UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Analytical results and sample locality map for stream-sediment and panned-concentrate samples from the Camas Creek Addition to the Frank Church-River of No Return Wilderness, Custer and Lemhi Counties, Idaho

By

Roy T. Hopkins, Jr., John D. Sharkey, Kathy A. Romine,

and Gary A. Nowlan

Open-File Report 85-705

1985

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STUDIES RELATED TO WILDERNESS

The Wilderness Act (Public Law 88-577, September 3, 1964) and related acts require the U.S. Geological Survey and the U.S. Bureau of Mines to survey certain areas on Federal lands to determine their mineral values if any, that may be present. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of a geochemical survey of the Camas Creek Addition to the Frank Church-River of No Return Wilderness in the Challis and Salmon National Forests, Custer and Lemhi Counties, Idaho. The area was established as a wilderness by Public Law 96-312, July 23, 1980.

INTRODUCTION

In the summer of 1983 the U.S. Geological Survey conducted a reconnaissance geochemical survey of the Camas Creek Addition to the Frank Church-River of No Return Wilderness, Custer and Lemhi Counties, Idaho.

The Camas Creek Addition comprises about 125 mi^2 (320 km^2) in the north-central part of Custer County and the southwestern part of Lemhi County, Idaho (fig. 1). The addition lies about 15 mi (24 km) northwest of Challis, Idaho, which is on U.S. Route 93. Access is by secondary roads from Challis.

Topography of the Camas Creek Addition is mountainous and quite rugged. The entire addition is dissected by Camas Creek and its tributaries. Along Camas Creek and the lower reaches of its tributaries, the valley floors are commonly quite flat for a breadth of 500-1,000 ft (150-300 m) across the valley. Elevation ranges from about 10,200 ft. (3,110 m) at the summit of one of the Twin Peaks in the southernmost part of the addition to about 4,700 (1,430 m) at Camas Creek at the northern tip of the addition. The study area is generally forested with conifers but areas of grass and sagebrush are common. A system of foot trails gives good access to most of the streams in the study area.

An open-file geologic map of the Challis 1° x 2° quadrangle, which includes the study area, was recently released (Fisher and others, 1983). Mineral resources of parts of the Frank Church-River of No Return Wilderness that adjoin the study area are discussed by Cater and others (1973). The study area is underlain almost entirely by the Tertiary Challis volcanics. Lodes of barite, fluorite, and antimony are present within the Camas Creek Addition near Meyers Cove (Anderson, 1943).

Samples were collected by G. A. Nowlan, S. C. Rose, and G. P. Pudlik. Analyses were by R. T. Hopkins, Jr., K. A. Romine, J. D. Sharkey, and L. Sherlock.

METHODS OF STUDY

Sample Media

Analyses of the stream-sediment samples represent the chemistry of the rock material eroded from the drainage basin upstream from each sample locality. Such information is useful in identifying those basins which contain concentrations of elements that may be related to mineral deposits. Panned-concentrate samples provide information about the chemistry of a limited number of minerals in rock material eroded from the drainage basin upstream from each sample locality. The selective concentration of minerals, many of which are ore-related, permits determination of some elements that are not easily detected in stream-sediment samples.

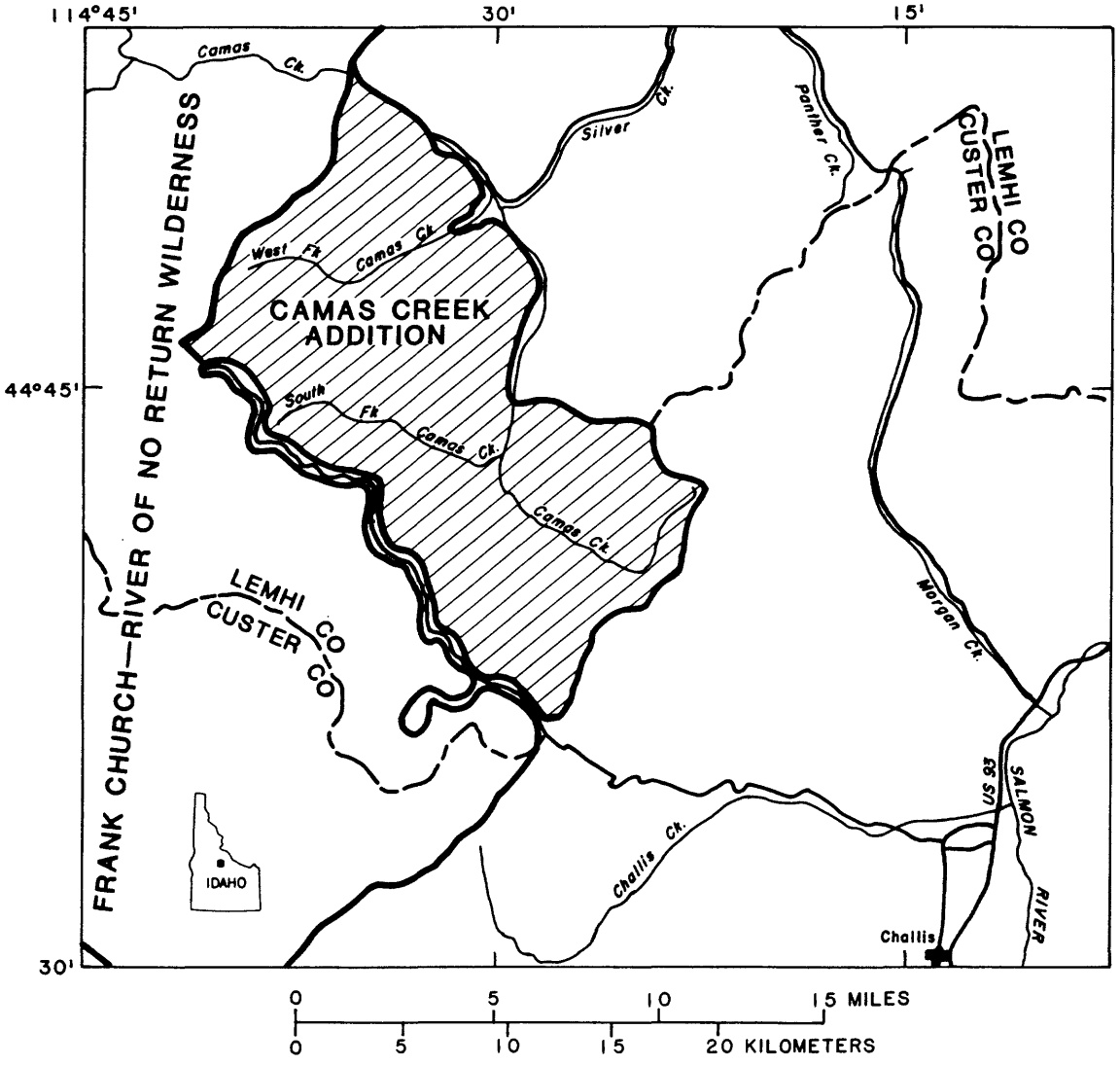

Figure 1. Index map, Camas Creek Addition to the Frank Church-River of No Return Wilderness, Custer and Lemhi Counties, Idaho.

Sample Collection

Samples were collected at 168 localities (plate 1). At all of the localities, a stream-sediment sample was collected; at most of the localities two panned-concentrate samples were collected. The two panned-concentrate samples will be referred to as the heavy-mineral-concentrate sample and the raw panned-concentrate sample. Sampling density was about 1 sample locality per square mile.

Stream-sediment samples

The stream-sediment samples consisted of grab samples of active alluvium collected primarily from first-order (unbranched) and second-order (below the junction of two first-order) streams as shown on USGS topographic maps (scale = 1:24,000).

Heavy-mineral-concentrate samples

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

Raw panned-concentrate samples

A heaping 16-inch pan of unscreened alluvium (approximately 20 lbs or 9 kg) was panned until between 4 and 19 g remained.

Sample Preparation

The stream-sediment samples were oven dried at less than 60°C, then sieved using 80-mesh (0.17-mm) stainless-steel sieves. The portion of the sediment passing through the sieve was saved for analysis.

After oven drying at less than 60°C, bromoform (specific gravity 2.8) was used to remove the remaining quartz and feldspar from the heavy-mineral-concentrate samples that had been panned in the field. The resultant heavy-mineral sample was separated into three fractions using a large electromagnet (in this case a modified Frantz Isodynamic Separator). The most magnetic material, primarily magnetite, was not analyzed. The second fraction, largely ferromagnesian silicates and iron oxides, was saved for analysis/archival storage. The third fraction (the least magnetic material including the nonmagnetic ore minerals, zircon, sphene, etc.) was split using a Jones splitter. One split was hand-ground for spectrographic analysis; the other split was saved for mineralogical analysis. These magnetic separates are the same separates that would be produced by using a Frantz Isodynamic Separator set at a slope of 15° and a tilt of 10° with a current of 0.1 ampere to remove the magnetite and ilmenite, and a current of 1.0 ampere to split the remainder of the sample into paramagnetic and nonmagnetic fractions.

The raw panned-concentrate samples were dried at less than 60°C and then were analyzed for gold without further preparation.

Sample Analysis

Spectrographic method

The stream-sediment and heavy-mineral-concentrate samples were analyzed for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). The elements analyzed and their lower limits of determination are listed in table 1. Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (Ca, Fe, Mg, and Ti) are given in weight percent; all others are given in parts per million (micrograms/gram).

Other Methods

Other methods of analysis used on samples from the Camas Creek Addition are summarized in table 2.

Analytical results are listed in tables 3, 4, and 5.

ROCK ANALYSIS STORAGE SYSTEM

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

DESCRIPTION OF DATA TABLES

Tables 3-5 list the analyses for samples of stream sediment, heavy-mineral concentrate, and raw panned concentrate, respectively. For the three tables, the data are arranged so that column 1 contains the USGS-assigned sample identifications. The numeric portions of the identifications correspond to the numbers shown on the locality map (plate 1). Stream-sediment samples were analyzed for As, Cd, Sb, and Zn by both emission spectrography and atomic absorption; the results in table 3 for these four elements are atomic-absorption results. A letter "N" in tables 3 and 4 indicates that a given element was looked for but not detected at the lower limit of determination shown for that element in tables 1 and 2. If an element was observed but was below the lowest reporting value, a "less than" symbol (<) was entered in the tables in front of the lower limit of determination. If an element was observed but was above the highest reporting value, a "greater than" symbol (>) was entered in the tables in front of the upper limit of determination. Because of the formatting used in the computer program that produced tables 3 and 4, some of the elements listed in these tables (Ca, Fe, Mg, Ti, Ag, Be, and U) carry one or more nonsignificant digits

to the right of the significant digits. The analysts did not determine these elements to the accuracy suggested by the extra zeros. Emission spectrographic determinations for As, Au, Cd, Mo, Sb, Th, W, and Zn in stream-sediment samples and As, Bi, Cd, and Sb in heavy-mineral-concentrate samples resulted in no detectable amounts at the lower limits of determination shown in table 1; consequently, the results for these determinations have been omitted from tables 3 and 4. Zirconium concentrations in heavy-mineral-concentrate samples were all greater than the upper limit of determination and consequently Zr is omitted from table 4.

