UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Analytical data and sample locality map for aqua-regia leachates of stream sediments analyzed by ICP from the Bristol Bay, Ugashik, and western Karluk quadrangles, Alaska

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STUDIES RELATED TO AMRAP

The U.S. Geological Survey, is required by the Alaska National Interests Lands Conservation Act (Public Law 96-487, 1980), to survey certain Federal lands to determine their mineral values. Results from the Alaska Mineral Resource Assessment Program (AMRAP) must be made available to the public and be submitted to the President and Congress. This report is one in a series of publications that presents geochemical and mineralogical data determined during the mineral assessment study of the Bristol Bay, Ugashik, and western Karluk quadrangles, Alaska. The analytical results of aqua-regia leachate studies for the stream sediments collected during the study are presented in this report.

INTRODUCTION

A reconnaissance exploration geochemical study was undertaken by the U.S. Geological Survey during the 1979 and 1980 field seasons in the Bristol Bay, Ugashik, and western Karluk quadrangles, Alaska Peninsula. This area will be referred to in this report as the Ugashik-Karluk study area (fig. 1). Very few roads exist throughout the quadrangles and access to much of the area is limited to travel by air, boat, or foot.

The topographic relief in the study area is dominated by the large stratovolcanoes. Elevations exceed 2000 m (6000 ft) at Mt. Chiginagak. The relief is rugged and mountainous terrain with youthful stream drainages. Interstream uplands, underlain by extensive ground moraines, are covered by fields of grasses and low shrubs and have narrow, deeply incised drainages. Large glacial lakes preserved in the area were formed by the retreat of the glaciers from the terminal moraines (Detterman and others, 1983). The climate is very wet; rainfall exceeds 200 in. per year.

GENERAL GEOLOGY

The Alaska Peninsula marks the transition zone between the volcanic island arc of the Aleutians and the continental magmatic arc of southern Alaska. At least two-thirds of the study area is covered either by Quaternary alluvial and glacial deposits or by Quaternary cones, flows and large volcanic centers (Detterman and others, 1983). At the northern end of the study area, the Bruin Bay fault was intermittently active from Late Jurassic time to Middle Tertiary time (Detterman and others, 1983). This fault separates the two physiographic provinces at the northern end of the study area. The Pacific Ocean side of the study area is predominately underlain by Jurassic, Cretaceous, and Tertiary marine and nonmarine clastic sedimentary rocks that are, in

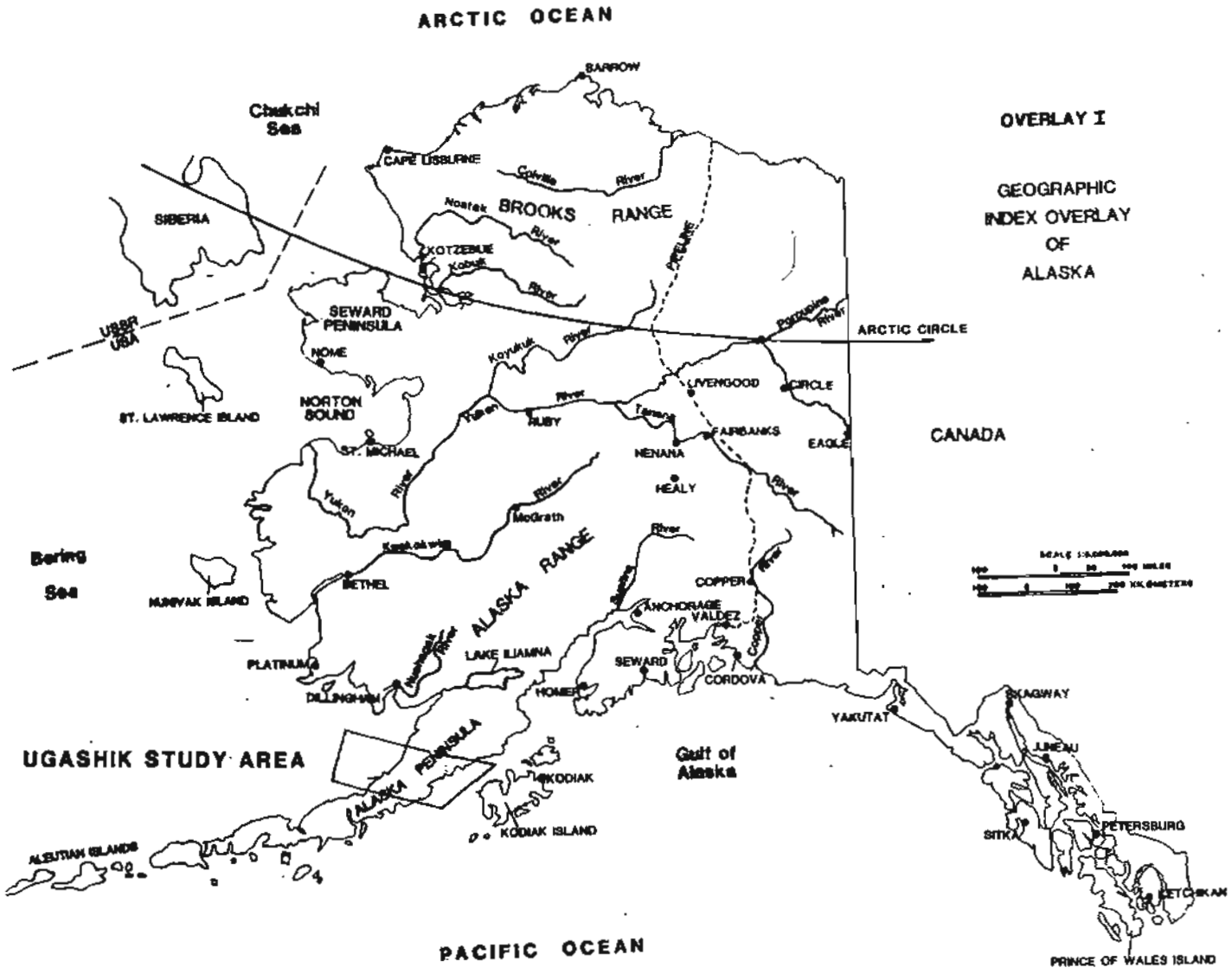

Figure 1. Index map of the Ugashik study area.

places, intruded by, or covered by, Tertiary diorite and quartz diorite and associated extrusive equivalents (Detterman and others, 1983). The Bristol Bay side of the study area, which is a part of the Nushagak-Bristol Bay Lowland (Wahraftig, 1965), is composed dominantly of unconsolidated Quaternary alluvium and glacial deposits. However small areas of late Tertiary and Quaternary volcanic rocks are present (Detterman and others, 1983).

METHODS OF STUDY

Sample Media

Geochemical results presented in this report are from stream sediment samples that were collected from active channels of perennial first-order (unbranched) streams and second-order (below the junction of two first-order) streams, as determined from topographic maps (scale 1:63,360). The area of the drainage basins ranged from 5 to 10 km^2. Areas covered by glacial materials were not sampled. Both a heavy-mineral panned concentrate and a stream-sediment sample were collected from as many sites as possible. However, the results presented in this paper are only those of the stream sediments. The 586 sample localities are shown on plate 1. Samples from the Bristol Bay quadrangle (west of 158°W) are indicated by the suffix BB, samples from the Karluk quadrangle (east of 156°W) are indicated by the suffix KA, and the samples from the Ugashik quadrangle (between 156°W and 158°W) are indicated by the suffix UG.

Sample Collection

The stream sediment samples collected in the Ugashik study area (Detra and others, 1981) were used in this study. The samples were wet-sieved on site to minus 2.0 mm (10-mesh) using a stainless steel sieve and a 14-inch gold pan. Composite samples within individual streams were collected whenever possible. At all sites, a representative portion of the sediment was taken directly from the gold pan and saved as the stream sediment sample. The samples were oven-dried in the field and then shipped to the laboratory for analysis.

Sample Preparation

In the laboratory, the stream sediment samples were sieved using an 80-mesh (0.17 mm) stainless steel sieve. The portion of the sediment that passed through the sieve was saved. This minus-80-mesh sediment was then ground to approximately minus-150-mesh and used for chemical analysis.

Sample Analysis

One gram of prepared stream sediment sample was weighed into 50 mL beaker for digestion. Sample weights were determined to a precision of ±2 percent. The sample was first wetted with a small amount of 10 percent HCl (v/v) to react any carbonate minerals present. Following the completion of this reaction, 15 mL of aqua regia (1:3; HNO_3:HCl) was added to each sample. Initial oxidation of the nonsilicate phases present in the sample usually occurred as an immediate, vigorous reaction. When necessary, this reaction was contained by quenching with distilled water from a squirt bottle. The samples were then placed on a hot plate that was heated to a constant temperature of approximately 80°C. The oxidation reaction was usually complete after the samples had been gently heated for approximately ten minutes. The low temperature of the hot plate is necessary to prevent spattering of the samples during the evaporation process. The solution was then taken slowly to dryness. Several mL of 20-percent HCl (v/v) were added to the sample residue and the sample was gently heated. Sample solutions were then filtered through Whatman no. 41 filter paper that had been previously wetted with 10 percent HCL (v/v) and the samples were diluted to constant final volume, usually 10 mL. These sample solutions were aspirated directly into the plasma for analysis.

The Inductively Coupled Plasma (ICP) instrumentation used is commercially available from Applied Research Laboratories. Two instruments were used, the earlier measurements were made on the ICPQ model and the later measurements on a model 34000 ICP. The two instruments have very similar spectral arrays, but the 34000 also had the capability of measuring some of the alkali elements (sodium, potassium, and lithium), and zirconium.

Corrections for spectral interferences and determination of qualifiers designating lower limits of determination and trace concentrations were determined using the procedures described by Church (1981) and Church and others (1983). Because the chemistry of each sample is different and analytical results from ICP utilize a fixed spectral array, the effect of spectral interferences on each element in each sample must be evaluated. This requires that the lower limit of determination for the elements in each sample be verified. The lower limit of determination (N) will also vary because dilutions of the solutions analyzed may be required during analysis. This condition occurs when the sample must be diluted, usually so that the calcium or iron concentrations in the solution analyzed would be within the calibration range of the instrument, so that corrections for possible spectral interferences could be applied. The recommended values for N and the minimum determinant values for each element measured in this study are summarized in table 1. Analytical results are reported in table 2. Column four in

table 1 indicates the number of samples having N values higher than those recommended as a result of higher dilution factors. In table 1, we report the minimum determinant concentration for each element in ppm in column 2. We have summarized, in column 3 of table 1, the recommended value of N to be used for each element in table 2 along with the number of samples to which this value applies. In column 4 of table 1, we list the number of samples which have higher values of N in table 2. Values of N that are higher than the recommended N are indicated in table 2 in parentheses, for example N(0.8). We suggest that the values for N assigned in table 1 be used for this data set if a single lower limit (N) is needed. Qualified values (<, trace concentrations) indicate that less than half, but more than one tenth of the total signal measured by the ICP remained after correction for spectral interferences (Church and others, 1983). Analytical results for 580 samples reported in table 2 are expressed in parts per million and all values are rounded to two significant figures. The major elements are listed first, followed by the minor and trace elements listed by group as shown on the periodic chart of the elements.

Previous studies of stream-sediment leachates analyzed by ICP have shown that the aqua-regia leach procedure can be effectively applied in regional geochemical exploration. Replicate analysis of geochemical exploration standards (USGS, GXR series; Allcott and Lakin, 1974) using ICP analysis of aqua-regia leachates has indicated an analytical precision of approximately 10 percent(Church and others, 1983). They also demonstrated that recoveries for the ore-related metals are greater than 85 percent. Church (1978) evaluated different digestion procedures for use in exploration geochemistry and showed that the aqua-regia leach was the most effective in releasing metals bound in many nonsilicate phases. Further studies (Church and others, 1987) demonstrated that the aqua-regia leach technique resulted in almost complete recovery of elements bound in the hydromorphic oxide phases. They also demonstrated that the application of the aqua-regia leach procedure resulted in high recoveries (generally greater than 90 percent) of metals bound in many carbonate, sulfide, and crystalline iron- and manganese-oxide minerals. These observations were verified by studies of hand-picked mineral separates (purity generally 90-99 percent). In contrast, the effect of leaching rock samples that contain largely silicate phases (standard silicate rocks were used) indicate that much lower total concentrations of transition metals were released from the silicate phases. The aqua-regia leach procedure can therefore be used to enhance the contrast between mineralization and lithologic background in regional geochemical exploration studies (Church and others, 1983; 1987).

ROCK ANALYSIS STORAGE SYSTEM

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

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Table 1. Minimum determinate values and recommended values of N for aqua-regia leachate data from minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska

[all concentrations in parts per million, -- no values]

Element	Minimum Determinate Value	Recommended value of N (no. of N values)	No. of samples having a higher value for N
Na	54	--	--
K	67	--	--
Mg	310	--	--
Ca	300	--	--
Fe	3,500	--	--
Al	1,100	--	--
Ti	3.1	2.0 (47)	--
P	83	4.0 (48)	3
Li	.29	--	--
B	.85	.40 (23)	--
Be	.012	.012 (311)	--
Sr	1.6	.05 (47)	--
Ba	2.3	--	--
La	.90	.90 (2)	--
Ce	1.5	.90 (9)	--
Y	.78	.04 (46)	--
Zr	.34	.30 (59)	--
Nb	5.5	5.5 (576)	--
Mn	47	--	--
V	11	.75 (47)	--
Cr	1.7	--	--
Co	1.3	--	--
Ni	1.3	1.0 (47)	--
Cu	1.7	--	--
Zn	7.6	.34 (46)	--
Pb	2.7	3.0 (436)	--
Ag	.32	.30 (562)	--
Mo	.35	.34 (485)	--
Sn	5.1	5.0 (579)	--
As	1.5	1.5 (256)	--
Bi	4.2	4.0 (479)	--

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska
[N, not detected; <, detected but below the limit of determination shown.]

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
BB001	57 3 6	158 3 58	270	220	2,500	1,900	20,000	5,700	1,800	220
BB002	57 1 13	158 5 3	200	150	2,700	1,800	19,000	2,800	1,700	240
BB003	57 2 56	158 4 43	300	140	2,800	2,300	15,000	4,300	1,400	220
BB004	57 2 3	158 7 53	140	68	3,400	1,800	40,000	2,400	3,900	170
BB005	57 3 2	158 11 46	480	220	1,800	2,600	9,700	7,600	620	240
BB006	57 5 34	158 15 58	320	150	3,500	2,700	15,000	4,100	1,400	280
BB007	57 5 50	158 21 54	390	160	3,000	2,400	19,000	4,300	1,600	160
BB008	57 3 30	158 20 12	460	200	4,900	3,200	32,000	5,900	3,100	220
BB009	57 3 22	158 22 47	400	170	3,500	2,900	12,000	5,300	1,000	200
BB010	57 3 37	158 23 55	280	110	3,000	2,000	11,000	3,600	870	170
BB011	57 3 13	158 32 21	520	230	2,100	3,100	22,000	7,700	860	400
BB012	57 2 15	158 38 4	84	68	5,300	1,300	55,000	1,500	3,200	N(45)
BB013	57 5 43	158 33 52	570	220	910	1,800	5,900	3,800	360	230
BB014	57 10 11	158 28 31	130	74	3,800	1,500	47,000	1,600	3,400	<160
BB015	57 11 41	158 26 41	190	96	5,100	1,600	54,000	1,800	4,000	<130
KA005	57 58 30	155 2 19	210	200	1,800	2,100	11,000	5,700	330	140
KA006	57 58 29	155 4 52	160	310	2,300	1,900	10,000	5,700	180	140
KA007	57 57 15	155 5 33	180	320	2,100	2,300	10,000	6,200	140	150
KA008	57 57 45	155 8 47	200	390	2,700	3,300	10,000	8,500	260	190
KA009	57 58 3	155 10 54	190	350	2,000	2,200	7,900	8,000	230	140
KA010	57 58 59	155 14 35	210	550	3,400	3,700	14,000	8,800	200	280
KA011	57 58 52	155 16 54	210	790	4,100	4,700	14,000	10,000	180	320
KA012	57 59 0	155 16 47	180	720	3,400	4,300	11,000	9,200	160	190
KA013	57 57 14	155 15 0	170	600	3,900	3,500	14,000	8,700	100	260
KA014	57 56 25	155 15 22	220	400	2,100	3,600	14,000	7,100	330	300
KA015	57 56 9	155 13 45	250	350	1,900	3,800	7,800	7,600	120	190
KA016	57 56 35	155 9 51	220	250	2,400	3,500	12,000	10,000	350	150
KA017	57 55 35	155 9 57	220	330	2,000	3,600	13,000	7,800	270	290
KA018	57 55 3	155 8 36	230	320	3,600	4,700	14,000	13,000	210	180
KA019	57 53 1	155 4 43	190	720	3,300	1,700	19,000	6,200	220	230
KA020	57 52 41	155 9 54	120	160	2,200	2,400	9,400	7,200	220	120
KA021	57 52 32	155 11 30	160	200	1,900	3,000	8,500	7,200	160	150
KA022	57 54 19	155 16 13	180	200	2,100	2,100	11,000	8,900	310	120
KA023	57 54 16	155 18 43	240	350	1,800	3,800	7,200	6,700	67	260
KA024	57 54 14	155 19 6	220	270	1,600	3,000	6,200	5,800	36	180
KA025	57 54 31	155 19 14	250	460	2,600	3,600	10,000	6,400	68	210
KA026	57 52 20	155 16 26	410	330	3,400	4,900	15,000	9,400	330	230
KA027	57 51 50	155 16 10	500	470	6,200	6,100	25,000	15,000	420	280
KA028	57 50 0	155 13 45	430	300	5,100	5,100	20,000	11,000	310	280
KA029	57 51 37	155 23 16	310	410	2,100	4,100	7,900	8,600	160	170
KA030	57 50 56	155 23 8	690	520	8,800	11,000	29,000	19,000	490	320
KA031	57 50 44	155 22 21	230	160	2,000	2,900	9,200	5,400	210	140
KA032	57 49 59	155 22 20	470	360	5,400	8,100	31,000	13,000	520	260
KA033	57 49 2	155 20 35	250	140	2,500	2,900	14,000	5,300	410	190
KA034	57 47 48	155 22 9	360	240	3,800	3,900	12,000	8,500	290	190
KA035	57 46 41	155 20 43	570	420	5,800	6,100	32,000	14,000	570	410
KA036	57 44 55	155 18 11	350	320	4,700	3,900	16,000	10,000	230	190
KA037	57 43 49	155 18 56	370	240	20,000	4,500	27,000	16,000	260	140
KA038	57 43 41	155 20 24	320	680	4,900	4,500	27,000	14,000	18	280
KA039	57 44 6	155 23 13	480	540	7,700	5,500	25,000	15,000	87	210
KA040	57 45 22	155 28 52	450	420	5,800	5,900	37,000	15,000	730	400
KA041	57 46 2	155 30 21	520	530	6,100	8,100	34,000	15,000	570	370
KA042	57 50 0	155 30 45	380	340	4,500	5,200	21,000	10,000	290	290
KA043	57 49 35	155 31 17	460	430	4,300	8,100	16,000	14,000	280	260
KA044	57 48 29	155 30 53	590	440	9,800	7,900	32,000	15,000	450	400
KA046	57 47 45	155 28 52	390	330	5,600	5,100	37,000	11,000	780	370
KA047	57 48 1	155 28 49	520	480	6,500	5,900	31,000	17,000	750	250
KA048	57 48 7	155 29 8	440	400	5,300	5,900	29,000	14,000	550	390
KA049	57 47 44	155 30 32	450	480	4,100	5,500	22,000	14,000	490	280
KA050	57 47 54	155 36 18	450	630	2,100	5,600	10,000	11,000	150	390

