

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Analytical results and sample locality maps
of stream-sediment, heavy-mineral-concentrate, and rock samples
from the Little Jacks Creek (ID-111-006), Big Jacks Creek (ID-111-007C),
Duncan Creek (ID-111-007B), and Upper Deep Creek (ID-111-044)
Wilderness Study Areas, Owyhee County, Idaho

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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.

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STUDIES RELATED TO WILDERNESS

Bureau of Land Management Wilderness Study Areas

The Federal Land Policy and Management Act (Public Law 94-579, October 21, 1976) requires the U.S. Geological Survey and the U.S. Bureau of Mines to conduct mineral surveys on certain areas to determine their mineral values, if any. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of geochemical surveys of the Little Jacks Creek (ID-111-06), Big Jacks Creek (ID-111-07C), Duncan Creek (ID-111-07B), and the Upper Deep Creek (ID-111-44) Bureau of Land Management Wilderness Study Areas, Owyhee County, Idaho.

INTRODUCTION

In July 1985, the U.S. Geological Survey conducted reconnaissance geochemical surveys of the Little Jacks Creek (ID-111-06), Big Jacks Creek (ID-111-07C), Duncan Creek (ID-111-07B), and Upper Deep Creek (ID-111-44) Bureau of Land Management Wilderness Study Area, Owyhee County, Idaho.

Bureau of Land Management Wilderness Study Areas in Owyhee County, Idaho covered in this report are:

	SIZE		
	Mi ²	Km ²	Acres
Wilderness Study Area			
Little Jacks Creek	53	138	34,000
Big Jacks Creek	78	203	49,875
Duncan Creek	15	39	9,400
Upper Deep Creek	9	23	5,700

The Little Jacks Creek, Big Jacks Creek, and Duncan Creek Wilderness Study Areas are contiguous areas west of State Highway 51 in the western half of Owyhee County, southwestern Idaho, and lie about 31 mi (50 km) southwest of Mountain Home, Idaho (fig. 1). The Upper Deep Creek Wilderness Study Area lies about 24 mi (38 km) west of those areas (fig. 2). Access to the Little Jacks Creek and Big Jacks Creek Wilderness Study Areas is provided on the north by an improved light duty road that connects with State Highway 78 near Grandview, Idaho. This road continues to the southwest to near the Upper Deep Creek Wilderness Study Area. Access to the Duncan Creek and eastern parts of the Little Jacks Creek and Big Jacks Creek Wilderness Study Areas is provided by several unimproved dirt roads that connect to State Highway 51. Further access to all areas may be by additional unimproved dirt roads and by jeep trails.

The study areas are located on the Owyhee Upland, an extensive volcanic plateau south of the western Snake River Plain. The areas are underlain by Miocene rhyolitic rocks locally covered by a thin veneer of basalt. The rock units are described in detail in Ekren and others (1984). The geologic map of Owyhee County, Idaho, west of longitude 116°W. (Ekren and others, 1981) includes these study areas.

The ground surface of the Upper Deep Creek study area slopes gently southward from a maximum elevation of 5,760 ft (1,756 m) at the northern end down to 4,800 ft (1,463 m) along Upper Deep Creek at the southern end. Topographic relief in the Duncan Creek, Little Jacks Creek, and Big Jacks

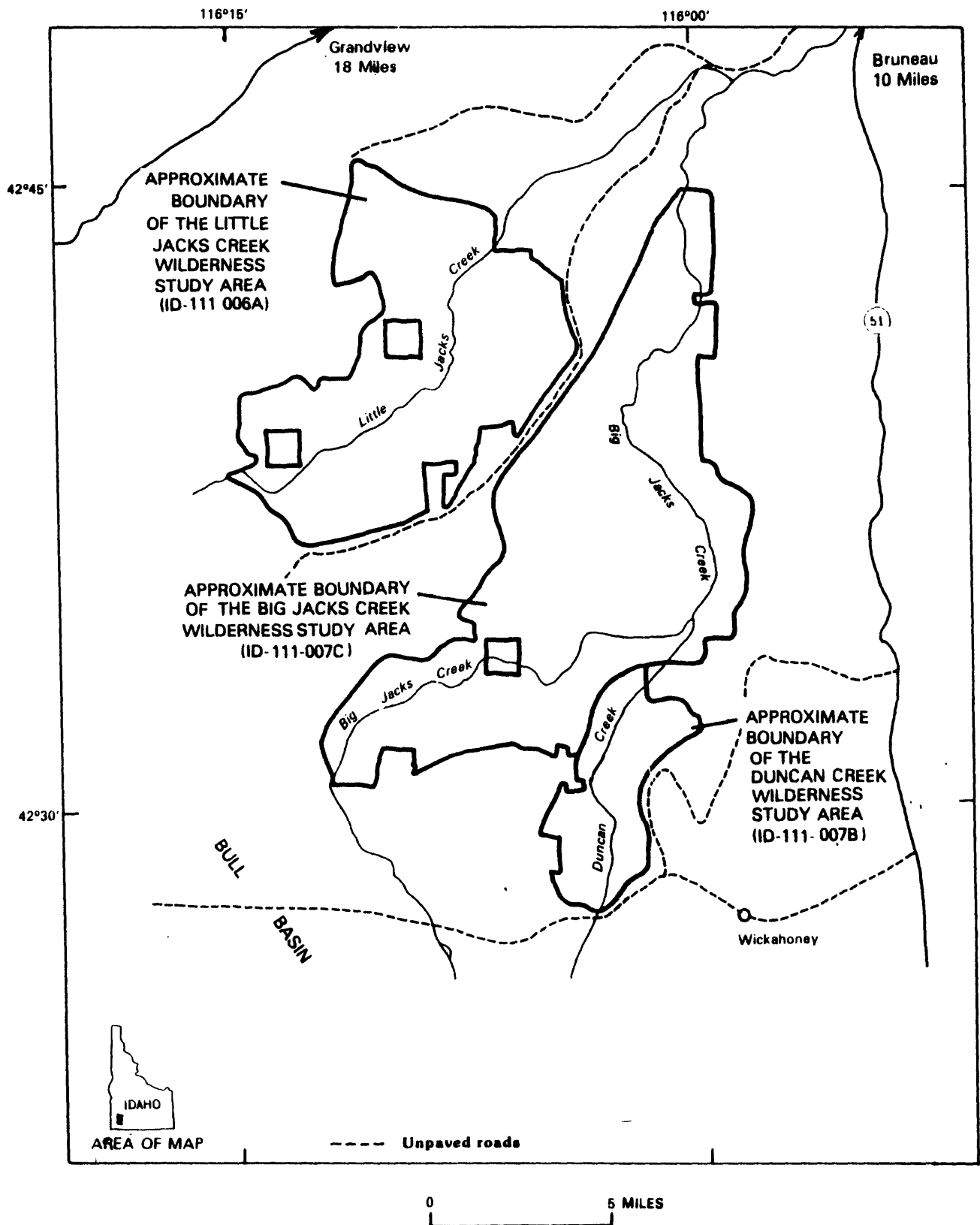


Figure 1. Index map showing locations of the Little Jacks Creek, Big Jacks Creek, and Duncan Creek Wilderness Study Areas, Owyhee County, Idaho.