The lower limit of determination for Au by atomic absorption is 0.05 ppm, based on a 10-g sample (table 2). Because the sample weight for raw panned concentrates is variable, the lower limit of determination is variable when reported in terms of ppm (table 5). However, the Au method used for this study will detect 0.5 µg of Au, as reflected in table 5 by the last column (Au per pan, µg).

Latitudes and longitudes listed in tables 3-5 are based on 1:24,000-scale U.S. Geological Survey topographic maps of the Meyers Cove, Meyers Cove Point, Rock Creek, Sheldon Peak, Sleeping Deer Mountain, and Yellowjacket quadrangles and the 1:62,500-scale map of the Twin Peaks quadrangle. The listed coordinates may not conform precisely to the plotted locations in plate 1.

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

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

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

Table 2.--Lower limits of determination for methods other than the spectrographic method

[AA = atomic absorption; SI = specific ion; and F = fluorometry]

Element or constituent determined	Sample Type	Method	Determination limit (ppm)	Reference
Gold (Au)	Raw panned-concentrate	AA	0.05*	Thompson and others, 1968.
Arsenic (As)	Stream sediment	AA	10	Modification of Viets, 1978.
Antimony (Sb)	" "	AA	2	
Zinc (Zn)	" "	AA	5	
Cadmium (Cd)	" "	AA	0.1	
Fluorine (F)	" "	SI	100	Hopkins, 1977.
Uranium (U)	" "	F	0.05	Modification of Centanni and others, 1956.

*Based on a 10-g sample

Table 3.--Analyses of stream-sediment samples, Camas Creek Addition, River of No Return Wilderness, Idaho
[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown]

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	As	B	Ba	Be	Bi	Cd	Co	Cr	Cu	F	La	Mn
IA2135	44 47 57	114 39 22	.70	1.0	.30	.20	N	N	10	300	5.0	N	.2	N	10	15	350	20	1,000
IA2136	44 48 17	114 38 34	1.50	.3	.10	.05	<.5	N	N	150	3.0	N	.1	N	<10	10	110	20	200
IA2137	44 48 19	114 38 11	1.50	.7	.20	.15	N	5	15	200	3.0	N	.1	N	10	15	150	20	700
IA2138	44 48 35	114 36 54	1.00	1.5	.70	.50	N	N	20	700	5.0	N	.2	<5	15	15	210	70	700
IA2139	44 48 32	114 36 55	1.50	2.0	.70	.50	N	N	20	1,000	3.0	N	.2	<5	N	10	230	30	1,000
IA2140	44 48 31	114 36 48	.70	2.0	.70	.50	N	N	15	700	3.0	N	.2	<5	10	15	410	70	500
IA2141	44 48 11	114 36 37	1.50	1.5	.30	.15	<.5	N	20	500	5.0	N	.1	N	10	20	170	20	300
IA2142	44 47 48	114 35 45	1.00	1.5	.50	.50	N	N	20	700	5.0	N	N	N	10	10	330	30	500
IA2143	44 41 52	114 23 30	1.50	3.0	1.00	.70	N	N	20	700	3.0	N	N	7	15	15	250	30	2,000
IA2144	44 41 52	114 23 27	.70	1.5	.50	.50	N	N	10	700	3.0	N	.2	N	<10	7	290	20	2,000
IA2145	44 41 29	114 24 2	1.50	3.0	1.00	1.00	<.5	N	20	1,000	3.0	N	.3	7	10	30	470	50	1,000
IA2146	44 41 30	114 23 58	1.00	3.0	1.00	1.00	N	N	15	1,000	2.0	N	N	10	20	15	490	50	1,500
IA2147	44 41 7	114 24 8	1.00	1.5	.70	.70	N	N	10	700	5.0	N	.3	N	<10	10	290	20	700
IA2148	44 40 22	114 24 29	1.00	1.5	.70	.70	N	N	20	700	7.0	N	N	<5	<10	15	350	30	700
IA2149	44 40 25	114 24 30	1.00	2.0	1.00	.70	N	N	15	700	2.0	N	.1	5	10	15	410	30	1,000
IA2150	44 47 45	114 35 48	1.50	2.0	1.00	.70	N	N	15	1,000	3.0	N	.3	5	<10	15	270	30	700
IA2151	44 47 53	114 34 46	1.50	2.0	.30	.20	N	N	15	700	7.0	N	N	N	<10	15	410	70	1,000
IA2152	44 48 19	114 34 16	1.00	.7	.20	.15	N	N	30	500	3.0	N	.2	N	10	20	310	20	700
IA2153	44 48 27	114 33 47	1.00	1.0	.30	.30	N	N	20	700	5.0	N	.1	<5	<10	10	330	30	200
IA2154	44 48 44	114 32 52	.70	1.0	.30	.30	<.5	N	15	700	10.0	N	.1	N	<10	15	370	200	300
IA2155	44 48 45	114 32 53	1.00	2.0	.70	.70	N	5	10	1,000	3.0	N	.2	<5	10	10	290	70	700
IA2156	44 49 13	114 31 30	.70	2.0	.30	.30	N	N	30	1,000	5.0	N	.1	N	<10	15	650	50	700
IA2157	44 48 52	114 29 51	.50	1.5	.30	.30	N	N	15	700	5.0	N	.2	N	N	<5	290	30	500
IA2158	44 45 53	114 38 3	1.50	3.0	.70	.70	N	N	15	1,000	3.0	N	.2	<5	<10	15	190	30	700
IA2159	44 45 58	114 37 43	1.00	1.0	.20	.15	<.5	N	10	500	7.0	N	.1	N	<10	10	250	20	500
IA2160	44 45 58	114 37 44	1.00	2.0	.70	.70	N	N	30	1,000	3.0	N	.2	N	<10	10	270	50	700
IA2161	44 46 8	114 37 36	1.50	2.0	.50	.20	N	N	15	700	5.0	N	.2	N	<10	20	230	20	700
IA2162	44 46 30	114 37 16	1.50	2.0	.30	.15	<.5	N	15	700	10.0	N	N	N	<10	20	250	20	500
IA2163	44 46 4	114 31 3	.70	2.0	.30	.30	N	5	30	1,000	5.0	N	.1	N	N	5	310	30	1,000
IA2164	44 43 25	114 32 20	.50	2.0	.20	.50	N	N	10	700	5.0	N	N	N	10	5	510	50	700
IA2165	44 43 17	114 31 46	1.50	2.0	.30	.50	N	N	15	1,000	5.0	N	.1	N	<10	10	290	100	700
IA2166	44 43 19	114 31 36	1.50	2.0	.30	.20	N	N	15	700	5.0	N	.1	N	10	15	330	30	500
IA2167	44 43 14	114 31 35	.70	.7	.15	.10	<.5	N	15	150	3.0	N	.3	N	N	10	290	30	300
IA2168	44 43 5	114 30 50	1.50	2.0	.70	.50	N	N	10	1,000	3.0	N	.2	<5	N	5	210	30	500
IA2169	44 43 4	114 30 45	.70	.7	.15	.15	N	N	15	300	5.0	N	.1	N	15	10	450	20	500
IA2170	44 43 14	114 29 57	1.50	2.0	.70	.70	N	N	10	1,500	3.0	N	.2	N	10	5	250	100	700
IA2171	44 43 13	114 29 54	.50	2.0	.50	.50	N	N	15	1,000	3.0	N	.2	<5	10	7	230	50	500
IA2172	44 43 54	114 29 42	1.00	2.0	.50	.50	N	N	20	1,000	5.0	N	.1	N	10	15	330	50	700
IA2173	44 44 1	114 29 36	1.00	3.0	.50	.70	N	10	<10	1,000	5.0	N	.1	<5	10	5	250	50	700
IA2174	44 37 58	114 25 23	.70	1.0	.15	.15	N	10	10	500	7.0	N	.8	N	<10	7	230	150	700
IA2175	44 38 7	114 23 48	1.00	2.0	.30	.20	N	5	10	700	7.0	N	.2	N	<10	5	290	100	700
IA2176	44 38 7	114 23 42	.70	2.0	.70	.30	N	N	10	700	5.0	N	.4	N	10	7	310	30	700
IA2177	44 39 18	114 21 57	1.50	2.0	1.00	.50	N	N	15	1,000	3.0	N	.3	5	20	7	310	30	700
IA2178	44 39 26	114 21 56	1.50	5.0	1.50	>1.00	N	N	10	1,500	1.5	N	.3	10	70	7	310	30	1,000
IA2179	44 39 50	114 22 19	1.50	2.0	.70	.70	N	N	10	1,000	3.0	N	.2	5	N	7	310	30	700
IA2180	44 40 32	114 21 56	1.50	3.0	.70	1.00	N	N	15	1,000	5.0	N	.2	5	15	10	310	30	1,000
IA2181	44 40 31	114 22 0	1.50	3.0	.70	1.00	N	N	10	1,000	5.0	N	.2	5	15	10	230	30	1,000
IA2182	44 35 55	114 26 32	.30	3.0	.30	.70	N	10	<10	700	5.0	N	.4	N	<10	10	110	200	1,000
IA2183	44 41 47	114 21 28	1.00	1.5	.50	.50	N	5	15	1,000	5.0	N	.3	N	N	7	230	30	700
IA2184	44 43 45	114 22 14	1.50	2.0	1.00	.70	N	40	15	700	3.0	N	.6	<5	10	15	270	30	700