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
BB001	.24	5	N	12	17	1.5	3	2.3	3.7	N	230	78
BB002	.58	5	N	9.8	12	1.5	3.1	2.1	3	N	210	77
BB003	.73	3.6	N	14	17	1.4	2.9	2.1	3.4	N	200	59
BB004	.48	4.7	N	7.2	5.9	1.5	3.6	2.5	2.2	N	340	140
BB005	1.6	4.4	N	21	38	2.6	5.6	3.6	5.8	N	200	27
BB006	.99	8.1	N	15	15	1.8	3.7	2.6	2.6	N	210	63
BB007	.97	6.4	.41	15	17	1.5	2.9	2.1	3.2	N	220	83
BB008	1.3	6.8	3.2	20	21	2.1	4.5	3	4.5	N	330	120
BB009	1	6	2.8	19	21	1.7	3.1	2.2	3.5	N	200	48
BB010	.97	4.9	N	13	13	1.3	2.3	1.7	2.9	N	160	42
BB011	1.8	5.9	N	21	33	2.5	4.8	3.6	4.1	N	260	45
BB012	.51	7.9	N	4.4	2.3	1.7	3.7	2.7	1.7	N	380	180
BB013	.93	5.1	N	17	16	1.4	2.6	2	1.3	N	77	16
BB014	.42	5	N	5.3	3.2	2.1	4.7	3.3	1.7	N	330	180
BB015	.55	9.1	.33	5.7	2.8	2	4.8	3.4	2.1	N	380	190
KA005	6.4	7.9	N	31	50	1.9	5	2	1.7	N	210	31
KA006	7.8	6.7	N	26	54	2.5	6.1	2.8	1.1	N	200	27
KA007	6.4	5.8	.35	26	55	3	6.5	3.2	1.1	N	230	26
KA008	8.3	6.2	1.6	46	70	4	8.3	2.6	1.4	N	170	28
KA009	5.9	5.9	.18	43	70	2.7	5.9	2	1	N	140	24
KA010	9.8	5.4	1.6	50	94	5.2	11	3.7	2.3	N	230	35
KA011	11	4	.23	60	110	4.1	8.3	3.6	2.5	N	230	31
KA012	11	6	.73	42	84	3.3	6.3	2.8	1.5	N	200	25
KA013	11	3.9	.27	39	100	3.9	7.6	3.9	2.7	N	220	27
KA014	5.9	3.9	N	52	70	5.2	11	2.8	2	N	190	37
KA015	4.8	3.9	.42	69	75	3.4	7.4	2.3	1.4	N	160	22
KA016	5.4	4.7	.033	44	57	2.3	5.6	2.5	2.1	N	220	36
KA017	4.9	4.4	.31	74	79	4.7	11	3	1.8	N	230	39
KA018	6.7	13	.65	35	30	2	4.9	2.6	1.6	N	330	34
KA019	2.5	5.1	N	18	49	1.4	3.7	2.4	.73	N	220	34
KA020	4.2	5.7	.23	29	28	1.8	4.8	1.9	1.5	N	190	27
KA021	5	21	.56	63	51	2	4.8	1.8	.5	N	170	24
KA022	5	5.5	N	54	57	2.1	5.4	2	2.1	N	270	34
KA023	4	3.3	N	83	61	3.2	7	2.8	.95	N	160	18
KA024	3.9	3.3	N	63	66	2.5	5.5	2	1.1	N	130	14
KA025	6.7	4.6	.32	52	78	3.2	7.1	3.2	1.5	N	200	22
KA026	6.2	8.2	N	93	82	3.4	7	2.7	2.5	N	220	46
KA027	8.9	4.5	N	89	91	3.2	6.4	3.7	4.8	N	340	58
KA028	7.6	4.7	N	71	66	2.6	5.2	3.3	4.7	N	300	48
KA029	4.6	4.3	.26	98	82	2.4	4	1.9	1.4	N	150	22
KA030	12	5.7	N	110	100	3.7	7	4.7	5.9	N	370	56
KA031	3.4	4.4	.15	50	41	1.7	2.9	1.5	1.2	N	150	27
KA032	8.2	5.8	.18	67	64	2.9	6	3.6	3.6	N	330	74
KA033	3.8	2.7	N	38	34	1.7	3.6	1.7	3.2	N	190	50
KA034	5.2	3.2	N	58	55	1.9	3.8	2.3	4.5	N	220	27
KA035	11	3.2	N	100	100	3.7	7.4	4.1	5.2	N	390	73
KA036	8.2	3.1	.27	65	120	2.1	3.2	2.7	2.3	N	310	37
KA037	15	2.9	N	41	91	2	3.3	3.4	1.7	N	410	58
KA038	21	2.1	.11	53	200	2.7	5.4	5.9	2.1	N	340	37
KA039	10	2.7	.22	110	190	3.8	6.7	5.6	1.3	N	420	47
KA040	10	7.8	N	110	100	3.4	7.1	3.9	4	N	420	82
KA041	11	4.8	N	100	100	4.6	9.1	4.6	4.4	N	360	80
KA042	8	2.7	N	78	76	3	6	3.3	1.6	N	280	57
KA043	9.1	4.5	.11	93	94	3	6.2	3.2	2.2	N	290	41
KA044	11	3.9	N	98	92	3.6	6.6	4.6	4.4	N	420	70
KA046	6.5	5.9	N	70	65	3	6.3	3.5	3.9	N	380	93
KA047	14	4.9	N	88	99	3.2	6.9	4.1	5	N	390	77
KA048	9.1	3.5	N	99	86	3.4	7.2	4	2.4	N	380	71
KA049	11	3.9	N	95	110	4.1	8.9	3.7	2.8	N	320	53
KA050	3.9	3.5	.027	140	130	4.4	9.3	2.6	1.6	N	180	27

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
BB001	6.5	5.5	5.3	6.7	30	N	N	N	N	N	N
BB002	7	5.7	5.8	5.9	30	N	N	N	N	N	N
BB003	4.8	5	5	5.9	25	N	N	N	N	N	N
BB004	12	7	7.1	5.3	57	N	N	N	N	N	N
BB005	3.8	3.6	4.4	11	18	N	N	N	N	N	N
BB006	6.8	5.7	6.2	5.7	30	N	N	N	N	N	N
BB007	8.7	5.9	5.9	5.9	32	N	N	N	N	N	N
BB008	12	8	8.2	8.7	50	N	N	N	N	<1.5	N
BB009	5.5	5.3	6.1	7	23	N	N	N	N	N	N
BB010	4.9	4.4	6	5	19	N	N	N	N	N	N
BB011	4.3	4.1	4.4	9.4	21	N	N	N	N	2.9	N
BB012	17	11	13	3.6	61	N	N	N	N	<1.7	N
BB013	1.9	1.7	1.7	5.6	10	N	N	N	N	1.6	N
BB014	20	9.7	10	3.7	63	N	N	N	N	<1.7	N
BB015	22	11	13	4	67	N	N	N	N	<1.6	N
KA005	5.5	3.4	4.3	5.8	44	N	N	N	N	6.5	N
KA006	6.7	3.7	5.3	10	43	N	N	N	N	3	N
KA007	5.6	3.8	4.8	11	25	2.7	N	N	N	4.6	N
KA008	6.6	3.5	5.2	9.3	29	N	N	N	N	N	N
KA009	5.4	2.8	5.1	8.4	29	N	N	N	N	N	N
KA010	8.8	5.1	35	35	7,500	7.3	N	N	5.1	<1.8	N
KA011	9.3	4.8	7.9	19	50	<2.5	N	N	N	N	N
KA012	8	3.9	7.3	15	31	N	N	N	N	N	N
KA013	9.6	5	8.8	22	40	N	N	N	N	<2.2	N
KA014	6.5	3.6	4.9	11	33	N	N	N	N	N	N
KA015	4.3	3.3	3.8	12	25	N	N	N	N	N	N
KA016	5.6	4.1	5.2	10	25	N	N	N	N	N	N
KA017	6.5	4.2	4.9	13	31	N	N	N	N	<1.6	N
KA018	7.2	6.9	7.7	19	30	N	N	N	N	12	N
KA019	8.5	7.8	7.5	51	26	<2.6	N	1.8	N	13	N
KA020	5.1	3.6	4.8	9	20	N	N	N	N	N	N
KA021	4.9	3.2	4	9.6	20	N	N	N	N	N	N
KA022	5	4.7	4.7	7.7	22	N	N	N	N	N	N
KA023	3.6	3.1	3.2	13	22	N	N	N	N	N	N
KA024	3.4	2.7	3	10	20	N	N	N	N	N	N
KA025	6	3.9	5.5	16	29	2.8	N	N	N	2.7	N
KA026	7.5	4.6	6	14	31	N	N	N	N	N	N
KA027	10	7.2	9.3	21	40	N	N	N	N	N	N
KA028	8	6.1	7.3	16	36	N	N	N	N	N	N
KA029	4.2	3	3.8	11	22	N	N	N	N	N	N
KA030	12	8.2	12	26	45	N	N	N	N	N	N
KA031	4.1	3.2	3.9	7.7	20	N	N	N	N	N	N
KA032	12	7.9	11	22	45	N	N	N	N	N	N
KA033	5.7	4.1	4.8	8.1	30	N	N	N	N	N	N
KA034	5.6	4.4	5.9	11	23	N	N	N	N	N	N
KA035	9.4	7.2	8.7	19	50	N	N	N	N	N	N
KA036	7.5	5.3	6.9	7.5	36	N	N	N	N	N	N
KA037	26	13	56	23	41	N	N	N	N	N	N
KA038	8.3	7	9.9	22	55	N	N	N	N	4.2	N
KA039	16	7.5	12	16	47	N	N	N	N	N	N
KA040	9.5	7.6	9.6	20	58	N	N	N	N	N	N
KA041	13	8.6	11	30	48	N	N	N	N	N	N
KA042	8.8	5.9	8.2	20	39	N	N	N	N	N	N
KA043	7.8	5.8	7.9	19	34	N	N	N	N	N	N
KA044	11	9	10	26	52	N	N	N	N	N	N
KA046	10	8.2	9.2	18	49	N	N	N	N	N	N
KA047	13	8.5	12	26	45	N	N	N	N	N	N
KA048	9.9	7.8	9.4	21	48	N	N	N	N	N	N
KA049	9.4	6.6	8.1	22	38	N	N	N	N	N	N
KA050	5.7	3.4	4.6	18	33	N	N	N	N	N	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
KA051	57 47 59	155 38 36	280	400	3,300	2,600	16,000	8,400	250	300
KA052	57 48 11	155 38 33	210	630	4,900	3,200	15,000	9,000	170	310
KA053	57 44 51	155 38 0	530	540	6,300	6,300	22,000	14,000	300	260
KA054	57 45 9	155 38 15	490	600	4,500	5,600	16,000	12,000	280	280
KA055	57 43 43	155 41 1	540	550	7,900	6,400	35,000	15,000	440	340
KA056	57 44 4	155 41 29	410	560	5,400	5,300	23,000	13,000	200	340
KA057	57 43 49	155 41 25	530	520	8,000	8,300	30,000	16,000	430	330
KA058	57 43 8	155 38 12	680	630	7,800	9,200	25,000	16,000	300	350
KA059	57 42 22	155 39 0	680	560	6,900	6,300	58,000	15,000	1,400	370
KA060	57 45 29	155 38 35	840	580	7,100	9,100	38,000	17,000	790	410
KA061	57 59 17	155 48 48	1,000	750	6,900	12,000	22,000	18,000	490	320
KA062	57 59 10	155 50 13	750	300	6,300	6,000	29,000	12,000	420	330
KA063	57 59 4	155 53 30	890	190	5,900	5,500	36,000	15,000	1,600	240
KA064	57 59 33	155 53 19	560	260	10,000	4,400	26,000	16,000	750	360
KA065	57 59 9	155 57 44	990	230	9,300	9,500	20,000	14,000	680	230
KA066	57 58 55	155 58 18	710	280	3,700	4,500	25,000	18,000	1,400	320
KA068	57 56 4	155 58 50	640	430	3,200	5,300	22,000	17,000	570	320
KA069	57 55 40	155 55 6	620	150	3,600	5,000	14,000	8,200	370	210
KA070	57 55 35	155 50 36	750	200	8,200	5,900	19,000	9,900	570	190
KA071	57 57 3	155 47 23	980	280	3,600	9,200	22,000	14,000	530	260
KA072	57 57 3	155 47 23	820	300	5,900	8,200	20,000	12,000	590	220
KA073	57 55 59	155 48 30	930	250	4,700	8,600	16,000	13,000	520	310
KA074	57 55 57	155 44 27	280	430	3,100	4,400	8,900	7,200	160	200
KA075	57 59 9	155 41 1	270	660	5,300	4,300	19,000	9,800	300	300
KA076	57 56 31	155 41 50	170	390	3,200	2,100	11,000	8,100	250	220
KA077	57 51 7	155 34 40	350	910	8,400	5,100	31,000	14,000	840	320
KA078	57 51 19	155 34 44	220	590	4,600	3,600	15,000	11,000	310	300
KA079	57 41 14	155 37 22	460	260	3,500	4,100	34,000	6,200	930	290
KA080	57 41 8	155 37 14	340	180	2,100	3,000	14,000	5,000	340	160
KA081	57 40 56	155 35 0	1,200	840	5,900	9,700	43,000	18,000	1,000	450
KA082	57 33 39	155 44 15	810	510	6,400	6,400	45,000	17,000	1,200	380
KA083	57 34 24	155 44 5	850	470	6,000	6,300	45,000	16,000	1,200	260
KA084	57 36 11	155 44 32	530	370	5,000	5,400	26,000	12,000	520	300
KA085	57 37 48	155 46 11	470	290	4,100	5,900	45,000	11,000	600	310
KA086	57 40 15	155 50 13	490	370	4,100	5,900	33,000	11,000	710	400
KA087	57 39 31	155 49 6	470	420	4,200	8,300	53,000	13,000	930	500
KA088	57 39 20	155 47 19	830	400	5,800	9,600	40,000	15,000	980	340
KA089	57 38 10	155 44 9	860	530	5,900	8,900	46,000	14,000	1,200	400
KA090	57 41 18	155 44 0	910	670	6,900	12,000	41,000	23,000	980	410
KA091	57 41 8	155 43 52	640	340	5,000	5,700	55,000	13,000	1,500	320
KA092	57 40 28	155 42 4	640	390	4,700	5,000	26,000	13,000	780	270
KA093	57 39 52	155 41 17	520	270	4,000	4,500	50,000	9,000	1,200	250
KA094	57 39 21	155 42 2	580	240	3,500	5,100	13,000	8,100	400	180
KA095	57 57 49	155 37 46	350	340	2,900	3,300	27,000	10,000	870	290
KA096	57 57 47	155 37 23	210	770	5,800	4,000	15,000	9,700	290	300
KA097	57 56 13	155 38 17	240	790	6,800	4,200	32,000	11,000	750	210
KA098	57 58 25	155 32 23	200	540	5,200	2,900	14,000	8,600	330	250
KA099	57 57 56	155 32 53	160	630	5,400	3,300	15,000	9,000	290	270
KA100	57 57 48	155 31 1	150	520	4,300	2,500	11,000	9,900	260	190
KA101	57 59 0	155 27 8	140	380	3,200	2,500	10,000	6,200	180	180
KA102	57 59 14	155 23 47	110	440	2,000	2,600	11,000	6,000	250	150
KA103	57 58 2	155 24 20	78	330	1,400	2,000	5,200	4,200	120	110
KA104	57 56 55	155 22 19	160	640	3,900	3,100	12,000	8,300	150	240
KA105	57 56 47	155 22 23	140	480	3,600	2,400	10,000	5,800	95	230
KA106	57 55 54	155 25 30	200	680	4,800	3,400	14,000	9,700	180	300
KA107	57 55 11	155 26 0	190	710	5,300	3,400	15,000	10,000	170	330
KA108	57 54 30	155 27 0	200	590	4,200	3,200	14,000	9,700	220	300
KA109	57 54 4	155 25 20	370	590	2,600	4,900	10,000	11,000	140	220
KA110	57 53 47	155 30 31	250	600	4,000	4,200	14,000	11,000	330	250
KA111	57 52 2	155 30 59	180	330	3,100	2,400	9,500	8,000	230	200

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
KA051	11	5.8	N	42	71	2.9	5.5	3.1	.99	N	140	32
KA052	12	3.8	N	31	89	3.5	6.7	4.1	2.9	N	280	34
KA053	11	3.8	N	85	90	3.3	6.4	4.2	4.7	N	310	46
KA054	9.1	3.9	N	110	100	3.2	6	3.1	3.5	N	250	40
KA055	17	5.1	N	69	88	3.7	7.5	4.8	5.1	N	370	80
KA056	9.6	2.5	.081	68	87	4	8	4.3	2.2	N	310	54
KA057	13	5.2	N	76	82	3.9	7.8	4.7	5.4	N	340	69
KA058	12	9.6	1.1	78	96	3.6	7	4.8	5	N	310	53
KA059	11	4.9	.023	88	82	4.3	9.4	5.1	5.8	N	450	160
KA060	9.9	2.8	N	120	100	4	7.7	4.8	3.4	N	420	90
KA061	9.2	4.1	N	65	45	2.8	5.3	4.4	3.8	N	310	73
KA062	1.9	6.1	3.2	31	33	3.1	7.1	5.6	4	N	450	100
KA063	1.8	6.6	.42	32	26	2.1	5.2	3.6	6.4	N	340	160
KA064	3.9	5.5	2.8	32	56	3.4	8.3	5.5	6.3	N	370	79
KA065	1.5	4.1	2.6	46	38	2.8	5.7	4.5	4.9	N	300	59
KA066	3.6	9.4	3.6	35	49	2.9	6.5	4	5.8	N	290	110
KA068	9	5.7	1.8	37	52	2.8	5.6	4.1	3.7	N	360	69
KA069	1.6	3.9	.14	29	21	2.1	4	3.1	3.4	N	290	64
KA070	1.9	6.8	.63	35	21	2.2	4.3	2.7	3.3	N	250	79
KA071	2.3	5.2	N	45	28	2.5	5.3	3.7	3	N	260	91
KA072	3.8	4.4	N	35	26	2.2	4	3.6	3.9	N	300	71
KA073	1.9	5	.26	40	30	2.7	5.3	4.6	3.1	N	330	60
KA074	6	6.9	.75	43	32	1.6	2.3	2	1.3	N	130	28
KA075	11	5.5	1.5	46	60	2.6	4.4	4.1	2.5	N	280	50
KA076	8.2	3.6	.92	30	78	2.9	5.7	3.6	1.5	N	210	26
KA077	17	5.7	.23	55	71	3.3	5.1	4.2	1.9	N	340	95
KA078	12	3.7	.79	47	100	3.1	5.8	3.4	2.8	N	290	35
KA079	5.2	4.4	N	58	48	2.3	4.4	2.6	3.1	N	320	100
KA080	4	3.1	.33	42	33	1.6	2.9	1.8	2.2	N	200	47
KA081	14	4.3	N	150	96	4.7	9.7	4.8	4.5	N	450	85
KA082	11	6	N	140	83	3.6	7.5	4.7	7.3	N	480	110
KA083	12	5.4	N	140	71	3.3	6.6	4.5	5	N	450	120
KA084	12	3.6	N	81	70	3.3	6.3	3.6	4.8	N	330	60
KA085	8.2	5.9	N	95	55	3	5.8	2.8	1.5	N	400	110
KA086	7.9	3.9	N	83	66	3.2	6.9	3.6	5.2	N	350	78
KA087	9.7	3.3	N	120	120	4.2	8.3	4.1	3.7	N	440	100
KA088	11	4.1	N	89	71	3.5	7	4.8	8.2	N	420	100
KA089	11	5.2	.68	95	60	3.8	7.3	4.8	9.5	N	430	110
KA090	10	4.1	N	120	100	3.7	7.6	5	4.6	N	500	89
KA091	6.6	5	N	75	50	3	6.6	4.1	6.3	N	510	140
KA092	7.2	4	N	72	57	2.3	4.9	3.2	3.3	N	360	67
KA093	5.9	4.1	N	53	38	2.4	5.2	3.5	4.3	N	440	160
KA094	5.9	5	N	58	36	2	3.5	2.7	5	N	210	34
KA095	3.8	4.6	N	42	100	4.3	9.7	4.5	4.8	N	430	82
KA096	13	6.6	N	45	63	2.7	3.7	3.4	2.5	N	240	38
KA097	16	5.9	N	50	81	3.4	5	4.6	1.8	N	330	110
KA098	13	6	.4	29	60	2.5	3.9	3.3	2.3	N	240	36
KA099	12	6.2	N	34	60	2.7	3.9	3.6	2.5	N	230	44
KA100	9.1	5	N	25	46	2	2.4	2.6	2.7	N	180	34
KA101	9.9	7.1	.67	29	55	2.1	2.8	2.1	1.2	N	270	22
KA102	6.9	7.9	.73	22	43	4.9	8.6	2.4	1.1	N	160	31
KA103	4.9	7.2	N	18	36	3	4.5	1.5	.48	N	98	14
KA104	13	3.4	N	34	110	3.7	6.4	3.7	3.3	N	190	24
KA105	9	4.7	N	25	93	2.5	3.3	3	2.9	N	160	21
KA106	13	4.7	.18	40	130	3.7	6.2	4.4	4.1	N	240	27
KA107	12	4	.29	37	150	3.9	6	4.9	5.1	N	260	28
KA108	11	4.9	1.6	41	120	3.5	6	4.2	3.9	N	260	30
KA109	6.9	4.6	.42	110	120	4.5	7.7	2.9	1.1	N	180	25
KA110	11	4.6	N	64	98	3.6	6.1	2.8	3	N	230	35
KA111	8.8	5.9	.1	36	72	2.5	4	3	.77	N	180	24

