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RECONNAISSANCE GEOLOGIC MAP AND GEOCHEMICAL ANALYSES OF STREAM SEDIMENT AND ROCK SAMPLES OF THE ANCHORAGE B-7 QUADRANGLE, ALASKA

By

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Introduction

A reconnaissance geologic map and analytical data for 58 stream-sediment samples and 24 rock samples from the Anchorage B-7, 1:63,360-scale quadrangle are presented in this report, together with a statistical treatment of the geochemical data. The bedrock was mapped and the samples were collected in 1969 and 1970 as part of a continuing U.S. Geological Survey project to map basement rocks in the western Chugach Mountains.

Most of the early work on the bedrock geology of the Anchorage B-7 quadrangle and the surrounding areas was by S. R. Capps (1916 and 1940). More recently, chromite-bearing ultramafic rocks in the northeast part of the quadrangle and the adjacent part of the Anchorage B-6 quadrangle were mapped and described by A. W. Rose (1966). Other studies of the chromite-bearing ultramafic rocks and studies of the adjacent areas that were made as the result of construction of a tunnel and dam as part of a hydroelectric power development program by the City of Anchorage are summarized by Rose (1966). The geology and geochemistry of the adjoining Anchorage B-6 quadrangle was described by Clark and Bartsch (1971). Ernest Dobrovolny and H. R. Schmoll of the U.S. Geological Survey are currently mapping the surficial deposits of the Anchorage Borough, including those in the Anchorage B-7 quadrangle. In this report no attempt was made to differentiate units within the surficial deposits. The contacts between bedrock and surficial deposits in figure 1 and some of the information used in compiling the bedrock geologic

map (fig. 1) are from unpublished maps by H. R. Schnoll and E. Dobrovolny. Allen L. Clark and Ivan Barnes of the U.S. Geological Survey each spent approximately a week helping with geologic mapping and sampling in the Anchorage B-6 and B-7 quadrangles. David L. Jones and Arthur Grantz of the U.S. Geological Survey generously shared information and ideas on geologic interpretation of the units.

Map units

The age assignments of units in figure 1 are based on sparse paleontological data and two K-Ar age determinations. The information is partly from the Anchorage B-7 quadrangle and partly from adjacent areas. The undifferentiated unit (JPu) includes a variety of plutonic, metaplutonic, metasedimentary and metavolcanic rocks that crop out near the northwestern front of the Chugach Mountains. The plutonic and metaplutonic rocks have compositions ranging from gabbro to quartz diorite. Gneisses and schists have well-developed schistosity and greenschist facies metamorphic assemblages, sometimes overprinted by prehnite-pumpellyite facies minerals. Metasedimentary rocks are generally fine grained and include metagraywackes, siliceous argillites, cherts, and marbles. Some metabasalts also occur in the unit. The rocks included in the undifferentiated unit differ from the heterogeneous assemblage (JKa) primarily in the presence of plutonic and metaplutonic rocks and of gneisses and schists with well-developed schistosity and greenschist facies mineral assemblages. The relations of the different types of rocks in the undifferentiated unit to each other are obscure because of the lack of continuity of bedrock and the probability of complex faulting in the area near the range front.

Ages have been determined at two localities in the unit of undifferentiated rocks. Fusulinids found in marble a few hundred feet from the west contact of the ultramafic rocks (fossil locality 1, fig. 1) were described by Raymond C. Douglass of the U.S. Geological Survey as follows (written communication, 1971):

> "This sample contains fractured, deformed, and partly recrystallized specimens of at least two kinds of fusulinids. One is a form of schwagerinid that may represent Schwagerina sp., Chusenella sp., or Parafusulina sp. The possibility that all three are represented cannot be ruled out thus far. The second form is Cancellina sp., a neoschwagerinid."
>
> "Cancellina is a genus recognized in several places within the Permian Tethyan seaway. This is the first known occurrence of a neoschwagerinid in Alaska, and this is only the third place in the western hemisphere where Cancellina has been recognized."
>
> "Cancellina is considered to be of late Leonardian age but may extend into earliest Guadalupian. At the moment, I would favor a Leonardian age for the Alaskan sample."
>
> "Tomowo Ozawa has recently (1970) summarized the group to which Cancellina is assigned and he concluded that Cancellina developed in relatively calm waters characteristically in the micritic facies. Recrystallization in this sample has destroyed most of the lithologic evidence, but remnants of echinodermal material can be recognized in what may have been a micritic groundmass."

Slightly chloritized biotite from quartz diorite (K-Ar locality 1, fig. 1) collected by Marvin Lanphere and Arthur Grantz of the U.S. Geological Survey was dated with K-Ar method by Lanphere at 161 $\pm$ 5 m.y. (oral communication, 1971).

Because a wide variety of rock types are included in the undifferentiated unit, it is possible that rocks of ages other than Permian to Jurassic are included also.

The heterogeneous assemblage (JKa) crops out in the Anchorage B-7 quadrangle mostly in a fault-bounded northeast-trending belt in the central part of the quadrangle. The unit is composed predominantly of massive metaclastic rocks that include weakly metamorphosed graywacke, arkose, and conglomerate sandstone. The unit also includes greenstones of basaltic composition (including pillow lavas) that are usually associated with radiolarian chert, cherty argillite, and argillite. Small amounts of ultramafic rocks and marble occur in this unit in the adjacent Anchorage A-7 quadrangle. The radiolarian chert-pillow basalt association is interpreted to indicate a marine environment of deposition. The deformation of the heterogeneous assemblage is characterized by pervasive closely spaced shears. The attitudes of locally prominent sets of shears in this unit are shown by a cleavage symbol in figure 1. Tight folds are present rarely. The pervasive shearing and lenticular remnants of beds commonly seen in the cherty argillite sequences, as well as lack of persistence of distinctive lithologic sequences from one ridge to the next (fig. 1) suggests a mélange-like style deformation. Attitudes of bedding and shears show large local variations, but the pattern is not random, and a general northwest dip can be discerned. Prehnite and pumpellyite are widespread in this unit. Prehnite in veinlets, usually associated with quartz, is commonly visible in hand specimens and characteristic of the unit.

The maximum age of the heterogeneous assemblage is indicated by a K-Ar date of 146 $\pm$ 7 m.y. on hornblende from a granitic cobble in a conglomeratic sandstone near the Seward Highway in the Anchorage A-8 quadrangle (Marvin Lanphere and Arthur Grantz, U.S. Geological Survey, oral communication, 1969). The minimum age of the unit is limited by the beginning of

accumulation of the unmetamorphosed Tertiary non-marine sediments in the Cook Inlet region.

Metagraywacke, siltite, argillite, and calcareous sandstones tentatively correlated with the Valdez Group (KJv) crop out in the southeast part of the quadrangle below the heterogeneous assemblage. The rocks are part of a widespread thick marine flysch sequence that in some areas contains sedimentary features that are generally associated with turbidites. Fossils are very scarce in the flysch deposits, and none have been found in the Anchorage B-7 quadrangle. Worm trails and plant fragments have been found in the adjacent Anchorage B-6 quadrangle (Clark and Bartsch, 1971) and Inoceramus fossils of Jurassic or Cretaceous age have been found in several localities (Plafker and MacNeil, 1966, p. B63; Park, 1931, p. 393) in the western Chugach Mountains. Fossils from a newly discovered locality in the flysch near Mile 100 of the Seward Highway (Seward D-7 quadrangle) are similar to the Upper Cretaceous (Maestrichtian) Inoceramus kusiroensis (David L. Jones, U.S. Geological Survey, written communication, 1970).

Sparsity of fossils and absence of shallow-water features suggest that the flysch represents a moderate to deep water deposit.

Deformation in the flysch is characterized by tight similar folds with slaty cleavage and numerous high- and low-angle faults.

White mica, chlorite, epidote, and albite are widespread in the unit. Micaceous minerals commonly show a distinct metamorphic fabric, but detrital textures are still discernible.

The non-marine Kenai Formation (Tk) consisting predominantly of sandstone, siltstone, and claystone is exposed in only a few small areas near Eagle River (fig. 1). Fossil plants from the Kenai Formation near

Eagle River (fossil locality 2, fig. 1) have been described by J. A. Wolfe (1966) and J. A. Wolfe and others (1966). In these reports, fossils from the Eagle River locality are assigned to the "Lower(?) Seldovian" Stage, which is considered to be of late Oligocene age (Wahrhaftig and others, 1969, p. D-9 to D-11).

The surficial deposits include a variety of glacial and alluvial deposits that are being mapped and described by Ernest Dobrovolny and H. R. Schmoll.

Igneous rocks in the quadrangle include quartz diorites to gabbros in the undifferentiated assemblage described above, protrusive ultramafic rocks, and felsic to intermediate hypabyssal rocks.

The ultramafic rocks (M_ZP_Zu) are exposed in a linear belt near the northwest part of the quadrangle between the undifferentiated rocks and the heterogeneous assemblage. The body is a weakly serpentinized layered protrusion composed predominantly of peridotite (wehrlite), dunite, and pyroxenite. Clinopyroxene is the predominant pyroxene in the body. Small amounts of gabbro occur locally. No contact metamorphism was noted in the vicinity of the ultramafic body. A detailed map of the ultramafic body by Rose (1966) shows the distribution of the rock types in the ultramafic. Rose (1966) noted a similarity in appearance of clinopyroxenes in the ultramafic rocks and in the strongly altered gabbros that crop out northwest of the ultramafic body near Mount Eklutna and on the ridge between Thunder Bird Creek and the Eklutna River. Rose (1966) considered the gabbros to be a part of the ultramafic body. On figure 1 of this report the gabbros near the ultramafic rocks are included with other

plutonic rocks in the undifferentiated unit. This grouping is lithologic only and not meant to imply that these gabbros are not related genetically to the ultramafic rocks. Small bodies of felsic to intermediate intrusive rock cut all of the metamorphic rock units. Most are light-colored fine-grained altered rocks composed predominantly of plagioclase, quartz, chlorite, and sericite, and sometimes carbonate. Mafic minerals are commonly absent or completely replaced. Dacite porphyry containing hornblende, quartz, and plagioclase phenocrysts occurs in a few places along the range front, but was not found elsewhere.

Structure

Two major faults are postulated in the quadrangle.

The first is a thrust fault which results in rocks of the heterogeneous assemblage overlying younger(?) flysch deposits of the Valdez(?) Group. The ages are not yet firmly established for these two groups of rocks so the fault is only inferred at the present time. However, the available age data (discussed in an earlier part of this paper) indicate that it is unlikely that the heterogeneous assemblage is younger than the upper Cretaceous parts of the flysch, and that a thrust fault is necessary to account for the relative positions of the two groups of rocks.

The boundary between the heterogeneous assemblage and the undifferentiated rocks to the northwest is thought to be a major fault zone. The inferred fault juxtaposes rock types of continental affinity (plutonic rocks, gneisses, and schists) on the northwest against weakly metamorphosed basaltic pillow lavas and radiolarian cherts of oceanic affinity on the southeast. Rocks of continental affinity are absent in the heterogeneous

assemblage except as clasts in metaconglomerate sandstones.

The approximate location of the juxtaposition of the two terranes--the continental undifferentiated unit and the oceanic heterogeneous assemblage--is marked by the ultramafic body in the northeast part of the quadrangle (unit M_ZP_Zu). In other places the position of the contact between the two units is obscured by intense shearing and recrystallization of rocks in both units as well as lack of exposure in critical areas.

Metallic mineral occurrences

No metallic mineral production has been reported from the Anchorage B-7 quadrangle, but three occurrences are known.

A. W. Rose (1966) described chromite-rich bands in dunite at two localities; one on the ridge between Thunder Bird Creek and Eklutna River, and the second on the west slope of Mount Eklutna (fig. 2). According to Rose (1966), the known chromite occurrences are of low grade and small size.

Landes (1927, p. 71) described a lead-zinc prospect located "...at an elevation of 1,500 feet in a slight draw in the face of the cliff between Eklutna and Peters Creeks." The approximate location is shown on figure 2. According to Landes (1927) the country rock is impregnated through a zone about three feet wide with arsenopyrite, pyrite, sphalerite, and galena. A vein less than 2 inches wide contains sphalerite, galena, and chalcopyrite. Landes (1927) did not think sufficient base-metal minerals were exposed to encourage development work.

Data on stream sediment and rock samples

Standard procedures were followed in the collection and preparation of samples. Outcrop samples were chosen for analysis to provide data on background or because they were strongly iron stained or contained visible sulfides. Descriptions of analyzed rock specimens are given in Table 1.

Stream-sediment samples of fine-grained material were generally collected from active stream channels; where this was not possible, samples were collected from bank or terrace deposits adjacent to the channel.

Rock samples were crushed and split, and one split was pulverized. The pulverized splits of the rock samples and the minus 80 mesh fractions of the stream-sediment samples were analyzed for 30 elements by the U.S. Geological Survey's standard six-step semiquantitative spectrographic method and for gold and mercury by the atomic absorption method (Tables 2 and 3). The precision of a reported value is approximately plus 100 percent or minus 50 percent. Analyses for gold by the atomic absorption method are accurate to $\pm$ 100 percent. Semiquantitative spectrographic analyses were done by K. J. Curry, and atomic absorption analyses were done by R. B. Tripp, H. D. King, R. L. Miller, A. L. Meier, and D. G. Murrey.

Locations of the rock and stream-sediment samples are shown on figure 2.

Table 1.--Description of bedrock samples from the Anchorage B-7 quadrangle.

Sample localities are shown by sample number plotted on figure 2.

