UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Analytical results and sample locality map for stream-sediment and panned-concentrate samples from the McEleny Addition and a part of the West Panther Creek Addition to the Frank Church-River of No Return Wilderness, Lemhi County, Idaho

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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 West Panther Creek and McEleny Additions to the Frank Church-River of No Return Wilderness in the Salmon National Forest, Lemhi County, 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 West Panther Creek and McEleny Additions to the Frank Church-River of No Return Wilderness, Lemhi County, Idaho.

The study area comprises about 140 mi^2 (363 km^2) in the northwestern part of Lemhi County, Idaho, and lies about 30 mi (48 km) west of Salmon, Idaho, and about 50 mi (80 km) northwest of Challis, Idaho (fig. 1). Access to the study area is by secondary roads from Salmon and Challis, which are on U.S Route 93. Approximately the southern one-third of the West Panther Creek Addition was covered in this study.

Elevation in the study area ranges from about 5,000 ft (1,520 km) on Clear Creek in the West Panther Creek Addition to over 9,600 ft (2,930 m) on the ridge line at the western edge of the study area one mile (1.6 km) east of Mt. McGuire. The study area is all mountainous, ranging from spectacular cliffs, spires, and monoliths in the Bighorn Crags to more subdued, forested terrain in other areas. Numerous meadows and lakes are scattered throughout the area. An extensive system of foot trails throughout most of the study area gives good accessibility.

The southern part of the West Panther Creek Addition is underlain by the Crags pluton, an Eocene quartz monzonite-granodiorite, and by the Precambrian Yellowjacket Formation, which consists of argillite, siltite, and quartzite. The Crags pluton underlies the western three-fourths of the sampled portion of the West Panther Creek Addition and extends into the northwestern corner of the McEleny Addition. Most of the remainder of the McEleny Addition is underlain by the Yellowjacket Formation except for an area underlain by Cretaceous quartz monzonite, which adjoins the south edge of the Crags pluton, and an area of Precambrian Hoodoo quartzite and assorted Tertiary felsic rocks at the southern tip of the Addition.

The most important cobalt deposit in the United States is located in the Blackbird district, which includes the southeastern part of the West Panther Creek Addition. The Blackbird district has also produced copper, gold, silver, and nickel. The McEleny Addition wraps around the Yellowjacket district, which has produced primarily gold but has also produced copper, lead, and silver.

Geology and mineral resources of adjoining areas of the River of No Return Wilderness are presented by Cater and others (1973, 1975) and Lund and others (1983). The report by Cater and others (1975) covers part of the West Panther Creek Addition included in this present report and the report by Lund and others (1983) covers the northern two-thirds of the West Panther Creek Addition.

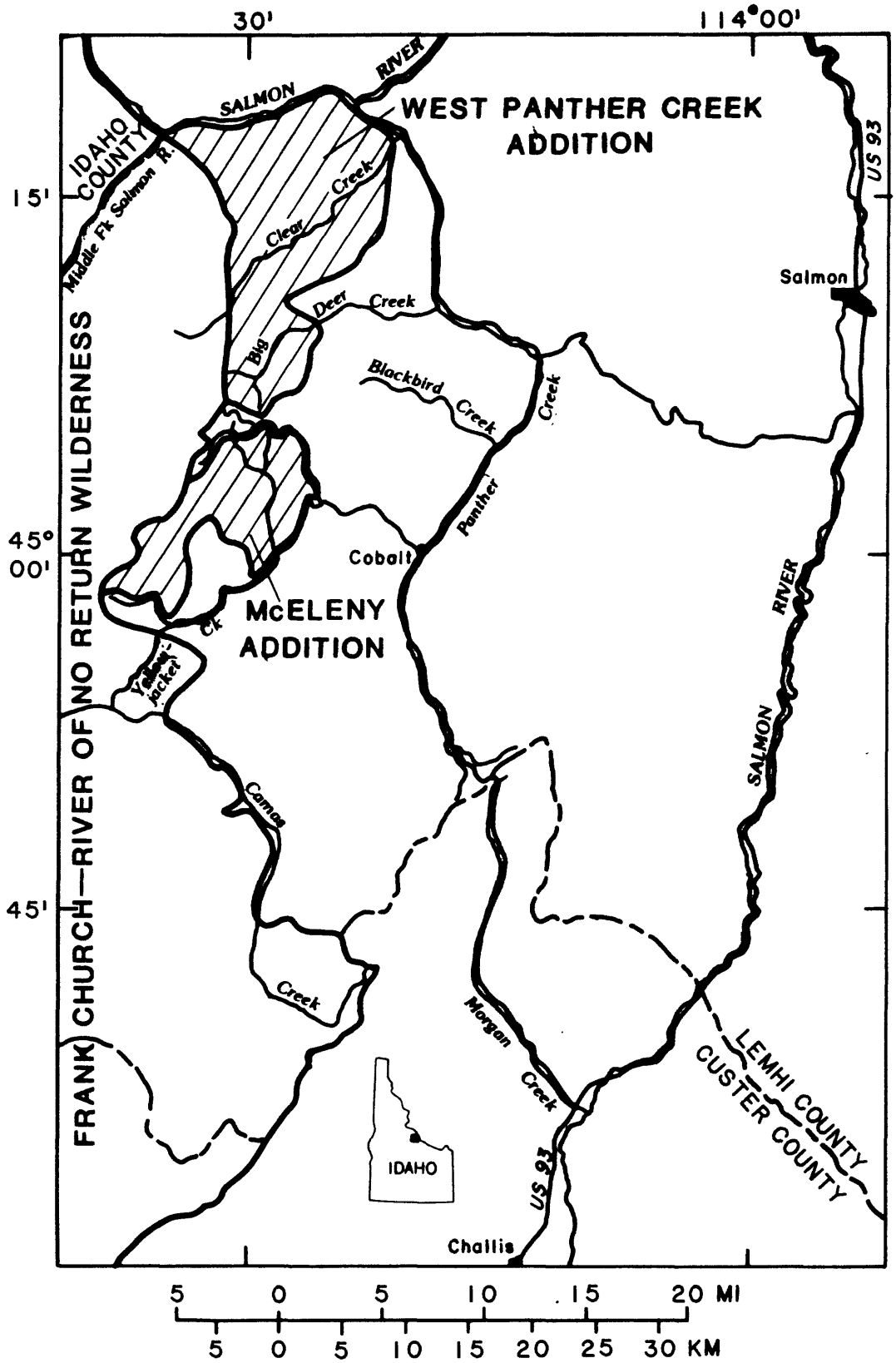

Figure 1. Index map, McEleny Addition and a part of the west Panther Creek Addition to the Frank Church-River of No Return Wilderness, Lemhi County, Idaho.

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

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.

Sample Collection

Samples were collected at 130 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 g) was panned until between 3 g and 23 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 West Panther Creek and McEleny Additions 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 As, Cd, and Sb are atomic-absorption results. Atomic-absorption results for Zn are those under the column headed by Zn-a. 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, Sb, and W in stream-sediment samples and Cd, Sb, and Zn 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.

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 g of Au, as reflected in table 5 by the last column (Au per pan, g).