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
KA051	9.2	4	19	14	37	N	N	N	N	<1.7	N
KA052	11	5.9	10	22	49	N	N	N	N	<1.9	N
KA053	12	7.9	11	32	37	N	N	N	N	<1.9	N
KA054	8.8	5.6	6.2	23	34	N	N	N	N	N	N
KA055	16	9.9	14	41	52	N	N	N	N	<3.4	N
KA056	11	7.6	9.9	29	44	N	N	N	N	N	N
KA057	15	9	13	37	47	N	N	N	N	<1.6	N
KA058	15	8.7	14	40	43	N	N	N	N	<3.7	N
KA059	17	11	13	28	57	N	N	N	N	N	N
KA060	12	9	11	24	60	N	N	N	N	N	N
KA061	12	8.2	9.7	26	32	N	N	N	N	N	N
KA062	11	9.8	8.6	26	34	N	N	N	N	N	N
KA063	17	11	13	18	43	N	N	N	N	N	N
KA064	6.6	10	11	19	31	N	N	N	N	N	N
KA065	5.6	9.1	10	22	25	N	N	N	N	N	N
KA066	10	7.1	7.6	12	35	N	N	N	N	N	N
KA068	10	5.9	7.5	14	34	N	N	N	N	N	N
KA069	9	5.6	5.6	14	21	N	N	N	N	N	N
KA070	11	8.7	10	19	22	N	N	N	N	N	N
KA071	15	8.7	9.8	24	25	N	N	N	N	N	N
KA072	9	8	8.1	19	26	N	N	N	N	N	N
KA073	6.5	6.5	6.4	16	24	N	N	N	N	N	N
KA074	9.3	5.6	5.8	12	21	N	N	N	N	N	N
KA075	15	6.8	11	22	37	N	N	N	N	<2	N
KA076	9	4.6	6.5	13	29	N	N	N	N	N	N
KA077	24	9.1	14	26	54	N	N	N	N	N	N
KA078	11	5.7	8.3	18	37	N	N	N	N	N	N
KA079	9	6.9	6.7	13	69	N	N	N	N	N	N
KA080	4.6	3.9	3.8	8.4	34	N	N	N	N	N	N
KA081	11	8.3	8	23	65	N	N	N	N	N	N
KA082	11	9	8.4	19	73	N	N	N	N	N	N
KA083	11	8.4	7.5	17	64	N	N	N	N	N	N
KA084	9.1	6.5	7	19	49	N	N	N	N	N	N
KA085	11	6.9	5.9	15	70	N	N	N	N	N	N
KA086	9.7	7	7.1	19	54	N	N	N	N	N	N
KA087	11	7.7	7.8	19	77	N	N	N	N	N	N
KA088	11	8.4	8.3	23	60	N	N	N	N	N	N
KA089	12	9	8.6	20	66	N	N	N	N	N	N
KA090	11	9.1	8.2	22	58	N	N	N	N	N	N
KA091	12	9.5	6.5	13	73	N	N	N	N	N	N
KA092	8	6.7	5.9	12	43	N	N	N	N	N	N
KA093	13	9	6.2	12	71	N	N	N	N	N	N
KA094	5.3	4.4	5.1	13	27	N	N	N	N	N	N
KA095	9.2	6.7	6.3	8.7	48	<2.8	N	N	N	<1.9	N
KA096	16	6.3	11	21	36	N	N	N	N	N	N
KA097	21	8.8	14	27	56	N	N	N	N	N	N
KA098	14	6.1	11	19	41	N	N	N	N	N	N
KA099	15	6.6	11	21	38	N	N	N	N	<1.7	N
KA100	11	5.2	9.9	16	33	N	N	N	N	N	N
KA101	8.1	4.4	6.6	9.6	29	N	N	N	N	N	N
KA102	6.5	2.7	3.8	7.9	17	N	N	N	N	N	N
KA103	3.4	1.8	2.7	5.9	13	N	N	N	N	N	N
KA104	10	4.3	9.4	23	41	N	N	N	N	<2.1	N
KA105	8.2	4.2	8.2	15	32	N	N	N	N	1.9	N
KA106	12	5.6	11	20	43	N	N	N	N	<1.9	N
KA107	12	5.8	11	22	45	N	N	N	N	<1.6	N
KA108	9.9	5.4	9.9	19	45	N	N	N	N	N	N
KA109	5.7	3.6	5.1	15	31	N	N	N	N	N	N
KA110	11	4.6	7.5	16	33	N	N	N	N	N	N
KA111	7.3	4.2	6.9	13	28	N	N	N	N	N	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
KA112	57 49 9	155 37 37	140	410	3,000	2,100	9,400	5,700	170	200
KA113	57 39 47	155 59 23	260	310	1,100	2,400	7,500	8,000	300	110
KA114	57 43 17	155 57 37	350	490	2,200	3,900	13,000	9,000	300	280
KA115	57 41 37	155 54 6	490	450	4,800	5,800	19,000	13,000	360	310
KA116	57 42 26	155 53 18	360	230	3,100	3,900	12,000	6,600	300	210
KA117	57 42 53	155 49 41	460	360	4,400	5,000	27,000	11,000	830	280
KA118	57 44 26	155 52 37	310	400	3,400	3,700	11,000	8,500	210	230
KA119	57 46 34	155 53 27	310	630	4,000	4,200	13,000	9,700	210	260
KA120	57 46 50	155 51 29	230	650	4,300	2,700	14,000	9,200	380	270
KA121	57 47 40	155 49 47	200	730	4,500	2,600	13,000	8,900	280	240
KA122	57 48 6	155 47 42	310	750	4,200	3,200	20,000	9,300	460	280
KA123	57 48 45	155 48 14	190	430	3,900	2,600	14,000	7,700	230	220
KA124	57 50 42	155 46 38	210	620	4,400	2,600	17,000	9,500	280	270
KA125	57 34 22	155 50 54	480	530	6,000	8,300	34,000	17,000	490	450
KA126	57 35 58	155 55 13	310	550	5,100	4,200	34,000	13,000	93	420
KA127	57 35 56	155 55 24	590	620	5,100	9,400	46,000	16,000	720	510
KA128	57 37 29	155 57 30	460	330	4,600	6,300	44,000	11,000	1,200	470
KA129	57 37 30	155 59 31	590	510	7,800	9,000	39,000	17,000	830	360
KA130	57 38 0	155 59 15	390	390	5,900	5,500	23,000	12,000	480	290
KA131	57 37 21	155 53 2	430	430	4,200	5,800	51,000	13,000	1,300	480
KA132	57 37 29	155 54 0	630	490	5,000	11,000	44,000	17,000	870	470
KA133	57 37 56	155 54 5	550	570	5,100	10,000	30,000	17,000	340	420
KA134	57 39 16	155 56 52	350	320	4,100	5,000	25,000	8,600	490	380
KA135	57 33 1	155 47 9	690	350	4,300	5,400	36,000	13,000	1,200	260
KA136	57 34 18	155 48 44	520	390	4,700	5,700	25,000	13,000	390	380
KA137	57 34 32	155 49 54	580	440	5,300	8,600	38,000	14,000	1,000	450
KA138	57 33 11	155 54 5	650	410	5,400	8,200	32,000	15,000	1,000	400
KA139	57 32 15	155 55 31	930	620	8,500	13,000	32,000	23,000	560	420
UG001	57 13 34	157 17 17	500	510	3,400	8,800	20,000	14,000	38	270
UG002	57 13 56	157 20 53	350	360	2,900	4,600	22,000	11,000	280	160
UG003	57 13 59	157 22 50	340	360	3,100	4,700	15,000	12,000	240	350
UG004	57 16 41	157 24 18	430	330	5,000	3,800	15,000	14,000	630	340
UG005	57 5 31	157 23 49	320	410	7,000	4,900	27,000	14,000	720	410
UG006	57 8 20	157 26 47	230	220	3,000	3,700	22,000	10,000	560	300
UG007	57 8 18	157 27 17	810	540	10,000	8,800	17,000	17,000	470	460
UG008	57 9 24	157 29 35	360	330	5,800	4,100	16,000	11,000	450	350
UG009	57 10 46	157 31 49	180	320	3,200	4,400	21,000	8,600	23	260
UG010	57 10 53	157 34 2	450	370	4,600	4,300	19,000	12,000	110	320
UG011	57 9 24	157 35 49	350	260	1,600	3,700	8,200	8,100	65	180
UG012	57 8 26	157 36 36	160	290	2,600	2,400	19,000	11,000	330	230
UG013	57 7 59	157 33 0	63	180	2,200	1,500	16,000	4,200	14	250
UG014	57 6 36	157 35 17	240	440	5,200	2,400	33,000	12,000	440	310
UG015	57 7 32	157 33 7	180	320	5,200	2,100	33,000	14,000	88	340
UG016	57 7 10	157 32 9	200	160	2,400	2,100	9,300	4,900	420	210
UG017	57 6 29	157 32 35	210	140	2,300	2,100	12,000	4,600	580	200
UG018	57 6 16	157 29 33	230	210	2,500	2,900	21,000	7,800	880	240
UG019	57 5 17	157 29 35	160	240	1,500	2,300	7,900	6,100	9	120
UG020	57 4 10	157 28 3	110	210	2,500	2,900	15,000	7,600	10	210
UG021	57 3 20	157 28 35	180	180	2,400	3,200	15,000	9,800	330	260
UG022	57 7 38	157 38 46	310	640	3,900	5,300	28,000	15,000	55	260
UG023	57 6 18	157 39 48	750	400	9,400	5,500	14,000	13,000	520	360
UG024	57 6 3	157 37 28	110	340	3,100	4,100	21,000	11,000	4.8	230
UG025	57 4 10	157 37 21	180	550	3,500	4,800	20,000	12,000	11	250
UG026	57 4 0	157 36 58	110	380	3,200	4,800	34,000	6,600	8.2	300
UG027	57 4 9	157 35 35	110	170	2,400	2,100	22,000	7,200	62	230
UG028	57 2 51	157 34 21	110	450	3,300	4,800	22,000	8,400	4.6	260
UG029	57 2 23	157 34 39	620	380	7,000	5,500	19,000	12,000	930	320
UG030	57 0 55	157 32 40	300	270	2,000	2,500	31,000	10,000	690	270
UG031	57 1 39	157 29 44	390	540	5,000	4,600	26,000	11,000	1,000	260
UG032	57 2 12	157 30 30	490	530	4,400	4,500	12,000	7,400	120	200

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
KA112	8.2	4.7	N	26	83	2.4	3.4	2.7	1.4	N	160	22
KA113	3.4	7.5	.63	83	78	1.3	1.5	1.1	1.2	N	120	24
KA114	3.8	4.6	.1	96	88	2.8	4.5	1.8	.66	N	180	39
KA115	8.3	4.5	N	85	87	3.3	5.4	3.6	5.1	N	260	46
KA116	3.9	4.9	.55	57	47	1.9	2.5	2.1	2.6	N	200	36
KA117	6.9	6.6	.25	69	59	2.9	5.6	3.2	3.9	N	320	75
KA118	5.4	4.4	.15	57	72	2.7	4.3	2.5	3.4	N	190	29
KA119	8.5	5.6	.41	64	110	3.3	5.1	2.9	3	N	210	31
KA120	12	6.5	1.9	35	120	3.3	6	3.7	3.8	N	250	34
KA121	12	5.2	.61	37	110	2.8	4.6	3	3	N	210	30
KA122	13	6.8	.53	54	110	3.4	6.1	3	3.2	N	270	53
KA123	14	5.4	.16	35	100	2.8	4.8	2.8	2.6	N	240	32
KA124	9.3	6.3	.13	37	100	3	5.8	2.9	3.8	N	220	32
KA125	18	4.7	1.5	120	200	4.7	8.8	5.2	5.3	N	400	64
KA126	15	4.3	.12	65	180	3.9	6.8	6.3	3.2	N	370	47
KA127	12	3.6	N	150	180	5.1	10	5.6	3.9	N	450	88
KA128	8.5	5.7	.027	85	75	3.9	8.2	4.6	5.2	N	450	110
KA129	17	4.4	N	83	99	4.1	7.8	5.1	8.2	N	370	83
KA130	13	5.1	N	54	67	3.2	6.2	4.1	7.3	N	280	53
KA131	11	4.4	N	150	170	4.7	9.5	4.9	4.3	N	450	110
KA132	13	7	.1	140	150	4.4	8	4.9	5.8	N	430	90
KA133	17	3.4	N	130	270	4.8	8.7	5.7	3.8	N	370	54
KA134	5.8	4.3	N	60	65	4	8.3	3.3	4.4	N	270	70
KA135	7.3	4.6	N	92	71	2.7	4.4	2.9	5.1	N	360	84
KA136	11	5	N	85	110	3.9	8	5.1	7.1	N	350	51
KA137	13	7.8	N	110	130	4.6	9.3	5.1	9.3	N	410	81
KA138	12	8.1	N	120	92	3.7	6.5	4.2	8.3	N	400	76
KA139	18	10	2.3	120	160	4.7	9.8	6.5	12	N	490	59
UG001	5.8	4.6	N	77	200	8.1	18	6.4	4.7	N	380	34
UG002	4.6	6	N	49	150	4.7	11	4.1	5.1	N	350	54
UG003	2.9	4.6	.1	49	140	7.5	17	7	6.6	N	360	37
UG004	2.5	5	.21	70	75	4.1	9.2	5.3	6.4	N	290	44
UG005	4	7.2	1.1	110	100	5.2	12	6.5	8.4	N	4,000	63
UG006	2.6	6.1	.075	40	85	4	8.9	5.5	6.7	N	720	44
UG007	6.2	7.8	N	150	65	4.5	9.2	5.3	5.2	N	330	45
UG008	2.5	6.3	N	66	84	4.6	10	4.6	5.9	N	280	44
UG009	4.4	4	N	43	130	6	14	6.1	3.8	N	440	35
UG010	4.9	4	N	43	96	6.6	15	5.8	2.4	N	370	36
UG011	2.4	6.7	.032	43	140	4.7	9.5	4.1	.6	N	210	17
UG012	9	5.7	N	28	49	4.4	10	4.7	3.2	N	360	34
UG013	4	6	N	9.8	60	3.8	7.9	4.1	1.1	N	590	20
UG014	6.4	27	N	14	28	5	9.3	6.1	2.9	N	460	52
UG015	9.2	5.4	N	13	45	5.5	11	6.8	1.9	N	520	38
UG016	1.4	5.6	N	20	45	2.6	5.6	2.7	3.1	N	200	28
UG017	1.8	7.5	1.7	23	74	2.6	5.3	2.8	2.8	N	310	32
UG018	2.8	5	N	25	65	3.6	7.8	4	3.9	N	300	58
UG019	2.7	5	.087	35	81	2.9	5.8	2.5	1.7	N	160	17
UG020	3.9	4.8	N	33	100	4.6	10	4	.84	N	270	28
UG021	4.2	5.7	.76	41	77	4.4	9.6	4.6	3	N	300	39
UG022	8.1	5.9	N	66	160	7	16	5.7	2.9	N	410	56
UG023	2.9	7.7	N	98	53	3.7	7.8	4.1	4	N	260	35
UG024	7.5	5.1	N	44	110	5.5	12	5	1.4	N	390	25
UG025	7.4	4.9	.43	56	110	6.6	15	5.3	1.9	N	360	25
UG026	4	4.5	.13	25	100	8.5	17	11	1.1	N	610	37
UG027	3.6	4.9	N	12	55	3.1	6.3	5	1.6	N	320	32
UG028	5.2	5.2	.093	50	170	8.4	19	6	1.1	N	350	23
UG029	2.2	4.4	N	80	39	3.3	7.4	3.7	7.7	N	260	52
UG030	4.3	7.2	N	27	100	3.4	7.7	4.8	2	N	630	49
UG031	2.7	5.7	1.6	69	93	4.3	9.7	5.4	5.8	N	380	69
UG032	3	5.3	.26	41	110	4.8	11	5.5	10	N	310	30

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued.

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
KA112	7.4	3.7	6.5	13	28	N	N	N	N	N	N
KA113	3.2	2.4	3.3	5.3	18	N	N	N	N	N	N
KA114	6.6	3.4	4.2	15	29	N	N	N	N	N	N
KA115	9.9	6.5	9.2	24	35	N	N	N	N	N	N
KA116	5.1	4.4	5.5	11	26	N	N	N	N	N	N
KA117	9.8	7.3	8.3	16	44	N	N	N	N	N	N
KA118	7.2	4.4	6.3	18	26	N	N	N	N	N	N
KA119	10	4.8	7.5	20	34	N	N	N	N	N	N
KA120	12	5.2	9	20	37	N	N	N	N	<1.8	N
KA121	13	5	9	19	35	N	N	N	N	N	N
KA122	14	5.5	8.2	21	41	N	N	N	N	<1.5	N
KA123	13	4.9	8.1	16	43	N	N	N	N	<1.5	N
KA124	12	5	8.4	15	36	N	N	N	N	N	N
KA125	12	8.1	11	31	61	N	N	N	N	N	N
KA126	11	8	12	29	59	N	N	N	N	4.5	N
KA127	12	8.8	9.9	25	71	N	N	N	N	N	N
KA128	11	9.2	8.1	19	74	N	N	N	N	N	N
KA129	16	9.6	14	35	66	N	N	N	N	<2.1	N
KA130	13	7.7	12	30	40	N	N	N	N	<2.2	N
KA131	11	8.1	7.9	17	77	N	N	N	N	N	N
KA132	10	7.9	8.5	23	66	N	N	N	N	N	N
KA133	9.4	7.6	9.9	27	65	N	N	N	N	N	N
KA134	10	6.9	8.7	21	39	N	N	N	N	<1.8	N
KA135	8	7.1	6.5	14	52	N	N	N	N	N	N
KA136	8.6	7.3	8.1	26	45	N	N	N	N	<1.7	N
KA137	11	8.2	9.8	23	64	N	N	N	N	N	N
KA138	9.2	7.4	7.1	19	53	N	N	N	N	N	N
KA139	11	9.4	11	34	55	N	N	N	N	N	N
UG001	6.2	6.7	4.9	14	51	N	N	N	N	N	N
UG002	6.4	6.8	5.1	14	51	N	N	N	N	N	N
UG003	6.3	5.6	7.2	9.7	40	<3.5	N	N	N	<1.6	N
UG004	11	6.4	16	13	29	N	N	N	N	N	N
UG005	16	13	31	15	47	N	N	N	N	N	N
UG006	13	7.1	15	10	36	N	N	N	N	<1.8	N
UG007	11	10	35	14	34	N	N	N	N	5.7	N
UG008	11	7.1	20	13	40	N	N	N	N	<2.1	N
UG009	5.3	7.6	5.1	9.9	51	<3.5	N	N	N	<1.8	N
UG010	7.2	6.3	9	12	45	<3.8	N	N	N	<2.7	N
UG011	2.2	3	2.6	5.9	26	N	N	N	N	N	N
UG012	8.2	6.2	13	19	47	<3	N	N	N	<2.3	N
UG013	7	7.1	11	14	110	15	N	.73	N	26	N
UG014	23	20	18	41	53	<5.8	N	.94	N	60	N
UG015	15	15	16	45	89	8.2	N	.95	N	34	N
UG016	5	3.8	7.5	5.4	21	N	N	N	N	N	N
UG017	5.9	4.1	7.2	5.9	26	N	N	N	N	6.6	N
UG018	5.9	5.6	5.9	8.9	40	N	N	N	N	<2.2	N
UG019	2.6	3.4	2.5	4.7	26	N	N	N	N	N	N
UG020	4.8	5.4	5	7.9	38	<3.2	N	N	N	<2.1	N
UG021	4.8	5.1	4	7.5	36	N	N	N	N	<1.9	N
UG022	8.9	8.3	7.2	13	38	<3	N	N	N	<1.5	N
UG023	11	8.4	35	13	28	N	N	N	N	N	N
UG024	7.3	7.5	8.2	13	50	<3.8	N	N	N	<2.8	N
UG025	8.2	7.4	8.6	13	52	<4.9	N	N	N	<2.7	N
UG026	12	19	24	39	80	5.9	N	.79	N	6.6	N
UG027	8	8.5	12	21	37	3.7	N	.63	N	13	N
UG028	7.9	8.5	12	20	58	6.3	N	.38	N	4	N
UG029	9.5	8.5	23	12	30	N	N	N	N	N	N
UG030	6	4.4	5.6	6.3	33	N	N	N	N	<2.8	N
UG031	11	8.6	15	12	46	N	N	N	N	N	N
UG032	6.7	6.5	8.4	11	32	<2.9	N	N	N	N	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
UG033	57 7 21	157 41 24	640	480	5,600	5,900	12,000	12,000	170	240
UG034	57 7 38	157 43 41	340	300	1,700	2,900	10,000	6,700	330	240
UG035	57 6 31	157 45 54	310	300	2,300	3,600	15,000	9,400	530	290
UG036	57 6 9	157 45 54	570	680	3,600	8,600	25,000	16,000	24	160
UG037	57 4 16	157 46 16	220	220	2,100	2,700	16,000	6,200	880	280
UG038	57 4 6	157 41 48	200	160	1,800	2,900	12,000	6,500	340	180
UG039	57 3 34	157 43 21	110	280	2,400	2,800	16,000	6,300	59	210
UG040	57 3 53	157 43 37	260	440	4,000	13,000	21,000	20,000	250	450
UG041	57 1 59	157 45 22	220	420	4,200	4,900	27,000	13,000	50	320
UG042	57 1 33	157 43 43	250	420	4,500	5,400	33,000	14,000	170	300
UG043	57 1 5	157 43 54	420	370	2,400	3,400	20,000	7,500	1,100	510
UG044	57 1 0	157 41 19	380	280	3,400	3,500	31,000	6,500	1,700	670
UG045	57 1 14	157 40 23	310	270	3,000	3,300	46,000	7,600	3,300	700
UG046	57 0 41	157 38 14	120	82	3,400	1,500	22,000	2,500	1,800	270
UG047	57 0 53	157 38 3	170	160	4,600	1,600	31,000	8,600	260	220
UG048	57 7 32	157 51 13	150	360	5,400	2,500	23,000	12,000	91	260
UG049	57 5 55	157 49 39	92	330	5,000	2,200	20,000	9,600	23	220
UG050	57 3 1	157 49 3	190	120	5,200	2,200	39,000	4,000	3,400	220
UG051	57 0 40	157 51 13	240	300	3,300	3,500	19,000	7,400	790	270
UG053	57 0 49	157 54 16	210	250	2,800	3,500	20,000	7,700	630	270
UG054	57 0 38	157 59 26	220	240	3,300	3,900	27,000	8,400	630	200
UG055	57 1 27	157 58 43	400	190	13,000	3,600	46,000	6,200	2,600	N(48)
UG056	57 2 57	157 59 47	300	190	3,300	2,600	12,000	5,600	950	220
UG059	57 2 46	157 21 59	120	360	2,800	3,900	14,000	8,700	5.4	220
UG060	57 1 29	157 23 13	150	540	3,000	2,400	13,000	6,500	19	190
UG061	57 1 34	157 23 5	120	380	3,300	2,600	28,000	6,500	110	240
UG062	57 1 20	157 22 12	450	270	3,000	3,000	26,000	8,100	510	220
UG063	57 1 16	157 21 42	180	340	5,600	2,200	22,000	9,400	400	360
UG064	57 1 55	157 21 28	100	300	3,800	3,200	15,000	7,500	87	290
UG065	57 2 53	157 18 21	130	270	4,400	3,600	20,000	10,000	210	300
UG066	57 2 14	157 17 9	140	310	5,500	3,400	21,000	11,000	350	310
UG067	57 2 25	157 16 57	140	350	4,200	5,100	15,000	11,000	150	340
UG068	57 2 47	157 17 39	270	690	5,100	5,000	23,000	14,000	61	280
UG069	57 5 6	157 18 13	410	600	2,400	4,600	17,000	11,000	52	220
UG070	57 6 0	157 16 21	220	300	3,600	4,100	16,000	9,500	240	320
UG071	57 6 43	157 14 44	350	490	2,500	4,500	15,000	14,000	34	260
UG072	57 6 53	157 14 55	280	620	3,100	4,600	15,000	7,800	7.6	240
UG073	57 8 6	157 18 25	140	360	3,000	4,200	15,000	6,700	20	230
UG074	57 9 20	157 19 49	99	400	5,100	2,300	23,000	11,000	17	190
UG075	57 10 54	157 18 2	95	290	4,600	3,900	14,000	9,900	92	250
UG076	57 10 51	157 15 27	120	330	4,800	4,000	22,000	13,000	140	260
UG077	57 10 8	157 14 18	120	330	5,600	1,700	58,000	18,000	46	400
UG078	57 8 51	157 12 8	140	270	5,600	4,400	20,000	13,000	280	380
UG079	57 8 37	157 9 37	180	270	6,500	5,700	22,000	15,000	210	400
UG080	57 7 38	157 9 28	86	340	4,600	2,700	25,000	10,000	48	200
UG081	57 7 23	157 9 43	230	940	4,100	3,400	21,000	13,000	16	140
UG083	57 6 20	157 9 19	390	220	1,700	2,700	26,000	5,200	610	210
UG084	57 6 38	157 10 23	220	150	2,800	2,000	9,700	4,400	660	220
UG085	57 7 54	157 11 25	76	330	4,300	1,500	17,000	7,500	12	150
UG085	57 7 54	157 11 25	97	310	2,600	3,900	15,000	8,100	3.1	220
UG086	57 9 34	157 10 12	180	730	4,000	3,100	20,000	9,300	20	230
UG087	57 9 35	157 7 14	110	420	3,600	3,000	34,000	7,500	78	280
UG088	57 8 36	157 5 58	380	260	3,000	2,800	26,000	7,800	440	230
UG089	57 6 41	157 5 41	420	87	660	2,600	6,800	8,600	320	150
UG090	57 6 0	157 6 25	380	150	630	1,900	22,000	3,300	280	220
UG091	57 6 2	157 6 6	210	340	5,100	2,000	28,000	9,500	94	280
UG092	57 6 12	157 5 51	170	270	2,700	1,100	38,000	5,000	160	<120
UG093	57 7 47	157 5 0	76	290	3,900	1,900	16,000	5,700	35	320
UG094	57 8 59	157 5 9	350	130	1,300	3,700	12,000	4,600	810	390
UG095	57 10 43	157 3 48	710	150	620	5,400	15,000	6,100	630	340