Table 3.--Analyses of stream-sediment samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Nb	Ni	Pb	Sb	Sc	Sn	Sr	U	V	Y	Zn	Zr
IA2135	N	<5	30	N	N	N	<100	50.00	70	30	45	70
IA2136	N	N	20	N	N	N	N	150.00	20	30	30	30
IA2137	N	7	30	N	N	N	N	80.00	30	30	50	50
IA2138	<20	7	30	N	<5	N	300	25.00	70	70	75	700
IA2139	<20	5	30	N	<5	N	500	27.00	70	30	45	500
IA2140	20	7	50	N	<5	N	200	7.80	70	50	35	500
IA2141	N	5	20	N	N	N	<100	51.00	30	50	40	100
IA2142	<20	<5	30	N	N	N	300	12.00	70	30	40	500
IA2143	<20	7	30	N	<5	N	300	3.70	100	30	55	300
IA2144	N	<5	30	N	<5	N	150	10.00	70	20	60	200
IA2145	<20	5	50	N	<5	N	300	6.50	150	30	55	>1,000
IA2146	<20	10	30	N	<5	N	300	3.80	150	30	50	700
IA2147	<20	5	30	N	<5	N	200	13.00	70	30	90	200
IA2148	20	<5	30	N	N	N	200	19.00	70	30	50	700
IA2149	<20	5	30	N	<5	N	300	8.40	150	20	40	700
IA2150	<20	7	30	N	<5	N	300	13.00	100	30	70	500
IA2151	<20	<5	30	N	<5	N	200	1.50	30	70	40	300
IA2152	N	7	20	N	N	N	N	3.30	20	20	50	100
IA2153	N	7	30	N	N	N	200	10.00	30	30	55	200
IA2154	N	N	30	N	<5	N	200	29.00	30	200	60	700
IA2155	<20	7	30	N	N	N	300	77.00	70	30	50	700
IA2156	<20	10	30	N	<5	N	100	23.00	50	30	35	500
IA2157	20	<5	30	N	N	N	200	4.80	30	30	40	500
IA2158	<20	5	30	N	<5	N	300	6.10	70	30	45	500
IA2159	N	N	20	N	N	N	N	11.00	30	30	45	150
IA2160	<20	<5	30	N	N	N	200	6.50	70	30	40	>1,000
IA2161	<20	5	30	N	N	N	<100	5.30	50	30	50	300
IA2162	20	<5	30	N	N	N	N	36.00	30	30	45	300
IA2163	<20	<5	50	N	N	N	100	24.00	15	30	50	700
IA2164	30	<5	50	N	N	N	100	38.00	20	50	45	>1,000
IA2165	<20	<5	30	N	<5	N	500	21.00	50	30	40	1,000
IA2166	N	5	30	N	<5	N	300	6.00	50	30	45	300
IA2167	N	<5	20	N	N	N	N	110.00	30	20	60	70
IA2168	N	5	30	N	N	N	500	59.00	50	30	45	200
IA2169	N	N	20	N	N	N	N	22.00	30	20	60	100
IA2170	<20	<5	30	N	<5	N	500	21.00	50	30	60	>1,000
IA2171	30	5	50	N	N	N	200	5.40	30	50	60	1,000
IA2172	<20	<5	30	N	<5	N	300	6.70	50	30	60	700
IA2173	30	N	30	N	N	N	200	4.20	30	50	60	>1,000
IA2174	20	<5	30	N	N	N	N	4.90	20	50	85	500
IA2175	30	<5	30	N	<5	N	100	11.00	30	50	50	700
IA2176	<20	<5	30	N	N	N	100	4.40	50	30	70	700
IA2177	20	5	30	N	<5	N	300	9.50	70	30	60	500
IA2178	30	7	30	N	7	N	500	4.70	150	30	30	1,000
IA2179	<20	15	30	N	<5	N	500	11.00	70	20	55	700
IA2180	<20	5	30	N	<5	N	300	6.20	100	30	50	200
IA2181	20	<5	20	N	<5	N	300	7.60	100	30	70	300
IA2182	50	<5	50	N	N	N	N	3.60	20	70	40	1,000
IA2183	<20	5	30	N	<5	N	200	10.00	50	30	20	700
IA2184	<20	5	30	N	5	N	200	3.80	100	30	70	500

Table 3.--Analyses of stream-sediment samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	As	B	Ba	Be	Bi	Cd	Co	Cr	Cu	F	La	Mn
IA2185	44 43 42	114 22 6	1.50	5.0	1.50	1.00	N	N	10	1,000	2.0	N	N	7	50	15	400	50	1,000
IA2186	44 43 30	114 21 57	1.50	3.0	1.00	1.00	N	N	10	1,000	2.0	N	N	7	20	10	360	30	700
IA2187	44 43 1	114 21 14	1.50	3.0	1.00	.70	N	N	15	1,000	3.0	N	N	5	20	15	360	30	1,000
IA2188	44 42 58	114 21 14	1.50	2.0	.70	.30	.7	5	15	700	5.0	N	N	N	15	15	440	20	700
IA2189	44 46 27	114 32 22	.50	1.0	.15	.30	N	N	10	700	5.0	N	N	N	<10	<5	360	20	500
IA2190	44 47 44	114 31 36	.70	1.5	.15	.15	N	N	15	500	5.0	N	N	N	10	7	320	70	700
IA2191	44 47 44	114 31 38	.70	2.0	.20	.30	N	N	20	700	7.0	N	N	<5	10	5	220	150	700
IA2192	44 50 29	114 35 3	1.50	2.0	.50	.30	.7	N	20	500	10.0	N	1.0	<5	10	20	360	500	700
IA2193	44 39 8	114 31 10	1.50	3.0	.70	1.00	N	N	15	1,500	3.0	N	N	7	<10	10	300	150	700
IA2194	44 39 7	114 31 9	1.50	1.0	.15	.20	N	N	15	700	15.0	N	.1	N	N	7	320	200	700
IA2195	44 39 16	114 31 15	1.50	3.0	1.00	.70	N	N	15	1,000	2.0	N	N	5	<10	7	360	30	700
IA2196	44 39 40	114 31 6	1.50	3.0	.70	.70	<.5	N	15	1,000	3.0	N	N	<5	10	15	400	50	700
IA2197	44 39 39	114 31 5	1.50	2.0	.70	.70	N	N	15	1,000	5.0	N	N	5	10	7	360	50	700
IA2198	44 39 47	114 30 51	1.00	3.0	.70	1.00	N	N	10	1,000	5.0	N	N	<5	<10	10	380	30	700
IA2199	44 40 52	114 30 28	1.00	3.0	.70	.70	N	N	10	1,000	3.0	N	N	5	<10	7	340	30	500
IA2200	44 40 52	114 30 23	1.50	3.0	.70	.50	.7	N	10	1,000	5.0	N	N	<5	<10	15	360	30	700
IA2201	44 42 17	114 29 47	.50	1.5	.30	.30	N	N	10	700	7.0	N	N	N	<10	5	180	30	500
IA2202	44 44 45	114 31 29	1.50	1.5	.50	.30	N	N	15	1,000	3.0	N	N	N	20	<5	200	30	700
IA2203	44 44 46	114 31 28	.70	1.5	.20	.20	N	N	50	1,000	3.0	N	N	<5	<10	<5	180	30	700
IA2204	44 49 1	114 40 19	1.50	2.0	.70	.50	N	N	20	1,000	5.0	N	.6	<5	15	20	280	100	2,000
IA2205	44 49 1	114 40 16	1.50	.2	.07	.05	<.5	N	15	100	3.0	N	.9	N	10	15	120	20	150
IA2206	44 47 29	114 42 7	1.00	1.0	.20	.10	.7	<5	15	150	5.0	N	1.3	N	10	30	240	30	700
IA3186	44 46 23	114 39 27	1.50	1.0	.30	.30	N	N	15	700	5.0	N	N	N	10	15	200	30	500
IA3187	44 46 23	114 39 29	1.50	3.0	.10	1.00	N	N	N	1,000	2.0	N	N	7	15	10	360	30	1,000
IA3188	44 46 56	114 38 59	1.50	3.0	1.00	.70	N	N	20	1,000	3.0	N	N	7	20	20	260	30	1,000
IA3189	44 46 53	114 38 57	2.00	3.0	1.00	.70	N	N	10	1,000	3.0	N	N	7	<10	10	360	30	1,000
IA3190	44 47 9	114 37 42	.50	.3	.15	.07	<.5	N	N	150	3.0	N	.2	N	N	<5	400	20	150
IA3191	44 47 3	114 37 45	1.50	3.0	1.50	1.00	N	<5	15	1,500	3.0	N	N	7	20	15	360	30	1,000
IA3192	44 46 58	114 37 2	1.50	3.0	.70	.70	N	N	15	1,000	3.0	N	N	5	10	10	220	50	700
IA3193	44 47 0	114 37 4	1.50	5.0	1.50	1.00	N	<5	20	1,500	1.5	N	N	7	30	15	280	30	1,000
IA3194	44 47 8	114 36 56	1.50	1.5	.50	.30	<.5	N	20	700	5.0	N	.3	N	<10	15	240	30	700
IA3195	44 47 16	114 36 12	1.50	3.0	.70	.70	N	N	15	1,000	5.0	N	N	<5	10	15	240	150	1,000
IA3196	44 47 40	114 35 35	1.50	3.0	1.00	.70	N	N	15	1,000	3.0	N	N	7	15	15	320	100	700
IA3209	44 40 43	114 32 22	.50	2.0	.30	.30	N	N	10	700	5.0	N	N	N	10	10	240	50	1,000
IA3210	44 40 45	114 32 24	1.00	3.0	.50	.50	N	<5	10	700	10.0	N	N	<5	10	10	280	100	1,000
IA3211	44 41 23	114 31 50	.70	3.0	.50	.70	N	N	15	1,000	7.0	N	.2	N	<10	10	320	100	700
IA3212	44 41 25	114 31 45	1.50	3.0	.30	.30	N	<5	15	500	15.0	N	.7	N	<10	20	360	700	3,000
IA3213	44 41 42	114 31 47	.70	2.0	.20	.30	N	N	15	700	7.0	N	.3	N	N	15	260	500	1,000
IA3214	44 41 38	114 31 45	.30	2.0	.15	.30	N	N	15	700	7.0	N	N	N	<10	5	420	70	500
IA3215	44 42 2	114 30 49	1.50	3.0	.50	.30	<.5	15	15	500	20.0	N	.4	N	N	20	640	700	1,500
IA3216	44 42 0	114 30 46	.30	2.0	.30	.30	N	N	15	700	5.0	N	N	N	<10	7	440	70	500
IA3217	44 51 33	114 32 29	1.50	3.0	1.00	.70	1.5	N	10	1,000	7.0	N	.3	<5	15	20	380	200	1,000
IA3218	44 52 13	114 33 38	1.50	3.0	1.00	.70	3.0	N	70	700	10.0	N	1.7	<5	10	70	320	700	1,000
IA3219	44 52 13	114 33 36	1.50	3.0	1.00	.70	N	N	20	1,000	5.0	N	N	<5	15	10	380	30	700
IA3220	44 52 38	114 34 2	1.50	3.0	.50	.50	N	N	15	700	20.0	N	.3	N	15	30	380	500	1,000
IA3221	44 53 1	114 34 51	2.00	3.0	1.00	1.00	N	N	15	700	15.0	N	.1	5	<10	20	340	200	1,000
IA3222	44 53 0	114 34 53	1.50	3.0	.70	>1.00	N	N	10	3,000	2.0	N	N	N	15	20	1,840	150	700
IA3223	44 48 58	114 37 52	1.50	3.0	1.00	.70	<.5	N	50	700	7.0	N	.2	5	15	30	400	150	1,000
IA3224	44 49 1	114 37 51	1.50	3.0	.70	.70	<.5	N	20	700	7.0	N	.2	<5	15	20	420	100	1,000
IA3225	44 46 22	114 35 16	1.50	3.0	.50	.50	<.5	N	15	1,000	7.0	N	.1	N	10	10	240	50	1,000