Map number	Sample description
1r	Greenstone, altered zone about 1 to 2 feet wide at contact between two metaigneous rock types.
2r	Greenstone, porphyritic metabasalt.
3r	Greenstone, metabasalt(?) with minor pyrite.
4r	Greenstone, metabasalt(?) with minor pyrite.
5r	Hornblende quartz diorite.
6r	Greenstone; strongly sheared; hematite stained locally.
7r	Metagabbro.
8r	Serpentinite.
9r	Serpentinized dunite(?).
10r	Intermediate(?) metaigneous rock, fine-grained, calcareous, contains minor pyrite, limonite stained.
11r	Same as 10r.
12r	Same as 10r.
13r	Pyroxenite.
14r	Peridotite.
15r	Peridotite.
16r	Altered porphyritic quartz diorite.
17r	Massive green metasandstone.
18r	Fault gouge.
19r	Altered intermediate(?) dike rock.
20r	Altered dacite dike rock.
21r	Graywacke.
22r	Green metasandstone.
23r	Alaskite.
24r	Hornfelsed graywacke.

The results of the analyses of the stream-sediment and rock analyses have been processed by means of a computer program known as GEOSUM and are presented in Tables 2 and 3. The GEOSUM program is designed primarily for summarizing and tabulating geochemical data--especially data from semiquantitative spectrographic analyses (commonly referred to as six-step spectrographic analyses) by the laboratories of the U.S. Geological Survey. The computer output consists of: (a) a tabulation of the data, (b) histograms and cumulative frequency distributions for all elements for which there is sufficient data, (c) a statistical summary which includes geometric means and geometric deviations.[1/]

[1/] The frequency tables and histograms for gold and mercury have been omitted because the classes used in calculating these tables are those used in the semiquantitative spectrographic method, and gold and mercury were analyzed by the quantitative atomic absorption method. The frequency tables and histograms that contain no valid data points and those for which the minimum and maximum are the same have also been omitted.

Explanation of Tables 2 and 3

Analytical results from rock and stream-sediment samples are given in Tables 2 and 3 as analytical values such as 7.0000 ppm, 10.0000 percent, etc., or as qualified values expressed as a letter. These letter codes are N = not detected, L = less than specified limit of detection, G = greater than value shown, B = no data. The terms H = interference and T = trace, but do not occur in these data. Note that the right-most zero digits for each analytical value may or may not be significant. The specified limits of detection are as follows:

Specified limits of detection

FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM
0.05000	0.02000	0.05000	0.00200	10.00000	0.5000
AS PPM	AU PPM	B PPM	BA PPM	BE PPM	BI PPM
200.00	10.00000	10.00000	20.00000	1.00000	10.00000
CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM
20.00000	5.00000	5.00000	5.00000	20.00000	5.00000
NB PPM	NI PPM	PB PPM	SB PPM	SC PPM	SN PPM
10.00000	5,00000	10.00000	100.000	5,00000	10.00000
SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
100.00000	10.00000	50.00000	10.00000	200.00000	10.00000
AU PPM[1/]	HG PPM[1/]				
0.02000	0.01000				

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported in percentage (pct) or parts per million (ppm) as geometric midpoints (1.0, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, 0.12, 0.83, etc. The frequency distributions and histograms are on logarithmic scales and are computed using these brackets as class intervals, for example:

Reported value (ppm)	Limits	
1.0	.83	1.2
1.5	1.2	1.8
2.0	1.8	2.6
3.0	2.6	3.8
5.0	3.8	5.6
7.0	5.6	8.3
10.0	8.3	12.0

[1/] Analyses by atomic absorption method.

On the histograms decimal numbers are shown as powers of 10, for example:

7.0E-01 means 7.0×10^{-1} or 0.7

7.0E 00 means 7.0×10^{0} or 7.0

7.0E 01 means 7.0×10^{1} or 70.0

7.0E 02 means 7.0×10^{2} or 700.0

7.0E 03 means 7.0×10^{3} or 7,000.0

The histograms are constructed of X's, each of which represents 1 percent of the total number of samples.

The histograms and the statistics given below them are derived only from data values within the ranges of analytical determination ("analytical values"). The histograms are, therefore, incomplete, and the statistics are biased if data values qualified with N, L, C, T, or H codes are present. Statistical estimates that are unbiased in this regard are given at the end of Tables 2 and 3. The geometric mean is the antilogarithm of the arithmetic mean of the logs of the analyses and an estimate of "central tendency," or of a characteristic value, of a frequency distribution that is approximately symmetrical on a log scale, and is therefore useful for characterizing many geochemical distributions. The geometric mean is not an estimate of geochemical abundance. The geometric deviation is the antilogarithm of the standard deviation of the logs of the analyses. See USGS Professional Paper 574-B (Miesch, 1967) for further discussion and USGS Bulletin 1147E (Miesch, 1963, p. 20-23), for further discussion and explanation of geometric deviation.

In the computations performed to produce the statistical summary at the end of Tables 2 and 3 all elements are ignored where one or more of the unqualified data values is less than the analytical limit of detection specified on input or where any data values are qualified with the G (greater than) code. Data values qualified with B or H are not used in the computations. Where none of the data values for an element are qualified the mean and deviation should be the same as those given in the preceding section. Where data are qualified with the codes N, L, or T, the estimates of geometric mean and deviation are based on a method by A. J. Cohen for treating censored distributions. The application of this method of geochemical problems is described in USGS Professional Paper 574-B (Miesch, 1967). The estimates are unbiased in a strict sense only where the data are derived from a lognormal parent population, but experiments have shown that large departures from this requirement may not greatly invalidate the results. Acceptance and use of the estimates, however, is the responsibility of the individual.

Anomalous samples

Normal background contents for rocks and stream-sediment samples in the map area were determined by inspection of the histograms given in Tables 2 and 3, supplemented by inspection of histograms for samples from the adjacent Anchorage B-6 quadrangle (Clark and Bartsch, 1971).

Most of the samples that contain greater than background amounts of one or more elements are associated with the ultramafic body. Chromite-rich zones are known in the dunite (Rose, 1966). Contents of 5,000 or more ppm (parts per million) of chromium, 1,000 or more ppm of nickel, and 150 or more ppm of cobalt are common in the ultramafic rocks. Chromium contents of between 300 and 3,000 ppm are common in the streams draining the area of ultramafic rock outcrops. Two samples (map nos. 22 and 23) collected from Little Peters Creek contain 700 to 3,000 ppm of chromium, that is probably derived from ultramafic rocks. No ultramafic rocks were found on the part of the ridge between Peters and Little Peters Creek that was examined, but it is probable that at least small ultramafic bodies are present.

A mercury content of 1.0 ppm was detected in a stream-sediment sample (map no. 3) from below the falls in Thunder Bird Creek. Although no mercury occurrences are known on Thunder Bird Creek, an occurrence of cinnabar was reported by Atherton and Judd (1956) in the tunnel between Eklutna Lake and the Eklutna power plant near the Knik River in the Anchorage B-6 quadrangle. A mercury content of 1.2 ppm was reported for one sample (map no. 25) from Peters Creek.

Weakly anomalous gold contents (0.04 ppm) were found in two samples (map nos. 27 and 32) from Peters Creek. Capps (1916, p. 192-193) described several lode gold prospects on quartz veins near the head of Peters Creek, approximately 8-1/2 miles upstream from the weakly anomalous samples.

Weakly anomalous contents of silver (0.5 to 1.5 ppm) were detected in two stream-sediment samples and one rock sample from the South Fork of the Eagle River area. The source of the silver in the stream-sediment samples is not known.

The mercury, gold, and silver anomalies discussed above are from a very few samples with weakly anomalous amounts of only one or a very small number of elements. The significance of these samples is not known, but they should be interpreted with caution. A few other samples in Tables 2 and 3 are weakly anomalous in one or more metals, and the significance of these values is also unknown.

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TABLE 2.
ANCHORAGE B-7,STREAM SEDIMENT

MAP NO.	SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
1	BAN253	7.0000	5.0000	2.0000	0.5000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	150.0000
2	BAN254	7.0000	5.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	300.0000
3	BAN133	10.0000	3.0000	1.5000	0.7000	1500.0000	0.5000	200.0000N	10.0000N	100.0000	300.0000
4	BAN135	7.0000	3.0000	1.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	300.0000
5	BAN134	10.0000	3.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	300.0000
6	BAN136	7.0000	1.5000	0.7000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	300.0000
7	AKC515	5.0000	3.0000	1.5000	0.5000	1000.0000	0.5000N	200.0000N	10.0000N	20.0000	500.0000
8	AKC585	7.0000	2.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
9	BAN120	7.0000	3.0000	2.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	300.0000
10	BAN121	7.0000	3.0000	5.0000	0.5000	2000.0000	0.5000N	200.0000N	10.0000N	50.0000	200.0000
11	BAN122	7.0000	3.0000	2.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	300.0000
12	BAN137	7.0000	1.5000	3.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	150.0000
13	BAN138	7.0000	5.0000	10.0000	0.5000	2000.0000	0.5000N	200.0000N	10.0000N	70.0000	150.0000
14	BAN140	10.0000	5.0000	5.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	150.0000
15	BAJ150	10.0000	1.5000	0.7000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
16	BAJ152	7.0000	2.0000	0.7000	0.5000	1000.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
17	BAJ151	10.0000	2.0000	0.7000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
18	BAJ153	10.0000	1.5000	0.7000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
19	BAJ149	7.0000	1.5000	0.7000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	100.0000	500.0000
20	BAN139	10.0000	2.0000	0.7000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	300.0000
21	BAN108	10.0000	2.0000	1.5000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	500.0000
22	BAN123	10.0000	7.0000	3.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	300.0000
23	BAN124	7.0000	5.0000	5.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	300.0000
24	BAN110	15.0000	3.0000	1.5000	1.0000	2000.0000	0.5000N	200.0000N	10.0000N	100.0000	500.0000
25	BAJ154	15.0000	2.0000	1.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
26	BAN109	10.0000	3.0000	2.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	500.0000
27	BAJ157	10.0000	2.0000	1.5000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	700.0000
28	BAJ156	7.0000	2.0000	1.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	500.0000
29	BAJ155	10.0000	3.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	700.0000
30	BAJ158	15.0000	2.0000	1.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
31	BAJ160	10.0000	2.0000	0.7000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
32	BAJ159	15.0000	3.0000	2.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	700.0000
33	BAJ162	10.0000	2.0000	1.5000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	700.0000
34	BAJ161	15.0000	2.0000	0.7000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
35	AKC540	10.0000	2.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
36	AKC541	7.0000	1.5000	1.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	500.0000
37	BAN119	10.0000	3.0000	2.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	300.0000
38	BAN118	10.0000	3.0000	1.5000	0.7000	2000.0000	0.5000N	200.0000N	10.0000N	70.0000	300.0000
39	BAN111	10.0000	3.0000	1.0000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	500.0000
40	BAN113	15.0000	2.0000	1.5000	1.0000G	2000.0000	0.5000N	200.0000N	10.0000N	70.0000	500.0000
41	BAN112	10.0000	1.5000	0.7000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	150.0000	500.0000
42	BAN115	10.0000	2.0000	0.7000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	500.0000
43	BAN114	15.0000	2.0000	1.0000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	700.0000
44	BAJ164	15.0000	1.5000	0.7000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
45	BAJ163	10.0000	1.5000	0.7000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	700.0000
46	AKC586	5.0000	1.5000	1.5000	0.5000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
47	AKC549	5.0000	1.5000	1.5000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	300.0000
48	AKC550	5.0000	1.5000	1.0000	0.5000	1000.0000	0.5000L	200.0000N	10.0000N	30.0000	300.0000
49	BAN125	10.0000	2.0000	2.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	300.0000
50	AKC545	5.0000	1.0000	0.7000	0.5000	700.0000	0.5000N	200.0000N	10.0000N	20.0000	300.0000