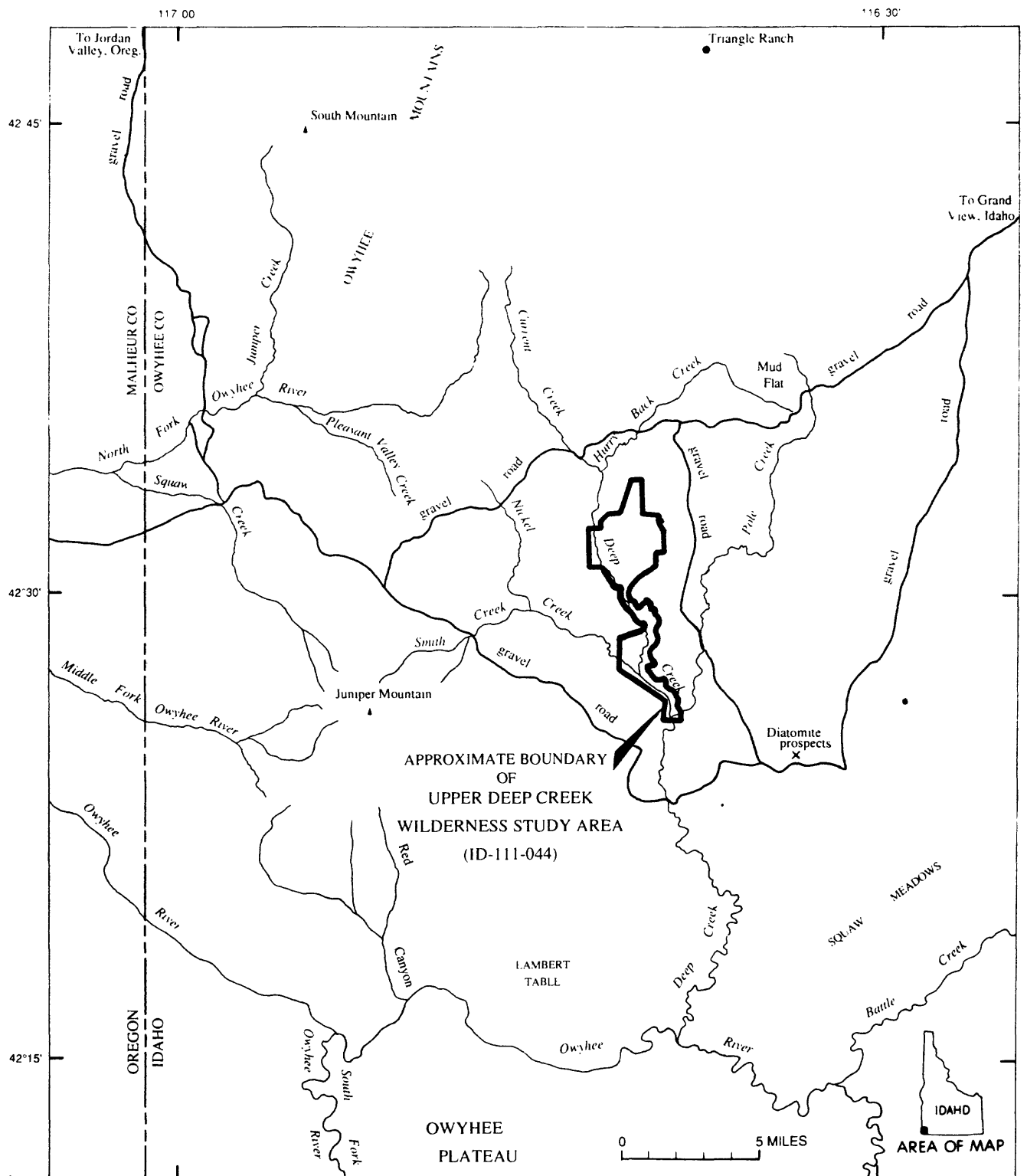


Figure 2. Index map showing location of Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho.

Creek study areas is about 1,300 ft (396 m), 2,300 ft (701 m), and 2,900 ft (884 m), respectfully. These areas have maximum elevations close to 5,900 ft (1,798 m). Canyons cut by Little Jacks, Big Jacks, and Duncan Creeks are steep and rugged with heights of about 800 ft (244 m) along Little Jacks and Big Jacks Creeks and about 500 ft (152 m) along Duncan Creek. Valley sides along Upper Deep Creek are relatively less rugged and are generally about 400 ft (122 m) in height. The climate is arid to semiarid.

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

Analyses of unaltered or unmineralized rock samples provide background geochemical data for individual rock units. On the other hand, analyses of altered or mineralized rocks, where present, may provide useful geochemical information about the major- and trace-element assemblages associated with a mineralizing system.

Sample Collection

Samples were collected at 182 sites (table 1; plates 1 and 2). At nearly all of those sites, both a stream-sediment sample and a heavy-mineral-concentrate sample were collected. Where suitable outcrop was available, rock samples were collected. Average sampling density was about one sample site per .9 mi² for the stream sediments and heavy-mineral concentrates, and about one sample site per 5 mi² for the rocks. The area of the drainage basins sampled ranged from .5 mi² to 2 mi².

TABLE 1.--Number of sample sites for each Wilderness Study Area

Wilderness Study Area	Number of Sites
Little Jacks Creek	59
Big Jacks Creek	81
Duncan Creek	17
Upper Deep Creek	25

Stream-sediment samples

The stream-sediment samples consisted of active alluvium collected primarily from first-order (unbranched) and second-order (below the junction of two first-order) streams as shown on USGS topographic maps (scale = 1:24,000). Each sample was composited from several localities within an area that may extend as much as 20 ft from the site plotted on the map.

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.

Rock samples

Rock samples were collected from outcrops or exposures in the vicinity of the plotted site location. Samples were collected from unaltered and/or altered and/or mineralized rocks.

Sample Preparation

The stream-sediment samples were air dried, 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 air drying, 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 archival storage. The third fraction (the least magnetic material which may include 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 0.2 ampere to remove the magnetite and ilmenite, and a current of 0.6 ampere to split the remainder of the sample into paramagnetic and nonmagnetic fractions.

Rock samples were crushed and then pulverized to minus 0.15 mm with ceramic plates.

Sample Analysis

Spectrographic method

The stream-sediment, heavy-mineral-concentrate, and rock samples were analyzed for 31 elements using semiquantitative, direct-current arc emission spectrographic methods. The analyses of heavy-mineral-concentrate samples were performed by analysts in the Branch of Exploration Geochemistry using the method of the Grimes and Marranzino (1968); analyses for stream-sediment and rock samples were performed by analysts in the Branch of Analytical Chemistry

using a modification of the Myers and others method (1961) by Crock and others (1987). The elements analyzed and their lower limits of determination are listed in table 2. For arsenic (As), gold (Au), cadmium (Cd), lanthanum (La), and thorium (Th), the lower limit of determination of the two analytical methods varies. The values in the parentheses are the limits of determination for Myers and others (1961). Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (iron, magnesium, calcium, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram). Analytical data for samples from the study areas discussed in this report are listed in tables 4-15.

Chemical methods

Other methods of analysis used on samples from the Little Jacks Creek, Big Jacks Creek, Duncan Creek, and Upper Deep Creek Wilderness Study Areas are summarized in table 3.

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, 1977).

DESCRIPTION OF DATA TABLES

Tables 4-15 list the results of analyses for the stream-sediment, heavy-mineral concentrate, and rock samples for each of the four areas, respectively. For the tables, the data are arranged so that column 1 contains the USGS-assigned sample numbers. These numbers correspond to the numbers shown on the site location maps (plates 1 and 2). Columns in which the element headings show the letter "s" below the element symbol are emission spectrographic analyses; "aa" indicates atomic absorption analyses; "icp" indicates inductively coupled plasma-atomic emission spectroscopy. A letter "N" in the tables indicates that a given element was looked for but not detected at the lower limit of determination shown for that element in table 2. For emission spectrographic analyses, a "less than" symbol (<) entered in the tables in front of the lower limit of determination indicates that an element was observed but was below the lowest reporting value. For AA and ICP analyses, a "less than" symbol (<) entered in the tables in front of the lower limit of determination indicates that an element was below the lowest reporting value. 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. If an element was not looked for

in a sample, two dashes (--) are entered in place of an analytical value. Because of the formatting used in the computer program that produced tables 4-15, some of the elements listed in these tables (Fe, Mg, Ca, Ti, Ag, and Be) carry one or more nonsignificant digits to the right of the significant digits. The analysts did not determine these elements to the accuracy suggested by the extra zeros.