Table 3.--Analyses of stream-sediment samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Nb	Ni	Pb	Sb	Sc	Sn	Sr	U	V	Y	Zn	Zr
IA2185	<20	15	50	N	7	N	500	7.80	150	30	60	300
IA2186	<20	5	30	N	7	N	300	4.40	150	30	65	300
IA2187	<20	10	30	N	5	N	300	9.80	150	30	55	300
IA2188	<20	10	30	N	<5	N	200	82.00	50	30	40	200
IA2189	<20	<5	30	N	<5	N	150	10.00	30	30	30	300
IA2190	20	<5	30	N	N	N	100	55.00	15	100	35	700
IA2191	30	<5	50	N	N	N	100	22.00	20	100	40	1,000
IA2192	<20	5	70	N	<5	N	150	43.00	50	200	140	200
IA2193	20	<5	30	N	<5	N	500	8.50	70	50	50	>1,000
IA2194	20	N	30	N	N	N	100	44.00	20	150	40	500
IA2195	<20	<5	30	N	<5	N	300	9.90	70	30	50	700
IA2196	20	10	30	N	<5	N	300	6.90	100	30	60	700
IA2197	20	<5	30	N	<5	N	300	8.50	70	50	50	700
IA2198	20	5	50	N	<5	N	300	3.90	70	30	60	700
IA2199	20	<5	30	N	<5	N	300	10.00	70	30	50	700
IA2200	20	5	30	N	<5	N	300	18.00	100	30	45	700
IA2201	30	<5	30	N	N	N	150	5.30	30	30	60	700
IA2202	<20	<5	30	N	<5	N	500	4.40	20	30	30	300
IA2203	20	<5	30	N	N	N	150	1.30	20	30	20	300
IA2204	30	10	50	N	<5	N	500	30.00	70	100	130	700
IA2205	N	<5	15	<2	N	N	N	150.00	20	30	150	50
IA2206	N	<5	30	2	N	N	N	240.00	30	50	75	50
IA3186	<20	<5	30	N	<5	N	300	130.00	50	30	30	700
IA3187	<20	5	30	N	7	N	700	8.00	150	30	50	500
IA3188	<20	7	50	N	7	N	500	22.00	150	30	40	300
IA3189	<20	10	30	N	7	N	700	20.00	100	20	50	300
IA3190	N	N	15	<2	N	N	N	97.00	30	15	55	30
IA3191	N	20	30	N	7	N	700	13.00	150	30	55	300
IA3192	<20	7	50	N	5	N	300	20.00	100	30	45	700
IA3193	20	15	30	N	10	N	700	8.00	150	30	50	700
IA3194	N	<5	30	N	<5	N	150	8.90	70	30	70	300
IA3195	<20	5	50	N	5	N	300	21.00	70	50	50	700
IA3196	<20	10	30	N	7	N	500	17.00	100	30	50	1,000
IA3209	30	<5	100	N	<5	N	N	7.80	20	100	110	700
IA3210	30	<5	70	N	N	N	150	15.00	30	150	70	700
IA3211	20	<5	70	N	N	N	150	14.00	30	100	80	700
IA3212	20	<5	50	N	N	N	<100	42.00	20	500	110	500
IA3213	30	<5	30	N	<5	N	N	4.90	20	200	130	>1,000
IA3214	50	<5	50	N	N	N	N	2.20	15	70	50	>1,000
IA3215	<20	<5	30	N	<5	N	150	28.00	50	300	200	300
IA3216	30	<5	50	N	N	N	N	2.20	20	100	45	1,000
IA3217	20	5	70	N	<5	N	150	28.00	70	200	60	1,000
IA3218	20	10	70	N	5	N	150	87.00	70	700	110	500
IA3219	30	5	50	N	<5	N	300	8.90	50	30	50	700
IA3220	20	<5	50	N	<5	N	<100	170.00	30	300	75	300
IA3221	20	7	50	N	<5	N	200	33.00	70	100	70	1,000
IA3222	30	<5	50	N	<5	N	300	6.40	70	50	50	>1,000
IA3223	20	15	70	N	<5	N	<100	15.00	100	150	100	500
IA3224	20	10	50	N	<5	N	300	33.00	70	100	70	500
IA3225	<20	5	50	N	N	N	100	20.00	30	70	60	300

Table 3.--Analyses of stream-sediment samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	As	B	Ba	Be	Bi	Cd	Co	Cr	Cu	F	La	Mn
IA3226	44 46 19	114 35 6	1.50	1.0	.20	.20	N	N	15	700	5.0	N	.4	N	<10	15	300	30	700
IA3227	44 46 20	114 35 6	1.00	1.5	.20	.30	.7	<5	15	700	10.0	N	.3	N	<10	15	300	50	500
IA3228	44 43 35	114 35 37	1.50	3.0	1.00	1.00	N	N	15	1,000	2.0	N	.4	7	20	20	500	30	1,000
IA3229	44 43 35	114 35 40	2.00	1.5	.50	.50	<.5	5	15	700	5.0	N	.6	N	N	20	400	20	700
IA3230	44 44 28	114 37 42	1.50	2.0	.70	.50	N	N	10	1,000	3.0	N	.2	N	N	7	400	30	700
IA3231	44 44 26	114 37 40	1.50	3.0	1.00	.70	N	5	10	1,000	3.0	N	.2	5	10	15	400	70	1,000
IA3232	44 44 39	114 36 56	1.50	3.0	.70	.70	N	N	<10	1,000	7.0	N	.3	<5	<10	15	300	20	1,000
IA3233	44 44 22	114 35 53	1.50	3.0	1.00	.70	N	N	15	1,500	3.0	N	.2	5	<10	10	300	50	700
IA3234	44 44 12	114 35 26	1.50	3.0	1.50	1.00	N	N	20	1,000	3.0	N	.3	7	<10	20	500	30	1,000
IA3235	44 44 14	114 35 26	1.50	3.0	1.00	1.00	N	N	10	1,500	3.0	N	.1	5	10	15	300	150	1,000
IA3236	44 44 4	114 34 43	1.50	3.0	1.00	.70	N	N	10	1,500	2.0	N	.1	5	N	10	300	30	700
IA3237	44 44 10	114 34 8	1.50	3.0	.70	.70	N	N	15	1,500	2.0	N	N	<5	<10	5	500	30	1,000
IA3238	44 44 10	114 33 45	1.50	3.0	.70	.70	N	N	15	1,000	3.0	N	.2	<5	<10	10	400	30	1,000
IA3239	44 44 2	114 33 35	1.50	3.0	.70	.70	N	N	10	1,500	3.0	N	.1	<5	<10	10	400	50	1,000
IA3240	44 43 39	114 32 57	1.50	2.0	.50	.50	N	N	20	1,000	3.0	N	.3	N	<10	15	400	30	700
IA3241	44 40 34	114 25 48	1.50	5.0	1.50	1.00	N	N	10	1,000	3.0	N	.2	7	N	20	500	30	1,500
IA3242	44 40 57	114 27 2	1.00	3.0	.70	.70	<.5	N	20	1,000	5.0	N	.2	5	N	20	500	50	700
IA3243	44 40 53	114 27 1	1.00	5.0	1.00	>1.00	N	N	50	1,500	3.0	N	.2	7	30	20	500	50	700
IA3244	44 41 0	114 27 29	.30	2.0	.10	.30	N	N	10	500	7.0	N	.1	N	N	5	200	100	700
IA3245	44 41 47	114 29 2	.70	3.0	1.00	.70	N	N	15	1,000	7.0	N	.2	5	15	15	300	30	700
IA3246	44 41 48	114 28 59	.20	3.0	.50	.50	N	N	15	1,000	7.0	N	.1	5	<10	7	300	30	700
IA3247	44 41 14	114 32 45	.15	3.0	.20	.30	N	N	15	1,000	10.0	N	.1	N	N	5	600	100	1,500
IA3248	44 41 12	114 32 44	.50	2.0	.30	.50	N	N	10	1,000	7.0	N	.1	N	N	5	500	50	1,000
IA3249	44 43 8	114 26 3	1.50	3.0	1.00	.70	50.0	N	15	1,000	5.0	N	.3	5	10	20	300	30	1,000
IA3250	44 43 7	114 26 6	1.50	5.0	1.50	1.00	<.5	15	70	1,000	7.0	<10	.9	7	<10	20	900	30	2,000
IA3251	44 43 21	114 26 33	2.00	3.0	1.00	.70	1.5	N	15	1,000	7.0	N	.3	N	15	30	300	30	700
IA3252	44 43 50	114 27 37	1.50	5.0	1.00	1.00	N	N	30	1,500	7.0	N	.4	7	10	30	400	30	1,500
IA3253	44 44 26	114 29 14	2.00	1.5	.70	.50	N	N	20	700	5.0	N	.4	N	<10	20	300	30	1,000
IA3254	44 44 29	114 29 23	1.50	3.0	.50	.50	N	N	70	1,500	5.0	N	.1	N	<10	<5	200	30	1,000
IA3255	44 45 54	114 25 44	1.50	3.0	1.50	1.00	N	N	15	1,000	3.0	N	.1	7	10	20	400	30	1,000
IA3256	44 45 58	114 27 6	1.50	3.0	1.00	1.00	<.5	N	20	1,000	7.0	N	.2	7	N	20	300	30	1,000
IA3257	44 45 48	114 27 54	2.00	1.5	.50	.50	.7	N	30	700	5.0	N	.3	N	10	20	300	30	1,000
IA3258	44 45 57	114 29 10	1.00	3.0	.50	.70	N	N	20	1,000	5.0	N	.1	N	N	7	300	70	700
IA3259	44 49 49	114 36 26	.50	.7	.10	.15	N	N	<10	200	5.0	N	.8	N	<10	20	300	20	1,000
IA3260	44 53 19	114 36 15	3.00	7.0	2.00	>1.00	N	N	N	700	1.5	N	.3	10	N	20	600	50	1,500
IA3261	44 53 17	114 36 15	1.50	3.0	.10	1.00	N	N	15	5,000	3.0	N	.2	<5	N	5	3,900	300	1,000
IA3262	44 53 18	114 36 28	2.00	5.0	1.00	1.00	N	N	N	1,000	5.0	N	.2	<5	10	5	500	100	1,000
IA3263	44 37 31	114 28 22	.15	2.0	.05	.30	N	N	10	70	5.0	N	.2	N	N	<5	100	50	500
IA3264	44 37 35	114 28 29	1.50	3.0	.70	.70	N	N	15	2,000	3.0	N	.2	<5	<10	5	400	30	1,000
IA3265	44 38 28	114 27 58	.30	2.0	.30	.20	N	N	10	200	7.0	N	.1	N	N	5	300	30	500
IA3266	44 38 28	114 28 3	.20	2.0	.10	.20	N	N	N	150	10.0	N	.2	N	<10	<5	<100	70	500
IA3267	44 39 21	114 28 16	.50	2.0	.30	.70	N	5	15	2,000	7.0	N	.2	N	N	5	400	150	700
IA3268	44 39 16	114 28 2	.20	2.0	.10	.70	N	N	N	200	15.0	N	.2	N	N	<5	200	150	700
IA3269	44 39 17	114 27 58	.30	2.0	.15	.30	N	N	10	300	15.0	N	.2	N	N	<5	200	70	300
IA3270	44 42 17	114 29 51	.30	2.0	.20	.50	N	N	20	1,000	5.0	N	.2	N	<10	<5	500	50	700
IA3271	44 42 29	114 29 41	1.50	3.0	1.00	.70	1.0	N	30	1,000	3.0	N	.3	N	<10	20	400	30	700
IA3272	44 52 50	114 34 30	2.00	2.0	.50	1.00	N	N	20	5,000	7.0	N	.4	<5	N	10	14,300	200	1,000
IA3273	44 53 12	114 35 10	1.50	5.0	1.00	1.00	N	N	20	700	7.0	N	.6	7	N	30	500	70	2,000
IA3274	44 53 7	114 35 27	1.50	1.5	.30	.30	N	N	20	300	10.0	N	.4	N	<10	20	500	150	500
IA3275	44 48 38	114 41 31	1.50	5.0	1.50	1.00	N	N	30	1,000	15.0	N	.4	5	N	30	400	200	2,000