Latitudes and longitudes listed in tables 3-5 are based on 1:24,000-scale U.S. Geological Survey topographic maps of the Duck Creek Point, Hoodoo Meadows, Mt. McGuire, and Yellowjacket quadrangles and the 1:62,500-scale map of the Blackbird Mountain 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, West Panther Creek and McEleny Additions, 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
IA2095	44 57 27	114 37 20	1.5	5.0	1.00	>1.00	N	N	10	700	2.0	N	.4	5	N	20	700	30
IA2096	44 57 33	114 37 26	2.0	10.0	2.00	>1.00	N	N	10	700	1.0	N	.4	10	<10	20	1,200	50
IA2097	44 57 34	114 37 26	2.0	7.0	1.50	>1.00	70.0	N	20	700	1.5	N	.3	7	<10	20	400	50
IA2098	45 1 0	114 36 4	1.0	.3	.20	.30	N	N	20	150	1.5	N	.3	N	N	10	200	20
IA2099	45 0 58	114 36 5	1.5	3.0	1.00	1.00	N	N	50	300	1.5	N	.4	N	20	50	200	30
IA2100	45 0 35	114 35 6	1.5	3.0	.70	1.00	N	N	50	500	2.0	N	.4	N	10	20	200	20
IA2101	45 0 36	114 35 5	1.5	2.0	1.00	1.00	N	N	50	500	3.0	N	.4	<5	10	50	200	30
IA2102	45 0 32	114 34 34	2.0	5.0	2.00	>1.00	N	N	30	700	5.0	N	.3	7	20	15	300	150
IA2103	45 2 0	114 31 8	2.0	2.0	1.50	.70	N	N	50	700	5.0	N	.4	5	<10	20	300	20
IA2104	45 1 59	114 31 8	1.5	1.0	.50	.50	N	N	50	500	3.0	N	.3	N	N	20	200	20
IA2105	45 4 33	114 27 58	1.5	2.0	.70	.50	N	N	50	500	5.0	N	.3	N	N	70	300	30
IA2106	45 4 33	114 27 55	1.5	3.0	.70	.70	.5	N	30	700	3.0	N	.3	7	<10	30	200	30
IA2107	45 4 26	114 28 5	1.0	1.0	.50	.30	N	N	30	700	7.0	N	.5	N	N	20	200	20
IA2108	45 4 11	114 28 4	1.5	3.0	1.00	.70	N	N	50	700	3.0	N	.3	5	N	50	200	20
IA2112	45 4 13	114 29 21	.7	1.5	.30	.30	N	N	10	200	50.0	N	1.5	N	N	30	500	30
IA2113	45 4 14	114 29 24	1.0	2.0	.50	.70	N	N	20	300	50.0	N	.4	N	<10	10	500	20
IA2114	45 8 23	114 27 42	1.0	2.0	.50	.50	N	N	70	500	50.0	N	2.5	N	<10	20	500	20
IA2115	45 8 23	114 27 39	1.5	3.0	1.00	1.00	N	N	200	700	20.0	N	.5	5	<10	150	500	30
IA2116	45 4 39	114 31 27	.7	3.0	.50	.70	N	N	10	200	50.0	N	.3	N	<10	10	400	100
IA2117	45 4 39	114 31 29	1.0	3.0	.70	1.00	N	N	10	500	15.0	N	.3	<5	N	10	300	200
IA2118	45 4 38	114 31 33	1.0	3.0	.50	>1.00	N	N	N	200	10.0	N	.2	N	<10	5	300	700
IA2119	45 3 17	114 28 40	1.5	5.0	1.00	1.00	N	N	150	1,000	2.0	N	.2	7	15	20	300	20
IA2120	45 2 36	114 28 29	.5	2.0	.70	1.00	N	N	200	1,000	1.5	N	.1	7	10	5	200	20
IA2121	45 2 38	114 28 32	1.0	2.0	.70	1.00	N	N	30	700	15.0	N	.3	5	10	15	400	100
IA2122	45 2 15	114 28 52	1.5	2.0	1.00	1.00	N	N	50	500	3.0	N	.3	<5	<10	20	400	30
IA2123	45 1 53	114 29 7	1.5	2.0	.70	.70	N	N	70	500	3.0	N	.3	N	20	20	300	30
IA2124	45 1 30	114 29 17	1.5	3.0	1.50	1.00	N	N	70	700	1.0	N	.1	<5	20	7	200	20
IA2125	45 1 32	114 29 13	.7	2.0	.50	1.00	N	N	30	300	15.0	N	.2	N	15	5	300	200
IA2126	45 1 9	114 28 50	1.0	2.0	.70	.50	N	N	50	700	3.0	N	.3	N	10	15	200	20
IA2127	45 0 24	114 28 50	1.0	3.0	.70	1.00	N	N	30	500	15.0	N	.3	5	<10	10	300	100
IA2128	45 0 21	114 28 53	.7	2.0	.70	1.00	N	N	50	500	2.0	N	.1	5	<10	10	100	20
IA2129	45 9 16	114 32 22	1.0	3.0	.50	>1.00	N	N	<10	500	7.0	N	.4	<5	<10	15	300	700
IA2130	45 9 16	114 32 21	.1	.3	<.02	.07	N	N	N	20	10.0	N	.6	N	N	<5	700	20
IA2131	45 9 46	114 32 8	1.0	3.0	.30	1.00	N	N	N	300	15.0	N	.3	N	<10	<5	400	300
IA2132	45 9 45	114 32 12	1.5	3.0	.50	1.00	N	N	10	500	20.0	N	.5	<5	<10	10	400	300
IA2133	45 9 48	114 32 34	1.5	2.0	.30	1.00	N	N	N	200	15.0	N	.6	N	N	15	600	700
IA2134	45 9 48	114 32 34	1.5	3.0	.30	.70	N	N	<10	200	30.0	N	.8	N	N	20	600	700
IA3130	44 58 38	114 37 13	1.5	7.0	2.00	1.00	N	N	300	700	1.5	N	.3	7	10	30	400	30
IA3131	44 58 36	114 37 22	1.5	2.0	.50	.20	N	N	30	150	2.0	N	.4	N	N	20	400	200
IA3132	44 58 40	114 37 25	1.5	5.0	.70	1.00	N	N	70	700	2.0	N	.4	5	N	20	400	30
IA3133	44 58 40	114 37 23	1.5	5.0	2.00	1.00	N	N	300	700	2.0	N	.3	7	10	20	400	50
IA3134	44 58 35	114 33 50	1.5	.5	.30	.15	N	N	10	100	1.5	N	.4	N	N	30	200	20
IA3135	44 58 42	114 34 2	2.0	5.0	2.00	1.00	N	N	50	700	2.0	N	.3	7	10	30	400	30
IA3136	44 59 1	114 34 11	2.0	5.0	1.50	1.00	N	N	70	700	2.0	N	.3	N	<10	30	200	20
IA3137	44 59 48	114 34 14	2.0	1.5	.70	.20	N	N	30	150	2.0	N	.3	N	N	50	200	20
IA3138	44 59 35	114 33 59	1.0	3.0	2.00	1.00	N	N	70	700	1.5	N	.2	5	10	20	200	20
IA3139	44 59 35	114 34 3	2.0	7.0	3.00	>1.00	N	N	100	1,000	2.0	N	.2	7	20	20	300	100
IA3140	45 0 7	114 34 12	1.5	3.0	1.50	.70	N	N	100	500	1.0	N	.3	N	15	30	300	30
IA3141	45 2 2	114 34 4	2.0	5.0	2.00	>1.00	N	N	30	700	1.5	N	.2	7	15	30	400	30
IA3142	45 2 3	114 34 6	1.5	3.0	1.00	1.00	N	N	N	500	7.0	N	.2	<5	N	5	400	70

Table 3.--Analyses of stream-sediment samples, West Panther Creek and McEleny Additions, River of No Return Wilderness, Idaho--Continued

Sample	Mn	Mo	Nb	Ni	Pb	Sb	Sc	Sn	Sr	Th	U	V	Y	Zn	Zn-a	Zr
IA2095	1,500	N	20	<5	20	N	N	N	N	N	5.3	100	30	N	55	>1,000
IA2096	3,000	N	50	15	15	N	<5	N	300	N	8.7	200	30	N	65	>1,000
IA2097	3,000	N	20	5	20	N	<5	N	300	N	3.8	150	30	N	65	>1,000
IA2098	500	N	N	N	<10	N	N	N	N	N	64.0	30	15	N	10	50
IA2099	1,000	N	<20	15	20	N	<5	N	N	N	68.0	150	30	N	20	50
IA2100	1,000	N	<20	<5	20	N	<5	N	N	N	49.0	150	20	N	25	200
IA2101	700	N	<20	15	30	N	<5	N	N	N	53.0	100	50	N	20	500
IA2102	1,500	N	30	<5	30	N	7	<10	200	N	22.0	150	70	N	40	>1,000
IA2103	1,000	N	20	15	30	N	5	N	100	N	28.0	100	50	N	30	700
IA2104	500	N	<20	10	20	N	<5	N	N	N	68.0	70	20	N	20	100
IA2105	1,000	N	<20	5	20	N	<5	N	N	N	22.0	100	150	N	50	150
IA2106	1,500	N	<20	10	30	N	<5	N	100	N	32.0	100	70	N	45	300
IA2107	150	N	<20	<5	15	N	N	N	N	N	97.0	30	100	N	25	500
IA2108	1,000	N	<20	15	15	N	<5	N	N	N	29.0	70	50	N	35	500
IA2112	2,000	N	30	<5	50	N	N	70	N	N	117.0	20	200	N	400	300
IA2113	2,000	N	50	<5	50	N	<5	15	N	N	36.0	50	150	N	70	700
IA2114	1,500	N	50	7	100	N	<5	15	N	N	59.0	50	300	500	470	150
IA2115	1,000	N	N	15	30	N	<5	300	150	N	74.0	100	100	N	350	500
IA2116	1,000	N	50	<5	50	N	N	20	N	N	59.0	30	200	N	70	1,000
IA2117	1,500	N	30	<5	50	N	N	15	N	N	51.0	50	150	N	80	700
IA2118	1,500	N	70	<5	50	N	N	20	N	<100	65.0	70	200	N	70	>1,000
IA2119	1,000	N	<20	15	20	N	<5	N	<100	N	13.0	70	30	N	25	500
IA2120	300	N	<20	10	10	N	<5	N	N	N	6.5	100	20	N	10	700
IA2121	700	N	20	10	50	N	<5	10	N	N	65.0	50	70	N	80	1,000
IA2122	500	N	<20	10	15	N	<5	N	N	N	38.0	70	30	N	25	200
IA2123	700	N	<20	10	20	N	<5	N	N	N	4.4	70	30	N	20	200
IA2124	1,000	N	<20	10	15	N	<5	N	<100	N	5.3	70	20	N	15	700
IA2125	700	N	100	7	30	N	<5	30	<100	N	19.0	30	300	N	60	1,000
IA2126	300	N	N	10	20	N	<5	N	N	N	30.0	50	30	N	15	300
IA2127	700	N	30	10	50	N	<5	10	<100	N	27.0	70	100	N	60	500
IA2128	300	N	<20	7	20	N	N	N	N	N	13.0	70	30	N	15	1,000
IA2129	1,000	N	50	5	50	N	<5	30	N	N	70.0	50	200	N	70	>1,000
IA2130	30	N	N	<5	<10	N	N	N	N	N	234.0	20	30	N	30	70
IA2131	1,000	N	50	<5	50	N	N	10	N	N	41.0	30	200	N	70	>1,000
IA2132	1,000	N	30	<5	50	N	N	10	<100	N	114.0	30	150	N	110	>1,000
IA2133	1,000	N	30	<5	30	N	N	<10	N	<100	97.0	50	150	N	75	>1,000
IA2134	2,000	N	20	N	30	N	N	10	N	N	102.0	70	150	N	120	1,000
IA3130	1,500	N	<20	20	50	N	<5	N	<100	N	22.0	200	30	N	30	700
IA3131	700	N	N	<5	10	N	N	N	N	N	54.0	30	30	N	40	70
IA3132	>5,000	N	20	7	20	N	<5	N	<100	N	5.5	100	30	N	90	1,000
IA3133	1,000	N	<20	50	15	N	5	N	N	N	21.0	150	70	N	25	1,000
IA3134	1,500	N	N	N	10	N	N	N	N	N	30.0	30	20	N	25	20
IA3135	1,000	N	<20	20	20	N	<5	N	200	N	40.0	100	50	N	45	500
IA3136	1,000	N	<20	10	20	N	<5	N	N	N	33.0	150	30	N	25	700
IA3137	500	N	N	<5	15	N	N	N	N	N	97.0	50	50	N	15	50
IA3138	700	N	N	15	20	N	<5	N	N	N	16.0	100	30	N	20	700
IA3139	1,500	N	20	15	20	N	5	<10	150	N	16.0	150	70	N	30	>1,000
IA3140	500	N	N	15	20	N	<5	N	N	N	132.0	100	30	N	20	300
IA3141	1,500	N	<20	10	20	N	5	N	200	N	4.4	150	30	N	45	>1,000
IA3142	1,500	N	20	5	30	N	<5	N	<100	N	13.0	50	70	N	70	>1,000

