

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Analytical results and sample locality map
of stream-sediment and panned-concentrate samples
from the Chandler Lake 1° x 3° quadrangle, Alaska

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STUDIES RELATED TO AMRAP

The U.S. Geological Survey, is required by the Alaskan National Interests Lands Conservation Act (ANILCA) (Public Law 96-487, 1980), to survey certain Federal lands to determine their mineral resource potential. Results from the Alaskan Mineral Resource Assessment Program (AMRAP) must be made available to the public and be submitted to the President and the Congress. This report presents analytical results of a geochemical survey of the Chandler Lake quadrangle, Alaska.

INTRODUCTION

In June and July 1982 we conducted a follow-up geochemical survey of the Chandler Lake 1° x 3° quadrangle, Alaska.

The quadrangle comprises about 3,600 mi² in the north-central part of the Brooks Range and lies about 250 mi northwest of Fairbanks (figure 1). Access to the area is provided by charter plane from Bettles, Alaska.

The southern boundary of the quadrangle is approximately along the Brooks Range divide. The core of the Brooks Range consists mostly of metamorphic and igneous rocks. North of this core of metamorphic and igneous rocks is a belt of intensely thrust faulted sedimentary and minor mafic igneous rocks of Late Devonian to Triassic age; mostly unmetamorphosed. This belt covers approximately the southern third of the quadrangle. North of the mountains, where no samples were collected, the foothills of the Brooks Range consist of Cretaceous to Tertiary age deltaic rocks that were derived from the Brooks Range and prograded northward and eastward. These clastic rocks are deformed into long east-west trending anticlines and synclines and comprise the northern two-thirds of the quadrangle. The individual formations have been described in more detail by Brosge et al. (1960) and Mull and others (1982).

The topographic relief in the mountainous area is about 4,000 ft with a maximum elevation of 7,610 ft. North of the mountains, the foothills are gently sloping plateaus with very little relief. The climate is semiarid.

METHODS OF STUDY

Sample Collection

We collected samples at 175 sites (plate 1). At nearly all of those sites, we collected both a stream-sediment sample and a heavy-mineral concentrate. We analyzed 175 stream-sediment samples and 157 panned-concentrate samples, for a sampling density of about 1 sample per 2 mi² in the mountainous areas and 1 sample per 5 mi² in the foothills. Also included in this report are results from 154 stream-sediment samples collected in 1982 (Barton and others, 1982).

Stream-sediment samples

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



Figure 1. Index map of Alaska showing location of the Chandler Lake 1° x 3° quadrangle.

The stream-sediment samples consisted of active alluvium collected primarily from first-order (unbranched) and second-order (below the junction of two first-order) streams as shown on USGS topographic maps (scale = 1:63,360). Each sample was composited from several localities within an area that may extend as much as 25 ft from the site plotted on the map.

Heavy-mineral-concentrate samples

We panned heavy-mineral-concentrate samples from the same active alluvium as the stream-sediment samples. Each bulk sample was passed through a 2.0-mm (10-mesh) screen to remove the coarse material. The sediment passing through the screen was panned until most of the quartz, feldspar, organic material, and clay-sized material was removed. The sample was air dried.

Sample Preparation

Only the stream-sediment samples required extensive preparation. We sieved the stream-sediment samples at the collection site through a 10-mesh screen and the minus 10-mesh material was retained. The samples were air dried and sieved to 0.177 mm using stainless steel sieves. The portion of the sediment passing through the sieve was pulverized to minus 100-mesh and saved for analysis.

After panning the sediment, we used bromoform to separate and remove the remaining quartz and feldspar from the heavy-mineral concentrate. The heavy minerals (specific gravity >2.8) were separated into three fractions using a large electromagnet (in this case a modified Frantz Isodynamic Separator). The most magnetic material (largely magnetite) was discarded. The second fraction (largely ferromagnesian silicates and iron oxides) was saved for analysis/archival storage. The third fraction (the least magnetic material including the nonmagnetic ore minerals, zircon, sphene, etc.) was divided into two splits using a Jones splitter. One split was hand-ground for spectrographic analysis; the other split was saved for mineralogical analysis.

The magnetic separates discussed are the same separates that would be produced by removing the magnetite with a hand magnet and then using a Frantz Isodynamic Separator set at a slope of 15° and a tilt of 10° with a current of 0.1 ampere to remove the ilmenite, and a current of 1.0 ampere to split the remainder of the sample into magnetic and nonmagnetic fractions.

Sample Analysis

Spectrographic method

We analyzed the stream-sediment and heavy-mineral-concentrate samples for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). The elements analyzed and their lower limits of determination are listed in Table 1. Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical

method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (iron, magnesium, calcium, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram).

Analytical results for stream-sediment and panned-concentrate samples are listed in Tables 2 and 3, respectively.

ROCK ANALYSIS STORAGE SYSTEM

Upon completion of all analytical work, the analytical results were entered into a computer-based file called RASS (Rock Analysis Storage System). This data base contains both descriptive geological information and analytical data. Any or all of this information may be retrieved and converted to a binary form (STATPAC) for computerized statistical analysis or publication (VanTrump and Miesch, 1976).

DESCRIPTION OF DATA TABLES

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

ACKNOWLEDGMENTS

We would like to thank John Cathrall for collecting samples in the southeast corner of the Chandler Lake quadrangle.

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

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

Elements	Lower determination limit	Upper determination limit
Percent		
Iron (Fe)	0.05	20
Magnesium (Mg)	.02	10
Calcium (Ca)	.05	20
Titanium (Ti)	.002	1
Parts per million		
Manganese (Mn)	10	5,000
Silver (Ag)	0.5	5,000
Arsenic (As)	200	10,000
Gold (Au)	10	500
Boron (B)	10	2,000
Barium (Ba)	20	5,000
Beryllium (Be)	1	1,000
Bismuth (Bi)	10	1,000
Cadmium (Cd)	20	500
Cobalt (Co)	5	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Lanthanum (La)	20	1,000
Molybdenum (Mo)	5	2,000
Niobium (Nb)	20	2,000
Nickel (Ni)	5	5,000
Lead (Pb)	10	20,000
Antimony (Sb)	100	10,000
Scandium (Sc)	5	100
Tin (Sn)	10	1,000
Strontium (Sr)	100	5,000
Vanadium (V)	10	10,000
Tungsten (W)	50	10,000
Yttrium (Y)	10	2,000
Zinc (Zn)	200	10,000
Zirconium (Zr)	10	1,000
Thorium (Th)	100	2,000

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.
 [N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	Latitude	Longitude	Fe-ppt.	Mg-pct.	Ca-pct.	Ti-pct.	Mn-ppt.	Ag-ppt.	As-ppt.	Au-ppt.	B-ppt.	Ba-ppt.
			% _s	% _s	% _s	% _s	% _s	% _s	% _s	% _s	% _s	% _s
1060S	68 0 13	150 24 57	3.00	1.00	.10	.500	500	N	N	N	150	500
1063S	68 0 39	150 21 8	3.00	1.00	.10	.500	500	<.5	N	N	150	500
1064S	68 0 27	150 18 35	5.00	1.00	.07	.700	500	.5	N	N	100	300
1066S	68 0 17	150 14 51	5.00	1.00	.07	.500	700	N	N	N	150	500
1627S	68 14 12	150 0 54	1.00	.10	.05	.100	500	N	N	N	30	70
1628S	68 13 26	150 2 52	2.00	.30	.05	.200	700	<.5	N	N	70	200
1629S	68 10 26	150 5 35	5.00	.50	.10	.300	1,500	N	N	N	150	500
1630S	68 10 19	150 3 12	2.00	.50	.05	.200	1,000	<.5	N	N	100	500
1631S	68 8 44	150 2 27	2.00	.30	.05	.150	700	N	N	N	70	150
1632S	68 8 40	150 1 49	2.00	.30	.07	.200	500	<.5	N	N	70	150
1633S	68 7 28	150 1 35	1.50	.30	.05	.200	500	N	N	N	70	150
1634S	68 7 28	150 0 57	2.00	.30	.05	.200	500	N	N	N	70	150
1635S	68 9 59	150 10 17	2.00	.30	.05	.200	700	N	N	N	70	200
1636S	68 9 17	150 12 4	3.00	.30	.05	.200	1,000	N	N	N	70	150
1637S	68 7 53	150 18 54	2.00	.30	.05	.300	700	N	N	N	70	200
1638S	68 5 59	150 16 2	2.00	.70	.10	.300	700	N	N	N	100	300
1639S	68 6 7	150 15 29	2.00	.50	.05	.200	700	N	N	N	70	150
1640S	68 5 32	150 14 24	2.00	.50	.05	.200	700	N	N	N	70	150
1641S	68 4 24	150 13 54	3.00	.70	.10	.200	700	<.5	N	N	100	200
1642S	68 4 34	150 13 9	3.00	.70	.07	.200	700	N	N	N	100	200
1643S	68 3 26	150 6 43	3.00	.70	.07	.300	1,000	N	N	N	100	200
1644S	68 3 55	150 6 47	2.00	.70	.07	.200	700	N	N	N	100	200
1645S	68 6 33	150 21 19	2.00	.50	.07	.200	1,000	<.5	N	N	100	150
1646S	68 6 19	150 20 58	2.00	.50	.07	.200	700	N	N	N	100	200
1647S	68 6 7	150 20 58	2.00	.70	.10	.300	1,000	N	N	N	100	200
1648S	68 5 14	150 23 39	2.00	.50	.07	.200	700	<.5	N	N	70	200
1649S	68 4 11	150 25 20	3.00	.50	.07	.300	700	N	N	N	100	200
82CL567S	68 33 58	152 59 0	3.00	.70	.30	.500	700	N	N	N	50	700
82CL584S	68 26 11	152 42 5	2.00	.50	.05	.200	500	N	N	N	70	1,000
82CL585S	68 28 11	152 47 51	2.00	.20	.05	.100	1,000	N	N	N	30	300
82CL586S	68 29 20	152 48 47	2.00	.20	.05	.100	500	N	N	N	50	700
82CL587S	68 29 56	152 52 45	2.00	.30	.05	.150	700	N	N	N	50	200
82CL588S	68 33 56	152 51 47	5.00	.70	.10	.500	1,500	<.5	N	N	150	3,000
82CL589S	68 35 2	152 54 8	5.00	.70	.30	.300	500	N	N	N	50	700
82CL590S	68 37 11	152 51 53	7.00	1.50	.50	.500	1,500	N	N	N	150	500
82CL591S	68 32 54	152 39 38	7.00	1.50	.20	.500	1,000	N	N	N	100	1,000
82CL592S	68 31 40	152 39 55	7.00	1.50	.30	.500	1,000	N	N	N	100	1,000
82CL593S	68 31 58	152 39 45	5.00	1.00	.20	.500	700	N	N	N	70	700
82CL594S	68 25 34	152 1 18	5.00	.50	.20	.300	500	<.5	N	N	100	1,500
82CL595S	68 25 10	152 8 49	5.00	1.00	.10	.300	700	N	N	N	100	2,000
82CL596S	68 25 10	152 16 26	3.00	.70	.15	.300	1,500	N	N	N	50	500
82CL597S	68 26 39	152 12 31	5.00	1.50	.30	.500	700	N	N	N	50	1,000
82CL598S	68 31 12	152 13 49	7.00	1.50	.15	.500	700	N	N	N	100	1,000
82CL599S	68 33 35	152 14 32	5.00	1.00	.20	.300	1,000	N	N	N	50	700
82CL600S	68 32 34	152 29 3	5.00	1.00	.50	.500	500	<.5	N	N	100	700

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Gale quadrangle, Alaska.