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TABLE 2.--Limits of determination for the spectrographic analysis of rocks and stream sediments, based on a 10-mg sample

[The values shown are the lower limits of determination assigned by the Grimes and Marranzino method, except for those values in parentheses, which are the lower values assigned by the Myers and others method. 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.]

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	(700)	10,000
Gold (Au)	10	(15)	500
Boron (B)	10		2,000
Barium (Ba)	20		5,000
Beryllium (Be)	1		1,000
Bismuth (Bi)	10		1,000
Cadmium (Cd)	20	(30)	500
Cobalt (Co)	5		2,000
Chromium (Cr)	10		5,000
Copper (Cu)	5		20,000
Lanthanum (La)	20	(30)	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	(200)	2,000

TABLE 3.--Chemical methods used

[AA = atomic absorption; ICP = inductively coupled plasma spectroscopy]

Element or constituent determined	Sample type	Method	Determination limit (micrograms/gram or ppm)	Reference
Gold (Au)	Rocks and sediments	AA	0.01	<u>Modification of Thompson and others, 1968, by Crock and others, 1987.</u>
Mercury (Hg)	Rocks and sediments	AA	.02	Koirtiyohann and Khalil, 1976.
Arsenic (As)	Rocks and sediments	ICP	5	Crock and others, 1987.
Antimony (Sb)		ICP	2	
Zinc (Zn)		ICP	2	
Bismuth (Bi)		ICP	2	
Cadmium (Cd)		ICP	.1	

Table 4. Results of analyses of stream-sediment samples from the Little Jacks Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-ppt. S	Hg-ppt. S	Cd-ppt. S	Tl-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Pb-ppm S
LJ001S	42 42 58	116 5 21	5.0	.7	2.0	.70	700	N	N	N	10	1,500
LJ002S	42 42 38	116 4 37	7.0	1.0	3.0	.50	700	N	N	N	20	1,000
LJ003S	42 42 9	116 4 23	3.0	1.0	2.0	.70	700	N	N	N	15	1,500
LJ004S	42 40 3	116 4 3	3.0	1.0	2.0	.30	700	N	N	N	20	700
LJ005S	42 39 57	116 4 44	5.0	.7	3.0	.50	1,000	N	N	N	20	1,500
LJ006S	42 40 16	116 4 38	3.0	1.0	2.0	.30	700	N	N	N	20	700
LJ007S	42 41 6	116 4 28	3.0	.7	2.0	.30	700	N	N	N	20	1,000
LJ008S	42 41 32	116 4 22	7.0	.7	2.0	.70	1,000	N	N	N	20	1,500
LJ009S	42 37 18	116 9 12	3.0	.5	1.5	.30	700	N	N	N	20	1,000
LJ010S	42 37 33	116 8 55	3.0	.7	1.5	.50	700	N	N	N	20	1,000
LJ011S	42 37 35	116 8 55	3.0	.7	1.5	.30	700	N	N	N	15	1,000
LJ012S	42 37 38	116 7 55	3.0	.7	1.5	.30	700	N	N	N	20	1,000
LJ013S	42 36 12	116 12 3	5.0	.3	1.5	.70	500	N	N	N	15	1,500
LJ014S	42 37 24	116 12 55	5.0	.7	3.0	.70	500	N	N	N	15	1,500
LJ015S	42 37 39	116 13 51	3.0	1.0	1.5	.30	500	N	N	N	20	700
LJ016S	42 38 5	116 13 2	5.0	.7	2.0	.30	500	N	N	N	20	700
LJ017S	42 38 50	116 12 28	5.0	1.0	2.0	.30	500	N	N	N	20	700
LJ018S	42 38 46	116 11 31	3.0	.5	1.5	.30	700	N	N	N	20	1,500
LJ019S	42 37 55	116 11 35	3.0	.5	1.5	.30	500	N	N	N	20	1,000
LJ020S	42 39 52	116 12 45	5.0	.5	1.5	.50	500	N	N	N	15	1,500
LJ021S	42 39 2	116 11 41	5.0	.5	1.5	.30	500	N	N	N	20	1,500
LJ022S	42 39 11	116 10 47	5.0	.3	3.0	.30	300	N	N	N	20	1,500
LJ023S	42 38 58	116 10 29	5.0	.5	2.0	.50	300	N	N	N	20	2,000
LJ024S	42 38 58	116 10 33	3.0	.7	1.5	.30	500	N	N	N	20	700
LJ025S	42 40 44	116 11 1	3.0	.7	1.5	.30	500	N	N	N	20	700
LJ026S	42 39 38	116 11 2	5.0	.7	2.0	.30	500	N	N	N	20	1,500
LJ027S	42 39 14	116 9 49	3.0	.7	1.5	.30	300	N	N	N	20	1,500
LJ028S	42 39 42	116 9 45	3.0	.7	1.5	.30	500	N	N	N	20	1,500
LJ029S	42 39 58	116 9 12	3.0	.5	2.0	.30	500	N	N	N	15	1,500
LJ030S	42 39 56	116 9 1	3.0	.7	2.0	.50	700	N	N	N	15	1,500
LJ031S	42 38 41	116 8 57	3.0	.5	1.5	.20	700	N	N	N	15	700
LJ032S	42 39 45	116 8 1	3.0	.7	1.5	.30	500	N	N	N	15	700
LJ033S	42 40 27	116 7 57	3.0	.5	1.5	.30	500	N	N	N	15	700
LJ034S	42 41 4	116 7 51	3.0	.7	1.5	.15	300	N	N	N	10	300
LJ035S	42 38 50	116 7 46	2.0	.5	1.5	.30	300	N	N	N	15	500
LJ036S	42 41 36	116 6 26	2.0	.7	1.5	.30	300	N	N	N	15	700
LJ037S	42 40 59	116 5 24	2.0	.7	1.5	.30	500	N	N	N	15	700
LJ038S	42 41 1	116 5 25	3.0	.7	1.5	.30	700	N	N	N	15	700
LJ039S	42 41 7	116 6 4	2.0	.7	1.5	.30	500	N	N	N	15	700
LJ040S	42 40 29	116 6 21	2.0	.7	1.5	.30	700	N	N	N	15	700
LJ041S	42 42 0	116 5 44	1.5	.7	1.5	.30	300	N	N	N	15	700
LJ042S	42 42 3	116 5 44	2.0	.7	1.5	.30	300	N	N	N	15	700
LJ043S	42 39 13	116 5 37	2.0	.7	1.5	.30	300	N	N	N	15	700
LJ044S	42 40 6	116 5 50	2.0	.7	1.5	.30	700	N	N	N	15	700
LJ045S	42 41 55	116 5 18	2.0	.7	1.5	.30	500	N	N	N	15	700