Table 3.--Analyses of stream-sediment samples, West Panther Creek and McEleny Additions, 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
IA3143	45 1 48	114 34 12	2.0	3.0	2.00	1.00	N	N	N	300	3.0	N	.4	20	300	30	800	50
IA3144	45 1 9	114 34 23	1.5	2.0	.70	.50	.7	N	70	300	5.0	N	.7	7	70	30	300	30
IA3145	45 1 9	114 34 29	1.5	3.0	1.00	.70	N	N	20	300	5.0	N	.2	10	50	15	400	100
IA3146	45 1 34	114 34 12	2.0	3.0	2.00	.50	N	N	150	500	3.0	N	.4	10	50	30	800	30
IA3147	45 1 13	114 30 44	.5	2.0	.70	.50	N	N	70	500	2.0	N	.2	7	30	20	<100	20
IA3148	45 1 11	114 30 42	.5	2.0	.50	.50	N	N	70	500	1.5	N	.4	5	20	10	<100	20
IA3149	45 1 35	114 30 15	1.5	3.0	1.00	.50	N	N	100	700	3.0	N	.3	10	70	20	300	30
IA3150	45 1 34	114 30 16	.5	1.5	.50	.30	N	N	100	300	<1.0	N	.3	5	15	7	N	20
IA3151	45 3 11	114 25 1	1.0	2.0	.70	.30	.5	<5	50	500	3.0	N	.2	10	30	30	400	150
IA3152	45 3 4	114 24 56	1.0	3.0	1.00	.50	N	N	100	700	5.0	N	.1	20	50	50	700	150
IA3153	45 4 51	114 25 34	1.0	3.0	1.00	.50	N	N	100	500	3.0	N	.4	10	50	30	300	50
IA3154	45 4 46	114 25 36	1.5	1.5	.50	.30	<.5	N	50	500	5.0	N	.7	<5	20	30	300	200
IA3157	45 2 54	114 33 56	1.5	3.0	.70	.50	N	N	15	500	7.0	N	.5	10	30	10	400	150
IA3158	45 2 56	114 33 59	1.0	3.0	.70	.70	N	N	20	500	7.0	N	.2	7	20	10	400	300
IA3159	45 2 48	114 34 11	1.0	3.0	.70	.70	N	N	20	500	7.0	N	<.1	10	30	15	400	150
IA3160	45 5 52	114 27 51	1.0	3.0	1.00	.50	N	N	150	700	10.0	<10	N	10	50	50	600	50
IA3161	45 5 49	114 27 55	1.0	2.0	.70	.50	N	N	70	300	15.0	N	.1	7	20	30	600	30
IA3162	45 6 8	114 26 43	1.0	3.0	.70	.50	N	N	70	300	7.0	N	.7	7	50	30	400	50
IA3163	45 6 11	114 26 21	1.0	3.0	1.00	.50	N	N	70	500	3.0	N	.2	10	100	30	400	30
IA3164	45 4 30	114 31 1	.5	3.0	.50	.50	N	N	20	200	20.0	N	.7	<5	30	20	500	100
IA3165	45 4 26	114 31 3	.7	3.0	.70	.70	N	N	10	300	15.0	N	.2	5	15	10	400	500
IA3166	45 3 39	114 30 16	1.0	3.0	.70	.50	<.5	N	15	300	15.0	N	.3	5	15	30	600	500
IA3167	45 3 40	114 30 9	1.0	3.0	.70	.70	N	N	10	300	15.0	N	.2	5	15	10	800	300
IA3168	45 3 32	114 29 22	1.0	3.0	1.00	.50	N	N	70	700	20.0	N	.6	10	100	30	600	30
IA3169	45 3 26	114 29 29	1.0	3.0	.70	.30	N	N	20	300	15.0	N	.2	<5	10	15	400	100
IA3170	45 6 21	114 29 50	.5	2.0	.30	.30	N	N	20	200	30.0	N	.2	<5	15	10	800	50
IA3171	45 6 16	114 29 44	.5	2.0	.20	.20	N	N	15	70	20.0	N	.5	N	10	7	700	50
IA3172	45 7 3	114 29 56	.5	2.0	.20	.20	N	5	20	150	50.0	N	.8	5	10	10	800	70
IA3173	45 7 2	114 29 48	.5	3.0	.50	.30	N	N	15	200	30.0	N	.4	<5	30	15	800	100
IA3174	45 7 29	114 29 47	.5	3.0	.30	.50	N	N	10	200	20.0	N	.2	N	20	7	400	200
IA3175	45 7 55	114 29 16	.5	1.5	.15	.15	N	N	10	50	15.0	N	.2	N	10	5	900	30
IA3176	45 7 59	114 29 20	.5	3.0	.50	.30	N	N	20	300	30.0	N	.4	<5	20	10	600	150
IA3177	45 8 10	114 29 18	.5	3.0	.30	.20	N	<5	10	150	20.0	N	.6	<5	20	20	400	70
IA3178	45 9 1	114 28 35	.7	3.0	.50	.50	N	N	10	200	30.0	N	.2	5	15	7	600	150
IA3179	45 8 59	114 28 31	.3	2.0	.20	.20	N	N	20	100	20.0	N	.3	<5	10	7	600	50
IA3180	45 9 19	114 28 11	.7	2.0	.20	.20	N	N	20	200	30.0	N	.6	<5	20	10	600	200
IA3181	45 9 28	114 27 0	1.0	1.0	.20	.15	.5	N	70	200	30.0	N	1.0	N	20	30	600	20
IA3182	45 9 31	114 27 2	.5	2.0	.20	.20	N	N	20	150	20.0	N	.3	N	15	7	500	50
IA3183	45 9 46	114 26 18	1.5	3.0	.70	.50	N	5	30	200	10.0	N	.3	10	70	20	400	50
IA3184	45 9 55	114 25 34	1.0	3.0	.70	.50	N	N	100	500	5.0	N	.6	10	70	20	600	30
IA3185	45 9 54	114 25 40	.5	2.0	.50	.30	N	N	20	200	20.0	N	.3	5	20	10	400	20
IA3197	45 10 43	114 31 49	1.5	3.0	.30	.50	N	N	10	300	7.0	N	.3	7	20	7	600	300
IA3198	45 10 44	114 31 43	1.0	3.0	.70	.50	N	N	<10	300	10.0	N	.3	7	20	10	800	300
IA3199	45 11 1	114 31 32	1.0	1.5	.15	.30	N	N	20	200	15.0	N	.2	N	20	15	1,100	300
IA3200	45 11 31	114 30 54	1.0	5.0	.50	1.00	N	N	10	300	5.0	N	.3	5	20	10	500	700
IA3201	45 12 9	114 30 23	1.0	3.0	.30	.50	N	N	10	300	7.0	N	.4	5	20	10	400	150
IA3202	45 12 7	114 30 17	1.0	5.0	.30	.70	N	<5	10	300	10.0	N	.4	7	15	10	500	500
IA3203	45 12 27	114 29 58	1.0	2.0	.50	.50	N	N	10	300	5.0	N	.1	5	30	5	600	100
IA3204	45 12 25	114 29 56	1.0	3.0	.30	.50	N	N	10	300	10.0	N	.3	5	20	10	700	300
IA3205	45 12 38	114 29 12	1.0	2.0	.70	.30	N	N	50	500	5.0	N	.5	5	70	30	400	20

Table 3.--Analyses of stream-sediment samples, West Panther Creek and McEleny Additions, River of No Return Wilderness, Idaho--Continued