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
UG033	2.9	4	N	82	65	3.3	7.3	3.9	5.2	N	230	28
UG034	1.9	5.2	N	26	69	3.4	7.1	4.1	3.2	N	210	24
UG035	2.1	3.9	N	30	84	4.3	10	5.1	4	N	310	41
UG036	5.4	4.4	N	89	240	4.1	9.2	7.9	7.5	N	450	47
UG037	2	5.6	.73	20	62	3	6.8	3.7	5.4	N	280	49
UG038	3.1	6.7	.69	24	60	3.2	7.5	3.2	1.5	N	230	35
UG039	4.4	6	.21	19	33	4.7	11	3.8	1.4	N	250	29
UG040	5.3	8	.16	44	51	4.4	8.7	4.9	.79	N	280	47
UG041	7.1	5.3	N	53	140	7.5	16	6.5	2.6	N	400	44
UG042	5.7	4.5	N	64	150	7.1	16	6.7	2.5	N	470	66
UG043	3.1	9.9	N	26	40	2.8	6	4.2	3.2	N	1,600	55
UG044	3.1	8.4	N	29	29	3.4	7.3	4.9	5.5	N	470	76
UG045	3.7	4.1	N	27	65	4.1	10	5	7.1	N	410	110
UG046	.96	8	N	6.6	11	1.5	3.4	2.4	3.3	N	250	83
UG047	7.4	27	N	9.1	24	3.1	6.2	4.6	1.5	N	370	44
UG048	17	4.5	N	28	52	4.3	8.7	5	1.6	N	330	38
UG049	19	5.6	N	24	48	3.3	7.6	4	1.1	N	260	30
UG050	1.3	11	N	12	16	1.9	5.2	3	3.2	N	370	130
UG051	3.8	5.3	N	32	51	3.3	7.8	3.4	3.1	N	280	50
UG053	3.3	4.6	N	27	82	4	9.5	4.2	2.9	N	310	52
UG054	4.1	5.2	N	34	91	4.8	11	4.8	3.9	N	350	79
UG055	1.7	7.5	N	24	31	2.1	5	2.8	4.7	N	410	150
UG056	1.6	11	N	17	27	1.9	4.9	2.5	3.2	N	200	44
UG059	4.1	4.2	N	42	150	5.8	15	4.2	1	N	270	20
UG060	8.3	6	N	25	62	2.8	6.4	3.7	.97	N	320	25
UG061	9	6.8	N	16	16	3.9	8.7	6.6	.99	N	1,500	41
UG062	4.6	6.4	.057	22	25	3.4	7.5	4.7	2	N	690	55
UG063	11	8.2	N	12	35	2.3	4.6	4.3	1	N	740	33
UG064	11	7.9	.17	23	26	3.1	6.4	4.7	.87	N	380	26
UG065	13	13	N	27	33	2.8	5.4	4.9	.78	N	570	33
UG066	18	9.4	N	29	35	3.1	6	5	.63	N	490	37
UG067	10	10	.47	51	22	2.2	4	2.9	.42	N	260	30
UG068	12	6.5	2.9	47	88	3.8	7.8	4.5	1.1	N	350	41
UG069	4	4.6	N	56	140	5.7	13	4.7	1.9	N	340	32
UG070	3.8	5.3	.027	46	78	4.2	8.8	3.8	1.6	N	300	41
UG071	4.4	3.9	.058	62	160	6.1	14	5.4	2.4	N	350	29
UG072	3.9	5	.33	37	120	5.3	12	5.2	.7	N	290	27
UG073	5.5	6.1	.35	43	51	2.9	5.2	4	N	N	280	25
UG074	21	4.4	N	33	54	2.6	5.5	3.9	.95	N	250	35
UG075	14	8.9	N	38	21	2	3.3	2.8	.43	N	220	29
UG076	15	6.9	.34	41	35	2.6	5.8	4.5	1.1	N	370	37
UG077	25	8.7	3.4	9.5	23	3.5	7.8	13	.4	N	650	34
UG078	17	8.1	N	38	31	3.1	6	6	1.4	N	450	33
UG079	20	14	N	64	20	2.8	5.6	4	.94	N	370	36
UG080	19	5.3	N	28	66	3.5	6.9	4.8	1.2	N	320	36
UG081	11	7	1.5	32	110	2.9	5.7	3.7	.75	N	270	34
UG083	2.6	5.4	.18	21	24	2.3	5.4	2.9	1.7	N	190	86
UG084	1.4	9	.43	13	22	1.6	4	2.2	3.2	N	170	32
UG085	17	4.1	.036	11	48	2	4.6	3.3	.64	N	220	26
UG085	4.3	5.5	N	43	150	5.3	13	4.3	.84	N	280	17
UG086	12	6.2	.57	34	83	3.3	6.6	5.1	1.1	N	420	31
UG087	11	8	.13	18	20	4.4	9.6	8.2	.9	N	1,800	39
UG088	4.5	6.6	.32	20	29	3.4	7.7	5	2.2	N	730	50
UG089	1.1	13	N	17	6.7	1.1	2.6	1.6	.83	N	110	40
UG090	.76	6.3	.085	14	8.4	1.5	3.9	1.7	1.9	N	82	53
UG091	14	6.6	N	18	23	2.1	4.6	3.5	.69	N	300	30
UG092	4.4	6.7	N	6.7	6.1	1.7	5	4.2	.41	N	490	76
UG093	10	6.3	.29	10	48	3.3	7.3	5.5	.78	N	770	21
UG094	1.8	10	.39	23	13	2.8	7.3	3.5	4.4	N	170	61
UG095	.65	8.5	3.9	35	24	3.3	8.3	4.8	5.1	N	240	72

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued.

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
UG033	7.4	7.4	16	11	24	N	N	N	N	N	N
UG034	3.7	3.8	3.5	8.1	24	N	N	N	N	N	N
UG035	4.7	5.3	4.2	9.5	34	N	N	N	N	<1.9	N
UG036	4.2	10	3.6	35	47	N	N	N	N	N	N
UG037	4.4	5.1	3.6	7.4	36	N	N	N	N	2	N
UG038	3.9	4	2.9	6.2	32	2.9	N	N	N	2.4	N
UG039	7.1	6	7.9	9.3	45	4.3	N	N	N	<1.8	N
UG040	4.2	6.6	4	12	38	N	N	N	N	N	N
UG041	9.5	8	8.4	14	60	<3.4	N	N	N	<2.6	N
UG042	9.7	9	8.9	14	75	<3.4	N	N	N	<2.5	N
UG043	5.6	5.1	5.1	8.8	32	N	N	N	N	<2.1	N
UG044	8.7	6.3	8.7	7.6	43	N	N	N	N	<2.1	N
UG045	9.2	5.7	5.4	6	70	N	N	N	N	<1.9	N
UG046	6.6	7.2	9.1	6.2	35	N	N	N	N	1.7	N
UG047	14	14	16	39	52	5.2	N	.71	N	22	N
UG048	18	8.6	17	21	48	<3.5	N	N	N	9.6	N
UG049	16	7.9	17	20	46	<3.3	N	N	N	4.9	N
UG050	10	9.5	15	10	70	N	N	N	N	N	N
UG051	7.7	6.2	8.4	11	36	N	N	N	N	<1.7	N
UG053	6.5	6.4	5.9	9	42	<3.1	N	N	N	2.6	N
UG054	8.4	7.5	5.4	8.1	55	<2.7	N	N	N	N	N
UG055	16	14	21	13	50	N	N	N	N	N	N
UG056	4.4	5.2	7.3	8	26	N	N	N	N	N	N
UG059	6.5	6.9	7.7	13	42	5.7	N	N	N	3	N
UG060	13	6.3	14	15	38	5.3	N	.46	N	3.2	N
UG061	12	15	19	27	290	79	1	.59	N	26	N
UG062	7.8	9.5	8.5	38	83	12	N	.54	N	13	N
UG063	16	8.4	14	36	200	16	N	.35	N	11	N
UG064	12	5.9	11	20	50	5.1	N	N	N	4.4	N
UG065	14	9.3	13	33	92	12	N	N	N	10	N
UG066	16	7.4	12	23	63	7.1	N	N	N	5.9	N
UG067	13	4.8	10	10	27	N	N	N	N	N	N
UG068	18	8.2	17	19	43	N	N	N	N	N	N
UG069	5.1	5.4	4.4	7.9	44	N	N	N	N	N	N
UG070	11	5.6	11	11	35	N	N	N	N	N	N
UG071	4.9	5.7	4.6	10	38	N	N	N	N	N	N
UG072	9.6	7.6	13	18	43	5.1	N	N	N	2.3	N
UG073	11	5.8	14	12	27	N	N	N	N	2.1	N
UG074	19	7.6	16	19	42	N	N	N	N	4.3	N
UG075	15	5.5	11	12	28	N	N	N	N	<2.5	N
UG076	16	8	13	17	35	N	N	N	N	<3.6	N
UG077	15	16	22	68	150	12	.55	.48	N	56	N
UG078	15	11	15	28	65	N	N	N	N	<2.6	N
UG079	15	8	13	28	50	N	N	N	N	<2.4	N
UG080	18	8.1	16	19	44	N	N	N	N	4.4	N
UG081	19	8.4	19	21	42	N	N	N	N	N	N
UG083	9.1	5.6	7.2	12	35	3.4	N	.55	N	3.3	N
UG084	3.5	4.2	5.6	5.9	23	N	N	N	N	N	N
UG085	15	6.5	13	15	36	N	N	N	N	3.4	N
UG085	6.2	6.9	7.9	13	44	6.2	N	N	N	3.4	N
UG086	17	8.2	19	22	53	6.1	N	N	N	3.7	N
UG087	12	18	22	33	350	110	1	.56	N	33	N
UG088	7.5	9.8	9.6	41	85	13	N	.49	N	14	N
UG089	4	2.4	2.2	6	10	N	N	N	N	N	N
UG090	3.2	3.4	2.2	7.1	22	N	N	.7	N	2.8	N
UG091	16	9	13	25	43	6.7	N	.8	N	14	N
UG092	12	9.5	7.9	30	150	18	.59	1.2	N	68	N
UG093	9.8	5.4	13	23	65	16	.61	.77	N	20	N
UG094	5.5	3.9	5.9	11	19	N	N	N	N	N	N
UG095	4.4	5.3	2.8	8.4	22	N	N	N	N	N	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
UG096	57 10 35	157 2 25	350	67	350	2,200	14,000	3,200	710	200
UG097	57 10 46	157 0 43	310	95	310	1,900	5,400	2,700	290	190
UG098	57 15 36	157 14 3	170	390	4,000	2,900	13,000	7,800	280	190
UG099	57 16 21	157 14 57	300	230	4,200	3,300	34,000	9,200	1,200	230
UG100	57 17 47	157 15 59	360	190	1,700	2,100	26,000	7,300	1,500	220
UG101	57 18 16	157 14 14	270	200	2,400	4,200	26,000	11,000	1,500	230
UG102	57 17 11	157 10 32	250	280	3,600	3,300	16,000	8,000	270	210
UG103	57 16 47	157 9 16	270	270	3,800	4,000	17,000	10,000	320	240
UG104	57 15 11	157 9 22	200	200	3,500	3,400	26,000	9,300	990	220
UG105	57 14 29	157 11 18	460	250	3,900	4,600	14,000	9,000	470	220
UG106	57 13 57	157 6 49	190	220	2,800	2,500	14,000	8,100	190	200
UG107	57 15 17	157 6 20	150	290	4,900	1,600	29,000	8,800	400	230
UG108	57 15 48	157 6 2	230	590	4,600	2,400	17,000	9,500	490	260
UG109	57 16 34	157 2 50	150	210	3,600	2,300	21,000	11,000	500	230
UG110	57 14 46	157 0 39	180	340	3,600	3,400	16,000	11,000	150	230
UG111	57 14 39	157 1 5	160	180	3,700	2,400	16,000	9,800	240	240
UG112	57 14 46	156 57 41	140	330	3,700	3,300	16,000	9,400	28	240
UG113	57 12 59	156 56 54	140	360	5,300	8,400	14,000	14,000	97	260
UG114	57 12 53	156 56 39	74	280	3,000	5,400	8,800	8,600	170	380
UG115	57 11 25	156 57 23	130	580	3,900	10,000	11,000	15,000	300	250
UG116	57 10 24	156 56 22	170	310	3,000	4,000	10,000	8,400	410	210
UG117	57 10 16	156 56 3	360	160	1,600	3,400	14,000	6,300	960	220
UG118	57 11 54	156 54 41	170	480	3,400	16,000	10,000	20,000	260	210
UG119	57 14 13	156 55 40	140	400	2,800	9,500	11,000	15,000	360	370
UG120	57 24 46	156 55 26	220	580	2,100	3,400	32,000	4,700	490	250
UG121	57 25 13	156 55 14	310	970	3,700	3,900	26,000	9,600	460	270
UG122	57 25 35	156 59 11	260	830	2,800	4,700	15,000	9,100	250	230
UG123	57 25 47	156 59 34	190	300	1,700	3,200	13,000	5,500	200	220
UG124	57 27 24	156 55 16	260	700	3,200	3,300	26,000	7,400	530	180
UG125	57 27 4	156 53 45	310	720	2,300	5,500	24,000	8,800	250	290
UG126	57 26 52	156 50 19	440	500	2,700	4,100	26,000	10,000	860	230
UG127	57 25 26	156 50 52	290	1,100	3,600	3,300	14,000	8,100	310	250
UG128	57 24 41	156 51 18	240	950	3,800	3,700	16,000	9,700	440	330
UG129	57 23 43	156 53 0	160	680	1,800	2,200	13,000	5,300	360	270
UG130	57 22 35	156 54 53	240	910	2,600	5,000	35,000	9,000	420	330
UG131	57 21 23	156 57 36	390	450	6,200	6,100	27,000	15,000	300	300
UG131	57 21 23	156 57 36	210	900	3,200	4,500	26,000	9,800	590	400
UG132	57 21 1	156 59 3	250	950	3,800	4,900	28,000	11,000	780	310
UG133	57 20 56	157 0 34	360	1,300	5,800	5,100	45,000	13,000	560	320
UG134	57 21 6	157 2 5	330	590	2,600	3,200	75,000	10,000	660	N
UG135	57 21 20	157 4 56	280	650	3,100	3,200	44,000	8,200	890	260
UG136	57 22 54	157 5 17	250	500	2,600	2,700	57,000	6,900	1,000	170
UG137	57 23 57	157 7 42	310	230	1,600	3,300	35,000	9,900	1,700	630
UG138	57 24 34	157 8 9	280	240	1,700	2,800	24,000	11,000	1,500	320
UG139	57 25 50	157 9 15	270	310	2,100	3,100	34,000	9,400	2,200	420
UG140	57 26 42	157 11 37	310	260	1,900	4,100	44,000	16,000	1,600	550
UG141	57 28 23	157 11 39	250	190	1,400	2,700	19,000	6,200	3,100	540
UG142	57 29 31	157 9 5	280	170	1,500	3,300	36,000	7,100	2,700	600
UG143	57 27 31	157 6 15	220	190	1,500	2,300	38,000	8,800	1,700	510
UG144	57 27 59	157 7 24	280	490	2,400	3,300	23,000	6,900	880	230
UG145	57 25 6	157 3 25	370	670	3,200	4,100	26,000	12,000	880	350
UG146	57 25 22	157 3 6	290	330	1,800	3,000	26,000	13,000	1,600	360
UG147	57 27 48	157 2 8	300	260	1,600	3,200	27,000	12,000	1,400	470
UG148	57 28 2	157 3 58	410	670	3,200	4,600	40,000	9,800	770	500
UG149	57 29 52	156 42 59	500	800	2,700	4,800	17,000	9,700	730	410
UG150	57 28 53	156 43 44	580	1,600	4,800	6,600	24,000	17,000	740	400
UG151	57 26 54	156 38 54	380	1,300	5,600	4,100	29,000	15,000	630	210
UG152	57 26 19	156 37 30	390	810	4,500	6,800	62,000	11,000	590	430
UG153	57 24 24	156 31 17	690	620	10,000	13,000	37,000	23,000	680	310
UG154	57 24 34	156 31 29	600	580	5,900	8,900	34,000	16,000	630	260