Table 4. Results of analyses of stream-sediment samples from the Little Jacks Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
LJ001S	1.5	N	N	15	50	15	50	N	30	70	20	N	15	N
LJ002S	1.5	N	N	10	50	15	70	N	30	15	20	N	15	N
LJ003S	1.5	N	N	10	50	20	70	N	30	15	15	N	15	N
LJ004S	1.5	N	N	10	70	20	50	N	<20	15	15	N	15	N
LJ005S	1.5	N	N	15	70	20	70	N	20	15	15	N	15	N
LJ006S	1.5	N	N	10	50	20	30	N	<20	15	15	N	15	N
LJ007S	1.5	N	N	10	70	15	70	N	<20	15	15	N	10	N
LJ008S	1.5	N	N	15	50	15	70	N	50	15	15	N	15	N
LJ009S	1.5	N	N	10	70	30	50	N	<20	15	15	N	15	N
LJ010S	1.5	N	N	10	100	30	50	N	30	15	15	N	15	N
LJ011S	1.5	N	N	15	30	30	50	N	20	15	15	N	15	N
LJ012S	1.5	N	N	15	50	30	50	N	<20	15	15	N	15	N
LJ013S	1.5	N	N	10	30	20	70	5	70	10	15	N	15	N
LJ014S	1.5	N	N	10	100	20	70	N	30	15	20	N	15	N
LJ015S	1.5	N	N	10	100	30	50	N	20	20	15	N	15	N
LJ016S	1.5	N	N	15	100	30	50	N	<20	20	15	N	15	N
LJ017S	1.5	N	N	15	200	30	50	N	<20	30	15	N	15	N
LJ018S	1.5	N	N	7	30	20	70	N	20	15	15	N	15	N
LJ019S	1.5	N	N	7	30	30	50	N	<20	15	15	N	15	N
LJ020S	1.5	N	N	10	70	20	70	N	30	15	20	N	15	N
LJ021S	1.5	N	N	7	30	20	70	N	30	15	20	N	15	N
LJ022S	1.5	N	N	7	50	20	70	<5	30	10	15	N	15	N
LJ023S	1.5	N	N	7	30	20	70	N	30	10	20	N	15	N
LJ024S	1.0	N	N	10	70	30	50	N	<20	15	15	N	15	N
LJ025S	1.0	N	N	10	70	30	50	N	<20	20	15	N	15	N
LJ026S	1.5	N	N	10	70	20	70	N	20	15	20	N	15	N
LJ027S	1.5	N	N	7	50	30	50	N	20	15	15	N	15	N
LJ028S	1.5	N	N	7	30	20	50	N	<20	10	15	N	10	N
LJ029S	1.5	N	N	10	30	15	70	N	<20	10	20	N	10	N
LJ030S	1.5	N	N	15	30	20	70	N	30	15	15	N	15	N
LJ031S	1.5	N	N	15	30	15	50	N	<20	10	15	N	7	N
LJ032S	1.5	N	N	7	30	15	30	N	<20	10	15	N	7	N
LJ033S	1.0	N	N	7	30	15	50	N	<20	10	15	N	10	N
LJ034S	2.0	N	N	<5	<10	7	70	N	20	<5	15	N	7	N
LJ035S	1.5	N	N	7	30	15	50	N	<20	10	15	N	7	N
LJ036S	1.5	N	N	7	30	15	50	N	<20	7	15	N	7	N
LJ037S	1.5	N	N	7	30	10	50	N	<20	7	15	N	7	N
LJ038S	1.5	N	N	10	30	7	50	N	30	10	15	N	7	N
LJ039S	1.5	N	N	10	30	10	30	N	<20	10	15	N	7	N
LJ040S	1.5	N	N	10	30	10	30	N	<20	10	15	N	7	N
LJ041S	1.5	N	N	7	30	10	30	N	<20	7	15	N	7	N
LJ042S	1.5	N	N	7	30	15	70	N	<20	15	15	N	7	N
LJ043S	1.5	N	N	7	30	15	70	N	<20	10	15	N	7	N
LJ044S	1.5	N	N	10	30	7	30	N	20	10	15	N	7	N
LJ045S	1.5	N	N	7	30	15	30	N	20	10	15	N	7	N

Table 4. Results of analyses of stream-sediment samples from the Little Jacks Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
LJ001S	500	100	N	30	N	300	N	<.1	<.02	<5	<2	.4	2	61
LJ002S	500	70	N	30	N	300	N	<.1	<.02	<5	4	.6	<2	66
LJ003S	500	70	N	30	N	300	N	<.1	<.02	<5	<2	.6	2	69
LJ004S	500	70	N	20	N	200	N	<.1	<.02	<5	3	.5	<2	67
LJ005S	700	150	N	30	N	300	N	<.1	<.02	<5	<2	.5	<2	58
LJ006S	500	100	N	20	N	200	N	<.1	<.02	<5	<2	.6	<2	65
LJ007S	700	100	N	30	N	300	N	<.1	<.02	5	<2	.4	<2	55
LJ008S	500	150	N	30	N	500	N	<.1	<.02	<5	3	.6	<2	67
LJ009S	700	100	N	20	N	200	N	<.1	.04	6	<2	.8	<2	82
LJ010S	500	100	N	30	N	300	N	<.1	.02	<5	<2	.5	<2	68
LJ011S	500	100	N	30	N	300	N	<.1	.04	5	<2	.6	<2	67
LJ012S	500	100	N	30	N	200	N	<.1	.04	6	<2	.6	<2	65
LJ013S	500	150	N	50	N	300	N	<.1	<.02	5	3	.5	<2	67
LJ014S	500	150	N	50	N	200	N	<.2	<.02	5	3	.4	<2	54
LJ015S	300	100	N	30	N	200	N	<.1	.03	6	<2	.6	<2	72
LJ016S	300	100	N	30	N	200	N	<.1	.03	5	<2	.7	<2	72
LJ017S	300	100	N	20	N	200	N	<.1	.03	6	<2	.7	<2	68
LJ018S	500	100	N	30	N	300	N	<.1	.05	<5	<2	.7	<2	67
LJ019S	500	70	N	20	N	200	N	<.1	.05	<5	<2	.8	<2	79
LJ020S	300	70	N	70	N	300	N	<.1	.03	5	<2	.5	<2	56
LJ021S	500	70	N	30	N	300	N	<.1	.03	<5	<2	.5	<2	64
LJ022S	700	70	N	50	N	300	N	<.1	.02	<5	<2	.4	<2	50
LJ023S	700	70	N	50	N	300	N	<.1	.02	<5	<2	.5	<2	55
LJ024S	500	70	N	15	N	150	N	<.1	.03	5	2	.6	<2	55
LJ025S	500	70	N	20	N	200	N	<.1	.03	5	<2	.6	<2	55
LJ026S	700	70	N	50	N	300	N	<.1	.03	<5	<2	.5	<2	57
LJ027S	700	100	N	30	N	150	N	<.1	.04	6	<2	.7	<2	73
LJ028S	500	70	N	30	N	200	N	<.1	.04	<5	2	.6	<2	67
LJ029S	700	70	N	30	N	200	N	<.1	.03	<5	<2	.4	<2	51
LJ030S	700	100	N	30	N	300	N	<.1	.03	<5	2	.5	<2	58
LJ031S	300	70	N	30	N	150	N	<.1	.03	8	<2	.3	<2	50
LJ032S	300	70	N	30	N	150	N	<.1	.03	8	<2	.4	<2	54
LJ033S	300	70	N	30	N	150	N	<.1	.04	7	<2	.4	<2	55
LJ034S	150	20	N	30	N	200	N	<.1	<.02	<5	<2	.2	<2	34
LJ035S	200	50	N	20	N	150	N	<.1	.03	7	<2	.4	<2	56
LJ036S	200	50	N	20	N	150	N	<.1	<.02	<5	<2	.3	<2	51
LJ037S	200	50	N	20	N	150	N	<.1	.02	6	<2	.4	<2	55
LJ038S	200	70	N	30	N	150	N	<.1	.02	<5	2	.3	<2	60
LJ039S	200	70	N	30	N	150	N	<.1	.02	6	<2	.4	<2	56
LJ040S	200	70	N	30	N	150	N	<.1	<.02	<5	<2	.3	<2	51
LJ041S	300	70	N	30	N	200	N	<.1	.02	<5	<2	.3	<2	56
LJ042S	200	70	N	30	N	150	N	<.1	.03	<5	<2	.5	<2	66
LJ043S	200	70	N	30	N	150	N	<.1	<.02	<5	<2	.4	<2	62
LJ044S	200	70	N	30	N	200	N	<.1	<.02	<5	<2	.3	<2	48
LJ045S	200	70	N	20	N	150	N	<.1	.02	<5	<2	.4	<2	68