TABLE 2.
ANCHORAGE B-7,STREAM SEDIMENT

MAP NO.	SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
1	BAN253	1.0000L	10.0000N	20.0000N	30.0000	700.0000	15.0000	20.0000N	5.0000N	10.0000	150.0000
2	BAN254	1.0000L	10.0000N	20.0000N	30.0000	1000.0000	15.0000	20.0000N	5.0000N	10.0000	100.0000
3	BAN133	1.0000L	10.0000N	20.0000N	30.0000	2000.0000	100.0000	20.0000L	5.0000L	10.0000	150.0000
4	BAN135	1.0000	10.0000N	20.0000N	30.0000	1500.0000	70.0000	20.0000L	5.0000L	10.0000	100.0000
5	BAN134	1.0000L	10.0000N	20.0000N	30.0000	1500.0000	70.0000	20.0000L	5.0000L	10.0000	150.0000
6	BAN136	1.0000	10.0000N	20.0000N	30.0000	700.0000	70.0000	20.0000N	5.0000L	10.0000	100.0000
7	AKC515	1.0000L	10.0000N	20.0000N	20.0000	1000.0000	20.0000	20.0000N	5.0000N	10.0000L	150.0000
8	AKC585	1.5000	10.0000N	20.0000N	30.0000	150.0000	30.0000	20.0000L	5.0000L	15.0000	50.0000
9	BAN120	1.0000L	10.0000N	20.0000N	20.0000	150.0000	70.0000	20.0000L	5.0000N	10.0000	70.0000
10	BAN121	1.0000L	10.0000N	20.0000N	30.0000	300.0000	50.0000	20.0000N	5.0000L	10.0000	100.0000
11	BAN122	1.0000L	10.0000N	20.0000N	20.0000	150.0000	70.0000	20.0000N	5.0000N	10.0000	70.0000
12	BAN137	1.0000L	10.0000N	20.0000N	30.0000	700.0000	70.0000	20.0000L	5.0000L	10.0000	100.0000
13	BAN138	1.0000N	10.0000N	20.0000N	30.0000	1500.0000	100.0000	20.0000N	5.0000L	10.0000	150.0000
14	BAN140	1.0000N	10.0000N	20.0000N	30.0000	3000.0000	100.0000	20.0000N	5.0000L	10.0000	150.0000
15	BAJ150	1.0000	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000L	10.0000	100.0000
16	BAJ152	1.5000	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000L	10.0000	100.0000
17	BAJ151	1.0000	10.0000N	20.0000N	30.0000	200.0000	100.0000	20.0000N	5.0000L	10.0000	150.0000
18	BAJ153	1.0000	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000L	10.0000	100.0000
19	BAJ149	1.0000L	10.0000N	20.0000N	30.0000	300.0000	70.0000	20.0000N	5.0000L	10.0000	100.0000
20	BAN139	1.0000L	10.0000N	20.0000N	30.0000	1500.0000	70.0000	20.0000L	5.0000L	10.0000	100.0000
21	BAN108	1.0000L	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000N	10.0000	70.0000
22	BAN123	1.0000L	10.0000N	20.0000N	30.0000	3000.0000	100.0000	20.0000N	5.0000N	10.0000	150.0000
23	BAN124	1.0000L	10.0000N	20.0000N	30.0000	700.0000	70.0000	20.0000L	5.0000L	10.0000	100.0000
24	BAN110	1.0000L	10.0000N	20.0000N	30.0000	200.0000	100.0000	20.0000N	5.0000L	10.0000L	100.0000
25	BAJ154	1.0000	10.0000N	20.0000N	30.0000	700.0000	100.0000	20.0000N	5.0000L	10.0000	150.0000
26	BAN109	1.0000L	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000L	10.0000	70.0000
27	BAJ157	1.0000	10.0000N	20.0000N	30.0000	150.0000	100.0000	20.0000L	5.0000L	10.0000	70.0000
28	BAJ156	1.5000	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000L	10.0000	100.0000
29	BAJ155	1.0000	10.0000N	20.0000N	30.0000	150.0000	100.0000	20.0000N	5.0000L	10.0000	100.0000
30	BAJ158	1.0000	10.0000N	20.0000N	30.0000	200.0000	100.0000	20.0000N	5.0000L	10.0000	150.0000
31	BAJ160	1.5000	10.0000N	20.0000N	30.0000	150.0000	100.0000	20.0000N	5.0000N	10.0000	100.0000
32	BAJ159	1.0000L	10.0000N	20.0000N	30.0000	300.0000	70.0000	20.0000N	5.0000L	10.0000	100.0000
33	BAJ162	1.0000L	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000L	5.0000N	10.0000	70.0000
34	BAJ161	1.5000	10.0000N	20.0000N	30.0000	200.0000	100.0000	20.0000L	5.0000L	10.0000	150.0000
35	AKC540	1.0000L	10.0000N	20.0000N	20.0000	100.0000	30.0000	20.0000L	5.0000L	10.0000	30.0000
36	AKC541	1.0000L	10.0000N	20.0000N	20.0000	70.0000	20.0000	20.0000L	5.0000L	10.0000	30.0000
37	BAN119	1.0000L	10.0000N	20.0000N	30.0000	100.0000	100.0000	20.0000L	5.0000L	10.0000	70.0000
38	BAN118	1.0000L	10.0000N	20.0000N	30.0000	100.0000	70.0000	20.0000L	5.0000L	10.0000	50.0000
39	BAN111	1.0000	10.0000N	20.0000N	30.0000	300.0000	100.0000	20.0000N	5.0000L	10.0000	100.0000
40	BAN113	1.0000L	10.0000N	20.0000N	30.0000	150.0000	100.0000	20.0000L	5.0000L	10.0000	100.0000
41	BAN112	1.0000L	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000L	10.0000L	70.0000
42	BAN115	1.5000	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000L	10.0000L	100.0000
43	BAN114	1.0000	10.0000N	20.0000N	30.0000	150.0000	150.0000	20.0000L	5.0000L	10.0000	100.0000
44	BAJ164	1.5000	10.0000N	20.0000N	30.0000	150.0000	100.0000	50.0000	5.0000L	10.0000	150.0000
45	BAJ163	1.0000	10.0000N	20.0000N	30.0000	150.0000	100.0000	20.0000N	5.0000N	10.0000	100.0000
46	AKC586	1.0000	10.0000N	20.0000N	30.0000	150.0000	30.0000	20.0000L	5.0000L	10.0000	50.0000
47	AKC549	1.0000L	10.0000N	20.0000N	30.0000	150.0000	30.0000	20.0000L	5.0000L	10.0000	70.0000
48	AKC550	1.0000L	10.0000N	20.0000N	30.0000	100.0000	50.0000	20.0000L	5.0000L	10.0000	50.0000
49	BAN125	1.0000L	10.0000N	20.0000N	30.0000	300.0000	30.0000	20.0000L	5.0000N	10.0000	70.0000
50	AKC545	1.0000L	10.0000N	20.0000N	30.0000	150.0000	30.0000	20.0000N	5.0000L	10.0000	50.0000

TABLE 2.
ANCHORAGE B-7,STREAM SEDIMENT

MAP NO.	SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
1	BAN253	10.0000L	100.0000N	20.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000N	150.0000
2	BAN254	10.0000L	100.0000N	20.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000N	150.0000
3	BAN133	50.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000L	150.0000
4	BAN135	20.0000	100.0000N	20.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000L	150.0000
5	BAN134	10.0000	100.0000N	20.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000N	150.0000
6	BAN136	15.0000	100.0000N	20.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000L	200.0000
7	AKC515	10.0000N	100.0000N	20.0000	10.0000N	200.0000	200.0000	50.0000N	15.0000	200.0000L	70.0000
8	AKC585	10.0000	100.0000N	20.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000L	300.0000
9	BAN120	15.0000	100.0000N	20.0000	10.0000N	500.0000	300.0000	50.0000N	20.0000	200.0000L	200.0000
10	BAN121	15.0000	100.0000N	15.0000	10.0000N	500.0000	300.0000	50.0000N	20.0000	200.0000N	100.0000
11	BAN122	15.0000	100.0000N	20.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000L	150.0000
12	BAN137	15.0000	100.0000N	20.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000N	150.0000
13	BAN138	20.0000	100.0000N	30.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000N	150.0000
14	BAN140	15.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000L	100.0000
15	BAJ150	50.0000	100.0000N	30.0000	10.0000N	150.0000	200.0000	50.0000N	20.0000	200.0000L	200.0000
16	BAJ152	50.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000N	200.0000
17	BAJ151	70.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000N	200.0000
18	BAJ153	30.0000	100.0000N	30.0000	10.0000N	150.0000	200.0000	50.0000N	20.0000	200.0000N	150.0000
19	BAJ149	20.0000	100.0000N	30.0000	10.0000N	150.0000	200.0000	50.0000N	30.0000	200.0000L	150.0000
20	BAN139	50.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000N	300.0000
21	BAN108	15.0000	100.0000N	20.0000	10.0000N	500.0000	300.0000	50.0000N	15.0000	200.0000N	150.0000
22	BAN123	15.0000	100.0000N	30.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000L	150.0000
23	BAN124	15.0000	100.0000N	30.0000	10.0000N	500.0000	300.0000	50.0000N	30.0000	200.0000N	150.0000
24	BAN110	20.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000L	200.0000
25	BAJ154	50.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000L	200.0000
26	BAN109	20.0000	100.0000N	30.0000	10.0000N	500.0000	300.0000	50.0000N	20.0000	200.0000N	200.0000
27	BAJ157	30.0000	100.0000N	30.0000	10.0000N	500.0000	200.0000	50.0000N	20.0000	200.0000L	200.0000
28	BAJ156	30.0000	100.0000N	30.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000L	200.0000
29	BAJ155	50.0000	100.0000N	30.0000	10.0000N	500.0000	300.0000	50.0000N	15.0000	200.0000N	150.0000
30	BAJ158	50.0000	100.0000N	30.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000L	300.0000
31	BAJ160	50.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000N	200.0000
32	BAJ159	15.0000	100.0000N	50.0000	10.0000N	700.0000	300.0000	50.0000N	30.0000	200.0000N	300.0000
33	BAJ162	15.0000	100.0000N	30.0000	10.0000N	500.0000	300.0000	50.0000N	20.0000	200.0000L	150.0000
34	BAJ161	50.0000	100.0000N	30.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000L	200.0000
35	AKC540	10.0000	100.0000N	20.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000L	100.0000
36	AKC541	10.0000	100.0000N	15.0000	10.0000N	200.0000	200.0000	50.0000N	15.0000	200.0000N	100.0000
37	BAN119	20.0000	100.0000N	20.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000L	150.0000
38	BAN118	30.0000	100.0000N	20.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000L	150.0000
39	BAN111	30.0000	100.0000N	30.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000L	200.0000
40	BAN113	15.0000	100.0000N	30.0000	10.0000N	300.0000	300.0000	50.0000N	30.0000	200.0000N	200.0000
41	BAN112	30.0000	100.0000N	20.0000	10.0000N	150.0000	300.0000	50.0000N	20.0000	200.0000N	200.0000
42	BAN115	30.0000	100.0000N	20.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000N	200.0000
43	BAN114	30.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000N	300.0000
44	BAJ164	30.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000L	200.0000
45	BAJ163	20.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000L	200.0000
46	AKC586	10.0000	100.0000N	20.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000L	200.0000
47	AKC549	200.0000	100.0000N	15.0000	10.0000N	200.0000	200.0000	50.0000N	15.0000	200.0000L	100.0000
48	AKC550	30.0000	100.0000N	15.0000	10.0000N	200.0000	200.0000	50.0000N	15.0000	200.0000L	70.0000
49	BAN125	10.0000L	100.0000N	20.0000	10.0000N	500.0000	300.0000	50.0000N	20.0000	200.0000N	150.0000
50	AKC545	20.0000	100.0000N	15.0000	10.0000N	150.0000	150.0000	50.0000N	10.0000	200.0000L	70.0000

TABLE 2.
ANCHORAGE B-7, STREAM SEDIMENT

MAP NO.	SAMPLE	AU PPM *	HG PPM*
1	BAN253	0.0200L	0.18
2	BAN254	0.0200L	0.35
3	BAN133	0.0200L	1.00
4	BAN135	0.0200L	0.20
5	BAN134	0.0200L	0.30
6	BAN136	0.0200L	0.18
7	AKC515	0.0200L	0.04
8	AKC585	0.0200L	0.14
9	BAN120	0.0200L	0.22
10	BAN121	0.0200L	0.30
11	BAN122	0.0200L	0.30
12	BAN137	0.0200L	0.65
13	BAN138	0.0200L	0.45
14	BAN140	0.0200L	0.40
15	BAJ150	0.0400L	0.75
16	BAJ152	0.1000L	0.60
17	BAJ151	0.1000L	0.20
18	BAJ153	0.1000L	0.50
19	BAJ149	0.0400L	0.20
20	BAN139	0.0200L	0.11
21	BAN108	0.0200L	0.08
22	BAN123	0.0200L	0.30
23	BAN124	0.0200L	0.10
24	BAN110	0.1000L	0.16
25	BAJ154	0.0200L	1.20
26	BAN109	0.0200L	0.24
27	BAJ157	0.0400	0.35
28	BAJ156	0.0200L	0.50
29	BAJ155	0.0200L	0.28
30	BAJ158	0.0200L	0.60
31	BAJ160	0.0200L	0.20
32	BAJ159	0.0400	0.26
33	BAJ162	0.0200L	0.15
34	BAJ161	0.0400L	0.40
35	AKC540	0.0200L	0.60
36	AKC541	0.0200L	0.10
37	BAN119	0.0200L	0.60
38	BAN118	0.0200L	0.60
39	BAN111	0.0200L	0.03
40	BAN113	0.0200L	0.08
41	BAN112	0.0200L	0.11
42	BAN115	0.2000L	0.50
43	BAN114	0.0200L	0.10
44	BAJ164	0.0200L	0.45
45	BAJ163	0.0400L	0.30
46	AKC586	0.0200L	0.14
47	AKC549	0.0200L	0.10
48	AKC550	0.0200L	0.12
49	BAN125	0.0200L	0.22
50	AKC545	0.0200L	0.04

*Atomic absorption analyses.

TABLE 2.
ANCHORAGE B-7,STREAM SEDIMENT

MAP NO.	SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
51	BAN229	7.0000	1.5000	1.5000	0.7000	700.0000	0.5000N	200.0000N	10.0000N	50.0000	300.0000
52	AKC546	3.0000	1.0000	0.7000	0.3000	700.0000	0.5000	200.0000N	10.0000N	20.0000	300.0000
53	BAN227	7.0000	1.5000	1.0000	0.5000	1000.0000	0.5000L	200.0000N	10.0000N	50.0000	300.0000
54	BAN214	10.0000	1.5000	0.7000	0.5000	1000.0000	0.5000	200.0000N	10.0000N	70.0000	300.0000
55	BAN228	10.0000	1.5000	1.0000	0.7000	1500.0000	0.5000L	200.0000N	10.0000N	100.0000	300.0000
56	BAN126	10.0000	1.5000	0.7000	0.5000	1000.0000	0.5000L	200.0000N	10.0000N	100.0000	300.0000
57	BAN127	10.0000	3.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	300.0000
58	BAN129	7.0000	1.5000	0.7000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	300.0000

TABLE 2.
ANCHORAGE B-7,STREAM SEDIMENT

MAP NO.	SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
51	BAN229	1.0000L	10.0000N	20.0000N	20.0000	70.0000	15.0000	20.0000L	5.0000L	10.0000	30.0000
52	AKC546	1.0000L	10.0000N	20.0000N	20.0000	100.0000	50.0000	20.0000N	5.0000N	10.0000	50.0000
53	BAN227	1.0000	10.0000N	20.0000N	20.0000	100.0000	70.0000	20.0000N	5.0000L	10.0000	50.0000
54	BAN214	1.0000	10.0000N	20.0000N	30.0000	150.0000	50.0000	20.0000N	5.0000L	10.0000	70.0000
55	BAN228	1.0000	10.0000N	20.0000N	30.0000	150.0000	50.0000	20.0000N	5.0000L	10.0000	70.0000
56	BAN126	1.0000L	10.0000N	20.0000N	30.0000	150.0000	100.0000	20.0000N	5.0000L	10.0000	70.0000
57	BAN127	1.0000	10.0000N	20.0000N	20.0000	150.0000	100.0000	20.0000L	5.0000L	10.0000	70.0000
58	BAN129	1.0000L	10.0000N	20.0000N	15.0000	150.0000	50.0000	20.0000N	5.0000L	10.0000L	70.0000

TABLE 2.
ANCHORAGE B-7,STREAM SEDIMENT

MAP NO.	SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
51	BAN229	30.0000	100.0000N	15.0000	10.0000N	500.0000	300.0000	50.0000N	15.0000	200.0000L	150.0000
52	AKC546	30.0000	100.0000N	15.0000	10.0000N	150.0000	150.0000	50.0000N	15.0000	200.0000L	70.0000
53	BAN227	30.0000	100.0000N	15.0000	10.0000N	300.0000	200.0000	50.0000N	15.0000	200.0000N	150.0000
54	BAN214	30.0000	100.0000N	15.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000L	200.0000
55	BAN228	50.0000	100.0000N	20.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000L	200.0000
56	BAN126	30.0000	100.0000N	15.0000	10.0000N	200.0000	300.0000	50.0000N	15.0000	200.0000L	150.0000
57	BAN127	30.0000	100.0000N	20.0000	10.0000N	500.0000	300.0000	50.0000N	20.0000	200.0000L	150.0000
58	BAN129	15.0000	100.0000N	15.0000	10.0000N	200.0000	200.0000	50.0000N	15.0000	200.0000N	200.0000

TABLE 2.
ANCHORAGE B-7,STREAM SEDIMENT

MAP NO.	SAMPLE	AU PPM*	HG PPM*
51	BAN229	0.0200L	0.28
52	AKC546	0.0200L	0.10
53	BAN227	0.0200L	0.20
54	BAN214	0.0200L	0.20
55	BAN228	0.0200L	0.35
56	BAN126	0.0200L	0.90
57	BAN127	0.0200L	0.35
58	BAN129	0.0200L	0.28

*Atomic absorption analyses.