Sample	Be-ppm s	Bi-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
10605	1.0	N	15	150	50	50	N	<20	50	50
10635	1.0	N	20	150	150	30	N	<20	50	50
10645	1.0	N	20	200	50	50	N	<20	50	50
10665	1.0	N	20	150	70	50	N	<20	50	70
16275	<1.0	N	7	15	7	N	N	N	20	N
16285	2.0	N	15	50	30	N	N	N	50	15
16295	3.0	N	20	70	50	<20	N	N	100	20
16305	3.0	N	20	70	20	20	N	N	70	20
16315	1.5	N	15	30	30	N	N	N	30	<10
16325	2.0	N	15	30	20	20	N	N	50	10
16335	2.0	N	15	30	20	20	N	N	30	20
16345	1.5	N	15	30	20	20	N	N	50	20
16355	2.0	N	20	30	30	20	N	N	50	<10
16365	2.0	N	20	30	20	N	N	N	50	10
16375	2.0	N	20	50	70	20	N	N	50	20
16385	2.0	N	20	50	50	30	N	N	50	30
16395	1.5	N	20	50	20	<20	N	N	50	10
16405	1.5	N	20	30	30	<20	N	N	50	20
16415	2.0	N	20	50	30	30	N	N	50	20
16425	3.0	N	15	50	50	<20	N	N	50	20
16435	2.0	N	20	70	50	20	N	<20	70	20
16445	2.0	N	20	50	50	20	N	20	50	20
16455	3.0	N	20	50	30	<20	N	N	50	20
16465	2.0	N	20	50	30	<20	N	N	50	20
16475	3.0	N	20	50	30	20	N	N	50	30
16485	3.0	N	20	30	20	20	N	N	50	15
16495	3.0	N	20	50	30	20	N	N	50	20
82CL5675	<1.0	N	20	300	20	N	N	N	30	15
82CL5845	1.0	N	20	50	20	N	N	N	50	20
82CL5855	<1.0	N	30	30	7	N	N	N	20	<10
82CL5865	<1.0	N	20	30	7	N	N	N	20	10
82CL5875	<1.0	N	20	30	10	N	N	N	20	10
82CL5885	1.0	N	50	500	50	20	5	N	100	30
82CL5895	<1.0	N	30	150	20	N	N	N	50	15
82CL5905	1.0	N	30	200	50	50	N	N	70	20
82CL5915	1.0	N	50	200	50	20	N	N	70	20
82CL5925	<1.0	N	50	150	50	20	N	N	100	50
82CL5935	<1.0	N	30	150	50	<20	N	N	50	20
82CL5945	1.0	N	20	70	30	<20	N	N	50	20
82CL5955	<1.0	N	20	200	20	N	N	N	50	15
82CL5965	<1.0	N	20	70	15	N	<5	N	30	10
82CL5975	<1.0	N	50	150	50	N	N	N	50	20
82CL5985	<1.0	N	50	150	70	20	N	N	70	30
82CL5995	<1.0	N	20	100	20	N	5	N	50	15
82CL6005	<1.0	N	20	200	30	N	N	N	50	15

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.

Sample	Sb _s -ppm	Sc _s -ppm	Sn _s -ppm	Sr _s -ppm	V _s -ppm	M _s -ppm	Y _s -ppm	Zn _s -ppm	Zr _s -ppm	Th _s -ppm
1060S	N	15	N	<100	100	N	20	N	100	N
1063S	N	15	N	N	100	N	30	N	150	N
1064S	N	20	N	<100	100	N	30	N	100	N
1066S	N	20	N	<100	150	N	30	N	100	N
1627S	N	<5	N	N	50	N	<10	N	30	N
1628S	N	15	N	<100	100	N	20	N	70	N
1629S	N	15	N	<100	200	N	30	200	100	N
1630S	N	15	N	<100	150	N	50	N	100	N
1631S	N	7	N	N	100	N	20	N	50	N
1632S	N	10	N	N	100	N	20	N	100	N
1633S	N	10	N	N	100	N	20	N	50	N
1634S	N	10	N	N	100	N	20	N	100	N
1635S	N	10	N	N	100	N	20	N	70	N
1636S	N	10	N	<100	100	N	20	N	70	N
1637S	N	10	N	<100	100	N	20	N	70	N
1638S	N	15	N	<100	150	N	30	N	100	N
1639S	N	10	N	N	100	N	20	N	100	N
1640S	N	10	N	N	100	N	20	N	100	N
1641S	N	10	N	N	150	N	20	N	100	N
1642S	N	10	N	N	100	N	20	N	70	N
1643S	N	15	N	N	150	N	30	N	100	N
1644S	N	15	N	N	150	N	20	N	100	N
1645S	N	15	N	<100	150	N	20	N	100	N
1646S	N	15	N	<100	150	N	30	N	100	N
1647S	N	15	N	<100	150	N	20	N	100	N
1648S	N	10	N	N	150	N	20	N	70	N
1649S	N	10	N	<100	150	N	20	N	100	N
82CL567S	N	15	N	100	70	N	20	200	70	N
82CL584S	N	10	N	<100	70	N	20	N	50	N
82CL585S	N	5	N	N	50	N	15	N	30	N
82CL586S	N	7	N	<100	50	N	20	N	50	N
82CL587S	N	7	N	N	50	N	15	N	50	N
82CL588S	N	15	N	100	100	N	30	200	70	N
82CL589S	N	15	N	100	70	N	30	N	50	N
82CL590S	N	20	N	100	100	N	30	N	70	N
82CL591S	N	15	N	100	150	N	30	N	70	N
82CL592S	N	15	N	100	100	N	30	N	100	N
82CL593S	N	15	N	100	100	N	30	N	70	N
82CL594S	N	10	N	<100	70	N	30	N	70	N
82CL595S	N	10	N	<100	100	N	20	N	70	N
82CL596S	N	10	N	<100	100	N	20	N	50	N
82CL597S	N	15	N	100	150	N	20	N	70	N
82CL598S	N	15	N	<100	150	N	30	200	70	N
82CL599S	N	7	N	<100	100	N	20	N	50	N
82CL600S	N	10	N	<100	100	N	20	N	50	N

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake Quadrangle, Alaska. --continued

Sample	Latitude	Longitude	Fe-pct. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
82CL6015	68 29 31	152 24 32	.70	.10	<.05	-.070	100	<.5	N	N	15	100
82CL6025	68 25 52	152 33 2	2.00	-.15	<.05	-.150	1,000	N	N	N	30	200
82CL6035	68 23 12	152 36 17	1.00	.70	<.05	-.100	500	N	N	N	20	150
82CL6045	68 16 37	150 22 48	2.00	-.10	<.05	-.300	300	N	N	N	50	200
82CL6055	68 17 46	150 25 14	2.00	-.50	-.05	-.300	300	N	N	N	70	200
82CL6065	68 16 49	150 22 2	3.00	-.70	-.05	-.500	300	N	N	N	70	200
82CL6075	68 18 31	150 24 39	3.00	-.70	-.05	-.500	300	N	N	N	70	200
82CL6085	68 78 35	150 26 17	3.00	-.50	-.05	-.500	200	N	N	N	50	200
82CL6095	68 19 16	150 25 21	3.00	-.70	-.05	-.500	300	N	N	N	70	200
82CL6105	68 20 8	150 29 2	3.00	-.50	-.05	-.500	300	N	N	N	50	200
82CL6115	68 20 25	150 28 2	3.00	-.70	2.00	-.500	200	N	N	N	70	200
82CL6125	68 20 58	150 28 21	5.00	.70	10.00	-.300	150	1.5	N	N	100	5,000
82CL6135	68 22 2	150 29 59	.70	3.00	20.00	-.050	100	.7	N	N	15	150
82CL6145	68 23 48	150 31 7	3.00	1.00	3.00	-.300	500	<.5	N	N	50	300
82CL6155	68 25 20	150 27 22	3.00	2.00	7.00	-.300	700	1.0	N	N	70	>5,000
82CL6165	68 26 76	150 27 25	5.00	1.00	.20	-.500	1,000	N	N	N	100	500
82CL6175	68 24 51	150 24 0	3.00	2.00	5.00	-.500	1,000	.7	N	N	100	3,000
82CL6185	68 25 18	150 22 25	5.00	1.00	.20	-.500	1,000	N	N	N	100	700
82CL6195	68 24 7	150 22 3	5.00	1.50	3.00	-.500	150	1.0	N	N	100	5,000
82CL6205	68 23 10	150 23 35	1.50	2.00	15.00	-.150	100	.5	N	N	50	2,000
82CL6215	68 23 2	150 19 54	.15	5.00	20.00	-.020	50	<.5	N	N	<10	<20
82CL6225	68 20 3	150 18 56	3.00	1.00	1.50	-.500	500	N	N	N	100	200
82CL6235	68 21 39	150 17 59	1.50	1.50	15.00	-.150	150	.5	N	N	50	700
82CL6245	68 19 46	150 18 21	3.00	.70	1.50	-.300	500	N	N	N	100	300
82CL6255	68 24 10	150 12 29	1.00	3.00	20.00	-.070	150	N	N	N	20	50
82CL6265	68 23 10	150 14 55	1.00	3.00	20.00	-.070	150	N	N	N	20	50
82CL6275	68 23 26	150 8 52	1.50	3.00	15.00	-.100	150	<.5	N	N	50	500
82CL6285	68 24 49	150 5 53	3.00	2.00	3.00	-.200	200	1.0	N	N	100	5,000
82CL6295	68 27 53	150 12 22	3.00	1.00	.10	-.500	1,000	N	N	N	100	700
82CL6305	68 17 14	150 36 35	3.00	1.00	.07	-.500	500	<.5	N	N	100	300
82CL6315	68 20 49	150 36 26	3.00	1.50	3.00	-.500	500	N	N	N	100	500
82CL6325	68 19 9	150 36 23	2.00	-.20	<.05	-.200	200	N	N	N	50	300
82CL6335	68 18 29	150 39 35	3.00	1.00	.05	-.500	500	N	N	N	100	300
82CL6345	68 9 30	150 46 29	1.50	3.00	20.00	-.070	100	<.5	N	N	30	500
82CL6355	68 8 44	150 45 54	1.00	5.00	20.00	-.050	100	N	N	N	10	50
82CL6365	68 11 10	150 47 27	2.00	2.00	10.00	-.150	200	N	N	N	50	200
82CL6375	68 9 13	150 45 16	.05	5.00	>20.00	-.002	20	N	N	N	50	200
82CL6385	68 13 48	150 43 2	2.00	.20	.05	-.200	200	N	N	N	100	300
82CL6395	68 12 9	150 45 21	5.00	.50	2.00	-.300	300	N	N	N	100	300
82CL6405	68 15 46	150 37 14	2.00	.70	.07	-.500	500	N	N	N	70	300
82CL6415	68 14 7	150 38 53	3.00	-.50	-.15	-.300	700	N	N	N	50	200
82CL6425	68 23 23	150 42 36	.70	1.50	20.00	-.050	150	N	N	N	10	100
82CL6435	68 21 19	150 43 28	2.00	1.50	5.00	-.200	300	N	N	N	50	200
82CL6445	68 18 50	150 16 7	2.00	.50	.05	-.300	300	N	N	N	70	500
82CL6455	68 21 37	150 47 26	1.50	.70	10.00	-.150	100	1.0	N	N	50	3,000

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Be-ppm s	Bi-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
82CL6015	<1.0	N	7	15	5	N	N	N	10	N
82CL6025	1.0	N	20	20	10	N	N	N	20	20
82CL6035	<1.0	N	10	15	7	N	N	N	15	<10
82CL6045	1.0	N	20	100	20	30	N	N	30	30
82CL6055	1.5	N	20	100	20	30	N	N	50	30
82CL6065	1.5	N	20	100	20	30	N	N	50	20
82CL6075	1.0	N	20	70	30	50	N	N	70	30
82CL6085	1.0	N	20	30	20	30	N	N	50	20
82CL6095	1.5	N	20	100	20	50	N	N	50	30
82CL6105	1.0	N	20	100	20	20	N	N	50	15
82CL6115	1.5	N	30	100	20	50	N	N	70	30
82CL6125	1.5	N	20	150	20	50	N	N	70	30
82CL6135	<1.0	N	7	50	5	N	N	N	20	10
82CL6145	1.0	N	20	100	20	50	N	N	30	20
82CL6155	<1.0	N	30	100	30	30	7	N	70	30
82CL6165	<1.0	N	30	150	20	30	N	<20	100	30
82CL6175	<1.0	N	30	150	30	50	10	N	70	30
82CL6185	1.0	N	30	150	30	30	<5	<20	70	20
82CL6195	1.0	N	20	150	30	50	7	<20	70	30
82CL6205	<1.0	N	10	100	10	N	N	N	50	20
82CL6215	N	N	N	30	<5	N	N	N	10	<10
82CL6225	1.0	N	10	200	30	70	N	<20	50	30
82CL6235	<1.0	N	10	150	10	30	N	N	30	15
82CL6245	1.5	N	30	100	20	50	N	<20	30	30
82CL6255	<1.0	N	7	70	5	N	N	N	15	20
82CL6265	<1.0	N	10	70	5	N	N	N	30	15
82CL6275	<1.0	N	10	160	5	20	M	N	20	15
82CL6285	1.0	N	20	100	15	20	5	N	30	30
82CL6295	1.0	N	30	100	20	20	N	N	30	20
82CL6305	1.0	N	30	100	30	50	N	<20	50	30
82CL6315	1.0	N	30	100	20	50	N	<20	50	30
82CL6325	1.0	N	20	70	15	N	N	N	20	10
82CL6335	1.0	N	30	100	30	70	M	<20	30	50
82CL6345	<1.0	N	10	100	5	30	N	N	20	10
82CL6355	<1.0	N	7	70	<5	N	N	N	15	10
82CL6365	<1.0	N	15	100	10	20	N	N	20	20
82CL6375	N	N	N	30	<5	N	N	N	5	<10
82CL6385	1.0	N	15	50	10	<20	N	N	20	20
82CL6395	1.0	N	30	100	20	50	M	N	30	20
82CL6405	1.0	N	20	100	20	50	N	<20	20	30
82CL6415	1.0	N	20	100	30	<20	M	<20	20	10
82CL6425	N	N	5	50	<5	N	N	N	10	<10
82CL6435	1.0	N	20	100	15	50	N	N	15	30
82CL6445	1.5	N	20	100	30	50	N	<20	30	20
82CL6455	<1.0	N	15	100	20	50	10	N	30	20