Sample	Mn	Mo	Nb	Ni	Pb	Sb	Sc	Sn	Sr	Th	U	V	Y	Zn	Zn-a	Zr
IA3143	500	N	20	50	15	N	20	N	200	N	170.0	150	150	N	40	500
IA3144	300	N	<20	15	20	N	7	N	150	N	42.0	70	70	N	20	300
IA3145	700	N	20	10	30	N	10	N	200	N	25.0	70	100	N	40	700
IA3146	700	N	N	15	30	N	7	N	200	N	16.0	70	50	N	20	500
IA3147	500	N	<20	15	20	N	5	N	100	N	32.0	70	30	N	15	200
IA3148	300	N	<20	10	15	N	<5	N	<100	N	13.0	70	30	N	10	300
IA3149	300	N	20	20	20	N	10	N	200	N	21.0	100	70	N	20	30
IA3150	200	N	N	15	15	N	<5	N	N	N	9.3	50	15	N	5	500
IA3151	300	N	<20	20	20	N	5	N	100	N	58.0	70	100	N	15	200
IA3152	700	N	<20	50	30	N	10	N	N	N	42.0	70	150	N	20	300
IA3153	1,000	N	<20	20	30	N	7	N	150	N	36.0	70	70	N	25	500
IA3154	500	N	N	15	15	N	5	N	200	N	100.0	70	150	N	35	300
IA3157	1,000	N	30	7	50	N	5	N	200	N	29.0	70	70	N	50	1,000
IA3158	700	N	30	<5	30	N	5	N	200	N	29.0	70	150	N	30	1,000
IA3159	1,000	N	30	10	50	N	5	N	200	N	16.0	70	100	N	60	700
IA3160	700	N	<20	20	30	N	7	150	200	N	66.0	100	150	N	50	300
IA3161	1,000	15	<20	15	30	N	5	100	150	N	42.0	70	150	N	45	300
IA3162	700	N	<20	30	30	N	7	N	150	N	29.0	100	100	<200	120	200
IA3163	1,000	N	<20	30	30	N	7	N	150	N	18.0	100	70	<200	90	200
IA3164	700	N	70	7	70	N	<5	150	N	<100	66.0	30	300	N	85	700
IA3165	1,000	N	70	5	70	N	<5	30	<100	100	72.0	50	300	N	60	>1,000
IA3166	700	N	70	5	100	N	<5	50	N	N	50.0	50	300	N	100	1,000
IA3167	1,000	N	70	5	100	N	<5	20	N	N	53.0	50	200	N	65	1,000
IA3168	1,000	N	20	20	100	N	10	20	150	N	37.0	70	150	N	120	500
IA3169	700	N	30	7	100	N	5	20	<100	N	53.0	30	150	N	75	700
IA3170	700	N	70	7	70	N	<5	20	N	N	130.0	30	300	N	50	700
IA3171	1,000	N	70	5	70	N	<5	30	N	N	53.0	20	200	N	45	700
IA3172	1,500	7	50	5	70	N	<5	10	N	N	190.0	30	300	N	80	200
IA3173	1,000	7	70	5	70	N	<5	150	N	N	120.0	30	300	N	50	700
IA3174	1,000	<5	70	5	100	N	<5	30	N	N	53.0	20	200	N	75	700
IA3175	200	7	30	5	70	N	N	20	N	N	50.0	10	100	N	25	300
IA3176	1,000	10	70	7	100	N	<5	30	N	100	130.0	20	300	N	90	700
IA3177	1,000	7	50	5	100	N	<5	50	N	N	86.0	20	300	N	110	700
IA3178	1,000	N	50	5	70	N	<5	100	N	N	88.0	30	150	N	40	700
IA3179	500	5	70	5	50	N	N	30	N	N	40.0	20	100	N	60	300
IA3180	1,000	N	50	5	30	N	<5	10	<100	N	100.0	20	150	N	60	500
IA3181	700	N	20	7	30	N	N	15	<100	N	190.0	30	300	N	80	70
IA3182	700	10	50	5	70	N	<5	20	N	N	64.0	20	200	N	55	300
IA3183	500	N	<20	30	30	N	10	15	100	N	40.0	100	70	N	30	30
IA3184	700	N	<20	30	50	N	7	N	100	N	18.0	70	70	N	70	300
IA3185	500	<5	30	10	50	N	<5	70	N	N	66.0	30	100	N	45	200
IA3197	1,000	10	30	<5	30	N	5	<10	150	N	150.0	50	150	N	30	1,000
IA3198	1,000	10	50	5	70	N	5	70	<100	N	46.0	50	100	N	55	700
IA3199	300	10	<20	<5	30	N	<5	N	100	N	400.0	50	150	N	25	150
IA3200	1,000	7	100	<5	50	N	<5	50	100	<100	60.0	50	200	N	40	>1,000
IA3201	700	N	20	<5	50	N	5	<10	150	N	61.0	20	100	N	40	700
IA3202	1,000	7	50	<5	50	N	5	20	100	<100	80.0	50	150	N	50	>1,000
IA3203	300	N	20	10	50	N	5	15	100	N	16.0	30	50	N	30	500
IA3204	700	7	50	<5	30	N	5	10	100	N	90.0	50	100	N	55	1,000
IA3205	700	N	<20	20	30	N	5	N	150	N	110.0	50	70	N	25	200

Table 3.--Analyses of stream-sediment samples, West Panther Creek and McEleny Additions, 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
IA3206	45 12 44	114 29 6	1.0	3.0	1.00	.50	N	N	50	500	3.0	N	.2	7	70	20	400	50
IA3207	45 12 52	114 28 10	.7	2.0	.50	.30	N	N	20	300	10.0	N	N	5	20	10	400	100
IA3208	45 12 54	114 28 14	1.0	3.0	.50	.50	N	N	20	300	7.0	N	N	5	30	10	500	200
IA3278	45 6 44	114 31 21	.3	1.0	.20	.15	N	N	10	70	30.0	N	N	N	15	5	400	30
IA3279	45 4 17	114 32 26	.7	3.0	.70	.70	.5	N	N	300	7.0	N	N	<5	20	10	800	300
IA3280	45 4 53	114 32 32	1.0	5.0	.70	.70	N	N	10	300	7.0	N	.1	7	20	15	700	200
IA3281	45 5 10	114 32 1	.7	3.0	.50	.50	N	N	10	300	10.0	N	N	5	15	10	600	200
IA3282	45 5 27	114 31 12	.5	2.0	.50	.30	N	N	15	150	30.0	N	N	<5	10	7	600	200
IA3283	45 2 4	114 23 16	.7	3.0	.70	.50	N	N	1,000	500	3.0	N	N	7	50	30	600	100
IA3298	45 1 32	114 26 54	1.0	3.0	.70	.50	N	N	1,000	500	3.0	N	N	5	50	20	600	30
IA3299	45 1 9	114 26 51	1.0	3.0	1.00	.50	N	N	1,000	700	3.0	N	N	50	50	20	1,100	30
IA3300	45 1 7	114 26 48	.7	2.0	.50	.30	N	N	70	500	5.0	N	N	<5	30	20	900	30
IA3301	45 0 5	114 28 34	.7	3.0	.70	.50	N	N	100	500	3.0	N	N	15	30	20	800	30
IA3302	44 59 47	114 28 41	1.5	3.0	1.00	.50	N	N	70	700	2.0	N	N	7	100	20	1,000	30
IA3303	44 59 25	114 29 9	1.0	3.0	1.00	.70	N	N	200	700	3.0	N	N	7	50	20	900	30
IA3304	44 59 27	114 29 25	1.0	1.5	.50	.50	N	N	150	300	7.0	N	N	5	50	20	1,100	50
IA3305	44 59 20	114 29 35	1.0	2.0	.70	.30	N	N	150	300	7.0	N	N	7	70	30	100	50
IA3306	45 0 6	114 31 8	.7	2.0	.30	.30	N	N	70	500	1.5	N	N	7	70	20	1,400	30
IA3307	45 0 4	114 31 11	.7	1.5	.30	.50	N	N	70	300	1.5	N	N	5	50	15	1,100	30
IA3308	44 59 22	114 30 48	1.0	2.0	.50	.30	N	N	100	300	7.0	N	N	5	50	30	1,300	50
IA3309	44 59 22	114 30 50	.5	2.0	.50	.30	N	N	150	300	<1.0	N	N	7	70	10	1,100	20
IA3310	45 0 56	114 32 39	1.0	2.0	.70	.50	N	N	70	300	1.0	N	.1	5	70	20	900	30
IA3311	45 0 56	114 32 41	1.0	1.0	.30	.30	N	N	50	200	7.0	N	N	N	50	20	1,400	30
IA3312	45 0 20	114 32 40	1.5	3.0	1.00	.70	N	N	200	500	2.0	N	N	15	70	30	1,800	30
IA3313	44 59 58	114 32 46	1.0	3.0	1.00	.70	N	N	200	500	1.5	N	N	10	70	20	1,300	30
IA3314	44 59 59	114 32 43	1.0	2.0	.70	.50	N	N	150	500	3.0	N	N	5	70	30	1,400	30
IA3315	44 58 19	114 36 24	.7	3.0	1.00	.70	N	N	300	500	1.0	N	.2	15	100	20	1,500	30
IA3316	44 58 17	114 36 25	1.0	3.0	1.50	.70	N	N	300	500	3.0	N	N	15	50	15	1,700	50
IA3317	44 57 43	114 34 48	1.5	5.0	1.50	.70	N	N	150	500	2.0	N	N	10	150	20	1,700	150
IA3318	44 57 44	114 34 50	1.5	2.0	.30	.50	N	N	50	200	5.0	N	N	7	30	20	1,700	30

Table 3.--Analyses of stream-sediment samples, West Panther Creek and McEleny Additions, River of No Return Wilderness, Idaho--Continued