Table 4. Results of analyses of stream-sediment samples from the Little Jacks Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Ce-pct. S	Ti-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
LJ046S	42 43 11	116 5 55	2.0	.7	1.5	.30	500	N	N	N	15	700
LJ047S	42 42 48	116 7 0	2.0	.7	1.5	.30	700	N	N	N	15	700
LJ048S	42 43 3	116 6 52	2.0	.7	1.5	.30	700	N	N	N	15	700
LJ049S	42 43 59	116 6 26	3.0	1.0	1.5	.30	300	N	N	N	15	700
LJ050S	42 44 27	116 8 8	3.0	1.0	1.5	.30	500	N	N	N	15	700
LJ051S	42 44 36	116 8 55	3.0	.7	1.5	.30	500	<.5	<700	<15	15	700
LJ052S	42 44 55	116 10 25	2.0	.7	1.5	.30	500	<.5	<700	<15	15	700
LJ053S	42 44 12	116 10 35	1.5	.7	1.0	.30	300	<.5	<700	<15	15	700
LJ054S	42 44 0	116 9 27	3.0	.7	1.0	.20	300	<.5	<700	<15	15	700
LJ055S	42 43 52	116 9 30	2.0	.7	1.5	.20	300	<.5	<700	<15	15	700
LJ056S	42 43 27	116 11 7	2.0	.7	1.0	.30	300	<.5	<700	<15	15	700
LJ057S	42 41 27	116 8 7	3.0	.7	1.0	.30	300	<.5	<700	<15	15	700
LJ058S	42 41 40	116 8 5	3.0	.7	1.5	.30	300	<.5	<700	<15	15	700
LJ059S	42 42 42	116 7 48	2.0	.7	1.5	.30	300	<.5	<700	<15	15	700

Table 4. Results of analyses of stream-sediment samples from the Little Jacks Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Re-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
LJ046S	1.5	N	N	7	30	7	50	N	<20	10	15	N	7	N
LJ047S	1.5	N	N	10	30	7	50	N	20	15	15	N	7	N
LJ048S	1.5	N	N	7	30	10	70	N	<20	15	15	N	7	N
LJ049S	1.5	N	N	7	30	7	30	N	<20	15	15	N	10	N
LJ050S	1.5	N	N	10	70	7	50	N	20	15	15	N	10	N
LJ051S	1.5	<10	<30	7	30	7	70	N	30	10	15	<100	7	<10
LJ052S	1.5	<10	<30	7	30	7	30	N	<20	10	15	<100	7	<10
LJ053S	1.5	<10	<30	7	70	7	50	N	<20	10	15	<100	7	<10
LJ054S	1.5	<10	<30	7	30	7	30	N	<20	10	15	<100	7	<10
LJ055S	1.5	<10	<30	7	30	10	50	<5	<20	10	15	<100	7	<10
LJ056S	1.5	<10	<30	10	30	7	30	N	<20	10	15	<100	7	<10
LJ057S	1.5	<10	<30	7	30	7	70	<5	30	15	15	<100	7	<10
LJ058S	1.5	<10	<30	7	30	7	70	<5	30	10	15	<100	10	<10
LJ059S	1.5	<10	<30	7	30	7	70	<5	30	7	15	<100	7	<10

Table 4. Results of analyses of stream-sediment samples from the Little Jacks Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
LJ046S	200	70	N	30	N	150	N	<.1	<.02	<5	<2	.3	<2	57
LJ047S	200	70	N	30	N	150	N	<.1	.03	<5	<2	.3	<2	52
LJ048S	200	70	N	30	N	150	N	<.1	.03	<5	<2	.4	2	70
LJ049S	200	70	N	30	N	150	N	<.1	<.02	<5	<2	.4	<2	60
LJ050S	150	70	N	30	N	150	N	<.1	<.02	<5	<2	.5	<2	57
LJ051S	200	50	<50	30	<200	150	<200	<.1	.02	<5	<2	.4	<2	58
LJ052S	200	50	<50	20	<200	150	<200	<.1	.03	<5	<2	.5	<2	62
LJ053S	200	50	<50	20	<200	150	<200	<.1	.02	<5	<2	.3	<2	54
LJ054S	200	50	<50	20	<200	150	<200	<.1	<.02	<5	<2	.3	<2	63
LJ055S	200	50	<50	30	<200	150	<200	<.1	.03	<5	<2	.4	<2	55
LJ056S	200	70	<50	30	<200	150	<200	<.1	<.02	<5	<2	.4	<2	55
LJ057S	200	70	<50	30	<200	150	<200	<.1	<.02	<5	<2	.3	<2	60
LJ058S	150	70	<50	30	<200	150	<200	<.1	.02	<5	<2	.4	<2	65
LJ059S	150	30	<50	30	<200	200	<200	<.1	<.02	<5	2	.2	<2	45

Table 5. Results of analyses of heavy-mineral-concentrate samples from the Little Jacks Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Ca-pct. S	Fl-pct. S	Mn-ppt S	Ag-ppt S	As-ppt S	Au-ppt S	B-ppt S	Ba-ppt S
LJ001C3	42 42 58	116 5 21	1.0	1.00	5	1.00	700	N	N	N	30	1,500
LJ002C3	42 42 38	116 4 37	.5	.30	5	1.50	200	N	N	N	50	5,000
LJ003C3	42 42 9	116 4 23	.7	.50	5	2.00	500	N	N	N	70	1,000
LJ004C3	42 40 3	116 4 3	3.0	1.50	7	>2.00	1,000	N	N	N	100	700
LJ005C3	42 39 57	116 4 44	1.5	1.00	7	>2.00	700	N	N	N	100	1,000
LJ006C3	42 40 16	116 4 38	3.0	.70	5	>2.00	1,000	N	N	N	100	500
LJ008C3	42 41 32	116 4 22	.5	.20	5	2.00	200	N	N	N	70	1,000
LJ009C3	42 37 18	116 9 12	1.0	.30	2	>2.00	300	N	N	N	100	1,000
LJ010C3	42 37 33	116 38 55	1.0	.50	2	>2.00	300	N	N	N	70	1,000
LJ011C3	42 37 35	116 38 55	1.0	.10	3	>2.00	500	N	N	N	50	1,000
LJ012C3	42 37 38	116 7 55	1.0	.15	2	>2.00	500	N	N	N	50	1,500
LJ013C3	42 36 12	116 12 3	.7	.10	5	.70	200	N	N	N	50	3,000
LJ015C3	42 37 39	116 13 51	.5	.50	7	1.00	200	N	N	N	50	500
LJ017C3	42 38 50	116 12 28	.5	.20	7	.70	200	N	N	N	50	700
LJ018C3	42 38 46	116 11 31	.5	.15	5	1.00	300	N	N	N	70	1,500
LJ019C3	42 37 55	116 11 35	.7	.20	5	2.00	300	N	N	N	100	1,000
LJ020C3	42 39 52	116 12 45	.7	.50	5	2.00	300	N	N	N	70	1,000
LJ021C3	42 39 2	116 11 41	.5	.20	2	2.00	300	N	N	N	100	700
LJ022C3	42 39 11	116 10 47	1.5	1.00	5	>2.00	500	N	N	N	70	700
LJ023C3	42 38 58	116 10 29	.3	.05	5	2.00	200	N	N	N	50	2,000
LJ024C3	42 38 58	116 10 33	.5	.10	2	1.00	200	N	N	N	50	2,000
LJ025C3	42 40 44	116 11 1	1.5	.30	2	>2.00	300	N	N	N	100	500
LJ026C3	42 39 38	116 11 2	1.5	1.00	5	>2.00	500	N	N	N	100	1,000
LJ027C3	42 39 14	116 9 49	.5	.15	5	2.00	300	N	N	N	150	2,000
LJ028C3	42 39 42	116 9 45	1.0	.15	3	2.00	500	N	N	N	70	1,000
LJ029C3	42 39 58	116 9 12	.5	.10	5	1.00	300	N	N	N	50	1,000
LJ030C3	42 39 56	116 9 1	2.0	.20	3	2.00	700	N	N	N	50	2,000
LJ031C3	42 38 41	116 8 57	1.0	.30	3	>2.00	500	N	N	N	100	700
LJ032C3	42 39 45	116 8 1	1.0	.50	5	>2.00	700	N	N	N	200	1,000
LJ033C3	42 40 27	116 7 57	.7	.30	5	2.00	300	N	N	N	100	1,000
LJ034C3	42 41 4	116 7 51	.3	.10	3	.15	100	N	N	N	30	1,000
LJ035C3	42 38 50	116 7 46	2.0	.30	3	2.00	500	N	N	N	100	5,000
LJ036C3	42 41 36	116 6 26	1.0	.20	7	2.00	500	N	N	N	100	2,000
LJ037C3	42 40 59	116 5 24	.5	.50	7	2.00	500	N	N	N	70	500
LJ038C3	42 41 1	116 5 25	.7	.20	7	2.00	700	N	N	N	100	1,000
LJ039C3	42 41 7	116 6 4	.5	.20	5	2.00	300	N	N	N	70	1,000
LJ040C3	42 40 29	116 6 21	1.0	1.00	5	>2.00	700	N	N	N	70	700
LJ041C3	42 42 0	116 5 44	.7	.20	7	>2.00	500	N	N	N	70	1,000
LJ042C3	42 42 3	116 5 44	2.0	.50	7	>2.00	700	N	N	N	200	700
LJ043C3	42 39 13	116 5 37	2.0	1.00	7	>2.00	700	N	N	N	70	2,000
LJ044C3	42 40 6	116 5 50	.7	.50	7	>2.00	300	N	N	N	100	700
LJ045C3	42 41 55	116 5 18	.5	.20	3	2.00	300	N	N	N	100	1,000
LJ046C3	42 43 11	116 5 55	.5	.20	7	2.00	300	N	N	N	50	700
LJ047C3	42 42 48	116 7 0	1.0	.50	7	>2.00	500	N	N	N	150	1,000
LJ048C3	42 43 3	116 6 52	.5	.20	7	>2.00	500	N	N	N	50	700