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	V-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
82CL6015	N	5	N	N	50	N	10	N	50	N
82CL6025	N	10	N	N	70	N	20	N	70	N
82CL6035	N	7	N	N	50	N	10	N	50	N
82CL6045	N	10	N	N	70	N	20	N	70	N
82CL6055	N	10	N	N	100	N	20	N	100	N
82CL6065	N	15	N	<100	70	N	30	N	70	N
82CL6075	N	15	N	<100	100	N	50	N	70	N
82CL6085	N	10	N	<100	100	N	20	N	70	N
82CL6095	N	15	N	<100	100	N	30	N	70	N
82CL6105	N	10	N	<100	70	N	20	N	70	N
82CL6115	N	20	N	<100	100	N	30	N	100	N
82CL6125	N	15	N	150	100	N	30	N	50	N
82CL6135	N	7	N	200	50	N	20	N	30	N
82CL6145	N	10	N	<100	70	N	30	N	70	N
82CL6155	N	10	N	200	100	N	30	<200	30	N
82CL6165	N	15	N	<100	100	N	30	N	100	N
82CL6175	N	15	N	150	150	N	30	N	70	N
82CL6185	N	15	N	100	150	N	30	N	100	N
82CL6195	N	15	N	100	150	N	50	<200	100	N
82CL6205	N	10	N	200	70	N	30	N	50	N
82CL6215	N	<5	N	200	20	N	20	N	15	N
82CL6225	N	15	N	<100	100	N	50	N	100	N
82CL6235	N	10	N	150	50	N	30	N	50	N
82CL6245	N	20	N	100	100	N	30	N	100	N
82CL6255	N	7	N	200	50	N	20	N	30	N
82CL6265	N	7	N	200	50	N	20	N	30	N
82CL6275	N	10	N	200	50	N	20	N	30	N
82CL6285	N	10	N	200	70	N	20	N	50	N
82CL6295	N	15	N	<100	100	N	20	N	70	N
82CL6305	N	10	N	<100	100	N	20	N	100	N
82CL6315	N	15	N	100	100	N	30	N	300	N
82CL6325	N	10	N	<100	70	N	20	N	150	N
82CL6335	N	15	N	<100	100	N	20	N	100	N
82CL6345	N	7	N	200	50	N	20	N	30	N
82CL6355	N	5	N	200	50	N	20	N	20	N
82CL6365	N	10	N	200	70	N	20	N	30	N
82CL6375	N	N	N	300	15	N	10	N	10	N
82CL6385	N	7	N	N	50	N	20	N	50	N
82CL6395	N	15	N	100	100	N	30	N	70	N
82CL6405	N	10	N	100	100	N	30	N	100	N
82CL6415	N	10	N	<100	100	N	20	N	100	N
82CL6425	N	5	N	200	20	N	20	N	20	N
82CL6435	N	10	N	100	70	N	20	N	70	N
82CL6445	N	15	N	100	70	N	30	N	100	N
82CL6455	N	10	N	200	100	N	30	N	50	N

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.--Continued

Sample	Latitude	Longitude	Fe-pct. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
82CL6465	68 18 46	150 12 5	2.00	.70	.10	.300	300	N	N	N	50	200
82CL6475	68 18 14	150 15 23	2.00	.70	.10	.500	300	N	N	N	70	300
82CL6485	68 18 0	150 7 16	2.00	.70	2.00	.500	300	N	N	N	70	200
82CL6495	68 18 0	150 13 40	3.00	.50	.05	.500	500	N	N	N	70	300
82CL6505	68 18 55	150 7 0	3.00	.70	2.00	.500	300	N	N	N	70	200
82CL6515	68 19 47	150 11 21	.70	2.00	20.00	.050	100	<.5	N	N	10	50
82CL6525	68 19 24	150 5 9	2.00	.70	5.00	.200	300	N	N	N	50	200
82CL6535	68 19 19	150 9 14	2.00	1.00	7.50	.300	300	N	N	N	50	200
82CL6545	68 21 36	150 1 37	.70	5.00	15.00	.030	100	<.5	N	N	20	500
82CL6555	68 20 25	150 7 55	.20	7.00	15.00	.020	50	<.5	N	N	<10	<20
82CL6565	68 19 52	150 3 11	2.00	1.50	10.00	.200	150	<.5	N	N	30	150
82CL6575	68 19 29	150 51 11	3.00	1.00	20.00	.500	300	N	N	N	70	300
82CL6585	68 22 13	150 52 1	2.00	1.00	5.00	.100	200	N	N	N	50	200
82CL6595	68 17 43	150 48 35	2.00	.30	.07	.200	300	<.5	N	N	70	300
82CL6605	68 19 16	150 49 10	2.00	1.50	15.00	.100	150	<.5	N	N	30	100
82CL6615	68 12 15	150 31 40	3.00	.30	.05	.200	300	N	N	N	70	200
82CL6625	68 12 6	150 28 6	3.00	.30	.07	.300	200	<.5	N	N	70	200
82CL6635	68 12 42	150 32 9	2.00	.50	.05	.300	300	<.5	N	N	70	300
82CL6645	68 14 23	150 24 5	3.00	.70	.05	.300	300	N	N	N	70	200
82CL6655	68 13 8	150 27 14	3.00	.30	.05	.300	500	N	N	N	50	200
82CL6665	68 14 21	150 26 42	5.00	.70	.05	.500	500	N	N	N	70	200
82CL6675	68 12 58	150 22 5	3.00	.50	.05	.300	500	N	N	N	50	200
82CL6685	68 12 30	150 18 14	3.00	.70	.05	.500	300	N	N	N	70	200
82CL6695	68 13 53	150 16 36	3.00	.50	.05	.500	500	N	N	N	70	200
82CL6705	68 12 40	150 19 4	3.00	.50	.05	.500	500	N	N	N	50	200
82CL6715	68 12 30	150 17 4	3.00	.50	.05	.500	300	N	N	N	70	200
82CL6725	68 13 52	150 11 6	3.00	.50	.05	.500	500	N	N	N	50	200
82CL6735	68 14 22	150 6 57	2.00	.30	.05	.300	500	N	N	N	50	200
82CL6745	68 9 24	150 19 15	3.00	.30	.05	.500	500	<.5	N	N	70	200
82CL6755	68 10 34	150 14 57	3.00	.20	.05	.300	700	N	N	N	50	200
82CL6765	68 9 8	150 25 19	5.00	.50	.05	.500	500	N	N	N	70	200
82CL6775	68 9 0	150 22 41	5.00	1.50	2.00	.500	500	N	N	N	100	300
82CL6785	68 10 22	150 32 18	5.00	.50	.05	.500	500	N	N	N	70	300
82CL6795	68 11 21	150 22 57	3.00	.50	.05	.300	200	N	N	N	70	200
82CL6805	68 8 39	150 32 59	5.00	.70	2.00	.300	500	N	N	N	70	300
82CL6815	68 9 22	150 32 18	.20	1.00	20.00	.020	50	<.5	N	N	N	20
82CL6825	68 6 54	150 36 38	2.00	.20	.10	.200	500	<.5	N	N	70	300
82CL6835	68 7 21	150 32 15	3.00	.30	.05	.500	300	N	N	N	70	200
82CL6845	68 5 38	150 43 13	1.50	1.00	2.00	.200	200	N	N	N	70	150
82CL6855	68 7 34	150 40 37	2.00	1.00	2.00	.200	300	<.5	N	N	100	200
82CL6865	68 5 15	150 47 22	1.50	2.00	7.00	.150	200	N	N	N	50	100
82CL6875	68 5 31	150 42 2	2.00	.50	.50	.200	200	N	N	N	100	200
82CL6885	68 4 54	150 51 41	.70	2.00	7.00	.070	200	N	N	N	50	70
82CL6895	68 4 35	150 43 41	2.00	.50	.07	.150	500	N	N	N	100	150
82CL6905	68 3 24	150 49 41	2.00	.20	.05	.100	500	N	N	N	70	200

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Ba-ppm s	Bi-ppm s	Ca-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
82CL6465	1.0	N	30	30	100	30	50	N	<20	30	20
82CL6475	1.0	N	30	30	100	30	50	N	<20	30	50
82CL6485	1.0	N	20	20	70	20	30	N	<20	30	20
82CL6495	1.0	N	20	20	70	30	30	N	<20	50	30
82CL6505	1.0	N	20	20	100	30	50	N	<20	50	20
82CL6515	N	N	5	5	70	5	N	N	N	15	10
82CL6525	1.0	N	15	15	70	15	50	N	N	20	20
82CL6535	1.0	N	20	20	70	20	30	N	N	30	20
82CL6545	<1.0	N	N	N	50	7	N	N	N	10	15
82CL6555	N	N	N	N	50	<5	N	N	N	7	<10
82CL6565	1.0	N	15	15	50	10	20	N	N	20	20
82CL6575	1.5	N	30	30	150	30	50	N	N	50	50
82CL6585	<1.0	N	15	15	50	10	N	N	N	20	15
82CL6595	1.0	N	20	20	100	15	50	N	N	30	15
82CL6605	<1.0	N	15	15	70	10	30	N	N	20	15
82CL6615	1.5	N	20	20	100	20	30	N	N	20	20
82CL6625	1.0	N	20	20	100	30	50	N	<20	30	20
82CL6635	1.0	N	20	20	70	30	50	N	<20	20	20
82CL6645	1.0	N	20	20	100	20	50	N	N	50	20
82CL6655	1.0	N	20	20	100	20	20	N	N	20	20
82CL6665	1.0	N	30	30	150	30	50	N	<20	30	20
82CL6675	1.0	N	20	20	70	20	30	N	N	30	20
82CL6685	1.0	N	20	20	100	20	50	N	N	30	20
82CL6695	1.0	N	20	20	70	20	30	N	N	30	20
82CL6705	1.0	N	20	20	50	20	20	N	N	20	20
82CL6715	1.0	N	20	20	100	20	20	N	N	20	20
82CL6725	1.0	N	20	20	100	15	20	N	N	20	20
82CL6735	1.0	N	20	20	50	15	20	N	N	20	20
82CL6745	1.0	N	20	20	100	20	20	N	N	20	10
82CL6755	1.0	N	20	20	100	20	<20	N	N	50	10
82CL6765	1.0	N	20	20	100	20	20	N	N	50	20
82CL6775	1.0	N	20	20	150	30	50	N	N	50	50
82CL6785	1.0	N	30	30	100	30	30	N	N	50	30
82CL6795	1.0	N	20	20	100	20	20	N	N	30	10
82CL6805	1.5	N	30	30	150	30	30	N	N	70	50
82CL6815	N	N	N	N	50	<5	N	N	N	15	<10
82CL6825	1.0	N	20	20	50	15	<20	N	N	20	15
82CL6835	1.0	N	20	20	70	20	20	N	N	30	20
82CL6845	1.5	N	15	15	50	20	30	N	N	30	30
82CL6855	2.0	N	15	15	70	30	30	N	N	50	20
82CL6865	1.0	N	10	10	70	10	20	N	N	50	20
82CL6875	2.0	N	15	15	70	30	50	N	N	50	20
82CL6885	<1.0	N	7	7	30	10	N	N	N	30	10
82CL6895	1.5	N	20	20	50	20	20	N	N	50	15
82CL6905	1.0	N	15	15	50	20	<20	N	N	50	10

