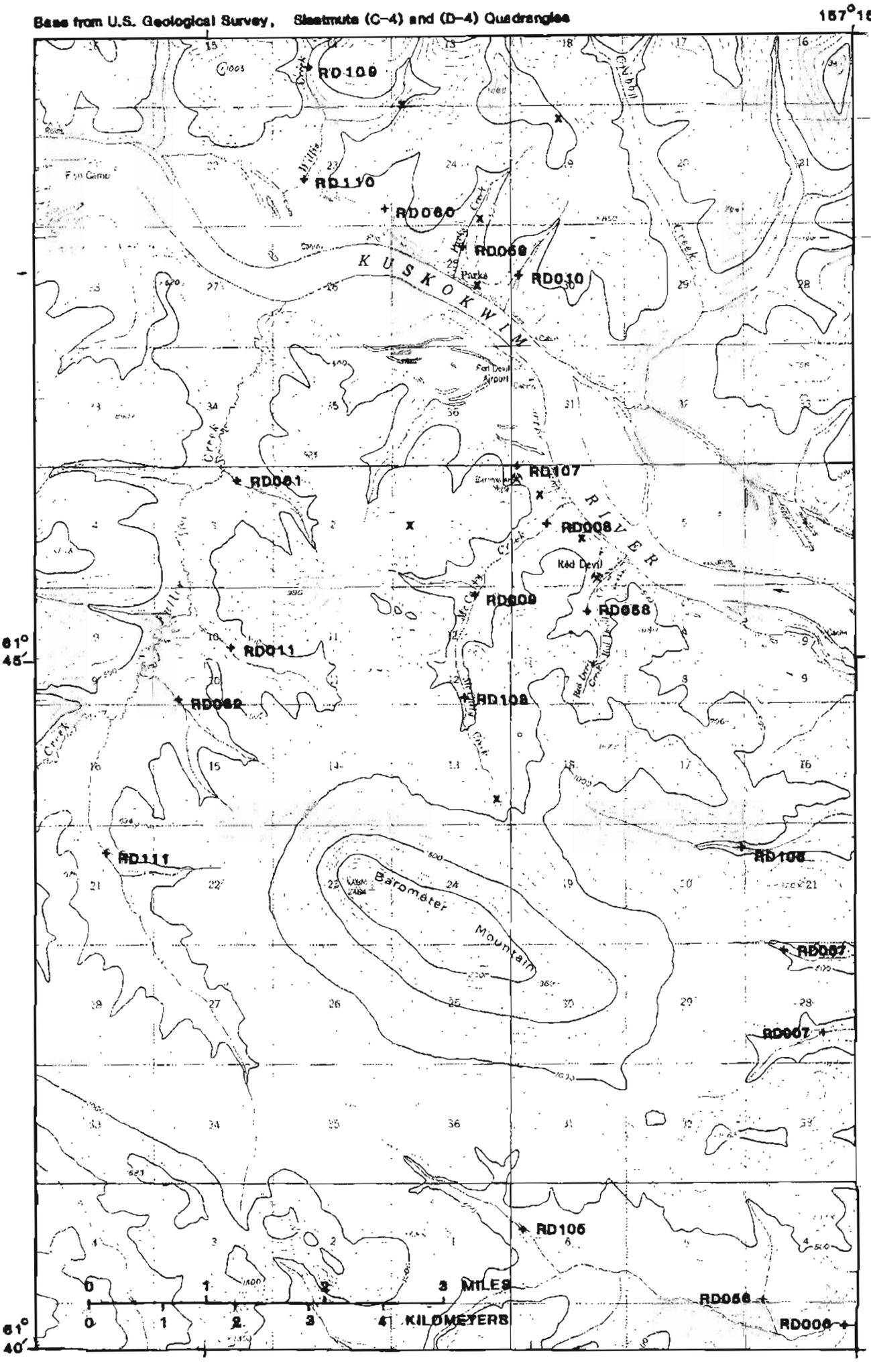

Figure 2. Localities of samples from the Red Devil area.
⚒ - Mines as labeled, x - mineral prospects.

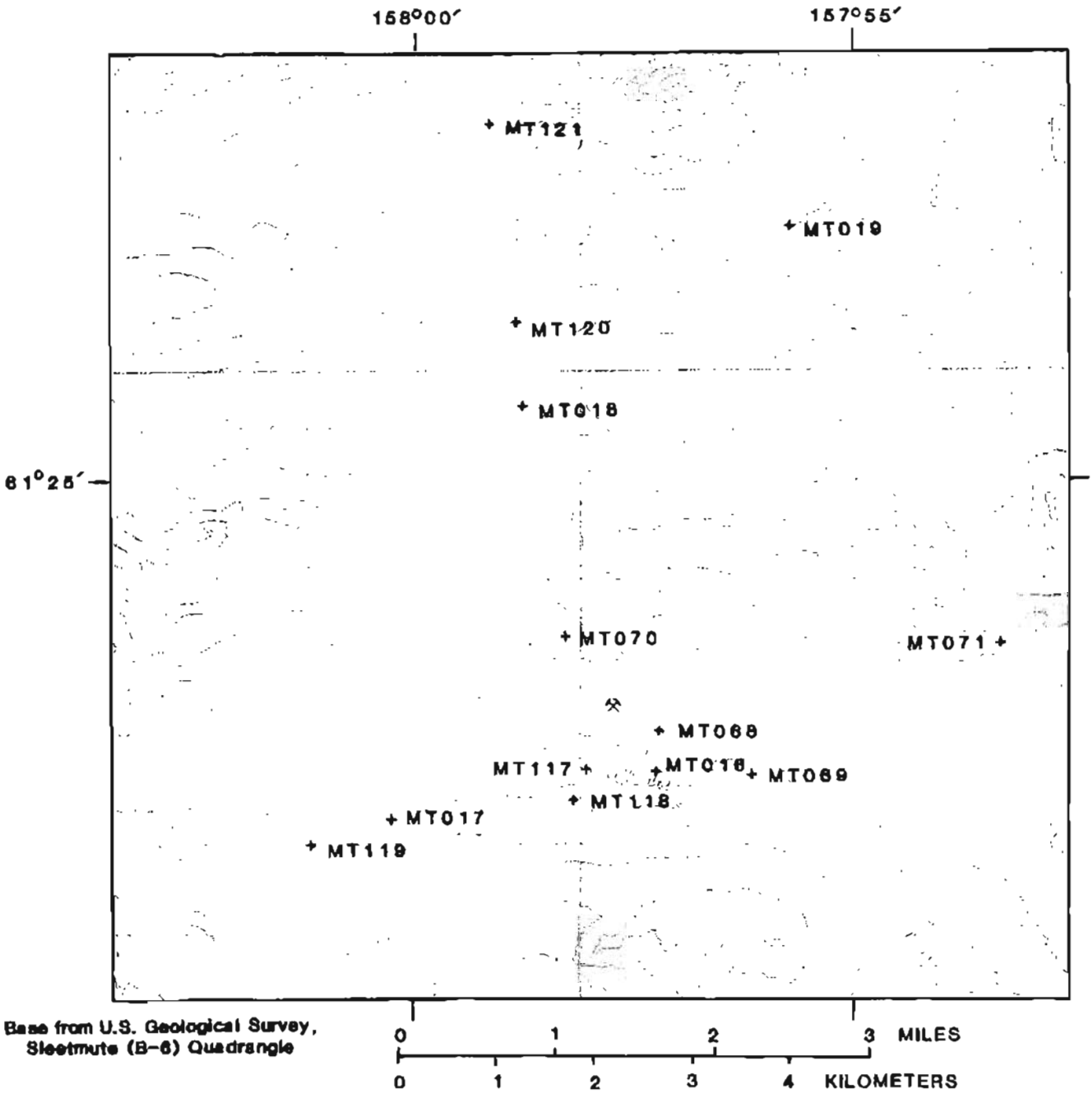

Figure 3. Localities of samples from the Mountain Top area.
⚒ - Mountain Top mine.

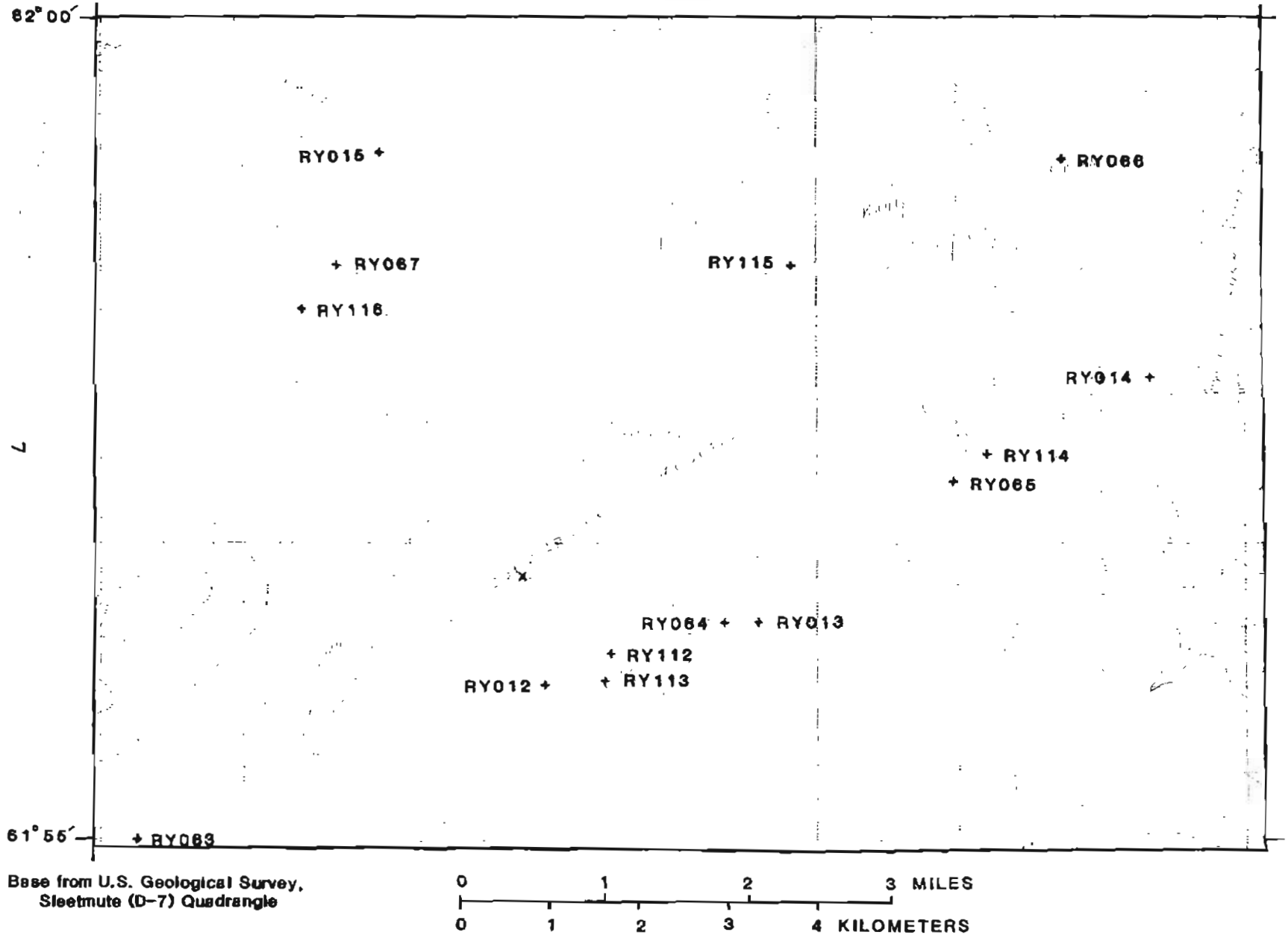

Figure 4. Localities of samples from the Rhyolite area.
x - Rhyolite prospect.

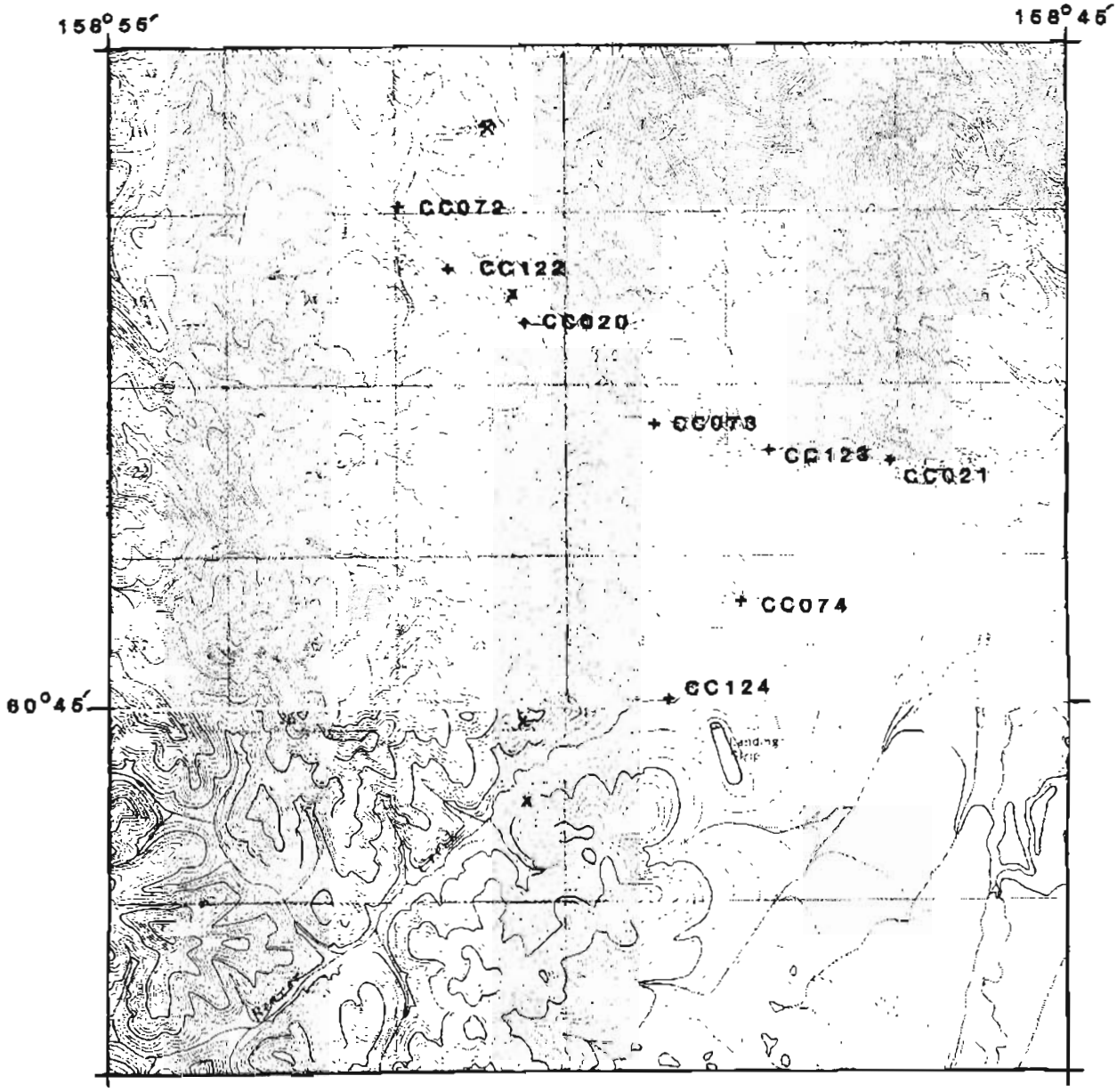

Figure 5. Localities of samples from the Cinnabar Creek area.
⚒ - Cinnabar Creek mine, x - mineral prospects.

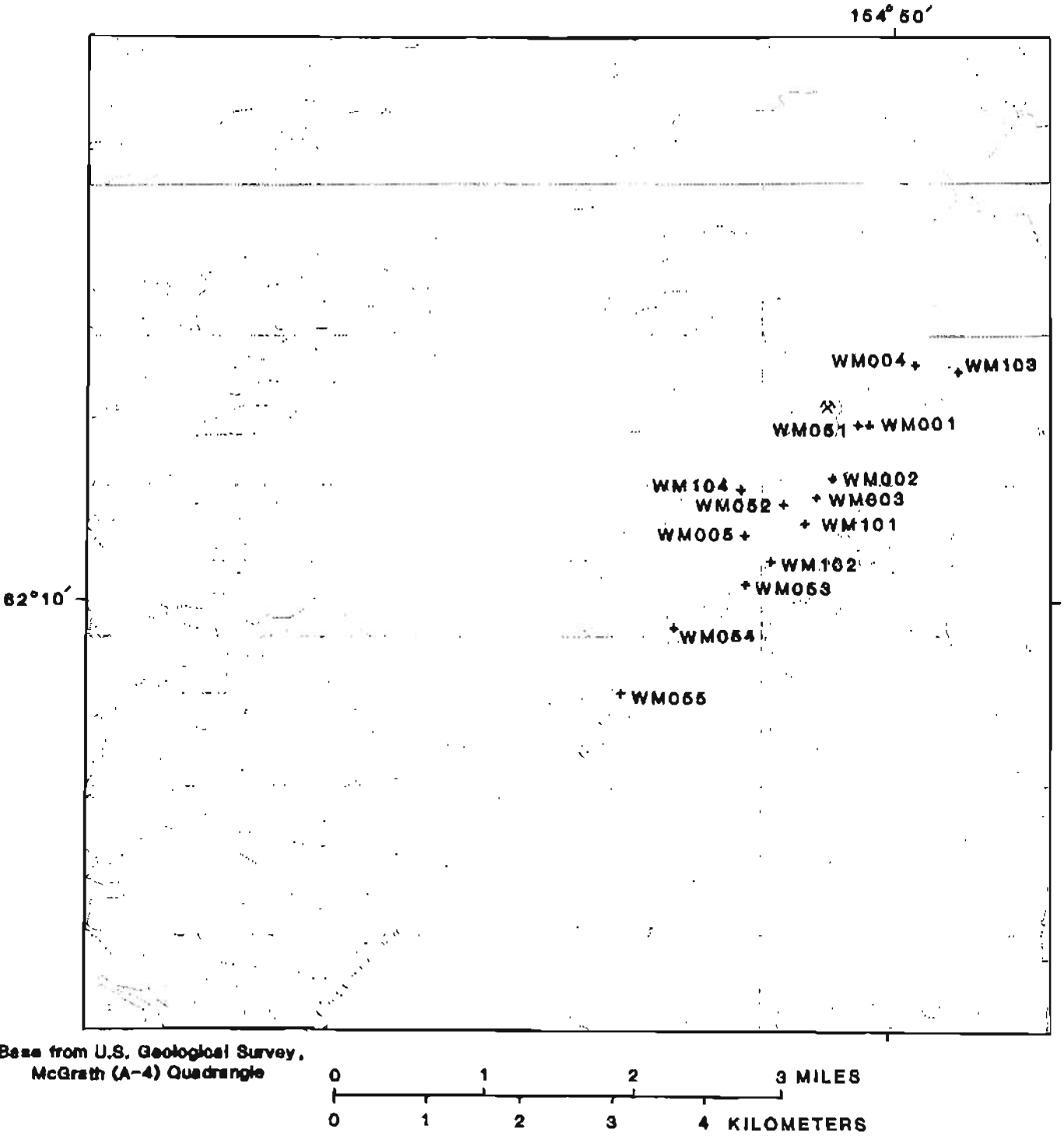

Figure 6. Localities of samples from the White Mountain area.
⚒ - White Mountain mine.

magnetically into magnetic, paramagnetic, and nonmagnetic fractions. The magnetic fraction (C1) contains mainly magnetite and ilmenite. The paramagnetic fraction (C2) consists largely of ferromagnesian silicates and iron oxides. The nonmagnetic fraction (C3) contains the nonmagnetic ore minerals and silicates present in the sample. This C3 fraction was then split using a multiple plate splitter. One split was hand ground and used for chemical analysis. The second split was saved for mineralogical examination. All three fractions of the heavy-mineral-concentrates were chemically analyzed.

Analytical Techniques

Semiquantitative Emission Spectrography

The stream-sediment samples were analyzed for 35 elements and the heavy-mineral-concentrate samples were analyzed for 37 elements using a semiquantitative, direct-current arc emission spectrographic technique adapted from Grimes and Marranzino (1968) and Myers and others (1961). The elements analyzed and their lower limits of determination are listed in table 1.

Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from laboratory reference standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 10, 20, 50, 100, etc. Samples whose concentrations are estimated to fall between those values are assigned values of 15, 30, 70, and so forth. The precision of this analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting levels at the 96 percent confidence level (Motooka and Grimes, 1976).

Atomic Absorption Spectroscopy

Stream-sediment samples were analyzed for Au, Te, and Tl by an atomic absorption (AA) technique adapted from Hubert and Chao (1985). In this method, the stream sediments were digested using a series of hydrogen peroxide, hydrofluoric acid, aqua-regia, and hydrobromic acid-bromine solutions. The Au, Te, and Tl were separated and concentrated by extraction in methyl isobutyl ketone (MIBK). Gold and Tl were first extracted from a 0.1 M hydrobromic acid solution, then the Te was extracted from a 3 M hydrobromic acid solution in the presence of ascorbic acid to eliminate any iron interference. The Au, Te, and Tl were determined by flame AA spectrophotometry. Samples with concentrations of Au found to be less than 50 ppb by this flame AA technique were then analyzed by graphite furnace AA spectrophotometry (GFAAS). Results for Au in the range of 2 to 50 ppb were determined by this GFAAS technique. The GFAAS technique for gold was adapted from Meier (1980).

Stream sediments were analyzed for mercury by a cold vapor AA

Table 1. Limits of determination for the spectrographic analysis of stream sediments, based on a 10-mg sample. [The spectrographic limits of determination for heavy-mineral-concentrate samples are based on a 5-mg sample, and are thus two reporting intervals higher than the limits given for stream sediments.]

Elements	Lower determination limit	Upper determination limit
	Percent	
Calcium (Ca)	.05	20
Iron (Fe)	.05	20
Magnesium (Mg)	.02	10
Sodium (Na)	.2	5
Phosphorus (P)	.2	10
Titanium (Ti)	.002	1
	Parts per million	
Silver (Ag)	0.5	5,000
Arsenic (As)	200	10,000
Gold (Au)	10	500
Boron (B)	10	2,000
Barium (Ba)	20	5,000
Beryllium (Be)	1	1,000
Bismuth (Bi)	10	1,000
Cadmium (Cd)	20	500
Cobalt (Co)	10	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Gallium (Ga)	5	500
Germanium (Ge)	10	100
Lanthanum (La)	50	1,000
Manganese (Mn)	10	5,000
Molybdenum (Mo)	5	2,000
Niobium (Nb)	20	2,000
Nickel (Ni)	5	5,000
Lead (Pb)	10	20,000
Antimony (Sb)	100	10,000
Scandium (Sc)	5	100
Tin (Sn)	10	1,000
Strontium (Sr)	100	5,000
Thorium (Th)	100	2,000
Vanadium (V)	10	10,000
Tungsten (W)	20	10,000
Yttrium (Y)	10	2,000
Zinc (Zn)	200	10,000
Zirconium (Zr)	10	1,000
Platinum (Pt)*	20	1,000
Palladium (Pd)*	5	1,000

* Stated determination limits for Pt and Pd are for heavy-mineral-concentrate samples and are based on a 5 mg sample.

technique as described by Kennedy and Crock (1987). The samples were first decomposed with nitric acid and sodium dichromate. Hydroxylamine hydrochloride/sodium chloride and stannous chloride were added to the samples in a continuous flow system to produce Hg^0. Mercury vapor was then measured directly in an optical absorption cell by AA spectrophotometry.

Inductively Coupled Plasma-Atomic Emission Spectroscopy

The stream-sediment samples were analyzed for Ag, As, Sb, Bi, Cd, Cu, Mo, Pb, and Zn by inductively coupled plasma-atomic emission spectroscopy (ICP-AES) following the procedure developed by Motooka (1988). The sediments were decomposed with concentrated hydrochloric acid and hydrogen peroxide in a hot-water bath similar to the procedure described by O'Leary and Viets (1986). The metals were then extracted in diisobutyl ketone (DIBK) in the presence of ascorbic acid and potassium iodide. The DIBK phase was aspirated directly into the plasma and element concentrations were determined simultaneously with a multichannel ICP-AES instrument. The lower limits of determination for the ICP-AES and AA results for the stream-sediment samples are shown in Table 2.

Table 2. Lower limits of determination for other chemical methods used for stream-sediment analysis. [AA = atomic absorption; and ICP-AES = inductively coupled plasma-atomic emission spectrometry. Concentrations are in parts per million.]

Element		Lower determination limit
	AA	
Mercury	(Hg)	.050
Tellurium	(Te)	.050
Thallium	(Tl)	.050
Gold	(Au)	.002
	ICP-AES	
Silver	(Ag)	.045
Arsenic	(As)	.60
Bismuth	(Bi)	.60
Cadmium	(Cd)	.030
Copper	(Cu)	.050
Molybdenum	(Mo)	.090
Lead	(Pb)	.60
Antimony	(Sb)	.60
Zinc	(Zn)	.050

Mineralogical Analysis

Mineral identifications were made on each of the nonmagnetic, heavy-mineral-concentrate samples (C3) with a binocular microscope

using physical properties such as hardness, cleavage, color, and crystal habits. In most cases, the mineral grains could be identified in this way, however, x-ray diffraction was used occasionally to confirm visual mineral identification. Estimates of the percentage of a particular mineral species present were made and grouped into classes. These classes correspond to the relative amount of a particular mineral within a sample. The classes are as follows:

-- ..... not observed
1 ..... <1%
2 ..... 1-5%
3 ..... >5-20%
4 ..... >20-50%
5 ..... >50%

DATA STORAGE SYSTEM

The geochemical and mineralogical results were entered into the Branch of Geochemistry's data base. This data base contains both descriptive geological information and the analytical data. Any or all of this information may be retrieved and converted to a binary form (STATPAC) for computerized statistical analysis or publication (VanTrump and Miesch, 1977).

The information in this report is also available on 5.25 inch, 360K magnetic diskettes that includes the text in ASCII file format, and the analytical data in database file (.dbf) format (Gray and others, 1990). Access to this information requires an IBM compatible computer using MS DOS, a 5.25 inch drive capable of handling 360K diskettes, and a database program able to import .dbf files.