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 1 (FE PCT)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E-02 -	5.6E-02	0	0	0.0	0.0
5.6E-02 -	8.3E-02	0	0	0.0	0.0
8.3E-02 -	1.2E-01	0	0	0.0	0.0
1.2E-01 -	1.8E-01	0	0	0.0	0.0
1.8E-01 -	2.6E-01	0	0	0.0	0.0
2.6E-01 -	3.8E-01	0	0	0.0	0.0
3.8E-01 -	5.6E-01	0	0	0.0	0.0
5.6E-01 -	8.3E-01	0	0	0.0	0.0
8.3E-01 -	1.2E 00	0	0	0.0	0.0
1.2E 00 -	1.8E 00	0	0	0.0	0.0
1.8E 00 -	2.6E 00	0	0	0.0	0.0
2.6E 00 -	3.8E 00	1	1	1.72	1.72
3.8E 00 -	5.6E 00	5	6	8.62	10.34
5.6E 00 -	8.3E 00	18	24	31.03	41.38
8.3E 00 -	1.2E 01	26	50	44.83	86.21
1.2E 01 -	1.8E 01	8	58	13.79	100.00

HISTOGRAM FOR COLUMN 1 (FE PCT)

25 21

```
      3.0E 00 XX
      5.0E 00 XXXXXXXXX
      7.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      1.5E 01 XXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 1.50000E 01
MINIMUM = 3.00000E 00
GEOMETRIC MEAN = 8.73457E 00
GEOMETRIC DEVIATION = 1.39797E 00

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 2 (MG PCT)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E-02 -	2.6E-02	0	0	0.0	0.0
2.6E-02 -	3.8E-02	0	0	0.0	0.0
3.8E-02 -	5.6E-02	0	0	0.0	0.0
5.6E-02 -	8.3E-02	0	0	0.0	0.0
8.3E-02 -	1.2E-01	0	0	0.0	0.0
1.2E-01 -	1.8E-01	0	0	0.0	0.0
1.8E-01 -	2.6E-01	0	0	0.0	0.0
2.6E-01 -	3.8E-01	0	0	0.0	0.0
3.8E-01 -	5.6E-01	0	0	0.0	0.0
5.6E-01 -	8.3E-01	0	0	0.0	0.0
8.3E-01 -	1.2E 00	2	2	3.45	3.45
1.2E 00 -	1.8E 00	18	20	31.03	34.48
1.8E 00 -	2.6E 00	17	37	29.31	63.79
2.6E 00 -	3.8E 00	15	52	25.86	89.66
3.8E 00 -	5.6E 00	5	57	8.62	98.28
5.6E 00 -	8.3E 00	1	58	1.72	100.00

HISTOGRAM FOR COLUMN 2 (MG PCT)

```
      1.0E 00 XXX
      1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      2.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
      3.0E 00 XXXXXXXXXXXXXXXXXXXXXXXX
      5.0E 00 XXXXXXXXX
      7.0E 00 XX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 7.00000E 00
MINIMUM = 1.00000E 00
GEOMETRIC MEAN = 2.19331E 00
GEOMETRIC DEVIATION = 1.52626E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 3 (CA PCT)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E-02 -	5.6E-02	0	0	0.0	0.0
5.6E-02 -	8.3E-02	0	0	0.0	0.0
8.3E-02 -	1.2E-01	0	0	0.0	0.0
1.2E-01 -	1.8E-01	0	0	0.0	0.0
1.8E-01 -	2.6E-01	0	0	0.0	0.0
2.6E-01 -	3.8E-01	0	0	0.0	0.0
3.8E-01 -	5.6E-01	0	0	0.0	0.0
5.6E-01 -	8.3E-01	18	18	31.03	31.03
8.3E-01 -	1.2E 00	10	28	17.24	48.28
1.2E 00 -	1.8E 00	17	45	29.31	77.59
1.8E 00 -	2.6E 00	7	52	12.07	89.66
2.6E 00 -	3.8E 00	2	54	3.45	93.10
3.8E 00 -	5.6E 00	3	57	5.17	98.28
5.6E 00 -	8.3E 00	0	57	0.0	98.28
8.3E 00 -	1.2E 01	1	58	1.72	100.00

HISTOGRAM FOR COLUMN 3 (CA PCT)

```
      7.0E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      1.0E 00 XXXXXXXXXXXXXXXX
      1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      2.0E 00 XXXXXXXXXXXX
      3.0E 00 XXX
      5.0E 00 XXXXX
      7.0E 00
      1.0E 01 XX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 1.00000E 01
MINIMUM = 7.00000E-01
GEOMETRIC MEAN = 1.28741E 00
GEOMETRIC DEVIATION = 1.81445E 00

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 4 (TI PCT)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E-03 - 2.6E-03	0	0	0.0	0.0
2.6E-03 - 3.8E-03	0	0	0.0	0.0
3.8E-03 - 5.6E-03	0	0	0.0	0.0
5.6E-03 - 8.3E-03	0	0	0.0	0.0
8.3E-03 - 1.2E-02	0	0	0.0	0.0
1.2E-02 - 1.8E-02	0	0	0.0	0.0
1.8E-02 - 2.6E-02	0	0	0.0	0.0
2.6E-02 - 3.8E-02	0	0	0.0	0.0
3.8E-02 - 5.6E-02	0	0	0.0	0.0
5.6E-02 - 8.3E-02	0	0	0.0	0.0
8.3E-02 - 1.2E-01	0	0	0.0	0.0
1.2E-01 - 1.8E-01	0	0	0.0	0.0
1.8E-01 - 2.6E-01	0	0	0.0	0.0
2.6E-01 - 3.8E-01	1	1	1.72	1.72
3.8E-01 - 5.6E-01	22	23	37.93	39.66
5.6E-01 - 8.3E-01	28	51	48.28	87.93
8.3E-01 - 1.2E 00	6	57	10.34	98.28

HISTOGRAM FOR COLUMN 4 (TI PCT)

```
      3.0E-01 XX
      5.0E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      7.0E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      1.0E 00 XXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	1	57
0.0	0.0			0.0	1.72	

MAXIMUM = 1.00000E 00
MINIMUM = 3.00000E-01
GEOMETRIC MEAN = 6.28851E-01
GEOMETRIC DEVIATION = 1.27555E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 5 (MN PPM)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	0	0	0.0	0.0
1.2E 01 - 1.8E 01	0	0	0.0	0.0
1.8E 01 - 2.6E 01	0	0	0.0	0.0
2.6E 01 - 3.8E 01	0	0	0.0	0.0
3.8E 01 - 5.6E 01	0	0	0.0	0.0
5.6E 01 - 8.3E 01	0	0	0.0	0.0
8.3E 01 - 1.2E 02	0	0	0.0	0.0
1.2E 02 - 1.8E 02	0	0	0.0	0.0
1.8E 02 - 2.6E 02	0	0	0.0	0.0
2.6E 02 - 3.8E 02	0	0	0.0	0.0
3.8E 02 - 5.6E 02	0	0	0.0	0.0
5.6E 02 - 8.3E 02	3	3	5.17	5.17
8.3E 02 - 1.2E 03	14	17	24.14	29.31
1.2E 03 - 1.8E 03	36	53	62.07	91.38
1.8E 03 - 2.6E 03	5	58	8.62	100.00

HISTOGRAM FOR COLUMN 5 (MN PPM)

```
7.0E 02 XXXXX
1.0E 03 XXXXXXXXXXXXXXXXXXXXXXXX
1.5E 03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 03 XXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 2.00000E 03
MINIMUM = 7.00000E 02
GEOMETRIC MEAN = 1.34039E 03
GEOMETRIC DEVIATION = 1.29072E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 9 (B PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	3	3	5.17	5.17
2.6E 01 -	3.8E 01	3	6	5.17	10.34
3.8E 01 -	5.6E 01	9	15	15.52	25.86
5.6E 01 -	8.3E 01	14	29	24.14	50.00
8.3E 01 -	1.2E 02	19	48	32.76	82.76
1.2E 02 -	1.8E 02	10	58	17.24	100.00

HISTOGRAM FOR COLUMN 9 (B PPM)

```
       2.0E 01 XXXXX
       3.0E 01 XXXXX
       5.0E 01 XXXXXXXXXXXXXXX
       7.0E 01 XXXXXXXXXXXXXXXXXXXXXXX
       1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
       1.5E 02 XXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 1.50000E 02
MINIMUM = 2.00000E 01
GEOMETRIC MEAN = 7.63933E 01
GEOMETRIC DEVIATION = 1.68921E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 10 (BA PPM)

LIMITS LOWER	- UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0.0	0.0
5.6E 01 -	8.3E 01	0	0	0.0	0.0
8.3E 01 -	1.2E 02	0	0	0.0	0.0
1.2E 02 -	1.8E 02	4	4	6.90	6.90
1.8E 02 -	2.6E 02	1	5	1.72	8.62
2.6E 02 -	3.8E 02	24	29	41.38	50.00
3.8E 02 -	5.6E 02	11	40	18.97	68.97
5.6E 02 -	8.3E 02	18	58	31.03	100.00

HISTOGRAM FOR COLUMN 10 (BA PPM)

```
1.5E 02 XXXXXXX
2.0E 02 XX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXXXXXXXXXXXX
7.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 7.00000E 02
MINIMUM = 1.50000E 02
GEOMETRIC MEAN = 4.06997E 02
GEOMETRIC DEVIATION = 1.59662E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 11 (BE PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E-01 -	1.2E 00	17	17	29.31	29.31
1.2E 00 -	1.8E 00	7	24	12.07	41.38

HISTOGRAM FOR COLUMN 11 (BE PPM)

1.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.5E 00 XXXXXXXXXXXX

N	L	H	B	T	G	ANALYTICAL VALUES
2	32	0	0	0	0	24
3.45	55.17			0.0	0.0	

MAXIMUM = 1.50000E 00
MINIMUM = 1.00000E 00
GEOMETRIC MEAN = 1.12554E 00
GEOMETRIC DEVIATION = 1.20715E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 14 (CO PPM)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	0	0	0.0	0.0
5.6E 00 - 8.3E 00	0	0	0.0	0.0
8.3E 00 - 1.2E 01	0	0	0.0	0.0
1.2E 01 - 1.8E 01	1	1	1.72	1.72
1.8E 01 - 2.6E 01	9	10	15.52	17.24
2.6E 01 - 3.8E 01	48	58	82.76	100.00

HISTOGRAM FOR COLUMN 14 (CO PPM)

```
1.5E 01 XX
2.0E 01 XXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 3.00000E 01
MINIMUM = 1.50000E 01
GEOMETRIC MEAN = 2.78355E 01
GEOMETRIC DEVIATION = 1.18486E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 15 (CR PPM)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	0	0	0.0	0.0
5.6E 00 - 8.3E 00	0	0	0.0	0.0
8.3E 00 - 1.2E 01	0	0	0.0	0.0
1.2E 01 - 1.8E 01	0	0	0.0	0.0
1.8E 01 - 2.6E 01	0	0	0.0	0.0
2.6E 01 - 3.8E 01	0	0	0.0	0.0
3.8E 01 - 5.6E 01	0	0	0.0	0.0
5.6E 01 - 8.3E 01	2	2	3.45	3.45
8.3E 01 - 1.2E 02	6	8	10.34	13.79
1.2E 02 - 1.8E 02	27	35	46.55	60.34
1.8E 02 - 2.6E 02	4	39	6.90	67.24
2.6E 02 - 3.8E 02	5	44	8.62	75.86
3.8E 02 - 5.6E 02	0	44	0.0	75.86
5.6E 02 - 8.3E 02	5	49	8.62	84.48
8.3E 02 - 1.2E 03	2	51	3.45	87.93
1.2E 03 - 1.8E 03	4	55	6.90	94.83
1.8E 03 - 2.6E 03	1	56	1.72	96.55
2.6E 03 - 3.8E 03	2	58	3.45	100.00