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
82CL666S	N	10	N	<100	100	N	30	N	70	N
82CL667S	N	20	N	<100	70	N	50	N	100	N
82CL668S	N	75	N	<100	70	N	20	N	100	N
82CL669S	N	20	N	N	70	N	30	N	100	N
82CL670S	N	15	N	<100	70	N	30	N	100	N
82CL671S	N	5	N	200	20	N	20	N	20	N
82CL672S	N	15	N	150	70	N	20	N	50	N
82CL673S	N	15	N	<100	70	N	20	N	100	N
82CL674S	N	5	N	200	20	N	15	N	20	N
82CL675S	N	<5	N	200	15	N	20	N	15	N
82CL676S	N	10	N	200	50	N	20	N	50	N
82CL677S	N	20	N	<100	100	N	30	N	70	N
82CL678S	N	70	N	100	50	N	30	N	30	N
82CL679S	N	10	N	100	70	N	20	N	50	N
82CL680S	N	10	N	150	50	N	20	N	30	N
82CL681S	N	10	N	<100	70	N	30	N	50	N
82CL682S	N	15	N	<100	70	N	30	N	100	N
82CL683S	N	10	N	<100	70	N	20	N	70	N
82CL684S	N	15	N	N	70	N	20	N	70	N
82CL685S	N	15	N	<100	70	N	30	N	150	N
82CL686S	N	10	N	<100	70	N	20	<200	100	N
82CL687S	N	20	N	<100	100	N	30	N	150	N
82CL688S	N	15	N	<100	70	N	20	N	100	N
82CL689S	N	10	N	<100	70	N	20	N	100	N
82CL690S	N	10	N	<100	70	N	20	N	100	N
82CL691S	N	10	N	150	100	N	20	N	30	N
82CL692S	N	15	N	<100	100	N	20	<200	70	N
82CL693S	N	7	N	200	50	N	15	<200	100	N
82CL694S	N	10	N	150	100	N	20	<200	50	N
82CL695S	N	15	N	100	100	N	20	<200	70	N
82CL696S	N	<5	N	500	30	N	15	N	20	N
82CL697S	N	7	N	<100	70	N	30	N	70	N
82CL698S	N	10	N	<100	100	N	20	N	100	N
82CL699S	N	15	N	150	100	N	20	<200	50	N
82CL700S	N	15	N	100	100	N	20	<200	70	N
82CL701S	N	<5	N	500	30	N	15	N	20	N
82CL702S	N	7	N	<100	70	N	30	N	70	N
82CL703S	N	10	N	<100	100	N	20	N	100	N
82CL704S	N	15	N	150	100	N	20	<200	50	N
82CL705S	N	10	N	100	100	N	20	<200	70	N
82CL706S	N	15	N	<100	70	N	30	N	150	N
82CL707S	N	10	N	<100	70	N	20	N	100	N
82CL708S	N	10	N	<100	70	N	20	N	100	N
82CL709S	N	15	N	<100	70	N	30	N	100	N
82CL710S	N	10	N	<100	70	N	20	N	100	N
82CL711S	N	15	N	<100	70	N	30	N	150	N
82CL712S	N	10	N	<100	70	N	20	N	100	N
82CL713S	N	10	N	N	70	N	20	N	70	N
82CL714S	N	10	N	N	70	N	20	N	70	N
82CL715S	N	10	N	N	70	N	20	N	150	N
82CL716S	N	10	N	<100	70	N	20	<200	100	N
82CL717S	N	10	N	<100	100	N	30	N	150	N
82CL718S	N	10	N	<100	70	N	20	N	100	N
82CL719S	N	10	N	<100	70	N	20	N	100	N
82CL720S	N	15	N	<100	70	N	30	N	100	N
82CL721S	N	10	N	<100	70	N	20	<200	100	N
82CL722S	N	15	N	<100	100	N	30	N	150	N
82CL723S	N	10	N	<100	70	N	20	N	100	N
82CL724S	N	10	N	<100	70	N	20	N	100	N
82CL725S	N	10	N	<100	70	N	20	N	100	N
82CL726S	N	15	N	<100	70	N	30	N	100	N
82CL727S	N	10	N	<100	70	N	20	N	100	N
82CL728S	N	10	N	<100	70	N	20	N	100	N
82CL729S	N	10	N	<100	70	N	20	N	100	N
82CL730S	N	10	N	<100	70	N	20	N	100	N
82CL731S	N	15	N	<100	70	N	30	N	150	N
82CL732S	N	10	N	<100	70	N	20	N	100	N
82CL733S	N	10	N	<100	70	N	20	N	100	N
82CL734S	N	10	N	<100	70	N	20	N	100	N
82CL735S	N	10	N	<100	70	N	20	N	100	N
82CL736S	N	10	N	<100	70	N	20	N	100	N
82CL737S	N	10	N	<100	70	N	20	N	100	N
82CL738S	N	10	N	<100	70	N	20	N	100	N
82CL739S	N	10	N	<100	70	N	20	N	100	N
82CL740S	N	10	N	<100	70	N	20	N	100	N
82CL741S	N	10	N	<100	70	N	20	N	100	N
82CL742S	N	10	N	<100	70	N	20	N	100	N
82CL743S	N	10	N	<100	70	N	20	N	100	N
82CL744S	N	10	N	<100	70	N	20	N	100	N
82CL745S	N	10	N	<100	70	N	20	N	100	N
82CL746S	N	10	N	<100	70	N	20	N	100	N
82CL747S	N	10	N	<100	70	N	20	N	100	N
82CL748S	N	10	N	<100	70	N	20	N	100	N
82CL749S	N	10	N	<100	70	N	20	N	100	N
82CL750S	N	10	N	<100	70	N	20	N	100	N
82CL751S	N	10	N	<100	70	N	20	N	100	N
82CL752S	N	10	N	<100	70	N	20	N	100	N
82CL753S	N	10	N	<100	70	N	20	N	100	N
82CL754S	N	10	N	<100	70	N	20	N	100	N
82CL755S	N	10	N	<100	70	N	20	N	100	N
82CL756S	N	10	N	<100	70	N	20	N	100	N
82CL757S	N	10	N	<100	70	N	20	N	100	N
82CL758S	N	10	N	<100	70	N	20	N	100	N
82CL759S	N	10	N	<100	70	N	20	N	100	N
82CL760S	N	10	N	<100	70	N	20	N	100	N
82CL761S	N	10	N	<100	70	N	20	N	100	N
82CL762S	N	10	N	<100	70	N	20	N	100	N
82CL763S	N	10	N	<100	70	N	20	N	100	N
82CL764S	N	10	N	<100	70	N	20	N	100	N
82CL765S	N	10	N	<100	70	N	20	N	100	N
82CL766S	N	10	N	<100	70	N	20	N	100	N
82CL767S	N	10	N	<100	70	N	20	N	100	N
82CL768S	N	10	N	<100	70	N	20	N	100	N
82CL769S	N	10	N	<100	70	N	20	N	100	N
82CL770S	N	10	N	<100	70	N	20	N	100	N
82CL771S	N	10	N	<100	70	N	20	N	100	N
82CL772S	N	10	N	<100	70	N	20	N	100	N
82CL773S	N	10	N	<100	70	N	20	N	100	N
82CL774S	N	10	N	<100	70	N	20	N	100	N
82CL775S	N	10	N	<100	70	N	20	N	100	N
82CL776S	N	10	N	<100	70	N	20	N	100	N
82CL777S	N	10	N	<100	70	N	20	N	100	N
82CL778S	N	10	N	<100	70	N	20	N	100	N
82CL779S	N	10	N	<100	70	N	20	N	100	N
82CL780S	N	10	N	<100	70	N	20	N	100	N
82CL781S	N	<5	N	500	30	N	15	N	20	N
82CL782S	N	7	N	<100	70	N	30	N	70	N
82CL783S	N	10	N	<100	100	N	20	N	100	N
82CL784S	N	15	N	150	100	N	20	<200	50	N
82CL785S	N	15	N	100	100	N	20	<200	70	N
82CL786S	N	10	N	150	100	N	20	<200	30	N
82CL787S	N	15	N	<100	100	N	20	<200	70	N
82CL788S	N	7	N	200	50	N	15	N	30	N
82CL789S	N	15	N	100	100	N	20	<200	70	N
82CL790S	N	10	N	<100	100	N	15	N	70	N

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Latitude	Longitude	Fe-pct. s	Hg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
82CL691S	68 5 31	150 53 9	1.00	.70	1.50	.070	300	N	N	N	50	100
82CL692S	68 0 28	150 46 45	2.00	.15	.05	.150	500	N	N	N	70	150
82CL693S	68 4 7	150 50 24	2.00	.70	1.50	.150	500	N	N	N	100	150
82CL694S	68 4 30	150 33 37	1.00	.10	.05	.150	200	N	N	N	50	100
82CL695S	68 1 31	150 47 11	1.50	.15	.05	.150	300	N	N	N	50	100
82CL696S	68 3 24	150 41 10	1.00	.20	.05	.150	200	N	N	N	50	100
82CL697S	68 0 23	150 50 48	2.00	.30	.05	.300	300	N	N	N	100	150
82CL698S	68 2 18	150 31 15	1.50	.30	.05	.200	300	N	N	N	50	150
82CL699S	68 4 45	150 33 32	1.50	.20	.05	.200	500	N	N	N	50	100
82CL700S	68 3 18	150 31 3	1.50	.30	.07	.200	500	N	N	N	70	150
82CL701S	68 4 17	150 37 23	1.00	.05	<.05	.070	300	N	N	N	30	70
82CL702S	68 3 9	151 19 30	1.50	.10	.05	.150	700	N	N	N	50	100
82CL703S	68 0 17	150 31 4	2.00	.50	.07	.300	500	N	N	N	70	150
82CL704S	68 5 56	151 19 38	1.50	.20	.07	.200	300	N	N	N	70	150
82CL705S	68 2 50	150 31 35	2.00	.30	.05	.200	500	N	N	N	70	150
82CL706S	68 7 23	151 19 17	.70	.30	5.00	.050	150	N	N	N	20	150
82CL707S	68 10 27	151 19 5	2.00	.30	.15	.200	300	N	N	N	70	150
82CL708S	68 12 42	151 24 32	.70	2.00	10.00	.050	150	N	N	N	20	50
82CL709S	68 1 54	151 18 52	2.00	.30	.10	.200	200	N	N	N	70	150
82CL710S	68 12 52	151 24 19	2.00	.15	1.50	.200	700	N	N	N	70	200
82CL711S	68 4 32	151 17 58	1.50	.15	.10	.200	300	N	N	N	70	150
82CL712S	68 10 50	151 29 1	<.05	2.00	10.00	.010	30	N	N	N	10	N
82CL713S	68 5 35	151 23 39	2.00	.50	.10	.200	300	N	N	N	50	150
82CL714S	68 10 45	151 28 34	.10	1.00	10.00	.020	100	.7	N	N	15	20
82CL715S	68 5 39	151 22 36	2.00	.50	.15	.300	500	N	N	N	70	150
82CL716S	68 9 40	151 21 0	.30	.20	10.00	.050	150	.5	N	N	20	100
82CL717S	68 11 13	151 26 36	.05	2.00	10.00	.010	20	N	N	N	<10	N
82CL718S	68 9 54	151 21 0	.07	.30	10.00	.010	30	N	N	N	<10	N
82CL719S	68 3 17	151 27 25	2.00	.20	.07	.200	1,000	N	N	N	50	150
82CL720S	68 3 28	151 32 46	1.50	.10	.05	.150	700	N	N	N	50	150
82CL721S	68 2 57	151 27 13	2.00	.10	.05	.200	300	N	N	N	30	100
82CL722S	68 3 7	151 32 33	3.00	.15	<.05	.300	1,000	N	N	N	70	200
82CL723S	68 0 59	151 40 29	2.00	.50	.70	.300	500	N	N	N	70	150
82CL724S	68 23 15	151 49 34	2.00	.50	.10	.200	500	N	N	N	50	3,000
82CL725S	68 27 19	151 44 43	3.00	.50	.07	.300	1,000	N	N	N	70	500
82CL726S	68 26 39	151 2 41	1.50	.20	.07	.150	300	N	N	N	50	200
82CL727S	68 1 44	151 4 29	3.00	.30	<.05	.300	500	N	N	N	70	200
82CL728S	68 1 56	151 1 51	2.00	.20	<.05	.200	500	N	N	N	70	300
82CL729S	68 3 12	150 58 40	1.50	.30	<.05	.200	300	N	N	N	30	200
82CL730S	68 3 2	150 53 31	5.00	.70	.05	.500	300	N	N	N	70	200