Sample	Mn	Mo	Nb	Ni	Pb	Sb	Sc	Sn	Sr	Th	U	V	Y	Zn	Zn-a	Zr
IA3206	500	N	<20	30	30	N	7	N	200	N	16.0	70	70	N	190	200
IA3207	500	N	20	15	30	N	<5	10	150	N	64.0	50	70	N	60	300
IA3208	500	<5	20	7	50	N	<5	15	150	N	60.0	50	70	N	60	700
IA3278	500	N	30	<5	50	N	N	15	N	N	39.0	20	150	N	40	700
IA3279	700	N	70	<5	70	N	<5	20	N	N	14.0	70	200	N	65	1,000
IA3280	1,000	N	30	<5	100	N	<5	15	N	N	6.2	50	100	N	85	1,000
IA3281	700	N	70	5	70	N	<5	20	N	N	10.0	50	150	N	60	1,000
IA3282	1,000	N	70	7	100	N	N	30	N	<100	24.0	30	300	N	65	50
IA3283	700	N	<20	20	30	N	7	N	N	N	12.0	70	150	N	25	500
IA3298	700	N	<20	15	20	N	7	N	150	N	14.0	70	70	N	20	500
IA3299	500	N	<20	20	20	N	7	N	100	N	18.0	70	50	N	20	700
IA3300	1,000	N	<20	10	15	N	7	N	100	N	35.0	50	70	N	30	200
IA3301	500	N	<20	20	15	N	7	N	<100	N	11.0	50	30	N	25	500
IA3302	700	N	<20	10	30	N	5	N	200	N	7.4	70	20	N	20	1,000
IA3303	700	N	<20	15	30	N	5	N	200	N	5.4	70	30	N	20	700
IA3304	150	N	<20	15	50	N	7	N	<100	N	24.0	50	70	N	30	150
IA3305	500	N	<20	20	30	N	10	N	<100	N	8.0	70	150	N	40	200
IA3306	300	N	<20	15	20	N	7	N	100	N	11.0	70	50	N	10	200
IA3307	300	N	<20	15	20	N	7	N	<100	N	4.9	50	20	N	10	200
IA3308	700	N	<20	15	20	N	7	N	N	N	8.8	70	150	N	45	200
IA3309	300	N	N	20	20	<1	5	N	N	N	4.4	70	20	N	15	200
IA3310	500	N	<20	15	15	N	7	N	100	N	25.0	70	20	N	10	200
IA3311	700	N	N	15	15	N	5	N	N	N	16.0	50	150	N	20	100
IA3312	500	N	<20	30	20	<1	10	N	100	N	10.0	100	50	N	25	300
IA3313	500	N	<20	20	20	N	7	N	<100	N	5.6	70	30	N	10	500
IA3314	300	N	<20	20	15	N	7	N	<100	N	50.0	70	70	N	10	500
IA3315	500	N	<20	30	30	N	7	N	<100	N	2.2	100	30	N	20	700
IA3316	700	N	20	30	20	N	10	N	<100	N	4.8	100	50	N	20	700
IA3317	700	N	<20	20	20	N	10	N	150	N	11.0	100	50	N	30	700
IA3318	700	N	<20	10	10	N	7	N	150	N	5.2	70	70	N	25	300

Table 4.--Analyses of heavy-mineral-concentrate samples, West Panther Creek and McEleny Additions, 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	Au	B	Ba	Be	Bi	Co	Cr	Cu
IH2095	44 57 27	114 37 20	20.00	.30	.10	.2	N	N	N	N	50	N	N	N	50	<10
IH2096	44 57 33	114 37 26	20.00	.50	.10	.5	N	N	N	N	<50	N	N	N	20	<10
IH2097	44 57 34	114 37 26	15.00	.50	.07	1.5	N	N	N	N	<50	N	N	N	30	N
IH2099	45 0 58	114 36 5	5.00	<.10	.20	>2.0	N	N	N	200	10,000	N	50	<10	500	N
IH2100	45 0 35	114 35 6	7.00	.15	.15	>2.0	N	N	N	100	50	N	N	<10	300	N
IH2101	45 0 36	114 35 5	5.00	<.10	.15	>2.0	N	N	N	200	200	N	>2,000	<10	300	10
IH2102	45 0 32	114 34 34	5.00	.20	.30	>2.0	N	N	N	<20	N	N	N	<10	150	20
IH2103	45 2 0	114 31 8	15.00	.30	.10	>2.0	N	N	N	70	<50	N	N	<10	200	<10
IH2112	45 4 13	114 29 21	.30	.70	.05	1.0	N	N	N	20	N	5	N	N	20	<10
IH2114	45 8 23	114 27 42	.70	.15	.07	>2.0	10	N	N	150	N	2	500	N	200	N
IH2115	45 8 23	114 27 39	5.00	.30	.15	>2.0	10	N	N	200	50	70	>2,000	10	150	20
IH2116	45 4 39	114 31 27	.50	.30	<.05	.5	N	N	N	N	N	7	1,500	<10	N	30
IH2117	45 4 39	114 31 29	.70	.20	<.05	1.0	N	N	N	N	N	3	700	<10	70	70
IH2118	45 4 38	114 31 33	1.50	.20	<.05	1.5	N	N	N	N	N	2	1,000	<10	30	50
IH2119	45 3 17	114 28 40	10.00	<.10	.15	>2.0	N	N	N	100	700	N	70	10	2,000	N
IH2120	45 2 36	114 28 29	.15	<.10	.15	>2.0	N	N	N	150	50	N	N	10	1,500	N
IH2121	45 2 38	114 28 32	.70	.30	<.05	>2.0	N	N	N	N	N	2	N	N	70	20
IH2123	45 1 53	114 29 7	3.00	.10	.07	>2.0	N	N	N	N	N	N	N	N	200	N
IH2124	45 1 30	114 29 17	5.00	.30	.15	>2.0	N	N	N	70	70	N	N	N	150	<10
IH2125	45 1 32	114 29 13	2.00	.15	<.05	>2.0	N	N	N	20	N	<2	150	<10	100	10
IH2127	45 0 24	114 28 50	2.00	.30	.05	>2.0	N	N	N	N	N	<2	100	N	150	10
IH2129	45 9 16	114 32 22	.30	.30	<.05	>2.0	N	N	N	N	N	<2	300	N	N	15
IH2131	45 9 46	114 32 8	.50	.30	<.05	>2.0	N	N	N	N	N	N	N	10	<20	30
IH2132	45 9 45	114 32 12	.30	.30	<.05	>2.0	N	N	N	N	N	<2	N	<10	N	15
IH2133	45 9 48	114 32 34	.50	.30	<.05	2.0	N	N	N	N	N	N	N	15	N	50
IH2134	45 9 48	114 32 34	.50	.50	.05	2.0	N	N	N	N	N	N	N	15	N	50
IH3130	44 58 38	114 37 13	1.00	<.10	.30	>2.0	N	N	N	200	N	N	N	N	1,500	N
IH3132	44 58 40	114 37 25	.70	.30	.05	1.5	N	N	N	20	N	2	50	N	20	N
IH3133	44 58 40	114 37 23	1.50	.20	.07	>2.0	N	N	N	50	N	N	N	N	300	N
IH3135	44 58 42	114 34 2	5.00	.20	.30	>2.0	N	N	N	70	<50	N	N	<10	200	<10
IH3137	44 59 48	114 34 14	1.50	.30	.30	>2.0	N	N	N	100	100	<2	N	N	100	N
IH3138	44 59 35	114 33 59	10.00	.50	.30	>2.0	N	N	N	500	N	N	700	N	500	N
IH3139	44 59 35	114 34 3	7.00	.20	.30	>2.0	N	N	N	20	N	N	N	<10	300	20
IH3140	45 0 7	114 34 12	10.00	.30	.50	>2.0	150	N	N	100	<50	N	>2,000	N	300	15
IH3141	45 2 2	114 34 4	15.00	.10	.15	>2.0	N	N	N	N	<50	N	150	N	200	N
IH3142	45 2 3	114 34 6	5.00	.20	<.05	>2.0	N	N	N	N	<50	2	N	20	<20	50
IH3144	45 1 9	114 34 23	15.00	.20	.30	>2.0	N	N	N	200	<50	N	300	<10	500	N
IH3145	45 1 9	114 34 29	5.00	.20	.20	>2.0	N	N	N	N	<50	N	N	10	200	20
IH3146	45 1 34	114 34 12	10.00	.20	.20	>2.0	N	N	N	100	100	N	N	N	300	N
IH3147	45 1 13	114 30 44	1.50	.15	<.05	>2.0	N	N	N	N	N	N	N	N	300	N
IH3148	45 1 11	114 30 42	1.00	.10	.05	>2.0	N	N	N	30	<50	<2	N	N	150	N
IH3149	45 1 35	114 30 15	15.00	.15	.30	>2.0	N	N	N	N	<50	N	50	N	500	N
IH3150	45 1 34	114 30 16	2.00	<.10	.05	>2.0	N	N	N	150	N	3	N	N	200	N
IH3151	45 3 11	114 25 1	3.00	<.10	.15	>2.0	N	N	N	100	50	N	N	10	2,000	N
IH3153	45 4 51	114 25 34	5.00	.50	.15	>2.0	N	N	N	<20	100	N	N	300	200	N
IH3154	45 4 46	114 25 36	3.00	1.50	.20	>2.0	N	N	N	100	300	3	N	200	70	15
IH3157	45 2 54	114 33 56	.70	.30	.05	2.0	N	N	N	N	N	5	1,500	<10	20	10
IH3158	45 2 56	114 33 59	15.00	.50	.07	>2.0	N	N	N	N	<50	N	N	20	200	30
IH3159	45 2 48	114 34 11	.70	.20	<.05	>2.0	N	N	N	<20	N	3	N	20	150	50
IH3160	45 5 52	114 27 51	2.00	1.00	.07	>2.0	N	N	N	20	N	7	N	20	100	50