HISTOGRAM FOR COLUMN 15 (CR PPM)

```
7.0E 01 XXX
1.0E 02 XXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXXXXX
3.0E 02 XXXXXXXXX
5.0E 02
7.0E 02 XXXXXXXXX
1.0E 03 XXX
1.5E 03 XXXXXXX
2.0E 03 XX
3.0E 03 XXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 3.00000E 03
MINIMUM = 7.00000E 01
GEOMETRIC MEAN = 2.51380E 02
GEOMETRIC DEVIATION = 2.65507E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 16 (CU PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 -	5.6E 00	0	0	0.0	0.0
5.6E 00 -	8.3E 00	0	0	0.0	0.0
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	3	3	5.17	5.17
1.8E 01 -	2.6E 01	2	5	3.45	8.62
2.6E 01 -	3.8E 01	6	11	10.34	18.97
3.8E 01 -	5.6E 01	6	17	10.34	29.31
5.6E 01 -	8.3E 01	21	38	36.21	65.52
8.3E 01 -	1.2E 02	19	57	32.76	98.28
1.2E 02 -	1.8E 02	1	58	1.72	100.00

HISTOGRAM FOR COLUMN 16 (CU PPM)

```
      1.5E 01 XXXXX
      2.0E 01 XXX
      3.0E 01 XXXXXXXXXX
      5.0E 01 XXXXXXXXXX
      7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      1.5E 02 XX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 1.50000E 02
MINIMUM = 1.50000E 01
GEOMETRIC MEAN = 6.23728E 01
GEOMETRIC DEVIATION = 1.73961E 00

```
A470   GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71)                                  DATE   4/21/71

     TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN    19 ( NB PPM )

       LIMITS           FREQ  FREQ   PERCENT   PERCENT
    LOWER - UPPER              CUM     FREQ    FREQ CUM
  8.3E 00 -    1.2E 01    52    52     89.66     89.66
  1.2E 01 -    1.8E 01     1    53      1.72     91.38

HISTOGRAM FOR COLUMN    19 ( NB PPM )

      1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      1.5E 01 XX

                                                             ANALYTICAL
     N         L         H         B         T         G      VALUES
     0         5         0         0         0         0          53
    0.0       8.62                          0.0       0.0

MAXIMUM =  1.50000E 01
MINIMUM =  1.00000E 01
GEOMETRIC MEAN =  1.00765E 01
GEOMETRIC DEVIATION =  1.05784E 00
```

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 20 (NI PPM)

LIMITS LOWER	- UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 -	5.6E 00	0	0	0.0	0.0
5.6E 00 -	8.3E 00	0	0	0.0	0.0
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	3	3	5.17	5.17
3.8E 01 -	5.6E 01	7	10	12.07	17.24
5.6E 01 -	8.3E 01	15	25	25.86	43.10
8.3E 01 -	1.2E 02	21	46	36.21	79.31
1.2E 02 -	1.8E 02	12	58	20.69	100.00

HISTOGRAM FOR COLUMN 20 (NI PPM)

```
3.0E 01 XXXXX
5.0E 01 XXXXXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 1.50000E 02
MINIMUM = 3.00000E 01
GEOMETRIC MEAN = 8.57019E 01
GEOMETRIC DEVIATION = 1.52704E 00

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 21 (PB PPM)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	5	5	8.62	8.62
1.2E 01 - 1.8E 01	13	18	22.41	31.03
1.8E 01 - 2.6E 01	8	26	13.79	44.83
2.6E 01 - 3.8E 01	16	42	27.59	72.41
3.8E 01 - 5.6E 01	10	52	17.24	89.66
5.6E 01 - 8.3E 01	1	53	1.72	91.38
8.3E 01 - 1.2E 02	0	53	0.0	91.38
1.2E 02 - 1.8E 02	0	53	0.0	91.38
1.8E 02 - 2.6E 02	1	54	1.72	93.10

HISTOGRAM FOR COLUMN 21 (PB PPM)

```
1.0E 01 XXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXXXXXX
7.0E 01 XX
1.0E 02
1.5E 02
2.0E 02 XX
```

N	L	H	B	T	G	ANALYTICAL VALUES
1	3	0	0	0	0	54
1.72	5.17			0.0	0.0	

MAXIMUM = 2.00000E 02
MINIMUM = 1.00000E 01
GEOMETRIC MEAN = 2.49766E 01
GEOMETRIC DEVIATION = 1.81158E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 23 (SC PPM)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	0	0	0.0	0.0
5.6E 00 - 8.3E 00	0	0	0.0	0.0
8.3E 00 - 1.2E 01	0	0	0.0	0.0
1.2E 01 - 1.8E 01	11	11	18.97	18.97
1.8E 01 - 2.6E 01	20	31	34.48	53.45
2.6E 01 - 3.8E 01	26	57	44.83	98.28
3.8E 01 - 5.6E 01	1	58	1.72	100.00

HISTOGRAM FOR COLUMN 23 (SC PPM)

```
1.5E 01 XXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 5.00000E 01
MINIMUM = 1.50000E 01
GEOMETRIC MEAN = 2.30742E 01
GEOMETRIC DEVIATION = 1.33838E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 25 (SR PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 01 -	1.2E 02	0	0	0.0	0.0
1.2E 02 -	1.8E 02	6	6	10.34	10.34
1.8E 02 -	2.6E 02	22	28	37.93	48.28
2.6E 02 -	3.8E 02	18	46	31.03	79.31
3.8E 02 -	5.6E 02	11	57	18.97	98.28
5.6E 02 -	8.3E 02	1	58	1.72	100.00

HISTOGRAM FOR COLUMN 25 (SR PPM)

```
1.5E 02 XXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXXXXXXXXXXXX
7.0E 02 XX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 7.00000E 02
MINIMUM = 1.50000E 02
GEOMETRIC MEAN = 2.67669E 02
GEOMETRIC DEVIATION = 1.49884E 00

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 26 (V PPM)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	0	0	0.0	0.0
1.2E 01 - 1.8E 01	0	0	0.0	0.0
1.8E 01 - 2.6E 01	0	0	0.0	0.0
2.6E 01 - 3.8E 01	0	0	0.0	0.0
3.8E 01 - 5.6E 01	0	0	0.0	0.0
5.6E 01 - 8.3E 01	0	0	0.0	0.0
8.3E 01 - 1.2E 02	0	0	0.0	0.0
1.2E 02 - 1.8E 02	2	2	3.45	3.45
1.8E 02 - 2.6E 02	17	19	29.31	32.76
2.6E 02 - 3.8E 02	39	58	67.24	100.00

HISTOGRAM FOR COLUMN 26 (V PPM)

```
1.5E 02 XXX
2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 3.00000E 02
MINIMUM = 1.50000E 02
GEOMETRIC MEAN = 2.60087E 02
GEOMETRIC DEVIATION = 1.23682E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/21/71

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 28 (Y PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	1	1	1.72	1.72
1.2E 01 -	1.8E 01	11	12	18.97	20.69
1.8E 01 -	2.6E 01	34	46	58.62	79.31
2.6E 01 -	3.8E 01	12	58	20.69	100.00

HISTOGRAM FOR COLUMN 28 (Y PPM)

```
1.0E 01 XX
1.5E 01 XXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 3.00000E 01
MINIMUM = 1.00000E 01
GEOMETRIC MEAN = 2.03503E 01
GEOMETRIC DEVIATION = 1.27425E 00

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

FREQUENCY TABLE FOR COLUMN 30 (ZR PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0.0	0.0
5.6E 01 -	8.3E 01	4	4	6.90	6.90
8.3E 01 -	1.2E 02	5	9	8.62	15.52
1.2E 02 -	1.8E 02	22	31	37.93	53.45
1.8E 02 -	2.6E 02	22	53	37.93	91.38
2.6E 02 -	3.8E 02	5	58	8.62	100.00

HISTOGRAM FOR COLUMN 30 (ZR PPM)

```
7.0E 01 XXXXXXX
1.0E 02 XXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	58
0.0	0.0			0.0	0.0	

MAXIMUM = 3.00000E 02
MINIMUM = 7.00000E 01
GEOMETRIC MEAN = 1.62712E 02
GEOMETRIC DEVIATION = 1.41916E 00

TITLE
ANCHORAGE B-7,STREAM SEDIMENT

IN THE COMPUTATIONS PERFORMED TO PRODUCE THE FOLLOWING TABLE OF GEOMETRIC MEANS AND DEVIATIONS, ALL ELEMENTS ARE IGNORED WHERE ONE OR MORE OF THE UNQUALIFIED DATA VALUES IS LESS THAN THE ANALYTICAL LIMIT OF DETECTION SPECIFIED ON INPUT OR WHERE ANY DATA VALUES ARE QUALIFIED WITH THE G (GREATER THAN) CODE. DATA VALUES QUALIFIED WITH B OR H ARE NOT USED IN THE COMPUTATIONS. WHERE NONE OF THE DATA VALUES FOR AN ELEMENT ARE QUALIFIED THE MEAN AND DEVIATION SHOULD BE THE SAME AS THOSE GIVEN IN THE PRECEDING SECTION. WHERE DATA ARE QUALIFIED WITH THE CODES N, L, OR T, THE ESTIMATES OF GEOMETRIC MEAN AND DEVIATION ARE BASED ON A METHOD BY A. J. COHEN FOR TREATING CENSORED DISTRIBUTIONS. THE APPLICATION OF THIS METHOD TO GEOCHEMICAL PROBLEMS IS DESCRIBED IN USGS PROFESSIONAL PAPER 574-B. THE ESTIMATES ARE UNBIASED IN A STRICT SENSE ONLY WHERE THE DATA ARE DERIVED FROM A LOGNORMAL PARENT POPULATION, BUT EXPERIMENTS HAVE SHOWN THAT LARGE DEPARTURES FROM THIS REQUIREMENT MAY NOT GREATLY INVALIDATE THE RESULTS ACCEPTANCE AND USE OF THE ESTIMATES, HOWEVER, IS THE RESPONSIBILITY OF THE INDIVIDUAL.

ELEMENT	N	L	H	B	T	G	ANALYTICAL VALUES
FE PCT	0	0	0	0	0	0	58
MG PCT	0	0	0	0	0	0	58
CA PCT	0	0	0	0	0	0	58
TI PCT	0	0	0	0	0	1	57
MN PPM	0	0	0	0	0	0	58
B PPM	0	0	0	0	0	0	58
BA PPM	0	0	0	0	0	0	58
BE PPM	2	32	0	0	0	0	24
CO PPM	0	0	0	0	0	0	58
CR PPM	0	0	0	0	0	0	58
CU PPM	0	0	0	0	0	0	58
NB PPM	0	5	0	0	0	0	53
NI PPM	0	0	0	0	0	0	58
PB PPM	1	3	0	0	0	0	54
SC PPM	0	0	0	0	0	0	58
SR PPM	0	0	0	0	0	0	58
V PPM	0	0	0	0	0	0	58
Y PPM	0	0	0	0	0	0	58
ZR PPM	0	0	0	0	0	0	58

ELEMENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS
FE PCT	8.734562	1.40	58 SAMPLES AND 58 ANALYTICAL VALUES.
MG PCT	2.193311	1.53	58 SAMPLES AND 58 ANALYTICAL VALUES.
CA PCT	1.287414	1.81	58 SAMPLES AND 58 ANALYTICAL VALUES.
TI PCT	********	******	1 GREATER THAN VALUES. NO COMPUTATIONS.
MN PPM	1340.388916	1.29	58 SAMPLES AND 58 ANALYTICAL VALUES.
B PPM	76.393127	1.69	58 SAMPLES AND 58 ANALYTICAL VALUES.
BA PPM	406.995605	1.60	58 SAMPLES AND 58 ANALYTICAL VALUES.
BE PPM	0.768279	1.48	34 NOT DETECTED, LESS THAN, OR TRACE VALUES. 24 REPORTED VALUES.
CO PPM	27.835419	1.18	58 SAMPLES AND 58 ANALYTICAL VALUES.
CR PPM	251.379608	2.66	58 SAMPLES AND 58 ANALYTICAL VALUES.
CU PPM	62.372726	1.74	58 SAMPLES AND 58 ANALYTICAL VALUES.
NB PPM	9.878902	1.09	5 NOT DETECTED, LESS THAN, OR TRACE VALUES. 53 REPORTED VALUES.
NI PPM	85.701675	1.53	58 SAMPLES AND 58 ANALYTICAL VALUES.
PB PPM	22.668289	1.97	4 NOT DETECTED, LESS THAN, OR TRACE VALUES. 54 REPORTED VALUES.
SC PPM	23.074127	1.34	58 SAMPLES AND 58 ANALYTICAL VALUES.
SR PPM	267.668457	1.50	58 SAMPLES AND 58 ANALYTICAL VALUES.

V PPM	260.086914	1.24	58 SAMPLES AND	58 ANALYTICAL VALUES.
Y PPM	20.350281	1.27	58 SAMPLES AND	58 ANALYTICAL VALUES.
ZR PPM	162.711868	1.42	58 SAMPLES AND	58 ANALYTICAL VALUES.