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Be-ppm 3	Bi-ppm 5	Co-ppm 5	Co-ppm 5	Cr-ppm 3	Cu-ppm 5	La-ppm 5	Mn-ppm 5	Nb-ppm 5	Ni-ppm 5	Pb-ppm 5
82CL691S	<1.0	N	N	10	50	10	N	N	N	20	N
82CL692S	1.0	N	15	15	50	20	N	N	N	30	<10
82CL693S	1.0	N	15	15	50	20	20	N	N	30	15
82CL694S	1.0	N	10	10	20	10	N	N	N	20	<10
82CL695S	1.0	N	10	10	20	30	N	N	N	30	<10
82CL696S	1.0	N	N	10	20	15	N	N	N	20	<10
82CL697S	2.0	N	15	15	50	30	20	N	N	30	10
82CL698S	1.5	N	15	15	30	20	20	N	N	30	10
82CL699S	1.0	N	10	10	30	20	N	N	N	20	<10
82CL700S	1.5	N	15	15	30	20	<20	N	N	20	10
82CL701S	<1.0	N	N	7	15	10	N	N	N	10	N
82CL702S	1.0	N	10	10	20	20	N	N	N	20	<10
82CL703S	1.5	N	15	15	50	30	30	N	N	30	10
82CL704S	1.0	N	10	10	30	20	<20	N	N	30	10
82CL705S	1.5	N	15	15	50	30	N	N	N	30	10
82CL706S	N	N	N	N	30	7	N	N	N	15	N
82CL707S	1.0	N	15	15	50	20	N	N	N	30	10
82CL708S	N	N	N	5	30	5	N	N	N	15	N
82CL709S	1.0	N	15	15	50	20	N	N	N	30	<10
82CL710S	1.5	N	15	15	30	30	N	N	N	30	10
82CL711S	1.0	N	10	10	30	20	<20	N	N	20	<10
82CL712S	N	N	N	N	15	<5	N	N	N	5	N
82CL713S	1.0	N	15	15	50	20	N	N	N	30	<10
82CL714S	N	N	N	N	70	7	N	N	N	20	N
82CL715S	1.5	N	15	15	50	30	N	N	N	20	10
82CL716S	<1.0	N	N	N	30	10	N	N	N	15	N
82CL717S	N	N	N	N	10	5	N	N	N	5	N
82CL718S	N	N	N	N	10	<5	N	N	N	7	N
82CL719S	1.5	N	10	10	30	20	N	N	N	20	N
82CL720S	1.0	N	10	10	20	30	N	N	N	20	N
82CL721S	1.0	N	N	10	70	10	N	N	N	20	N
82CL722S	1.5	N	<20	15	30	20	N	N	N	20	20
82CL723S	1.5	N	15	15	50	20	20	N	N	50	15
82CL724S	1.0	N	N	20	100	15	N	<5	N	50	15
82CL725S	1.0	N	N	30	500	20	<20	N	N	30	15
82CL726S	1.0	N	N	10	20	10	N	N	N	30	10
82CL727S	1.5	N	30	30	100	30	30	N	N	50	20
82CL728S	1.0	N	20	20	70	20	20	N	N	20	15
82CL729S	1.0	N	15	15	50	15	<20	N	N	20	15
82CL730S	1.5	N	20	20	150	30	20	N	<20	50	30

Table 2. Spectrographic analysis of stream sediment samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
82CL691S	N	5	N	<100	50	N	15	N	50	N
82CL692S	N	10	N	N	70	N	15	N	70	N
82CL693S	N	10	N	<100	70	N	20	N	50	N
82CL694S	N	7	N	N	70	N	10	N	50	N
82CL695S	N	7	N	N	70	N	10	N	50	N
82CL696S	N	7	N	N	70	N	10	N	50	N
82CL697S	N	15	N	N	100	N	20	<200	70	N
82CL698S	N	10	N	N	100	N	15	N	70	N
82CL699S	N	7	N	N	70	N	10	N	50	N
82CL700S	N	10	N	N	70	N	15	N	70	N
82CL701S	N	5	N	N	50	N	<10	N	30	N
82CL702S	N	7	N	N	70	N	10	N	50	N
82CL703S	N	10	N	<100	100	N	20	N	70	N
82CL704S	N	10	N	<100	100	N	20	N	100	N
82CL705S	N	10	N	N	100	N	15	N	70	N
82CL706S	N	5	N	<100	50	N	15	N	20	N
82CL707S	N	7	N	<100	100	N	20	N	70	N
82CL708S	N	5	N	300	50	N	15	N	20	N
82CL709S	N	10	N	<100	70	N	20	N	70	N
82CL710S	N	10	N	100	100	N	20	<200	50	N
82CL711S	N	7	N	<100	100	N	20	N	50	N
82CL712S	N	N	N	150	15	N	<10	N	N	N
82CL713S	N	7	N	N	70	N	15	N	70	N
82CL714S	N	N	N	200	50	N	20	N	10	N
82CL715S	N	10	N	N	100	N	20	N	70	N
82CL716S	N	N	N	100	30	N	10	N	10	N
82CL717S	N	N	N	150	10	N	<10	N	N	N
82CL718S	N	N	N	200	10	N	<10	N	N	N
82CL719S	N	7	N	N	50	N	15	N	70	N
82CL720S	N	7	N	N	50	N	10	<200	50	N
82CL721S	N	7	N	N	50	N	10	N	50	N
82CL722S	N	10	N	N	70	N	15	300	70	N
82CL723S	N	10	N	<100	70	N	15	<200	70	N
82CL724S	N	7	N	100	100	N	15	N	70	N
82CL725S	N	10	N	<100	100	N	20	<200	70	N
82CL726S	N	7	N	N	70	N	15	N	50	N
82CL727S	N	15	N	<100	100	N	20	N	100	N
82CL728S	N	10	N	<100	100	N	20	N	70	N
82CL729S	N	7	N	N	70	N	20	N	70	N
82CL730S	N	15	N	<100	150	N	30	N	100	N

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska.
 [N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
1627C	68 14 12	150 0 54	1.0	.30	3.00	1.50	700	N	N	N	100	500
1628C	68 13 26	150 2 52	1.5	.30	2.00	1.00	200	N	N	N	100	>10,000
1629C	68 10 26	150 5 35	2.0	.30	3.00	2.00	700	N	N	N	150	>10,000
1630C	68 10 19	150 3 12	2.0	.50	3.00	2.00	200	N	N	N	150	>10,000
1631C	68 8 44	150 2 27	3.0	.30	5.00	1.50	700	10.0	N	N	100	>10,000
1632C	68 8 40	150 1 49	1.5	.20	3.00	.50	200	N	N	N	100	700
1633C	68 7 28	150 1 35	2.0	.20	10.00	>2.00	700	2.0	500	N	100	>10,000
1634C	68 7 28	150 0 57	2.0	.20	5.00	2.00	500	N	N	N	100	>10,000
1635C	68 4 59	150 10 17	2.0	.20	5.00	2.00	500	N	N	N	100	10,000
1636C	68 9 17	150 12 4	3.0	.20	3.00	>2.00	500	N	N	N	100	>10,000
1637C	68 7 53	150 18 54	2.0	.20	2.00	2.00	500	N	N	N	100	3,000
1639C	68 6 7	150 15 29	2.0	.30	3.00	>2.00	500	N	N	N	100	>10,000
1640C	68 5 32	150 14 24	2.0	.20	3.00	2.00	300	N	N	N	100	>10,000
1641C	68 4 24	150 13 54	3.0	.30	7.00	>2.00	500	N	<500	N	100	>10,000
1642C	68 4 34	150 13 9	3.0	.30	3.00	>2.00	700	N	N	N	150	3,000
1644C	68 3 55	150 6 47	2.0	.30	3.00	>2.00	500	N	N	N	100	2,000
1645C	68 6 33	150 21 19	1.0	.20	2.00	2.00	500	N	N	N	100	5,000
1646C	68 6 19	150 20 58	2.0	.20	3.00	>2.00	300	N	N	N	100	>10,000
1648C	68 5 14	150 23 39	5.0	.50	5.00	>2.00	700	N	N	N	200	>10,000
82CL584C	68 26 11	152 42 5	2.0	.07	.20	1.00	300	N	N	N	20	>10,000
82CL585C	68 28 11	152 47 51	1.0	.30	.70	.70	700	N	N	N	30	>10,000
82CL586C	68 29 20	152 48 47	10.0	.15	.50	.70	300	7.0	500	N	N	>10,000
82CL587C	68 29 56	152 52 45	10.0	.30	3.00	1.50	700	N	N	N	20	>10,000
82CL588C	68 33 56	152 51 47	.5	.07	.15	.07	1,500	N	N	N	<20	>10,000
82CL589C	68 35 2	152 54 8	5.0	.50	20.00	>2.00	700	N	N	N	300	>10,000
82CL590C	68 37 11	152 51 53	5.0	.10	1.50	.70	700	3.0	1,000	N	30	>10,000
82CL591C	68 32 54	152 39 38	5.0	.50	7.00	1.50	700	2.0	N	N	100	>10,000
82CL592C	68 31 40	152 39 55	10.0	.15	1.50	.20	500	<1.0	N	N	N	>10,000
82CL593C	68 31 58	152 39 45	10.0	.15	3.00	2.00	500	2.0	N	N	N	>10,000
82CL594C	68 25 34	152 1 18	.5	.10	20.00	.70	150	N	N	N	N	>10,000
82CL595C	68 25 10	152 8 49	2.0	.20	.70	.50	1,000	N	N	N	N	>10,000
82CL596C	68 25 10	152 16 26	2.0	.20	2.00	2.00	700	<1.0	N	N	30	>10,000
82CL598C	68 31 12	152 13 49	20.0	.20	.50	.20	700	7.0	2,000	N	N	>10,000
82CL599C	68 33 35	152 14 32	3.0	.30	7.00	>2.00	500	N	N	N	200	>10,000
82CL600C	68 32 34	152 29 3	15.0	.20	1.50	1.50	500	5.0	N	N	N	>10,000
82CL601C	68 29 31	152 24 32	.5	.07	<.10	2.00	<20	N	N	N	20	5,000
82CL603C	68 23 12	152 36 17	.7	.07	.50	>2.00	100	N	N	N	20	1,000
82CL604C	68 16 37	150 22 48	5.0	.50	10.00	2.00	2,000	N	N	N	70	>10,000
82CL605C	68 17 46	150 25 14	7.0	.15	3.00	1.50	2,000	3.0	N	N	50	>10,000
82CL606C	68 16 49	150 22 2	5.0	.50	20.00	>2.00	3,000	N	N	N	100	>10,000
82CL607C	68 18 31	150 24 39	10.0	.50	5.00	2.00	1,000	2.0	N	N	100	>10,000
82CL608C	68 18 35	150 26 17	15.0	.10	5.00	2.00	1,000	5.0	N	N	70	>10,000
82CL609C	68 19 16	150 25 21	7.0	.20	.70	1.50	500	<1.0	N	N	70	>10,000
82CL610C	68 20 8	150 29 2	7.0	.20	1.00	1.00	1,000	N	N	N	100	10,000
82CL611C	68 20 25	150 28 2	2.0	.30	7.00	.50	300	N	N	N	50	10,000

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska.