Table 4.--Analyses of heavy-mineral-concentrate samples, West Panther Creek and McEleny Additions, River of No Return Wilderness, Idaho--Continued

Sample	La	Mn	Mo	Nb	Ni	Pb	Sc	Sn	Sr	Th	V	W	Y	Zr
IH2095	1,000	200	N	N	N	50	15	N	<200	N	<20	N	1,000	>2,000
IH2096	1,500	200	N	N	N	30	15	N	500	N	20	N	1,000	>2,000
IH2097	700	200	N	N	N	30	15	N	N	N	50	N	1,000	>2,000
IH2099	100	70	N	N	N	70	20	50	N	N	150	N	500	>2,000
IH2100	70	100	N	N	N	100	30	50	N	N	150	N	700	>2,000
IH2101	70	100	N	N	N	200	50	50	N	N	150	N	700	>2,000
IH2102	150	100	N	N	N	150	50	300	N	5,000	200	100	2,000	>2,000
IH2103	300	150	N	<50	N	100	20	>2,000	N	5,000	200	500	1,500	>2,000
IH2112	500	150	N	300	N	30	15	>2,000	N	1,500	20	100	2,000	>2,000
IH2114	50	100	5,000	700	N	20,000	<10	>2,000	N	1,000	150	150	1,000	>2,000
IH2115	<50	200	150	300	N	700	20	>2,000	N	N	150	500	500	>2,000
IH2116	300	50	N	150	N	300	15	>2,000	N	>5,000	20	N	3,000	>2,000
IH2117	700	50	30	<50	N	500	10	>2,000	N	>5,000	70	N	5,000	>2,000
IH2118	150	150	N	N	N	300	<10	2,000	N	>5,000	50	N	3,000	>2,000
IH2119	50	150	N	150	15	70	<10	1,000	N	N	1,000	500	700	>2,000
IH2120	70	70	N	150	N	70	50	700	N	N	700	150	700	>2,000
IH2121	100	100	N	100	N	150	10	>2,000	N	>5,000	70	N	5,000	>2,000
IH2123	50	50	N	70	N	100	50	1,000	N	N	200	150	1,500	>2,000
IH2124	70	150	N	50	<10	70	10	1,500	N	2,000	70	150	1,000	>2,000
IH2125	300	100	N	70	N	100	15	>2,000	N	>5,000	70	N	3,000	>2,000
IH2127	300	100	N	100	<10	150	30	>2,000	N	>5,000	100	100	3,000	>2,000
IH2129	300	100	N	50	N	100	50	>2,000	N	>5,000	<20	N	3,000	>2,000
IH2131	1,500	70	N	50	N	150	50	>2,000	N	>5,000	<20	N	5,000	>2,000
IH2132	150	100	N	50	N	100	50	>2,000	N	5,000	<20	N	5,000	>2,000
IH2133	300	70	N	N	N	200	30	2,000	N	>5,000	50	N	3,000	>2,000
IH2134	300	150	N	N	N	200	30	>2,000	N	>5,000	50	N	3,000	>2,000
IH3130	<50	20	N	150	N	50	50	200	N	N	300	N	500	>2,000
IH3132	70	70	N	N	<10	50	10	N	N	N	70	N	3,000	>2,000
IH3133	70	70	N	70	<10	50	<10	N	N	N	100	100	3,000	>2,000
IH3135	100	200	N	70	<10	70	10	200	N	5,000	200	100	1,000	>2,000
IH3137	70	150	N	50	N	70	N	20	N	1,000	150	N	500	>2,000
IH3138	70	150	N	150	N	70	N	70	N	N	500	<100	500	>2,000
IH3139	150	150	N	70	N	200	10	300	N	>5,000	200	N	1,500	>2,000
IH3140	70	150	300	150	N	1,000	N	70	N	N	200	1,500	700	>2,000
IH3141	500	300	15	100	N	30	10	200	N	N	200	200	1,000	>2,000
IH3142	700	150	N	70	N	300	15	500	N	>5,000	150	N	3,000	>2,000
IH3144	300	200	20	100	N	50	<10	100	N	1,000	200	500	700	>2,000
IH3145	200	200	<10	70	N	200	30	1,500	N	>5,000	150	700	2,000	>2,000
IH3146	70	200	N	70	<10	30	15	500	N	N	200	1,000	700	>2,000
IH3147	50	20	N	70	N	100	20	<20	N	N	150	N	700	>2,000
IH3148	50	70	N	N	<10	70	30	N	N	N	200	N	700	>2,000
IH3149	1,000	300	20	500	N	50	20	1,000	N	700	500	N	3,000	>2,000
IH3150	50	50	N	N	N	150	50	<20	N	N	200	N	1,500	>2,000
IH3151	50	100	N	300	N	30	50	300	N	N	700	150	200	>2,000
IH3153	50	200	N	500	10	70	70	100	N	N	100	200	500	>2,000
IH3154	<50	300	N	100	10	50	<10	N	N	3,000	50	<100	150	>2,000
IH3157	50	200	N	150	N	50	<10	>2,000	N	700	50	<100	70	2,000
IH3158	1,000	200	<10	150	N	300	50	200	N	>5,000	200	N	3,000	>2,000
IH3159	500	150	N	150	N	300	70	300	N	>5,000	50	N	5,000	>2,000
IH3160	1,000	200	N	150	N	300	70	300	N	>5,000	70	N	5,000	>2,000

Table 4.--Analyses of heavy-mineral-concentrate samples, West Panther Creek and McEleny Additions, River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	As	Au	B	Ba	Be	Bi	Co	Cr	Cu
IH3161	45 5 49	114 27 55	7.00	1.50	.10	>2.0	30	N	N	500	N	150	>2,000	10	30	100
IH3162	45 6 8	114 26 43	10.00	2.00	.50	>2.0	N	N	N	150	300	50	1,500	150	100	70
IH3163	45 6 11	114 26 21	10.00	10.00	1.50	>2.0	N	N	N	500	200	3	1,000	500	200	50
IH3164	45 4 30	114 31 1	<.10	.70	<.05	.7	N	N	N	N	N	7	2,000	N	<20	15
IH3165	45 4 26	114 31 3	1.00	1.50	.10	>2.0	N	N	N	N	N	15	1,500	N	<20	30
IH3166	45 3 39	114 30 16	1.50	2.00	<.05	>2.0	N	N	N	N	N	15	2,000	N	<20	100
IH3167	45 3 40	114 30 9	.70	.50	<.05	>2.0	N	N	N	N	N	10	1,500	<10	20	30
IH3168	45 3 32	114 29 22	1.50	1.00	.07	>2.0	N	N	N	N	N	5	2,000	<10	70	150
IH3169	45 3 26	114 29 29	1.50	.30	.20	>2.0	N	N	N	50	N	30	300	N	50	<10
IH3170	45 6 21	114 29 50	<.10	1.00	<.05	1.0	N	N	N	20	N	20	1,000	N	<20	15
IH3171	45 6 16	114 29 44	3.00	2.00	.05	.7	N	N	N	N	N	15	2,000	N	<20	20
IH3172	45 7 3	114 29 56	.10	2.00	<.05	2.0	N	N	N	N	N	10	N	N	<20	30
IH3173	45 7 2	114 29 48	1.00	1.00	<.05	.5	N	N	N	N	N	20	1,500	N	N	10
IH3174	45 7 29	114 29 47	1.00	1.00	<.05	>2.0	N	N	N	N	N	200	500	N	<20	10
IH3176	45 7 59	114 29 20	.70	1.00	<.05	2.0	N	N	N	N	N	7	N	N	<20	15
IH3177	45 8 10	114 29 18	.70	.70	<.05	.7	N	N	N	N	N	7	2,000	N	<20	30
IH3178	45 9 1	114 28 35	.10	.70	<.05	2.0	N	N	N	N	N	5	500	N	N	50
IH3179	45 8 59	114 28 31	.50	.50	<.05	2.0	N	N	N	N	N	150	1,000	N	<20	10
IH3180	45 9 19	114 28 11	.50	.50	<.05	>2.0	N	N	N	20	N	50	N	<10	N	20
IH3181	45 9 28	114 27 0	.70	.20	.07	>2.0	N	N	N	300	N	15	>2,000	N	150	<10
IH3182	45 9 31	114 27 2	.50	.30	<.05	2.0	N	N	N	50	N	5	N	N	150	<10
IH3183	45 9 46	114 26 18	1.00	.20	.15	>2.0	N	N	N	150	N	150	500	10	300	N
IH3184	45 9 55	114 25 34	1.00	.70	.70	>2.0	N	N	N	5,000	<50	N	300	20	300	N
IH3185	45 9 54	114 25 40	2.00	1.50	.30	>2.0	N	N	N	500	N	7	N	N	150	<10
IH3197	45 10 43	114 31 49	1.50	.70	<.05	>2.0	N	N	N	N	N	<2	N	N	N	10
IH3198	45 10 44	114 31 43	.50	1.50	<.05	>2.0	N	N	N	N	<50	<2	N	10	N	20
IH3200	45 11 31	114 30 54	.50	.30	<.05	>2.0	N	N	N	N	N	2	N	10	N	30
IH3201	45 12 9	114 30 23	1.00	.70	.05	>2.0	N	N	N	N	N	<2	N	N	N	N
IH3202	45 12 7	114 30 17	1.00	.70	.07	>2.0	N	N	N	N	N	<2	N	N	N	15
IH3203	45 12 27	114 29 58	2.00	1.00	.07	>2.0	N	N	N	<20	N	N	N	N	N	N
IH3204	45 12 25	114 29 56	1.00	.20	<.05	>2.0	N	N	N	N	N	<2	N	N	N	10
IH3205	45 12 38	114 29 12	15.00	.50	.20	>2.0	N	N	N	200	N	N	150	<10	300	N
IH3207	45 12 52	114 28 10	5.00	.50	.15	>2.0	N	N	N	300	N	N	N	N	70	<10
IH3208	45 12 54	114 28 14	2.00	.30	<.05	>2.0	N	N	N	N	N	<2	N	N	<20	<10
IH3278	45 6 44	114 31 21	.30	1.00	.05	>2.0	N	N	N	<20	N	7	N	N	N	10
IH3279	45 4 17	114 32 26	.70	.30	<.05	>2.0	N	N	N	N	N	<2	N	N	N	15
IH3280	45 4 53	114 32 32	.70	1.50	<.05	>2.0	N	N	N	N	N	<2	N	N	N	20
IH3281	45 5 10	114 32 1	.15	.30	.05	>2.0	N	N	N	20	N	5	500	<10	N	70
IH3282	45 5 27	114 31 12	<.10	1.00	.05	2.0	N	1,000	N	N	N	100	2,000	N	N	70
IH3283	45 2 4	114 23 16	5.00	.70	.30	>2.0	N	N	N	500	70	N	N	20	700	N
IH3301	45 0 5	114 28 34	2.00	1.00	.50	>2.0	N	N	N	500	70	<2	1,500	<10	300	N
IH3302	44 59 47	114 28 41	3.00	1.50	.70	>2.0	N	N	N	500	50	<2	N	<10	300	N
IH3303	44 59 25	114 29 9	3.00	2.00	1.00	>2.0	N	N	N	500	<50	N	N	50	500	300
IH3306	45 0 6	114 31 8	1.50	1.00	.15	>2.0	N	N	N	200	70	N	N	50	150	N
IH3307	45 0 4	114 31 11	1.00	.30	.15	>2.0	N	N	N	100	<50	N	N	N	500	N
IH3309	44 59 22	114 30 50	2.00	.30	.30	>2.0	N	N	N	200	50	N	N	N	700	N
IH3310	45 0 56	114 32 39	1.00	<.10	.20	>2.0	150	N	>1,000	700	<50	N	2,000	10	1,500	N
IH3313	44 59 58	114 32 46	10.00	.50	.50	>2.0	15	N	200	500	<50	N	N	<10	700	N
IH3315	44 58 19	114 36 24	1.00	N	.20	>2.0	N	N	N	200	<50	N	N	<10	1,500	N
IH3316	44 58 17	114 36 25	1.00	.50	.15	>2.0	N	N	N	150	N	N	N	<10	300	N