TABLE 3.
ANCHORAGE B-7,ROCK SAMPLES

MAP NO.	SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
1r	BAJ101	7.0000	3.0000	2.0000	0.3000	1500.0000	0.5000N	200.0000N	10.0000N	15.0000	20.0000N
2r	BAN011	15.0000	7.0000	7.0000	0.7000	3000.0000	0.5000N	200.0000N	10.0000N	50.0000	300.0000
3r	BAN010	15.0000	3.0000	5.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	20.0000	50.0000
4r	BAN009	15.0000	7.0000	10.0000	0.7000	2000.0000	0.5000N	200.0000N	10.0000N	30.0000	300.0000
5r	BAN156	7.0000	3.0000	3.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	10.0000	150.0000
6r	AKC036	5.0000	1.5000	1.5000	0.3000	700.0000	0.5000N	200.0000N	10.0000N	10.0000	150.0000
7r	AKC035	15.0000	5.0000	2.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	15.0000	100.0000
8r	BAN173	15.0000	10.0000G	0.0500L	0.0050	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	20.0000
9r	BAN168	10.0000	10.0000G	0.2000	0.0070	1500.0000	0.5000N	200.0000N	10.0000N	10.0000L	20.0000
10r	BAN153	10.0000	7.0000	7.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	10.0000	70.0000
11r	BAN152	10.0000	7.0000	7.0000	0.7000	2000.0000	0.5000L	200.0000N	10.0000N	10.0000	150.0000
12r	BAN154	7.0000	3.0000	5.0000	0.3000	1500.0000	0.5000N	200.0000N	10.0000N	10.0000L	70.0000
13r	BAN205	7.0000	10.0000G	20.0000	0.0700	1500.0000	0.5000N	200.0000N	10.0000N	10.0000L	20.0000L
14r	BAN203	15.0000	10.0000G	10.0000	0.0500	2000.0000	0.5000N	200.0000N	10.0000N	10.0000	20.0000L
15r	BAN176	7.0000	10.0000G	15.0000	0.0700	1000.0000	0.5000N	200.0000N	10.0000N	10.0000	20.0000L
16r	AKC039	3.0000	1.5000	0.7000	0.2000	300.0000	0.5000N	200.0000N	10.0000N	30.0000	150.0000
17r	AKC012	3.0000	1.5000	5.0000	0.3000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	300.0000
18r	AKC030	3.0000	1.0000	0.3000	0.2000	1000.0000	0.5000N	200.0000N	10.0000N	150.0000	700.0000
19r	AKC031	5.0000	2.0000	1.5000	0.5000	700.0000	0.5000N	200.0000N	10.0000N	50.0000	3000.0000
20r	AKC042	3.0000	1.0000	0.7000	0.2000	200.0000	0.5000N	200.0000N	10.0000N	30.0000	300.0000
21r	BAN013	7.0000	1.5000	1.0000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	500.0000
22r	AKC032	7.0000	1.5000	1.5000	0.7000	700.0000	0.5000N	200.0000N	10.0000N	30.0000	700.0000
23r	AKC034	3.0000	1.0000	0.5000	0.1500	300.0000	1.5000	200.0000N	10.0000N	30.0000	200.0000
24r	AKC047	7.0000	1.5000	0.7000	0.7000	700.0000	0.5000L	200.0000N	10.0000N	20.0000	1000.0000

TABLE 3.
ANCHORAGE B-7,ROCK SAMPLES

MAP NO.	SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
1r	BAJ101	1.0000N	10.0000N	20.0000N	30.0000	70.0000	70.0000	20.0000N	5.0000L	10.0000L	30.0000
2r	BAN011	1.0000N	10.0000N	20.0000N	150.0000	300.0000	150.0000	20.0000N	5.0000L	10.0000L	100.0000
3r	BAN010	1.0000N	10.0000N	20.0000N	30.0000	20.0000	70.0000	20.0000N	5.0000N	10.0000L	10.0000
4r	BAN009	1.0000N	10.0000N	20.0000N	50.0000	300.0000	150.0000	20.0000N	5.0000L	10.0000L	70.0000
5r	BAN156	1.0000N	10.0000N	20.0000N	20.0000	30.0000	100.0000	20.0000N	5.0000L	10.0000L	10.0000
6r	AKC036	1.0000N	10.0000N	20.0000N	15.0000	15.0000	50.0000	20.0000N	5.0000N	10.0000L	30.0000
7r	AKC035	1.0000N	10.0000N	20.0000N	70.0000	20.0000	70.0000	20.0000N	5.0000L	10.0000	30.0000
8r	BAN173	1.0000N	10.0000N	20.0000N	300.0000	3000.0000	5.0000	20.0000N	5.0000L	10.0000L	3000.0000
9r	BAN168	1.0000N	10.0000N	20.0000N	300.0000	5000.0000G	5.0000L	20.0000N	5.0000L	10.0000L	2000.0000
10r	BAN153	1.0000N	10.0000N	20.0000N	30.0000	150.0000	150.0000	20.0000N	5.0000L	10.0000	100.0000
11r	BAN152	1.0000N	10.0000N	20.0000N	30.0000	70.0000	200.0000	20.0000N	5.0000L	10.0000	70.0000
12r	BAN154	1.0000N	10.0000N	20.0000N	20.0000	50.0000	70.0000	20.0000N	5.0000N	10.0000	30.0000
13r	BAN205	1.0000N	10.0000N	20.0000N	50.0000	5000.0000G	300.0000	20.0000N	5.0000N	10.0000L	500.0000
14r	BAN203	1.0000N	10.0000N	20.0000N	200.0000	3000.0000	150.0000	20.0000N	5.0000L	10.0000L	1000.0000
15r	BAN176	1.0000N	10.0000N	20.0000N	150.0000	5000.0000G	150.0000	20.0000N	5.0000L	10.0000	700.0000
16r	AKC039	1.0000L	10.0000N	20.0000N	10.0000	70.0000	5.0000L	20.0000N	5.0000N	10.0000L	30.0000
17r	AKC012	1.0000	10.0000N	20.0000N	7.0000	30.0000	50.0000	20.0000L	5.0000L	10.0000L	70.0000
18r	AKC030	1.0000	10.0000N	20.0000N	20.0000	30.0000	30.0000	20.0000N	5.0000L	10.0000L	100.0000
19r	AKC031	1.5000	10.0000N	20.0000N	20.0000	150.0000	15.0000	30.0000	5.0000L	10.0000L	50.0000
20r	AKC042	1.0000L	10.0000N	20.0000N	10.0000	70.0000	5.0000	20.0000N	5.0000N	10.0000L	30.0000
21r	BAN013	1.0000	10.0000N	20.0000N	30.0000	150.0000	30.0000	20.0000N	5.0000N	10.0000L	70.0000
22r	AKC032	1.0000N	10.0000N	20.0000N	20.0000	30.0000	30.0000	20.0000N	5.0000L	10.0000	30.0000
23r	AKC034	1.0000L	10.0000N	20.0000N	15.0000	20.0000	70.0000	20.0000N	5.0000L	10.0000L	50.0000
24r	AKC047	1.0000L	10.0000N	20.0000N	30.0000	150.0000	70.0000	20.0000N	5.0000L	15.0000	150.0000

TABLE 3.
ANCHORAGE B-7,ROCK SAMPLES

MAP NO.	SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
1r	BAJ101	10.0000N	100.0000N	30.0000	10.0000N	200.0000	200.0000	50.0000N	15.0000	200.0000N	100.0000
2r	BAN011	10.0000L	100.0000N	70.0000	10.0000N	300.0000	700.0000	50.0000N	10.0000	200.0000N	10.0000L
3r	BAN010	15.0000	100.0000N	50.0000	10.0000N	300.0000	500.0000	50.0000N	30.0000	200.0000N	70.0000
4r	BAN009	10.0000L	100.0000N	70.0000	10.0000N	500.0000	700.0000	50.0000N	20.0000	200.0000N	30.0000
5r	BAN156	10.0000L	100.0000N	30.0000	10.0000N	200.0000	200.0000	50.0000N	30.0000	200.0000N	150.0000
6r	AKC036	10.0000N	100.0000N	20.0000	10.0000N	100.0000	150.0000	50.0000N	15.0000	200.0000L	50.0000
7r	AKC035	10.0000L	100.0000N	50.0000	10.0000N	150.0000	700.0000	50.0000N	10.0000	200.0000L	10.0000L
8r	BAN173	10.0000N	100.0000N	7.0000	10.0000N	100.0000L	30.0000	50.0000N	10.0000L	200.0000N	10.0000L
9r	BAN168	10.0000N	100.0000N	7.0000	10.0000N	100.0000L	30.0000	50.0000N	10.0000L	200.0000N	10.0000L
10r	BAN153	10.0000L	100.0000N	50.0000	10.0000N	500.0000	500.0000	50.0000N	20.0000	200.0000N	30.0000
11r	BAN152	10.0000	100.0000N	50.0000	10.0000N	500.0000	500.0000	50.0000N	20.0000	200.0000N	50.0000
12r	BAN154	10.0000L	100.0000N	30.0000	10.0000N	500.0000	300.0000	50.0000N	15.0000	200.0000N	20.0000
13r	BAN205	10.0000N	100.0000N	100.0000	10.0000N	100.0000L	300.0000	50.0000N	10.0000L	200.0000N	10.0000L
14r	BAN203	10.0000N	100.0000N	50.0000	10.0000N	100.0000L	150.0000	50.0000N	10.0000L	200.0000N	10.0000L
15r	BAN176	10.0000N	100.0000N	10.0000	10.0000N	100.0000L	200.0000	50.0000N	10.0000N	200.0000N	10.0000L
16r	AKC039	10.0000L	100.0000N	5.0000L	10.0000N	300.0000	50.0000	50.0000N	10.0000L	200.0000N	100.0000
17r	AKC012	10.0000N	100.0000N	15.0000	10.0000N	200.0000	150.0000	50.0000N	15.0000	200.0000L	70.0000
18r	AKC030	10.0000L	100.0000N	10.0000	10.0000N	150.0000	100.0000	50.0000N	10.0000L	200.0000N	70.0000
19r	AKC031	20.0000	100.0000N	15.0000	10.0000N	200.0000	150.0000	50.0000N	15.0000	200.0000N	200.0000
20r	AKC042	10.0000N	100.0000N	5.0000L	10.0000N	300.0000	70.0000	50.0000N	10.0000L	200.0000N	100.0000
21r	BAN013	15.0000	100.0000N	20.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000N	200.0000
22r	AKC032	10.0000L	100.0000N	15.0000	10.0000N	300.0000	200.0000	50.0000N	15.0000	200.0000L	70.0000
23r	AKC034	100.0000	100.0000N	5.0000L	10.0000L	150.0000	30.0000	50.0000N	10.0000	200.0000L	70.0000
24r	AKC047	10.0000	100.0000N	20.0000	10.0000N	150.0000	300.0000	50.0000N	15.0000	200.0000L	150.0000

TABLE 3.
ANCHORAGE B-7,ROCK SAMPLES

MAP NO.	SAMPLE	AU PPM *	HG PPM*
1r	BAJ101	0.0200L	0.12
2r	BAN011	0.0200L	0.22
3r	BAN010	0.0200L	0.12
4r	BAN009	0.0200L	0.20
5r	BAN156	0.0200L	0.10
6r	AKC036	0.0200L	B
7r	AKC035	0.0200L	B
8r	BAN173	0.0200L	0.09
9r	BAN168	0.0200L	0.11
10r	BAN153	0.0200L	0.10
11r	BAN152	0.0200L	0.18
12r	BAN154	0.0200L	0.30
13r	BAN205	0.0200L	0.22
14r	BAN203	0.0200L	0.14
15r	BAN176	0.0200L	0.55
16r	AKC039	0.0200L	B
17r	AKC012	0.0200L	B
18r	AKC030	0.0200L	B
19r	AKC031	0.0200L	B
20r	AKC042	0.0200L	B
21r	BAN013	0.0200L	0.13
22r	AKC032	0.0200L	B
23r	AKC034	0.0200L	B
24r	AKC047	0.0200L	B

* Atomic absorption analyses.

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 1 (FE PCT)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E-02 -	5.6E-02	0	0	0.0	0.0
5.6E-02 -	8.3E-02	0	0	0.0	0.0
8.3E-02 -	1.2E-01	0	0	0.0	0.0
1.2E-01 -	1.8E-01	0	0	0.0	0.0
1.8E-01 -	2.6E-01	0	0	0.0	0.0
2.6E-01 -	3.8E-01	0	0	0.0	0.0
3.8E-01 -	5.6E-01	0	0	0.0	0.0
5.6E-01 -	8.3E-01	0	0	0.0	0.0
8.3E-01 -	1.2E 00	0	0	0.0	0.0
1.2E 00 -	1.8E 00	0	0	0.0	0.0
1.8E 00 -	2.6E 00	0	0	0.0	0.0
2.6E 00 -	3.8E 00	5	5	20.83	20.83
3.8E 00 -	5.6E 00	2	7	8.33	29.17
5.6E 00 -	8.3E 00	8	15	33.33	62.50
8.3E 00 -	1.2E 01	3	18	12.50	75.00
1.2E 01 -	1.8E 01	6	24	25.00	100.00

HISTOGRAM FOR COLUMN 1 (FE PCT)

```
  3.0E 00 XXXXXXXXXXXXXXXXXXXX
  5.0E 00 XXXXXXXX
  7.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
  1.0E 01 XXXXXXXXXXXX
  1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	24
0.0	0.0			0.0	0.0	

MAXIMUM = 1.50000E 01
MINIMUM = 3.00000E 00
GEOMETRIC MEAN = 7.21717E 00
GEOMETRIC DEVIATION = 1.78090E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 2 (MG PCT)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E-02 -	2.6E-02	0	0	0.0	0.0
2.6E-02 -	3.8E-02	0	0	0.0	0.0
3.8E-02 -	5.6E-02	0	0	0.0	0.0
5.6E-02 -	8.3E-02	0	0	0.0	0.0
8.3E-02 -	1.2E-01	0	0	0.0	0.0
1.2E-01 -	1.8E-01	0	0	0.0	0.0
1.8E-01 -	2.6E-01	0	0	0.0	0.0
2.6E-01 -	3.8E-01	0	0	0.0	0.0
3.8E-01 -	5.6E-01	0	0	0.0	0.0
5.6E-01 -	8.3E-01	0	0	0.0	0.0
8.3E-01 -	1.2E 00	3	3	12.50	12.50
1.2E 00 -	1.8E 00	6	9	25.00	37.50
1.8E 00 -	2.6E 00	1	10	4.17	41.67
2.6E 00 -	3.8E 00	4	14	16.67	58.33
3.8E 00 -	5.6E 00	1	15	4.17	62.50
5.6E 00 -	8.3E 00	4	19	16.67	79.17

HISTOGRAM FOR COLUMN 2 (MG PCT)

```
1.0E 00 XXXXXXXXXXXX
1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXX
2.0E 00 XXXX
3.0E 00 XXXXXXXXXXXXXXXX
5.0E 00 XXXX
7.0E 00 XXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	5	19
0.0	0.0			0.0	20.83	