DESCRIPTION OF THE DATA TABLES

In tables 3-5 the sample number prefixes refer to the mineral occurrence studied; CC = Cinnabar Creek, MT = Mountain Top, RD = Red Devil, RY = Rhyolite, and WM = White Mountain. The sample numbers correspond to those shown on the sample site maps (figs. 2-6). The spectrographic, ICP-AES, and AA results for the stream sediments are listed in table 3. In table 3, the sample suffix SF1 designates the coarse stream-sediment size fraction, SF2 indicates the medium sediment size fraction, and SF3 designates the fine stream-sediment size fraction. The spectrographic results for the heavy-mineral concentrates are shown in table 4. In tables 3 and 4, values determined for the major elements Ca, Fe, Mg, Na, P, and Ti are given in weight percent (%); all other values are given in parts per million (ppm). Each element column heading in tables 3 and 4 is also followed by abbreviations for spectrographic results (S), inductively coupled plasma-atomic emission spectroscopy results (ICP), or atomic absorption results (AA). Suffixes C1 (magnetic),C2 (paramagnetic), and C3 (nonmagnetic) in table 4 designate the heavy-mineral fractions for each sample. The mineralogical data for the nonmagnetic, heavy-mineral concentrates appears in table 5.

An "N" indicates that a given element was looked for, but not

detected at the lower limit of determination shown for that element. An "L" indicates that the element was observed, but was below the indicated lower limit of determination. If an element was observed and was above the highest reporting value, a "G" was entered following the upper limit of determination. For some heavy-mineral-concentrate samples there was an insufficient amount of material available for analysis and a ".0B" occurs in place of the analytical value.

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Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. [N, not detected; L, detected but below the limit of determination shown; G, determined to be greater than the value shown.]

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S
1	CC020SF1	60 46 56	158 50 39	1	15	1.5	5G	.2N	1G	.5N	200N
2	CC020SF2	60 46 56	158 50 39	.7	10	1.5	5	.2N	1G	.5N	200N
3	CC020SF3	60 46 56	158 50 39	1	10	2	5G	.2N	1G	.5N	200N
4	CC021SF1	60 46 14	158 46 53	1.5	10	2	5	.2N	1G	.5N	200N
5	CC021SF2	60 46 14	158 46 53	1	10	3	5	.2N	1G	.5N	200N
6	CC021SF3	60 46 14	158 46 53	1	7	3	5G	.2N	1G	.5N	200N
7	CC072SF1	60 47 33	158 51 58	1	10	1.5	5	.2N	1G	.5N	200N
8	CC072SF2	60 47 33	158 51 58	.7	7	1	5	.2N	1G	.5N	200L
9	CC072SF3	60 47 33	158 51 58	1	10	2	5	.2N	1G	.5N	300
10	CC073SF1	60 46 26	158 49 19	1	15	2	5G	.2N	1	.5N	200N
11	CC073SF2	60 46 26	158 49 19	1	10	3	5G	.2N	1G	.5N	200N
12	CC073SF3	60 46 26	158 49 19	1	7	2	5G	.2N	1G	.5N	200N
13	CC074SF1	60 45 32	158 48 24	2	20	3	5G	.2N	1G	.5N	200N
14	CC074SF2	60 45 32	158 48 24	1.5	10	2	5	.2N	1G	.5N	200N
15	CC074SF3	60 45 32	158 48 24	1	7	3	5	.2N	1	.5N	200N
16	CC122SF1	60 47 13	158 51 26	.7	10	2	5	.2N	1	.5N	200N
17	CC122SF2	60 47 13	158 51 26	.7	10	1	5	.2N	1G	3	200N
18	CC122SF3	60 47 13	158 51 26	1	7	2	5	.2N	1G	.5N	200N
19	CC123SF1	60 46 17	158 48 07	1.5	10	2	5G	.2N	1G	.5N	200N
20	CC123SF2	60 46 17	158 48 07	.7	5	1	3	.2N	1	.5N	200N
21	CC123SF3	60 46 17	158 48 07	1	10	2	5	.2N	1G	.5N	200N
22	CC124SF1	60 45 02	158 49 10	1.5	10	3	5G	.2N	1G	.5N	200N
23	CC124SF2	60 45 02	158 49 10	2	7	2	5G	.2N	1G	.5N	200N
24	CC124SF3	60 45 02	158 49 10	1.5	7	2	5	.2N	1G	.5N	200N
25	MT016SF1	61 23 26	157 57 16	.7	15	.7	.7	.2N	1	.5N	200N
26	MT016SF2	61 23 26	157 57 16	.5	15	.7	.5	.2N	1G	.5N	200N
27	MT016SF3	61 23 26	157 57 16	.5	7	1	.5	.2N	1	.5N	200N
28	MT017SF1	61 23 09	158 00 17	1.5	7	1.5	5G	.2N	.7	.5N	200N
29	MT017SF2	61 23 09	158 00 17	1	10	2	5G	.2N	1	.5N	200N
30	MT017SF3	61 23 09	158 00 17	1	10	2	5	.2N	1G	.5N	200N
31	MT018SF1	61 25 25	157 58 47	5	7	3	5G	.2N	1	.5N	200N
32	MT018SF2	61 25 25	157 58 47	2	7	3	5	.2N	1	.5N	200N
33	MT018SF3	61 25 25	157 58 47	1.5	7	3	3	.2N	1G	.5N	200N
34	MT019SF1	61 26 24	157 55 41	3	7	3	2	.2N	1	.5N	200N
35	MT019SF2	61 26 24	157 55 41	3	7	3	5	.2N	1G	.5N	200N
36	MT019SF3	61 26 24	157 55 41	2	10	3	2	.2N	1	.5N	200N

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
1	CC020SF1	50	1500	1N	10N	20N	20	150	30	70	10N	50N
2	CC020SF2	50	1500	1N	10N	20N	20	150	30	100	10N	50L
3	CC020SF3	50	2000	1N	10N	20N	20	100	30	100	10N	50L
4	CC021SF1	50	1000	1L	10N	20N	20	100	30	100	10N	50L
5	CC021SF2	70	2000	1L	10N	20N	20	150	30	100	10N	50L
6	CC021SF3	50	2000	1N	10N	20N	20	150	30	50	10N	50N
7	CC072SF1	70	2000	1N	10N	20N	20	150	30	70	10N	50N
8	CC072SF2	50	1500	1N	10N	20N	20	100	20	70	10N	50N
9	CC072SF3	70	2000	1N	10N	20N	20	70	30	100	10N	50L
10	CC073SF1	50	2000	1N	10N	20N	20	70	30	100	10N	50L
11	CC073SF2	50	2000	1N	10N	20N	50	150	30	150	10N	50L
12	CC073SF3	50	1500	1N	10N	20N	20	100	30	100	10N	50L
13	CC074SF1	70	1000	1N	10N	20N	30	100	30	150	10N	50
14	CC074SF2	30	1000	1L	10N	20N	20	100	30	100	10N	50N
15	CC074SF3	20	1000	1N	10N	20N	20	100	30	100	10N	50N
16	CC122SF1	50	1500	1N	10N	20N	20	100	30	100	10N	50N
17	CC122SF2	50	1500	1N	10N	20N	20	150	50	70	10N	50N
18	CC122SF3	50	1500	1N	10N	20N	15	150	30	100	10N	50L
19	CC123SF1	50	2000	1N	10N	20N	20	150	30	100	10N	50L
20	CC123SF2	30	1000	1N	10N	20N	20	100	20	50	10N	50L
21	CC123SF3	50	2000	1N	10N	20N	20	100	30	100	10N	50L
22	CC124SF1	30	1000	1N	10N	20N	20	100	30	100	10N	50N
23	CC124SF2	20	1500	1N	10N	20N	20	150	20	100	10N	50N
24	CC124SF3	30	1000	1N	10N	20N	20	100	20	100	10N	50N
25	MT016SF1	30	1500	1L	10N	20N	30	200	30	70	10N	50N
26	MT016SF2	50	1500	1N	10N	20N	30	300	70	50	10N	50N
27	MT016SF3	50	1500	1N	10N	20N	15	150	30	30	10N	50N
28	MT017SF1	20	1000	1L	10N	20N	20	100	20	50	10N	50L
29	MT017SF2	50	1500	1N	10N	20N	15	100	20	70	10N	50N
30	MT017SF3	30	1500	1N	10N	20N	20	100	20	50	10N	50L
31	MT018SF1	20	2000	1N	10N	20N	20	500	20	50	10N	50N
32	MT018SF2	20	1500	1N	10N	20N	20	700	20	70	10N	50N
33	MT018SF3	20	1500	1N	10N	20N	20	200	20	30	10N	50L
34	MT019SF1	50	1000	1L	10N	20N	20	200	15	70	10N	50N
35	MT019SF2	50	1000	1N	10N	20N	20	700	20	100	10N	50L
36	MT019SF3	70	2000	1L	10N	20N	20	200	20	50	10N	50

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S	Th ppm-S	V ppm-S
1	CC020SF1	2000	5N	20N	30	20	100N	30	10N	200	100N	300
2	CC020SF2	2000	5N	20N	30	30	100N	20	10N	200	100N	200
3	CC020SF3	2000	5N	20N	30	50	100N	15	10N	200	100N	300
4	CC021SF1	5000	7	20N	30	30	100N	20	10N	200	100N	300
5	CC021SF2	5000G	5N	20N	50	30	100N	20	10N	200	100N	300
6	CC021SF3	5000	5N	20N	30	30	100N	20	10N	300	100N	200
7	CC072SF1	5000G	5N	20N	50	30	100N	20	10N	200	100N	500
8	CC072SF2	5000G	5N	20N	20	20	100N	15	10N	200	100N	200
9	CC072SF3	5000G	5N	20N	30	50	100N	20	10N	200	100N	200
10	CC073SF1	5000	5N	20N	30	30	100N	30	10N	200	100N	300
11	CC073SF2	3000	5N	20N	50	30	100N	30	10N	300	100N	500
12	CC073SF3	3000	5N	20N	30	50	100N	20	10N	300	100N	200
13	CC074SF1	3000	5N	20N	30	30	100N	10	10N	200	100N	500
14	CC074SF2	2000	5N	20N	15	30	100N	20	10N	200	100N	200
15	CC074SF3	1000	5N	20N	20	20	100N	20	10N	200	100N	200
16	CC122SF1	2000	5N	20N	20	30	100N	20	10N	200	100N	200
17	CC122SF2	2000	5N	20N	20	20	100N	20	10N	200	100N	300
18	CC122SF3	5000	5N	20N	30	20	100N	20	10N	200	100N	300
19	CC123SF1	5000	5N	20N	50	20	100N	20	10N	200	100N	500
20	CC123SF2	2000	5N	20N	30	20	100N	20	10N	200	100N	200
21	CC123SF3	3000	5N	20N	30	30	100N	15	10N	300	100N	200
22	CC124SF1	3000	5N	20N	20	30	100N	20	10N	200	100N	500
23	CC124SF2	2000	5N	20N	30	20	100N	20	10N	300	100N	200
24	CC124SF3	1000	5N	20N	20	30	100N	20	10N	300	100N	200
25	MT016SF1	3000	5N	20N	70	30	100N	20	10N	300	100N	300
26	MT016SF2	2000	5N	20N	50	30	100N	20	10N	300	100N	300
27	MT016SF3	1500	5N	20N	30	20	100N	20	10N	300	100N	200
28	MT017SF1	3000	5N	20N	20	30	100N	15	10N	200	100N	300
29	MT017SF2	1500	5N	20N	20	30	100N	20	10N	200	100N	300
30	MT017SF3	1500	5N	20N	20	30	100N	20	10N	200	100N	300
31	MT018SF1	2000	5N	20N	50	20	100N	20	10N	300	100N	300
32	MT018SF2	2000	5N	20N	70	30	100N	20	10N	300	100N	200
33	MT018SF3	2000	5N	20N	50	20	100N	20	10N	200	100N	200
34	MT019SF1	1000	5N	20N	30	30	100N	20	10N	200	100N	200
35	MT019SF2	1500	5N	20N	50	30	100N	20	10N	300	100N	200
36	MT019SF3	1500	5N	20N	50	30	100N	20	10N	200	100N	200

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	W ppm-S	Y ppm-S	Zn ppm-S	Zr ppm-S	Au ppm-AA	Hg ppm-AA	Te ppm-AA	Tl ppm-AA	Ag ppm-ICP	As ppm-ICP
1	CC020SF1	20N	30	200N	100	.002N	6.4	.05N	.10	.09	79
2	CC020SF2	20N	50	200N	150	.002N	36G	.05N	.20	.12	79
3	CC020SF3	20N	30	200N	100	.002	36G	.05N	.10	.13	74
4	CC021SF1	20N	30	200N	100	.002L	2.2	.05N	.15	.045N	40
5	CC021SF2	20N	20	200N	300	.002	36G	.05N	.20	.045N	31
6	CC021SF3	20N	30	200N	150	.012	36G	.05N	.25	.09	31
7	CC072SF1	20N	30	200N	150	.002N	36G	.05N	.20	.09	390
8	CC072SF2	20N	20	200N	70	.002L	36G	.05N	.20	.12	500
9	CC072SF3	20N	30	200N	100	.002L	36G	.05N	.25	.11	470
10	CC073SF1	20N	30	200N	100	.002N	4.3	.05N	.15	.07	63
11	CC073SF2	20N	30	200N	100	.002N	36G	.05N	.20	.09	61
12	CC073SF3	20N	30	200N	100	.002L	36G	.05N	.15	.08	56
13	CC074SF1	20N	50	200N	200	.002L	.72	.05N	.15	.045N	24
14	CC074SF2	20N	20	200N	150	.002L	3.6	.05N	.15	.045N	17
15	CC074SF3	20N	20	200N	100	.004	1.5	.05N	.20	.045N	18
16	CC122SF1	20N	20	200N	100	.002N	7.2	.05N	.15	.08	110
17	CC122SF2	20N	20	200N	100	.002L	36G	.05N	.05N	.08	110
18	CC122SF3	20N	20	200N	150	.002L	36G	.05N	.20	.08	87
19	CC123SF1	20N	30	200N	100	.002N	2.0	.05N	.25	.09	46
20	CC123SF2	20N	30	200N	100	.002N	36G	.05N	.25	.12	37
21	CC123SF3	20N	30	200N	100	.002L	4.0	.05N	.25	.14	36
22	CC124SF1	20N	30	200N	150	.002L	.56	.05N	.10	.045N	13
23	CC124SF2	20N	30	200N	100	.002	36G	.05N	.15	.045N	11
24	CC124SF3	20N	20	200N	100	.002	3.1	.05N	.20	.045N	11
25	MT016SF1	20N	30	200N	100	.002L	1.6	.05N	.25	.13	19
26	MT016SF2	20N	30	200N	100	.002	2.0	.05N	.15	.18	17
27	MT016SF3	20N	20	200N	150	.006	5.6	.05N	.35	.17	12
28	MT017SF1	20N	30	200N	100	.002	.68	.05N	.20	.07	16
29	MT017SF2	20N	30	200N	150	.012	.74	.05N	.20	.07	7.8
30	MT017SF3	20N	20	200N	100	.004	.60	.05N	.25	.14	8.5
31	MT018SF1	20N	30	200N	100	.002L	3.2	.05N	.15	.045N	9.6
32	MT018SF2	20N	20	200N	200	.002L	17	.05N	.20	.045N	8.3
33	MT018SF3	20N	20	200N	150	.002	4.2	.05N	.20	.08	9.1
34	MT019SF1	20N	20	200N	100	.002N	.56	.05N	.25	.06	20
35	MT019SF2	20N	20	200N	150	.002L	1.1	.05N	.05	.09	15
36	MT019SF3	20N	20	200N	200	.002L	2.5	.05N	.25	.07	22

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Bi ppm-ICP	Cd ppm-ICP	Cu ppm-ICP	Mo ppm-ICP	Pb ppm-ICP	Sb ppm-ICP	Zn ppm-ICP
1	CC020SF1	.6N	.16	46	1.4	7.8	3.8	110
2	CC020SF2	.6N	.18	42	1.2	9.8	4.7	110
3	CC020SF3	.6N	.17	42	1.1	11	4.9	100
4	CC021SF1	.6N	.14	41	1.3	7.2	1.8	98
5	CC021SF2	.6N	.13	34	1.2	6.7	1.4	97
6	CC021SF3	.6N	.26	35	1.3	9.7	1.5	93
7	CC072SF1	.6N	.22	46	1.5	8.2	17	110
8	CC072SF2	.6N	.17	38	1.4	8.6	23	110
9	CC072SF3	.6N	.23	37	1.4	9.1	21	97
10	CC073SF1	.6N	.13	43	1.2	7.5	2.9	100
11	CC073SF2	.6N	.17	43	1.2	8.6	3.3	110
12	CC073SF3	.6N	.15	42	1.2	9.0	2.8	100
13	CC074SF1	.6N	.07	43	.84	6.1	.94	92
14	CC074SF2	.6N	.08	39	.79	6.4	1.2	91
15	CC074SF3	.6N	.09	44	.87	7.1	1.0	96
16	CC122SF1	.6N	.17	44	1.3	7.6	13	100
17	CC122SF2	.6N	.17	39	1.2	8.2	18	110
18	CC122SF3	.6N	.15	38	1.1	6.2	12	94
19	CC123SF1	.6N	.16	35	1.2	6.9	1.9	98
20	CC123SF2	.6N	.17	33	1.1	8.2	2.1	100
21	CC123SF3	.6N	.17	34	1.0	8.0	2.1	97
22	CC124SF1	.6N	.08	43	.93	6.2	1.3	97
23	CC124SF2	.6N	.06	31	.76	6.4	1.0	84
24	CC124SF3	.6N	.08	36	.89	6.8	.95	86
25	MT016SF1	.6N	.41	72	2.4	12	.90	140
26	MT016SF2	.6N	.30	71	2.2	13	1.3	130
27	MT016SF3	.6N	.27	62	1.6	9.8	.97	97
28	MT017SF1	.6N	.34	27	2.1	7.8	.72	88
29	MT017SF2	.6N	.20	21	1.2	5.7	.60N	78
30	MT017SF3	.6N	.25	25	1.3	7.4	.60N	84
31	MT018SF1	.6N	.10	11	.61	3.6	.60N	52
32	MT018SF2	.6N	.15	16	.55	5.1	.60N	68
33	MT018SF3	.6N	.17	18	.62	6.5	.60N	76
34	MT019SF1	.6N	.07	18	.53	7.2	1.3	68
35	MT019SF2	.6N	.10	18	.50	7.9	1.2	71
36	MT019SF3	.6N	.11	22	.61	9.5	1.6	82

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S
37	MT068SF1	61 23 38	157 57 11	.7	15	1	5G	.2L	1G	.5N	200N
38	MT068SF2	61 23 38	157 57 11	.7	10	.7	5	.2N	1G	.5N	200N
39	MT068SF3	61 23 38	157 57 11	.5	5	1	2	.2N	1	.5N	200N
40	MT069SF1	61 23 25	157 56 08	5	7	2	5G	.2N	1	.5N	200N
41	MT069SF2	61 23 25	157 56 08	2	7	2	3	.2N	1G	.5N	200N
42	MT069SF3	61 23 25	157 56 08	3	10	5	3	.2N	1G	.5N	200N
43	MT070SF1	61 24 10	157 58 18	5	10	2	5G	.2N	1	.5N	200N
44	MT070SF2	61 24 10	157 58 18	2	7	3	5	.2N	1G	.5N	200N
45	MT070SF3	61 24 10	157 58 18	2	10	2	5	.2N	1G	.5N	200N
46	MT071SF1	61 24 08	157 53 16	5	15	3	5	.2N	1G	.5N	200N
47	MT071SF2	61 24 08	157 53 16	2	15	5	2	.2N	1	.5N	200N
48	MT071SF3	61 24 08	157 53 16	1.5	15	3	2	.2N	1	.5N	200N
49	MT117SF1	61 23 26	157 58 05	1.5	10	1	3	.2N	1	.5N	200N
50	MT117SF2	61 23 26	157 58 05	1	15	1.5	3	.2N	1G	.5N	200N
51	MT117SF3	61 23 26	157 58 05	1	7	2	3	.2N	1G	.5N	200N
52	MT118SF1	61 23 16	157 58 11	3	7	3	5G	.2N	1	5	200N
53	MT118SF2	61 23 16	157 58 11	1.5	10	3	3	.2N	1G	.5N	200N
54	MT118SF3	61 23 16	157 58 11	1.5	7	2	3	.2N	1	.5N	200N
55	MT119SF1	61 23 01	158 01 12	2	10	2	5	.2N	1G	.5N	200N
56	MT119SF2	61 23 01	158 01 12	1.5	7	1	5	.2N	1G	.5N	200N
57	MT119SF3	61 23 01	158 01 12	1.5	10	3	5	.2N	1G	.5N	200N
58	MT120SF1	61 25 53	157 58 52	5	10	5	5	.2N	1G	.5N	200N
59	MT120SF2	61 25 53	157 58 52	2	10	3	5	.2N	1	.5N	200N
60	MT120SF3	61 25 53	157 58 52	1.5	10	3	3	.2N	1	.5N	200N
61	MT121SF1	61 26 58	157 59 10	5	10	5	5	.2N	1	.5N	200N
62	MT121SF2	61 26 58	157 59 10	2	10	5	3	.2N	1G	.5N	200N
63	MT121SF3	61 26 58	157 59 10	2	10	5	5	.2N	1	.5N	200N
64	RD006SF1	61 40 11	157 15 12	1	7	.7	5G	.2N	.7	.5N	200N
65	RD006SF2	61 40 11	157 15 12	1	5	2	5	.2N	1	.5N	200N
66	RD006SF3	61 40 11	157 15 12	1.5	10	3	5	.2N	1G	.5N	200N
67	RD007SF1	61 42 19	157 15 33	1	10	1	3	.2N	1G	.5N	200N
68	RD007SF2	61 42 19	157 15 33	.7	7	1	3	.2N	1	.5N	200N
69	RD007SF3	61 42 19	157 15 33	1	5	2	1.5	.2N	1	.5N	200N
70	RD008SF1	61 46 00	157 19 45	1.5	3	.1	5G	.2N	.7	.5N	200N
71	RD008SF2	61 46 00	157 19 45	1	5	2	3	.2N	1G	.5N	200N
72	RD008SF3	61 46 00	157 19 45	1	7	2	3	.2N	1G	.5N	200N

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
37	MT068SF1	100	1500	1L	10N	20N	20	70	50	100	10N	50N
38	MT068SF2	70	2000	1N	10N	20N	15	150	30	100	10N	50L
39	MT068SF3	50	1000	1N	10N	20N	10	70	20	30	10N	50N
40	MT069SF1	20	2000	1N	10N	20N	20	200	15	70	10N	50L
41	MT069SF2	20	1000	1N	10N	20N	30	500	15	100	10N	50
42	MT069SF3	30	2000	1L	10N	20N	30	300	20	50	10N	50L
43	MT070SF1	20	2000	1N	10N	20N	20	500	15	50	10N	50L
44	MT070SF2	20	1500	1N	10N	20N	15	500	15	70	10N	50N
45	MT070SF3	50	2000	1N	10N	20N	15	500	20	70	10N	50L
46	MT071SF1	10	2000	1N	10N	20N	20	500	20	50	10N	50N
47	MT071SF2	20	1500	1N	10N	20N	50	700	20	50	10N	50N
48	MT071SF3	10N	1000	1N	10N	20N	20	700	20	50	10N	50N
49	MT117SF1	70	2000	1L	10N	20N	20	150	30	100	10N	50L
50	MT117SF2	150	2000	1L	10N	20N	20	200	30	100	10N	50L
51	MT117SF3	100	2000	1N	10N	20N	15	150	30	50	10N	50L
52	MT118SF1	50	1500	1N	10N	20N	20	200	20	50	10N	50L
53	MT118SF2	30	1500	1N	10N	20N	30	500	30	50	10N	50
54	MT118SF3	50	1500	1N	10N	20N	15	200	30	50	10N	50L
55	MT119SF1	50	2000	1N	10N	20N	20	150	20	70	10N	50L
56	MT119SF2	30	1000	1N	10N	20N	20	200	20	100	10N	50L
57	MT119SF3	70	1000	1N	10N	20N	20	200	30	100	10N	50
58	MT120SF1	20	2000	1N	10N	20N	20	1000	20	70	10N	50N
59	MT120SF2	20	1500	1N	10N	20N	20	300	15	50	10N	50N
60	MT120SF3	20	1500	1N	10N	20N	20	150	15	20	10N	50N
61	MT121SF1	15	2000	1N	10N	20N	20	700	20	70	10N	50N
62	MT121SF2	20	1000	1N	10N	20N	30	700	20	70	10N	50L
63	MT121SF3	30	2000	1N	10N	20N	50	700	30	50	10N	50N
64	RD006SF1	30	5000	1N	10N	20N	15	100	10	50	10N	50
65	RD006SF2	20	2000	1L	10N	20N	15	150	15	100	10N	70
66	RD006SF3	50	5000	1L	10N	20N	15	200	20	70	10N	50
67	RD007SF1	50	3000	1N	10N	20N	20	100	20	70	10N	50L
68	RD007SF2	30	2000	1N	10N	20N	15	200	15	70	10N	50
69	RD007SF3	50	2000	1L	10N	20N	15	150	20	30	10N	50L
70	RD008SF1	30	5000	1N	10N	20N	10	100	7	100	10N	50N
71	RD008SF2	30	1500	1L	10N	20N	15	150	10	50	10N	70
72	RD008SF3	50	2000	1N	10N	20N	15	150	15	100	10N	50