Table 4.--Analyses of heavy-mineral-concentrate samples, West Panther Creek and McEleny Additions, River of No Return Wilderness, Idaho--Continued

Sample	La	Mn	Mo	Nb	Ni	Pb	Sc	Sn	Sr	Th	V	W	Y	Zr
IH3161	50	200	300	200	<10	1,500	<10	>2,000	N	1,000	100	500	300	>2,000
IH3162	70	700	150	500	20	1,000	10	300	<200	500	150	300	500	>2,000
IH3163	2,000	1,500	N	150	100	200	30	30	500	N	200	100	500	2,000
IH3164	50	150	N	1,000	N	70	15	>2,000	N	5,000	<20	200	1,500	>2,000
IH3165	>2,000	150	N	200	N	300	50	>2,000	N	>5,000	20	N	5,000	>2,000
IH3166	1,000	300	2,000	100	N	10,000	70	>2,000	N	>5,000	100	700	5,000	>2,000
IH3167	100	100	<10	200	N	200	70	>2,000	N	>5,000	30	N	5,000	>2,000
IH3168	100	200	1,500	500	<10	7,000	<10	>2,000	N	1,500	300	1,000	1,500	>2,000
IH3169	>2,000	300	N	150	N	100	70	>2,000	N	>5,000	20	N	5,000	>2,000
IH3170	70	200	N	500	N	150	30	>2,000	N	5,000	20	<100	3,000	>2,000
IH3171	>2,000	300	50	700	N	200	70	>2,000	N	5,000	20	200	5,000	>2,000
IH3172	200	500	N	300	N	200	70	>2,000	N	>5,000	50	N	5,000	>2,000
IH3173	100	200	100	500	N	500	10	>2,000	N	5,000	20	<100	2,000	>2,000
IH3174	2,000	200	N	100	N	150	70	>2,000	N	>5,000	20	N	>5,000	>2,000
IH3176	1,000	200	300	300	N	1,000	30	>2,000	N	>5,000	20	N	5,000	>2,000
IH3177	1,500	200	N	300	N	150	<10	>2,000	N	5,000	20	<100	2,000	>2,000
IH3178	2,000	150	N	100	N	200	50	>2,000	N	>5,000	30	N	5,000	>2,000
IH3179	300	150	N	500	N	70	15	>2,000	N	2,000	30	100	2,000	>2,000
IH3180	2,000	70	N	50	N	150	70	>2,000	N	>5,000	30	N	5,000	>2,000
IH3181	100	100	N	500	N	150	<10	>2,000	N	1,500	150	500	300	>2,000
IH3182	150	70	N	500	N	70	<10	>2,000	N	5,000	50	100	2,000	>2,000
IH3183	100	300	N	150	N	150	20	>2,000	N	1,000	300	300	700	>2,000
IH3184	100	300	N	200	<10	200	20	1,000	N	N	300	300	700	>2,000
IH3185	2,000	500	N	200	N	70	20	>2,000	N	3,000	150	N	2,000	>2,000
IH3197	500	150	N	<50	N	70	50	1,500	N	5,000	30	N	3,000	>2,000
IH3198	700	150	N	50	N	150	50	>2,000	N	>5,000	30	N	2,000	>2,000
IH3200	200	50	N	70	N	150	70	>2,000	N	>5,000	30	N	5,000	>2,000
IH3201	200	200	N	150	N	100	150	300	N	3,000	50	N	3,000	>2,000
IH3202	2,000	200	N	100	N	100	70	2,000	N	>5,000	30	N	3,000	>2,000
IH3203	700	500	N	150	<10	70	70	300	N	1,500	70	N	3,000	>2,000
IH3204	100	70	N	100	N	70	50	1,500	N	5,000	50	N	2,000	>2,000
IH3205	70	300	N	300	10	70	20	200	N	700	200	N	1,000	>2,000
IH3207	1,000	300	N	100	N	100	20	1,500	N	5,000	100	N	3,000	>2,000
IH3208	70	150	N	70	N	70	20	700	N	3,000	50	N	2,000	>2,000
IH3278	2,000	200	N	300	N	100	70	>2,000	N	5,000	50	N	>5,000	>2,000
IH3279	100	70	N	50	N	100	50	70	N	>5,000	20	N	2,000	>2,000
IH3280	100	200	N	70	N	150	50	500	N	>5,000	50	N	2,000	>2,000
IH3281	>2,000	100	N	100	N	300	50	>2,000	N	>5,000	50	N	>5,000	>2,000
IH3282	>2,000	300	N	1,000	N	200	50	>2,000	N	>5,000	30	150	>5,000	>2,000
IH3283	200	150	N	300	<10	50	<10	500	N	N	300	300	300	1,500
IH3301	70	200	N	70	30	150	30	2,000	N	N	150	N	1,000	>2,000
IH3302	300	300	N	100	30	100	30	>2,000	N	200	100	N	1,000	>2,000
IH3303	700	300	N	100	30	20	20	100	N	N	200	N	500	>2,000
IH3306	700	100	N	70	20	100	50	30	N	N	200	N	1,000	>2,000
IH3307	100	150	N	100	<10	100	50	50	N	N	500	200	700	>2,000
IH3309	70	150	N	70	30	150	50	300	N	N	300	<100	700	>2,000
IH3310	70	100	N	200	30	70	50	150	N	N	1,000	200	300	>2,000
IH3313	70	150	30	150	20	30	30	70	<200	N	300	300	500	>2,000
IH3315	70	50	N	200	N	1,500	70	150	N	N	300	150	300	>2,000
IH3316	100	70	N	70	<10	50	50	70	N	N	200	N	2,000	>2,000

Table 4.--Analyses of heavy-mineral-concentrate samples, West Panther Creek and McEleny Additions, River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Ca	Fe	Mg	Ti	Ag	As	Au	B	Ba	Be	Bi	Co	Cr	Cu
IH3317	44 57 43	114 34 48	15.00	.50	.30	>2.0	N	N	N	50	N	N	N	N	200	<10
IH3318	44 57 44	114 34 50	30.00	.50	.10	>2.0	N	N	N	30	N	N	N	N	50	N