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mn-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
1627C	2	N	N	N	20	50	200	N	<50	20	<20
1628C	2	N	N	N	50	50	100	N	<50	20	<20
1629C	2	N	100	10	50	100	200	N	<50	30	50
1630C	<2	N	50	<10	100	150	300	N	<50	50	2,000
1631C	2	N	N	50	70	150	200	N	<50	100	10,000
1632C	2	N	N	<10	<20	20	100	N	<50	20	50
1633C	2	N	300	20	200	100	500	N	<50	30	5,000
1634C	2	N	200	15	<20	50	300	N	<50	20	15,000
1635C	<2	N	100	15	70	200	500	N	<50	50	50
1636C	<2	N	N	15	100	100	500	N	<50	30	70
1637C	<2	N	N	10	100	70	200	N	<50	20	50
1639C	<2	N	N	<10	50	50	150	N	<50	20	300
1640C	<2	N	500	<10	70	70	150	N	<50	20	2,000
1641C	<2	N	200	20	100	100	700	N	<50	30	10,000
1642C	<2	N	<50	10	150	100	150	N	<50	30	500
1644C	<2	N	<50	10	70	70	200	N	<50	30	70
1645C	<2	N	N	<10	50	30	500	N	<50	20	30
1646C	<2	N	150	<10	150	70	500	N	<50	20	50
1648C	<2	N	100	50	150	100	500	N	<50	70	300
82CL584C	<2	N	N	10	150	50	100	N	<50	20	50
82CL585C	N	N	N	30	150	30	50	N	<50	20	30
82CL586C	N	N	N	30	100	100	70	N	N	300	100
82CL587C	<2	N	N	20	70	700	500	10	<50	150	100
82CL588C	N	N	N	15	20	30	<50	N	N	20	<20
82CL589C	N	N	N	30	150	30	300	15	<50	150	200
82CL590C	N	N	N	20	50	30	50	<10	N	100	200
82CL591C	N	N	N	20	150	50	50	15	<50	100	200
82CL592C	N	N	N	20	50	50	50	15	N	100	200
82CL593C	N	N	N	20	200	100	50	10	<50	200	150
82CL594C	N	N	N	N	100	30	70	N	N	20	20
82CL595C	N	N	N	20	2,000	30	50	<10	N	50	20
82CL596C	<2	N	N	10	300	50	100	<10	<50	70	30
82CL598C	N	N	N	50	700	700	<50	<10	N	300	150
82CL599C	<2	N	N	10	300	30	500	10	50	20	70
82CL600C	N	N	500	30	200	100	50	20	<50	200	200
82CL601C	N	N	N	<10	70	<10	70	N	<50	<10	<20
82CL603C	N	N	N	10	70	15	1,000	N	50	N	100
82CL604C	N	N	N	15	500	150	500	N	<50	20	700
82CL605C	5	N	N	20	200	200	500	N	<50	30	700
82CL606C	2	N	N	20	1,000	100	1,000	N	<50	50	1,500
82CL607C	3	N	N	30	300	200	50	N	<50	150	300
82CL608C	5	N	N	30	200	300	50	N	<50	150	700
82CL609C	<2	N	N	20	700	70	150	N	<50	100	3,000
82CL610C	2	N	N	20	100	100	200	N	<50	100	100
82CL611C	<2	N	N	15	50	50	50	N	N	50	50

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska.

Sample	Sr-ppm S	Sc-ppm S	Sn-ppm S	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S
1627C	N	<10	N	500	150	N	200	N	2,000	N
1628C	N	<10	N	500	150	N	100	N	2,000	N
1629C	N	<10	N	1,000	150	N	100	2,000	>2,000	N
1630C	N	<10	N	700	150	N	200	5,000	>2,000	N
1631C	N	<10	N	1,500	100	N	300	2,000	>2,000	N
1632C	N	<10	N	200	100	N	150	2,000	300	N
1633C	N	20	N	1,000	150	N	700	10,000	>2,000	N
1634C	N	<10	N	1,000	150	N	300	10,000	>2,000	N
1635C	N	<10	N	1,000	150	N	500	2,000	>2,000	N
1636C	N	<10	N	700	150	N	300	3,000	>2,000	N
1637C	N	N	N	200	150	N	150	700	>2,000	N
1639C	N	N	N	300	100	N	200	N	>2,000	N
1640C	N	N	N	300	100	N	200	20,000	>2,000	N
1641C	N	<10	N	1,000	150	N	700	5,000	>2,000	N
1642C	N	<10	N	200	150	N	200	N	>2,000	N
1644C	N	N	N	200	150	N	200	5,000	>2,000	N
1645C	N	N	N	500	100	N	150	N	>2,000	N
1646C	N	20	N	1,000	150	N	300	5,000	>2,000	N
1648C	N	N	N	700	150	N	300	3,000	>2,000	N
82CL584C	N	15	N	1,000	70	N	70	1,000	1,500	N
82CL585C	N	<10	N	300	70	N	<20	500	700	N
82CL586C	N	10	N	1,000	20	N	20	10,000	1,500	N
82CL587C	N	<10	N	1,500	70	N	70	15,000	2,000	N
82CL588C	N	<10	N	1,000	30	N	N	50	50	N
82CL589C	N	30	N	1,000	200	N	500	N	>2,000	N
82CL590C	N	10	N	1,000	20	N	50	N	2,000	N
82CL591C	N	15	N	500	200	N	70	7,000	2,000	N
82CL592C	N	15	N	500	30	N	150	1,500	2,000	N
82CL593C	N	10	N	1,000	70	N	100	10,000	>2,000	N
82CL594C	N	10	N	10,000	70	N	100	N	>2,000	N
82CL595C	N	<10	N	2,000	70	N	30	700	300	N
82CL596C	N	10	N	200	100	N	70	1,000	2,000	N
82CL598C	N	<10	N	1,000	50	N	20	15,000	700	N
82CL599C	N	20	N	700	300	N	300	N	>2,000	N
82CL600C	N	15	N	3,000	100	N	70	20,000	>2,000	N
82CL601C	N	10	N	N	70	N	50	N	>2,000	N
82CL603C	N	15	50	1,000	200	N	150	1,500	>2,000	N
82CL604C	N	50	N	3,000	200	N	500	1,500	>2,000	N
82CL605C	N	20	N	1,000	100	N	200	5,000	>2,000	N
82CL606C	N	50	50	5,000	200	N	700	7,000	>2,000	N
82CL607C	N	20	N	700	150	N	300	10,000	>2,000	N
82CL608C	N	30	<20	1,000	150	N	500	3,000	>2,000	N
82CL609C	N	10	N	500	100	N	100	7,000	>2,000	N
82CL610C	N	20	N	700	200	N	150	N	>2,000	N
82CL611C	N	<10	N	500	100	N	70	N	700	N

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska. --continued

Sample	Latitude	Longitude	Fe-pct. 1.5	Mg-pct. 5	Ca-pct. 5	Ti-pct. 5	Mn-ppm 5	Ag-ppm 5	As-ppm 5	Au-ppm 5	B-ppm 5	Ba-ppm 5
82CL612C	68 20 58	150 28 21	2.0	1.00	15.00	.07	70	1.0	N	N	<20	>10,000
82CL613C	68 22 2	150 29 59	3.0	.30	5.00	1.00	500	N	N	N	20	>10,000
82CL614C	68 23 48	150 31 7	.5	.15	.20	.07	100	N	N	N	N	>10,000
82CL615C	68 25 20	150 27 22	5.0	.70	1.00	.50	300	<1.0	N	N	30	>10,000
82CL616C	68 26 16	150 27 25	3.0	.30	.70	.05	150	1.0	N	N	N	>10,000
82CL617C	68 24 51	150 24 0	5.0	.70	5.00	1.00	1,000	<1.0	N	N	30	>10,000
82CL618C	68 25 18	150 22 25	1.5	.20	.30	.05	30	1.0	N	N	N	>10,000
82CL619C	68 24 7	150 22 3	5.0	.20	15.00	.07	300	7.0	N	N	N	>10,000
82CL620C	68 23 10	150 23 35	7.0	2.00	>50.00	.10	300	N	N	N	<20	>10,000
82CL621C	68 23 2	150 19 54	15.0	1.00	30.00	2.00	5,000	N	N	N	50	>10,000
82CL622C	68 20 3	150 18 56	2.0	.15	1.00	.05	100	2.0	N	N	N	>10,000
82CL623C	68 21 39	150 17 59	5.0	.20	15.00	.15	300	7.0	N	N	N	>10,000
82CL624C	68 19 46	150 18 21	5.0	.20	10.00	.70	500	2.0	N	N	30	>10,000
82CL625C	68 24 70	150 12 29	5.0	3.00	30.00	.10	300	N	N	N	30	7,000
82CL626C	68 23 10	150 14 55	15.0	1.00	30.00	.07	300	5.0	N	N	<20	10,000
82CL627C	68 23 26	150 8 52	10.0	3.00	>50.00	.10	500	7.0	N	N	20	>10,000
82CL628C	68 24 49	150 5 53	7.0	2.00	20.00	1.00	2,000	2.0	N	N	50	>10,000
82CL629C	68 27 53	150 12 22	1.5	.15	3.00	1.00	700	2.0	N	N	70	>10,000
82CL630C	68 17 14	150 36 35	15.0	1.00	10.00	.70	5,000	N	N	N	100	>10,000
82CL631C	68 20 49	150 36 26	5.0	.30	1.50	1.00	1,500	1.5	N	N	70	>10,000
82CL632C	68 19 9	150 36 23	1.0	.15	1.00	.05	30	N	N	N	N	>10,000
82CL633C	68 18 29	150 39 35	5.0	.20	3.00	.30	700	2.0	N	N	20	>10,000
82CL634C	68 9 30	150 46 29	15.0	3.00	7.00	.02	150	N	N	N	N	>10,000
82CL635C	68 8 44	150 45 54	10.0	7.00	10.00	.03	300	N	N	N	N	7,000
82CL636C	68 11 10	150 41 21	15.0	5.00	10.00	.07	500	10.0	N	N	N	>10,000
82CL637C	68 9 13	150 45 16	3.0	10.00	15.00	.10	500	N	N	N	<20	2,000
82CL638C	68 13 48	150 43 2	7.0	.20	7.00	1.00	1,000	3.0	N	N	50	>10,000
82CL639C	68 12 9	150 45 21	7.0	3.00	30.00	1.50	700	N	N	N	50	10,000
82CL640C	68 15 46	150 37 14	5.0	.30	10.00	>2.00	500	N	N	N	<20	>10,000
82CL641C	68 14 7	150 38 53	10.0	.30	5.00	2.00	1,500	N	N	N	70	>10,000
82CL642C	68 23 23	150 42 36	15.0	2.00	50.00	1.00	1,500	N	N	N	50	>10,000
82CL643C	68 21 19	150 43 28	15.0	2.00	5.00	1.50	300	N	N	N	N	>10,000
82CL644C	68 18 50	150 16 7	10.0	.10	2.00	.70	200	N	N	N	N	>10,000
82CL645C	68 21 37	150 47 26	7.0	.10	1.00	.05	150	3.0	N	N	N	>10,000
82CL646C	68 18 46	150 12 5	10.0	.50	7.00	2.00	2,000	5.0	N	N	70	10,000
82CL647C	68 18 14	150 15 23	7.0	.30	1.00	1.00	1,000	3.0	N	N	30	10,000
82CL648C	68 19 0	150 7 16	15.0	.20	5.00	2.00	2,000	N	N	N	150	10,000
82CL649C	68 18 0	150 13 40	2.0	.15	1.00	>2.00	1,500	N	N	N	50	>10,000
82CL650C	68 18 55	150 7 0	20.0	.50	10.00	>2.00	2,000	10.0	N	N	N	>10,000
82CL652C	68 19 24	150 5 9	20.0	.07	2.00	.50	300	<1.0	N	N	N	>10,000
82CL653C	68 19 19	150 9 14	20.0	.20	1.50	>2.00	500	20.0	N	N	N	>10,000
82CL654C	68 21 36	150 1 37	15.0	1.00	20.00	.50	500	5.0	N	N	N	>10,000
82CL655C	68 20 25	150 7 55	1.5	3.00	30.00	.30	200	2.0	N	N	<20	10,000
82CL656C	68 19 52	150 3 11	15.0	1.00	50.00	>2.00	2,000	N	N	N	20	>10,000
82CL658C	68 22 13	150 52 1	10.0	.20	5.00	1.50	1,000	N	N	N	50	>10,000