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S	Th ppm-S	V ppm-S
37	MT068SF1	5000G	5N	20N	30	30	100N	20	10N	300	100N	1000
38	MT068SF2	3000	5N	20N	50	30	100N	20	10N	200	100N	300
39	MT068SF3	1000	5N	20N	20	20	100N	20	10N	200	100N	300
40	MT069SF1	2000	5N	20N	30	30	100N	20	10N	300	100N	150
41	MT069SF2	5000	5N	20N	50	30	100N	20	10N	300	100N	150
42	MT069SF3	5000G	5N	20N	50	50	100N	20	10N	300	100N	200
43	MT070SF1	5000	5N	20N	50	30	100N	20	10N	300	100N	300
44	MT070SF2	2000	5N	20N	30	20	100N	20	10N	300	100N	200
45	MT070SF3	5000	5N	20N	50	30	100N	15	10N	300	100N	200
46	MT071SF1	5000	5N	20N	70	30	100N	20	10N	300	100N	200
47	MT071SF2	5000	5N	20N	100	20	100N	20	10N	300	100N	200
48	MT071SF3	5000	5N	20N	70	30	100N	20	10N	200	100N	200
49	MT117SF1	5000	15	20N	50	50	100N	20	10N	500	100N	500
50	MT117SF2	5000G	10	20L	50	50	100N	20	10N	300	100N	500
51	MT117SF3	5000	7	20N	50	30	100N	20	10N	300	100N	500
52	MT118SF1	1500	5N	20N	30	30	100N	20	10N	300	100N	150
53	MT118SF2	5000	5N	20N	70	30	100N	20	10N	300	100N	300
54	MT118SF3	5000	5N	20L	30	30	100N	20	10N	200	100N	200
55	MT119SF1	3000	5N	20N	30	30	100N	20	10N	300	100N	200
56	MT119SF2	2000	5N	20N	50	20	100N	20	10N	300	100N	200
57	MT119SF3	1500	5N	20N	50	30	100N	20	10N	200	100N	300
58	MT120SF1	5000G	5N	20N	50	30	100N	20	10N	200	100N	500
59	MT120SF2	5000	5N	20N	30	30	100N	20	10N	200	100N	200
60	MT120SF3	5000	5N	20N	30	30	100N	15	10N	150	100N	200
61	MT121SF1	3000	5N	20N	70	30	100N	30	10N	300	100N	300
62	MT121SF2	1000	5N	20N	70	20	100N	20	10N	300	100N	200
63	MT121SF3	2000	5N	20N	100	30	100N	20	10N	300	100N	200
64	RD006SF1	700	5N	20N	20	30	100N	15	10N	100	100N	150
65	RD006SF2	700	5N	20L	30	30	100N	15	10N	200	100N	150
66	RD006SF3	1500	5N	20L	30	50	100N	20	10N	200	100N	300
67	RD007SF1	2000	5N	20N	20	30	100N	7	10N	200	100N	300
68	RD007SF2	1000	5N	20L	30	30	100N	15	10N	100	100N	200
69	RD007SF3	1000	5N	20L	20	15	100N	15	10N	100	100N	200
70	RD008SF1	700	5N	20N	15	30	100N	10	10N	300	100N	200
71	RD008SF2	1000	5N	20L	30	20	100N	15	10N	200	100N	200
72	RD008SF3	1000	5N	20L	50	50	100N	15	10N	200	100N	200

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	W ppm-S	Y ppm-S	Zn ppm-S	Zr ppm-S	Au ppm-AA	Hg ppm-AA	Te ppm-AA	Tl ppm-AA	Ag ppm-ICP	As ppm-ICP
37	MT068SF1	20N	70	200N	150	.002	36G	.05N	.20	.16	15
38	MT068SF2	20N	50	200N	100	.002	36G	.05N	.20	.19	12
39	MT068SF3	20N	30	200N	100	.002	36G	.05N	.25	.26	5.3
40	MT069SF1	20N	30	200N	100	.002N	.48	.05N	.30	.07	9.0
41	MT069SF2	20N	50	200N	150	.002L	4.4	.05N	.25	.06	6.8
42	MT069SF3	20N	50	200N	200	.002	19	.05N	.35	.08	12
43	MT070SF1	20N	20	200N	100	.002N	36G	.05N	.25	.09	6.5
44	MT070SF2	20N	20	200N	100	.002L	36G	.05N	.25	.12	5.3
45	MT070SF3	20N	30	200N	200	.002L	36G	.05N	.25	.13	6.0
46	MT071SF1	20N	30	200N	100	.002N	.48	.05N	.20	.045N	17
47	MT071SF2	20N	30	200N	100	.002N	1.3	.05N	.10	.045N	27
48	MT071SF3	20N	20	200N	100	.002L	6.0	.05N	.10	.045N	24
49	MT117SF1	20N	50	200N	100	.002	11	.05N	.35	.21	27
50	MT117SF2	20N	50	200N	200	.002L	21	.05N	.30	.26	21
51	MT117SF3	20N	50	200N	200	.004	8.0	.05N	.50	.32	17
52	MT118SF1	20N	50	200N	100	.002N	.92	.05N	.30	.08	50
53	MT118SF2	20N	50	200N	150	.002N	18	.05N	.10	.11	73
54	MT118SF3	20N	20	200N	150	.002L	8.0	.05N	.35	.13	78
55	MT119SF1	20N	30	200N	100	.002N	.48	.05N	.20	.10	36
56	MT119SF2	20N	30	200N	150	.002N	9.6	.05N	.20	.13	29
57	MT119SF3	20N	30	200N	200	.002L	12	.05N	.25	.15	33
58	MT120SF1	20N	20	200N	150	.002L	36G	.05N	.15	.045N	16
59	MT120SF2	20N	20	200N	150	.002L	36G	.05N	.15	.045N	16
60	MT120SF3	20N	20	200N	150	.002L	36G	.05N	.20	.07	20
61	MT121SF1	20N	30	200N	100	.002N	2.2	.05N	.20	.045N	13
62	MT121SF2	20N	20	200N	100	.002N	36G	.05N	.20	.045N	11
63	MT121SF3	20N	20	200N	100	.002L	31	.05N	.20	.08	13
64	RD006SF1	20N	20	200N	70	.002N	1.8	.05N	.40	.07	13
65	RD006SF2	20N	20	200N	150	.002N	2.6	.05N	.45	.08	11
66	RD006SF3	20N	50	200N	500	.004	2.4	.05N	.40	.08	13
67	RD007SF1	20N	30	200N	150	.002L	.12	.05N	.35	.08	26
68	RD007SF2	20N	20	200N	300	.002L	2.2	.05N	.35	.06	13
69	RD007SF3	20N	30	200N	300	.004	1.8	.05N	.55	.10	16
70	RD008SF1	20N	20	200N	100	.002N	.54	.05N	.55	.06	8.2
71	RD008SF2	20N	20	200N	150	.002N	36G	.05N	.45	.07	17
72	RD008SF3	20N	30	200N	200	.002N	11	.05N	.45	.08	29

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Bi ppm-ICP	Cd ppm-ICP	Cu ppm-ICP	Mo ppm-ICP	Pb ppm-ICP	Sb ppm-ICP	Zn ppm-ICP
37	MT068SF1	.6N	.40	76	3.2	12	1.1	150
38	MT068SF2	.6N	.24	55	1.9	7.9	1.1	96
39	MT068SF3	.6N	.19	48	1.4	6.5	.60N	70
40	MT069SF1	.6N	.11	11	.35	4.3	1.0	45
41	MT069SF2	.6N	.19	15	.49	7.0	1.5	68
42	MT069SF3	.6N	.29	21	.81	11	1.8	79
43	MT070SF1	.6N	.16	8.4	.68	3.3	.60N	46
44	MT070SF2	.6N	.17	12	.74	5.0	.69	60
45	MT070SF3	.6N	.30	16	.93	5.5	.60N	77
46	MT071SF1	.6N	.06	15	.42	3.4	.60N	43
47	MT071SF2	.6N	.03N	19	.59	4.3	.69	53
48	MT071SF3	.6N	.08	22	.55	4.2	.60N	57
49	MT117SF1	.6N	1.3	66	8.1	12	3.5	190
50	MT117SF2	.6N	1.0	59	6.9	11	2.8	150
51	MT117SF3	.6N	.84	50	4.6	10	2.0	120
52	MT118SF1	.6N	.19	19	.95	4.5	1.3	55
53	MT118SF2	.6N	.30	33	1.6	7.9	1.7	84
54	MT118SF3	.6N	.27	39	1.6	8.2	1.7	79
55	MT119SF1	.6N	.30	26	1.1	5.9	1.2	73
56	MT119SF2	.6N	.32	31	1.2	7.0	1.1	84
57	MT119SF3	.6N	.31	39	1.4	7.9	1.1	88
58	MT120SF1	.6N	.12	14	.81	4.1	.66	57
59	MT120SF2	.6N	.10	17	.74	5.5	.68	62
60	MT120SF3	.6N	.16	19	.83	6.7	.67	72
61	MT121SF1	.6N	.11	20	.46	6.2	1.1	57
62	MT121SF2	.6N	.13	21	.37	6.3	1.0	65
63	MT121SF3	.6N	.17	24	42	7.9	.84	75
64	RD006SF1	.6N	.08	9.8	.49	4.8	.60N	47
65	RD006SF2	.6N	.13	14	.60	6.6	.98	63
66	RD006SF3	.6N	.15	17	.68	7.5	1.3	70
67	RD007SF1	.6N	.18	23	1.1	9.3	3.1	85
68	RD007SF2	.6N	.10	18	.72	6.6	1.8	67
69	RD007SF3	.6N	.19	25	.87	9.2	2.0	89
70	RD008SF1	.6N	.06	5.0	.19	2.3	1.4	23
71	RD008SF2	.6N	.15	9.4	.44	5.1	3.0	46
72	RD008SF3	.6N	.17	16	.63	8.5	3.7	65

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S
73	RD009SF1	61 45 28	157 20 50	.7	3	.7	3	.2N	1	.5N	200N
74	RD009SF2	61 45 28	157 20 50	.7	5	1	3	.2N	1	.5N	200N
75	RD009SF3	61 45 28	157 20 50	1	7	1.5	5	.2N	1G	.5N	200N
76	RD010SF1	61 47 49	157 20 09	.5	10	2	2	.2N	1G	.5N	200N
77	RD010SF2	61 47 49	157 20 09	.7	7	1	3	.2N	1	.5N	200N
78	RD010SF3	61 47 49	157 20 09	1.5	10	2	3	.2N	1G	.5N	200N
79	RD011SF1	61 45 06	157 24 36	1	10	1	5	.2N	1	.5N	200N
80	RD011SF2	61 45 06	157 24 36	1	5	1	5	.2N	1G	.5N	200N
81	RD011SF3	61 45 06	157 24 36	1.5	10	2	3	.2N	1G	.5N	200N
82	RD056SF1	61 40 22	157 16 28	.7	10	1	3	.2N	1	.5N	200N
83	RD056SF2	61 40 22	157 16 28	.5	7	1	2	.2N	1	.5N	200N
84	RD056SF3	61 40 22	157 16 28	1	10	3	3	.2N	1G	.5N	200N
85	RD057SF1	61 42 54	157 16 07	.7	10	1	5	.2N	1	.5N	200N
86	RD057SF2	61 42 54	157 16 07	.7	7	1	3	.2N	1	.5N	200N
87	RD057SF3	61 42 54	157 16 07	.7	10	1	2	.2N	1	.5N	200N
88	RD058SF1	61 45 22	157 19 08	1	7	1	5	.2N	1	.5N	200N
89	RD058SF2	61 45 22	157 19 08	.7	7	1	2	.2N	1G	.5N	200N
90	RD058SF3	61 45 22	157 19 08	.7	10	1.5	2	.2N	1G	.5N	200N
91	RD059SF1	61 48 00	157 21 01	.5	7	1.5	2	.2N	1	.5N	200N
92	RD059SF2	61 48 00	157 21 01	.5	7	1.5	3	.2N	1	.5N	200N
93	RD059SF3	61 48 00	157 21 01	1	10	2	3	.2N	1G	.5N	200N
94	RD060SF1	61 48 17	157 22 12	.7	7	1	2	.2N	1	.5N	200N
95	RD060SF2	61 48 17	157 22 12	.7	5	1.5	3	.2N	1G	.5N	200N
96	RD060SF3	61 48 17	157 22 12	1	7	2	5	.2N	1G	.5N	200N
97	RD061SF1	61 46 19	157 24 31	.5	5	.7	3	.2N	.5	.5N	200N
98	RD061SF2	61 46 19	157 24 31	1	10	2	3	.2N	1G	.5N	200N
99	RD061SF3	61 46 19	157 24 31	1	10	2	5	.2N	1G	.5N	200N
100	RD062SF1	61 44 43	157 25 24	1	10	2	5G	.2N	1G	.5N	200N
101	RD062SF2	61 44 43	157 25 24	1	5	1	5G	.2N	1	.5N	200N
102	RD062SF3	61 44 43	157 25 24	1.5	7	3	5G	.2N	1G	.5N	200N
103	RD105SF1	61 40 54	157 20 09	1.5	5	.7	5G	.2N	.5	.5N	200N
104	RD105SF2	61 40 54	157 20 09	.7	3	2	5	.2N	1	.5N	200N
105	RD105SF3	61 40 54	157 20 09	1.5	7	2	3	.2N	1G	.5N	200N
106	RD106SF1	61 43 39	157 16 46	.7	5	1	5	.2N	.7	.5N	200N
107	RD106SF2	61 43 39	157 16 46	1	10	2	5	.2N	1	.5N	200N
108	RD106SF3	61 43 39	157 16 46	1	7	2	5	.2N	1G	.5N	200N

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
73	RD009SF1	30	2000	1N	10N	20N	10	100	10	50	10N	50L
74	RD009SF2	50	1500	1N	10N	20N	15	150	10	30	10N	50
75	RD009SF3	50	2000	1N	10N	20N	15	200	20	70	10N	50
76	RD010SF1	50	3000	1N	10N	20N	20	150	20	70	10N	50L
77	RD010SF2	30	1500	1L	10N	20N	15	150	20	100	10N	50
78	RD010SF3	50	2000	1L	10N	20N	15	150	20	70	10N	50
79	RD011SF1	50	3000	1L	10N	20N	20	100	20	100	10N	50L
80	RD011SF2	30	2000	1L	10N	20N	15	100	15	70	10N	50L
81	RD011SF3	50	3000	1L	10N	20N	15	150	15	50	10N	70
82	RD056SF1	30	2000	1N	10N	20N	15	150	15	50	10N	50L
83	RD056SF2	30	1500	1N	10N	20N	20	150	15	70	10N	70
84	RD056SF3	50	3000	1L	10N	20N	20	150	20	50	10N	70
85	RD057SF1	50	3000	1N	10N	20N	20	150	20	70	10N	50N
86	RD057SF2	30	1500	1L	10N	20N	20	200	20	100	10N	50
87	RD057SF3	50	1500	1L	10N	20N	20	100	20	30	10N	50L
88	RD058SF1	50	3000	1N	10N	20N	15	100	20	50	10N	50L
89	RD058SF2	50	2000	1L	10N	20N	15	150	20	50	10N	100
90	RD058SF3	50	3000	1L	10N	20N	20	150	20	30	10N	50
91	RD059SF1	50	2000	1N	10N	20N	20	100	20	50	10N	50L
92	RD059SF2	30	2000	1L	10N	20N	20	150	20	70	10N	50
93	RD059SF3	50	3000	1L	10N	20N	20	150	20	50	10N	70
94	RD060SF1	50	3000	1N	10N	20N	15	200	20	50	10N	50
95	RD060SF2	20	1500	1L	10N	20N	15	200	20	70	10N	50
96	RD060SF3	50	2000	1L	10N	20N	15	150	20	100	10N	70
97	RD061SF1	30	2000	1N	10N	20N	10	150	10	30	10N	50L
98	RD061SF2	50	2000	1L	10N	20N	15	200	10	50	10N	50
99	RD061SF3	70	5000	1L	10N	20N	15	300	20	50	10N	150
100	RD062SF1	20	2000	1L	10N	20N	20	100	20	100	10N	50L
101	RD062SF2	15	2000	1N	10N	20N	15	70	10	70	10N	50L
102	RD062SF3	20	1500	1L	10N	20N	15	150	15	150	10N	70
103	RD105SF1	30	5000	1L	10N	20N	10	100	10	100	10N	50L
104	RD105SF2	20	1500	1L	10N	20N	10	70	10	70	10N	50
105	RD105SF3	50	3000	1L	10N	20N	15	150	15	50	10N	50
106	RD106SF1	30	5000	1L	10N	20N	10	100	15	70	10N	50L
107	RD106SF2	50	2000	1L	10N	20N	15	150	20	70	10N	50L
108	RD106SF3	30	3000	1L	10N	20N	10	150	15	50	10N	50

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S	Th ppm-S	V ppm-S
73	RD009SF1	500	5N	20N	20	20	100N	10	10N	200	100N	200
74	RD009SF2	700	5N	20N	30	10	100N	10	10N	300	100N	200
75	RD009SF3	1000	5N	20L	50	30	100N	15	10N	150	100N	200
76	RD010SF1	1500	5N	20L	50	30	100N	20	10N	200	100N	300
77	RD010SF2	700	5N	20L	30	30	100N	20	10N	100	100N	200
78	RD010SF3	1000	5N	20N	50	50	100N	15	10N	150	100N	200
79	RD011SF1	1000	5N	20N	30	30	100N	20	10N	200	100N	200
80	RD011SF2	700	5N	20N	30	20	100N	15	10N	300	100N	150
81	RD011SF3	1000	5N	20L	30	30	100N	15	10N	200	100N	200
82	RD056SF1	1000	5N	20N	50	20	100N	15	10N	100	100N	200
83	RD056SF2	1000	5N	20N	50	20	100N	15	10N	150	100N	150
84	RD056SF3	1500	5N	20L	50	30	100N	15	10N	150	100N	200
85	RD057SF1	3000	5N	20N	50	30	100N	15	10N	150	100N	200
86	RD057SF2	1000	5N	20N	50	30	100N	15	10N	150	100N	200
87	RD057SF3	1500	5N	20N	50	30	100N	10	10N	100	100N	200
88	RD058SF1	700	5N	20N	20	30	100N	15	10N	100	100N	200
89	RD058SF2	1000	5N	20L	50	30	100N	15	10N	200	100N	200
90	RD058SF3	1000	5N	20	50	30	100N	15	10N	100	100N	300
91	RD059SF1	1500	5N	20L	30	30	100N	15	10N	150	100N	200
92	RD059SF2	1000	5N	20L	50	20	100N	15	10N	150	100N	200
93	RD059SF3	2000	5N	20N	50	30	100N	15	10N	150	100N	300
94	RD060SF1	700	5N	20L	30	30	100N	20	10N	150	100N	300
95	RD060SF2	700	5N	20N	50	20	100N	15	10N	200	100N	200
96	RD060SF3	1500	5N	20L	30	50	100N	20	10N	200	100N	300
97	RD061SF1	300	5N	20N	20	20	100N	10	10N	100	100N	200
98	RD061SF2	2000	5N	20	15	20	100N	15	10N	150	100N	300
99	RD061SF3	700	5N	20L	30	30	100N	20	100	150	100N	300
100	RD062SF1	1000	5N	20N	20	50	100N	15	10N	300	100N	300
101	RD062SF2	1000	5N	20N	20	20	100N	15	10N	200	100N	150
102	RD062SF3	1000	5N	20L	50	30	100N	15	10N	200	100N	200
103	RD105SF1	500	5N	20N	20	30	100N	10	10N	300	100N	150
104	RD105SF2	700	5N	20N	20	20	100N	10	10N	300	100N	100
105	RD105SF3	1000	5N	20L	50	50	100N	15	10N	200	100N	200
106	RD106SF1	700	5N	20N	30	30	100N	10	10N	200	100N	200
107	RD106SF2	1000	5N	20L	30	30	100N	15	10N	150	100N	200
108	RD106SF3	1000	5N	20N	30	20	100N	15	10N	150	100N	200

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	W ppm-S	Y ppm-S	Zn ppm-S	Zr ppm-S	Au ppm-AA	Hg ppm-AA	Te ppm-AA	Tl ppm-AA	Ag ppm-ICP	As ppm-ICP
73	RD009SF1	20N	20	200N	100	.002N	.96	.05N	.40	.09	8.8
74	RD009SF2	20N	15	200N	100	.002L	1.0	.05N	.30	.08	6.3
75	RD009SF3	20N	20	200N	300	.002	5.0	.05N	.50	.10	6.8
76	RD010SF1	20N	30	200N	100	.002N	1.0	.05N	.35	.09	12
77	RD010SF2	20N	30	200N	150	.002N	1.0	.05N	.35	.11	4.3
78	RD010SF3	20N	30	200N	300	.002L	5.0	.05N	.45	.09	7.1
79	RD011SF1	20N	30	200N	150	.002N	.44	.05N	.40	.08	13
80	RD011SF2	20N	20	200N	200	.002L	.88	.05N	.40	.08	5.4
81	RD011SF3	20N	50	200N	1000	.004	1.0	.05N	.20	.07	4.4
82	RD056SF1	20N	30	200N	150	.002N	.60	.05N	.40	.07	14
83	RD056SF2	20N	30	200N	200	.002N	2.9	.05N	.40	.07	9.1
84	RD056SF3	20N	50	200N	500	.012	12	.05N	.45	.07	12
85	RD057SF1	20N	30	200N	100	.002N	.34	.05N	.40	.07	18
86	RD057SF2	20N	30	200N	150	.002N	.32	.05N	.45	.09	12
87	RD057SF3	20N	30	200N	300	.002N	1.4	.05N	.20	.09	11
88	RD058SF1	20N	20	200N	100	.002N	.58	.05N	.40	.07	32
89	RD058SF2	20N	30	200N	300	.002N	.20	.05N	.45	.07	26
90	RD058SF3	20N	50	200N	500	.002N	2.8	.05N	.20	.07	36
91	RD059SF1	20N	20	200N	150	.002N	1.0	.05N	.35	.08	21
92	RD059SF2	20N	30	200N	150	.002N	.40	.05N	.35	.11	14
93	RD059SF3	20N	30	200N	300	.002N	6.4	.05N	.45	.10	20
94	RD060SF1	20N	30	200N	150	.002N	2.4	.05N	.40	.11	19
95	RD060SF2	20N	20	200N	500	.002N	3.2	.05N	.40	.11	14
96	RD060SF3	20N	30	200N	500	.002L	5.0	.05N	.45	.10	10
97	RD061SF1	20N	30	200N	100	.004	1.1	.05N	.35	.045N	16
98	RD061SF2	20N	70	200N	10000	.002L	4.5	.05N	.35	.045N	10
99	RD061SF3	20N	50	200N	700	.002	.72	.05N	.50	.08	16
100	RD062SF1	20N	30	200N	200	.002N	.14	.05N	.30	.045N	4.4
101	RD062SF2	20N	20	200N	200	.002L	.08	.05N	.30	.045N	3.9
102	RD062SF3	20N	50	200N	700	.018	.92	.05N	.30	.045N	.6N
103	RD105SF1	20N	15	200N	100	.002N	.60	.05N	.45	.08	13
104	RD105SF2	20N	15	200N	150	.002N	1.6	.05N	.10	.10	3.9
105	RD105SF3	20N	30	200N	300	.002L	2.1	.05N	.40	.11	13
106	RD106SF1	20N	15	200N	150	.002L	.28	.05N	.35	.05	8.1
107	RD106SF2	20N	30	200N	200	.002L	1.1	.05N	.35	.06	5.3
108	RD106SF3	20N	50	200N	300	.004	6.8	.05N	.35	.13	5.9

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Bi ppm-ICP	Cd ppm-ICP	Cu ppm-ICP	Mo ppm-ICP	Pb ppm-ICP	Sb ppm-ICP	Zn ppm-ICP
73	RD009SF1	.6N	.07	7.6	.38	3.2	8.5	44
74	RD009SF2	.6N	.12	8.9	.47	4.8	9.0	57
75	RD009SF3	.6N	.16	13	.57	6.1	9.7	63
76	RD010SF1	.6N	.16	25	1.3	7.8	.76	76
77	RD010SF2	.6N	.14	18	.90	6.8	.61	67
78	RD010SF3	.6N	.17	22	1.0	9.2	.96	73
79	RD011SF1	.6N	.12	17	1.1	7.0	1.8	65
80	RD011SF2	.6N	.10	11	.62	5.4	1.1	52
81	RD011SF3	.6N	.13	13	.56	6.3	.69	52
82	RD056SF1	.6N	.12	15	.46	4.8	.60N	66
83	RD056SF2	.6N	.17	17	.55	5.6	.80	74
84	RD056SF3	.6N	.19	21	.63	6.5	.98	82
85	RD057SF1	.6N	.24	27	1.8	12	1.4	88
86	RD057SF2	.6N	.21	22	1.3	8.7	1.2	80
87	RD057SF3	.6N	.20	25	1.4	8.8	1.2	85
88	RD058SF1	.6N	.12	15	.78	6.7	13	57
89	RD058SF2	.6N	.15	15	.78	6.6	11	64
90	RD058SF3	.6N	.16	23	1.0	9.0	12	82
91	RD059SF1	.6N	.16	19	1.2	6.9	2.6	67
92	RD059SF2	.6N	.18	19	1.1	6.8	1.8	73
93	RD059SF3	.6N	.22	26	1.5	9.9	2.4	90
94	RD060SF1	.6N	.13	17	1.1	6.0	1.9	55
95	RD060SF2	.6N	.11	17	.96	7.3	1.6	57
96	RD060SF3	.6N	.16	18	.82	8.1	1.1	62
97	RD061SF1	.6N	.08	9.4	.56	4.5	4.8	38
98	RD061SF2	.6N	.09	9.5	.49	4.3	3.6	42
99	RD061SF3	.6N	.15	15	.68	7.1	4.0	58
100	RD062SF1	.6N	.09	13	.62	5.1	.60N	61
101	RD062SF2	.6N	.11	11	.48	4.9	.60N	58
102	RD062SF3	.6N	.11	13	.51	5.8	.60N	56
103	RD105SF1	.6N	.06	8.4	.54	4.9	.83	46
104	RD105SF2	.6N	.10	9.1	.44	5.2	.60N	49
105	RD105SF3	.6N	.14	16	.62	8.6	1.2	67
106	RD106SF1	.6N	.09	13	.56	4.2	1.5	66
107	RD106SF2	.6N	.14	13	.53	5.2	.97	61
108	RD106SF3	.6N	.19	15	61	7.4	1.4	59