Table 3.--Analyses of stream-sediment samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Nb	Ni	Pb	Sb	Sc	Sn	Sr	U	V	Y	Zn	Zr
IA3226	N	<5	30	N	<5	N	100	34.00	30	30	45	300
IA3227	<20	<5	30	N	N	N	100	34.00	20	70	45	500
IA3228	<20	20	30	N	<5	N	300	8.90	150	20	55	700
IA3229	N	5	30	N	N	N	200	20.00	50	30	50	150
IA3230	<20	<5	30	N	N	N	200	24.00	50	20	40	1,000
IA3231	<20	5	50	N	<5	N	200	14.00	70	50	50	700
IA3232	<20	<5	30	N	<5	N	150	32.00	50	30	40	700
IA3233	<20	15	30	N	<5	N	500	3.40	100	30	50	1,000
IA3234	<20	15	50	N	<5	N	300	4.30	100	30	55	700
IA3235	20	5	50	N	<5	N	300	12.00	100	30	45	>1,000
IA3236	<20	7	30	N	<5	N	300	8.30	70	30	45	500
IA3237	20	<5	50	N	<5	N	500	2.10	50	30	50	700
IA3238	<20	<5	50	N	<5	N	300	36.00	50	50	45	1,000
IA3239	20	15	30	N	<5	N	500	12.00	70	30	45	1,000
IA3240	<20	7	30	N	<5	N	300	12.00	70	30	40	300
IA3241	20	7	50	N	7	N	300	5.10	150	30	60	700
IA3242	<20	7	50	N	<5	N	300	8.10	100	50	50	500
IA3243	20	20	50	N	5	N	500	5.20	150	30	55	1,000
IA3244	70	<5	70	N	N	N	N	1.90	10	70	75	>1,000
IA3245	<20	10	50	N	<5	N	300	12.00	70	30	40	500
IA3246	30	7	70	N	N	N	150	3.40	50	30	60	500
IA3247	30	5	100	N	N	N	N	.90	15	50	35	500
IA3248	30	<5	50	N	N	N	150	5.60	30	50	40	1,000
IA3249	<20	10	50	N	<5	N	300	11.00	150	30	45	500
IA3250	<20	10	100	N	5	N	300	6.90	150	30	90	700
IA3251	<20	10	50	N	5	N	200	11.00	100	50	40	300
IA3252	<20	15	70	N	5	N	300	7.30	150	30	60	500
IA3253	N	<5	30	N	<5	N	200	21.00	100	20	35	300
IA3254	<20	<5	100	N	N	N	150	.75	15	20	15	700
IA3255	<20	10	30	N	5	N	200	5.20	150	30	50	500
IA3256	<20	10	50	N	<5	N	200	13.00	150	30	55	500
IA3257	N	7	30	N	<5	N	150	15.00	70	20	25	300
IA3258	30	5	100	N	N	N	200	2.50	30	30	45	1,000
IA3259	N	5	50	N	N	N	N	16.00	20	30	65	70
IA3260	<20	<5	20	N	5	N	500	8.50	200	50	80	>1,000
IA3261	50	<5	30	N	5	N	200	2.90	100	70	55	>1,000
IA3262	20	<5	50	N	<5	N	300	28.00	70	70	70	>1,000
IA3263	70	<5	70	N	N	<10	N	.75	<10	100	100	1,000
IA3264	<20	<5	30	N	N	N	300	2.30	30	30	45	700
IA3265	70	<5	70	N	N	<10	N	1.80	10	70	80	1,000
IA3266	50	<5	100	N	N	<10	N	1.00	<10	100	110	1,000
IA3267	20	N	50	N	<5	N	200	4.20	30	50	50	>1,000
IA3268	100	<5	50	N	N	<10	N	1.60	10	100	100	>1,000
IA3269	30	<5	50	N	N	N	N	4.90	10	70	65	700
IA3270	30	<5	50	N	N	N	N	2.00	20	50	40	>1,000
IA3271	<20	7	30	N	<5	N	300	5.70	100	20	50	300
IA3272	20	<5	30	N	N	N	200	16.00	50	100	65	>1,000
IA3273	20	<5	50	N	5	N	200	3.90	100	50	360	700
IA3274	<20	N	30	N	<5	N	<100	215.00	30	150	50	500
IA3275	<20	15	30	N	<5	N	N	50.00	70	200	110	700

Table 3.--Analyses of stream-sediment samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	As	B	Ba	Be	Bi	Cd	Co	Cr	Cu	F	La	Mn
IA3276	44 48 40	114 42 8	2.00	5.0	1.50	1.00	N	N	15	700	7.0	N	.6	<5	10	20	500	70	1,500
IA3277	44 47 36	114 41 46	1.50	5.0	.70	1.00	3.0	N	20	700	3.0	N	.5	N	<10	20	300	70	2,000
IA3284	44 49 32	114 35 19	1.50	3.0	1.00	.70	<.5	N	10	700	7.0	N	.3	<5	15	20	400	70	1,000
IA3285	44 49 26	114 33 52	1.50	1.5	.30	.15	N	N	20	300	3.0	N	.5	N	N	20	700	30	700
IA3286	44 49 24	114 33 50	1.50	3.0	1.00	.70	.5	N	10	1,000	5.0	N	.3	N	N	15	400	50	1,000
IA3287	44 46 38	114 29 55	1.00	3.0	.30	.70	N	N	15	700	15.0	N	.3	N	N	10	300	150	1,500
IA3288	44 46 33	114 29 51	1.50	3.0	.50	.50	N	N	30	1,500	10.0	N	.1	<5	<10	7	400	50	1,000
IA3289	44 40 10	114 27 26	1.00	.7	.10	.05	N	N	N	70	7.0	N	.1	N	N	15	500	50	200
IA3290	44 40 9	114 27 32	.20	2.0	.10	.30	N	N	N	200	10.0	N	.1	N	N	<5	<100	30	300
IA3291	44 40 11	114 27 39	1.00	2.0	.20	.30	N	10	10	700	5.0	N	1.1	N	N	15	400	300	1,000
IA3292	44 51 1	114 31 37	1.50	2.0	.30	.30	<.5	N	20	500	10.0	N	.5	N	<10	20	1,000	200	700
IA3293	44 50 30	114 30 55	1.50	1.0	.20	.20	N	N	30	300	5.0	N	.5	N	N	10	700	30	700
IA3294	44 50 12	114 30 48	1.00	2.0	.50	.50	N	N	50	1,000	2.0	N	.2	N	N	10	200	20	1,500
IA3295	44 50 10	114 30 46	1.50	3.0	.50	.70	N	N	50	1,000	3.0	N	.4	<5	N	15	300	20	2,000
IA3296	44 36 25	114 24 43	1.00	3.0	.50	.70	N	N	15	700	7.0	N	.5	N	<10	20	200	100	1,500
IA3297	44 35 33	114 27 14	.70	2.0	.20	.50	N	N	10	500	10.0	N	.3	N	N	5	200	200	300
IA3319	44 47 33	114 28 14	1.00	2.0	.30	.50	N	N	15	500	7.0	N	.3	N	<10	15	400	200	700
IA3320	44 47 31	114 28 12	.70	2.0	.30	.50	N	N	15	700	5.0	N	.1	N	10	<5	300	50	500

Table 3.--Analyses of stream-sediment samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Nb	Ni	Pb	Sb	Sc	Sn	Sr	U	V	Y	Zn	Zr
IA3276	<20	15	50	N	<5	N	300	65.00	150	30	330	500
IA3277	20	<5	30	N	<5	N	300	14.00	70	30	75	>1,000
IA3284	<20	5	50	N	<5	N	300	35.00	100	50	60	300
IA3285	N	N	20	N	N	N	N	2.60	30	15	45	70
IA3286	<20	<5	30	N	<5	N	300	12.00	70	30	50	700
IA3287	20	N	30	N	N	N	N	8.70	20	150	60	>1,000
IA3288	<20	<5	50	N	<5	N	150	5.60	20	50	35	500
IA3289	N	N	15	N	N	N	N	30.00	10	50	15	15
IA3290	50	<5	50	N	N	<10	N	.85	<10	50	70	700
IA3291	30	N	50	N	N	N	100	6.60	20	150	430	>1,000
IA3292	N	N	30	N	<5	N	N	7.70	30	100	50	150
IA3293	N	N	15	N	N	N	N	2.10	50	20	60	70
IA3294	N	<5	20	N	<5	N	<100	.30	20	20	40	500
IA3295	<20	5	30	N	<5	N	150	.50	50	30	55	500
IA3296	30	<5	50	N	<5	N	N	4.10	50	70	100	1,000
IA3297	30	<5	30	N	<5	N	N	2.40	15	50	60	1,000
IA3319	20	<5	30	N	<5	N	N	7.60	20	70	35	500
IA3320	20	<5	30	N	N	N	200	2.10	20	20	40	700

Table 4.-- Analyses of heavy-mineral-concentrate samples, Camas Creek Addition, River of No Return Wilderness, Idaho

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown]