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugasnik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
JG096	.47	7.2	N	13	11	1.5	4.2	1.9	3.6	N	130	68
JG097	.29	7.2	.15	14	13	1.9	4.7	3.2	1.8	N	58	28
JG098	13	5.4	.12	31	71	2.7	5.2	2.6	1	N	190	31
JG099	3.7	5.6	N	35	47	3.3	7.9	3.6	3.6	N	340	110
JG100	2.8	7.1	N	18	36	2.3	6.3	3	5.4	N	240	83
JG101	3.1	3.3	N	39	75	3.6	7.7	4.5	7.8	N	370	83
JG102	1.4	3.1	N	45	67	3.8	7.9	4.2	3.4	N	330	47
JG103	3.2	3.8	.29	52	76	4.3	8.8	4	3.7	N	330	50
JG104	3.5	3.6	N	35	40	2.9	6.3	3.6	3.8	N	440	89
JG105	3.4	4.3	N	47	54	3.6	7	3.6	4.2	N	310	52
JG106	4.2	3.2	N	24	40	3.8	7.5	3.1	1.6	N	280	33
JG107	3.3	5.1	N	15	33	2.9	6.2	3.9	1.8	N	510	50
JG108	4.6	6.5	N	26	52	3.4	5.9	4.7	2.5	N	340	48
JG109	3.4	.85	N	17	56	4.2	9.6	4.7	2.8	N	590	46
JG110	4.7	2.5	.22	28	56	4	7.9	3.6	1.8	N	310	34
JG111	4.1	3.5	N	25	35	3.5	6.5	3.9	1.5	N	400	36
JG112	6.5	2.9	N	29	43	4.3	8.2	3.6	1.2	N	350	27
JG113	11	3.1	N	54	20	3.2	5.2	3.3	N	N	290	28
JG114	6.6	5.9	.041	37	9.6	2.7	4.5	2.3	N	N	160	20
JG115	13	6.8	.013	58	22	2.3	3.3	2.4	N	N	230	23
JG116	8	6.2	N	34	35	2.5	4.3	2.7	1.4	N	200	31
JG117	2.8	4.8	N	24	29	3	5.6	4.2	2.5	N	210	77
JG118	8.3	54	N	52	28	1.4	1.8	2	N	N	230	23
JG119	10	6.7	.59	57	18	1.7	2.4	2.4	.95	N	220	29
JG120	3	4.2	N	14	28	4.7	7.8	1.7	.6	N	250	84
JG121	5.8	3.8	N	70	80	3.4	6.1	2.1	1.4	N	320	66
JG122	5.1	4.8	N	28	40	3.8	6.1	1.4	.72	N	210	39
JG123	.56	4.6	.11	32	82	5.2	11	6.7	7.5	N	350	29
JG124	3.1	3	N	35	56	3.5	5.6	2.3	2.2	N	250	75
JG125	4.5	3.7	N	24	36	5.2	8.4	1.8	.43	N	210	58
JG126	5.1	3.2	.62	21	48	4.3	6.8	2.3	1.2	N	540	67
JG127	6	4.5	N	120	130	2.5	4.5	1.9	.83	N	250	34
JG128	8.1	3	N	92	100	3.1	4.8	2.4	1.9	N	270	39
JG129	4	4	N	57	63	2.2	3.8	1.4	.82	N	180	35
JG130	5	3.8	N	40	53	5.2	8.5	2	.92	N	270	80
JG131	9.3	8.7	10	75	84	4	7.6	4.3	2.3	N	340	61
JG131	7	3.5	N	54	79	3.7	6.2	2.3	1.7	N	290	63
JG132	6.8	4.8	N	72	71	6	9.7	2.4	1.5	N	310	74
JG133	8.8	3.9	.45	47	73	6.9	11	2.8	1.3	N	400	100
JG134	4.7	4.5	N	58	76	3.2	4.4	2.4	4.5	N	480	45
JG135	4.2	N	.5	28	56	4.9	7.3	3.8	4.4	N	320	100
JG136	3.5	N	.59	24	47	5.8	9	3.7	5	N	310	140
JG137	2.9	N	.35	25	64	3.4	5.4	4.1	6.5	N	490	56
JG138	3.6	N	.37	30	62	3.7	7.1	4.1	7.6	N	470	50
JG139	4.4	N	.42	37	60	4.7	8.4	4.4	6.8	N	660	84
JG140	4.3	N	.48	32	94	3.7	5.9	5.2	9.9	N	2,400	68
JG141	1.8	N	.32	18	40	3.7	7.2	4.1	6.4	N	190	68
JG142	2.1	N	.35	20	51	3.5	6.5	3.8	5.7	N	500	79
JG143	2.5	N	.5	18	38	3.9	6.6	4.9	6.9	N	220	100
JG144	2.4	N	.36	36	57	3.1	5.5	3.3	2.6	N	460	71
JG145	3.1	N	.43	41	83	4.3	7.3	4.3	3.9	N	680	69
JG146	2.8	N	.48	26	61	2.9	5	4.4	7.9	N	550	77
JG147	3.3	N	.39	25	59	2.6	N	3.8	5.8	N	490	57
JG148	3.1	N	.41	56	140	3.7	7.4	5.2	5.9	N	3,100	60
JG149	6.9	N	.31	130	120	4	6.2	2.1	N	N	200	45
JG150	9.2	N	.44	130	160	4.9	6.1	2.9	1.3	N	360	51
JG151	7.7	N	.49	38	94	4.1	5.3	2.9	1	N	380	61
JG152	5.7	N	.7	63	59	5.7	9.2	3.3	N	N	390	160
JG153	16	N	.52	110	130	6.3	8.6	7.6	10	N	480	72
JG154	7	N	.49	110	96	6.2	8.5	4.3	4.6	N	390	89

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
UG096	3.4	4	3.2	4.9	20	N	N	N	N	N	N
UG097	1.7	1.9	1.3	5.2	8.4	N	N	N	N	N	N
UG098	12	4.6	8.6	13	38	N	N	N	N	N	N
UG099	18	7.6	7.6	10	48	<2.8	N	N	N	<2.7	N
UG100	6.1	4.8	3.9	4.4	40	N	N	N	N	3.8	N
UG101	7.2	5.6	3.9	7.3	44	N	N	N	N	<2.6	N
UG102	10	6	5.8	10	31	N	N	N	N	<1.8	N
UG103	11	6.3	6.8	12	33	N	N	N	N	<2.8	N
UG104	18	6.1	6.2	8.5	37	<2.5	N	N	N	4.6	N
UG105	14	5.3	5.7	7.7	29	N	N	N	N	<1.7	N
UG106	9.3	5.4	5.2	14	32	4.7	N	N	N	6.8	N
UG107	16	11	8.4	64	93	.23	.38	1.8	N	58	N
UG108	19	13	8.9	130	45	8.2	N	2.1	N	15	N
UG109	16	7.8	6.2	27	70	32	N	1.9	N	44	N
UG110	13	6.3	7.8	24	48	5.8	N	.42	N	10	N
UG111	14	6.3	6.3	18	64	7.7	N	N	N	12	N
UG112	10	6.5	8.6	17	51	6.5	N	N	N	22	N
UG113	18	5.9	11	15	30	<3.2	N	N	N	5.3	N
UG114	10	3	7.3	6	15	N	N	N	N	N	N
UG115	11	4.2	8.6	11	24	N	N	N	N	N	N
UG116	9.3	4	7.3	13	23	N	N	N	N	N	N
UG117	8.3	4.7	4.6	15	21	N	N	N	N	N	N
UG118	9.3	3.9	6.7	13	23	N	N	N	N	N	N
UG119	9.9	3.2	6.3	8.6	23	N	N	N	N	N	N
UG120	9.3	5.1	5.2	12	33	N	N	N	N	N	N
UG121	13	6	8.4	20	27	N	N	N	N	N	N
UG122	8.5	3.9	5.7	14	19	N	N	N	N	N	N
UG123	6.4	5.4	4.4	8.7	27	3.1	N	N	N	1.7	N
UG124	16	6.3	12	27	27	N	N	N	N	N	N
UG125	9.2	4.3	5.7	14	20	N	N	N	N	N	N
UG126	8.2	3.5	6	15	29	N	N	N	N	<2	N
UG127	8.8	3.9	5.7	13	25	N	N	N	N	N	N
UG128	10	4.5	6.8	14	29	N	N	N	N	N	N
UG129	5.2	2.9	3.5	8.8	18	N	N	N	N	N	N
UG130	9.2	4.6	6.1	13	24	N	N	N	N	N	N
UG131	16	8.4	16	36	40	N	N	N	N	<1.9	N
UG131	11	4.8	7.2	15	28	N	N	N	N	N	N
UG132	13	5.4	9.5	18	27	N	N	N	N	N	N
UG133	18	7.2	13	25	34	N	N	N	N	N	N
UG134	3.4	3.3	4.4	9.1	28	N	N	<.51	N	4.3	N
UG135	14	6.3	10	14	41	9.5	N	N	N	8.1	N
UG136	15	6.8	9.9	14	43	8.1	N	N	N	8.4	N
UG137	5.7	4	5.3	6.1	41	N	N	N	N	9.9	N
UG138	6.2	3.9	5.5	6.6	38	N	N	N	N	7.9	N
UG139	8.5	5.7	7.2	7.8	50	7.7	N	N	N	8.3	N
UG140	6.3	6.5	6.2	7.4	61	8.8	N	N	N	15	N
UG141	5.9	3.2	4.4	4.6	38	N	N	N	N	6.9	N
UG142	6.1	4.6	5.2	4.9	37	N	N	N	N	9.2	N
UG143	13	3.2	6.2	5.8	34	7.6	N	N	N	11	N
UG144	11	6.4	8.3	11	32	N	N	N	N	6.3	N
UG145	13	7.2	9.9	15	38	N	N	N	N	8.2	N
UG146	12	5.9	6.3	8.2	41	8.2	N	N	N	8.9	N
UG147	9.7	4.1	5.6	6.6	34	7.7	N	N	N	10	N
UG148	13	12	13	14	57	9.2	N	N	N	13	N
UG149	9.9	3.3	8.6	12	33	N	N	N	N	4.6	N
UG150	12	6.3	11	22	42	N	N	N	N	6.3	N
UG151	19	7.2	17	25	39	7.9	N	N	N	7.4	N
UG152	24	8.5	15	28	46	8.2	N	N	N	6.1	N
UG153	22	12	22	54	60	9.3	N	N	N	10	N
UG154	17	9	14	30	48	8.1	N	N	N	6.3	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
UG155	57 25 38	156 37 26	670	630	7,200	11,000	31,000	19,000	780	230
UG156	57 26 23	156 40 56	350	570	3,300	3,400	34,000	18,000	1,600	400
UG157	57 24 14	156 36 25	310	430	3,000	4,300	30,000	9,200	360	190
UG158	57 23 2	156 34 46	440	610	4,500	5,700	32,000	13,000	490	270
UG159	57 25 12	156 42 19	360	860	4,500	2,400	32,000	18,000	880	190
UG160	57 23 13	156 34 38	500	520	5,400	8,300	24,000	15,000	440	220
UG162	57 21 6	156 37 6	390	480	5,400	5,600	29,000	15,000	410	270
UG163	57 20 51	156 37 21	360	360	5,600	5,800	30,000	13,000	530	220
UG164	57 21 24	156 38 10	400	550	4,000	5,700	21,000	14,000	280	170
UG165	57 22 9	156 42 29	540	1,400	5,600	10,000	23,000	22,000	360	290
UG166	57 3 19	157 13 9	110	1,400	3,200	320	57,000	5,400	N	N
UG167	57 3 9	157 13 13	160	1,100	3,200	460	39,000	5,500	N	N
UG168	57 2 54	157 12 27	360	200	3,500	2,600	22,000	6,100	N	N
UG169	57 3 7	157 11 27	130	320	7,700	1,500	50,000	19,000	N	N
UG170	57 2 40	157 11 19	420	110	630	2,400	9,100	3,200	N	N
UG171	57 3 20	157 8 38	74	230	3,000	1,500	21,000	4,600	N	N
UG172	57 3 28	157 9 4	110	220	4,200	1,700	17,000	7,300	N	N
UG173	57 1 52	157 7 58	140	210	2,500	2,900	80,000	4,300	N	N
UG174	57 1 58	157 8 21	340	130	660	2,500	11,000	3,200	N	N
UG175	57 1 40	157 4 39	78	210	3,200	2,500	64,000	10,000	N	N
UG176	57 1 59	157 4 35	99	220	3,800	2,500	66,000	9,000	N	N
UG177	57 1 20	157 5 20	54	120	1,000	300	120,000	3,300	N	N
UG178	57 0 14	157 3 3	88	330	4,000	5,000	23,000	6,400	N	N
UG179	57 2 36	157 20 25	83	330	2,500	1,400	12,000	4,500	N	N
UG180	57 3 30	156 57 1	120	250	3,600	2,800	24,000	7,900	N	N
UG181	57 3 16	156 56 23	110	170	2,000	1,700	14,000	7,100	N	N
UG182	57 2 4	156 56 11	250	1,200	4,200	5,100	27,000	5,500	N	N
UG183	57 1 53	156 58 30	150	340	2,600	3,500	33,000	8,100	N	N
UG184	57 1 35	156 59 19	120	350	4,000	4,100	24,000	10,000	N	N
UG185	57 2 44	157 0 24	83	260	2,800	2,400	20,000	5,900	N	N
UG186	57 3 1	157 1 13	86	350	4,000	4,400	35,000	7,500	N	N
UG187	57 3 42	157 1 14	120	290	5,300	2,300	28,000	9,600	N	N
UG188	57 3 27	157 1 25	87	370	6,500	2,800	29,000	11,000	N	N
UG189	57 1 55	156 59 30	130	360	5,400	8,400	27,000	10,000	N	N
UG190	57 0 36	156 58 40	200	410	5,400	9,300	25,000	12,000	N	N
UG191	57 0 15	157 0 37	140	370	5,100	4,800	28,000	12,000	N	N
UG192	57 3 47	157 13 28	210	1,700	4,600	610	74,000	9,100	N	N
UG193	57 3 52	157 13 13	100	790	3,600	490	61,000	5,500	N	N
UG194	57 0 20	157 7 45	310	190	1,700	2,400	14,000	7,800	N	N
UG196	57 11 27	157 0 13	130	480	5,300	12,000	13,000	18,000	N	N
UG197	57 11 43	157 0 2	120	400	3,400	9,700	9,200	12,000	N	N
UG198	57 11 41	157 2 33	110	290	4,200	4,300	27,000	14,000	N	N
UG199	57 12 5	157 4 50	170	210	4,800	3,900	24,000	15,000	N	N
UG200	57 12 33	157 6 6	200	190	2,600	3,800	19,000	14,000	N	N
UG201	57 14 1	156 53 50	130	130	1,500	2,400	9,300	11,000	N	N
UG202	57 11 54	156 51 47	190	130	2,200	3,800	15,000	11,000	N	N
UG203	57 9 13	156 51 49	200	130	3,000	6,200	13,000	12,000	N	N
UG204	57 9 43	156 51 31	140	280	3,300	11,000	11,000	15,000	N	N
UG205	57 9 45	156 51 57	180	120	2,300	5,700	9,900	10,000	N	N
UG206	57 10 16	156 51 8	100	190	3,100	11,000	9,700	15,000	N	N
UG207	57 9 17	156 47 40	300	420	5,400	2,800	15,000	9,700	N	N
UG208	57 9 25	156 47 6	130	190	5,600	14,000	29,000	5,000	N	N
UG209	57 10 24	156 48 33	190	340	4,300	5,600	37,000	12,000	N	N
UG210	57 10 49	156 49 4	190	310	3,400	3,500	60,000	6,500	N	N
UG211	57 11 18	156 49 31	140	150	1,500	3,800	9,300	4,000	N	N
UG212	57 12 42	156 50 17	230	210	1,500	3,300	9,400	5,100	N	N
UG213	57 14 36	156 50 22	250	340	3,000	4,200	25,000	7,100	230	330
UG214	57 13 50	156 52 0	260	240	2,100	2,700	24,000	17,000	890	320
UG215	57 15 58	156 51 39	190	590	5,300	4,500	15,000	11,000	380	320
UG216	57 17 26	156 52 33	360	640	3,100	9,800	11,000	6,300	45	390

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
UG155	11	N	.48	110	120	6.8	9.7	5.6	7.2	N	400	73
UG156	5.9	N	.59	40	100	5.2	7.3	4.5	7.9	N	440	75
UG157	4.5	12	10	64	62	4.3	7.8	2.2	1.1	N	270	86
UG158	7.3	11	10	96	90	5.8	11	3.3	1.8	N	330	92
UG159	10	12	11	29	76	3.7	7.7	3.3	5.1	N	430	73
UG160	7.1	9.3	10	83	84	4.3	7.6	3.2	2.7	N	310	64
UG162	9.8	10	10	89	95	3.7	7.3	3.8	2.1	N	360	69
UG163	10	3.1	N	63	74	3.1	6.9	3.8	3.7	N	350	76
UG164	5.8	3.3	N	89	90	4	7.8	2.3	.83	N	280	59
UG165	13	3.8	.065	120	120	4.6	9.8	2.8	1.2	N	360	50
UG166	.94	7	N	N	15	.54	1.8	N	N	N	140	N
UG167	1.5	6.1	.25	N	9.6	.71	1.9	N	N	N	130	N
UG168	3.3	21	N	N	24	3.1	7.7	N	N	N	340	N
UG169	13	8.4	1	N	27	3.8	9.4	N	N	N	2,000	N
UG170	.29	9.5	.71	N	10	2.5	5.9	N	N	N	88	N
UG171	7.9	5.8	.33	N	28	2.1	5	N	N	N	280	N
UG172	12	8.5	.64	N	30	3.4	7.9	N	N	N	490	N
UG173	2.9	6.3	N	N	4.5	3.2	7.5	N	N	N	2,500	N
UG174	.72	8.8	1	N	15	3.1	7.8	N	N	N	140	N
UG175	3.6	6.3	.33	N	4.3	7.5	18	N	N	N	510	N
UG176	4.3	5.9	.044	N	5.6	6.3	15	N	N	N	500	N
UG177	1.2	4.4	N	N	5	<.9	4.3	N	N	N	1,800	N
UG178	5.1	6.9	.9	N	110	4.8	12	N	N	N	410	N
UG179	7	6.2	1.3	N	44	2.4	6.4	N	N	N	290	N
UG180	5.3	6.9	.81	N	92	4.5	11	N	N	N	380	N
UG181	5	6.2	1	N	57	3.7	8.4	N	N	N	280	N
UG182	8.6	8.6	.31	N	21	14	34	N	N	N	290	N
UG183	8.4	6.6	1.7	N	120	6.4	13	N	N	N	540	N
UG184	7.6	6.9	1.9	N	120	5.2	10	N	N	N	370	N
UG185	4.8	6.9	.39	N	71	4.2	8.6	N	N	N	330	N
UG186	2.6	5.7	N	N	160	4.9	11	N	N	N	380	N
UG187	15	6.7	.19	N	40	5.8	11	N	N	N	420	N
UG188	9.5	5.8	N	N	94	5.6	12	N	N	N	550	N
UG189	7.4	4.8	N	N	110	5.9	12	N	N	N	400	N
UG190	5.9	12	.15	N	55	7.4	15	N	N	N	410	N
UG191	6.5	4.8	N	N	140	6.5	14	N	N	N	390	N
UG192	1.5	5.2	N	N	59	.9	1.7	N	N	N	160	N
UG193	3	7.1	N	N	26	.84	N	N	N	N	170	N
UG194	1.7	5.8	N	N	27	7	15	N	N	N	400	N
UG196	12	6.8	.99	N	15	2.4	3.2	N	N	N	260	N
UG197	7.2	9.8	.29	N	9.6	2.3	3	N	N	N	160	N
UG198	7.9	4.7	.33	N	120	5.4	11	N	N	N	430	N
UG199	9.5	3.8	.24	N	55	6.1	12	N	N	N	430	N
UG200	5.7	5	.022	N	37	5	11	N	N	N	390	N
UG201	3.9	12	.23	N	22	2.4	3.5	N	N	N	98	N
UG202	4.4	10	.42	N	22	2.9	4.4	N	N	N	300	N
UG203	5.7	10	1.2	N	15	2.7	4	N	N	N	370	N
UG204	6.5	11	.74	N	21	2.6	3.3	N	N	N	220	N
UG205	4.3	12	N	N	17	2.5	3.4	N	N	N	370	N
UG206	4.9	9.9	N	N	11	2.4	2.6	N	N	N	190	N
UG207	14	6.1	N	N	28	1.8	2.3	N	N	N	330	N
UG208	6.6	6.1	N	N	31	3.7	5.8	N	N	N	410	N
UG209	9.3	8.1	.55	N	44	6.1	12	N	N	N	660	N
UG210	4.3	5.3	.23	N	8.8	3.4	6.2	N	N	N	250	N
UG211	2.1	7.8	N	N	12	2.9	5.4	N	N	N	160	N
UG212	1.7	13	.26	N	22	3.9	8.4	N	N	N	170	N
UG213	4.3	12	.18	58	12	3.6	6.7	3.7	1.7	N	330	43
UG214	3.9	14	3.1	44	46	4.2	9.4	4.6	4.4	N	290	79
UG215	17	9.5	N	97	75	3.6	6.2	4.1	3.7	N	310	32
UG216	3.9	9	.53	26	22	3.2	4.9	3.5	N	N	200	17