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S
109	RD107SF1	61 46 25	157 20 11	.7	10	1	2	.2N	1	.5N	700
110	RD107SF2	61 46 25	157 20 11	.7	10	1.5	2	.2N	1	.5N	700
111	RD107SF3	61 46 25	157 20 11	.5	7	1	2	.2N	1G	.5N	500
112	RD108SF1	61 44 44	157 21 01	1	10	1	5G	.2N	1G	.5L	200N
113	RD108SF2	61 44 44	157 21 01	.7	7	1.5	5	.2N	1	.5N	200N
114	RD108SF3	61 44 44	157 21 01	.7	5	1.5	2	.2N	1	.5N	200N
115	RD109SF1	61 49 19	157 23 23	1	7	2	2	.2N	1	.5N	200N
116	RD109SF2	61 49 19	157 23 23	1	7	2	3	.2N	1	.5N	200N
117	RD109SF3	61 49 19	157 23 23	1	5	2	3	.2N	1G	.5N	200N
118	RD110SF1	61 48 29	157 23 27	.7	10	1.5	2	.2N	1G	.5N	200N
119	RD110SF2	61 48 29	157 23 27	1	7	1.5	3	.2N	1	.5N	200N
120	RD110SF3	61 48 29	157 23 27	1	7	2	2	.2N	1G	.5N	200N
121	RD111SF1	61 43 39	157 26 33	1	15	2	5G	.2N	1G	.5N	200N
122	RD111SF2	61 43 39	157 26 33	1	7	1	5G	.2N	1	.5N	200N
123	RD111SF3	61 43 39	157 26 33	1.5	7	2	5	.2N	1G	.5N	200N
124	RY012SF1	61 55 56	158 24 13	1	7	1.5	5	.2N	1	.5N	200N
125	RY012SF2	61 55 56	158 24 13	.5	7	1	3	.2N	.7	.5N	200N
126	RY012SF3	61 55 56	158 24 13	.7	7	1	5	.2N	1G	.5N	200N
127	RY013SF1	61 56 19	158 21 30	1.5	7	1.5	5G	.2N	1G	.5N	200N
128	RY013SF2	61 56 19	158 21 30	1	5	1.5	5G	.2N	1G	.5N	200N
129	RY013SF3	61 56 19	158 21 30	1	5	2	3	.2N	1G	.5N	200N
130	RY014SF1	61 57 50	158 16 26	1.5	7	.7	5G	.2N	1	.5N	200N
131	RY014SF2	61 57 50	158 16 26	1	7	1.5	5G	.2N	1	.5N	200N
132	RY014SF3	61 57 50	158 16 26	1	7	3	5	.2N	1G	.5N	200N
133	RY015SF1	61 59 11	158 26 22	1.5	15	2	5G	.2N	1G	.5N	200N
134	RY015SF2	61 59 11	158 26 22	.5	7	1	5	.2N	1	.5N	200N
135	RY015SF3	61 59 11	158 26 22	1	7	3	5	.2N	1G	.5N	200N
136	RY063SF1	61 54 59	158 29 27	1.5	7	.7	5G	.2N	1G	.5N	200N
137	RY063SF2	61 54 59	158 29 27	1.5	7	.7	5G	.2N	1	.5N	200N
138	RY063SF3	61 54 59	158 29 27	1	5	1	2	.2N	1	.5N	200N
139	RY064SF1	61 56 20	158 21 53	1	7	.7	5G	.2N	1	.5N	200N
140	RY064SF2	61 56 20	158 21 53	.7	3	.7	5G	.2N	1	.5N	200N
141	RY064SF3	61 56 20	158 21 53	1.5	5	1	3	.2N	1G	.5N	200N
142	RY065SF1	61 57 11	158 18 59	1.5	7	1	5G	.2N	1G	.5N	200N
143	RY065SF2	61 57 11	158 18 59	1	5	1	5G	.2N	1G	.5N	200N
144	RY065SF3	61 57 11	158 18 59	.7	5	1	2	.2N	1G	.5N	200N

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
109	RD107SF1	100	5000	1L	10N	20N	20	150	50	100	10N	70
110	RD107SF2	100	3000	1L	10N	20N	20	150	70	100	10N	50
111	RD107SF3	150	3000	1L	10N	20N	20	150	50	50	10N	50
112	RD108SF1	70	5000	1N	10N	20N	20	100	20	150	10N	50L
113	RD108SF2	50	3000	1L	10N	20N	15	200	20	100	10N	70
114	RD108SF3	30	2000	1N	10N	20N	10	150	20	30	10N	50
115	RD109SF1	50	2000	1L	10N	20N	15	100	15	70	10N	50L
116	RD109SF2	50	2000	1L	10N	20N	15	200	20	70	10N	50L
117	RD109SF3	50	2000	1L	10N	20N	15	150	20	30	10N	70
118	RD110SF1	70	2000	1N	10N	20N	15	100	20	100	10N	50L
119	RD110SF2	30	3000	1N	10N	20N	15	150	15	50	10N	50
120	RD110SF3	50	2000	1L	10N	20N	15	150	20	50	10N	50
121	RD111SF1	30	5000	1N	10N	20N	15	70	10	150	10N	50L
122	RD111SF2	30	2000	1N	10N	20N	15	200	10	100	10N	50L
123	RD111SF3	30	2000	1N	10N	20N	15	150	15	100	10N	50
124	RY012SF1	20	1500	1L	10N	20N	20	200	20	70	10N	50
125	RY012SF2	50	1500	1L	10N	20N	15	150	15	50	10N	50N
126	RY012SF3	30	2000	1L	10N	20N	20	200	15	50	10N	50
127	RY013SF1	50	3000	1N	10N	20N	15	100	10	150	10N	50L
128	RY013SF2	30	2000	1N	10N	20N	15	150	10	100	10N	50L
129	RY013SF3	30	1500	1L	10N	20N	15	200	15	70	10N	50
130	RY014SF1	30	2000	1L	10N	20N	15	100	15	100	10N	50L
131	RY014SF2	50	2000	1L	10N	20N	15	200	15	100	10N	50L
132	RY014SF3	50	1500	1L	10N	20N	20	150	15	30	10N	50
133	RY015SF1	20	1500	1N	10N	20N	20	70	15	100	10N	50L
134	RY015SF2	20	2000	1N	10N	20N	15	100	10	70	10N	50L
135	RY015SF3	20	2000	1N	10N	20N	15	200	15	70	10N	50
136	RY063SF1	20	5000G	1L	10N	20N	15	100	10	100	10N	50
137	RY063SF2	30	5000	1N	10N	20N	15	150	10	100	10N	70
138	RY063SF3	20	1500	1N	10N	20N	15	100	10	30	10N	50
139	RY064SF1	200	2000	1L	10N	20N	10	50	7	100	10N	50N
140	RY064SF2	70	1000	1L	10N	20N	10	150	7	70	10N	50L
141	RY064SF3	70	1500	1L	10N	20N	10	150	10	50	10N	70
142	RY065SF1	30	5000	1L	10N	20N	20	100	10	100	10N	50L
143	RY065SF2	50	1500	1N	10N	20N	15	200	7	70	10N	50
144	RY065SF3	30	1000	1L	10N	20N	15	150	10	50	10N	50

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S	Th ppm-S	V ppm-S
109	RD107SF1	5000	5L	20L	50	50	300	20	10N	300	100N	500
110	RD107SF2	5000G	5N	20L	50	50	300	20	10N	200	100N	500
111	RD107SF3	2000	5N	20L	70	50	200	15	10N	200	100N	300
112	RD108SF1	2000	15	20N	30	50	100N	10	10N	200	100N	300
113	RD108SF2	700	5N	20N	30	30	100N	20	10N	150	100N	200
114	RD108SF3	700	5N	20N	30	15	100N	15	10N	150	100N	200
115	RD109SF1	500	5N	20N	30	20	100N	15	10N	100	100N	200
116	RD109SF2	700	5N	20L	50	20	100N	15	10N	150	100N	200
117	RD109SF3	700	5N	20N	30	30	100N	15	10N	200	100N	200
118	RD110SF1	1000	5N	20L	20	30	100N	10	10N	100	100N	500
119	RD110SF2	700	5N	20N	20	30	100N	15	10N	150	100N	200
120	RD110SF3	1000	5N	20L	50	30	100N	20	10N	200	100N	200
121	RD111SF1	1000	5N	20N	20	50	100N	10	10N	300	100N	300
122	RD111SF2	700	5N	20N	15	30	100N	15	10N	300	100N	150
123	RD111SF3	1000	5N	20N	20	30	100N	20	10N	200	100N	200
124	RYD12SF1	1000	5N	20N	30	30	100N	15	10N	200	100N	150
125	RYD12SF2	700	5N	20L	20	20	100N	15	10N	150	100N	200
126	RYD12SF3	1000	5N	20N	20	30	100N	15	10N	200	100N	200
127	RYD13SF1	1500	5N	20L	20	50	100N	10	10N	200	100N	200
128	RYD13SF2	500	5N	20N	15	30	100N	15	10N	200	100N	150
129	RYD13SF3	1000	5N	20N	30	30	100N	15	10N	200	100N	200
130	RYD14SF1	1000	5L	20N	15	50	100N	10	10N	300	100N	150
131	RYD14SF2	1000	5N	20L	20	30	100N	15	10N	200	100N	150
132	RYD14SF3	1500	5N	20N	30	30	100N	15	10N	200	100N	200
133	RYD15SF1	1500	5N	20N	30	30	100N	10	10N	100	100N	300
134	RYD15SF2	1000	5N	20N	20	30	100N	15	10N	200	100N	150
135	RYD15SF3	1000	5N	20N	20	30	100N	20	10N	150	100N	200
136	RYD63SF1	2000	5N	20L	10	70	100N	7	10N	200	100N	150
137	RYD63SF2	2000	5N	20N	15	50	100N	15	10N	200	100N	100
138	RYD63SF3	2000	5N	20N	15	20	100N	10	10N	100	100N	150
139	RYD64SF1	700	5N	20L	10	50	100N	7	10N	200	100N	150
140	RYD64SF2	700	5N	20L	7	30	100N	10	10N	150	100N	150
141	RYD64SF3	1000	5N	20L	10	30	100N	15	10N	150	100N	150
142	RYD65SF1	2000	5N	20L	15	70	100N	10	10N	200	100N	200
143	RYD65SF2	700	5N	20L	20	30	100N	15	10N	200	100N	100
144	RYD65SF3	700	5N	20N	30	20	100N	10	10N	100	100N	200

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	W ppm-S	Y ppm-S	Zn ppm-S	Zr ppm-S	Au ppm-AA	Hg ppm-AA	Te ppm-AA	Tl ppm-AA	Ag ppm-ICP	As ppm-ICP
109	RD107SF1	20N	50	200N	150	.016	36G	.05N	.75	.18	940
110	RD107SF2	20N	30	200N	300	.026	36G	.05N	.75	.20	970
111	RD107SF3	20N	50	200N	300	.018	36G	.05N	.80	.28	970
112	RD108SF1	20N	30	200N	150	.002	.30	.05N	.45	.045N	16
113	RD108SF2	20N	30	200N	200	.002L	1.3	.05N	.35	.045N	9.4
114	RD108SF3	20N	30	200N	200	.002	4.8	.05N	.50	.06	10
115	RD109SF1	20N	20	200N	200	.002L	1.5	.05N	.30	.05	16
116	RD109SF2	20N	30	200N	300	.002N	36G	.05N	.35	.06	11
117	RD109SF3	20N	50	200N	1000	.002L	2.6	.05N	.35	.09	16
118	RD110SF1	20N	20	200N	200	.002	3.2	.05N	.35	.05	22
119	RD110SF2	20N	20	200N	200	.002L	36G	.05N	.35	.045N	11
120	RD110SF3	20N	30	200N	500	.002L	7.4	.05N	.40	.06	12
121	RD111SF1	20N	20	200N	150	.002	.44	.05N	.40	.045N	10
122	RD111SF2	20N	20	200N	100	.002	.20	.05N	.30	.045N	6.5
123	RD111SF3	20N	30	200N	500	.002L	1.1	.05N	.40	.045N	8.0
124	RY012SF1	20N	20	200N	150	.002L	2.0	.05N	.30	.045N	13
125	RY012SF2	20N	20	200N	300	.002	11	.05N	.35	.045N	9.4
126	RY012SF3	20N	30	200N	300	.004	4.4	.05N	.40	.10	11
127	RY013SF1	20N	20	200N	200	.002N	.96	.05N	.30	.045N	9.8
128	RY013SF2	20N	20	200N	300	.004	3.2	.05N	.25	.045N	4.6
129	RY013SF3	20N	30	200N	500	.004	2.9	.05N	.40	.045N	6.5
130	RY014SF1	20N	20	200N	150	.002	.88	.05N	.35	.045N	18
131	RY014SF2	20N	30	200N	200	.002	4.4	.05N	.30	.045N	7.8
132	RY014SF3	20N	30	200N	300	.004	3.1	.05N	.35	.045N	10
133	RY015SF1	20N	20	200N	200	.002L	.12	.05N	.25	.045N	6.2
134	RY015SF2	20N	20	200N	150	.002L	.12	.05N	.25	.045N	3.5
135	RY015SF3	20N	30	200N	200	.006	1.0	.05N	.40	.05	3.7
136	RY063SF1	20N	20	200N	200	.002N	1.8	.05N	.40	.08	14
137	RY063SF2	20N	20	200N	200	.002	1.3	.05N	.40	.07	12
138	RY063SF3	20N	30	200N	300	.002L	1.4	.05N	.35	.05	17
139	RY064SF1	20N	15	200N	150	.002	1.1	.05N	.45	.045N	22
140	RY064SF2	20N	20	200N	300	.002L	2.9	.05N	.45	.045N	20
141	RY064SF3	20N	30	200N	300	.072	3.8	.05N	.45	.06	41
142	RY065SF1	20N	20	200N	200	.002N	.76	.05N	.35	.045N	13
143	RY065SF2	20N	20	200N	150	.002L	1.6	.05N	.35	.045N	7.6
144	RY065SF3	20N	20	200N	300	.002	3.6	.05N	.30	.045N	7.7

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Bi ppm-ICP	Cd ppm-ICP	Cu ppm-ICP	Mo ppm-ICP	Pb ppm-ICP	Sb ppm-ICP	Zn ppm-ICP
109	RD107SF1	.6N	.51	61	2.3	16	470	110
110	RD107SF2	.6N	.47	54	2.0	15	440	96
111	RD107SF3	.6N	.41	49	1.7	15	330	77
112	RD108SF1	.6N	.18	20	1.3	8.1	12	81
113	RD108SF2	.6N	.38	16	.91	6.7	5.3	67
114	RD108SF3	.6N	.22	24	1.2	8.5	4.8	87
115	RD109SF1	.6N	.09	11	.56	4.3	2.2	54
116	RD109SF2	.6N	.06	12	.50	4.4	1.7	49
117	RD109SF3	.6N	.15	15	.54	6.7	3.1	59
118	RD110SF1	.6N	.11	12	.70	4.3	2.4	49
119	RD110SF2	.6N	.12	12	.51	4.8	1.3	50
120	RD110SF3	.6N	.17	15	.57	6.8	1.7	57
121	RD111SF1	.6N	.06	7.5	.41	4.3	.60N	46
122	RD111SF2	.6N	.07	8.9	.39	4.7	.60N	48
123	RD111SF3	.6N	.12	13	.46	6.6	.60N	60
124	RY012SF1	.6N	.12	15	.66	8.9	2.0	62
125	RY012SF2	.6N	.11	13	.49	8.2	2.0	55
126	RY012SF3	.6N	.15	17	.65	11	2.2	66
127	RY013SF1	.6N	.06	6.0	.36	5.6	1.8	38
128	RY013SF2	.6N	.19	5.8	.28	5.4	1.5	42
129	RY013SF3	.6N	.13	9.4	.35	8.3	2.0	57
130	RY014SF1	.6N	.09	7.9	.58	7.3	1.7	46
131	RY014SF2	.6N	.04	7.1	.39	6.0	1.1	39
132	RY014SF3	.6N	.13	11	.43	9.1	2.0	58
133	RY015SF1	.6N	.07	8.9	.36	5.3	.60N	56
134	RY015SF2	.6N	.09	9.0	.40	5.7	.60N	55
135	RY015SF3	.6N	.11	13	.47	8.1	.60N	63
136	RY063SF1	.6N	.09	5.0	.46	4.2	.65	32
137	RY063SF2	.6N	.12	5.4	.41	4.8	.60N	33
138	RY063SF3	.6N	.20	9.4	.65	8.3	.60N	54
139	RY064SF1	.6N	.04	3.4	.33	4.6	1.8	17
140	RY064SF2	.6N	.03N	4.1	.27	6.1	1.9	20
141	RY064SF3	.6N	.13	8.1	.50	12	3.1	43
142	RY065SF1	.6N	.07	5.4	.40	5.7	1.5	33
143	RY065SF2	.6N	.06	5.4	.28	4.9	1.3	39
144	RY065SF3	.6N	.09	9.7	.44	7.7	2.4	60

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S
145	RY066SF1	61 59 10	158 17 32	1	10	1.5	5G	.2N	1G	.5N	200N
146	RY066SF2	61 59 10	158 17 32	.7	7	2	5	.2N	1	.5N	200N
147	RY066SF3	61 59 10	158 17 32	.7	10	3	5	.2N	1G	.5N	200N
148	RY067SF1	61 58 30	158 26 53	.7	7	1	5	.2N	1	3	200N
149	RY067SF2	61 58 30	158 26 53	1	7	2	5G	.2N	1	.5N	200N
150	RY067SF3	61 58 30	158 26 53	1	7	3	5	.2N	1G	.5N	200N
151	RY112SF1	61 56 07	158 23 22	.5	5	.5	5G	.2N	.5	.5N	200N
152	RY112SF2	61 56 07	158 23 22	.5	5	.7	5G	.2N	.7	.5N	200N
153	RY112SF3	61 56 07	158 23 22	1	7	1.5	5	.2N	1G	.5N	200N
154	RY113SF1	61 55 57	158 23 29	1	7	1	5G	.2N	.7	.5N	200N
155	RY113SF2	61 55 57	158 23 29	.5	7	1.5	5	.2N	1	.5N	200N
156	RY113SF3	61 55 57	158 23 29	.7	10	1.5	2	.2N	1	.5N	200N
157	RY114SF1	61 57 21	158 18 31	1	5	.7	5G	.2N	.7	.5N	200N
158	RY114SF2	61 57 21	158 18 31	.5	5	.7	5	.2N	1	.5N	200N
159	RY114SF3	61 57 21	158 18 31	1	7	1	5	.2N	1G	.5N	200N
160	RY115SF1	61 58 30	158 21 00	1	10	2	5G	.2N	1G	.5N	200N
161	RY115SF2	61 58 30	158 21 00	1	7	2	5G	.2N	1	.5N	200N
162	RY115SF3	61 58 30	158 21 00	.7	5	2	3	.2N	1G	.5N	200N
163	RY116SF1	61 58 14	158 27 22	1	10	1.5	5G	.2N	1G	.5N	200N
164	RY116SF2	61 58 14	158 27 22	.7	7	1	5	.2N	1	.5N	200N
165	RY116SF3	61 58 14	158 27 22	1	5	2	3	.2N	1G	.5N	200N
166	WM001SF1	62 11 01	154 50 16	1.5	5	1	1.5	.2N	1	.5N	200N
167	WM001SF2	62 11 01	154 50 16	1	5	1	3	.2N	1	.5L	200N
168	WM001SF3	62 11 01	154 50 16	1.5	7	2	2	.2N	1G	.5N	200N
169	WM002SF1	62 10 42	154 50 43	2	3	1	1	.2N	.3	1	200N
170	WM002SF2	62 10 42	154 50 43	1	5	1	2	.2N	1	.5N	200N
171	WM002SF3	62 10 42	154 50 43	1	7	1.5	1	.2N	1G	.5N	200N
172	WM003SF1	62 10 35	154 50 55	2	3	2	1.5	.2N	.5	2	200N
173	WM003SF2	62 10 35	154 50 55	1	5	1.5	1.5	.2N	1	.5N	200N
174	WM003SF3	62 10 35	154 50 55	2	7	3	2	.2N	1	.7	200N
175	WM004SF1	62 11 21	154 49 42	.7	7	.5	2	.2N	.5	.5N	200N
176	WM004SF2	62 11 21	154 49 42	1	7	.7	1.5	.2N	1	.5N	200N
177	WM004SF3	62 11 21	154 49 42	1	10	1.5	2	.2N	1	.5N	200N
178	WM005SF1	62 10 23	154 51 48	15	5	10	3	.2N	.5	.5N	200N
179	WM005SF2	62 10 23	154 51 48	15	5	10	2	.2N	.5	.5N	200N
180	WM005SF3	62 10 23	154 51 48	15	10	10	2	.2N	1	.5N	200N

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
145	RY066SF1	20	2000	1L	10N	20N	20	150	15	70	10N	50L
146	RY066SF2	20	1500	1L	10N	20N	15	150	15	50	10N	50
147	RY066SF3	30	2000	1N	10N	20N	20	200	15	30	10N	70
148	RY067SF1	50	1000	1L	10N	20N	15	100	15	50	10N	50L
149	RY067SF2	30	1500	1L	10N	20N	15	150	15	70	10N	50L
150	RY067SF3	50	2000	1L	10N	20N	15	200	15	50	10N	50
151	RY112SF1	50	1000	1L	10N	20N	10	70	10	100	10N	50N
152	RY112SF2	70	1500	1L	10N	20N	10	200	10	70	10N	50L
153	RY112SF3	70	1500	1L	10N	20N	15	200	10	50	10N	50L
154	RY113SF1	20	2000	1L	10N	20N	15	100	10	70	10N	50
155	RY113SF2	30	1500	1L	10N	20N	15	500	15	70	10N	50N
156	RY113SF3	30	1500	1L	10N	20N	20	100	10	20	10N	50L
157	RY114SF1	20	2000	1L	10N	20N	15	100	15	70	10N	50L
158	RY114SF2	30	1000	1L	10N	20N	15	200	10	70	10N	50L
159	RY114SF3	30	1500	1N	10N	20N	15	150	10	50	10N	50
160	RY115SF1	20	1500	1N	10N	20N	20	100	15	150	10N	50N
161	RY115SF2	20	1500	1N	10N	20N	15	200	15	100	10N	50N
162	RY115SF3	20	1000	1L	10N	20N	15	150	15	70	10N	50
163	RY116SF1	30	1500	1N	10N	20N	20	70	7	100	10N	50L
164	RY116SF2	20	2000	1N	10N	20N	15	150	7	70	10N	50L
165	RY116SF3	20	1500	1N	10N	20N	15	150	10	30	10N	50L
166	WM001SF1	30	1000	1N	10N	20N	10	50	15	20	10N	50L
167	WM001SF2	30	3000	1N	10N	20N	15	150	20	70	10N	50
168	WM001SF3	50	1500	1N	10N	20N	20	150	30	100	10N	50L
169	WM002SF1	15	1500	1N	10N	20N	10	70	15	20	10N	50N
170	WM002SF2	30	1500	1N	10N	20N	15	200	20	70	10N	50L
171	WM002SF3	30	2000	1L	10N	20N	20	100	30	20	10N	50L
172	WM003SF1	20	1500	1N	10N	20N	10	70	10	20	10N	50N
173	WM003SF2	30	1500	1L	10N	20N	15	100	15	20	10N	50N
174	WM003SF3	50	1500	1N	10N	20N	15	150	20	70	10N	50
175	WM004SF1	15	1500	1L	10N	20N	15	70	15	30	10N	50L
176	WM004SF2	30	2000	1L	10N	20N	20	100	20	30	10N	50
177	WM004SF3	50	2000	1N	10N	20N	30	200	30	70	10N	50
178	WM005SF1	30	1500	1N	10N	20N	15	70	15	30	10N	50N
179	WM005SF2	30	700	1L	10N	20N	15	100	15	70	10N	50N
180	WM005SF3	30	1500	1N	10N	20N	15	150	20	50	10N	50L

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S	Th ppm-S	V ppm-S
145	RY066SF1	1500	5N	20N	30	30	100N	15	10N	200	100N	200
146	RY066SF2	1000	5N	20L	30	30	100N	15	10N	200	100N	200
147	RY066SF3	1000	5N	20N	30	30	100N	15	10N	200	100N	150
148	RY067SF1	500	5N	20N	20	30	100N	10	10N	200	100N	150
149	RY067SF2	700	5N	20L	30	30	100N	15	10N	150	100N	150
150	RY067SF3	1000	5N	20L	30	30	100N	15	10N	150	100N	200
151	RY112SF1	700	7	20N	15	30	100N	10	10N	200	100N	150
152	RY112SF2	700	5N	20L	10	30	100N	10	10N	200	100N	150
153	RY112SF3	1000	5N	20N	20	30	100N	15	10N	200	100N	200
154	RY113SF1	700	5N	20N	20	50	100N	10	10N	200	100N	150
155	RY113SF2	700	5N	20L	20	30	100N	15	10N	200	100N	200
156	RY113SF3	1000	5N	20N	30	30	100N	15	10N	150	100N	200
157	RY114SF1	1000	5N	20N	15	30	100N	10	10N	200	100N	150
158	RY114SF2	700	5N	20N	15	20	100N	10	10N	200	100N	150
159	RY114SF3	1000	5N	20N	20	30	100N	30	10N	200	100N	150
160	RY115SF1	1000	5N	20N	20	30	100N	15	10N	200	100N	200
161	RY115SF2	1000	5N	20N	50	30	100N	15	10N	200	100N	150
162	RY115SF3	1000	5N	20N	30	30	100N	15	10N	200	100N	200
163	RY116SF1	1000	5N	20L	20	30	100N	10	10N	150	100N	200
164	RY116SF2	500	5N	20N	20	20	100N	15	10N	200	100N	150
165	RY116SF3	700	5N	20N	20	20	100N	15	10N	100	100N	150
166	WM001SF1	700	5N	20N	15	20	100N	7	10N	100	100N	200
167	WM001SF2	1000	5N	20N	20	30	100N	15	10N	150	100N	200
168	WM001SF3	1500	5N	20N	50	50	100N	20	10N	100	100N	200
169	WM002SF1	700	5N	20N	15	30	100N	7	10N	100	100N	200
170	WM002SF2	700	5N	20N	20	30	100N	15	10N	200	100N	150
171	WM002SF3	1000	5N	20N	30	30	100N	20	10N	150	100N	200
172	WM003SF1	700	5N	20N	10	20	100N	10	10N	150	100N	150
173	WM003SF2	1000	5N	20N	30	20	100N	10	10N	200	100N	200
174	WM003SF3	2000	5N	20N	30	70	100N	15	10N	150	100N	200
175	WM004SF1	2000	5N	20N	20	20	100N	10	10N	100	100N	150
176	WM004SF2	3000	5N	20N	30	30	100N	15	10N	150	100N	200
177	WM004SF3	5000G	5N	20N	50	50	100N	20	10N	150	100N	200
178	WM005SF1	2000	5N	20N	30	30	100N	10	10N	150	100N	150
179	WM005SF2	1500	5N	20N	30	30	100N	15	10N	200	100N	150
180	WM005SF3	2000	5N	20N	20	30	100N	15	10N	150	100N	200