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
82CL612C	N	N	N	10	50	30	50	<10	N	100	30
82CL613C	<2	N	N	10	70	100	200	N	N	50	200
82CL614C	N	N	N	N	20	10	<50	N	N	10	<20
82CL615C	N	N	N	20	700	50	200	20	N	150	100
82CL616C	N	N	N	15	30	30	N	30	N	100	50
82CL617C	N	N	N	20	500	70	50	10	<50	100	50
82CL618C	N	N	N	15	<20	30	N	N	N	50	100
82CL619C	N	N	N	15	50	70	<50	<10	N	150	70
82CL620C	N	N	N	10	100	30	150	15	N	150	50
82CL621C	N	N	N	20	500	100	150	N	N	100	2,000
82CL622C	N	N	N	N	30	30	<50	N	N	<10	100
82CL623C	N	N	N	15	50	50	50	15	N	150	50
82CL624C	2	N	700	15	50	70	500	N	<50	70	1,000
82CL625C	N	N	N	10	70	30	70	N	N	50	70
82CL626C	<2	N	N	50	70	100	150	N	N	200	300
82CL627C	N	N	N	15	70	70	100	<10	N	150	100
82CL628C	<2	N	N	30	70	70	700	<10	N	150	100
82CL629C	2	N	N	10	150	70	300	N	<50	30	300
82CL630C	5	N	N	20	150	100	70	N	<50	150	100
82CL631C	N	N	N	10	150	1,000	50	N	N	30	100
82CL632C	N	N	N	N	30	10	N	N	N	10	<20
82CL633C	<2	N	N	20	100	70	70	N	N	70	2,000
82CL634C	N	N	N	15	20	70	<50	N	N	150	200
82CL635C	N	N	N	20	50	70	N	N	N	200	300
82CL636C	N	N	N	100	50	500	N	N	N	500	2,000
82CL637C	N	N	N	<10	70	20	<50	N	N	30	70
82CL638C	N	50	N	20	500	100	200	N	N	50	2,000
82CL639C	N	N	N	15	200	70	50	N	<50	50	100
82CL640C	N	N	N	15	200	70	700	N	50	30	7,000
82CL641C	5	N	N	20	150	700	700	N	<50	70	300
82CL642C	N	N	N	20	300	70	200	<10	<50	150	100
82CL643C	N	N	N	15	200	70	150	N	<50	100	500
82CL644C	<2	N	N	N	150	50	50	N	N	50	2,000
82CL645C	N	N	N	10	20	50	<50	<10	N	50	70
82CL646C	3	N	N	70	200	700	1,000	N	<50	150	2,000
82CL647C	<2	N	200	30	200	500	200	N	N	100	2,000
82CL648C	<2	N	N	70	500	700	1,000	N	<50	150	7,000
82CL649C	N	N	N	20	200	300	1,000	N	50	10	1,000
82CL650C	<2	N	150	150	50	300	700	N	<50	300	10,000
82CL652C	N	N	N	150	<20	200	50	N	N	1,000	1,000
82CL653C	N	N	N	100	1,000	500	300	N	<50	200	5,000
82CL654C	N	N	N	20	50	100	50	<10	N	200	150
82CL655C	N	N	N	N	100	100	700	N	N	70	50
82CL656C	N	N	N	15	150	500	500	N	50	50	70
82CL658C	2	N	N	20	200	150	100	N	N	70	3,000

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quarantary, Alaska. --continued

Sample	Sb-ppm §	Sc-ppm §	Sn-ppm §	Sr-ppm §	V-ppm §	Y-ppm §	Zn-ppm §	Zr-ppm §	Th-ppm §
82CL612C	N	N	N	1,000	30	N	1,000	>2,000	N
82CL613C	N	<10	N	700	70	N	2,000	N	N
82CL614C	N	N	N	3,000	20	N	N	50	N
82CL615C	N	15	N	700	70	N	15,000	2,000	N
82CL616C	N	10	N	3,000	30	N	500	20	N
82CL617C	N	15	N	1,000	100	N	N	700	N
82CL618C	N	10	N	2,000	30	N	700	20	N
82CL619C	N	15	N	>10,000	50	N	N	50	N
82CL620C	N	10	N	1,000	70	N	N	300	N
82CL621C	N	30	N	1,500	150	N	1,000	>2,000	N
82CL622C	N	<10	N	>10,000	20	N	N	30	N
82CL623C	N	<10	N	5,000	70	N	N	700	N
82CL624C	N	10	N	1,000	70	N	15,000	700	N
82CL625C	N	<10	N	500	70	N	<500	150	N
82CL626C	N	N	N	700	70	N	5,000	200	N
82CL627C	N	10	N	10,000	70	N	1,000	150	N
82CL628C	N	20	N	1,000	200	N	N	1,000	N
82CL629C	N	10	N	700	70	N	500	2,000	N
82CL630C	N	20	N	1,000	200	N	2,000	500	N
82CL631C	N	15	N	1,500	100	N	N	500	N
82CL632C	N	<10	N	3,000	50	N	N	200	N
82CL633C	N	10	N	1,000	70	N	5,000	200	N
82CL634C	N	N	N	1,500	20	N	3,000	N	N
82CL635C	N	N	N	300	50	N	1,500	100	N
82CL636C	N	<10	N	500	50	N	15,000	200	N
82CL637C	N	<10	N	N	50	N	N	500	N
82CL638C	N	<10	N	1,500	70	N	3,000	2,000	N
82CL639C	N	30	N	700	150	N	N	>2,000	N
82CL640C	N	70	20	5,000	200	N	5,000	>2,000	N
82CL641C	N	10	30	2,000	200	N	5,000	>2,000	N
82CL642C	N	20	<20	2,000	500	N	N	1,000	N
82CL643C	N	20	30	5,000	70	N	3,000	>2,000	N
82CL644C	N	20	N	>10,000	50	N	<500	>2,000	N
82CL645C	N	15	N	5,000	20	N	<500	20	N
82CL646C	N	20	200	2,000	150	N	700	>2,000	N
82CL647C	N	<10	N	500	70	N	10,000	1,000	N
82CL648C	N	20	N	1,000	200	N	2,000	>2,000	N
82CL649C	N	20	<20	1,000	200	N	N	>2,000	N
82CL650C	N	15	N	1,000	200	N	>20,000	>2,000	N
82CL652C	N	<10	N	1,000	20	N	15,000	1,500	N
82CL653C	N	50	30	2,000	150	N	7,000	>2,000	N
82CL654C	N	<10	N	>10,000	70	N	1,000	1,500	N
82CL655C	N	<10	N	700	70	N	2,000	200	N
82CL656C	N	50	N	2,000	150	N	5,000	>2,000	N
82CL658C	N	<10	N	1,000	100	N	2,000	>2,000	N

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake Quadrangle, Alaska.--continued

Sample	Latitude	Longitude	Fe-pct. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-ppm s	Ay-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
82CL659C	68 17 43	150 48 35	15.0	.20	3.00	1.00	1,500	N	N	N	20	5,000
82CL660C	68 19 16	150 49 10	10.0	.70	>50.00	2.00	3,000	N	N	N	N	>10,000
82CL661C	68 12 15	150 31 40	20.0	.70	10.00	>2.00	1,000	N	N	N	70	>10,000
82CL662C	68 12 6	150 28 6	15.0	.30	7.00	>2.00	500	15.0	N	N	50	>10,000
82CL664C	68 14 23	150 24 5	2.0	.30	15.00	2.00	1,500	2.0	N	N	20	>10,000
82CL665C	68 13 8	150 27 14	2.0	.10	.50	2.00	300	5.0	N	N	<20	>10,000
82CL667C	68 12 58	150 22 5	10.0	.20	3.00	>2.00	1,500	N	N	N	100	>10,000
82CL669C	68 13 53	150 16 36	1.0	.05	1.00	.70	300	2.0	N	N	<20	>10,000
82CL672C	68 13 52	150 11 6	3.0	.07	3.00	>2.00	700	N	N	N	20	>10,000
82CL673C	68 14 22	150 6 57	15.0	.50	15.00	2.00	3,000	7.0	N	N	200	>10,000
82CL674C	68 9 24	150 19 15	10.0	.50	20.00	>2.00	1,500	N	N	N	150	>10,000
82CL675C	68 10 34	150 14 57	7.0	.10	1.00	>2.00	1,000	7.0	N	N	20	>10,000
82CL676C	68 9 8	150 25 19	15.0	.70	20.00	>2.00	2,000	N	N	N	150	>10,000
82CL677C	68 9 0	150 22 41	15.0	.70	30.00	2.00	1,500	N	N	N	100	>10,000
82CL678C	68 10 22	150 32 18	15.0	.50	20.00	>2.00	2,000	N	N	N	150	>10,000
82CL679C	68 11 21	150 22 57	20.0	.50	7.00	>2.00	2,000	N	N	N	30	>10,000
82CL680C	68 8 39	150 32 59	15.0	1.00	50.00	2.00	2,000	500.0	N	N	30	>10,000
82CL681C	68 9 22	150 32 18	.7	1.00	>50.00	.05	500	N	N	N	N	>10,000
82CL682C	68 6 54	150 36 38	5.0	.10	1.50	>2.00	700	N	N	N	70	>10,000
82CL683C	68 7 21	150 32 15	10.0	.30	2.00	>2.00	1,500	N	N	N	70	>10,000
82CL684C	68 5 38	150 43 13	20.0	.50	7.00	.10	300	7.0	N	N	30	>10,000
82CL685C	68 7 34	150 40 37	5.0	.15	5.00	.70	200	5.0	N	N	<20	>10,000
82CL686C	68 5 15	150 47 22	10.0	2.00	15.00	.05	100	<1.0	N	N	20	10,000
82CL687C	68 5 31	150 42 2	7.0	.50	7.00	1.00	1,000	N	N	N	100	>10,000
82CL688C	68 4 54	150 51 41	1.5	1.00	15.00	.50	300	N	N	N	50	>10,000
82CL689C	68 4 35	150 43 41	2.0	.20	1.00	2.00	500	N	N	N	50	10,000
82CL690C	68 3 24	150 49 41	2.0	.10	1.50	2.00	200	1.0	N	N	50	>10,000
82CL691C	68 5 31	150 53 9	1.5	.20	5.00	.50	500	N	N	N	70	10,000
82CL692C	68 0 28	150 46 45	3.0	.10	1.50	>2.00	300	N	N	N	100	10,000
82CL693C	68 4 7	150 50 24	15.0	.20	10.00	1.00	700	5.0	N	N	20	>10,000
82CL694C	68 4 30	150 33 37	1.0	.10	1.00	>2.00	200	N	N	N	70	500
82CL695C	68 1 31	150 47 11	1.5	.15	.50	.70	300	N	N	N	70	1,000
82CL696C	68 3 24	150 41 10	2.0	.15	1.00	2.00	300	N	N	N	100	>10,000
82CL697C	68 0 23	150 50 48	2.0	.20	.15	.70	300	N	N	N	150	3,000
82CL698C	68 2 18	150 31 15	1.5	.15	3.00	>2.00	300	N	N	N	70	7,000
82CL699C	68 4 45	150 33 32	2.0	.20	.70	2.00	500	N	N	N	50	1,000
82CL700C	68 3 18	150 31 3	1.5	.20	2.00	>2.00	500	N	N	N	70	3,000
82CL701C	68 3 9	150 37 23	1.5	.15	1.50	>2.00	700	N	N	N	150	10,000
82CL702C	68 3 9	151 19 30	2.0	.20	3.00	>2.00	700	N	N	N	150	7,000
82CL703C	68 0 17	150 31 6	15.0	.10	.70	2.00	1,500	20.0	N	N	50	>10,000
82CL704C	68 5 56	151 19 38	2.0	.15	.70	>2.00	200	N	N	N	50	7,000
82CL705C	68 2 50	150 31 35	2.0	.20	1.00	>2.00	150	N	N	N	30	>10,000
82CL706C	68 7 23	151 19 17	1.0	.10	10.00	.15	100	2.0	N	N	20	>10,000
82CL707C	68 10 27	151 19 5	1.5	.20	1.00	.70	500	N	N	N	100	10,000
82CL708C	68 12 42	151 24 32	1.5	.50	20.00	.07	500	<1.0	N	N	N	3,000

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska. (continued)