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
UG155	19	9.4	17	37	48	9.4	N	N	N	8	N
UG156	12	5.7	10	14	39	9.1	N	N	N	9.2	N
UG157	12	5.2	8.4	13	35	N	N	N	N	N	N
UG158	17	7	11	22	44	N	N	N	N	N	N
UG159	14	7.3	12	20	39	N	N	N	N	N	N
UG160	16	7.3	11	26	39	N	N	N	N	N	N
UG162	16	9.1	13	32	46	N	N	N	N	<2.3	N
UG163	16	8.4	13	31	45	N	N	N	N	<2.4	N
UG164	13	5.4	8.5	16	29	N	N	N	N	N	N
UG165	17	6.7	12	24	39	N	N	N	N	N	N
UG166	12	1.6	N	53	N	N	.35	N	N	14	N
UG167	12	7.4	N	48	N	N	N	N	N	7.7	N
UG168	9.2	8	N	25	N	N	N	N	N	4.9	N
UG169	15	23	N	160	N	N	.73	N	N	21	N
UG170	2.9	3	N	6.8	N	N	N	N	N	N	N
UG171	9.2	8.2	N	21	N	N	N	N	N	8.4	N
UG172	11	9.2	N	28	N	N	.32	N	N	11	N
UG173	7.3	24	N	310	N	N	3.7	N	N	200	N
UG174	3.1	3.7	N	22	N	N	N	N	N	2.1	N
UG175	8.5	32	N	330	N	N	.55	N	N	27	N
UG176	10	31	N	220	N	N	.46	N	N	28	N
UG177	5	16	N	190	N	N	.83	N	N	16	N
UG178	11	11	N	28	N	N	N	N	N	8.2	N
UG179	9.4	5.6	N	13	N	N	N	N	N	3.5	N
UG180	10	9.6	N	24	N	N	N	N	N	5.7	N
UG181	4.8	5.6	N	9.5	N	N	N	N	N	4.1	N
UG182	14	11	N	40	N	N	N	N	N	4.2	N
UG183	7.7	11	N	22	N	N	N	N	N	6	N
UG184	8.9	8.7	N	21	N	N	N	N	N	4.1	N
UG185	9.3	8.8	N	21	N	N	N	N	N	3.8	N
UG186	14	13	N	34	N	N	N	N	N	4.5	N
UG187	16	13	N	25	N	N	N	N	N	8	N
UG188	19	13	N	34	N	N	N	N	N	11	N
UG189	13	10	N	23	N	N	N	N	N	4.3	N
UG190	20	10	N	26	N	N	N	N	N	3.9	N
UG191	10	9.9	N	21	N	N	N	N	N	4.1	N
UG192	17	2.7	N	65	N	N	N	N	N	7	N
UG193	14	3.4	N	87	N	N	.57	N	N	12	N
UG194	6.5	6.6	N	15	N	N	N	N	N	23	N
UG196	16	5.7	N	11	N	N	N	N	N	N	N
UG197	10	3.5	N	7.8	N	N	N	N	N	N	N
UG198	13	9.9	N	22	N	N	N	N	N	<3.6	N
UG199	9	8.8	N	14	N	N	N	N	N	8	N
UG200	9.3	6.1	N	9.2	N	N	N	N	N	6.3	N
UG201	6	2.9	N	7.1	N	N	N	N	N	N	N
UG202	7.6	4.6	N	8.2	N	N	N	N	N	N	N
UG203	9.7	5.3	N	16	N	N	N	N	N	N	N
UG204	10	4.6	N	14	N	N	N	N	N	N	N
UG205	7.9	5.1	N	18	N	N	N	N	N	N	N
UG206	10	4.2	N	11	N	N	N	N	N	N	N
UG207	15	6.4	N	21	N	N	N	N	N	6.2	N
UG208	12	9.2	N	25	N	N	N	N	N	6.8	N
UG209	12	14	N	38	N	N	N	N	N	6	N
UG210	7.9	11	N	47	N	N	N	N	N	44	N
UG211	5.8	3.2	N	7.3	N	N	N	N	N	4	N
UG212	5.6	3.3	N	8.6	N	N	N	N	N	2.2	N
UG213	8.3	7	7.7	17	37	<3.3	N	.44	N	4.4	N
UG214	8.2	9	5	13	35	N	N	N	N	N	N
UG215	16	6.8	13	24	44	N	N	N	N	<2.1	N
UG216	7.8	3.5	7.6	43	32	N	N	N	N	N	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
UG217	57 17 31	156 49 1	230	600	5,300	3,500	16,000	12,000	520	370
UG218	57 16 54	156 47 48	220	840	4,600	5,200	19,000	12,000	350	330
UG219	57 17 6	156 46 21	230	580	3,300	4,600	17,000	9,700	270	310
UG220	57 16 42	156 44 31	300	300	2,000	4,100	22,000	7,300	770	300
UG221	57 16 52	156 43 31	170	170	1,800	3,200	10,000	10,000	400	240
UG222	57 15 26	156 41 14	230	260	3,700	4,600	15,000	9,400	200	260
UG223	57 14 4	156 40 1	180	330	2,900	2,000	25,000	4,500	35	200
UG224	57 13 52	156 39 27	210	190	3,300	2,800	59,000	5,700	130	<170
UG225	57 15 32	156 39 51	200	320	4,400	3,300	28,000	11,000	180	420
UG226	57 15 48	156 40 59	130	180	2,100	2,000	8,900	4,700	110	150
UG227	57 16 29	156 40 55	490	300	6,300	9,100	27,000	17,000	820	360
UG228	57 17 16	156 38 33	320	430	4,100	5,800	15,000	12,000	160	270
UG229	57 16 44	156 41 33	270	340	4,400	4,100	20,000	13,000	400	250
UG230	57 18 8	156 44 32	170	240	1,200	2,000	11,000	8,900	830	150
UG231	57 19 1	156 45 56	330	1,300	4,400	12,000	15,000	19,000	270	320
UG232	57 21 2	156 46 24	340	820	3,300	4,900	14,000	11,000	260	230
UG233	57 20 51	156 46 35	330	870	3,200	8,300	12,000	13,000	230	260
UG234	57 19 21	156 43 13	490	1,000	4,500	5,200	22,000	13,000	350	240
UG235	57 19 13	156 43 24	370	720	3,300	4,300	21,000	8,700	170	210
UG236	57 21 24	156 44 7	170	970	4,900	2,800	14,000	9,700	280	280
UG238	57 19 44	156 39 3	450	610	3,300	5,600	22,000	11,000	300	270
UG239	57 19 40	156 39 22	470	490	4,400	8,100	20,000	13,000	420	210
UG240	57 57 43	156 7 2	520	750	4,100	4,500	21,000	13,000	450	330
UG241	57 56 14	156 5 39	920	280	5,400	9,700	19,000	15,000	530	180
UG242	57 56 14	156 5 39	340	670	2,500	1,800	16,000	6,500	330	200
UG243	57 28 24	156 2 29	200	220	1,600	980	9,700	9,500	460	120
UG244	57 28 38	156 2 32	210	310	2,300	1,400	9,900	11,000	270	290
UG246	57 31 1	156 3 46	290	1,500	4,700	2,700	25,000	8,500	920	340
UG247	57 31 13	156 4 58	270	1,100	3,000	1,300	47,000	8,800	610	<110
UG248	57 31 35	156 6 40	260	900	3,300	1,100	49,000	5,500	280	N(19)
UG249	57 31 38	156 5 58	680	1,000	3,900	2,600	32,000	11,000	670	170
UG250	57 31 42	156 4 12	270	1,500	3,600	1,900	26,000	15,000	720	270
UG251	57 33 30	156 2 38	510	620	5,100	3,400	24,000	13,000	350	280
UG252	57 32 53	156 2 23	510	620	7,700	5,600	26,000	19,000	360	250
UG253	57 33 37	156 5 18	270	1,200	3,200	1,100	27,000	7,500	610	190
UG254	57 34 3	156 3 19	300	290	5,600	2,600	30,000	11,000	120	270
UG255	57 35 49	156 5 31	380	430	3,100	5,000	24,000	12,000	590	480
UG256	57 37 10	156 3 31	200	230	2,100	2,900	11,000	5,700	190	190
UG257	57 38 54	156 2 58	390	410	3,900	5,500	44,000	11,000	1,000	320
UG258	57 40 16	156 0 47	440	440	4,500	6,000	26,000	13,000	560	320
UG259	57 41 46	156 0 18	310	430	1,700	3,800	42,000	7,600	1,000	380
UG260	57 37 56	156 0 38	350	530	2,400	3,400	28,000	11,000	750	170
UG261	57 47 56	156 30 19	530	210	6,300	3,800	25,000	7,500	1,100	320
UG262	57 44 10	156 24 58	670	180	2,300	4,100	13,000	9,700	990	200
UG263	57 46 31	156 18 18	490	110	2,000	3,200	24,000	7,700	1,600	200
UG264	57 46 14	156 17 32	690	590	3,600	5,100	29,000	8,800	730	360
UG265	57 43 32	156 17 11	350	440	2,100	3,300	39,000	5,400	360	230
UG266	57 43 32	156 15 13	490	680	2,300	4,300	37,000	12,000	920	180
UG267	57 42 56	156 12 5	290	420	1,600	3,400	73,000	5,800	1,400	<93
UG268	57 42 38	156 7 41	570	760	2,300	5,600	13,000	14,000	340	240
UG269	57 41 8	156 10 12	340	450	1,700	3,200	43,000	6,700	810	<84
UG270	57 40 11	156 11 10	370	630	2,100	3,800	48,000	6,500	780	210
UG271	57 38 44	156 13 14	360	790	6,200	4,100	19,000	9,900	310	300
UG272	57 38 42	156 13 3	550	790	3,300	5,300	36,000	14,000	1,100	170
UG273	57 38 16	156 9 18	280	940	6,300	3,600	20,000	11,000	250	290
UG274	57 22 51	156 26 57	580	400	4,600	9,000	37,000	14,000	790	360
UG275	57 25 9	156 26 48	350	320	5,300	5,500	52,000	11,000	870	290
UG276	57 24 36	156 25 40	750	550	8,100	14,000	35,000	22,000	430	370
UG277	57 24 35	156 24 0	660	460	5,700	10,000	33,000	17,000	640	350
UG278	57 25 13	156 20 36	480	480	6,400	8,800	27,000	16,000	220	400

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
UG217	19	7.7	N	56	100	4	8.1	4.9	3.6	N	360	37
UG218	10	8.9	N	82	69	3.6	6.1	2.7	1.7	N	270	43
UG219	7.2	15	N	74	46	3.1	5.5	2.3	1.7	N	220	49
UG220	4.1	10	N	45	32	4	7.5	3.8	2.8	N	250	92
UG221	6.6	10	.1	46	37	2.4	4.3	2.3	2.1	N	380	40
UG222	7.7	9.2	N	69	50	3.4	6	3.8	3.1	N	260	42
UG223	6.6	9.4	N	21	8	2.6	4	3.1	.68	N	220	24
UG224	7.3	10	N	28	4.3	3.2	5.5	4.1	.77	N	300	34
UG225	10	7.2	N	50	49	3.9	9.6	5	2.4	N	350	44
UG226	5.4	9.8	1.4	32	23	1.8	2.5	1.7	1.6	N	120	19
UG227	13	17	N	87	60	3.4	6.7	5.1	7.7	N	380	56
UG228	6	10	.51	84	62	4.7	8.2	3.3	1.5	N	260	40
UG229	7.5	7.9	1.5	71	67	3.9	8.7	4	3.5	N	310	48
UG230	2.7	9.8	1.3	49	52	3	6.8	2.3	3.5	N	290	42
UG231	9	22	.53	63	72	4	7.5	2.4	N	N	280	33
UG232	6.3	19	.42	100	77	4.9	8.3	2.2	.86	N	210	38
UG233	6.8	11	1.2	84	89	2.7	6.6	2.1	.81	N	240	27
UG234	9.2	11	1.1	130	98	4.9	11	2.6	1.9	N	290	51
UG235	5.5	9	.43	120	75	5.1	9.9	3.1	.95	N	250	47
UG236	11	7.2	.55	31	97	2.7	5.4	3.7	1.8	N	310	26
UG238	5.3	8.4	.048	110	72	5.6	9.7	3.2	1.4	N	280	55
UG239	7	17	.06	97	86	4.1	5.6	3.2	3.1	N	260	57
UG240	10	22	.34	49	65	2.3	3.1	2.8	3.3	N	290	59
UG241	3.1	11	N	45	26	2	3.3	2.9	2.7	N	230	64
UG242	8.1	15	N	9.7	33	1.5	2.3	3	.7	N	190	81
UG243	4.6	8.7	N	10	25	1.3	1.5	2.1	3.4	N	130	26
UG244	3.8	46	1.8	13	41	1.5	1.8	2.6	2.4	N	370	24
UG246	15	24	N	11	89	3.9	8.4	6.9	.79	N	430	84
UG247	8.3	12	N	13	60	1.9	3	3.6	1.3	N	330	120
UG248	4.4	11	.29	6.6	22	.59	1.6	1.4	.4	N	180	140
UG249	8	16	N	16	30	1.5	3.1	2.7	1.5	N	150	91
UG250	8.6	59	1.5	16	71	2.4	5.5	3.7	3.2	N	500	53
UG251	11	10	N	26	41	2.3	3.5	4	1.7	N	380	46
UG252	14	37	N	25	42	2.6	4	5.2	2	N	530	55
UG253	6.9	17	.68	9.6	41	1.2	1.7	2.5	1.2	N	130	80
UG254	8.1	7	2.2	17	33	3.3	5.3	5.7	1.2	N	420	61
UG255	4.9	8.8	1.3	100	90	4.1	7.6	2.6	3.4	N	300	68
UG256	2.5	6.9	.86	45	45	2.5	4	1.6	2	N	150	31
UG257	8	7.1	N	96	100	3.6	5.7	3.6	4.6	N	400	100
UG258	9.4	4.7	N	110	130	3.9	6.7	3.9	5.8	N	310	61
UG259	2.5	6.2	N	100	89	3.2	6.4	2.2	2.2	N	400	110
UG260	5.2	17	N	100	100	2.2	3.6	1.8	3.5	N	340	73
UG261	1.9	18	N	28	39	2.8	3.5	4.7	2.9	N	1,500	69
UG262	2.1	14	1.5	30	20	2.2	1.6	5.8	3.2	N	260	59
UG263	.9	8.3	.36	23	14	1.4	2	1.6	3.1	N	220	130
UG264	5	6.8	N	110	92	3.2	5.5	2.4	1.9	N	300	70
UG265	4.5	6.7	N	77	63	5.6	8.9	2.4	1.7	N	210	97
UG266	4.1	12	N	120	110	2.6	4.5	1.9	2.8	N	380	89
UG267	2.5	4.6	N	85	64	2.8	4.6	2	.54	N	610	150
UG268	5	19	.4	170	140	2	2.8	1.8	2.8	N	180	28
UG269	3.7	6.9	N	85	65	2.3	3	1.5	1.2	N	430	95
UG270	3.3	6.3	N	81	70	3.3	4.7	1.9	1.1	N	380	110
UG271	9.8	7.2	.25	56	110	3.4	5.1	4.1	3.4	N	280	39
UG272	4.3	36	.012	170	140	2.5	4.1	1.9	3.2	N	370	85
UG273	13	6	.11	34	150	3.7	4.7	5.7	3.3	N	290	37
UG274	8.1	7.8	N	110	87	3.5	6	4.1	3.8	N	410	98
UG275	8.4	10	N	79	64	3.6	5.9	4.6	3.4	N	420	130
UG276	17	9.6	.41	140	190	4.2	8.9	5.8	6.3	N	470	62
UG277	16	6.3	N	150	150	4	6.9	5.2	7.4	N	460	75
UG278	20	5.3	.45	160	170	4.1	7.7	6	4.9	N	440	46

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
UG217	14	7	13	25	49	<3.3	N	N	N	<2.2	4.2
UG218	15	6.3	11	20	33	N	N	N	N	N	N
UG219	12	5	9.6	14	26	N	N	N	N	N	N
UG220	9.9	5.9	6.3	11	33	N	N	.42	N	<2	N
UG221	6.9	3.6	4.5	7	23	N	N	.42	N	N	N
UG222	11	6.2	8.7	16	29	N	N	N	N	N	N
UG223	4.9	7.4	6.8	18	49	8.2	N	2.4	N	30	N
UG224	8.2	18	16	23	46	<5.2	N	.76	N	39	N
UG225	11	7.1	9.5	25	41	7.4	N	1.5	N	23	N
UG226	6.3	3	4.4	7.6	20	2.8	N	.41	N	4.5	N
UG227	14	8.5	13	30	43	N	N	N	N	<2.2	N
UG228	13	5.7	9.4	16	29	N	N	N	N	N	N
UG229	12	6.6	8.6	19	35	N	N	N	N	4.2	N
UG230	5.3	3.7	4.1	5.9	23	N	N	N	N	N	N
UG231	12	5.4	8.9	17	30	N	N	N	N	N	N
UG232	11	4.3	7.5	14	22	N	N	N	N	N	N
UG233	9.6	4.3	6.9	13	24	N	N	N	N	N	N
UG234	14	6	10	19	33	N	N	N	N	N	N
UG235	13	5.4	9	16	25	N	N	N	N	N	N
UG236	14	5.4	10	22	41	N	N	N	N	<1.7	N
UG238	12	5.7	8.6	15	32	N	N	N	N	N	N
UG239	15	6.5	10	20	29	N	N	N	N	N	N
UG240	11	5.6	9.8	23	39	N	N	N	N	15	N
UG241	7.8	7.1	8.1	16	25	N	N	N	N	N	N
UG242	7.3	5.2	5	24	34	3.5	N	.36	N	24	N
UG243	3.6	3.8	5.3	15	29	N	N	N	N	31	N
UG244	6	6.6	13	22	41	<3.4	N	N	N	18	N
UG246	7.1	7.4	5.1	62	92	48	N	.56	N	22	N
UG247	9.4	9.8	6.4	38	76	51	N	2.5	N	16	N
UG248	6.4	6.4	4.5	33	23	6	N	1.1	N	14	N
UG249	4.9	5	5.5	37	25	<3.6	N	1.5	N	<3	N
UG250	17	21	14	52	89	14	.78	.72	N	120	N
UG251	12	11	13	27	69	6.7	N	N	N	50	N
UG252	19	14	18	39	74	<2.8	N	N	N	22	N
UG253	9.4	4.7	7.7	32	43	<3.9	N	3.6	N	4.2	N
UG254	11	14	9.8	30	45	N	N	.42	N	11	N
UG255	6.9	5.4	5.5	19	46	N	N	N	N	N	N
UG256	6.3	3.3	4.1	11	22	N	N	N	N	N	N
UG257	12	7.8	8.1	19	66	N	N	N	N	N	N
UG258	9.7	6.4	8.3	20	46	N	N	N	N	N	N
UG259	10	5.4	4.7	9.6	59	N	N	N	N	N	N
UG260	7.3	4.8	4.8	18	50	N	N	N	N	N	N
UG261	8.1	7.6	25	8	32	N	N	N	N	<2.5	N
UG262	6.2	4.7	10	7.5	26	N	N	N	N	N	N
UG263	11	5.9	7.3	6.4	29	N	N	N	N	N	N
UG264	9.1	5.9	12	17	43	N	N	N	N	<2.3	N
UG265	16	4.2	7.5	10	29	N	N	N	N	9.3	N
UG266	9	5.5	7.2	14	54	N	N	N	N	N	N
UG267	9.7	7.5	5	11	92	N	N	N	N	N	N
UG268	5.3	2.7	4.4	15	26	N	N	N	N	N	N
UG269	8	5.7	8.3	15	61	N	N	N	N	N	N
UG270	12	6.2	6.6	15	57	N	N	N	N	N	N
UG271	12	6.2	13	22	42	N	N	N	N	<1.8	N
UG272	8.1	5.6	8.3	18	53	N	N	N	N	N	N
UG273	16	7.3	14	32	51	N	N	N	N	<2.2	N
UG274	10	8.3	8.4	20	56	N	N	N	N	N	N
UG275	14	10	11	31	67	N	N	N	N	<2.5	N
UG276	12	9.9	12	37	57	N	N	N	N	<2.2	N
UG277	9.3	8.8	8.6	29	57	N	N	N	N	N	N
UG278	11	10	12	41	54	N	N	N	N	<3.1	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
U6279	57 26 55	156 24 26	470	450	5,600	8,500	32,000	13,000	510	240
U6280	57 26 32	156 24 8	630	550	7,800	11,000	30,000	20,000	510	360
U6281	57 26 36	156 21 58	530	450	5,600	9,100	29,000	13,000	470	290
U6282	57 29 22	156 21 8	690	480	6,900	11,000	42,000	17,000	660	380
U6283	57 27 14	156 18 36	380	290	3,400	13,000	42,000	16,000	710	390
U6284	57 26 46	156 14 45	320	390	5,300	6,200	34,000	13,000	590	310
U6285	57 27 58	156 14 25	640	390	5,500	11,000	27,000	16,000	530	310
U6286	57 32 56	156 9 0	300	680	3,500	1,500	24,000	9,200	320	250
U6287	57 33 51	156 8 2	240	1,600	4,500	1,300	24,000	11,000	560	280
U6288	57 34 56	156 8 8	250	350	4,800	3,800	26,000	11,000	44	350
U6289	57 35 53	156 7 14	290	550	2,300	3,000	24,000	4,600	280	340
U6289	57 35 53	156 7 14	250	370	3,200	3,200	12,000	13,000	350	350
U6290	57 32 3	156 37 21	410	770	3,300	4,500	42,000	9,900	570	220
U6291	57 32 5	156 33 44	460	590	4,600	5,900	35,000	13,000	650	260
U6292	57 33 0	156 33 55	590	890	4,300	10,000	33,000	16,000	540	300
U6293	57 34 5	156 32 50	320	620	3,100	4,800	49,000	9,600	770	230
U6294	57 36 0	156 31 37	280	500	2,400	3,600	22,000	9,400	1,000	410
U6295	57 37 19	156 27 12	450	720	2,000	4,300	12,000	13,000	670	340
U6296	57 36 37	156 23 4	510	680	2,600	3,200	36,000	6,400	630	260
U6297	57 37 57	156 23 34	430	890	2,400	4,500	22,000	8,600	400	380
U6299	57 42 18	156 16 49	280	560	1,900	3,100	46,000	5,400	780	250
U6300	57 40 20	156 18 27	380	770	3,300	4,100	33,000	7,900	460	390
U6301	57 39 41	156 19 1	390	690	3,100	4,400	36,000	7,900	440	450
U6302	57 37 58	156 17 0	290	550	2,600	3,300	57,000	7,400	1,200	<210
U6303	57 34 37	156 12 28	230	470	2,500	6,000	15,000	11,000	250	410
U6304	57 35 4	156 12 24	280	530	3,400	9,400	17,000	13,000	180	420
U6305	57 35 54	156 13 55	270	780	6,000	3,600	19,000	10,000	300	360
U6306	57 35 48	156 13 59	290	550	4,100	3,700	11,000	8,500	240	300
U6307	57 34 10	156 17 57	360	880	3,800	4,200	19,000	12,000	180	220
U6308	57 33 52	156 18 1	370	870	4,300	4,600	20,000	13,000	340	240
U6309	57 34 52	156 19 5	290	770	3,000	4,100	25,000	9,200	370	410
U6310	57 34 54	156 20 48	190	430	2,400	2,200	36,000	9,000	900	250
U6311	57 35 23	156 20 32	410	820	3,600	4,800	21,000	12,000	380	360
U6312	57 33 55	156 22 16	230	710	3,100	2,700	39,000	5,000	270	310
U6313	57 34 14	156 23 59	280	1,000	3,800	3,100	35,000	8,300	310	330
U6314	57 33 33	156 26 6	290	430	2,400	3,600	34,000	7,800	860	390
U6315	57 33 11	156 27 14	340	510	3,200	5,100	27,000	11,000	360	380
U6316	57 41 30	156 48 33	170	380	1,500	1,500	33,000	3,200	1,100	170
U6317	57 43 56	156 49 50	190	260	1,200	1,800	12,000	4,000	360	350
U6318	57 41 53	156 51 52	140	250	2,100	1,700	23,000	5,200	660	460
U6319	57 41 32	156 50 47	270	290	2,100	2,600	50,000	8,700	1,400	1,200
U6320	57 34 56	156 42 37	320	820	3,000	3,200	34,000	8,300	1,100	320
U6321	57 34 7	156 45 10	330	670	2,800	3,700	36,000	7,600	710	350
U6322	57 33 26	156 45 52	260	420	2,800	2,800	24,000	6,200	740	280
U6323	57 32 43	156 46 15	510	640	3,800	5,100	33,000	15,000	380	440
U6324	57 31 51	156 42 26	230	810	2,300	3,500	14,000	5,500	61	290
U6325	57 32 43	156 42 30	200	660	2,300	2,800	22,000	7,400	590	390
U6326	57 31 17	156 30 26	400	700	3,800	5,100	15,000	11,000	270	270
U6327	57 30 31	156 29 29	350	500	2,500	4,200	23,000	9,500	540	360
U6328	57 28 45	156 29 41	340	480	2,800	4,500	32,000	11,000	690	310
U6329	57 28 51	156 29 30	300	320	4,200	4,300	40,000	8,300	630	310
U6330	57 29 59	156 33 37	330	460	2,200	3,900	16,000	10,000	590	370
U6331	57 29 12	156 34 12	250	450	2,100	3,000	38,000	5,500	440	260
U6332	57 27 3	156 34 20	260	640	2,900	3,700	44,000	6,500	230	290
U6333	57 27 40	156 35 43	150	570	2,000	2,700	89,000	3,900	430	<170
U6334	57 28 38	156 36 6	280	1,200	3,800	3,300	21,000	8,100	210	330
U6335	57 29 23	156 36 51	210	840	3,100	2,600	48,000	6,400	380	310
U6336	57 29 40	156 38 19	380	1,100	3,500	3,300	17,000	9,100	300	370
U6337	57 35 24	156 0 49	390	430	4,900	8,100	32,000	14,000	410	540
U6338	57 35 16	156 1 8	360	420	6,200	6,300	24,000	14,000	230	360