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	W ppm-S	Y ppm-S	Zn ppm-S	Zr ppm-S	Au ppm-AA	Hg ppm-AA	Te ppm-AA	Tl ppm-AA	Ag ppm-ICP	As ppm-ICP
145	RY066SF1	20N	20	200N	100	.002N	.14	.05N	.25	.045N	12
146	RY066SF2	20N	20	200N	200	.002N	.16	.05N	.30	.045N	6.6
147	RY066SF3	20N	30	200N	500	.002L	.44	.05N	.30	.06	9.7
148	RY067SF1	20N	15	200N	150	.002L	.62	.05N	.25	.045N	7.9
149	RY067SF2	20N	20	200N	300	.002L	.64	.05N	.30	.045N	5.7
150	RY067SF3	20N	30	200N	700	.002L	1.4	.05N	.35	.045N	8.1
151	RY112SF1	20N	15	200N	100	.002L	5.2	.05N	.40	.045N	19
152	RY112SF2	20N	15	200N	300	.002L	32	.05N	.40	.045N	14
153	RY112SF3	20N	30	200N	300	.002L	5.6	.05N	.50	.09	21
154	RY113SF1	20N	20	200N	150	.002L	1.8	.05N	.40	.045N	12
155	RY113SF2	20N	20	200N	150	.002L	4.4	.05N	.35	.045N	6.7
156	RY113SF3	20N	30	200N	500	.002L	4.8	.05N	.40	.06	12
157	RY114SF1	20N	15	200N	150	.002L	1.1	.05N	.30	.045N	21
158	RY114SF2	20N	20	200N	150	.002L	.92	.05N	.35	.045N	15
159	RY114SF3	20N	30	200N	300	.002	.40	.05N	.35	.07	18
160	RY115SF1	20N	15	200N	150	.002N	.08	.05N	.25	.045N	2.8
161	RY115SF2	20N	20	200N	200	.002L	.08	.05N	.25	.045N	4.2
162	RY115SF3	20N	30	200N	500	.004	1.4	.05N	.35	.045N	3.3
163	RY116SF1	20N	20	200N	150	.002N	.36	.05N	.25	.045N	4.6
164	RY116SF2	20N	30	200N	150	.002L	.48	.05N	.30	.045N	2.9
165	RY116SF3	20N	20	200N	300	.002L	5.2	.05N	.40	.045N	2.7
166	WM001SF1	20N	30	200N	200	.002	9.4	.05N	.25	.045N	15
167	WM001SF2	20N	30	200N	200	.002	36G	.05N	.45	.05	21
168	WM001SF3	20N	30	200N	200	.002	36G	.05N	.45	.10	36
169	WM002SF1	20N	15	200N	150	.002L	6.2	.05N	.25	.05	19
170	WM002SF2	20N	30	200N	150	.002	36G	.05N	.45	.07	19
171	WM002SF3	20N	30	200N	300	.004	36G	.05N	.60	.15	31
172	WM003SF1	20N	15	200N	100	.002N	11	.05N	.30	.06	18
173	WM003SF2	20N	20	200N	200	.002L	26	.05N	.40	.08	21
174	WM003SF3	20N	20	200N	200	.002	36G	.05N	.75	.10	34
175	WM004SF1	20N	20	200N	70	.002N	10	.05N	.30	.09	12
176	WM004SF2	20N	20	200N	150	.002L	36G	.05N	.30	.11	16
177	WM004SF3	20N	30	200N	200	.044	36G	.05N	.70	.13	20
178	WM005SF1	20N	15	200N	70	.002N	7.2	.05N	.45	.06	12
179	WM005SF2	20N	20	200N	100	.002N	36G	.05N	.30	.06	9.2
180	WM005SF3	20N	20	200N	200	.002L	36G	.05N	.05	.08	7.9

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Bi ppm-ICP	Cd ppm-ICP	Cu ppm-ICP	Mo ppm-ICP	Pb ppm-ICP	Sb ppm-ICP	Zn ppm-ICP
145	RY066SF1	.6N	.08	9.3	.48	5.7	.60N	53
146	RY066SF2	.6N	.09	10	.45	5.7	.60N	59
147	RY066SF3	.6N	.14	15	.67	8.6	.60N	73
148	RY067SF1	.6N	.04	5.5	.21	4.3	.91	40
149	RY067SF2	.6N	.03N	5.8	.22	4.7	.76	38
150	RY067SF3	.6N	.09	9.6	.29	6.9	1.2	54
151	RY112SF1	.6N	.10	8.1	.60	6.9	4.1	42
152	RY112SF2	.6N	.10	7.9	.50	6.7	3.4	39
153	RY112SF3	.6N	.15	12	67	12	5.1	56
154	RY113SF1	.6N	.08	7.7	.45	6.5	3.5	41
155	RY113SF2	.6N	.07	8.4	.38	6.2	1.7	51
156	RY113SF3	.6N	.13	16	.61	11	2.5	75
157	RY114SF1	.6N	.08	7.9	.54	6.4	3.3	46
158	RY114SF2	.6N	.08	7.1	.40	5.4	2.9	43
159	RY114SF3	.6N	.13	10	.49	8.2	2.4	55
160	RY115SF1	.6N	.06	8.5	.36	4.5	.60N	47
161	RY115SF2	.6N	.07	8.9	.34	5.2	.60N	50
162	RY115SF3	.6N	.13	15	.59	8.4	.60N	68
163	RY116SF1	.6N	.04	5.7	.17	4.1	.60N	42
164	RY116SF2	.6N	.08	6.2	.25	4.8	.60N	46
165	RY116SF3	.6N	.10	10	.28	6.6	.60N	60
166	WM001SF1	.6N	.11	7.9	1.0	4.7	.75	34
167	WM001SF2	.6N	.21	16	.90	8.4	1.5	58
168	WM001SF3	.6N	.34	26	1.2	14	1.9	93
169	WM002SF1	.6N	.14	9.8	.60	5.8	1.2	39
170	WM002SF2	.6N	.22	17	.83	8.5	1.2	61
171	WM002SF3	.6N	.38	27	1.3	15	1.9	98
172	WM003SF1	.6N	.11	6.8	.51	4.8	1.1	36
173	WM003SF2	.6N	.15	14	.89	9.0	1.5	66
174	WM003SF3	.6N	.34	24	1.3	15	2.1	100
175	WM004SF1	.6N	.25	13	.84	6.5	.67	65
176	WM004SF2	.6N	.37	20	1.3	11	1.6	94
177	WM004SF3	.6N	.51	29	1.6	15	2.0	130
178	WM005SF1	.6N	.26	13	1.1	7.1	.60N	43
179	WM005SF2	.6N	.28	14	.87	7.6	.79	52
180	WM005SF3	.6N	.35	19	.97	10	.98	73

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S
181	WM051SF1	62 11 03	154 50 24	20G	3	10G	.7	.2N	.5	.5N	200N
182	WM051SF2	62 11 03	154 50 24	20	2	10G	.5	.2N	.3	.5N	200N
183	WM051SF3	62 11 03	154 50 24	20	2	10G	.5	.2N	.3	.5N	200N
184	WM052SF1	62 10 33	154 51 19	1	10	1.5	1	.2N	1G	.5N	200N
185	WM052SF2	62 10 33	154 51 19	1.5	10	1.5	2	.2N	1G	.5N	200N
186	WM052SF3	62 10 33	154 51 19	1	7	1.5	1	.2N	1G	.5N	200N
187	WM053SF1	62 10 05	154 51 49	1	5	1	2	.2N	1	.5N	200N
188	WM053SF2	62 10 05	154 51 49	1	5	2	1	.2N	1	.5N	200N
189	WM053SF3	62 10 05	154 51 49	2	7	2	2	.2N	1	.5N	200N
190	WM054SF1	62 09 49	154 52 41	1.5	5	1	2	.2N	.5	.5N	200N
191	WM054SF2	62 09 49	154 52 41	2	7	2	3	.2N	1	.5N	200N
192	WM054SF3	62 09 49	154 52 41	1.5	10	3	2	.2N	1G	.5N	200N
193	WM055SF1	62 09 27	154 53 21	10	5	2	1.5	.2N	.5	.5N	200N
194	WM055SF2	62 09 27	154 53 21	5	5	3	2	.2N	1	.5N	200N
195	WM055SF3	62 09 27	154 53 21	5	5	3	1.5	.2N	1	.5N	200N
196	WM101SF1	62 10 26	154 51 04	5	7	2	2	.2N	1	.5L	200N
197	WM101SF2	62 10 26	154 51 04	3	5	3	2	.2N	1	100	200N
198	WM101SF3	62 10 26	154 51 04	1.5	7	2	1	.2N	1	.5N	200N
199	WM102SF1	62 10 13	154 51 29	1	5	1	2	.2N	.7	.5N	200N
200	WM102SF2	62 10 13	154 51 29	1	5	2	2	.2N	1	.5N	200N
201	WM102SF3	62 10 13	154 51 29	1.5	7	2	3	.2N	1G	.5N	200N
202	WM103SF1	62 11 19	154 49 09	.7	7	.7	2	.2N	.7	.5N	200N
203	WM103SF2	62 11 19	154 49 09	.7	7	.7	2	.2N	1G	.5N	200N
204	WM103SF3	62 11 19	154 49 09	.7	7	1	2	.2N	1G	.5N	200N
205	WM104SF1	62 10 39	154 51 52	20	5	10	2	.2N	.5	.5N	200N
206	WM104SF2	62 10 39	154 51 52	15	3	10	1.5	.2N	.3	.5N	200N
207	WM104SF3	62 10 39	154 51 52	15	7	10	2	.2N	.7	.5N	200N

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
181	WM051SF1	20	300	1N	10N	20N	10	50	7	20	10N	50N
182	WM051SF2	30	300	1N	10N	20N	10	50	10	20	10N	50N
183	WM051SF3	20	300	1N	10N	20N	10L	70	10	20	10N	50N
184	WM052SF1	500	1000	1L	10N	20N	20	150	30	150	10N	50
185	WM052SF2	200	1500	1L	10N	20N	20	150	20	150	10N	100
186	WM052SF3	100	700	1L	10N	20N	15	100	20	50	10N	50
187	WM053SF1	30	1500	1N	10N	20N	15	150	15	30	10N	70
188	WM053SF2	30	700	1L	10N	20N	15	200	15	20	10N	50L
189	WM053SF3	50	1500	1N	10N	20N	15	100	20	70	10N	50
190	WM054SF1	30	1500	1L	10N	20N	10	70	15	30	10N	50L
191	WM054SF2	50	1500	1L	10N	20N	15	150	20	70	10N	50L
192	WM054SF3	70	1500	1N	10N	20N	15	150	20	30	10N	50L
193	WM055SF1	20	1000	1N	10N	20N	10	50	10	30	10N	100
194	WM055SF2	50	1500	1L	10N	20N	15	300	15	50	10N	100
195	WM055SF3	50	1000	1N	10N	20N	15	100	20	30	10N	50L
196	WM101SF1	50	1500	1L	10N	20N	10	70	15	50	10N	50
197	WM101SF2	30	2000	1N	10N	20N	15	100	20	70	10N	50L
198	WM101SF3	30	1500	1L	10N	20N	20	100	20	30	10N	50L
199	WM102SF1	20	2000	1N	10N	20N	15	100	15	30	10N	70
200	WM102SF2	30	1000	1L	10N	20N	15	200	15	30	10N	50
201	WM102SF3	50	2000	1N	10N	20N	20	200	30	100	10N	50
202	WM103SF1	20	2000	1L	10N	20N	15	100	20	30	10N	50L
203	WM103SF2	30	2000	1L	10N	20N	15	100	20	70	10N	50L
204	WM103SF3	50	3000	1L	10N	20N	15	100	30	100	10N	70
205	WM104SF1	30	1000	1N	10N	20N	15	100	15	30	10N	50N
206	WM104SF2	30	500	1N	10N	20N	10	100	15	30	10N	50N
207	WM104SF3	50	1000	1N	10N	20N	15	100	20	30	10N	50L

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S	Th ppm-S	V ppm-S
181	WM051SF1	1000	5N	20N	10	20	100N	5	10N	100	100N	50
182	WM051SF2	700	5N	20N	7	30	100N	10	10N	100	100N	50
183	WM051SF3	700	5N	20N	10	50	100N	10	10N	100	100N	30
184	WM052SF1	3000	5N	20L	30	50	100N	20	10N	200	100N	500
185	WM052SF2	1000	5N	20L	50	50	100N	20	10N	200	100N	200
186	WM052SF3	700	5N	20N	30	30	100N	15	10N	150	100N	200
187	WM053SF1	700	5N	20L	20	20	100N	10	10N	150	100N	150
188	WM053SF2	700	5N	20N	30	20	100N	10	10N	200	100N	150
189	WM053SF3	1500	5N	20N	30	50	100N	15	10N	200	100N	200
190	WM054SF1	700	5N	20N	15	30	100N	7	10N	150	100N	150
191	WM054SF2	1000	5N	20	30	30	100N	15	10N	150	100N	200
192	WM054SF3	1000	5N	20N	50	30	100N	15	10N	100	100N	200
193	WM055SF1	1000	5N	20N	15	20	100N	7	10N	150	100N	150
194	WM055SF2	1500	5N	20L	20	30	100N	15	10N	150	100N	200
195	WM055SF3	700	5N	20N	30	30	100N	15	10N	150	100N	200
196	WM101SF1	1000	5N	20N	15	30	100N	7	10N	100	100N	300
197	WM101SF2	700	5N	20N	20	30	100N	15	10N	200	100N	200
198	WM101SF3	1000	5N	20N	30	30	100N	15	10N	150	100N	150
199	WM102SF1	1000	5N	20L	20	30	100N	15	10N	100	100N	200
200	WM102SF2	700	5N	20N	30	20	100N	10	10N	150	100N	200
201	WM102SF3	1500	5N	20N	30	50	100N	20	10N	200	100N	300
202	WM103SF1	1000	5N	20N	20	30	100N	15	10N	100	100N	200
203	WM103SF2	1000	5N	20N	30	30	100N	15	10N	150	100N	200
204	WM103SF3	2000	5N	20N	50	70	100N	15	10N	200	100N	200
205	WM104SF1	1000	5N	20N	20	20	100N	10	10N	100	100N	150
206	WM104SF2	1000	5N	20N	20	20	100N	10	10N	150	100N	100
207	WM104SF3	1000	5N	20N	30	30	100N	7	10N	100	100N	150

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	W ppm-S	Y ppm-S	Zn ppm-S	Zr ppm-S	Au ppm-AA	Hg ppm-AA	Te ppm-AA	Tl ppm-AA	Ag ppm-ICP	As ppm-ICP
181	WM051SF1	20N	15	200N	70	.002N	36G	.05N	.20	.045N	96
182	WM051SF2	20N	15	200N	70	.004	36G	.05N	.20	.045N	130
183	WM051SF3	20N	15	200N	70	.002	36G	.05N	.35	.045N	130
184	WM052SF1	20N	50	200N	200	.002N	36G	.05N	.35	.045N	96
185	WM052SF2	20N	50	200N	200	.002N	36G	.05N	.30	.045N	74
186	WM052SF3	20N	30	200N	200	.002	36G	.05N	.35	.045N	60
187	WM053SF1	20N	20	200N	150	.002N	36G	.05N	.30	.09	24
188	WM053SF2	20N	20	200N	150	.002N	36G	.05N	.35	.09	30
189	WM053SF3	20N	20	200N	200	.002L	36G	.05N	.55	.11	43
190	WM054SF1	20N	15	200N	100	.002	.96	.05N	.25	.045N	40
191	WM054SF2	20N	20	200N	300	.002L	36G	.05N	.35	.045N	47
192	WM054SF3	20N	30	200N	200	.002	36G	.05N	.50	.07	91
193	WM055SF1	20N	30	200N	100	.002N	13	.05N	.25	.045N	34
194	WM055SF2	20N	30	200N	1000	.002L	36G	.05N	.25	.045N	42
195	WM055SF3	20N	30	200N	200	.002L	36G	.05N	.40	.07	69
196	WM101SF1	20N	50	200N	200	.002N	36G	.05N	.25	.05	32
197	WM101SF2	20N	30	200N	200	.002L	36G	.05N	.35	.07	33
198	WM101SF3	20N	30	200N	200	.002L	36G	.05N	.40	.12	46
199	WM102SF1	20N	20	200N	150	.002N	36G	.05N	.30	.08	19
200	WM102SF2	20N	20	200N	150	.002L	36G	.05N	.40	.10	21
201	WM102SF3	20N	30	200N	200	.002L	36G	.05N	.65	.11	36
202	WM103SF1	20N	30	200N	100	.002N	.88	.05N	.50	.10	12
203	WM103SF2	20N	30	200N	200	.002L	2.1	.05N	.50	.13	14
204	WM103SF3	20N	30	200N	200	.002L	23	.05N	.65	.16	16
205	WM104SF1	20N	20	200N	70	.002N	7.2	.05N	.35	.07	14
206	WM104SF2	20N	20	200N	70	.002N	36G	.05N	.25	.08	10
207	WM104SF3	20N	20	200N	150	.002N	36G	.05N	.20	.13	9.2

Table 3. Analytical results for stream sediments collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Bi ppm-ICP	Cd ppm-ICP	Cu ppm-ICP	Mo ppm-ICP	Pb ppm-ICP	Sb ppm-ICP	Zn ppm-ICP
181	WM051SF1	.6N	.18	11	.27	6.7	5.2	81
182	WM051SF2	.6N	.25	14	.39	10	7.5	100
183	WM051SF3	.6N	.22	9.1	.40	10	7.9	79
184	WM052SF1	.6N	.21	28	2.3	16	.85	120
185	WM052SF2	.6N	.19	26	1.6	15	.87	99
186	WM052SF3	.6N	.17	24	1.3	15	.60N	93
187	WM053SF1	.6N	.14	8.3	.54	5.1	.60N	39
188	WM053SF2	.6N	.18	15	.77	8.7	1.2	66
189	WM053SF3	.6N	.33	24	.95	12	1.2	94
190	WM054SF1	.6N	.13	7.8	.53	4.7	.67	38
191	WM054SF2	.6N	.15	12	.69	7.2	.85	55
192	WM054SF3	.6N	.33	23	1.0	13	1.1	96
193	WM055SF1	.6N	.15	8.3	.82	4.7	.89	36
194	WM055SF2	.6N	.19	12	.96	6.1	1.1	51
195	WM055SF3	.6N	.33	21	1.2	10	.72	80
196	WM101SF1	.6N	.13	9.1	.54	6.1	1.6	45
197	WM101SF2	.6N	.22	15	.70	7.9	1.8	61
198	WM101SF3	.6N	.36	24	1.0	12	2.3	96
199	WM102SF1	.6N	.15	9.3	.82	5.4	.65	42
200	WM102SF2	.6N	.15	14	.79	8.1	.97	62
201	WM102SF3	.6N	.33	24	1.0	12	1.2	92
202	WM103SF1	.6N	.25	16	.85	7.3	.88	62
203	WM103SF2	.6N	.26	20	1.2	10	1.3	77
204	WM103SF3	.6N	.45	27	1.4	13	1.6	110
205	WM104SF1	.6N	.34	13	1.1	5.9	.70	41
206	WM104SF2	.6N	.30	14	.88	6.7	1.1	45
207	WM104SF3	.6N	.36	19	1.0	8.2	1.3	63

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. [N, not detected; L, detected but below the limit of determination shown; G, determined to be greater than the value shown; .08, not determined.]

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S	Au ppm-S
1	CC020C1	60 46 56	158 50 39	2	50G	7	.5N	.5N	2G	1N	500N	20N
2	CC020C2	60 46 56	158 50 39	5	30	7	.7	.5N	2G	1N	500N	20N
3	CC020C3	60 46 56	158 50 39	2	1.5	.2	.5	1.5	2	5	500L	20N
4	CC021C1	60 46 14	158 46 53	2	50G	7	.5N	.5N	2G	1N	500N	20N
5	CC021C2	60 46 14	158 46 53	3	50	5	.5N	.5N	2G	1N	500N	20N
6	CC021C3	60 46 14	158 46 53	5	1.5	.7	.5	1.5	2G	1N	500N	20N
7	CC072C1	60 47 33	158 51 58	1	50G	2	.5N	.5N	2G	1N	500N	20N
8	CC072C2	60 47 33	158 51 58	2	50	3	.5N	.5N	2G	1N	500N	20N
9	CC072C3	60 47 33	158 51 58	.5	.7	.3	.5N	.5N	.3	15	500N	20N
10	CC073C1	60 46 26	158 49 19	1.5	50G	5	.5N	.5N	2G	1L	500N	20N
11	CC073C2	60 46 26	158 49 19	3	30	7	.5L	.5N	2G	1N	500N	20N
12	CC073C3	60 46 26	158 49 19	5	2	.3	.5L	2	1	1N	500N	20N
13	CC074C1	60 45 32	158 48 24	2	50	5	.5L	.5N	2G	1N	500N	20N
14	CC074C2	60 45 32	158 48 24	5	20	7	.5L	.5N	2G	1N	500N	20N
15	CC074C3	60 45 32	158 48 24	5	1.5	1	.7	.5	2G	1N	500N	20N
16	CC122C1	60 47 13	158 51 26	1.5	50	3	.5N	.5N	2G	1N	500N	20N
17	CC122C2	60 47 13	158 51 26	3	30	7	.5L	.5N	2G	1N	500N	20N
18	CC122C3	60 47 13	158 51 26	5	1.5	.3	.5L	1	2	3	500N	20N
19	CC123C1	60 46 17	158 48 07	2	50G	5	.5N	.5N	2G	1N	500N	20N
20	CC123C2	60 46 17	158 48 07	3	50	10	.5	.5N	2G	1N	500N	20N
21	CC123C3	60 46 17	158 48 07	5	2	.5	.5	2	2G	1	500N	20N
22	CC124C1	60 45 02	158 49 10	1.5	50	3	.5L	.5N	2G	1N	500N	20N
23	CC124C2	60 45 02	158 49 10	3	30	7	.5N	.5N	2G	1N	500N	20N
24	CC124C3	60 45 02	158 49 10	7	1	.7	.5L	1.5	2G	1N	500N	20N
25	MT016C1	61 23 26	157 57 16	.5	50G	2	.5N	.5N	2G	1N	500N	20N
26	MT016C2	61 23 26	157 57 16	1.5	50	1.5	.5N	.5N	.7	1N	500N	20N
27	MT016C3	61 23 26	157 57 16	1.5	20	.7	.5N	1	2G	1N	500N	20N
28	MT017C1	61 23 09	158 00 17	2	50	7	.5N	.5N	2G	1N	500N	20N
29	MT017C2	61 23 09	158 00 17	5	30	10	.5L	.5N	2G	1N	500N	20N
30	MT017C3	61 23 09	158 00 17	3	1	1	.5	1.5	2G	1N	500N	20N
31	MT018C1	61 25 25	157 58 47	.08	.08	.08	.08	.08	.08	.08	.08	.08
32	MT018C2	61 25 25	157 58 47	20	20	15	.5	.5N	2	1N	500N	20N
33	MT018C3	61 25 25	157 58 47	3	1.5	.7	.5L	2	2G	1N	500N	20N
34	MT019C1	61 26 24	157 55 41	5	50G	5	.5N	.5N	2G	1N	500N	20N
35	MT019C2	61 26 24	157 55 41	5	20	15	.5L	.5N	2G	1N	500N	20N
36	MT019C3	61 26 24	157 55 41	3	1.5	.7	.5N	3	2G	1N	500N	20N

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
1	CC020C1	20N	300	2N	20N	50N	30	100	10N	50	20N	100N
2	CC020C2	20N	500	2N	20N	50N	50	700	50	20	20N	100N
3	CC020C3	20	10000G	2N	20N	50N	20N	100	20	10	20N	100N
4	CC021C1	20N	200	2N	20N	50N	50	100	10N	50	20N	100N
5	CC021C2	100	300	2N	20N	50N	70	1500	30	20	20N	100N
6	CC021C3	30	10000G	2N	20N	50N	20L	300	10N	15	20N	100L
7	CC072C1	20N	200	2N	20N	50N	50	30	10N	50	20N	100N
8	CC072C2	20N	200	2N	20N	50N	100	2000	100	10	20N	100N
9	CC072C3	20L	5000	2N	20N	50N	20N	70	20	10L	20N	100N
10	CC073C1	20N	300	2N	20N	50N	50	70	10N	30	20N	100N
11	CC073C2	20N	300	2N	20N	50N	70	500	50	30	20N	100N
12	CC073C3	20	10000G	2N	20N	50N	20	100	20	10	20N	100
13	CC074C1	20N	200	2N	20N	50N	50	200	10N	20	20N	100N
14	CC074C2	150	200	2N	20N	50N	50	1000	20	30	20N	100N
15	CC074C3	30	10000G	2N	20N	50N	20L	150	20	20	20N	100
16	CC122C1	20N	200	2N	20N	50N	50	70	15	30	20N	100N
17	CC122C2	20N	300	2N	20N	50N	70	500	70	20	20N	100N
18	CC122C3	30	10000G	2N	20N	50N	20N	50	20	10	20N	100N
19	CC123C1	20N	300	2N	20N	50N	50	1000	10N	30	20N	100N
20	CC123C2	20N	200	2N	20N	50N	50	500	50	20	20N	100N
21	CC123C3	30	10000G	2N	20N	50N	20L	700	15	15	20N	100N
22	CC124C1	20N	300	2N	20N	50N	70	100	10N	50	20N	100N
23	CC124C2	70	100	2N	20N	50N	50	700	10	20	20N	100N
24	CC124C3	30	500	2N	20N	50N	20N	100	10N	30	20N	100
25	MT016C1	20N	300	2N	20N	50N	50	200	10	50	20N	100N
26	MT016C2	20	1000	2N	20N	50N	50	1500	70	20	20N	100N
27	MT016C3	150	10000	2N	20N	50N	30	300	30	30	20N	300
28	MT017C1	20N	300	2N	20N	50N	50	7000	10	30	20N	100N
29	MT017C2	200	300	2N	20N	50N	50	3000	20	20	20N	100L
30	MT017C3	50	3000	2N	20N	50N	20L	150	10N	20	20N	150
31	MT018C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
32	MT018C2	20L	200	2N	20N	50N	50	5000	10	20	20N	100N
33	MT018C3	100	10000	2N	20N	50N	20L	150	10N	15	20N	300
34	MT019C1	20N	500	2N	20N	50N	50	10000	30	30	20N	100N
35	MT019C2	70	200	2N	20N	50N	50	2000	10N	20	20N	100N
36	MT019C3	70	700	2N	20N	50N	20L	700	10N	20	20N	150