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	Au	B	Ba	Be	Co	Cr	Cu	La	Mn	Mo	Nb
IH2135	44 47 57	114 39 22	3.00	1.50	.30	>2.00	N	N	20	300	<2	N	100	<10	70	500	N	50
IH2138	44 48 35	114 36 54	3.00	.70	.15	>2.00	N	N	N	1,000	5	N	70	N	700	300	N	150
IH2139	44 48 32	114 36 55	7.00	.50	.15	>2.00	N	N	N	<50	N	<10	200	N	700	300	N	100
IH2142	44 47 48	114 35 45	1.50	.70	.10	>2.00	N	N	<20	>10,000	N	N	300	N	100	100	N	70
IH2143	44 41 52	114 23 30	5.00	1.50	.30	>2.00	N	N	<20	300	<2	10	200	N	300	300	N	100
IH2144	44 41 52	114 23 27	2.00	1.00	.20	>2.00	N	N	300	150	N	<10	100	N	200	300	N	50
IH2145	44 41 29	114 24 2	3.00	1.00	.30	>2.00	N	N	<20	150	N	N	200	N	100	300	N	50
IH2146	44 41 30	114 23 58	5.00	1.50	.20	>2.00	N	N	N	150	N	N	200	N	500	300	N	70
IH2147	44 41 7	114 24 8	15.00	.70	.20	>2.00	N	N	N	150	<2	N	150	N	1,000	300	N	50
IH2148	44 40 22	114 24 29	3.00	.50	.07	2.00	N	N	N	100	<2	N	20	<10	150	150	N	N
IH2149	44 40 25	114 24 30	7.00	2.00	.50	>2.00	N	N	300	200	N	<10	300	N	200	300	N	70
IH2150	44 47 45	114 35 48	10.00	.50	.10	>2.00	N	N	N	300	N	N	150	N	150	300	N	100
IH2155	44 48 45	114 32 53	5.00	1.50	.10	>2.00	N	N	N	100	<2	N	70	N	200	200	N	70
IH2157	44 48 52	114 29 51	2.00	1.50	.10	>2.00	N	N	N	300	3	N	70	N	700	200	N	100
IH2160	44 45 58	114 37 44	3.00	1.00	.15	>2.00	N	N	N	50	N	N	50	<10	700	200	N	70
IH2164	44 43 25	114 32 20	.70	2.00	.07	>2.00	N	N	<20	100	5	N	N	N	500	500	N	100
IH2165	44 43 17	114 31 46	2.00	.50	.10	2.00	N	N	N	100	5	N	<20	10	200	200	N	<50
IH2168	44 43 5	114 30 50	2.00	.50	.07	2.00	N	N	N	100	2	N	<20	<10	200	150	N	<50
IH2170	44 43 14	114 29 57	1.50	.20	.05	1.50	N	N	N	<50	3	N	N	N	100	100	N	<50
IH2171	44 43 13	114 29 54	1.00	.20	<.05	>2.00	N	N	N	N	7	N	<20	N	700	70	N	<50
IH2173	44 44 1	114 29 36	1.00	.50	.07	>2.00	N	N	<20	100	2	N	30	N	700	150	N	150
IH2175	44 38 7	114 23 48	.50	.50	<.05	2.00	N	N	N	N	N	N	N	N	300	100	N	50
IH2176	44 38 7	114 23 42	.70	.30	.05	1.00	N	N	N	<50	N	N	N	10	300	100	N	<50
IH2177	44 39 18	114 21 57	2.00	.70	.10	>2.00	N	N	N	50	<2	N	<20	N	700	150	N	50
IH2178	44 39 26	114 21 56	15.00	1.50	.10	2.00	N	N	N	100	2	N	50	<10	700	200	N	N
IH2180	44 40 32	114 21 56	15.00	.70	.10	1.00	N	N	N	200	<2	N	<20	<10	1,000	200	N	N
IH2181	44 40 31	114 22 0	15.00	.70	.15	.70	N	N	N	100	<2	N	<20	20	1,000	300	N	N
IH2182	44 35 55	114 26 32	.20	.70	<.05	>2.00	N	N	N	N	N	N	N	N	150	70	N	150
IH2183	44 41 47	114 21 28	1.00	1.00	.20	2.00	100	100	N	150	<2	N	30	10	70	200	N	N
IH2185	44 43 42	114 22 6	2.00	.30	.07	>2.00	N	N	N	150	<2	<10	50	N	70	100	N	100
IH2187	44 43 1	114 21 14	30.00	.50	.15	>2.00	N	N	<20	150	<2	N	70	N	200	200	N	100
IH2189	44 46 27	114 32 22	15.00	.70	.15	>2.00	N	N	N	70	7	<10	30	N	1,000	500	N	70
IH2191	44 47 44	114 31 38	2.00	.50	.07	>2.00	N	N	N	<50	10	N	70	<10	500	150	N	50
IH2196	44 39 40	114 31 6	.70	.15	.05	>2.00	N	N	N	<50	N	N	50	<10	300	100	N	N
IH2197	44 39 39	114 31 5	1.00	.10	.05	1.00	N	N	N	300	N	N	20	<10	200	100	N	N
IH2199	44 40 52	114 30 28	.50	.50	<.05	1.50	N	N	N	N	<2	N	<20	<10	50	50	N	N
IH2201	44 42 17	114 29 47	1.00	.30	.07	>2.00	N	N	<20	700	10	N	<20	N	1,000	100	N	50
IH2202	44 44 45	114 31 29	.70	.50	.15	1.00	N	N	N	150	5	N	50	<10	70	150	N	N
IH2203	44 44 46	114 31 28	1.00	.70	.10	1.00	N	N	N	150	10	N	30	<10	1,000	500	N	N
IH3187	44 46 23	114 39 29	20.00	.30	.07	>2.00	N	N	N	700	<2	N	N	N	700	300	N	150
IH3189	44 46 53	114 38 57	3.00	.50	.07	>2.00	N	N	N	700	<2	N	N	N	700	200	N	200
IH3191	44 47 3	114 37 45	5.00	.15	.07	>2.00	N	N	N	300	2	N	<20	N	300	200	N	50
IH3192	44 46 58	114 37 2	2.00	.15	<.05	2.00	N	N	N	N	N	N	<20	15	70	100	N	N
IH3193	44 47 0	114 37 4	5.00	.15	.05	>2.00	70	70	N	200	<2	N	20	N	150	150	N	N
IH3194	44 47 8	114 36 56	3.00	.15	.05	2.00	N	N	N	100	N	N	N	<10	70	150	N	N
IH3195	44 47 16	114 36 12	3.00	.15	<.05	2.00	N	N	N	50	5	N	N	10	70	150	N	<50
IH3196	44 47 40	114 35 35	1.50	.15	.05	2.00	N	N	N	70	<2	N	<20	15	70	70	N	N
IH3209	44 40 43	114 32 22	.50	.30	.05	.70	N	N	N	150	<2	N	<20	N	70	70	N	N
IH3210	44 40 45	114 32 24	.50	.20	<.05	.70	N	N	N	<50	<2	N	<20	<10	70	70	N	N
IH3211	44 41 23	114 31 50	.30	.15	<.05	.70	N	N	N	N	N	N	N	<10	70	50	N	N

Table 4.-- Analyses of heavy-mineral-concentrate samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Ni	Pb	Sc	Sn	Sr	Th	V	W	Y	Zn
IH2135	20	20	30	N	N	N	150	N	500	N
IH2138	N	50	70	150	N	N	150	N	700	N
IH2139	N	100	70	N	N	N	200	N	700	N
IH2142	N	70	70	N	1,500	N	300	N	700	N
IH2143	30	70	100	N	N	N	300	N	300	N
IH2144	N	70	70	N	N	N	200	N	700	N
IH2145	N	70	100	50	N	N	300	N	700	N
IH2146	N	70	70	<20	N	N	300	N	300	N
IH2147	N	50	100	N	N	N	200	N	700	N
IH2148	N	20	50	N	N	N	70	N	1,000	N
IH2149	30	100	70	50	N	N	300	N	500	N
IH2150	30	30	70	N	<200	N	150	N	700	N
IH2155	N	50	100	<20	N	N	150	N	1,000	N
IH2157	N	70	70	<20	N	N	150	N	2,000	N
IH2160	N	30	100	20	N	N	150	N	1,000	N
IH2164	N	150	50	N	N	N	70	N	3,000	N
IH2165	N	50	70	1,500	N	200	50	N	1,500	N
IH2168	N	30	70	N	N	N	50	N	1,500	N
IH2170	N	20	70	150	N	N	30	N	2,000	N
IH2171	N	100	50	N	N	200	50	N	5,000	N
IH2173	<10	100	50	N	N	N	100	N	5,000	N
IH2175	N	20	50	N	N	200	20	N	3,000	N
IH2176	N	20	50	N	N	<200	30	N	3,000	N
IH2177	N	20	50	300	N	<200	70	N	3,000	N
IH2178	N	150	50	300	<200	N	100	N	1,500	N
IH2180	N	<20	50	N	300	N	50	N	700	N
IH2181	10	<20	30	100	200	N	50	N	700	N
IH2182	N	20	50	N	N	200	20	N	3,000	N
IH2183	N	<20	70	70	N	N	100	N	1,000	N
IH2185	N	70	70	N	N	N	100	N	1,000	N
IH2187	N	70	70	N	N	N	150	N	700	N
IH2189	N	50	50	N	N	N	100	N	1,000	N
IH2191	N	50	50	>2,000	N	<200	50	N	2,000	N
IH2196	N	20	70	N	N	N	200	N	2,000	N
IH2197	N	<20	70	N	N	300	30	N	2,000	N
IH2199	N	N	15	N	N	N	30	N	700	N
IH2201	N	200	50	1,500	N	200	200	N	5,000	N
IH2202	N	20	50	N	N	N	30	N	1,500	N
IH2203	N	100	30	N	N	<200	50	N	2,000	N
IH3187	N	150	70	100	N	N	100	N	700	N
IH3189	N	20	50	70	N	N	100	N	700	N
IH3191	N	20	70	100	N	N	100	N	700	N
IH3192	N	<20	70	N	N	N	50	N	1,500	N
IH3193	N	<20	70	N	N	N	70	N	1,000	N
IH3194	N	<20	70	N	N	N	50	N	1,000	N
IH3195	N	20	70	N	N	N	50	N	1,500	N
IH3196	N	20	100	N	N	N	50	N	1,500	N
IH3209	N	20	30	N	N	N	30	N	1,500	N
IH3210	N	30	50	20	N	N	30	N	3,000	N
IH3211	N	20	70	100	N	N	50	N	3,000	N