Table 4.--Analyses of heavy-mineral-concentrate samples, West Panther Creek and McEleny Additions, River of No Return Wilderness, Idaho--Continued

Sample	La	Mn	Mo	Nb	Ni	Pb	Sc	Sn	Sr	Th	V	W	Y	Zr
IH3317	300	200	N	100	<10	70	20	200	<200	3,000	150	N	1,000	>2,000
IH3318	700	300	<10	50	<10	N	20	30	1,000	200	100	300	700	>2,000

TABLE 5. Gold in raw panned-concentrate samples, West Panther Creek and McEleny Additions, 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)
IG2095	44 57 27	114 37 20	10.93	N(.05)	N(.5)
IG2096	44 57 33	114 37 26	22.19	N(.02)	N(.5)
IG2097	44 57 34	114 37 26	13.42	.45	6.0
IG2098	45 1 0	114 36 4	6.10	N(.08)	N(.5)
IG2099	45 0 58	114 36 5	5.63	N(.09)	N(.5)
IG2100	45 0 35	114 35 6	6.44	N(.08)	N(.5)
IG2101	45 0 36	114 35 5	5.54	N(.09)	N(.5)
IG2102	45 0 32	114 34 34	4.83	N(.10)	N(.5)
IG2103	45 2 0	114 31 8	7.09	N(.07)	N(.5)
IG2105	45 4 33	114 27 58	5.81	N(.09)	N(.5)
IG2106	45 4 33	114 27 55	4.57	<.11	<.5
IG2112	45 4 13	114 29 21	5.18	N(.10)	N(.5)
IG2114	45 8 23	114 27 42	4.82	.10	.5
IG2115	45 8 23	114 27 39	6.64	1.7	11
IG2116	45 4 39	114 31 27	7.60	N(.07)	N(.5)
IG2117	45 4 39	114 31 29	9.92	N(.05)	N(.5)
IG2118	45 4 38	114 31 33	7.22	N(.07)	N(.5)
IG2119	45 3 17	114 28 40	6.80	N(.07)	N(.5)
IG2120	45 2 36	114 28 29	5.03	1.2	6.0
IG2121	45 2 38	114 28 32	7.19	N(.07)	N(.5)
IG2124	45 1 30	114 29 17	7.63	N(.07)	N(.5)
IG2125	45 1 32	114 29 13	4.37	N(.11)	N(.5)
IG2127	45 0 24	114 28 50	6.03	N(.08)	N(.5)
IG2129	45 9 16	114 32 22	7.37	<.07	<.5
IG2131	45 9 46	114 32 8	3.45	N(.14)	N(.5)
IG2132	45 9 45	114 32 12	5.21	N(.10)	N(.5)
IG2133	45 9 48	114 32 34	8.37	N(.06)	N(.5)
IG2134	45 9 48	114 32 34	7.08	N(.07)	N(.5)
IG3130	44 58 38	114 37 13	17.66	N(.03)	N(.5)
IG3132	44 58 40	114 37 25	12.78	N(.04)	N(.5)
IG3133	44 58 40	114 37 23	13.94	N(.04)	N(.5)
IG3135	44 58 42	114 34 2	14.59	N(.03)	N(.5)
IG3137	44 59 48	114 34 14	10.62	N(.05)	N(.5)
IG3138	44 59 35	114 33 59	18.85	3.7	69
IG3139	44 59 35	114 34 3	11.60	.55	6.4
IG3140	45 0 7	114 34 12	15.42	N(.03)	N(.5)
IG3141	45 2 2	114 34 4	11.95	N(.04)	N(.5)
IG3141	45 2 3	114 34 6	13.98	N(.04)	N(.5)
IG3144	45 1 9	114 34 23	10.22	.30	3.1

TABLE 5. Gold in raw panned-concentrate samples, West Panther Creek and McEleny Additions, Frank Church-River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Weight of concentrate (g)	Au in concentrate (ppm)	Au per pan (μg)
IG3145	45 1 9	114 34 29	15.04	N(.03)	N(.5)
IG3146	45 1 34	114 34 12	14.30	N(.04)	N(.5)
IG3147	45 1 13	114 30 44	12.00	N(.04)	N(.5)
IG3148	45 1 11	114 30 42	14.32	N(.03)	N(.5)
IG3149	45 1 35	114 30 15	10.95	N(.05)	N(.5)
IG3150	45 1 34	114 30 16	16.47	1.4	23
IG3151	45 3 11	114 25 1	10.48	.85	8.9
IG3153	45 4 51	114 25 34	9.21	N(.05)	N(.5)
IG3154	45 4 46	114 25 36	11.40	N(.04)	N(.5)
IG3157	45 2 54	114 33 56	9.04	N(.06)	N(.5)
IG3158	45 2 56	114 33 59	9.03	N(.06)	N(.5)
IG3159	45 2 48	114 34 11	7.85	N(.06)	N(.5)
IG3160	45 5 52	114 27 51	8.28	N(.06)	N(.5)
IG3161	45 5 49	114 27 55	8.54	.10	.85
IG3162	45 6 8	114 26 43	13.09	N(.04)	N(.5)
IG3163	45 6 11	114 26 21	14.36	.15	2.2
IG3164	45 4 30	114 31 1	9.19	N(.05)	N(.5)
IG3165	45 4 26	114 31 3	13.20	N(.04)	N(.5)
IG3166	45 3 39	114 30 16	8.68	N(.06)	N(.5)
IG3167	45 3 40	114 30 9	9.38	.05	.5
IG3168	45 3 32	114 29 22	9.31	N(.05)	N(.5)
IG3169	45 3 26	114 29 29	12.03	.70	8.4
IG3170	45 6 21	114 29 50	9.79	.05	.5
IG3171	45 6 16	114 29 44	17.08	N(.03)	N(.5)
IG3172	45 7 3	114 29 56	8.86	N(.06)	N(.5)
IG3173	45 7 2	114 29 48	12.00	N(.04)	N(.5)
IG3174	45 7 29	114 29 47	7.56	N(.07)	N(.5)
IG3176	45 7 59	114 29 20	9.14	N(.05)	N(.5)
IG3177	45 8 10	114 29 18	7.43	N(.07)	N(.5)
IG3178	45 9 1	114 28 35	8.92	N(.06)	N(.5)
IG3179	45 8 59	114 28 31	5.52	N(.09)	N(.5)
IG3180	45 9 19	114 28 11	6.09	N(.08)	N(.5)
IG3181	45 9 28	114 27 0	16.40	N(.03)	N(.5)
IG3182	45 9 31	114 27 2	6.63	N(.08)	N(.5)
IG3183	45 9 46	114 26 18	7.92	N(.06)	N(.5)
IG3184	45 9 55	114 25 34	15.16	N(.03)	N(.5)
IG3185	45 9 54	114 25 40	9.25	N(.05)	N(.5)
IG3197	45 10 43	114 31 49	9.16	N(.05)	N(.5)
IG3198	45 10 44	114 31 43	16.94	N(.03)	N(.5)
IG3200	45 11 31	114 30 54	14.11	N(.04)	N(.5)
IG3201	45 12 9	114 30 23	8.38	.10	.84

TABLE 5. Gold in raw panned-concentrate samples, West Panther Creek and McEleny Additions, Frank Church-River of No Return Wilderness, Idaho--Continued

Sample	Latitude	Longitude	Weight of concentrate (g)	Au in concentrate (ppm)	Au per pan (μg)
IG3202	45 12 7	114 30 17	15.41	N(.03)	N(.5)
IG3203	45 12 27	114 29 58	13.34	N(.04)	N(.5)
IG3204	45 12 25	114 29 56	12.00	N(.04)	N(.5)
IG3205	45 12 38	114 29 12	12.30	.04	.5
IG3207	45 12 52	114 28 10	8.10	N(.06)	N(.5)
IG3208	45 12 54	114 28 14	16.45	N(.03)	N(.5)
IG3278	45 6 44	114 31 21	12.20	N(.04)	N(.5)
IG3279	45 4 17	114 32 26	6.47	N(.08)	N(.5)
IG3280	45 4 53	114 32 32	7.03	N(.07)	N(.5)
IG3281	45 5 10	114 32 1	5.46	N(.09)	N(.5)
IG3282	45 5 27	114 31 12	7.85	N(.06)	N(.5)
IG3283	45 2 4	114 23 16	11.06	N(.05)	N(.5)
IG3298	45 1 32	114 26 54	12.54	N(.04)	N(.5)
IG3299	45 1 9	114 26 51	6.50	N(.08)	N(.5)
IG3301	45 0 5	114 28 34	20.07	1.2	24
IG3302	44 59 47	114 28 41	12.44	N(.04)	N(.5)
IG3303	44 59 25	114 29 9	10.96	N(.05)	N(.5)
IG3306	45 0 6	114 31 8	10.59	N(.05)	N(.5)
IG3307	45 0 4	114 31 11	12.18	.30	3.7
IG3309	44 59 22	114 30 50	16.92	N(.03)	N(.5)
IG3310	45 0 56	114 32 39	6.69	N(.07)	N(.5)
IG3313	45 59 58	114 32 46	12.77	.75	9.6
IG3315	44 58 19	114 36 24	12.79	N(.04)	N(.5)
IG3316	44 58 17	114 36 25	10.32	N(.05)	N(.5)
IG3317	44 57 43	114 34 48	13.27	N(.04)	N(.5)
IG3318	44 57 44	114 34 50	11.73	N(.04)	N(.5)