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Pd ppm-S	Pt ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S
1	CC020C1	10000G	10N	50N	10N	20	5N	20N	200N	50	20N	200N
2	CC020C2	10000G	10N	50N	70	70	5N	20N	200N	100	20N	200N
3	CC020C3	500	10N	50N	10N	70	5N	20N	300	10L	150	1000
4	CC021C1	10000G	10N	50N	10	30	5N	20N	200N	20	20N	200N
5	CC021C2	10000G	10N	50N	100	30	5N	20N	200N	30	20N	200N
6	CC021C3	1500	10N	50N	10N	30	5N	20N	200N	30	20N	700
7	CC072C1	10000G	10N	50N	15	30	5N	20N	200N	30	20N	200N
8	CC072C2	10000G	10N	50N	200	50	5N	20N	200N	50	20N	200N
9	CC072C3	700	10N	50N	10N	20	5N	20N	300	10N	20N	200N
10	CC073C1	10000G	10N	50N	10L	30	5N	20N	200N	50	20N	200N
11	CC073C2	10000G	10N	50N	100	30	5N	20N	200N	100	20N	200N
12	CC073C3	700	10N	50N	15	20	5N	20N	200N	10	20N	2000
13	CC074C1	10000G	10N	50N	30	50	5N	20N	200N	30	20N	200N
14	CC074C2	10000G	10N	50L	70	30	5N	20N	200N	50	20N	200L
15	CC074C3	700	10N	50N	10N	30	5N	20N	200N	30	100	1000
16	CC122C1	10000G	10N	50N	10	20	5N	20N	200N	30	20N	200N
17	CC122C2	10000G	10N	50N	100	70	5N	20N	200N	70	20N	200N
18	CC122C3	500	10N	50N	10N	70	5N	20N	3000	10	20N	1000
19	CC123C1	10000G	10N	50N	10N	20	5N	20N	200N	50	20N	200N
20	CC123C2	10000G	10N	50N	50	20	5N	20N	200N	100	20N	200N
21	CC123C3	700	10N	50N	10L	50	5N	20N	200N	20	200	700
22	CC124C1	10000G	10N	50N	20	70	5N	20N	200N	30	20N	200N
23	CC124C2	10000G	10N	50L	70	20	5N	20N	200N	70	20N	200N
24	CC124C3	1000	10N	50N	10N	70	5N	20N	200N	50	20N	500
25	MT016C1	10000G	10N	50N	20	30	5N	20N	200N	20	20N	200N
26	MT016C2	5000	10N	50N	100	50	5N	20N	200N	50	20N	200
27	MT016C3	1500	10N	50N	50	70	5N	20N	200N	30	20	3000
28	MT017C1	10000G	10N	50N	100	70	5N	20N	200N	20	20N	200N
29	MT017C2	10000G	10N	50L	150	20	5N	20N	200N	70	20N	200N
30	MT017C3	500	10N	50L	10N	30	5N	20N	200N	50	700	3000
31	MT018C1	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B
32	MT018C2	5000	10N	50N	200	20N	5N	20N	200N	70	20N	200L
33	MT018C3	500	10N	50L	10L	200	5N	20N	200N	30	100	5000
34	MT019C1	10000G	10N	50N	70	30	5N	20N	200N	50	20N	200N
35	MT019C2	5000	10N	50N	150	20	5N	20N	200N	100	20N	200N
36	MT019C3	500	10N	50L	10N	100	5N	20N	200N	50	300	200N

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Th ppm-S	V ppm-S	W ppm-S	Y ppm-S	Zn ppm-s	Zr ppm-S
1	CC020C1	200N	3000	50N	30	500N	100
2	CC020C2	200N	300	50N	30	500N	100
3	CC020C3	200N	50	50N	100	500N	2000G
4	CC021C1	200N	1000	50N	50	500N	100
5	CC021C2	200N	700	50N	30	500N	150
6	CC021C3	200N	300	50N	200	500N	2000G
7	CC072C1	200N	700	50N	30	500N	100
8	CC072C2	200N	500	50N	30	500N	150
9	CC072C3	200N	30	50L	20	500N	300
10	CC073C1	200N	700	50N	50	500N	100
11	CC073C2	200N	200	50N	50	500N	100
12	CC073C3	200N	100	50N	100	500N	2000G
13	CC074C1	200N	1000	50N	50	500N	100
14	CC074C2	200N	500	50N	50	500N	100
15	CC074C3	200N	200	50N	100	500N	2000G
16	CC122C1	200N	1000	50N	30	500N	100
17	CC122C2	200N	200	50N	50	500N	150
18	CC122C3	200N	70	50N	100	500N	2000G
19	CC123C1	200N	3000	50N	30	500N	50
20	CC123C2	200N	200	50N	30	500N	100
21	CC123C3	200N	100	50N	150	500N	2000G
22	CC124C1	200N	1000	50N	50	500N	100
23	CC124C2	200N	500	50N	50	500N	150
24	CC124C3	200N	300	50N	300	500N	2000G
25	MT016C1	200N	700	50N	20	500N	100
26	MT016C2	200N	500	50N	50	500N	150
27	MT016C3	200N	700	50N	50	500N	2000G
28	MT017C1	200N	2000	50N	30	500N	150
29	MT017C2	200N	500	50N	100	500N	500
30	MT017C3	200N	200	150	150	500N	2000G
31	MT018C1	.0B	.0B	.0B	.0B	.0B	.0B
32	MT018C2	200N	1000	50N	50	500N	100
33	MT018C3	200N	150	50N	70	500N	2000G
34	MT019C1	200N	3000	50N	20	500N	100
35	MT019C2	200N	500	50N	30	500N	150
36	MT019C3	200N	1000	50N	150	500N	2000G

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S	Au ppm-S
37	MT068C1	61 23 38	157 57 11	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B
38	MT068C2	61 23 38	157 57 11	1	50G	1.5	.5	.5N	1	1N	500N	20N
39	MT068C3	61 23 38	157 57 11	.1	1	.1	.5N	.5N	.5	1N	500N	20N
40	MT069C1	61 23 25	157 56 08	3	50G	5	.5N	.5N	2G	1N	500N	20N
41	MT069C2	61 23 25	157 56 08	5	30	10	.5L	.5N	2G	1N	500N	20N
42	MT069C3	61 23 25	157 56 08	3	1	1	.5L	.7	2G	1N	500N	20N
43	MT070C1	61 24 10	157 58 18	2	50	7	.5	.5N	2G	1N	500N	20N
44	MT070C2	61 24 10	157 58 18	5	20	10	.5L	.5N	2G	1N	500N	20N
45	MT070C3	61 24 10	157 58 18	1	1	.2	.5L	.7	2	1N	500N	20N
46	MT071C1	61 24 08	157 53 16	.2	30	2	.5N	.5N	2G	1N	500N	20N
47	MT071C2	61 24 08	157 53 16	5	30	7	.5N	.5N	2G	1N	500N	20N
48	MT071C3	61 24 08	157 53 16	3	1.5	.7	.5N	.5	2	1N	500N	20N
49	MT117C1	61 23 26	157 58 05	.7	50	2	.5N	.5N	2G	1L	500N	20N
50	MT117C2	61 23 26	157 58 05	3	50	7	.5N	.5N	2G	1N	500N	20N
51	MT117C3	61 23 26	157 58 05	1	1.5	.5	.5L	1	2G	1N	500N	20N
52	MT118C1	61 23 16	157 58 11	2	30	2	.5L	.5N	2G	1N	500N	20N
53	MT118C2	61 23 16	157 58 11	3	30	7	.5N	.5N	2G	1N	500N	20N
54	MT118C3	61 23 16	157 58 11	3	1	.3	.5N	.7	2G	1N	500N	20N
55	MT119C1	61 23 01	158 01 12	3	50G	7	.5N	.5N	2G	1N	500N	20N
56	MT119C2	61 23 01	158 01 12	5	20	10	.5L	.5N	2G	1N	500N	20N
57	MT119C3	61 23 01	158 01 12	2	50	.3	.5N	1	2G	1N	500N	20N
58	MT120C1	61 25 53	157 58 52	1.5	50	1	.7	.5N	1.5	1N	500N	20N
59	MT120C2	61 25 53	157 58 52	20	20	15	.5	.5N	2G	1N	500N	20N
60	MT120C3	61 25 53	157 58 52	.7	.5	.3	.5N	.5N	1	1N	500N	20N
61	MT121C1	61 26 58	157 59 10	3	50	5	.7	.5N	2G	1N	500N	20N
62	MT121C2	61 26 58	157 59 10	20	20	15	.5L	.5N	2G	1N	500N	20N
63	MT121C3	61 26 58	157 59 10	7	2	10	.5	.5L	2G	1N	500N	20N
64	RD006C1	61 40 11	157 15 12	3	50G	5	.5N	.5N	2G	1N	500N	20N
65	RD006C2	61 40 11	157 15 12	3	50	7	.5N	.5N	2G	1N	500N	20N
66	RD006C3	61 40 11	157 15 12	3	1	.7	.5N	2	2G	1N	500N	20N
67	RD007C1	61 42 19	157 15 33	2	50	5	.5N	.5N	2G	1N	500N	20N
68	RD007C2	61 42 19	157 15 33	2	20	3	.5N	.5N	2G	1N	500N	20N
69	RD007C3	61 42 19	157 15 33	2	1.5	.7	.5N	.5N	2G	1N	500N	20N
70	RD008C1	61 46 00	157 19 45	7	50G	10	.7	.5N	2G	1N	500N	20N
71	RD008C2	61 46 00	157 19 45	15	15	7	.5	.5N	2G	1N	500N	20N
72	RD008C3	61 46 00	157 19 45	5	1	.7	.5L	1.5	2G	1N	500N	20N

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
37	MT068C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
38	MT068C2	20	1500	2N	20N	50N	100	3000	100	30	20N	100N
39	MT068C3	20	5000	2N	20N	50N	20N	100	30	10	20N	100N
40	MT069C1	20N	500	2N	20N	50N	100	10000G	100	20	20N	100N
41	MT069C2	70	200	2N	20N	50N	50	2000	10	20	20N	150
42	MT069C3	70	1000	2N	20N	50	50	200	10N	20	20N	100N
43	MT070C1	20N	300	2N	20N	50N	50	3000	50	50	20N	100N
44	MT070C2	20	200	2N	20N	50N	30	5000	10L	10	20N	100N
45	MT070C3	70	5000	2N	20N	50N	20N	70	10L	20	20N	200
46	MT071C1	20N	200	2N	20N	50N	50	5000	50	20	20N	100N
47	MT071C2	20L	150	2N	20N	50N	50	10000	20	15	20N	100N
48	MT071C3	150	500	2N	20N	50N	20L	200	15	30	20N	100N
49	MT117C1	20N	200	2N	20N	50N	50	1000	10N	50	20N	100N
50	MT117C2	70	500	2N	20N	50N	50	300	50	20	20N	150
51	MT117C3	100	7000	2N	20N	50N	20L	100	15	20	20N	200
52	MT118C1	20N	300	2N	20N	50N	50	3000	50	30	20N	100N
53	MT118C2	200	100	2N	20N	50N	50	3000	10L	15	20N	150
54	MT118C3	70	7000	2N	20N	50N	20N	70	10N	10	20N	100L
55	MT119C1	20N	300	2N	20N	50N	200	10000G	100	30	20N	100N
56	MT119C2	300	200	2N	20N	50N	50	1500	20	20	20N	150
57	MT119C3	30	10000G	2N	20N	700	30	70	30	20	20N	150
58	MT120C1	20N	1000	2N	20N	50N	20	5000	20	30	20N	100N
59	MT120C2	20	200	2N	20N	50N	50	7000	15	20	20N	100L
60	MT120C3	20N	1500	2N	20N	50N	20N	100	10	10N	20N	100N
61	MT121C1	20N	500	2N	20N	50N	30	10000G	50	30	20N	100N
62	MT121C2	20L	200	2N	20N	50N	30	7000	10	15	20N	100N
63	MT121C3	30	1000	2N	2000G	50N	20	1500	10N	20	20N	100N
64	RD006C1	20N	300	2N	20N	50N	100	5000	30	30	20N	100N
65	RD006C2	300	200	2L	20N	50N	30	2000	10	30	20N	300
66	RD006C3	100	10000	2N	20N	50N	20	150	10N	15	20N	200
67	RD007C1	20N	200	2N	20N	50N	150	1000	30	30	20N	100N
68	RD007C2	200	500	2N	20N	50N	50	3000	30	20	20N	500
69	RD007C3	100	1000	2N	20N	50N	20L	150	10N	20	20N	300
70	RD008C1	20N	500	2N	20N	50N	100	500	30	50	20N	100L
71	RD008C2	200	200	2N	20N	50N	30	700	10	30	20N	500
72	RD008C3	100	3000	2N	20N	50N	20N	150	10N	70	20N	100

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Pd ppm-S	Pt ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S
37 MT068C1	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B
38 MT068C2	10000	10N	50N	300	50	5N	20N	200N	30	20N	300
39 MT068C3	700	10N	50N	15	150	5N	20N	200N	10N	20N	200
40 MT069C1	10000G	10N	50N	500	20	5N	20N	200N	50	20N	200N
41 MT069C2	10000G	10N	50N	150	20	5N	20N	200N	70	20L	200N
42 MT069C3	500	10N	50N	10L	200	5N	20N	200N	50	2000G	200N
43 MT070C1	10000G	10N	50N	150	20	5N	20N	200N	30	20N	200N
44 MT070C2	7000	10N	50N	200	20	5N	20N	200N	70	20N	200N
45 MT070C3	700	10N	50N	10L	100	5N	20N	200N	10L	700	5000
46 MT071C1	3000	10N	50N	200	20	5N	20N	200N	30	20N	200N
47 MT071C2	10000G	10N	50N	200	20	5N	20N	200N	50	20N	200N
48 MT071C3	700	10N	50N	10	20	5N	20N	200N	20	2000G	200N
49 MT117C1	10000G	10N	50N	20	50	5N	20N	200N	30	20N	200N
50 MT117C2	10000G	10N	50L	100	20	5N	20N	200N	70	20N	200N
51 MT117C3	500	10N	50N	10N	70	5N	20N	200N	50	2000	5000
52 MT118C1	5000	10N	50N	300	30	5N	20N	200N	20	20N	200N
53 MT118C2	10000G	10N	50L	150	20	5N	20N	200N	70	20	200N
54 MT118C3	700	10N	50N	10N	20N	5N	20N	200N	30	2000G	1000
55 MT119C1	10000G	10N	50N	1000	20	5N	20N	200N	30	20N	200N
56 MT119C2	10000G	10N	50N	150	20	5N	20N	200N	100	20	200N
57 MT119C3	500	10N	50N	70	50	5N	20N	200N	20	1500	700
58 MT120C1	2000	10N	50N	70	50	5N	20N	200N	15	20N	200N
59 MT120C2	5000	10N	50N	200	20N	5N	20N	200N	70	20N	200N
60 MT120C3	500	10N	50N	10N	70	5N	20N	200N	10N	2000	500
61 MT121C1	3000	10N	50N	500	30	5N	20N	200N	20	20N	200N
62 MT121C2	10000	10N	50N	200	20	5N	20N	200N	70	20N	200N
63 MT121C3	1500	10N	50N	50	50	5N	20N	200N	50	2000G	500
64 RD006C1	10000G	10N	50N	70	50	5N	20N	200N	30	20N	200N
65 RD006C2	10000G	10N	50L	50	20	5N	20N	200N	100	20N	200N
66 RD006C3	500	10N	50L	10L	70	5N	20N	200N	30	200	500
67 RD007C1	10000	10N	50N	50	30	5N	20N	200N	20	20N	200N
68 RD007C2	10000G	10N	50	100	30	5N	20N	200N	70	20N	200N
69 RD007C3	500	10N	50N	10L	50	5N	20N	200N	30	500	500
70 RD008C1	10000G	10N	50N	70	50	5N	20N	200N	30	20N	200
71 RD008C2	10000G	10N	50	50	20	5N	20N	200N	100	20N	200
72 RD008C3	700	10N	50L	10	50	5N	20N	700	20	300	500

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Th ppm-S	V ppm-S	W ppm-S	Y ppm-S	Zn ppm-s	Zr ppm-S
37	MT068C1	.0B	.0B	.0B	.0B	.0B	.0B
38	MT068C2	200N	500	50N	50	500N	150
39	MT068C3	200N	50	50N	20L	500N	500
40	MT069C1	200N	3000	50N	70	500N	300
41	MT069C2	200N	300	50N	100	500N	300
42	MT069C3	200N	150	1000	200	700	2000G
43	MT070C1	200N	700	50N	15	500N	100
44	MT070C2	200N	500	50N	50	500N	300
45	MT070C3	200N	100	50L	30	500N	2000G
46	MT071C1	200N	2000	50N	20N	500N	150
47	MT071C2	200N	700	50N	30	500N	200
48	MT071C3	200N	300	200	70	500N	2000G
49	MT117C1	200N	1000	50N	30	500N	150
50	MT117C2	200N	300	50N	100	500N	300
51	MT117C3	200N	150	100	150	500N	2000G
52	MT118C1	200N	3000	50N	20	500N	100
53	MT118C2	200N	200	50N	300	500N	700
54	MT118C3	200N	100	300	700	500N	2000G
55	MT119C1	200N	5000	50N	30	500N	300
56	MT119C2	200N	300	50N	100	500N	200
57	MT119C3	200N	100	50	200	3000	2000G
58	MT120C1	200N	3000	50N	20L	500N	100
59	MT120C2	200N	1000	50N	50	500N	100
60	MT120C3	200N	70	50N	30	500N	2000G
61	MT121C1	200N	3000	50N	20L	500N	100
62	MT121C2	200N	700	50N	70	500N	200
63	MT121C3	200N	300	50N	70	500N	2000G
64	RD006C1	200N	5000	50N	20	500N	300
65	RD006C2	200N	300	50N	500	500N	500
66	RD006C3	200N	200	50N	200	500N	2000G
67	RD007C1	200N	3000	50N	20	500N	150
68	RD007C2	200N	300	50N	150	500N	200
69	RD007C3	200N	200	50N	200	500N	2000G
70	RD008C1	200N	3000	50N	50	500N	150
71	RD008C2	200N	500	50N	100	500N	200
72	RD008C3	200N	200	300	200	500N	2000G

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Mn %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S	Au ppm-S
73 RD009C1	61 45 28	157 20 50	1.5	30	2	.5L	.5N	2G	1N	500N	20N
74 RD009C2	61 45 28	157 20 50	3	30	7	.5L	.5N	2G	1N	500N	20N
75 RD009C3	61 45 28	157 20 50	7	1	.5	.5N	3	2G	1N	500N	20N
76 RD010C1	61 47 49	157 20 09	3	50G	7	.5N	.5N	2G	1N	500N	20N
77 RD010C2	61 47 49	157 20 09	3	30	5	.5	.5N	2G	1N	500N	20N
78 RD010C3	61 47 49	157 20 09	3	1	.7	.5N	3	2G	1N	500N	20N
79 RD011C1	61 45 06	157 24 36	2	50G	5	.5N	.5N	2G	1N	500N	20N
80 RD011C2	61 45 06	157 24 36	3	30	5	.5L	.5N	2G	1N	500N	20N
81 RD011C3	61 45 06	157 24 36	3	1	.7	.5N	2	2G	1N	500N	20N
82 RD056C1	61 40 22	157 16 28	.08	.08	.08	.08	.08	.08	.08	.08	.08
83 RD056C2	61 40 22	157 16 28	5	50	3	.5	.5N	2G	1N	500N	20N
84 RD056C3	61 40 22	157 16 28	2	5	1	.5	1	2G	1N	500N	20N
85 RD057C1	61 42 54	157 16 07	.08	.08	.08	.08	.08	.08	.08	.08	.08
86 RD057C2	61 42 54	157 16 07	2	50G	1	.5L	.5N	2	1N	500N	20N
87 RD057C3	61 42 54	157 16 07	10	3	.5	.5L	3	2G	1N	500N	20N
88 RD058C1	61 45 22	157 19 08	1.5	50G	2	.5N	.5N	2G	1N	500N	20N
89 RD058C2	61 45 22	157 19 08	5	20	5	.5L	.5N	2G	1N	500N	20N
90 RD058C3	61 45 22	157 19 08	5	1	.7	.5N	1.5	2G	1N	500N	20N
91 RD059C1	61 48 00	157 21 01	3	50G	7	.5N	.5N	2G	1N	500N	20N
92 RD059C2	61 48 00	157 21 01	5	50	5	.5	.5N	2G	1N	500N	20N
93 RD059C3	61 48 00	157 21 01	2	1.5	.5	.5N	2	2G	1N	500N	20N
94 RD060C1	61 48 17	157 22 12	.08	.08	.08	.08	.08	.08	.08	.08	.08
95 RD060C2	61 48 17	157 22 12	5	50	2	.5L	.5N	2G	1N	500N	20N
96 RD060C3	61 48 17	157 22 12	3	2	.3	.5N	2	2G	1N	500N	20N
97 RD061C1	61 46 19	157 24 31	.7	50G	2	.5N	.5N	2G	1N	500N	20N
98 RD061C2	61 46 19	157 24 31	3	20	5	.5N	.5N	2G	1N	500N	20N
99 RD061C3	61 46 19	157 24 31	2	.7	.3	.5N	.5	2G	1N	500N	20N
100 RD062C1	61 44 43	157 25 24	.08	.08	.08	.08	.08	.08	.08	.08	.08
101 RD062C2	61 44 43	157 25 24	3	20	5	.5	.5N	2G	1N	500N	20N
102 RD062C3	61 44 43	157 25 24	5	1	.5	.5N	1	2G	1N	500N	20N
103 RD105C1	61 40 54	157 20 09	3	50G	7	.5N	.5N	2G	1N	500N	20N
104 RD105C2	61 40 54	157 20 09	5	30	10	.5	.5N	2G	1N	500N	20N
105 RD105C3	61 40 54	157 20 09	7	1	.7	.5N	3	2G	1N	500N	20N
106 RD106C1	61 43 39	157 16 46	1	50G	2	.5N	.5N	2G	1N	500N	20N
107 RD106C2	61 43 39	157 16 46	2	50	7	.5N	.5N	2G	1N	500N	20N
108 RD106C3	61 43 39	157 16 46	2	.7	.5	.5N	1.5	2G	1N	500N	20N

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
73	RD009C1	20N	300	2N	20N	50N	70	500	50	50	20N	100N
74	RD009C2	500	700	2N	20N	50N	50	5000	10L	20	20N	500
75	RD009C3	150	1000	2N	20N	50N	20L	200	10N	15	20N	500
76	RD010C1	20N	300	2N	20N	50N	100	1000	30	30	20N	100N
77	RD010C2	100	500	2N	20N	50N	50	2000	30	20	20N	500
78	RD010C3	100	2000	2N	20N	50N	20L	200	10N	30	20N	300
79	RD011C1	20N	500	2N	20N	50N	100	2000	30	50	20N	100N
80	RD011C2	50	500	2N	20N	50N	30	2000	20	20	20N	300
81	RD011C3	70	5000	2N	20N	50N	20L	150	10N	20	20N	500
82	RD056C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
83	RD056C2	300	500	2N	20N	50N	30	2000	10	20	20N	500
84	RD056C3	100	10000	2N	20N	50N	20	300	10L	50	20N	700
85	RD057C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
86	RD057C2	100	1500	2L	20N	50N	50	1000	50	50	20N	300
87	RD057C3	50	2000	2N	20N	50N	20	200	10	30	20N	100L
88	RD058C1	20N	70	2N	20N	50N	100	2000	20	20	20N	100N
89	RD058C2	200	300	2L	20N	50N	30	1500	10	30	20N	1000
90	RD058C3	100	1500	3	20N	50N	20L	150	10N	50	20N	150
91	RD059C1	20N	300	2N	20N	50N	100	3000	50	50	20N	100N
92	RD059C2	150	700	2N	20N	50N	50	2000	20	20	20N	300
93	RD059C3	70	3000	2N	20N	50N	20L	150	10N	20	20N	300
94	RD060C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
95	RD060C2	100	700	2L	20N	50N	50	7000	50	30	20N	700
96	RD060C3	50	10000G	2N	20N	50N	20	300	15	30	20N	300
97	RD061C1	20N	150	2N	20N	50N	70	2000	20	30	20N	100N
98	RD061C2	200	500	2L	20N	50N	30	2000	10L	30	20N	2000
99	RD061C3	50	10000G	2N	20N	50N	20L	50	20	20	20N	100
100	RD062C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
101	RD062C2	700	700	2N	20N	50N	30	10000G	10	30	20N	700
102	RD062C3	200	7000	2N	20N	50N	20N	150	10N	10	20N	700
103	RD105C1	20N	500	2N	20N	50N	100	2000	30	50	20N	100N
104	RD105C2	1000	500	2N	20N	50N	50	5000	15	30	20N	300
105	RD105C3	150	2000	2N	20N	50N	20L	150	10N	10	20N	500
106	RD106C1	20N	200	2N	20N	50N	50	3000	20	50	20N	100N
107	RD106C2	1000	500	2N	20N	50N	30	10000	20	30	20N	1000
108	RD106C3	70	1500	2N	20N	50N	20L	150	10N	20	20N	150