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
6279	10	8.6	.23	99	79	4.2	6.6	4	4.3	N	320	75
6280	13	9.5	.63	160	120	4.3	8.6	5.5	8	N	450	59
6281	9.3	6.9	N	160	120	3.9	7.9	4.9	4.6	N	390	66
6282	10	10	N	140	110	4.3	6.8	5.9	4.9	N	480	98
6283	6.9	9	.13	139	63	2.8	4.8	3.1	1.6	N	430	93
6284	9.9	11	.74	110	110	3.7	7.2	4.6	4.2	N	400	78
6285	11	11	N	130	98	3.1	4.5	4.5	4.1	N	360	66
6286	7.3	11	.6	9.8	25	2.1	2.9	3.9	1.1	N	150	59
6287	9.7	24	.016	9.6	66	1.1	3	2.8	2	N	270	51
6288	7	4.5	.53	31	51	3.9	8.8	5.5	1	N	480	37
6289	3.7	9.3	N	56	59	3.2	6.1	2.7	1.3	N	230	52
6289	7.4	14	N	60	79	2.3	3.3	3.3	3.7	N	210	31
6290	5.2	9.9	.37	77	72	4.7	7.2	2	1.9	N	280	99
6291	7.1	10	.07	120	88	5.4	10	3.3	3.7	N	340	89
6292	6	26	.016	160	110	5.9	10	2.4	1.8	N	330	79
6293	4.1	11	N	75	72	5	9.3	2.1	1.9	N	350	110
6294	5.4	11	N	61	80	4.3	8.6	2.3	2.2	N	260	68
6295	5.5	19	.26	130	130	2.8	4.8	2	2.4	N	160	35
6296	4.2	8.1	N	60	66	3.4	6	2	1.3	N	320	83
6297	4.3	8	.49	110	100	4.4	7.8	2.1	.93	N	260	49
6299	2.9	6.4	N	65	66	3.3	6.1	1.8	1.1	N	370	110
6300	4.2	6.4	.16	67	68	5.1	9.3	2.5	1.9	N	280	86
6301	3.5	6.4	N	61	69	4.7	9	2.6	1.4	N	290	87
6302	2.9	9.6	N	80	71	2.5	4.7	1.9	1.8	N	470	120
6303	3.5	7.7	.36	110	74	2.5	4.8	2.1	.36	N	230	38
6304	4.6	6.1	.85	130	91	2.8	5.1	2.7	N	N	280	37
6305	9.4	5	N	45	110	3.5	5	4.3	2.7	N	270	38
6306	7.1	7.5	N	53	80	2.3	2.8	2.6	1.2	N	210	26
6307	7	5.8	N	89	73	3.5	5.3	2.1	1.1	N	230	42
6308	7.1	7.6	N	89	82	6.2	9.5	2.2	1.6	N	230	49
6309	4.4	6.3	N	84	83	3.3	6.6	2.5	1.5	N	310	58
6310	2.2	8.9	N	69	64	5.5	12	2.4	2.4	N	380	86
6311	6	5.9	N	110	110	3.7	5.4	2.8	1.6	N	270	46
6312	4.4	5.3	N	21	37	6.9	11	2.1	.92	N	250	100
6313	5.3	5.2	N	40	63	5.1	8	2.1	.54	N	280	89
6314	3.3	7.3	N	69	55	5.3	10	2.1	1.6	N	320	93
6315	4.3	3.7	N	77	68	5.3	9.2	2.4	1.4	N	270	72
6316	.56	8.1	N	16	59	2.7	4.2	2.1	3.6	N	360	87
6317	1.3	6.5	.66	23	46	2.6	5.4	2.2	3	N	220	24
6318	2.1	6.2	N	17	50	2.7	4.5	2.5	4.6	N	580	34
6319	4.1	6.1	.22	26	54	3.2	5	3.6	7.7	N	440	89
6320	3.4	8.4	N	36	61	3.2	6	2	3.1	N	360	75
6321	3	5.9	N	46	59	3.7	6.3	2.2	2.7	N	320	85
6322	2.6	5.6	N	34	48	3.1	6.4	2.2	3.3	N	220	60
6323	7.8	3.8	N	58	110	3.8	5.8	4.6	4.7	N	450	50
6324	3.9	4.1	.63	66	69	3.4	6	1.7	1.5	N	180	34
6325	3.9	6.9	N	59	87	3.2	5.9	2.4	3.9	N	250	53
6326	4.9	7.8	N	96	87	4.6	6.5	1.9	2.1	N	230	44
6327	3.6	7.1	.24	94	70	4.5	8.9	2.1	2.9	N	260	62
6328	4.3	8.2	N	92	73	5.1	7.7	2.3	3.3	N	290	90
6329	6.1	6.4	N	82	94	4	6.4	3.5	2.7	N	310	100
6330	3.3	8.2	N	86	73	3.9	7	2.1	4.8	N	260	53
6331	3.5	5.3	N	46	42	4.8	6.8	1.8	1.5	N	240	93
6332	5	6.4	N	27	40	5.3	8.7	2	.65	N	240	110
6333	3.7	2.7	N	14	34	5	6.1	2	N	10	270	200
6334	7	5.7	N	31	66	3.8	4.6	1.9	.79	N	220	52
6335	6.1	4.1	N	24	54	4.7	7.6	2	1.3	N	260	120
6336	9.2	7.4	N	88	99	5	6.7	1.7	1.3	N	200	47
6337	13	9	N	110	110	3.9	7.8	4.3	4.1	N	400	73
6338	15	5.8	N	63	77	3.7	7	4.1	3.7	N	320	58

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
U6279	14	9.4	12	32	43	N	N	N	N	<1.6	N
U6280	14	9.4	12	45	59	N	N	N	N	N	N
U6281	13	8.7	11	30	45	N	N	N	N	<2.8	N
U6282	14	9.6	11	33	61	N	N	N	N	N	N
U6283	8.4	6.9	9.8	15	68	N	N	N	N	N	N
U6284	12	7.9	10	24	62	N	N	N	N	<2.2	N
U6285	10	6.9	8.3	24	47	N	N	N	N	N	N
U6286	8	4.7	5.3	37	30	<4.3	N	1.6	N	9.5	N
U6287	14	8.2	6.6	44	33	12	N	4.6	N	56	N
U6288	8.9	11	17	29	90	<2.9	N	N	N	3.4	N
U6289	8.4	3.9	7.3	15	28	N	N	.44	N	9.4	N
U6289	7.3	3.8	5.8	15	28	N	N	N	N	N	N
U6290	14	5.9	7.8	16	36	N	N	N	N	N	N
U6291	16	7.6	11	24	45	N	N	N	N	N	N
U6292	13	6.3	8.2	18	45	N	N	N	N	N	N
U6293	14	6.8	8.6	15	49	N	N	N	N	N	N
U6294	8.5	4.8	7	11	37	N	N	N	N	N	N
U6295	6.3	3.3	5.6	9.4	29	N	N	N	N	N	N
U6296	10	5.7	7.5	14	45	N	N	N	N	<1.9	N
U6297	8.2	4.3	7.5	15	35	N	N	N	N	N	N
U6299	10	6.7	11	19	66	N	N	N	N	N	N
U6300	13	6.8	9.3	22	45	N	N	N	N	N	N
U6301	12	6.5	9.4	19	47	N	N	N	N	N	N
U6302	9.2	7.3	8	11	73	N	N	N	N	N	N
U6303	5.4	3.4	5.5	8.7	31	N	N	N	N	N	N
U6304	5.8	4.2	6.9	12	35	N	N	N	N	N	N
U6305	13	6.2	12	24	43	N	N	N	N	<1.7	N
U6306	8.4	4.3	7	16	27	N	N	N	N	N	N
U6307	12	5	9.9	21	33	N	N	N	N	N	N
U6308	14	5.3	10	20	32	N	N	N	N	N	N
U6309	7.5	4.9	6.7	15	46	N	N	N	N	N	N
U6310	8	6	6.3	11	63	N	N	N	N	N	N
U6311	9.6	4.9	7.4	20	37	N	N	N	N	N	N
U6312	15	6.6	9.9	20	30	N	N	N	N	<2	N
U6313	15	6.3	10	22	35	N	N	N	N	N	N
U6314	9.3	6.5	6.3	13	55	N	N	N	N	N	N
U6315	11	5.5	7.1	17	39	N	N	N	N	N	N
U6316	5	6.4	4.9	6.5	42	N	N	N	N	3.4	N
U6317	4.1	2.7	3.7	3.6	21	N	N	N	N	2.6	N
U6318	6.8	4.6	6.4	5.8	34	N	N	N	N	2.4	N
U6319	7.2	4.8	5.9	6.9	43	N	N	N	N	8.1	N
U6320	13	5.7	10	16	33	N	N	.42	N	3.5	N
U6321	10	6.8	7.3	20	45	N	N	N	N	N	N
U6322	10	5.6	8.2	17	30	N	N	N	N	<1.8	N
U6323	10	6.8	9	29	37	N	N	N	N	<1.7	N
U6324	8	4.2	6.7	16	24	N	N	N	N	N	N
U6325	7.5	4.3	5.8	11	32	N	N	N	N	<1.7	N
U6326	12	4.7	8.8	16	27	N	N	N	N	N	N
U6327	7.7	5	5.5	13	39	N	N	N	N	N	N
U6328	10	6	6.4	14	45	N	N	N	N	N	N
U6329	13	8.6	11	26	50	N	N	N	N	<2.3	N
U6330	7.3	4.8	5.2	14	33	N	N	N	N	N	N
U6331	11	5.5	6.1	12	32	N	N	N	N	N	N
U6332	16	5.9	9.9	20	30	N	N	N	N	<1.8	N
U6333	17	6.5	6.9	23	45	N	N	N	N	<1.7	N
U6334	12	5.4	11	27	46	N	N	N	N	N	N
U6335	17	6.5	11	23	39	N	N	N	N	<2.1	N
U6336	11	4.6	8.7	22	25	N	N	N	N	N	N
U6337	10	7.5	8.5	26	58	N	N	N	N	N	N
U6338	16	8.3	13	34	43	N	N	N	N	<3	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
U6339	57 34 59	156 0 39	410	330	5,800	8,000	38,000	15,000	650	470
U6340	57 26 21	156 3 32	240	1,200	3,300	1,800	13,000	4,700	410	210
U6341	57 27 10	156 5 48	260	180	2,700	1,800	21,000	20,000	880	200
U6342	57 28 44	156 5 35	160	1,400	4,800	1,200	29,000	13,000	540	230
U6343	57 29 37	156 5 34	190	1,400	4,500	1,500	30,000	12,000	630	200
U6344	57 29 31	156 5 49	370	840	5,900	2,400	19,000	11,000	360	240
U6345	57 28 38	156 7 44	370	190	6,400	3,000	22,000	12,000	240	250
U6346	57 29 8	156 10 24	110	130	4,200	2,400	15,000	10,000	470	170
U6347	57 29 23	156 12 29	230	240	3,700	5,500	20,000	11,000	340	270
U6348	57 30 55	156 15 19	260	430	5,000	11,000	25,000	18,000	310	290
U6349	57 31 3	156 15 27	450	400	6,400	6,200	34,000	15,000	490	300
U6350	57 31 9	156 16 31	400	390	4,200	5,500	23,000	12,000	500	220
U6351	57 30 6	156 16 36	500	430	8,000	9,400	28,000	17,000	310	360
U6352	57 28 29	156 21 30	130	100	1,400	1,800	11,000	3,200	220	120
U6353	57 25 56	156 19 23	410	360	4,500	5,300	42,000	11,000	690	310
U6354	57 26 2	156 19 11	410	330	4,600	5,600	33,000	11,000	500	390
U6355	57 22 36	156 24 56	400	330	4,800	5,200	47,000	12,000	840	280
U6356	57 21 38	156 30 7	480	340	4,800	5,500	21,000	12,000	400	240
U6357	57 21 20	156 30 11	390	320	5,300	5,300	28,000	12,000	340	280
U6358	57 21 32	156 28 40	460	420	5,700	8,500	32,000	16,000	220	310
U6359	57 20 2	156 30 53	280	350	5,200	4,300	23,000	12,000	39	260
U6360	57 19 3	156 33 10	330	380	4,800	5,400	25,000	14,000	59	300
U6361	57 18 42	156 33 48	300	370	5,600	8,000	30,000	16,000	25	310
U6362	57 17 41	156 36 35	420	390	5,600	6,000	24,000	14,000	99	370
U6363	57 14 21	156 39 19	380	250	3,200	2,600	24,000	6,200	380	260
U6364	57 14 57	156 37 14	430	190	1,300	3,300	12,000	4,800	510	210
U6366	57 17 7	156 30 51	260	300	4,600	2,400	16,000	7,900	130	280
U6367	57 17 11	156 29 46	150	190	4,300	2,000	17,000	9,100	34	280
U6368	57 17 46	156 27 15	170	280	5,300	8,200	31,000	16,000	73	300
U6369	57 17 36	156 22 31	360	510	7,900	13,000	28,000	24,000	540	320
U6370	57 17 14	156 22 35	160	450	3,500	1,900	19,000	9,200	170	300
U6371	57 16 22	156 20 19	180	700	3,400	1,400	17,000	7,600	420	240
U6372	57 15 25	156 22 28	150	320	2,800	4,100	14,000	8,300	210	290
U6373	57 14 53	156 25 49	260	410	4,700	6,100	17,000	15,000	310	300
U6374	57 13 37	156 26 24	290	690	2,900	1,800	16,000	4,700	170	210
U6375	57 13 29	156 26 12	240	1,700	3,600	1,600	19,000	6,200	320	290
U6376	57 13 0	156 25 20	270	740	3,400	1,400	16,000	10,000	480	240
U6377	57 11 56	156 22 42	150	310	9,600	1,900	32,000	19,000	220	380
U6378	57 10 25	156 20 11	180	100	1,400	2,000	15,000	12,000	580	220
U6379	57 10 48	156 23 24	180	770	5,700	1,900	53,000	23,000	310	590
U6380	57 10 44	156 22 8	300	440	3,900	2,000	17,000	9,800	190	350
U6381	57 9 48	156 21 16	190	360	4,100	1,500	47,000	19,000	460	430
U6382	57 8 47	156 22 13	170	180	1,800	990	12,000	7,700	430	180
U6383	57 3 45	156 30 3	140	110	1,500	760	11,000	7,100	510	160
U6384	57 2 36	156 32 53	240	120	1,300	1,100	15,000	14,000	910	200
U6385	57 1 18	156 34 12	140	100	1,600	880	13,000	12,000	750	250
U6386	57 2 47	156 36 50	240	660	4,300	2,000	36,000	14,000	560	360
U6387	57 4 58	156 37 57	140	490	2,800	1,000	11,000	4,800	200	240
U6388	57 5 23	156 37 57	240	250	4,300	1,700	29,000	12,000	210	380
U6389	57 6 55	156 37 38	240	260	6,100	3,500	53,000	16,000	55	470
U6390	57 7 30	156 39 54	140	500	2,900	1,600	37,000	4,100	110	180
U6391	57 7 20	156 39 54	100	280	4,200	2,000	17,000	8,400	10	270
U6392	57 8 32	156 37 45	310	300	3,100	2,800	38,000	6,200	730	240
U6393	57 8 34	156 37 23	150	540	3,400	2,600	24,000	5,600	150	340
U6394	57 8 56	156 36 30	230	230	2,400	1,600	30,000	3,600	320	140
U6395	57 7 44	156 36 15	190	110	1,400	2,100	31,000	2,700	2,700	320
U6396	57 7 11	156 35 45	160	260	2,100	1,400	21,000	7,900	690	280
U6397	57 5 51	156 35 38	160	460	3,500	2,000	14,000	7,700	210	380
U6398	57 0 10	156 50 7	250	260	6,400	4,600	26,000	11,000	230	380
U6399	57 0 37	156 46 3	120	150	2,000	2,300	13,000	7,100	290	300