Table 5. Results of analyses of heavy-metal-concentrate samples from the Little Jacks Creek Wilderness Study Area, Owyhee County, Idaho--Continued.

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	Fe-ppm S	Mn-ppm S	Nb-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
LJ001C3	2	N	N	10	50	<10	200	N	<50	30	N	<10	>2,000
LJ002C3	2	N	N	N	50	<10	200	N	N	20	N	<10	>2,000
LJ003C3	5	N	N	N	70	10	300	N	N	30	N	<10	>2,000
LJ004C3	7	N	N	N	500	30	1,500	N	<50	30	N	70	2,000
LJ005C3	10	N	N	N	200	15	1,000	N	<50	30	N	100	150
LJ006C3	10	N	N	N	700	15	200	N	50	20	N	50	>2,000
LJ008C3	15	N	N	N	50	<10	200	N	N	20	N	50	1,500
LJ009C3	7	N	N	N	100	10	200	N	<50	20	N	50	50
LJ010C3	7	N	N	N	100	<10	200	N	N	20	N	70	1,000
LJ011C3	10	N	N	N	100	<10	100	N	N	20	N	70	1,000
LJ012C3	10	N	N	N	150	<10	200	N	N	20	N	50	1,000
LJ013C3	2	N	N	N	30	<10	<50	N	N	20	N	<10	1,000
LJ015C3	<2	N	N	N	150	<10	<50	N	N	20	N	<10	20
LJ017C3	<2	N	N	N	50	<10	<50	N	N	20	N	<10	20
LJ018C3	2	N	N	N	30	<10	100	N	N	20	N	<10	700
LJ019C3	5	N	N	N	50	<10	150	N	<50	20	N	<10	300
LJ020C3	2	N	N	N	50	10	100	N	N	30	N	<10	>2,000
LJ021C3	2	N	N	N	100	<10	70	N	N	30	N	15	70
LJ022C3	5	N	N	N	150	<10	300	N	N	50	N	50	700
LJ023C3	5	N	N	N	50	15	100	N	N	20	50	<10	500
LJ024C3	3	N	N	N	30	<10	150	N	N	20	N	<10	100
LJ025C3	<2	N	N	N	100	10	200	N	N	30	1,000	50	70
LJ026C3	2	N	N	10	200	10	500	N	N	50	N	50	150
LJ027C3	10	N	N	<10	30	<10	100	N	N	20	500	<10	100
LJ028C3	3	N	N	N	50	<10	500	N	N	20	N	<10	500
LJ029C3	2	N	N	N	30	<10	100	N	N	30	N	<10	N
LJ030C3	3	N	N	<10	50	10	100	N	N	20	N	<10	2,000
LJ031C3	2	N	N	150	100	<10	100	N	N	20	N	<10	500
LJ032C3	5	N	N	10	100	10	500	N	50	30	20	50	>2,000
LJ033C3	3	N	N	N	50	<10	200	N	N	20	N	<10	50
LJ034C3	<2	N	N	N	50	<10	<50	N	N	10	N	<10	N
LJ035C3	5	20	N	10	100	15	150	N	N	30	N	<10	N
LJ036C3	5	N	N	100	100	10	300	N	<50	20	N	<10	>2,000
LJ037C3	15	N	N	150	150	10	200	N	N	30	N	70	>2,000
LJ038C3	7	N	N	50	50	<10	300	N	N	30	100	<10	700
LJ039C3	3	N	N	N	50	<10	150	N	N	20	N	<10	>2,000
LJ040C3	3	N	N	10	200	10	500	N	<50	30	N	30	20
LJ041C3	7	70	N	30	30	<10	200	N	50	20	700	<10	>2,000
LJ042C3	7	N	N	70	70	10	500	N	50	20	N	30	>2,000
LJ043C3	5	N	N	300	300	10	700	N	<50	30	N	30	1,000
LJ044C3	5	N	N	50	50	<10	500	N	<50	20	N	N	150
LJ045C3	7	N	N	30	30	<10	100	N	N	20	N	N	>2,000
LJ046C3	3	N	N	30	30	10	100	N	N	20	N	N	>2,000
LJ047C3	5	N	N	10	200	10	500	N	50	30	N	<10	700
LJ048C3	3	N	N	100	100	10	200	N	N	30	5,000	<10	200

Table 5. Results of analyses of heavy-mineral-concentrate samples from the Little Jacks Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
LJ001C3	700	50	<100	100	N	>2,000	N	--	--	--	--	--	--	--
LJ002C3	700	50	<100	300	N	>2,000	N	--	--	--	--	--	--	--
LJ003C3	700	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ004C3	500	70	<100	1,000	N	>2,000	N	--	--	--	--	--	--	--
LJ005C3	500	70	<100	1,500	N	>2,000	200	--	--	--	--	--	--	--
LJ006C3	500	70	<100	1,000	N	>2,000	<200	--	--	--	--	--	--	--
LJ008C3	700	50	<100	1,000	N	>2,000	200	--	--	--	--	--	--	--
LJ009C3	700	70	<100	1,000	N	>2,000	<200	--	--	--	--	--	--	--
LJ010C3	700	70	<100	1,000	N	>2,000	<200	--	--	--	--	--	--	--
LJ011C3	700	70	<100	1,500	N	>2,000	<200	--	--	--	--	--	--	--
LJ012C3	700	70	<100	1,000	N	>2,000	<200	--	--	--	--	--	--	--
LJ013C3	700	30	<100	100	N	>2,000	N	--	--	--	--	--	--	--
LJ015C3	700	20	<100	100	N	>2,000	N	--	--	--	--	--	--	--
LJ017C3	500	50	<100	100	N	>2,000	N	--	--	--	--	--	--	--
LJ018C3	700	50	<100	200	N	>2,000	N	--	--	--	--	--	--	--
LJ019C3	1,000	70	<100	200	N	>2,000	N	--	--	--	--	--	--	--
LJ020C3	700	50	<100	300	N	>2,000	N	--	--	--	--	--	--	--
LJ021C3	700	50	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ022C3	1,000	70	<100	700	N	>2,000	N	--	--	--	--	--	--	--
LJ023C3	1,000	50	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ024C3	700	30	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ025C3	700	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ026C3	1,000	100	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ027C3	1,000	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ028C3	1,000	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ029C3	1,000	50	<100	300	N	>2,000	N	--	--	--	--	--	--	--
LJ030C3	1,000	70	<100	300	N	>2,000	N	--	--	--	--	--	--	--
LJ031C3	1,000	70	<100	700	N	>2,000	<200	--	--	--	--	--	--	--
LJ032C3	1,000	100	<100	700	N	>2,000	N	--	--	--	--	--	--	--
LJ033C3	1,000	50	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ034C3	700	20	<100	200	N	>2,000	N	--	--	--	--	--	--	--
LJ035C3	700	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ036C3	700	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ037C3	1,000	70	<100	700	N	>2,000	<200	--	--	--	--	--	--	--
LJ038C3	700	70	<100	700	N	>2,000	<200	--	--	--	--	--	--	--
LJ039C3	1,000	70	<100	300	N	>2,000	N	--	--	--	--	--	--	--
LJ040C3	1,000	100	<100	500	N	>2,000	<200	--	--	--	--	--	--	--
LJ041C3	1,000	70	<100	300	N	>2,000	<200	--	--	--	--	--	--	--
LJ042C3	1,000	100	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ043C3	1,000	100	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ044C3	1,000	100	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ045C3	1,000	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ046C3	1,000	100	<100	300	N	>2,000	N	--	--	--	--	--	--	--
LJ047C3	1,000	100	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ048C3	1,000	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--