Table 4.-- Analyses of heavy-mineral-concentrate samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	Au	B	Ba	Be	Co	Cr	Cu	La	Mn	Mo	Nb
IH3214	44 41 38	114 31 45	.50	.20	<.05	1.00	N	N	N	<50	<2	N	<20	N	200	30	N	N
IH3216	44 42 0	114 30 46	.50	.20	<.05	1.00	N	N	N	N	N	N	N	N	200	30	N	N
IH3217	44 51 33	114 32 29	20.00	.15	.15	.50	N	N	N	N	N	N	N	<10	700	300	1,500	N
IH3218	44 52 13	114 33 38	30.00	.15	.07	.30	N	N	N	70	<2	N	N	<10	150	150	30	<50
IH3219	44 52 13	114 33 36	20.00	<.10	<.05	.30	N	N	N	>10,000	7	N	<20	10	70	20	N	N
IH3220	44 52 38	114 34 2	15.00	.15	<.05	.15	N	N	N	3,000	2	N	<20	200	70	50	N	N
IH3221	44 53 1	114 34 51	5.00	.20	.05	.15	N	N	N	<50	N	N	N	<10	100	50	N	N
IH3222	44 53 0	114 34 53	20.00	.10	<.05	1.00	N	N	N	>10,000	10	N	<20	N	150	30	N	N
IH3224	44 49 1	114 37 51	2.00	.20	<.05	.70	N	N	N	<50	N	N	N	N	70	50	N	N
IH3226	44 46 19	114 35 6	3.00	.20	.05	>2.00	N	N	N	300	10	N	N	N	150	100	N	N
IH3227	44 46 20	114 35 6	3.00	.30	<.05	2.00	N	N	N	200	20	N	<20	<10	100	70	N	N
IH3228	44 43 35	114 35 37	10.00	.15	.07	.15	N	N	N	N	<2	N	N	<10	300	200	N	N
IH3229	44 43 35	114 35 40	15.00	.30	.10	.20	N	N	N	100	<2	N	N	10	200	200	N	N
IH3230	44 44 28	114 37 42	2.00	.20	.05	2.00	N	N	N	50	<2	N	N	15	150	150	N	N
IH3231	44 44 26	114 37 40	1.00	.30	.05	.15	N	N	N	<50	<2	N	<20	20	70	50	N	N
IH3233	44 44 22	114 35 53	1.50	.20	.05	.15	N	N	N	N	N	N	N	15	70	50	N	N
IH3234	44 44 12	114 35 26	3.00	.30	.07	.15	N	N	N	<50	<2	N	<20	<10	100	150	N	N
IH3235	44 44 14	114 35 26	3.00	.20	.05	2.00	N	N	N	<50	<2	N	<20	<10	100	100	N	N
IH3239	44 44 2	114 33 35	3.00	.20	.05	2.00	N	N	N	50	<2	N	N	<10	70	70	N	N
IH3240	44 43 39	114 32 57	7.00	.20	.07	.15	N	N	N	<50	<2	N	N	<10	200	150	N	N
IH3241	44 40 34	114 25 48	2.00	.15	.05	1.50	N	N	N	<50	3	N	30	N	300	150	N	N
IH3242	44 40 57	114 27 2	2.00	.20	.05	.15	N	N	N	50	5	N	N	N	100	150	N	N
IH3243	44 40 53	114 27 1	3.00	<.10	.07	2.00	N	N	<20	50	7	N	70	<10	100	100	N	N
IH3244	44 41 0	114 27 29	.50	1.50	<.05	2.00	N	N	N	<50	10	N	N	<10	1,000	200	N	N
IH3245	44 41 47	114 29 2	1.50	.15	.05	1.00	N	N	N	<50	<2	N	N	<10	70	50	N	N
IH3246	44 41 46	114 28 59	3.00	.15	.05	2.00	N	N	<20	N	10	N	<20	N	1,000	50	N	N
IH3247	44 41 14	114 32 45	.70	.20	<.05	1.00	N	N	N	N	5	N	N	N	500	50	N	N
IH3249	44 43 8	114 26 3	5.00	.10	.07	2.00	N	N	N	N	2	N	N	N	150	200	N	N
IH3250	44 43 7	114 26 6	3.00	.15	.20	>2.00	N	N	70	>10,000	N	N	200	N	100	200	N	50
IH3252	44 43 50	114 27 37	1.50	.15	.15	>2.00	N	N	50	7,000	N	N	100	N	70	200	N	N
IH3253	44 44 26	114 29 14	3.00	.15	.15	>2.00	N	N	50	3,000	N	N	150	15	150	150	N	<50
IH3254	44 44 29	114 29 23	1.50	.15	<.05	.20	N	N	N	200	15	N	20	N	70	100	N	N
IH3255	44 45 54	114 25 44	3.00	N	.07	>2.00	N	N	N	50	200	N	70	N	<50	20	15	N
IH3257	44 45 48	114 27 54	1.50	.20	<.05	1.50	N	N	N	<50	<2	N	<20	N	70	50	N	N
IH3258	44 45 57	114 29 10	1.00	.15	<.05	1.00	N	N	N	<50	5	N	N	<10	300	50	N	N
IH3260	44 53 19	114 36 15	1.50	.30	.05	>2.00	N	N	N	<50	N	N	20	<10	200	100	N	70
IH3261	44 53 17	114 36 15	30.00	.50	.07	>2.00	N	N	N	>10,000	5	N	20	N	1,000	150	N	70
IH3262	44 53 18	114 36 28	2.00	.50	<.05	2.00	N	N	N	200	5	N	<20	20	500	150	N	70
IH3263	44 37 31	114 28 22	.30	.70	<.05	>2.00	N	N	N	N	200	N	<20	N	2,000	150	N	300
IH3264	44 37 35	114 28 29	2.00	.50	.10	>2.00	N	N	N	700	3	N	20	N	500	300	N	<50
IH3267	44 39 21	114 28 16	2.00	1.50	.05	>2.00	N	N	N	<50	10	N	<20	<10	500	150	N	50
IH3268	44 39 16	114 28 2	.15	.70	<.05	>2.00	N	N	N	N	7	N	N	N	1,500	100	N	150
IH3270	44 42 17	114 29 51	1.00	.70	<.05	>2.00	N	N	N	150	3	N	20	N	700	150	N	200
IH3274	44 53 7	114 35 27	15.00	.70	.07	1.50	N	N	N	70	3	N	<20	10	300	300	N	N
IH3275	44 48 38	114 41 31	30.00	1.00	.30	1.00	N	N	N	300	3	N	N	20	1,500	500	N	100
IH3276	44 48 40	114 42 8	50.00	.50	.30	1.50	N	N	N	70	2	N	N	<10	>2,000	700	N	150
IH3277	44 47 36	114 41 46	1.50	.70	.05	2.00	N	N	N	50	200	N	N	N	70	150	N	N
IH3284	44 49 32	114 35 19	10.00	.70	.30	>2.00	N	N	N	200	5	<10	150	N	700	300	N	300
IH3286	44 49 24	114 33 50	10.00	.70	.15	>2.00	N	N	N	70	2	<10	100	N	300	200	N	100
IH3290	44 40 9	114 27 32	.20	.50	<.05	>2.00	N	N	N	N	7	N	N	N	1,500	70	N	150

Table 4.-- Analyses of heavy-mineral-concentrate samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Ni	Pb	Sc	Sn	Sr	Th	V	W	Y	Zn
IH3214	N	20	50	150	N	N	50	N	500	N
IH3216	N	20	50	N	N	N	50	N	500	N
IH3217	N	300	20	N	300	N	70	N	1,000	N
IH3218	N	100	20	N	N	N	20	N	2,000	N
IH3219	N	100	15	N	<200	N	20	N	1,000	N
IH3220	N	5,000	20	50	N	<200	30	500	2,000	N
IH3221	N	150	50	N	N	<200	30	N	3,000	N
IH3222	N	20	30	N	<200	N	30	N	1,500	N
IH3224	N	30	20	N	N	N	50	N	1,000	N
IH3226	N	20	70	<20	N	N	70	N	1,500	N
IH3227	N	30	50	20	N	N	30	N	1,500	N
IH3228	N	20	30	N	<200	N	20	N	1,000	N
IH3229	N	20	50	N	<200	N	30	700	1,000	N
IH3230	N	20	70	100	N	N	50	N	1,500	N
IH3231	N	<20	100	N	N	N	30	N	2,000	N
IH3233	N	20	70	200	N	N	30	N	1,500	N
IH3234	N	30	70	N	N	N	30	150	1,500	N
IH3235	N	20	70	N	N	N	50	N	2,000	N
IH3239	N	20	100	N	N	N	30	N	2,000	N
IH3240	N	20	50	N	N	N	30	N	1,000	N
IH3241	N	N	50	N	N	N	70	N	700	N
IH3242	N	20	50	N	N	N	20	N	700	N
IH3243	N	N	70	N	N	N	100	N	700	N
IH3244	N	20	30	N	N	N	30	N	2,000	N
IH3245	N	N	70	N	N	N	30	N	1,000	N
IH3246	N	<20	50	N	N	N	70	N	700	N
IH3247	N	150	30	20	N	N	30	N	5,000	7,000
IH3249	<10	<20	50	N	N	N	50	N	1,500	N
IH3250	<10	700	50	150	2,000	N	300	N	500	N
IH3252	N	100	50	20	N	N	300	N	1,000	N
IH3253	N	30	50	20	N	N	300	N	1,000	N
IH3254	N	N	30	N	N	N	20	N	2,000	N
IH3255	N	N	50	N	N	N	300	N	1,000	N
IH3257	N	N	100	N	N	N	30	N	2,000	N
IH3258	N	70	50	N	N	N	50	N	5,000	N
IH3260	N	N	<10	N	N	500	70	N	700	N
IH3261	N	30	30	300	N	N	50	N	1,500	N
IH3262	N	200	150	200	N	>5,000	50	N	>5,000	N
IH3263	N	70	20	1,500	N	300	<20	N	>5,000	N
IH3264	N	70	70	N	N	N	30	N	2,000	N
IH3267	N	30	70	N	N	N	30	N	2,000	N
IH3268	N	50	30	50	N	500	<20	N	>5,000	N
IH3270	N	200	30	N	N	N	70	N	2,000	N
IH3274	30	50	30	20	N	700	30	N	2,000	N
IH3275	N	50	N	N	2,000	N	50	N	700	N
IH3276	N	30	20	N	5,000	N	30	N	1,000	N
IH3277	N	<20	30	N	N	N	30	N	2,000	N
IH3284	N	150	50	100	N	N	150	N	700	N
IH3286	N	100	50	30	N	N	150	N	700	N
IH3290	N	50	30	200	N	200	<20	N	5,000	N

Table 4.-- Analyses of heavy-mineral-concentrate samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	Au	B	Ba	Be	Co	Cr	Cu	La	Mn	Mo	Nb
IH3291	44 40 11	114 27 39	.70	.50	<.05	2.00	N	N	N	50	20	N	<20	10	70	100	N	N
IH3292	44 51 1	114 31 37	50.00	.70	.15	>2.00	N	N	N	300	<2	N	100	<10	700	150	N	300
IH3296	44 36 25	114 24 43	.30	.50	<.05	.70	N	N	N	50	<2	N	N	N	300	70	N	N
IH3320	44 47 31	114 28 12	1.00	1.00	.10	>2.00	N	N	N	200	5	N	70	N	1,000	200	N	150