MAXIMUM = 7.00000E 00
MINIMUM = 1.00000E 00
GEOMETRIC MEAN = 2.43557E 00
GEOMETRIC DEVIATION = 2.02613E 00

TITLE
ANCHORAGE 8-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 3 (CA PCT)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E-02 -	5.6E-02	0	0	0.0	0.0
5.6E-02 -	8.3E-02	0	0	0.0	0.0
8.3E-02 -	1.2E-01	0	0	0.0	0.0
1.2E-01 -	1.8E-01	0	0	0.0	0.0
1.8E-01 -	2.6E-01	1	1	4.17	4.17
2.6E-01 -	3.8E-01	1	2	4.17	8.33
3.8E-01 -	5.6E-01	1	3	4.17	12.50
5.6E-01 -	8.3E-01	3	6	12.50	25.00
8.3E-01 -	1.2E 00	1	7	4.17	29.17
1.2E 00 -	1.8E 00	3	10	12.50	41.67
1.8E 00 -	2.6E 00	2	12	8.33	50.00
2.6E 00 -	3.8E 00	1	13	4.17	54.17
3.8E 00 -	5.6E 00	3	16	12.50	66.67
5.6E 00 -	8.3E 00	3	19	12.50	79.17
8.3E 00 -	1.2E 01	2	21	8.33	87.50
1.2E 01 -	1.8E 01	1	22	4.17	91.67
1.8E 01 -	2.6E 01	1	23	4.17	95.83

HISTOGRAM FOR COLUMN 3 (CA PCT)

```
2.0E-01 XXXX
3.0E-01 XXXX
5.0E-01 XXXX
7.0E-01 XXXXXXXXXXXX
1.0E 00 XXXX
1.5E 00 XXXXXXXXXXXX
2.0E 00 XXXXXXXX
3.0E 00 XXXX
5.0E 00 XXXXXXXXXXXX
7.0E 00 XXXXXXXXXXXX
1.0E 01 XXXXXXXX
1.5E 01 XXXX
2.0E 01 XXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	1	0	0	0	0	23
0.0	4.17			0.0	0.0	

MAXIMUM = 2.00000E 01
MINIMUM = 2.00000E-01
GEOMETRIC MEAN = 2.39624E 00
GEOMETRIC DEVIATION = 3.59634E 00

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 4 (TI PCT)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E-03 -	2.6E-03	0	0	0.0	0.0
2.6E-03 -	3.8E-03	0	0	0.0	0.0
3.8E-03 -	5.6E-03	1	1	4.17	4.17
5.6E-03 -	8.3E-03	1	2	4.17	8.33
8.3E-03 -	1.2E-02	0	2	0.0	8.33
1.2E-02 -	1.8E-02	0	2	0.0	8.33
1.8E-02 -	2.6E-02	0	2	0.0	8.33
2.6E-02 -	3.8E-02	0	2	0.0	8.33
3.8E-02 -	5.6E-02	1	3	4.17	12.50
5.6E-02 -	8.3E-02	2	5	8.33	20.83
8.3E-02 -	1.2E-01	0	5	0.0	20.83
1.2E-01 -	1.8E-01	1	6	4.17	25.00
1.8E-01 -	2.6E-01	3	9	12.50	37.50
2.6E-01 -	3.8E-01	4	13	16.67	54.17
3.8E-01 -	5.6E-01	4	17	16.67	70.83
5.6E-01 -	8.3E-01	7	24	29.17	100.00

HISTOGRAM FOR COLUMN 4 (TI PCT)

```
5.0E-03 XXXX
7.0E-03 XXXX
1.0E-02
1.5E-02
2.0E-02
3.0E-02
5.0E-02 XXXX
7.0E-02 XXXXXXXX
1.0E-01
1.5E-01 XXXX
2.0E-01 XXXXXXXXXXXX
3.0E-01 XXXXXXXXXXXXXXXX
5.0E-01 XXXXXXXXXXXXXXXX
7.0E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	24
0.0	0.0			0.0	0.0	

MAXIMUM = 7.00000E-01
MINIMUM = 5.00000E-03
GEOMETRIC MEAN = 2.28922E-01
GEOMETRIC DEVIATION = 3.96350E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 5 (MN PPM)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	0	0	0.0	0.0
1.2E 01 - 1.8E 01	0	0	0.0	0.0
1.8E 01 - 2.6E 01	0	0	0.0	0.0
2.6E 01 - 3.8E 01	0	0	0.0	0.0
3.8E 01 - 5.6E 01	0	0	0.0	0.0
5.6E 01 - 8.3E 01	0	0	0.0	0.0
8.3E 01 - 1.2E 02	0	0	0.0	0.0
1.2E 02 - 1.8E 02	0	0	0.0	0.0
1.8E 02 - 2.6E 02	1	1	4.17	4.17
2.6E 02 - 3.8E 02	2	3	8.33	12.50
3.8E 02 - 5.6E 02	0	3	0.0	12.50
5.6E 02 - 8.3E 02	4	7	16.67	29.17
8.3E 02 - 1.2E 03	3	10	12.50	41.67
1.2E 03 - 1.8E 03	10	20	41.67	83.33
1.8E 03 - 2.6E 03	3	23	12.50	95.83
2.6E 03 - 3.8E 03	1	24	4.17	100.00

HISTOGRAM FOR COLUMN 5 (MN PPM)

```
      2.0E 02 XXXX
      3.0E 02 XXXXXXXX
      5.0E 02
      7.0E 02 XXXXXXXXXXXXXXXX
      1.0E 03 XXXXXXXXXXXX
      1.5E 03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      2.0E 03 XXXXXXXXXXXX
      3.0E 03 XXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	24
0.0	0.0			0.0	0.0	

MAXIMUM = 3.00000E 03
MINIMUM = 2.00000E 02
GEOMETRIC MEAN = 1.07736E 03
GEOMETRIC DEVIATION = 1.94374E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 9 (B PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	6	6	25.00	25.00
1.2E 01 -	1.8E 01	2	8	8.33	33.33
1.8E 01 -	2.6E 01	2	10	8.33	41.67
2.6E 01 -	3.8E 01	6	16	25.00	66.67
3.8E 01 -	5.6E 01	3	19	12.50	79.17
5.6E 01 -	8.3E 01	1	20	4.17	83.33
8.3E 01 -	1.2E 02	0	20	0.0	83.33
1.2E 02 -	1.8E 02	1	21	4.17	87.50

HISTOGRAM FOR COLUMN 9 (B PPM)

```
1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
1.5E 01 XXXXXXXX
2.0E 01 XXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXX
7.0E 01 XXXX
1.0E 02
1.5E 02 XXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	3	0	0	0	0	21
0.0	12.50			0.0	0.0	

MAXIMUM = 1.50000E 02
MINIMUM = 1.00000E 01
GEOMETRIC MEAN = 2.38702E 01
GEOMETRIC DEVIATION = 2.13644E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 10 (BA PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E 01 -	2.6E 01	2	2	8.33	8.33
2.6E 01 -	3.8E 01	0	2	0.0	8.33
3.8E 01 -	5.6E 01	1	3	4.17	12.50
5.6E 01 -	8.3E 01	2	5	8.33	20.83
8.3E 01 -	1.2E 02	1	6	4.17	25.00
1.2E 02 -	1.8E 02	4	10	16.67	41.67
1.8E 02 -	2.6E 02	1	11	4.17	45.83
2.6E 02 -	3.8E 02	4	15	16.67	62.50
3.8E 02 -	5.6E 02	1	16	4.17	66.67
5.6E 02 -	8.3E 02	2	18	8.33	75.00
8.3E 02 -	1.2E 03	1	19	4.17	79.17
1.2E 03 -	1.8E 03	0	19	0.0	79.17
1.8E 03 -	2.6E 03	0	19	0.0	79.17
2.6E 03 -	3.8E 03	1	20	4.17	83.33

HISTOGRAM FOR COLUMN 10 (BA PPM)

```
2.0E 01 XXXXXXXX
3.0E 01
5.0E 01 XXXX
7.0E 01 XXXXXXXX
1.0E 02 XXXX
1.5E 02 XXXXXXXXXXXXXXXXX
2.0E 02 XXXX
3.0E 02 XXXXXXXXXXXXXXXXX
5.0E 02 XXXX
7.0E 02 XXXXXXXX
1.0E 03 XXXX
1.5E 03
2.0E 03
3.0E 03 XXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
1	3	0	0	0	0	20
4.17	12.50			0.0	0.0	

MAXIMUM = 3.00000E 03
MINIMUM = 2.00000E 01
GEOMETRIC MEAN = 1.94341E 02
GEOMETRIC DEVIATION = 3.51964E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 11 (BE PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E-01 -	1.2E 00	3	3	12.50	12.50
1.2E 00 -	1.8E 00	1	4	4.17	16.67

HISTOGRAM FOR COLUMN 11 (BE PPM)

1.0E 00 XXXXXXXXXXXX
1.5E 00 XXXX

N	L	H	B	T	G	ANALYTICAL VALUES
16	4	0	0	0	0	4
66.67	16.67			0.0	0.0	

MAXIMUM = 1.50000E 00
MINIMUM = 1.00000E 00
GEOMETRIC MEAN = 1.10668E 00
GEOMETRIC DEVIATION = 1.22474E 00

A470 GEOCHEMICAL SUMMARY - U.S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 14 (CO PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 -	5.6E 00	0	0	0.0	0.0
5.6E 00 -	8.3E 00	1	1	4.17	4.17
8.3E 00 -	1.2E 01	2	3	8.33	12.50
1.2E 01 -	1.8E 01	2	5	8.33	20.83
1.8E 01 -	2.6E 01	5	10	20.83	41.67
2.6E 01 -	3.8E 01	6	16	25.00	66.67
3.8E 01 -	5.6E 01	2	18	8.33	75.00
5.6E 01 -	8.3E 01	1	19	4.17	79.17
8.3E 01 -	1.2E 02	0	19	0.0	79.17
1.2E 02 -	1.8E 02	2	21	8.33	87.50
1.8E 02 -	2.6E 02	1	22	4.17	91.67
2.6E 02 -	3.8E 02	2	24	8.33	100.00

HISTOGRAM FOR COLUMN 14 (CO PPM)

```
       7.0E 00 XXXX
       1.0E 01 XXXXXXXX
       1.5E 01 XXXXXXXX
       2.0E 01 XXXXXXXXXXXXXXXXXXXX
       3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
       5.0E 01 XXXXXXXX
       7.0E 01 XXXX
       1.0E 02
       1.5E 02 XXXXXXXX
       2.0E 02 XXXX
       3.0E 02 XXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	24
0.0	0.0			0.0	0.0	

MAXIMUM = 3.00000E 02
MINIMUM = 7.00000E 00
GEOMETRIC MEAN = 3.62226E 01
GEOMETRIC DEVIATION = 2.90079E 00

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 15 (CR PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 -	5.6E 00	0	0	0.0	0.0
5.6E 00 -	8.3E 00	0	0	0.0	0.0
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	1	1	4.17	4.17
1.8E 01 -	2.6E 01	3	4	12.50	16.67
2.6E 01 -	3.8E 01	4	8	16.67	33.33
3.8E 01 -	5.6E 01	1	9	4.17	37.50
5.6E 01 -	8.3E 01	4	13	16.67	54.17
8.3E 01 -	1.2E 02	0	13	0.0	54.17
1.2E 02 -	1.8E 02	4	17	16.67	70.83
1.8E 02 -	2.6E 02	0	17	0.0	70.83
2.6E 02 -	3.8E 02	2	19	8.33	79.17
3.8E 02 -	5.6E 02	0	19	0.0	79.17
5.6E 02 -	8.3E 02	0	19	0.0	79.17
8.3E 02 -	1.2E 03	0	19	0.0	79.17
1.2E 03 -	1.8E 03	0	19	0.0	79.17
1.8E 03 -	2.6E 03	0	19	0.0	79.17
2.6E 03 -	3.8E 03	2	21	8.33	87.50

HISTOGRAM FOR COLUMN 15 (CR PPM)

```
1.5E 01 XXXX
2.0E 01 XXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXX
5.0E 01 XXXX
7.0E 01 XXXXXXXXXXXXXXX
1.0E 02
1.5E 02 XXXXXXXXXXXXXXX
2.0E 02
3.0E 02 XXXXXXXX
5.0E 02
7.0E 02
1.0E 03
1.5E 03
2.0E 03
3.0E 03 XXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	3	21
0.0	0.0			0.0	12.50	

MAXIMUM = 3.00000E 03
MINIMUM = 1.50000E 01
GEOMETRIC MEAN = 8.65230E 01
GEOMETRIC DEVIATION = 4.40174E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 16 (CU PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 -	5.6E 00	2	2	8.33	8.33
5.6E 00 -	8.3E 00	0	2	0.0	8.33
8.3E 00 -	1.2E 01	0	2	0.0	8.33
1.2E 01 -	1.8E 01	1	3	4.17	12.50
1.8E 01 -	2.6E 01	0	3	0.0	12.50
2.6E 01 -	3.8E 01	3	6	12.50	25.00
3.8E 01 -	5.6E 01	2	8	8.33	33.33
5.6E 01 -	8.3E 01	6	14	25.00	58.33
8.3E 01 -	1.2E 02	1	15	4.17	62.50
1.2E 02 -	1.8E 02	5	20	20.83	83.33
1.8E 02 -	2.6E 02	1	21	4.17	87.50
2.6E 02 -	3.8E 02	1	22	4.17	91.67

HISTOGRAM FOR COLUMN 16 (CU PPM)

```
5.0E 00 XXXXXXXX
7.0E 00
1.0E 01
1.5E 01 XXXX
2.0E 01
3.0E 01 XXXXXXXXXXXX
5.0E 01 XXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXX
3.0E 02 XXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	2	0	0	0	0	22
0.0	8.33			0.0	0.0	

MAXIMUM = 3.00000E 02
MINIMUM = 5.00000E 00
GEOMETRIC MEAN = 6.00823E 01
GEOMETRIC DEVIATION = 2.93995E 00

09

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 19 (NB PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	6	6	25.00	25.00
1.2E 01 -	1.8E 01	1	7	4.17	29.17