Table 5. Results of analyses of heavy-mineral-concentrate samples from the Little Jacks Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
LJ049C3	2	N	N	N	100	<10	300	N	<50	30	N	N	<10	50
LJ050C3	2	N	N	N	50	<10	200	N	N	30	N	N	30	500
LJ051C3	5	N	N	N	200	10	1,500	N	N	50	N	N	50	100
LJ052C3	5	N	N	N	100	10	1,000	N	N	30	N	N	50	300
LJ053C3	5	N	N	N	100	10	200	N	<50	30	N	N	N	30
LJ054C3	2	N	N	N	70	<10	200	N	N	30	N	N	N	30
LJ055C3	<2	N	N	N	70	10	300	N	50	30	N	N	<10	100
LJ056C3	2	N	N	N	200	10	200	N	N	30	N	N	20	<20
LJ057C3	5	N	N	N	200	10	200	N	N	50	N	N	50	>2,000
LJ058C3	5	N	N	N	30	<10	100	N	N	30	N	N	<10	500
LJ059C3	5	N	N	N	100	<10	300	N	N	30	N	N	70	300

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Cu-pct. S	Ti-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
LJ049C3	42 43 59	116 6 26	.7	.70	7	>2.00	500	N	N	N	100	2,000
LJ050C3	42 44 27	116 8 8	.5	.70	7	>2.00	500	N	N	N	70	500
LJ051C3	42 44 36	116 8 55	2.0	1.00	7	>2.00	700	N	N	N	70	500
LJ052C3	42 44 55	116 10 25	1.0	1.00	7	>2.00	500	N	N	N	50	500
LJ053C3	42 44 12	116 10 35	1.0	.70	5	>2.00	300	N	N	N	100	1,000
LJ054C3	42 44 0	116 9 27	.7	.20	5	>2.00	300	N	N	N	70	1,000
LJ055C3	42 43 52	116 9 30	1.0	.70	5	2.00	500	N	N	N	300	1,500
LJ056C3	42 43 27	116 11 7	1.0	.50	5	>2.00	500	N	N	N	100	500
LJ057C3	42 41 27	116 8 7	1.0	1.50	5	>2.00	700	N	N	N	70	700
LJ058C3	42 41 40	116 8 5	.5	.20	5	>2.00	200	N	N	N	70	5,000
LJ059C3	42 42 42	116 7 48	1.0	.50	1	>2.00	500	N	N	N	50	200

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Ac-ppm na	Hg-ppm an	Am-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
LJ049C3	1,000	100	<100	300	N	>2,000	<200	--	--	--	--	--	--	--
LJ050C3	1,000	70	<100	700	N	>2,000	N	--	--	--	--	--	--	--
LJ051C3	700	150	<100	1,000	N	>2,000	<200	--	--	--	--	--	--	--
LJ052C3	1,000	100	<100	1,000	N	>2,000	<200	--	--	--	--	--	--	--
LJ053C3	1,000	100	<100	300	N	>2,000	N	--	--	--	--	--	--	--
LJ054C3	1,000	70	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ055C3	1,000	70	<100	200	N	>2,000	N	--	--	--	--	--	--	--
LJ056C3	1,000	100	<100	500	N	>2,000	<200	--	--	--	--	--	--	--
LJ057C3	1,000	100	<100	700	N	>2,000	N	--	--	--	--	--	--	--
LJ058C3	1,000	50	<100	500	N	>2,000	N	--	--	--	--	--	--	--
LJ059C3	700	100	<100	2,000	N	>2,000	N	--	--	--	--	--	--	--

Table 6. Results of analyses of rock samples from the Little Jacks Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Ca-pct. S	Ti-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
LJ020R	42 39 52	116 12 45	2.0	.07	.7	.2	200	N	N	N	N	3,000
LJ021R	42 39 2	116 11 41	2.0	.10	1.0	.3	300	N	N	N	N	3,000
LJ030R	42 39 56	116 9 1	2.0	.20	1.0	.3	200	N	N	N	N	3,000
LJ034R	42 41 4	116 7 51	2.0	.10	1.0	.3	300	N	N	N	<10	3,000
LJ037R	42 40 59	116 5 24	2.0	.07	.7	.2	150	N	N	N	N	3,000
LJ044R	42 40 6	116 5 50	1.5	.10	.7	.2	70	N	N	N	N	3,000
LJ053R	42 44 12	116 10 35	2.0	.10	.7	.2	150	N	N	N	N	3,000
LJ057R	42 41 27	116 8 7	2.0	.10	.7	.3	150	N	N	N	N	2,000
LJ047R	42 42 48	116 7 0	2.0	.15	.7	.2	150	N	N	N	<10	2,000

Sample	Si-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
LJ020R	150	10	<50	70	N	300	N	<.1	<.02	<5	<2	<.1	<2	53
LJ021R	150	30	<50	70	N	300	N	<.1	<.02	<5	<2	.2	<2	39
LJ030R	150	20	<50	50	N	300	N	<.1	<.02	<5	<2	.1	<2	64
LJ034R	150	20	<50	50	N	300	N	<.1	<.02	5	<2	.3	<2	58
LJ037R	100	<10	<50	50	N	300	N	<.1	<.02	<5	<2	.2	<2	70
LJ044R	<100	<10	<50	50	N	300	N	<.1	<.02	<5	<2	.2	<2	70
LJ053R	150	20	<50	70	N	300	N	<.1	.04	<5	<2	.3	<2	58
LJ057R	150	20	<50	50	N	300	N	<.1	<.02	<5	<2	.2	<2	67
LJ047R	<100	15	<50	50	N	300	N	<.1	<.02	<5	<2	.2	<2	72

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Hg-ppm S	Nb-ppm S	Bi-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
LJ020R	2.0	N	N	N	<10	<5	150	<5	50	<5	15	<100	7	N
LJ021R	2.0	N	N	<5	<10	5	100	5	30	<5	15	<100	7	N
LJ030R	2.0	N	N	<5	<10	5	150	5	30	<5	15	<100	7	N
LJ034R	1.5	N	N	<5	<10	5	100	5	30	<5	15	<100	7	N
LJ037R	2.0	N	N	<5	<10	<5	150	5	30	<5	15	<100	7	N
LJ044R	2.0	N	N	N	<10	<5	70	5	50	<5	20	<100	7	N
LJ053R	2.0	N	N	<5	<10	5	100	5	30	<5	15	<100	7	N
LJ057R	1.5	N	N	<5	<10	<5	100	5	30	<5	15	<100	7	N
LJ047R	2.0	N	N	N	<10	7	150	5	30	<5	15	<100	7	N