Table 4.-- Analyses of heavy-mineral-concentrate samples, Camas Creek Addition, River of No Return Wilderness, Idaho--Continued

Sample	Ni	Pb	Sc	Sn	Sr	Th	V	W	Y	Zn
IH3291	N	20	50	N	N	N	30	N	2,000	N
IH3292	N	100	30	N	<200	N	150	N	300	N
IH3296	N	20	50	N	N	200	30	N	3,000	N
IH3320	N	70	70	N	N	N	100	N	2,000	N

TABLE 5. Gold in raw panned-concentrate samples, Camas Creek Addition, Frank Church-River of No Return Wilderness, Idaho

[N, not detected at the limit of determination shown; <, detected but below the limit of determination shown]

Sample	Latitude	Longitude	Weight of concentrate (g)	Au in concentrate (ppm)	Au per pan (µg)
IG2135	44 47 57	114 39 22	10.01	N(.05)	N(.5)
IG2137	44 48 19	114 38 11	7.05	N(.07)	N(.5)
IG2138	44 48 35	114 36 54	4.65	N(.11)	N(.5)
IG2139	44 48 32	114 36 55	6.93	N(.07)	N(.5)
IG2140	44 48 31	114 36 48	5.89	N(.08)	N(.5)
IG2142	44 47 48	114 35 45	6.15	N(.08)	N(.5)
IG2143	44 41 52	114 23 30	6.29	N(.08)	N(.5)
IG2144	44 41 52	114 23 27	3.91	N(.13)	N(.5)
IG2145	44 41 29	114 24 2	5.58	N(.09)	N(.5)
IG2146	44 41 30	114 23 58	6.32	N(.08)	N(.5)
IG2147	44 41 7	114 24 8	4.88	N(.10)	N(.5)
IG2148	44 40 22	114 24 29	4.36	N(.11)	N(.5)
IG2149	44 40 25	114 24 30	5.77	N(.09)	N(.5)
IG2150	44 47 45	114 35 48	5.64	N(.09)	N(.5)
IG2155	44 48 45	114 32 53	6.89	N(.07)	N(.5)
IG2157	44 48 52	114 29 51	6.36	N(.08)	N(.5)
IG2160	44 45 58	114 37 44	6.53	N(.08)	N(.5)
IG2164	44 43 25	114 32 20	5.49	N(.09)	N(.5)
IG2165	44 43 17	114 31 46	5.83	N(.09)	N(.5)
IG2168	44 43 5	114 30 50	4.88	N(.11)	N(.5)
IG2170	44 43 14	114 29 57	5.61	N(.09)	N(.5)
IG2171	44 43 13	114 29 54	5.48	N(.09)	N(.5)
IG2173	44 44 1	114 29 36	5.30	N(.09)	N(.5)
IG2174	44 37 58	114 25 23	5.92	N(.08)	N(.5)
IG2175	44 38 7	114 23 48	5.91	N(.08)	N(.5)
IG2176	44 38 7	114 23 42	6.69	N(.07)	N(.5)
IG2177	44 39 18	114 21 57	5.38	N(.09)	N(.5)
IG2178	44 39 26	114 21 56	4.27	N(.12)	N(.5)
IG2180	44 40 32	114 21 56	9.21	N(.05)	N(.5)
IG2181	44 40 31	114 22 0	8.39	N(.06)	N(.5)
IG2182	44 35 55	114 26 32	7.59	N(.07)	N(.5)
IG2183	44 41 47	114 21 28	6.21	3.0	19
IG2184	44 43 45	114 22 14	6.18	N(.08)	N(.5)
IG2185	44 43 42	114 22 6	5.83	N(.09)	N(.5)
IG2186	44 43 30	114 21 57	9.86	N(.05)	N(.5)
IG2187	44 43 1	114 21 14	6.92	<.07	<.5
IG2188	44 42 58	114 21 14	4.82	N(.10)	N(.5)
IG2189	44 46 27	114 32 22	8.36	N(.06)	N(.5)
IG2191	44 47 44	114 31 38	6.86	N(.07)	N(.5)
IG2192	44 50 29	114 35 3	5.51	N(.09)	N(.5)

TABLE 5. Gold in raw panned-concentrate samples, Camas Creek Addition, Frank Church-River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Weight of concentrate (g)	Au in concentrate (ppm)	Au per pan (µg)
IG2193	44 39 8	114 31 10	7.41	N(.07)	N(.5)
IG2194	44 39 7	114 31 9	8.24	N(.06)	N(.5)
IG2196	44 39 40	114 31 6	7.20	N(.07)	N(.5)
IG2197	44 39 39	114 31 5	6.55	N(.08)	N(.5)
IG2199	44 40 52	114 30 28	7.48	N(.07)	N(.5)
IG2201	44 42 17	114 29 47	8.66	2.0	17
IG2202	44 44 45	114 31 29	7.37	N(.07)	N(.5)
IG2203	44 44 46	114 31 28	8.64	N(.06)	N(.5)
IG2204	44 49 1	114 40 19	6.10	N(.08)	N(.5)
IG3186	44 46 23	114 39 27	7.40	N(.07)	N(.5)
IG3187	44 46 23	114 39 29	8.56	N(.06)	N(.5)
IG3188	44 46 56	114 38 59	6.15	1.1	6.8
IG3189	44 46 53	114 38 57	6.23	3.9	24
IG3191	44 47 3	114 37 45	12.70	N(.04)	N(.5)
IG3192	44 46 58	114 37 2	5.72	N(.09)	N(.5)
IG3193	44 47 0	114 37 4	17.09	.15	2.6
IG3195	44 47 16	114 36 12	11.29	N(.04)	N(.5)
IG3196	44 47 40	114 35 35	7.23	3.8	27
IG3209	44 40 43	114 32 22	8.96	N(.06)	N(.5)
IG3210	44 40 45	114 32 24	15.52	N(.03)	N(.5)
IG3211	44 41 23	114 31 50	9.40	N(.05)	N(.5)
IG3214	44 41 38	114 31 45	14.66	N(.03)	N(.5)
IG3216	44 42 0	114 30 46	10.58	N(.05)	N(.5)
IG3217	44 51 33	114 32 29	14.60	N(.03)	N(.5)
IG3219	44 52 13	114 33 36	11.94	.10	1.2
IG3220	44 52 38	114 34 2	14.55	N(.03)	N(.5)
IG3221	44 53 1	114 34 51	12.28	N(.04)	N(.5)
IG3222	44 53 0	114 34 53	10.86	.10	1.1
IG3223	44 48 58	114 37 52	8.91	N(.06)	N(.5)
IG3224	44 49 1	114 37 51	10.44	N(.05)	N(.5)
IG3226	44 46 19	114 35 6	14.64	N(.03)	N(.5)
IG3227	44 46 20	114 35 6	10.11	N(.05)	N(.5)
IG3228	44 43 35	114 35 37	7.46	N(.07)	N(.5)
IG3229	44 43 35	114 35 40	9.65	N(.05)	N(.5)
IG3230	44 44 28	114 37 42	11.80	N(.04)	N(.5)
IG3231	44 44 26	114 37 40	8.47	N(.06)	N(.5)
IG3233	44 44 22	114 35 53	12.70	N(.04)	N(.5)
IG3234	44 44 12	114 35 26	6.45	N(.08)	N(.5)

TABLE 5. Gold in raw panned-concentrate samples, Camas Creek Addition, Frank Church-River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Weight of concentrate (g)	Au in concentrate (ppm)	Au per pan (μg)
IG3235	44 44 14	114 35 26	15.11	.50	7.6
IG3240	44 43 39	114 32 57	11.64	N(.04)	N(.5)
IG3241	44 40 34	114 25 48	5.84	N(.09)	N(.5)
IG3242	44 40 57	114 27 2	8.56	N(.06)	N(.5)
IG3243	44 40 53	114 27 1	9.89	N(.05)	N(.5)
IG3244	44 41 0	114 27 29	5.75	<.09	<.5
IG3245	44 41 47	114 29 2	9.05	N(.06)	N(.5)
IG3246	44 41 48	114 28 59	14.36	.20	2.9
IG3247	44 41 14	114 32 45	8.63	<.06	<.5
IG3249	44 43 8	114 26 3	7.71	<.06	<.5
IG3251	44 43 21	114 26 33	11.43	N(.04)	N(.5)
IG3252	44 43 50	114 27 37	10.66	.05	.53
IG3253	44 44 26	114 29 14	10.45	N(.05)	N(.5)
IG3254	44 44 29	114 29 23	14.33	N(.03)	N(.5)
IG3255	44 45 54	114 25 44	11.71	N(.04)	N(.5)
IG3257	44 45 48	114 27 54	14.03	.20	2.8
IG3258	44 45 57	114 29 10	7.83	.15	1.2
IG3260	44 53 19	114 36 15	13.46	N(.04)	N(.5)
IG3261	44 53 17	114 36 15	7.45	N(.07)	N(.5)
IG3262	44 53 18	114 36 28	16.79	N(.03)	N(.5)
IG3263	44 37 31	114 28 22	4.74	N(.11)	N(.5)
IG3264	44 37 35	114 28 29	8.19	N(.06)	N(.5)
IG3265	44 38 28	114 27 58	8.82	N(.06)	N(.5)
IG3266	44 38 28	114 28 3	6.55	N(.08)	N(.5)
IG3267	44 39 21	114 28 16	6.77	N(.07)	N(.5)
IG3268	44 39 16	114 28 2	8.02	N(.06)	N(.5)
IG3270	44 42 17	114 29 51	8.11	N(.06)	N(.5)
IG3274	44 53 7	114 35 27	18.37	N(.03)	N(.5)
IG3275	44 48 38	114 41 31	16.44	N(.03)	N(.5)
IG3276	44 48 40	114 42 8	14.87	N(.03)	N(.5)
IG3277	44 47 36	114 41 46	18.39	N(.03)	N(.5)
IG3284	44 49 32	114 35 19	12.46	N(.04)	N(.5)
IG3286	44 49 24	114 33 50	12.58	N(.04)	N(.5)
IG3288	44 46 33	114 29 51	16.63	N(.03)	N(.5)
IG3290	44 40 9	114 27 32	7.82	.40	3.1
IG3291	44 40 11	114 27 39	8.62	N(.06)	N(.5)
IG3292	44 51 1	114 31 37	9.97	N(.05)	N(.5)
IG3296	44 36 25	114 24 43	12.95	N(.04)	N(.5)
IG3297	44 35 33	114 27 14	12.25	N(.04)	N(.5)
IG3320	44 47 31	114 28 12	7.69	N(.07)	N(.5)