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
UG339	13	7.9	N	91	89	3.2	6.8	4.8	3.8	N	510	110
UG340	6.6	21	.24	9.2	27	1.4	2.5	2.2	.74	N	130	75
UG341	6.8	9.3	N	21	35	2.8	5.2	5.2	5.5	N	310	54
UG342	7.7	8.7	.23	9.5	36	1.8	1.7	3.2	3.8	N	360	47
UG343	10	14	N	15	50	1.6	1.9	3.2	2.7	N	490	66
UG344	8.2	15	N	19	40	1.8	1.6	2.9	2.1	N	360	47
UG345	13	8.1	N	19	16	2.1	3.2	3.7	1.6	N	360	47
UG346	8.8	7.2	.25	19	18	1.5	1.9	2.4	3.3	N	300	44
UG347	10	7	N	86	65	2.5	3.2	3.4	2.3	N	260	50
UG348	10	5.8	N	100	70	3.3	5	4.5	2.4	N	370	50
UG349	11	6.1	N	79	70	3.6	5.7	4.4	3.9	N	350	91
UG350	7.2	6.6	N	68	62	3.5	5.5	3	3.9	N	260	66
UG351	11	4.7	N	130	99	3.5	5	5.2	4.1	N	360	58
UG352	1.6	4.5	N	24	22	1.1	N	1.2	1.3	N	110	34
UG353	7.8	6.1	N	99	70	3.8	6.3	4.1	4	N	380	110
UG354	7.3	6.6	N	97	73	3.7	6	4.2	3	N	350	86
UG355	14	4.6	N	67	100	3.5	5.7	4.6	4.7	N	390	120
UG356	9.5	5.9	N	74	81	3.2	4.6	3.6	5.3	N	270	52
UG357	14	5.1	N	92	97	3.1	5.2	4.2	3.3	N	310	61
UG358	17	4.6	N	95	150	4.2	6.7	5	5.3	N	360	57
UG359	13	4.9	N	49	91	3.3	4.5	5	2.1	N	280	32
UG360	17	4.3	N	60	110	4	6.8	5.6	3.2	N	320	36
UG361	19	4.4	N	66	120	4.6	8.5	7	3.2	N	380	37
UG362	15	4.6	N	110	120	4	7.4	5.9	2.8	N	350	36
UG363	9.8	4.8	N	33	12	2.1	3.6	3.2	1.2	N	200	59
UG364	3.3	4.5	.27	20	15	2.7	5.4	3.6	2.5	N	130	61
UG366	7.8	6.1	N	15	18	1.7	2.9	3.2	.8	N	240	56
UG367	14	4.5	N	12	18	2.5	4.4	3.7	.97	N	310	31
UG368	20	11	N	66	41	3.3	6	4.6	1.8	N	330	44
UG369	18	30	1.2	95	57	3.7	6.4	5.3	6.7	N	420	58
UG370	8.6	4.3	.57	21	33	3.3	6.2	4.2	1.3	N	370	38
UG371	5.9	9.4	N	9.3	30	2.4	4	3.4	1.1	N	250	67
UG372	6.8	5.4	.31	59	38	3.4	6	2.8	1.1	N	270	34
UG373	11	5.7	.38	68	25	2.6	4.4	3.4	1.8	N	270	52
UG374	7.9	6.2	N	10	25	1.2	1.9	2.1	.51	N	140	67
UG375	11	8.7	N	8.4	42	1.5	2.2	2.8	.48	N	130	75
UG376	9.6	8.7	N	13	28	1.6	1.9	2.6	1.9	N	210	52
UG377	18	26	N	13	22	3.2	7.1	5.7	2.6	N	710	54
UG378	2.2	6.8	.63	13	24	2.9	5	5	5.2	N	510	33
UG379	7.7	10	.22	15	29	4.6	14	6.7	3.1	N	730	47
UG380	5.9	50	N	11	16	2.7	4.7	3.9	1.1	N	300	40
UG381	10	6.7	.34	13	29	5.2	11	8.5	4	N	1,600	53
UG382	4.3	4.8	.64	5.9	13	2.7	5.6	4.1	3	N	180	38
UG383	2.5	8.1	.44	5.1	11	1.7	3.6	2.9	4.1	N	220	36
UG384	2.5	8.8	.065	8.2	15	3.6	6.4	5.4	6.8	N	230	49
UG385	2.5	3.9	1.3	6	14	2.3	4.7	4.4	7.7	N	290	37
UG386	4.3	4	.18	14	19	1.9	4.3	4	3.8	N	260	67
UG387	4.1	5.1	1	5	12	2.2	4.9	3.2	1	N	170	29
UG388	4.4	1.3	N	12	15	2.4	5	4.3	1.7	N	270	37
UG389	7.5	3.2	1.9	23	27	4.4	8.9	7.8	1.5	N	540	36
UG390	8.2	4.7	N	8.3	25	2.1	3.9	3.4	.43	9.3	220	200
UG391	17	3	.13	15	32	2.5	4.7	4.2	.82	N	280	29
UG392	7.7	3.5	N	17	28	2.5	4.7	4.5	1.6	N	270	130
UG393	4.3	4.7	N	17	25	2.9	5	3.3	1	N	260	32
UG394	3.5	4.7	.029	7.1	9.9	1.2	1.9	2.2	.56	N	130	91
UG395	1.6	5.5	.27	9	12	2.9	7.3	4.8	5	N	240	180
UG396	3.3	5	N	8.3	19	2.2	4.7	3.6	3.6	N	250	85
UG397	4	19	.18	25	20	2.7	5.6	3.9	2.4	N	310	38
UG398	5.4	6.1	.1	32	19	5.1	10	4.4	2.7	N	380	49
UG399	1.2	4.5	N	15	27	3.3	6.9	3.6	4.8	N	290	33

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
J6339	11	9.1	7.6	23	61	N	N	N	N	N	N
J6340	24	7.9	11	55	42	4.7	N	.36	N	10	N
J6341	7.8	5.6	5.8	18	31	N	N	N	N	N	N
J6342	9.6	15	6.8	64	48	N	N	1.5	N	79	N
J6343	12	12	7.2	41	52	10	N	.82	N	47	N
J6344	11	11	13	29	56	<3.3	N	N	N	94	N
J6345	17	8.2	13	29	41	N	N	N	N	3.8	N
J6346	11	6	9.5	16	32	N	N	N	N	3.1	N
J6347	7.1	4.9	6.1	19	44	N	N	N	N	N	N
J6348	8.8	6.7	7.1	21	45	N	N	N	N	N	N
J6349	16	8.9	12	29	48	N	N	N	N	N	N
J6350	13	6.6	11	25	37	N	N	N	N	<1.7	N
J6351	14	8.8	13	39	50	N	N	N	N	N	N
J6352	5.2	2.6	3.3	7.9	16	N	N	N	N	N	N
J6353	13	8.8	9.3	24	37	N	N	N	N	<1.6	N
J6354	12	7.3	8.4	23	48	N	N	N	N	N	N
J6355	13	9	9.7	24	66	N	N	N	N	<1.9	N
J6356	11	6.5	9	23	36	N	N	N	N	N	N
J6357	12	7.6	14	23	50	N	N	N	N	<2.6	N
J6358	11	8.7	12	31	57	N	N	N	N	<3.9	N
J6359	10	7.3	14	27	49	N	N	N	N	5.1	N
J6360	9.7	8.7	11	29	50	N	N	N	N	5.7	N
J6361	10	9.8	12	33	54	N	N	N	N	5.9	N
J6362	10	8.4	11	32	47	N	N	N	N	4.6	N
J6363	9.2	7.9	8.4	17	33	3.6	N	.51	N	69	N
J6364	5.1	4.6	6.2	18	23	N	N	.35	N	6.4	N
J6366	13	7.3	9	29	31	3.7	N	N	N	5.2	N
J6367	9.3	7.2	8.5	19	34	<3.3	N	N	N	7.1	N
J6368	10	8.7	11	29	51	N	N	N	N	6.8	N
J6369	13	9	13	32	53	N	N	N	N	<3.1	N
J6370	9	7.1	8.2	21	44	5.4	N	.7	N	14	N
J6371	7.5	8.3	6.6	25	36	3.6	N	.55	N	6.9	N
J6372	8.4	5	7.3	16	32	5	N	N	N	11	N
J6373	15	6.1	9	18	33	N	N	N	N	<2.4	N
J6374	12	4.6	6.4	20	22	N	N	.5	N	4.3	N
J6375	12	5	6.1	24	19	3.2	N	.85	N	12	N
J6376	12	6.3	6	19	25	N	N	2.2	N	29	N
J6377	26	16	18	42	82	12	N	N	N	24	N
J6378	3.4	6.5	4.7	9.5	29	<3.9	N	.83	N	16	N
J6379	30	31	22	500	57	25	.34	8.9	N	160	N
J6380	11	13	14	51	43	5.7	N	.84	N	18	N
J6381	16	25	15	130	59	18	N	5.9	N	84	N
J6382	4.2	4.2	3.5	13	30	7.4	N	1.5	N	44	N
J6383	3.8	3.8	2.7	18	44	11	N	2.5	N	10	N
J6384	3.6	4	2.5	15	42	11	N	2.7	N	9.7	N
J6385	4.2	7.4	3.9	14	22	<2.9	N	.72	N	6.5	N
J6386	15	15	7.4	45	31	<4	N	5	N	15	N
J6387	5.8	5.7	4.5	32	22	4.9	N	1.6	N	19	N
J6388	8.3	9.4	6.1	18	31	N	N	5	N	13	N
J6389	11	22	15	43	110	17	N	2.3	N	73	N
J6390	23	6.9	10	18	28	3.5	N	.57	N	5.3	N
J6391	12	8.3	15	20	42	4.5	N	N	N	6.4	N
J6392	12	8.7	9.1	29	44	7	N	.99	N	34	N
J6393	12	12	13	75	31	7.4	N	3.8	N	79	N
J6394	12	9.4	7.6	17	22	3.7	N	.7	N	35	N
J6395	14	7.8	5.8	15	47	3	N	.71	N	7.6	N
J6396	9.2	8	5.7	16	27	<3.6	N	.87	N	19	N
J6397	7.2	6.6	5.4	26	30	5.9	N	1.1	N	9.4	N
J6398	12	8	7.3	13	36	N	N	N	N	<2	N
J6399	4.1	4.9	3.9	8.2	28	3.7	N	.4	N	3.5	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	Latitude	Longitude	ICP-Na	ICP-K	ICP-Mg	ICP-Ca	ICP-Fe	ICP-Al	ICP-Ti	ICP-P
UG400	57 1 16	156 47 0	230	270	5,300	6,200	11,000	12,000	110	330
UG401	57 2 1	156 46 41	220	270	4,800	5,600	12,000	12,000	320	320
UG402	57 3 42	156 50 34	97	210	2,700	3,100	43,000	4,700	14	430
UG403	57 4 51	156 53 47	210	200	1,400	1,800	21,000	3,300	370	200
UG404	57 4 43	156 53 39	140	220	2,800	2,000	23,000	7,200	75	330
UG405	57 6 9	156 51 31	210	610	4,300	2,400	22,000	7,100	180	290
UG406	57 6 5	156 51 54	180	230	3,100	5,100	22,000	4,600	63	360
UG407	57 5 36	156 52 9	150	240	2,200	2,400	16,000	3,500	19	250
UG408	57 4 10	156 49 23	96	150	2,800	2,100	16,000	6,300	250	340
UG409	57 3 35	156 47 11	200	260	5,300	4,200	15,000	11,000	230	340
UG410	57 4 32	156 42 44	170	380	1,900	1,500	26,000	2,800	120	250
UG411	57 3 27	156 43 36	190	220	4,200	2,200	23,000	11,000	500	290
UG412	57 2 52	156 42 14	200	320	2,500	1,500	19,000	11,000	370	280
UG413	57 2 11	156 41 47	160	180	3,300	1,900	14,000	12,000	330	280
UG414	57 0 13	156 38 32	200	320	4,400	4,100	23,000	12,000	360	230
UG415	57 0 10	156 34 28	250	240	3,800	3,600	17,000	18,000	930	260
UG416	57 6 11	156 32 14	200	170	1,800	1,200	12,000	10,000	720	270
UG417	57 8 39	156 32 43	130	620	2,700	880	24,000	11,000	300	230
UG418	57 7 54	156 32 47	210	430	3,200	1,500	31,000	12,000	940	160
UG419	57 7 13	156 31 59	130	210	2,000	860	9,100	6,500	280	210
UG420	57 6 52	156 30 28	150	280	1,800	950	16,000	9,100	500	230
UG422	57 9 33	156 27 7	66	110	470	490	27,000	1,100	170	<63
UG423	57 9 39	156 26 7	140	250	1,700	860	22,000	5,500	200	170
UG424	57 9 2	156 25 52	260	470	5,200	2,200	33,000	12,000	72	260
UG425	57 47 54	156 51 18	170	130	460	1,100	5,100	2,200	250	210
UG426	57 53 10	157 17 26	330	250	860	2,100	8,000	4,100	370	160
UG427	57 48 28	157 30 41	450	310	910	2,100	7,400	5,000	190	420
UG428	57 41 4	157 33 24	1,100	580	2,800	4,400	12,000	8,500	400	480
UG429	57 31 46	157 46 26	790	310	2,400	2,300	15,000	3,800	1,000	230
UG430	57 35 46	157 13 49	260	180	1,100	1,800	4,100	2,700	180	200
UG431	57 11 48	157 0 25	190	370	5,700	4,100	21,000	12,000	74	290
UG432	57 11 50	157 2 11	130	350	2,400	2,400	15,000	8,200	11	180
UG433	57 11 58	157 4 49	130	130	1,900	1,900	9,500	5,300	33	140
UG434	57 12 29	157 5 58	420	240	2,100	3,200	15,000	13,000	540	250
UG435	57 13 53	157 6 51	140	80	700	1,200	3,500	2,600	170	120
UG436	57 14 5	157 7 26	430	170	1,900	2,900	29,000	9,500	1,200	150
UG437	57 13 42	157 8 3	250	290	3,300	2,800	21,000	9,900	390	230
UG438	57 15 23	157 6 33	290	340	4,800	2,600	33,000	11,000	710	290
UG439	57 14 36	157 3 58	110	340	1,500	710	8,200	3,500	170	83
UG860395	57 15 0	157 5 0	180	990	2,900	670	150,000	6,200	N	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Li	ICP-B	ICP-Be	ICP-Sr	ICP-Ba	ICP-La	ICP-Ce	ICP-Y	ICP-Zr	ICP-Nb	ICP-Mn	ICP-V
UG400	4	5.9	.87	32	12	3.9	7.2	4.1	1.2	N	280	18
UG401	4.6	5.9	.71	34	16	4.2	7.7	3.5	3.2	N	260	24
UG402	4.6	6.3	N	16	8.7	4.6	9.4	6.4	.71	N	620	19
UG403	2.1	6.1	N	13	26	1.7	3	3.1	1.3	N	190	59
UG404	4.5	5.4	N	14	34	3.3	6.4	4.2	2.7	N	390	26
UG405	13	9.1	N	14	39	2.4	4.5	4.2	.71	N	250	57
UG406	6.9	6.4	N	33	54	3.3	5.4	6.8	.92	N	410	34
UG407	3.6	6.2	N	15	44	1.9	3.2	4	.6	N	240	23
UG408	2.7	5.7	.63	22	29	3.3	6.2	2.9	1.8	N	240	38
UG409	4.8	7.2	N	25	18	4.1	8	3.4	1.9	N	270	31
UG410	3.8	7.3	N	5.6	10	2.3	5	3.7	.42	5.5	140	130
UG411	4.2	3.8	.073	14	21	3.1	6.1	4.5	5	N	330	67
UG412	3.4	8	N	10	12	2.1	4.5	4.1	2.8	N	230	57
UG413	3.2	9.5	.12	11	14	2	3.8	3.8	2.9	N	260	34
UG414	5.5	5.8	N	30	30	3.3	6.8	4.2	3.9	N	370	55
UG415	4.7	6.7	N	25	23	3.5	7	5.1	5.7	N	320	60
UG416	3.5	7.3	N	8.5	15	2.4	3.7	4	2.6	N	150	44
UG417	5.5	7.7	N	6.9	38	2.2	4.5	4.2	2	N	310	67
UG418	7.2	11	N	11	30	2.1	3.7	3.7	2.6	N	280	100
UG419	3.4	6.8	.45	5.8	15	1.3	2.1	2.1	1.7	N	160	27
UG420	3.2	5.7	N	6	17	2.9	5	4.4	2.2	N	250	81
UG422	.66	7	.036	1.6	4.1	.7	N	1.2	.4	8.8	47	110
UG423	3.3	7.4	.036	5.5	15	1.5	1.8	2	1	N	160	84
UG424	11	3.6	N	15	49	2.4	3.8	3.5	.41	N	600	54
UG425	1.1	5.8	N	16	24	1.1	N	.88	.81	N	90	14
UG426	2.4	6.6	.22	30	40	2.2	2.9	1.6	.7	N	170	27
UG427	2.4	14	.49	28	45	1.9	2.5	2.1	1.1	N	180	15
UG428	4.5	11	.84	41	16	2.6	4.2	3.5	2.4	N	220	36
UG429	1.5	7.4	1	20	8.4	1.6	2.2	2.1	1.9	N	170	66
UG430	1.1	6.2	.59	15	7.8	1	N	1.4	1.1	N	84	11
UG431	9.2	5.2	.39	53	50	3.5	5.4	4.4	1.2	N	290	40
UG432	6.4	4.4	.25	17	78	2.9	5.1	2.7	.6	N	240	32
UG433	4.2	4.4	.39	17	26	2.4	3.9	2.2	N	N	180	22
UG434	5.5	4.8	N	26	35	4	7.7	4.4	2.3	N	330	44
UG435	1.1	6.4	.67	9.4	13	.79	N	.9	.34	N	61	15
UG436	3.5	7.1	N	21	28	2.7	4.8	3.3	3.5	N	290	110
UG437	5.5	3.4	N	31	58	4.2	7.8	3.6	1.9	N	310	55
UG438	6.4	5.6	N	25	44	3.7	6.7	4.5	3	N	470	78
UG439	1.8	6.2	.63	8.9	17	1.1	N	2.3	.44	N	96	23
UG860398	.65	N	.21	N	39	N	N	.78	N	N	64	N

Table 2. Aqua-regia leachate data for minus-80-mesh stream sediments from the Ugashik-Karluk study area, Alaska--continued

Sample	ICP-Cr	ICP-Co	ICP-Ni	ICP-Cu	ICP-Zn	ICP-Pb	ICP-Ag	ICP-Mo	ICP-Sn	ICP-As	ICP-Bi
UG400	4.6	5.5	3.7	7.1	23	N	N	N	N	N	N
UG401	6.3	5.7	5	9	26	N	N	N	N	N	N
UG402	5.1	16	12	36	120	60	.56	2.4	N	44	N
UG403	6.6	6.3	8.2	14	33	4	N	.58	N	5.1	N
UG404	6	8.8	9	18	53	13	.5	.85	N	20	N
UG405	15	7.9	13	23	42	4.7	N	.41	N	8.8	N
UG406	6.8	8.1	13	29	55	5.7	N	.51	N	7.7	N
UG407	6.7	6.9	13	19	41	4.5	N	.45	N	6.8	N
UG408	6.2	6.3	6.2	10	26	4.1	N	.63	N	6.3	N
UG409	8.8	6.6	6.2	10	27	N	N	N	N	4.4	N
UG410	11	4.6	4.3	14	17	3.8	N	.56	N	3.2	N
UG411	9.4	5.7	5.1	9.2	29	N	N	N	N	<1.7	N
UG412	10	10	7.2	23	23	N	N	2	N	9.7	N
UG413	6.6	8.1	6.9	18	24	N	N	.58	N	6.5	N
UG414	15	8.5	9.2	23	49	<2.7	N	N	N	<3.1	N
UG415	10	5.8	6.6	17	37	N	N	N	N	<2.1	N
UG416	4.4	3.4	3.1	12	20	<2.7	N	3.8	N	38	N
UG417	11	11	8.1	27	50	11	N	1.4	N	31	N
UG418	15	10	9.5	20	42	<5.4	N	1.7	N	56	N
UG419	4.2	3.8	3.6	17	29	14	N	1.1	N	26	N
UG420	7.9	4.4	3.9	32	86	30	N	2.3	N	25	N
UG422	9.6	2.3	2.2	4.8	7.6	N	N	.64	N	5.5	N
UG423	9.5	4.4	5.4	12	23	4.1	N	.61	N	34	N
UG424	30	15	19	42	67	<3.4	N	.85	N	22	N
UG425	2.1	1.3	2.2	1.7	13	N	N	N	N	3.8	N
UG426	4	2.4	2.9	2.6	19	N	N	N	N	1.9	N
UG427	3.4	1.9	2.6	3.9	17	N	N	N	N	2.7	N
UG428	7	4.2	6.7	9.3	27	N	N	N	N	3.5	N
UG429	8.6	5.1	6.7	4.6	27	N	N	N	N	2.3	N
UG430	2.4	1.7	2.5	3.1	13	N	N	N	N	1.6	N
UG431	17	8.2	15	19	41	N	N	N	N	<2.2	N
UG432	8.8	5.7	8.1	13	40	4.5	N	N	N	2.9	N
UG433	4.6	3.7	3	6.8	27	3.4	N	N	N	3.9	N
UG434	6.7	4.4	6.8	10	31	<3.1	N	.41	N	3.8	N
UG435	2.5	1.5	5.6	2.9	14	N	N	N	N	1.5	N
UG436	11	6.4	4.9	8.9	40	N	N	N	N	8.6	N
UG437	13	7.1	7.4	18	39	6.3	N	N	N	8.8	N
UG438	19	9.6	8.7	49	73	18	N	1.2	N	43	N
UG439	10	5.7	3.5	100	16	N	N	1.9	N	7.2	N
UGB60395	12	2.8	N	48	46	N	N	N	N	26	N