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Pd ppm-S	Pt ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S
73	RD009C1	7000	10N	50N	20	20	5N	20N	200N	20	20N	200N
74	RD009C2	10000G	10N	50L	70	20	5N	20N	200N	70	20N	200N
75	RD009C3	200	10N	50N	10N	150	5N	20N	5000	30	300	1000
76	RD010C1	10000G	10N	50N	30	50	5N	20N	200N	50	20N	200N
77	RD010C2	5000	10N	50L	70	20	5N	20N	200N	100	20N	300
78	RD010C3	500	10N	50N	10L	100	5N	20N	200N	50	500	2000
79	RD011C1	10000G	10N	50N	30	30	5N	20N	200N	30	20N	200N
80	RD011C2	10000	10N	50L	70	20	5N	20N	200N	70	20N	200
81	RD011C3	500	10N	50N	10L	70	5N	20N	200N	50	200	1500
82	RD056C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
83	RD056C2	10000G	10N	50L	50	20	5N	20N	200N	100	20N	200
84	RD056C3	1000	10N	50L	30	100	5N	20N	200N	30	500	1500
85	RD057C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
86	RD057C2	7000	10N	50N	150	70	5N	20N	200N	50	20N	200
87	RD057C3	1000	10N	50L	20	70	5N	20N	200N	30	700	700
88	RD058C1	10000G	10N	50N	50	20	5N	20N	200N	30	20N	200N
89	RD058C2	10000G	10N	50	70	20	5N	20N	200N	100	20	200L
90	RD058C3	500	10N	50L	10L	70	5N	20N	1500	30	2000	300
91	RD059C1	10000G	10N	50N	50	20	5N	20N	200N	30	20N	200N
92	RD059C2	5000	10N	50L	100	30	5N	20N	200N	70	20N	200
93	RD059C3	500	10N	50N	10L	100	5N	20N	200N	30	200	2000
94	RD060C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
95	RD060C2	10000G	10N	50L	150	70	5N	20N	200N	50	20N	200
96	RD060C3	150	10N	50N	15	100	5N	20N	200N	20	500	5000
97	RD061C1	10000	10N	50N	50	30	5N	20N	200N	20	20N	200N
98	RD061C2	10000G	10N	70	50	20	5N	20N	200N	70	20N	200N
99	RD061C3	150	10N	70	10L	20N	5N	20N	300	30	1500	500
100	RD062C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
101	RD062C2	10000	10N	50L	70	20	5N	20N	200N	100	20N	500
102	RD062C3	500	10N	50L	10N	100	5N	20N	200N	50	300	1500
103	RD105C1	10000G	10N	50N	10	70	5N	20N	200N	50	20N	200N
104	RD105C2	10000G	10N	50L	70	30	5N	20N	200N	100	20N	200
105	RD105C3	700	10N	50	10N	100	5N	20N	200N	50	70	2000
106	RD106C1	10000G	10N	50N	50	50	5N	20N	200N	20	20N	200N
107	RD106C2	10000G	10N	50	100	30	5N	20N	200N	50	20N	200N
108	RD106C3	200	10N	50N	10N	150	5N	20N	200N	50	1000	500

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Th ppm-S	V ppm-S	W ppm-S	Y ppm-S	Zn ppm-s	Zr ppm-S
73	RD009C1	200N	2000	50N	20	500N	100
74	RD009C2	200N	200	50N	300	500N	500
75	RD009C3	200N	300	50N	700	500N	2000G
76	RD010C1	200N	5000	50N	20L	500N	100
77	RD010C2	200N	300	50N	150	500N	200
78	RD010C3	200N	300	50N	300	500N	2000G
79	RD011C1	200N	5000	50N	20	500N	100
80	RD011C2	200N	200	50N	150	500N	200
81	RD011C3	200N	200	50N	300	500N	2000G
82	RD056C1	.0B	.0B	.0B	.0B	.0B	.0B
83	RD056C2	200N	300	50N	200	500N	200
84	RD056C3	200N	300	50N	150	500N	2000G
85	RD057C1	.0B	.0B	.0B	.0B	.0B	.0B
86	RD057C2	200N	200	50N	50	500N	150
87	RD057C3	200N	200	50N	300	500N	2000G
88	RD058C1	200N	5000	50N	20N	500N	100
89	RD058C2	200N	200	50N	150	500N	500
90	RD058C3	200N	150	50N	500	500N	2000G
91	RD059C1	200N	5000	50N	20	500N	100
92	RD059C2	200N	500	50N	150	500N	200
93	RD059C3	200N	500	50N	300	500N	2000G
94	RD060C1	.0B	.0B	.0B	.0B	.0B	.0B
95	RD060C2	200N	300	50N	100	500N	300
96	RD060C3	200N	200	300	150	500N	2000G
97	RD061C1	200N	3000	50N	20L	500N	300
98	RD061C2	200N	200	50N	300	500N	1000
99	RD061C3	200N	200	100	200	500N	2000G
100	RD062C1	.0B	.0B	.0B	.0B	.0B	.0B
101	RD062C2	200L	300	50N	150	500N	300
102	RD062C3	200N	300	50N	150	500N	2000G
103	RD105C1	200N	5000	50N	20L	500N	100
104	RD105C2	200N	300	50N	100	500N	200
105	RD105C3	200N	300	50N	200	500N	2000G
106	RD106C1	200N	3000	50N	20L	500N	150
107	RD106C2	200N	200	50N	500	500N	500
108	RD106C3	200N	200	50N	200	500N	2000G

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S	Au ppm-S
109	RD107C1	61 46 25	157 20 11	.7	50G	1.5	.5N	.5N	2G	1N	1000	20N
110	RD107C2	61 46 25	157 20 11	3	50G	2	.5N	.5N	2G	1N	10000	20N
111	RD107C3	61 46 25	157 20 11	1.5	1.5	.2	.5N	.5L	2	2	2000	20N
112	RD108C1	61 44 44	157 21 01	1	50G	2	.5N	.5N	2G	1N	500N	20N
113	RD108C2	61 44 44	157 21 01	2	30	1.5	.5L	.5N	2G	1N	500N	20N
114	RD108C3	61 44 44	157 21 01	5	1.5	.5	.5N	.5	2G	1N	500N	20N
115	RD109C1	61 49 19	157 23 23	2	50	5	.5L	.5N	2G	1N	500N	20N
116	RD109C2	61 49 19	157 23 23	5	50	7	.5L	.5N	2G	1N	500N	20N
117	RD109C3	61 49 19	157 23 23	2	1	.7	.5N	1.5	2G	1N	500N	20N
118	RD110C1	61 48 29	157 23 27	.7	50G	1.5	.5N	.5N	2G	1N	500N	20N
119	RD110C2	61 48 29	157 23 27	5	20	5	.5	.5N	2G	1N	500N	20N
120	RD110C3	61 48 29	157 23 27	2	.5	.3	.5N	.5L	2G	1N	500N	20N
121	RD111C1	61 43 39	157 26 33	.2	50	3	.5L	.5N	2G	1N	500N	20N
122	RD111C2	61 43 39	157 26 33	3	30	5	.5	.5N	2G	1N	500N	20N
123	RD111C3	61 43 39	157 26 33	5	.7	.3	.5N	1.5	2G	1N	500N	20N
124	RY012C1	61 55 56	158 24 13	.5	50G	1.5	.5N	.5N	2G	1N	500N	20N
125	RY012C2	61 55 56	158 24 13	3	50	5	.7	.5N	2	1N	500N	20N
126	RY012C3	61 55 56	158 24 13	3	1	.3	.5N	1.5	2G	1N	500N	20N
127	RY013C1	61 56 19	158 21 30	.7	50	2	.5N	.5N	2G	1N	500N	20N
128	RY013C2	61 56 19	158 21 30	2	15	7	.5N	.5N	2G	1N	500N	20N
129	RY013C3	61 56 19	158 21 30	5	.7	.5	.5N	1	2G	1N	500N	20N
130	RY014C1	61 57 50	158 16 26	1.5	50	5	.5L	.5N	2G	1N	500N	20N
131	RY014C2	61 57 50	158 16 26	5	30	7	.5N	.5N	2G	1N	500N	20N
132	RY014C3	61 57 50	158 16 26	3	1	.5	.5N	3	2G	1N	500N	20N
133	RY015C1	61 59 11	158 26 22	2	50	3	.5L	.5N	2G	1N	500N	20N
134	RY015C2	61 59 11	158 26 22	3	15	5	.5L	.5N	2G	1N	500N	20N
135	RY015C3	61 59 11	158 26 22	3	1	.5	.5N	1	2G	1N	500N	20N
136	RY063C1	61 54 59	158 29 27	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B
137	RY063C2	61 54 59	158 29 27	3	30	5	.5N	.5N	2G	1N	500N	20N
138	RY063C3	61 54 59	158 29 27	3	1.5	.3	.5N	.5L	2G	1N	500N	20N
139	RY064C1	61 56 20	158 21 53	1	50G	1.5	.5N	.5N	2G	1N	500N	20N
140	RY064C2	61 56 20	158 21 53	2	30	3	.7	.5N	2G	1N	500N	20N
141	RY064C3	61 56 20	158 21 53	2	.7	.3	.5N	.5L	2G	1N	500N	20N
142	RY065C1	61 57 11	158 18 59	1	50	2	.5L	.5N	2G	1N	500N	20N
143	RY065C2	61 57 11	158 18 59	3	20	10	.5N	.5N	2G	1N	500N	20N
144	RY065C3	61 57 11	158 18 59	7	1	.3	.5N	1.5	2G	1N	500N	20N

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
109	RD107C1	20N	700	2N	20N	50N	70	500	50	30	20N	100N
110	RD107C2	100	3000	2L	20N	50N	50	100	100	20	20N	500
111	RD107C3	50	10000G	2N	20N	50N	20N	50	20	10	20N	100N
112	RD108C1	20N	500	2N	20N	50N	150	1000	20	30	20N	100N
113	RD108C2	300	1000	2N	20N	50N	50	7000	30	30	20N	300
114	RD108C3	200	2000	2N	20N	50N	20L	150	10N	20	20N	300
115	RD109C1	20N	200	2N	20N	50N	70	2000	20	50	20N	100N
116	RD109C2	200	500	2N	20N	50N	50	5000	20	20	20N	500
117	RD109C3	100	5000	2N	20N	50N	20L	200	10N	20	20N	200
118	RD110C1	20N	150	2N	20N	50N	100	1500	20	30	20N	100N
119	RD110C2	200	200	2N	20N	50N	20	5000	10	30	20N	1000
120	RD110C3	50	5000	2N	20N	50N	20N	100	15	20	20N	200
121	RD111C1	20N	500	2N	20N	50N	100	7000	20	30	20N	100N
122	RD111C2	2000	700	2N	20N	50N	50	10000G	30	30	20N	500
123	RD111C3	200	5000	2N	20N	50N	20L	150	10N	10	20N	500
124	RY012C1	20N	300	2N	20N	50N	50	5000	15	30	20N	100N
125	RY012C2	100	1000	2N	20N	50N	20	10000G	30	30	20N	200
126	RY012C3	100	5000	2N	20N	50N	20L	200	10N	15	20N	500
127	RY013C1	20N	300	2N	20N	50N	100	2000	10N	30	20N	100N
128	RY013C2	500	700	2N	20N	50N	50	10000G	10L	20	20N	1000
129	RY013C3	150	5000	2N	20N	50N	20N	150	10N	20	20N	500
130	RY014C1	20N	500	2N	20N	50N	50	7000	10	50	20N	100N
131	RY014C2	500	1000	2N	20N	50N	50	10000	20	30	20N	500
132	RY014C3	150	5000	2N	20N	50N	20L	200	10N	10	20N	500
133	RY015C1	20N	500	2N	20N	50N	100	7000	10	30	20N	100L
134	RY015C2	300	700	2N	20N	50N	30	10000	10L	30	20N	500
135	RY015C3	100	2000	2N	20N	50N	20L	200	10N	10L	20N	500
136	RY063C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
137	RY063C2	100	700	2N	20N	50N	20	10000	10N	30	20N	100
138	RY063C3	150	2000	2N	20N	50N	20N	150	10N	20	20N	500
139	RY064C1	20N	200	2N	20N	50N	100	700	10N	20	20N	100N
140	RY064C2	5000G	300	2L	20N	50N	30	10000G	10	200	20N	300
141	RY064C3	150	5000	2N	20N	50N	20L	200	10N	30	20N	700
142	RY065C1	20N	300	2N	20N	50N	50	5000	10N	50	20N	100N
143	RY065C2	500	700	2N	20N	50N	50	10000G	15	30	20N	500
144	RY065C3	200	5000	2N	20N	50N	20N	150	10N	15	20N	1000

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Pd ppm-S	Pt ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S
109	RD107C1	7000	10N	50N	30	30	5N	20N	3000	20	70	200N
110	RD107C2	10000G	10N	50L	100	70	5N	20N	5000	50	20N	300
111	RD107C3	300	10N	50L	10	70	5N	20N	7000	10N	30	1000
112	RD108C1	10000	10N	50N	50	50	5N	20N	200N	20	20N	200N
113	RD108C2	7000	10N	50L	150	30	5N	20N	200N	30	20N	200N
114	RD108C3	700	10N	50L	15	70	5N	20N	1500	50	500	1500
115	RD109C1	10000G	10N	50N	50	70	5N	20N	200N	20	20N	200N
116	RD109C2	10000G	10N	50	70	30	5N	20N	200N	70	20N	200
117	RD109C3	200	10N	50	10L	50	5N	20N	200	50	300	1000
118	RD110C1	7000	10N	50N	50	20	5N	20N	200N	20	20N	200N
119	RD110C2	10000G	10N	50	70	20	5N	20N	200N	50	20N	200L
120	RD110C3	300	10N	50L	10N	50	5N	20N	200	30	500	1000
121	RD111C1	10000	10N	50N	50	50	5N	20N	200N	20	20N	200N
122	RD111C2	10000	10N	50L	150	30	5N	20N	200N	50	20N	200
123	RD111C3	500	10N	50L	10N	100	5N	20N	200N	50	150	2000
124	RY012C1	10000	10N	50N	30	30	5N	20N	200N	20	20N	200N
125	RY012C2	5000	10N	50L	70	50	5N	20N	200N	30	20N	300
126	RY012C3	150	10N	50	10N	50	5N	20N	200N	30	50	1000
127	RY013C1	10000	10N	50N	20	100	5N	20N	200N	30	20N	200N
128	RY013C2	5000	10N	50L	100	50	5N	20N	200N	100	20N	200N
129	RY013C3	700	10N	50N	10N	100	5N	20N	500	50	70	2000
130	RY014C1	10000G	10N	50N	30	100	5N	20N	200N	20	20N	200N
131	RY014C2	5000	10N	50L	150	70	5N	20N	200N	70	20N	200
132	RY014C3	500	10N	50	10N	100	5N	20N	200L	30	70	5000
133	RY015C1	10000G	10N	50N	70	100	5N	20N	200N	20	20N	200N
134	RY015C2	7000	10N	50L	100	50	5N	20N	200N	50	20N	500
135	RY015C3	200	10N	50	10N	100	5N	20N	200N	50	100	1000
136	RY063C1	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B
137	RY063C2	10000	10N	50N	70	30	5N	20N	200N	70	20N	200N
138	RY063C3	500	10N	50N	10N	200	5N	20N	200N	50	300	1500
139	RY064C1	10000	10N	50N	15	50	5N	20N	200N	20	20N	200N
140	RY064C2	7000	10N	50L	70	30	5N	20N	200N	50	20N	200N
141	RY064C3	150	10N	50L	10N	150	5N	20N	500	50	50	5000
142	RY065C1	10000	10N	50N	30	70	5N	20N	200N	30	20N	200N
143	RY065C2	10000	10N	50N	150	70	5N	20N	200N	70	20N	200
144	RY065C3	300	10N	50L	10N	100	5N	20N	700	50	20N	5000

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Th ppm-S	V ppm-S	W ppm-S	Y ppm-S	Zn ppm-S	Zr ppm-S
109	RD107C1	200N	3000	50N	20	500N	200
110	RD107C2	200N	200	50N	100	500N	200
111	RD107C3	200N	100	2000	70	500N	2000G
112	RD108C1	200N	3000	50N	20	500N	200
113	RD108C2	200N	200	50N	200	500N	300
114	RD108C3	200N	200	50N	200	500N	2000G
115	RD109C1	200N	3000	50N	30	500N	200
116	RD109C2	200N	300	50N	200	500N	500
117	RD109C3	200N	200	300	200	500N	2000G
118	RD110C1	200N	2000	50N	20	500N	150
119	RD110C2	200N	300	50N	150	500N	300
120	RD110C3	200N	150	300	200	500N	2000G
121	RD111C1	200N	1500	50N	20	500N	100
122	RD111C2	200L	300	50N	100	500N	300
123	RD111C3	200N	300	50N	100	500N	2000G
124	RY012C1	200N	2000	50N	20L	500N	150
125	RY012C2	200N	300	50N	70	500N	300
126	RY012C3	200N	200	50N	150	500N	2000G
127	RY013C1	200N	1000	50N	30	500N	100
128	RY013C2	200	500	50N	150	500N	200
129	RY013C3	200N	300	50N	150	500N	2000G
130	RY014C1	200N	1500	50N	30	500N	150
131	RY014C2	200N	500	50N	150	500N	200
132	RY014C3	200N	200	50L	100	500N	2000G
133	RY015C1	200N	2000	50N	30	500N	200
134	RY015C2	200N	300	50N	200	500N	200
135	RY015C3	200N	200	50N	100	500N	2000G
136	RY063C1	.08	.08	.08	.08	.08	.08
137	RY063C2	200N	500	50N	200	500N	300
138	RY063C3	200N	300	50N	100	500N	2000G
139	RY064C1	200N	2000	50N	30	500N	300
140	RY064C2	200N	300	50N	150	500N	300
141	RY064C3	200N	200	50N	150	500N	2000G
142	RY065C1	200N	1000	50N	30	500N	200
143	RY065C2	200L	500	50N	150	500N	200
144	RY065C3	200N	300	50N	150	500N	2000G

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S	Au ppm-S
145	RY066C1	61 59 10	158 17 32	.08	.08	.08	.08	.08	.08	.08	.08	.08
146	RY066C2	61 59 10	158 17 32	2	30	20	.5N	.5N	2G	1N	500N	20N
147	RY066C3	61 59 10	158 17 32	5	1.5	.7	.5N	2	2G	1N	500N	20N
148	RY067C1	61 58 30	158 26 53	.08	.08	.08	.08	.08	.08	.08	.08	.08
149	RY067C2	61 58 30	158 26 53	5	30	7	.5L	.5N	2G	1N	500N	20N
150	RY067C3	61 58 30	158 26 53	5	.7	.5	.5N	3	2G	1N	500N	20N
151	RY112C1	61 56 07	158 23 22	.7	50G	2	.5N	.5N	2G	1N	500N	20N
152	RY112C2	61 56 07	158 23 22	2	50	5	.5L	.5N	2G	1N	500N	20N
153	RY112C3	61 56 07	158 23 22	2	.7	.2	.5N	2	2G	1N	500N	20N
154	RY113C1	61 55 57	158 23 29	.7	50G	3	.5N	.5N	2G	1N	500N	20N
155	RY113C2	61 55 57	158 23 29	3	50	5	.5L	.5N	2G	1N	500N	20N
156	RY113C3	61 55 57	158 23 29	7	.7	.5	.5N	5	2G	1N	500N	20N
157	RY114C1	61 57 21	158 18 31	1	50G	2	.5N	.5N	2G	1N	500N	20N
158	RY114C2	61 57 21	158 18 31	3	30	7	.5N	.5N	2G	1N	500N	20N
159	RY114C3	61 57 21	158 18 31	5	.7	.3	.5N	3	2G	1N	500N	20N
160	RY115C1	61 58 30	158 21 00	1	50	2	.5N	.5N	2G	1N	500N	20N
161	RY115C2	61 58 30	158 21 00	2	15	20	.5N	.5N	2G	1N	500N	20N
162	RY115C3	61 58 30	158 21 00	3	.7	.5	.5N	.7	2G	1N	500N	20N
163	RY116C1	61 58 14	158 27 22	1.5	50G	2	.5L	.5N	2G	1N	500N	20N
164	RY116C2	61 58 14	158 27 22	3	20	7	.5	.5N	2G	1N	500N	20N
165	RY116C3	61 58 14	158 27 22	3	.5	.5	.5N	1	2G	1N	500N	20N
166	WM001C1	62 11 01	154 50 16	.7	50	.5	.5N	.5N	2G	1N	500N	20N
167	WM001C2	62 11 01	154 50 16	5	20	2	.5L	.5N	2G	1N	500N	20N
168	WM001C3	62 11 01	154 50 16	2	1	.5	.5N	.5N	2G	1N	500N	20N
169	WM002C1	62 10 42	154 50 43	2	50G	2	.5L	.5N	2G	1N	500N	20N
170	WM002C2	62 10 42	154 50 43	10	50G	5	.5	.5N	2G	1N	500N	20N
171	WM002C3	62 10 42	154 50 43	3	1	1.5	.5N	1	2G	1N	500N	20N
172	WM003C1	62 10 35	154 50 55	2	50	1.5	.5L	.5N	2G	1N	500N	20N
173	WM003C2	62 10 35	154 50 55	10	50	5	.5	.5N	2G	1N	500N	20N
174	WM003C3	62 10 35	154 50 55	3	1	1.5	.5N	1.5	2G	1N	500N	20N
175	WM004C1	62 11 21	154 49 42	2	50	1	.5L	.5N	2G	1N	500N	20N
176	WM004C2	62 11 21	154 49 42	5	50	3	.5	.5N	2G	1N	500N	20N
177	WM004C3	62 11 21	154 49 42	7	1.5	1.5	.5N	1	2G	1N	500N	20N
178	WM005C1	62 10 23	154 51 48	3	50G	3	.5N	.5N	2G	1N	500N	20N
179	WM005C2	62 10 23	154 51 48	15	20	7	.5	.5N	2G	1N	500N	20N
180	WM005C3	62 10 23	154 51 48	20	1	20	.5L	.5	2	1N	500N	20N

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
145	RY066C1	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B
146	RY066C2	150	700	2N	20N	50N	50	10000G	10	20	20N	300
147	RY066C3	100	10000G	2N	20N	50N	20	700	10N	10	20N	1000
148	RY067C1	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B	.0B
149	RY067C2	700	500	2N	20N	50N	50	10000G	10N	30	20N	1000
150	RY067C3	150	5000	2N	20N	50N	20L	150	10N	15	20N	300
151	RY112C1	20N	300	2N	20N	50N	50	5000	10	50	20N	100N
152	RY112C2	1000	1000	2N	20N	50N	50	10000G	30	30	20N	500
153	RY112C3	100	5000	2N	20N	50N	20L	200	10N	15	20N	500
154	RY113C1	20N	500	2N	20N	50N	50	5000	10	50	20N	100N
155	RY113C2	200	1000	2N	20N	50N	30	10000G	20	30	20N	2000
156	RY113C3	70	2000	2N	20N	50N	20L	100	10N	10	20N	500
157	RY114C1	20N	300	2N	20N	50N	70	3000	15	30	20N	100N
158	RY114C2	1000	1000	2N	20N	50N	50	10000G	20	30	20N	1000
159	RY114C3	150	3000	2N	20N	50N	20L	100	10N	15	20N	500
160	RY115C1	20N	300	2N	20N	50N	100	5000	10L	30	20N	100N
161	RY115C2	100	200	2N	20N	50N	50	10000	10L	20	20N	150
162	RY115C3	150	2000	2N	20N	50N	20N	150	10N	20	20N	700
163	RY116C1	20N	500	2N	20N	50N	100	2000	10	30	20N	200
164	RY116C2	500	500	2N	20N	50N	50	10000G	10	30	20N	500
165	RY116C3	100	5000	2N	20N	50N	20N	200	10N	10L	20N	500
166	WM001C1	20N	150	2N	20N	50N	50	200	20	50	20N	300
167	WM001C2	300	500	2N	20N	50N	30	5000	30	50	20N	2000G
168	WM001C3	30	1000	2N	20N	50N	20N	100	10N	10	20N	100N
169	WM002C1	20N	300	2N	20N	50N	50	700	50	30	20N	200
170	WM002C2	300	1500	2N	20N	50N	50	2000	30	50	20N	1000
171	WM002C3	70	2000	2N	20N	50N	20N	70	10N	15	20N	100
172	WM003C1	20N	300	2N	20N	50N	70	100	70	70	20N	300
173	WM003C2	300	1000	2N	20N	50N	30	3000	50	20	20N	2000
174	WM003C3	200	3000	2N	20N	50N	20N	300	10N	20	20N	100
175	WM004C1	20N	300	2N	20N	50N	50	200	30	50	20N	300
176	WM004C2	15	1000	2L	20N	50N	50	500	20	30	20N	1000
177	WM004C3	70	10000	2N	20N	50N	20L	200	10N	15	20N	100
178	WM005C1	20N	100	2N	20N	50N	100	300	70	50	20N	100N
179	WM005C2	150	300	2N	20N	50N	50	700	30	30	20N	500
180	WM005C3	70	3000	2N	20N	50N	20N	100	10N	20	20N	100L