Sample	Be-ppm	Bi-ppm	Cd-ppm	Co-ppm	Cr-ppm	Cu-ppm	La-ppm	Mo-ppm	Nb-ppm	Ni-ppm	Pb-ppm
82CL659C	<2	N	N	20	150	100	150	N	N	100	200
82CL660C	N	N	N	15	500	100	1,000	<10	N	70	300
82CL661C	N	N	N	20	2,000	500	700	N	<50	70	300
82CL662C	N	N	N	150	1,000	500	500	N	<50	100	15,000
82CL664C	N	N	N	15	150	1,500	700	N	N	20	1,500
82CL665C	N	N	N	15	500	1,500	<50	N	<50	30	20,000
82CL667C	2	N	N	20	700	200	1,000	N	<50	50	1,000
82CL669C	<2	N	700	N	500	100	1,000	N	N	20	200
82CL672C	2	N	300	15	200	700	1,000	N	50	50	3,000
82CL673C	2	N	N	30	2,000	150	700	N	<50	100	7,000
82CL674C	N	N	N	10	1,000	150	1,000	<10	<50	50	1,000
82CL675C	3	N	300	50	150	1,000	500	N	<50	100	10,000
82CL676C	N	N	N	30	1,500	300	300	N	50	300	3,000
82CL677C	<2	N	N	30	150	100	100	N	<50	200	500
82CL678C	2	N	N	30	700	150	150	N	<50	70	300
82CL679C	N	N	N	15	5,000	150	150	N	50	300	150
82CL680C	<2	N	N	20	700	200	200	N	<50	150	1,000
82CL681C	N	N	N	<10	200	<10	<50	N	10	30	300
82CL682C	2	N	N	15	200	70	70	N	<50	20	200
82CL683C	<2	N	N	20	100	100	100	N	50	50	100
82CL684C	<2	N	<50	100	50	150	50	N	N	300	3,000
82CL685C	N	N	<50	20	50	150	100	N	N	100	3,000
82CL686C	N	N	N	20	100	100	70	N	N	200	3,000
82CL687C	2	N	N	30	150	150	150	N	N	150	1,000
82CL688C	N	N	N	10	70	20	70	N	N	30	500
82CL689C	N	N	N	15	150	50	300	<10	50	20	70
82CL690C	<2	N	N	50	100	200	100	N	<50	100	1,000
82CL691C	2	N	N	10	100	30	50	N	70	50	70
82CL692C	2	N	N	100	150	150	700	N	70	200	200
82CL693C	2	N	N	50	70	100	100	N	<50	300	5,000
82CL694C	<2	N	N	10	150	50	500	N	50	15	70
82CL695C	<2	N	N	15	50	30	200	N	<50	30	30
82CL696C	<2	N	N	15	70	50	700	N	50	30	70
82CL697C	<2	N	N	20	150	70	50	N	<50	50	300
82CL698C	2	N	N	15	200	50	700	N	70	30	2,000
82CL699C	<2	N	N	15	100	50	500	N	<50	20	70
82CL700C	N	N	N	15	200	30	500	N	70	30	70
82CL701C	<2	N	N	20	300	30	700	N	70	50	300
82CL702C	2	N	N	20	150	30	700	N	50	50	700
82CL703C	N	30	N	100	100	30	150	N	50	150	7,000
82CL704C	N	N	N	20	300	20	700	N	50	30	1,000
82CL705C	<2	N	N	15	150	300	500	N	50	20	3,000
82CL706C	N	N	N	10	50	30	70	N	N	30	50
82CL707C	<2	N	N	15	200	30	70	N	<10	30	70
82CL708C	N	N	N	10	30	10	50	N	N	30	500

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska. --continued

Sample	Sb ppm 5	Sc ppm 5	Sn ppm 5	Sr ppm 5	V ppm 5	W ppm 5	Y ppm 5	Zn ppm 5	Zr ppm 5	Th ppm 3
82CL659C	N	20	N	500	200	N	200	N	2,000	N
82CL660C	N	50	N	7,000	150	N	1,000	500	>2,000	N
82CL661C	N	70	70	7,000	200	N	500	1,000	>2,000	N
82CL662C	N	50	N	5,000	200	N	500	2,000	>2,000	N
82CL664C	N	20	N	3,000	150	N	700	7,000	2,000	N
82CL665C	N	15	20	2,000	150	N	200	700	>2,000	N
82CL667C	N	50	30	2,000	300	N	500	10,000	>2,000	N
82CL669C	N	20	N	2,000	70	N	300	10,000	>2,000	N
82CL672C	N	30	20	1,500	200	N	500	7,000	>2,000	N
82CL673C	N	30	<20	5,000	200	N	500	N	>2,000	N
82CL674C	N	100	30	10,000	300	N	700	N	>2,000	N
82CL675C	N	15	N	2,000	200	N	200	10,000	>2,000	N
82CL676C	N	70	30	7,000	500	N	1,000	3,000	>2,000	N
82CL677C	N	30	N	3,000	500	N	500	5,000	>2,000	N
82CL678C	N	50	N	3,000	500	N	700	3,000	>2,000	N
82CL679C	N	50	N	3,000	500	N	300	N	>2,000	N
82CL680C	N	70	20	5,000	300	N	700	5,000	>2,000	N
82CL681C	N	<10	N	1,500	50	N	700	N	1,000	N
82CL682C	N	30	N	2,000	200	N	300	700	>2,000	N
82CL683C	N	20	N	1,000	200	N	150	N	>2,000	N
82CL684C	N	10	N	2,000	70	N	150	20,000	150	N
82CL685C	N	10	N	5,000	70	N	150	>20,000	500	N
82CL686C	N	<10	N	1,000	70	N	150	7,000	N	N
82CL687C	N	15	N	2,000	150	N	200	7,000	700	N
82CL688C	N	15	N	300	70	N	150	N	700	N
82CL689C	N	30	N	500	100	N	150	N	>2,000	N
82CL690C	N	30	N	1,500	100	N	150	700	>2,000	N
82CL691C	N	15	N	500	100	N	150	N	700	N
82CL692C	N	30	<20	1,000	200	N	150	700	>2,000	N
82CL693C	N	15	N	3,000	100	N	200	20,000	1,000	N
82CL694C	N	20	N	700	150	N	150	N	>2,000	N
82CL695C	N	15	<20	500	150	N	50	N	700	N
82CL696C	N	15	N	1,000	150	N	150	500	>2,000	N
82CL697C	N	15	N	N	150	N	30	N	500	N
82CL698C	N	30	20	1,000	200	N	200	500	>2,000	N
82CL699C	N	15	N	700	150	N	70	<500	2,000	N
82CL700C	N	20	N	700	150	N	200	2,000	>2,000	N
82CL701C	N	20	20	2,000	200	N	200	N	>2,000	N
82CL702C	N	30	20	3,000	200	N	300	N	>2,000	N
82CL703C	N	20	N	700	100	N	100	5,000	>2,000	N
82CL704C	N	15	<20	1,000	150	N	150	N	>2,000	N
82CL705C	N	20	N	1,000	200	N	200	2,000	>2,000	N
82CL706C	N	10	N	3,000	70	N	150	N	200	N
82CL707C	N	10	N	300	100	N	100	N	700	N
82CL708C	N	N	N	1,500	20	N	100	N	50	N

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Au-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
82CL709C	68 1 54	151 18 52	10.0	.15	.50	1.50	150	5.0	N	N	50	>10,000
82CL710C	68 12 52	151 24 19	2.0	.10	1.00	.70	500	N	N	N	70	>10,000
82CL711C	68 4 32	151 17 58	5.0	.10	.70	1.50	500	1.0	N	N	30	>10,000
82CL712C	68 10 50	151 29 1	.7	.70	20.00	.07	150	2.0	N	N	20	300
82CL713C	68 5 35	151 23 39	5.0	.10	1.50	1.50	500	1.0	N	N	70	>10,000
82CL714C	68 10 45	151 28 34	1.0	1.00	30.00	.03	50	5.0	N	N	20	700
82CL715C	68 5 39	151 22 36	2.0	.15	1.00	1.00	500	<1.0	N	N	70	10,000
82CL716C	68 9 40	151 21 0	1.0	.10	30.00	.10	200	5.0	N	N	30	>10,000
82CL717C	68 11 13	151 26 36	.1	2.00	20.00	.03	30	<1.0	N	N	<20	700
82CL718C	68 9 54	151 21 0	.1	.30	30.00	.05	100	3.0	N	N	20	150
82CL719C	68 3 17	151 27 25	7.0	.20	3.00	1.00	1,500	N	N	N	70	5,000
82CL720C	68 3 28	151 32 46	7.0	.10	.20	2.00	1,500	N	N	N	150	1,500
82CL721C	68 2 57	151 27 13	1.5	.07	.30	1.50	300	N	N	N	70	>10,000
82CL722C	68 3 7	151 32 33	7.0	.20	.20	2.00	1,000	N	N	N	150	1,000
82CL723C	68 0 59	151 40 29	20.0	.20	1.00	1.00	200	N	N	N	N	10,000
82CL724C	68 23 15	151 49 34	1.5	.70	50.00	1.00	1,000	<1.0	N	N	<20	>10,000
82CL725C	68 27 19	151 44 43	5.0	.50	5.00	2.00	1,000	N	N	N	100	>10,000
82CL726C	68 26 39	151 2 41	20.0	1.00	50.00	1.00	10,000	N	N	N	500	>10,000
82CL727C	68 1 44	151 4 29	7.0	.15	7.00	2.00	1,000	5.0	N	N	30	10,000
82CL728C	68 1 56	151 1 51	20.0	.50	5.00	>2.00	3,000	<1.0	N	N	200	>10,000
82CL729C	68 3 12	150 58 40	15.0	.15	2.00	>2.00	1,000	N	N	N	70	>10,000
82CL730C	68 3 2	150 53 31	30.0	.30	3.00	1.50	1,500	10.0	1,500	N	50	>10,000

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska.--continued

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s
82CL709C	N	N	N	70	50	1,500	150	N	<50	150	100
82CL710C	2	N	N	15	70	50	50	N	<50	50	50
82CL711C	<2	N	N	20	150	50	150	N	<50	70	100
82CL712C	N	N	N	<10	70	20	500	N	N	50	30
82CL713C	2	N	N	20	100	150	300	N	<50	50	2,000
82CL714C	<2	N	N	<10	100	30	300	<10	N	50	30
82CL715C	<2	N	N	15	50	500	100	N	<50	50	1,500
82CL716C	<2	N	N	10	70	30	300	15	N	70	50
82CL717C	N	N	N	<10	20	<10	50	N	N	10	<20
82CL718C	N	N	N	N	50	<10	70	N	N	20	<20
82CL719C	5	N	N	20	100	70	200	N	<50	70	70
82CL720C	3	N	N	20	150	70	500	N	50	70	100
82CL721C	<2	N	N	15	100	30	150	N	<50	30	50
82CL722C	2	N	N	20	200	70	150	N	<50	70	200
82CL723C	<2	N	N	20	200	70	50	N	<50	300	500
82CL724C	N	N	N	10	500	30	200	N	N	30	50
82CL725C	<2	N	N	20	700	50	700	N	<50	50	50
82CL726C	2	N	N	30	200	70	200	N	<50	150	150
82CL727C	3	N	N	20	200	100	300	N	<50	100	200
82CL728C	2	N	N	30	300	150	700	N	<50	150	200
82CL729C	2	N	N	50	200	300	500	N	<50	200	300
82CL730C	3	30	N	100	100	1,500	150	N	<50	300	20,000

Table 3. Spectrographic analysis of heavy mineral concentrate samples from the Chandler Lake quadrangle, Alaska. --continued

Sample	Sb-ppm 5	Sc-ppm 5	Sn-ppm 5	Sr-ppm 5	V-ppm 5	U-ppm 5	Y-ppm 5	Zn-ppm 5	Zr-ppm 5	Th-ppm 5
82CL709C	N	10	N	500	70	N	100	N	2,000	N
82CL710C	N	15	N	500	100	N	50	N	700	N
82CL711C	N	10	N	500	100	N	150	N	2,000	N
82CL712C	N	N	N	700	70	N	300	N	70	N
82CL713C	N	<10	N	1,500	70	N	100	1,000	2,000	N
82CL714C	N	N	N	700	100	N	300	N	50	N
82CL715C	N	10	N	300	100	N	70	500	2,000	N
82CL716C	N	10	N	1,500	150	N	300	N	500	N
82CL717C	N	N	N	300	20	N	70	N	20	N
82CL718C	N	N	N	700	50	N	100	N	30	N
82CL719C	N	15	N	700	150	N	300	700	700	N
82CL720C	N	20	N	1,000	200	N	200	N	>2,000	N
82CL721C	N	10	N	700	100	N	100	N	1,500	N
82CL722C	N	20	N	300	200	N	150	N	>2,000	N
82CL723C	N	<10	N	500	70	N	50	700	700	N
82CL724C	N	15	N	10,000	150	N	500	N	1,500	N
82CL725C	N	20	50	700	200	N	150	N	1,500	N
82CL726C	N	70	N	700	500	N	500	N	1,000	N
82CL727C	N	<10	N	1,000	150	N	300	3,000	>2,000	N
82CL728C	N	20	N	1,000	200	N	500	1,000	>2,000	N
82CL729C	N	15	N	1,000	100	N	300	10,000	>2,000	N
82CL730C	N	<10	N	3,000	70	N	150	20,000	>2,000	N