HISTOGRAM FOR COLUMN 19 (NB PPM)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXX
1.5E 01 XXXX

N	L	H	B	T	G	ANALYTICAL VALUES
0	17	0	0	0	0	7
0.0	70.83			0.0	0.0	

MAXIMUM = 1.50000E 01
MINIMUM = 1.00000E 01
GEOMETRIC MEAN = 1.05963E 01
GEOMETRIC DEVIATION = 1.16563E 00

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TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 20 (NI PPM)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	0	0	0.0	0.0
5.6E 00 - 8.3E 00	0	0	0.0	0.0
8.3E 00 - 1.2E 01	2	2	8.33	8.33
1.2E 01 - 1.8E 01	0	2	0.0	8.33
1.8E 01 - 2.6E 01	0	2	0.0	8.33
2.6E 01 - 3.8E 01	7	9	29.17	37.50
3.8E 01 - 5.6E 01	2	11	8.33	45.83
5.6E 01 - 8.3E 01	4	15	16.67	62.50
8.3E 01 - 1.2E 02	3	18	12.50	75.00
1.2E 02 - 1.8E 02	1	19	4.17	79.17
1.8E 02 - 2.6E 02	0	19	0.0	79.17
2.6E 02 - 3.8E 02	0	19	0.0	79.17
3.8E 02 - 5.6E 02	1	20	4.17	83.33
5.6E 02 - 8.3E 02	1	21	4.17	87.50
8.3E 02 - 1.2E 03	1	22	4.17	91.67
1.2E 03 - 1.8E 03	0	22	0.0	91.67
1.8E 03 - 2.6E 03	1	23	4.17	95.83
2.6E 03 - 3.8E 03	1	24	4.17	100.00

HISTOGRAM FOR COLUMN 20 (NI PPM)

```
1.0E 01 XXXXXXXX
1.5E 01
2.0E 01
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXX
1.5E 02 XXXX
2.0E 02
3.0E 02
5.0E 02 XXXX
7.0E 02 XXXX
1.0E 03 XXXX
1.5E 03
2.0E 03 XXXX
3.0E 03 XXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	24
0.0	0.0			0.0	0.0	

MAXIMUM = 3.00000E 03
MINIMUM = 1.00000E 01
GEOMETRIC MEAN = 8.75687E 01
GEOMETRIC DEVIATION = 4.64076E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 21 (PB PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	2	2	8.33	8.33
1.2E 01 -	1.8E 01	2	4	8.33	16.67
1.8E 01 -	2.6E 01	1	5	4.17	20.83
2.6E 01 -	3.8E 01	0	5	0.0	20.83
3.8E 01 -	5.6E 01	0	5	0.0	20.83
5.6E 01 -	8.3E 01	0	5	0.0	20.83
8.3E 01 -	1.2E 02	1	6	4.17	25.00

HISTOGRAM FOR COLUMN 21 (PB PPM)

```
1.0E 01 XXXXXXXX
1.5E 01 XXXXXXXX
2.0E 01 XXXX
3.0E 01
5.0E 01
7.0E 01
1.0E 02 XXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
9	9	0	0	0	0	6
37.50	37.50			0.0	0.0	

MAXIMUM = 1.00000E 02
MINIMUM = 1.00000E 01
GEOMETRIC MEAN = 1.88597E 01
GEOMETRIC DEVIATION = 2.36263E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 23 (SC PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 -	5.6E 00	0	0	0.0	0.0
5.6E 00 -	8.3E 00	2	2	8.33	8.33
8.3E 00 -	1.2E 01	2	4	8.33	16.67
1.2E 01 -	1.8E 01	3	7	12.50	29.17
1.8E 01 -	2.6E 01	3	10	12.50	41.67
2.6E 01 -	3.8E 01	3	13	12.50	54.17
3.8E 01 -	5.6E 01	5	18	20.83	75.00
5.6E 01 -	8.3E 01	2	20	8.33	83.33
8.3E 01 -	1.2E 02	1	21	4.17	87.50

HISTOGRAM FOR COLUMN 23 (SC PPM)

```
       7.0E 00 XXXXXXXX
       1.0E 01 XXXXXXXX
       1.5E 01 XXXXXXXXXXXX
       2.0E 01 XXXXXXXXXXXX
       3.0E 01 XXXXXXXXXXXX
       5.0E 01 XXXXXXXXXXXXXXXXXXXX
       7.0E 01 XXXXXXXX
       1.0E 02 XXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	3	0	0	0	0	21
0.0	12.50			0.0	0.0	

MAXIMUM = 1.00000E 02
MINIMUM = 7.00000E 00
GEOMETRIC MEAN = 2.60668E 01
GEOMETRIC DEVIATION = 2.19490E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 25 (SR PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 01 -	1.2E 02	1	1	4.17	4.17
1.2E 02 -	1.8E 02	4	5	16.67	20.83
1.8E 02 -	2.6E 02	5	10	20.83	41.67
2.6E 02 -	3.8E 02	5	15	20.83	62.50
3.8E 02 -	5.6E 02	4	19	16.67	79.17

HISTOGRAM FOR COLUMN 25 (SR PPM)

```
1.0E 02 XXXX
1.5E 02 XXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	5	0	0	0	0	19
0.0	20.83			0.0	0.0	

MAXIMUM = 5.00000E 02
MINIMUM = 1.00000E 02
GEOMETRIC MEAN = 2.44903E 02
GEOMETRIC DEVIATION = 1.62229E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 26 (V PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	3	3	12.50	12.50
3.8E 01 -	5.6E 01	1	4	4.17	16.67
5.6E 01 -	8.3E 01	1	5	4.17	20.83
8.3E 01 -	1.2E 02	1	6	4.17	25.00
1.2E 02 -	1.8E 02	4	10	16.67	41.67
1.8E 02 -	2.6E 02	4	14	16.67	58.33
2.6E 02 -	3.8E 02	4	18	16.67	75.00
3.8E 02 -	5.6E 02	3	21	12.50	87.50
5.6E 02 -	8.3E 02	3	24	12.50	100.00

HISTOGRAM FOR COLUMN 26 (V PPM)

```
3.0E 01 XXXXXXXXXXXX
5.0E 01 XXXX
7.0E 01 XXXX
1.0E 02 XXXX
1.5E 02 XXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXXXXXX
7.0E 02 XXXXXXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	24
0.0	0.0			0.0	0.0	

MAXIMUM = 7.00000E 02
MINIMUM = 3.00000E 01
GEOMETRIC MEAN = 1.85219E 02
GEOMETRIC DEVIATION = 2.68153E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 28 (Y PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	3	3	12.50	12.50
1.2E 01 -	1.8E 01	7	10	29.17	41.67
1.8E 01 -	2.6E 01	4	14	16.67	58.33
2.6E 01 -	3.8E 01	2	16	8.33	66.67

HISTOGRAM FOR COLUMN 28 (Y PPM)

```
1.0E 01 XXXXXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXX
```

N	L	H	B	T	G	ANALYTICAL VALUES
1	7	0	0	0	0	16
4.17	29.17			0.0	0.0	

MAXIMUM = 3.00000E 01
MINIMUM = 1.00000E 01
GEOMETRIC MEAN = 1.62905E 01
GEOMETRIC DEVIATION = 1.39695E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE 8-7,ROCK SAMPLES

FREQUENCY TABLE FOR COLUMN 30 (ZR PPM)

LIMITS LOWER - UPPER		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	1	1	4.17	4.17
2.6E 01 -	3.8E 01	2	3	8.33	12.50
3.8E 01 -	5.6E 01	2	5	8.33	20.83
5.6E 01 -	8.3E 01	5	10	20.83	41.67
8.3E 01 -	1.2E 02	3	13	12.50	54.17
1.2E 02 -	1.8E 02	2	15	8.33	62.50
1.8E 02 -	2.6E 02	2	17	8.33	70.83

HISTOGRAM FOR COLUMN 30 (ZR PPM)

```
      2.0E 01 XXXX
      3.0E 01 XXXXXXXX
      5.0E 01 XXXXXXXX
      7.0E 01 XXXXXXXXXXXXXXXXXXXX
      1.0E 02 XXXXXXXXXXXX
      1.5E 02 XXXXXXXX
      2.0E 02 XXXXXXXX
```

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N	L	H	B	T	G	ANALYTICAL VALUES
0	7	0	0	0	0	17
0.0	29.17			0.0	0.0	

MAXIMUM = 2.00000E 02
MINIMUM = 2.00000E 01
GEOMETRIC MEAN = 7.45629E 01
GEOMETRIC DEVIATION = 1.92948E 00

A470 GEOCHEMICAL SUMMARY - U S G S STATPAC (04/12/71) DATE 4/23/71

TITLE
ANCHORAGE B-7,ROCK SAMPLES

IN THE COMPUTATIONS PERFORMED TO PRODUCE THE FOLLOWING TABLE OF GEOMETRIC MEANS AND DEVIATIONS, ALL ELEMENTS ARE IGNORED WHERE ONE OR MORE OF THE UNQUALIFIED DATA VALUES IS LESS THAN THE ANALYTICAL LIMIT OF DETECTION SPECIFIED ON INPUT OR WHERE ANY DATA VALUES ARE QUALIFIED WITH THE G (GREATER THAN) CODE. DATA VALUES QUALIFIED WITH B OR H ARE NOT USED IN THE COMPUTATIONS. WHERE NONE OF THE DATA VALUES FOR AN ELEMENT ARE QUALIFIED THE MEAN AND DEVIATION SHOULD BE THE SAME AS THOSE GIVEN IN THE PRECEDING SECTION. WHERE DATA ARE QUALIFIED WITH THE CODES N, L, OR T, THE ESTIMATES OF GEOMETRIC MEAN AND DEVIATION ARE BASED ON A METHOD BY A. J. COHEN FOR TREATING CENSORED DISTRIBUTIONS. THE APPLICATION OF THIS METHOD TO GEOCHEMICAL PROBLEMS IS DESCRIBED IN USGS PROFESSIONAL PAPER 574-B. THE ESTIMATES ARE UNBIASED IN A STRICT SENSE ONLY WHERE THE DATA ARE DERIVED FROM A LOGNORMAL PARENT POPULATION, BUT EXPERIMENTS HAVE SHOWN THAT LARGE DEPARTURES FROM THIS REQUIREMENT MAY NOT GREATLY INVALIDATE THE RESULTS ACCEPTANCE AND USE OF THE ESTIMATES, HOWEVER, IS THE RESPONSIBILITY OF THE INDIVIDUAL.

ELEMENT	N	L	H	B	T	G	ANALYTICAL VALUES
FE PCT	0	0	0	0	0	0	24
MG PCT	0	0	0	0	0	5	19
CA PCT	0	1	0	0	0	0	23
TI PCT	0	0	0	0	0	0	24
MN PPM	0	0	0	0	0	0	24
B PPM	0	3	0	0	0	0	21
BA PPM	1	3	0	0	0	0	20
BE PPM	16	4	0	0	0	0	4
CO PPM	0	0	0	0	0	0	24
CR PPM	0	0	0	0	0	3	21
CU PPM	0	2	0	0	0	0	22
NB PPM	0	17	0	0	0	0	7
NI PPM	0	0	0	0	0	0	24
PB PPM	9	9	0	0	0	0	6
SC PPM	0	3	0	0	0	0	21
SR PPM	0	5	0	0	0	0	19
V PPM	0	0	0	0	0	0	24
Y PPM	1	7	0	0	0	0	16
ZR PPM	0	7	0	0	0	0	17

ELEMENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS
FE PCT	7.217159	1.78	24 SAMPLES AND 24 ANALYTICAL VALUES.
MG PCT	********	******	5 GREATER THAN VALUES. NO COMPUTATIONS.
CA PCT	1.975247	4.76	1 NOT DETECTED, LESS THAN, OR TRACE VALUES. 23 REPORTED VALUES.
TI PCT	0.228922	3.96	24 SAMPLES AND 24 ANALYTICAL VALUES.
MN PPM	1077.358398	1.94	24 SAMPLES AND 24 ANALYTICAL VALUES.
B PPM	19.706329	2.42	3 NOT DETECTED, LESS THAN, OR TRACE VALUES. 21 REPORTED VALUES.
BA PPM	112.829819	5.46	4 NOT DETECTED, LESS THAN, OR TRACE VALUES. 20 REPORTED VALUES.
BE PPM	0.487588	1.70	20 NOT DETECTED, LESS THAN, OR TRACE VALUES. 4 REPORTED VALUES.
CO PPM	36.222504	2.90	24 SAMPLES AND 24 ANALYTICAL VALUES.
CR PPM	********	******	3 GREATER THAN VALUES. NO COMPUTATIONS.
CU PPM	45.613678	4.00	2 NOT DETECTED, LESS THAN, OR TRACE VALUES. 22 REPORTED VALUES.
NB PPM	6.798606	1.44	17 NOT DETECTED, LESS THAN, OR TRACE VALUES. 7 REPORTED VALUES.
NI PPM	87.568527	4.64	24 SAMPLES AND 24 ANALYTICAL VALUES.
PB PPM	********	******	COHEN'S TABLE EXCEEDED. H(0.8) OR GAMMA(1.1) GTR THAN ALLOW. NO COMPUTATIONS.
SC PPM	19.286697	2.98	3 NOT DETECTED, LESS THAN, OR TRACE VALUES. 21 REPORTED VALUES.
SR PPM	179.875092	2.13	5 NOT DETECTED, LESS THAN, OR TRACE VALUES. 19 REPORTED VALUES.

V PPM	185.218399	2.68	24 SAMPLES AND 24 ANALYTICAL VALUES.	
Y PPM	11.471986	1.81	8 NOT DETECTED, LESS THAN, OR TRACE VALUES.	16 REPORTED VALUES.
ZR PPM	30.464417	4.71	7 NOT DETECTED, LESS THAN, OR TRACE VALUES.	17 REPORTED VALUES.