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Pd ppm-S	Pt ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S
145	RY066C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
146	RY066C2	3000	10N	50N	300	20	5N	20N	200N	50	20N	200
147	RY066C3	300	10N	50L	10L	100	5N	20N	200N	30	50	2000
148	RY067C1	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
149	RY067C2	7000	10N	50L	100	30	5N	20N	200N	70	20N	700
150	RY067C3	300	10N	50	10N	150	5N	20N	200	30	100	3000
151	RY112C1	10000G	10N	50N	30	70	5N	20N	200N	20	20N	200N
152	RY112C2	3000	10N	50N	200	30	5N	20N	200N	30	20N	300
153	RY112C3	150	10N	50L	10N	100	5N	20N	500	50	150	2000
154	RY113C1	10000G	10N	50N	30	50	5N	20N	200N	20	20N	200N
155	RY113C2	7000	10N	50N	150	70	5N	20N	200N	70	20N	500
156	RY113C3	700	10N	50L	10N	100	5N	20N	300	50	150	1500
157	RY114C1	10000	10N	50N	20	50	5N	20N	200N	20	20N	200N
158	RY114C2	5000	10N	50L	150	100	5N	20N	200N	70	20N	200
159	RY114C3	500	10N	50L	10N	100	5N	20N	200	50	200	1000
160	RY115C1	10000G	10N	50N	30	70	5N	20N	200N	30	20N	200N
161	RY115C2	7000	10N	50N	300	20	5N	20N	200N	50	20N	200N
162	RY115C3	300	10N	50L	10N	70	5N	20N	200N	50	200	2000
163	RY116C1	10000G	10N	50N	30	70	5N	20N	200N	30	20L	200N
164	RY116C2	7000	10N	50L	100	30	5N	20N	200N	50	20N	500
165	RY116C3	150	10N	50	10N	70	5N	20N	200N	30	70	1500
166	WM001C1	10000	50	50	20	20	5N	20N	200N	10	100	200N
167	WM001C2	10000G	10N	50L	100	100	5N	20N	200N	50	20N	200L
168	WM001C3	200	10N	50	10N	100	5N	20N	200N	20	1500	200N
169	WM002C1	10000	10N	50L	30	30	5N	20N	200N	20	30	200N
170	WM002C2	10000	10N	50L	100	100	5N	20N	200N	70	20N	200L
171	WM002C3	200	10N	50	10N	300	5N	20N	200N	20	100	500
172	WM003C1	10000G	15	50L	20	30	5N	20N	200N	15	100	200N
173	WM003C2	10000G	10N	50L	100	70	5N	20N	200N	70	1500	200
174	WM003C3	500	10N	50L	10N	150	5N	20N	200N	30	200	500
175	WM004C1	10000	20	50L	20	30	5N	20N	200N	15	100	200N
176	WM004C2	10000	10N	50N	100	30	5N	20N	200N	70	20N	200
177	WM004C3	1000	10N	50L	10N	100	5N	20N	200N	30	200	1000
178	WM005C1	10000G	10N	50N	50	20	5N	20N	200N	20	20N	200N
179	WM005C2	7000	10N	50L	100	30	5N	20N	200N	100	20N	200L
180	WM005C3	700	10N	50N	10L	100	5N	20N	200N	10	2000G	200

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Th ppm-S	V ppm-S	W ppm-S	Y ppm-S	Zn ppm-s	Zr ppm-S
145	RY066C1	.08	.08	.08	.08	.08	.08
146	RY066C2	200N	700	50N	70	500N	200
147	RY066C3	200N	200	50N	150	500N	2000G
148	RY067C1	.08	.08	.08	.08	.08	.08
149	RY067C2	200N	300	50N	500	500N	300
150	RY067C3	200N	200	50L	150	500N	2000G
151	RY112C1	200N	2000	50N	20	500N	150
152	RY112C2	200	300	50N	100	500N	700
153	RY112C3	200N	200	50N	150	500N	2000G
154	RY113C1	200N	2000	50N	20	500N	150
155	RY113C2	200	700	50N	200	500N	500
156	RY113C3	200N	200	50N	150	500N	2000G
157	RY114C1	200N	2000	50N	20	500N	150
158	RY114C2	200L	500	50N	200	500N	300
159	RY114C3	200N	200	50N	150	500N	2000G
160	RY115C1	200N	1000	50N	30	500N	150
161	RY115C2	200N	500	50N	70	500N	200
162	RY115C3	200N	200	50N	200	500N	2000G
163	RY116C1	200N	3000	50N	30	500N	100
164	RY116C2	200L	300	50N	200	500N	200
165	RY116C3	200N	200	50N	100	500N	2000G
166	WM001C1	200N	1000	50N	100	500N	1500
167	WM001C2	200L	200	50N	150	500N	300
168	WM001C3	200N	100	200	100	500L	2000G
169	WM002C1	200N	2000	50N	100	500N	700
170	WM002C2	200N	300	50N	100	500N	300
171	WM002C3	200N	150	50	100	500N	2000G
172	WM003C1	200N	1500	50N	70	500N	700
173	WM003C2	200N	300	50N	200	500N	300
174	WM003C3	200N	300	50N	300	500N	2000G
175	WM004C1	200N	1000	50N	100	500N	1000
176	WM004C2	200N	200	50N	500	500N	200
177	WM004C3	200N	200	100	700	500N	2000G
178	WM005C1	200N	5000	50N	20	500N	300
179	WM005C2	200N	300	50N	100	500N	300
180	WM005C3	200N	100	50N	150	500N	2000G

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Ca %-S	Fe %-S	Mg %-S	Na %-S	P %-S	Ti %-S	Ag ppm-S	As ppm-S	Au ppm-S
181	WM051C1	62 11 03	154 50 24	1.5	30	1.5	.5N	.5N	2G	1N	500N	20N
182	WM051C2	62 11 03	154 50 24	5	30	2	.5L	.5N	2G	1N	1000	20N
183	WM051C3	62 11 03	154 50 24	20	1	7	.5N	.7	1	1N	500N	20N
184	WM052C1	62 10 33	154 51 19	1	50G	1.5	.5L	.5N	2G	1N	500N	20N
185	WM052C2	62 10 33	154 51 19	2	50	2	.5N	.5N	1	1N	500L	20N
186	WM052C3	62 10 33	154 51 19	5	1.5	.3	.5N	.5	2	1N	500N	20N
187	WM053C1	62 10 05	154 51 49	.7	50	.3	.5N	.5N	2G	1N	500N	20N
188	WM053C2	62 10 05	154 51 49	5	30	1.5	.5N	.5N	2G	1N	500N	20N
189	WM053C3	62 10 05	154 51 49	2	.5	.3	.5N	.5L	2G	1N	500N	20N
190	WM054C1	62 09 49	154 52 41	1	50G	1	.5N	.5N	2G	1N	500N	20N
191	WM054C2	62 09 49	154 52 41	5	30	3	.5N	.5N	2G	1N	500N	20N
192	WM054C3	62 09 49	154 52 41	2	.5	.5	.5N	.7	2G	1N	500N	20N
193	WM055C1	62 09 27	154 53 21	.7	50G	.3	.5N	.5N	2G	1N	500N	20N
194	WM055C2	62 09 27	154 53 21	3	20	2	.5N	.5N	2G	1N	500N	20N
195	WM055C3	62 09 27	154 53 21	3	.7	.7	.5N	.5L	2G	1N	500N	20N
196	WM101C1	62 10 26	154 51 04	.7	50	1	.5N	.5N	2G	1N	500N	20N
197	WM101C2	62 10 26	154 51 04	5	30	3	.5	.5N	2G	1N	500N	20N
198	WM101C3	62 10 26	154 51 04	3	1	1.5	.5N	.5N	2G	1N	500N	20N
199	WM102C1	62 10 13	154 51 29	.5	50	.7	.5N	.5N	2G	1N	500N	20N
200	WM102C2	62 10 13	154 51 29	3	30	1.5	.5	.5N	2G	1N	500N	20N
201	WM102C3	62 10 13	154 51 29	1	.5	.2	.5N	.5L	2G	1N	500N	20N
202	WM103C1	62 11 19	154 49 09	1	50G	1	.5N	.5N	2G	1N	500N	20N
203	WM103C2	62 11 19	154 49 09	5	30	2	.5L	.5N	2G	1N	500N	20N
204	WM103C3	62 11 19	154 49 09	1.5	.7	.2	.5N	1	2G	1N	500N	20N
205	WM104C1	62 10 39	154 51 52	3	50G	3	.5N	.5N	2G	1N	500N	20N
206	WM104C2	62 10 39	154 51 52	10	30	10	.7	.5N	2G	1N	500N	20N
207	WM104C3	62 10 39	154 51 52	30	1	15	.5N	.7	2G	1N	500N	20N

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	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	Ge ppm-S	La ppm-S
181	WM051C1	20N	100	2N	20N	50N	100	200	30	50	20N	100
182	WM051C2	150	500	2N	20N	50N	70	500	50	30	20N	300
183	WM051C3	30	300	2N	20N	50N	20N	100	10L	10	20N	100L
184	WM052C1	20N	150	2N	20N	50N	100	100	70	30	20N	100N
185	WM052C2	70	500	2N	20N	50N	100	300	100	30	20N	200
186	WM052C3	50	2000	2N	20N	50N	20N	50	10	10	20N	100L
187	WM053C1	20N	100	2N	20N	50N	30	100	10	50	20N	500
188	WM053C2	150	200	2	20N	50N	30	7000	30	20	20N	2000G
189	WM053C3	50	2000	2L	20N	50N	20N	150	10N	10N	20N	150
190	WM054C1	20N	150	2N	20N	50N	50	200	30	70	20N	300
191	WM054C2	200	500	5	20N	50N	50	5000	20	30	20N	2000G
192	WM054C3	50	5000	2N	20N	50N	20L	70	10N	10L	20N	100L
193	WM055C1	20N	100	2N	20N	50N	70	150	20	30	20N	500
194	WM055C2	150	300	2	20N	50N	30	7000	70	50	20N	2000G
195	WM055C3	50	10000G	2N	20N	50N	20N	150	10N	15	20N	100L
196	WM101C1	20N	100	2N	20N	50N	100	200	50	30	20N	200
197	WM101C2	300	500	2N	20N	50N	50	3000	30	50	20N	500
198	WM101C3	50	3000	2N	20N	50N	20L	150	15	10	20N	100L
199	WM102C1	20N	100	2N	20N	50N	30	200	30	50	20N	500
200	WM102C2	200	300	2	20N	50N	50	7000	30	30	20N	2000G
201	WM102C3	30	1500	2	20N	50N	20N	70	10N	10N	20N	100N
202	WM103C1	20N	150	2N	20N	50N	70	100	30	70	20N	500
203	WM103C2	200	500	10	20N	50N	50	5000	20	20	20N	2000
204	WM103C3	50	3000	2N	20N	50N	20	100	10N	10N	20N	100N
205	WM104C1	20N	200	2N	20N	50N	150	100	70	50	20N	100N
206	WM104C2	70	300	2N	20N	50N	70	1000	30	30	20N	300
207	WM104C3	50	500	2N	20N	50N	20N	100	10N	20	20N	100L

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Mn ppm-S	Mo ppm-S	Nb ppm-S	Ni ppm-S	Pb ppm-S	Pd ppm-S	Pt ppm-S	Sb ppm-S	Sc ppm-S	Sn ppm-S	Sr ppm-S
181	WM051C1	10000	10N	50N	30	20	5N	20N	200N	15	20	200N
182	WM051C2	5000	10N	50L	100	150	5N	20N	200N	30	20N	200
183	WM051C3	700	10N	50L	10N	70	5N	20N	200N	10N	70	200
184	WM052C1	10000	10N	50N	20	20	5N	20N	200N	15	20N	200N
185	WM052C2	3000	10	50N	200	150	5N	20N	200N	30	20N	200N
186	WM052C3	200	10N	50N	10N	200	5N	20N	200N	10N	20N	200N
187	WM053C1	10000G	50	50L	10L	30	5N	20N	200N	10	150	200N
188	WM053C2	10000G	10N	70	150	50	5N	20N	200N	100	200	200N
189	WM053C3	100	10N	50	10N	20	5N	20N	200N	20	2000G	200N
190	WM054C1	10000	20	50L	30	30	5N	20N	200N	15	50	200N
191	WM054C2	10000G	10N	70	200	30	5N	20N	200N	100	20N	200N
192	WM054C3	100	10N	100	10N	50	5N	20N	200N	30	1500	200
193	WM055C1	7000	30	50L	50	20	5N	20N	200N	15	100	200N
194	WM055C2	10000G	10N	50	150	100	5N	20N	200N	100	20N	200N
195	WM055C3	150	10N	50	10N	150	5N	20N	200N	30	700	200N
196	WM101C1	10000	10L	50L	30	20	5N	20N	200N	15	30	200N
197	WM101C2	10000	10N	50L	100	100	5N	20N	200N	50	20N	200
198	WM101C3	200	10N	50	10N	100	5N	20N	200N	30	500	200
199	WM102C1	10000G	50	50L	10N	20	5N	20N	200N	10	150	200N
200	WM102C2	10000G	10N	50	100	50	5N	20N	200N	100	150	200N
201	WM102C3	100	10N	50L	10N	70	5N	20N	200N	15	2000G	200
202	WM103C1	10000	30	50L	10	20	5N	20N	200N	15	100	200N
203	WM103C2	10000G	10N	70	150	30	5N	20N	200N	100	20N	200N
204	WM103C3	100	10N	50	10N	100	5N	20N	200N	50	1000	200
205	WM104C1	10000G	10N	50N	50	20	5N	20N	200N	30	20N	200N
206	WM104C2	7000	10N	50L	100	20	5N	20N	200N	100	20N	200L
207	WM104C3	700	10N	50N	10L	20	5N	20N	200N	20	200	300

Table 4. Analytical data for heavy-mineral concentrates collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Th ppm-S	V ppm-S	W ppm-S	Y ppm-S	Zn ppm-s	Zr ppm-S
181	WM051C1	200N	3000	50N	30	500N	200
182	WM051C2	200N	200	50N	100	500N	200
183	WM051C3	200N	50	50N	100	500N	2000G
184	WM052C1	200N	3000	50N	30	500N	150
185	WM052C2	200N	200	50N	50	500N	200
186	WM052C3	200N	100	50N	70	500N	2000G
187	WM053C1	200N	700	50N	150	500N	2000
188	WM053C2	200	200	100	500	500N	500
189	WM053C3	200L	100	500	500	500N	2000G
190	WM054C1	200N	2000	50N	70	500N	500
191	WM054C2	200	300	150	700	500N	500
192	WM054C3	200N	150	70	200	500N	2000G
193	WM055C1	200N	1000	50N	100	500N	700
194	WM055C2	200	200	50N	200	500N	500
195	WM055C3	200N	100	150	200	500N	2000G
196	WM101C1	200N	3000	50N	50	500N	1000
197	WM101C2	200N	300	50N	100	500N	500
198	WM101C3	200N	150	150	150	500N	2000G
199	WM102C1	200N	1000	50N	100	500N	150
200	WM102C2	200L	200	200	300	500N	500
201	WM102C3	200N	100	300	150	500N	2000G
202	WM103C1	200N	1500	50N	150	500N	1000
203	WM103C2	200N	200	50N	700	500N	1000
204	WM103C3	200N	150	200	500	500N	2000G
205	WM104C1	200N	7000	50N	30	500N	100
206	WM104C2	200N	700	50N	70	500N	150
207	WM104C3	200N	150	50N	200	500N	2000G

Table 5. Mineralogical data for nonmagnetic, heavy-mineral concentrate samples collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. [--, not observed; 1, <1%; 2, 1-5%; 3, 5-20%; 4, 20-50%; 5, >50%.]

	Sample	Latitude	Longitude	Pyrite	Cinnabar	Stibnite	Gold	Scheelite	Barite	Tourmaline	Cassit	Rutile	Anatase
1	CC020C3	60 46 56	158 50 39	1	5	--	--	--	2	--	--	1	1
2	CC021C3	60 46 14	158 46 53	--	2	--	--	--	2	--	--	1	1
3	CC072C3	60 47 33	158 51 58	--	5	1	--	--	1	--	--	--	1
4	CC073C3	60 46 26	158 49 19	--	4	--	--	--	2	1	--	1	1
5	CC074C3	60 45 32	158 48 24	1	2	--	--	--	2	--	--	1	1
6	CC122C3	60 47 13	158 51 26	--	5	1	--	--	2	--	--	1	1
7	CC123C3	60 46 17	158 48 07	1	3	--	--	--	2	--	--	1	1
8	CC124C3	60 45 02	158 49 10	--	2	--	--	--	1	--	--	1	2
9	MT016C3	61 23 26	157 57 16	1	1	--	--	--	2	--	--	1	1
10	MT017C3	61 23 09	158 00 17	--	1	--	--	1	--	--	1	--	1
11	MT018C3	61 25 25	157 58 47	--	1	--	--	1	2	--	--	1	2
12	MT019C3	61 26 24	157 55 41	1	1	--	--	--	1	--	1	--	2
13	MT068C3	61 23 38	157 57 11	1	5	--	--	--	1	--	--	--	1
14	MT069C3	61 23 25	157 56 08	--	1	--	--	1	--	--	1	1	2
15	MT070C3	61 24 10	157 58 18	--	5	--	--	--	2	--	1	--	1
16	MT071C3	61 24 08	157 53 16	--	1	--	--	--	--	--	1	1	1
17	MT117C3	61 23 26	157 58 05	--	3	--	--	1	1	--	1	1	2
18	MT118C3	61 23 16	157 58 11	1	3	--	--	1	1	--	1	1	2
19	MT119C3	61 23 01	158 01 12	3	1	--	--	1	2	--	1	1	1
20	MT120C3	61 25 53	157 58 52	1	5	--	--	--	1	--	1	1	1
21	MT121C3	61 26 58	157 59 10	--	3	--	1	--	1	--	1	--	1
22	RD006C3	61 40 11	157 15 12	1	1	--	--	--	2	--	--	1	1
23	RD007C3	61 42 19	157 15 33	1	1	--	--	--	--	--	1	1	2
24	RD008C3	61 46 00	157 19 45	--	1	1	--	1	1	1	--	1	1
25	RD009C3	61 45 28	157 20 50	--	1	--	--	--	1	1	--	1	1
26	RD010C3	61 47 49	157 20 09	--	1	--	--	--	1	1	1	2	1
27	RD011C3	61 45 06	157 24 36	--	1	--	--	--	1	--	1	1	1
28	RD056C3	61 40 22	157 16 28	--	1	--	--	--	1	--	--	1	2
29	RD057C3	61 42 54	157 16 07	1	1	--	--	--	1	--	--	--	1
30	RD058C3	61 45 22	157 19 08	--	1	1	--	1	1	1	1	1	1
31	RD059C3	61 48 00	157 21 01	--	1	--	--	--	1	--	--	1	1
32	RD060C3	61 48 17	157 22 12	--	2	--	--	1	2	--	1	1	1
33	RD061C3	61 46 19	157 24 31	1	1	1	--	1	3	--	1	--	1
34	RD062C3	61 44 43	157 25 24	1	1	--	--	--	2	--	1	1	2
35	RD105C3	61 40 54	157 20 09	1	1	--	--	1	1	--	--	1	1
36	RD106C3	61 43 39	157 16 46	--	1	--	--	--	1	--	1	1	1
37	RD107C3	61 46 25	157 20 11	1	5	1	--	2	2	--	--	--	1
38	RD108C3	61 44 44	157 21 01	--	1	1	--	--	--	1	1	--	2
39	RD109C3	61 49 19	157 23 23	--	1	--	--	1	1	--	--	1	1
40	RD110C3	61 48 29	157 23 27	--	2	--	--	1	1	--	1	1	2

Table 5. Mineralogical data from nonmagnetic, heavy-mineral concentrate samples collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Sphene	Apatite	Zircon	Sericite	Brookite	Cr-Diopside	Realgar	Rock Fragments
1	CC020C3	--	2	2	--	--	--	--	1
2	CC021C3	--	1	4	1	--	1	--	1
3	CC072C3	--	1	1	--	--	1	--	1
4	CC073C3	--	1	3	2	--	--	--	3
5	CC074C3	--	2	5	1	--	--	--	1
6	CC122C3	1	3	3	1	--	--	--	1
7	CC123C3	--	2	4	1	--	1	--	2
8	CC124C3	--	2	5	1	1	--	--	1
9	MT016C3	1	1	3	1	--	1	--	3
10	MT017C3	1	3	4	--	--	--	--	--
11	MT018C3	--	3	2	1	--	1	--	1
12	MT019C3	--	2	3	--	1	1	--	1
13	MT068C3	--	--	1	1	--	1	--	1
14	MT069C3	--	2	4	1	1	--	--	--
15	MT070C3	--	1	2	1	--	--	--	1
16	MT071C3	--	1	3	--	--	1	--	--
17	MT117C3	--	2	5	1	1	1	--	--
18	MT118C3	--	1	4	1	--	--	--	--
19	MT119C3	--	1	4	--	--	1	--	--
20	MT120C3	--	1	2	--	--	2	--	--
21	MT121C3	--	1	2	--	1	3	--	1
22	RD006C3	1	3	5	1	--	1	--	1
23	RD007C3	1	2	5	2	1	1	--	1
24	RD008C3	1	2	5	1	--	1	--	1
25	RD009C3	1	2	5	1	1	1	--	1
26	RD010C3	1	3	5	1	--	1	--	--
27	RD011C3	--	3	5	2	--	--	--	1
28	RD056C3	--	2	3	2	1	1	--	1
29	RD057C3	1	3	5	1	--	1	--	--
30	RD058C3	2	2	5	1	--	1	--	1
31	RD059C3	1	2	4	1	1	1	--	1
32	RD060C3	--	2	5	1	1	1	--	1
33	RD061C3	2	1	5	--	1	1	--	--
34	RD062C3	1	2	5	2	1	1	--	1
35	RD105C3	--	2	5	1	--	1	--	--
36	RD106C3	--	2	5	1	1	--	--	--
37	RD107C3	--	1	3	1	--	--	2	1
38	RD108C3	1	1	5	2	1	1	--	--
39	RD109C3	--	2	5	1	--	--	--	1
40	RD110C3	1	1	5	1	1	--	--	1

Table 5. Mineralogical data from nonmagnetic, heavy-mineral concentrate samples collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Latitude	Longitude	Pyrite	Cinnabar	Stibnite	Gold	Scheelite	Barite	Tourmaline	Cassit	Rutile	Anatase
41	RD111C3	61 43 39	157 26 33	--	1	--	--	--	1	1	--	1	1
42	RY012C3	61 55 56	158 24 13	--	2	--	--	--	1	1	--	1	1
43	RY013C3	61 56 19	158 21 30	--	1	--	--	--	2	1	--	1	1
44	RY014C3	61 57 50	158 16 26	--	1	--	--	--	--	1	--	--	2
45	RY015C3	61 59 11	158 26 22	--	1	--	--	--	1	1	--	--	2
46	RY063C3	61 54 59	158 29 27	--	2	--	--	--	1	1	1	1	1
47	RY064C3	61 56 20	158 21 53	1	1	--	--	--	1	1	--	1	3
48	RY065C3	61 57 11	158 18 59	1	1	1	--	--	1	1	--	2	1
49	RY066C3	61 59 10	158 17 32	--	1	--	--	--	2	1	--	1	2
50	RY067C3	61 58 30	158 26 53	--	1	--	--	--	1	1	--	--	2
51	RY112C3	61 56 07	158 23 22	1	2	--	--	--	1	1	--	1	1
52	RY113C3	61 55 57	158 23 29	--	2	--	--	--	1	1	--	1	1
53	RY114C3	61 57 21	158 18 31	--	1	--	--	--	1	1	1	1	1
54	RY115C3	61 58 30	158 21 00	--	1	--	--	--	--	1	--	1	1
55	RY116C3	61 58 14	158 27 22	--	1	--	--	--	2	1	--	--	2
56	WM001C3	62 11 01	154 50 16	2	4	--	--	1	--	--	1	1	1
57	WM002C3	62 10 42	154 50 43	--	3	--	--	--	2	--	--	1	1
58	WM003C3	62 10 35	154 50 55	1	3	--	--	--	1	--	--	1	1
59	WM004C3	62 11 21	154 49 42	--	--	--	--	1	2	--	--	2	2
60	WM005C3	62 10 23	154 51 48	1	1	--	--	--	2	--	1	--	1
61	WM051C3	62 11 03	154 50 24	--	4	--	--	--	--	--	--	--	1
62	WM052C3	62 10 33	154 51 19	1	5	--	--	--	1	--	--	--	1
63	WM053C3	62 10 05	154 51 49	1	5	--	1	1	1	1	1	1	2
64	WM054C3	62 09 49	154 52 41	1	3	--	--	1	1	--	1	1	2
65	WM055C3	62 09 27	154 53 21	1	3	--	--	1	2	--	1	1	2
66	WM101C3	62 10 26	154 51 04	1	3	--	--	1	1	--	--	1	1
67	WM102C3	62 10 13	154 51 29	1	5	--	1	1	1	--	1	1	1
68	WM103C3	62 11 19	154 49 09	1	1	--	--	1	1	--	1	1	1
69	WM104C3	62 10 39	154 51 52	--	1	--	--	--	--	--	--	--	1

Table 5. Mineralogical data from nonmagnetic, heavy-mineral concentrate samples collected near cinnabar-stibnite occurrences in the Kuskokwim River region, Alaska. -- continued

	Sample	Sphene	Apatite	Zircon	Sericite	Brookite	Cr-Diopside	Realgar	Rock Fragments
41	RD111C3	1	3	4	1	1	--	--	1
42	RY012C3	1	2	5	2	--	1	--	1
43	RY013C3	1	3	5	2	1	--	--	2
44	RY014C3	1	3	5	2	--	--	--	1
45	RY015C3	1	2	4	2	1	--	--	--
46	RY063C3	1	1	5	1	--	--	--	--
47	RY064C3	--	2	5	1	1	--	--	1
48	RY065C3	1	3	5	1	--	--	--	1
49	RY066C3	1	2	5	2	--	--	--	1
50	RY067C3	1	3	5	1	--	--	--	--
51	RY112C3	--	2	5	2	1	--	--	1
52	RY113C3	1	3	4	1	1	--	--	--
53	RY114C3	1	3	4	2	--	--	--	--
54	RY115C3	1	2	5	2	1	--	--	1
55	RY116C3	1	3	4	2	--	--	--	2
56	WM001C3	--	1	3	2	--	1	--	1
57	WM002C3	1	2	3	2	--	1	--	1
58	WM003C3	--	1	3	2	--	1	--	--
59	WM004C3	1	1	4	1	--	--	--	1
60	WM005C3	--	1	3	--	--	1	--	4
61	WM051C3	--	2	2	1	--	--	--	3
62	WM052C3	--	1	2	1	1	--	--	2
63	WM053C3	1	1	3	1	1	1	--	1
64	WM054C3	--	1	4	1	1	--	--	1
65	WM055C3	1	2	4	1	--	--	--	2
66	WM101C3	--	1	3	2	1	--	--	--
67	WM102C3	1	1	4	1	--	1	--	1
68	WM103C3	--	1	4	2	--	1	--	--
69	WM104C3	--	1	3	--	--	--	--	3