Table 7. Results of analyses of stream-sediment samples from the Big Jacks Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-ppt. S	Hg-ppt. S	Ca-ppt. S	Ti-ppt. S	Mn-ppt. S	Ag-ppt. S	As-ppt. S	Au-ppt. S	B-ppt. S	Ba-ppt. S
BJ001S	42 33 27	116 2 18	3	.7	1.5	.30	500	N	N	N	30	700
BJ002S	42 33 52	116 2 15	3	.7	1.5	.30	500	N	N	N	30	700
BJ003S	42 33 56	116 3 10	3	.3	1.5	.30	300	N	N	N	15	1,000
BJ004S	42 34 3	116 3 54	2	.5	1.5	.30	500	N	N	N	15	1,000
BJ005S	42 33 20	116 3 52	2	.7	1.5	.20	300	N	N	N	30	700
BJ006S	42 33 10	116 4 27	3	.7	1.5	.20	500	N	N	N	30	700
BJ007S	42 33 15	116 4 55	3	.7	1.5	.30	500	N	N	N	30	700
BJ008S	42 32 3	116 6 12	3	.7	1.5	.20	300	N	N	N	30	700
BJ009S	42 32 14	116 6 26	3	.7	1.5	.30	300	N	N	N	30	700
BJ010S	42 32 15	116 6 23	3	.7	1.0	.20	500	N	N	N	30	700
BJ011S	42 33 5	116 5 35	3	.7	1.5	.30	500	N	N	N	20	700
BJ012S	42 33 25	116 5 54	3	.7	1.5	.30	500	N	N	N	15	700
BJ013S	42 33 37	116 6 56	3	.7	1.5	.50	500	N	N	N	15	1,000
BJ014S	42 33 8	116 7 24	3	.7	1.5	.30	300	N	N	N	15	700
BJ015S	42 32 56	116 7 24	2	.3	1.0	.50	300	N	N	N	15	1,000
BJ016S	42 32 45	116 8 13	2	.7	1.5	.15	500	N	N	N	15	700
BJ017S	42 32 50	116 9 2	3	.7	1.0	.30	300	N	N	N	15	700
BJ018S	42 32 12	116 10 5	3	.7	1.5	.30	300	N	N	N	15	700
BJ019S	42 32 4	116 8 7	3	.7	1.5	.30	300	N	N	N	15	700
BJ020S	42 32 25	116 10 30	3	.7	1.5	.30	300	N	N	N	15	700
BJ021S	42 32 11	116 11 12	3	1.5	1.5	.30	300	N	N	N	15	700
BJ022S	42 31 40	116 11 15	3	.7	1.0	.30	300	N	N	N	15	1,000
BJ023S	42 30 55	116 11 33	3	.5	.7	.30	300	N	N	N	15	1,000
BJ024S	42 32 52	116 3 45	3	.7	1.0	.30	700	N	N	N	15	700
BJ025S	42 35 35	115 59 6	10	1.0	1.5	>1.00	1,500	N	N	N	<10	700
BJ026S	42 35 56	115 59 28	3	1.0	1.5	.30	700	N	N	N	15	700
BJ027S	42 34 26	116 0 30	3	.7	1.0	.30	500	N	N	N	15	700
BJ028S	42 36 4	116 0 13	3	.7	1.0	.30	300	N	N	N	15	700
BJ029S	42 35 54	116 1 48	3	.7	1.5	.30	300	N	N	N	15	700
BJ030S	42 36 42	115 59 18	3	.7	1.5	.30	500	N	N	N	15	700
BJ031S	42 36 38	115 59 14	7	1.5	3.0	.70	1,500	N	N	N	10	1,000
BJ032S	42 36 56	115 59 55	5	1.0	2.0	.50	1,000	N	N	N	30	700
BJ033S	42 36 52	116 0 9	3	.7	2.0	.30	700	N	N	N	20	1,000
BJ034S	42 36 45	116 1 52	5	1.0	2.0	.50	700	N	N	N	20	1,500
BJ035S	42 36 44	116 1 57	5	.7	2.0	.70	700	N	N	N	15	1,500
BJ036S	42 37 19	116 1 5	3	.7	1.5	.50	700	N	N	N	15	1,500
BJ037S	42 36 26	116 2 50	3	.7	2.0	.30	700	N	N	N	20	1,000
BJ038S	42 35 40	116 4 26	3	.5	2.0	.50	700	N	N	N	15	1,500
BJ039S	42 35 24	116 4 59	5	.7	2.0	.30	500	N	N	N	20	1,500
BJ040S	42 35 27	116 5 3	3	.5	2.0	.30	500	N	N	N	10	1,500
BJ041S	42 37 22	116 2 15	3	.7	1.5	.30	500	N	N	N	20	1,000
BJ042S	42 37 24	116 3 38	3	.7	1.5	.30	500	N	N	N	30	1,000
BJ043S	42 37 26	116 3 45	5	1.0	2.0	.30	500	N	N	N	20	1,000
BJ044S	42 35 7	116 5 57	3	.5	1.5	.30	300	N	N	N	20	1,500
BJ045S	42 36 32	116 5 3	5	.7	2.0	.70	700	N	N	N	15	1,000

Table 7. Results of analyses of stream-sediment samples from the Big Jacks Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
RJ001S	1.5	N	N	15	30	15	30	N	<20	20	15	N	15	N
RJ002S	1.5	N	N	15	30	10	70	N	<20	15	15	N	10	N
RJ003S	1.5	N	N	10	70	<5	70	N	30	7	15	N	7	N
RJ004S	1.5	N	N	15	30	<5	70	N	20	7	15	N	7	N
RJ005S	1.5	N	N	10	30	15	50	N	<20	15	15	N	10	N
RJ006S	1.5	N	N	10	30	10	50	N	<20	10	15	N	10	N
RJ007S	1.5	N	N	15	30	10	70	N	<20	15	15	N	15	N
RJ008S	1.0	N	N	7	30	20	30	N	<20	10	15	N	10	N
RJ009S	1.5	N	N	10	50	20	70	N	<20	15	15	N	15	N
RJ010S	1.5	N	N	7	30	30	70	N	<20	7	15	N	7	N
RJ011S	1.5	N	N	10	30	15	50	N	<20	10	15	N	10	N
RJ012S	1.5	N	N	7	30	15	70	N	<20	7	15	N	10	N
RJ013S	1.5	N	N	10	70	10	70	N	30	10	15	N	10	N
RJ014S	1.5	N	N	10	70	50	70	N	20	15	15	N	15	N
RJ015S	1.5	N	N	<5	10	<5	70	<5	30	<5	15	N	7	N
RJ016S	1.5	N	N	7	30	30	50	N	<20	15	15	N	7	N
RJ017S	1.5	N	N	7	70	15	70	N	20	10	15	N	7	N
RJ018S	1.5	N	N	10	50	15	70	N	20	10	15	N	15	N
RJ019S	1.5	N	N	10	30	15	50	N	<20	15	15	N	15	N
RJ020S	1.5	N	N	10	50	<5	70	N	<20	15	15	N	15	N
RJ021S	1.5	N	N	15	150	15	50	N	<20	15	15	N	15	N
RJ022S	1.5	N	N	7	30	10	70	N	30	7	15	N	15	N
RJ023S	1.5	N	N	10	30	<5	70	N	20	10	15	N	7	N
RJ024S	1.5	N	N	15	30	10	50	N	<20	15	15	N	7	N
RJ025S	<1.0	N	N	15	30	<5	30	7	50	15	15	N	15	N
RJ026S	1.0	N	N	10	30	10	50	<5	<20	15	15	N	15	N
RJ027S	1.0	N	N	7	30	10	30	N	<20	10	15	N	7	N
RJ028S	1.0	N	N	7	30	10	30	N	<20	15	15	N	7	N
RJ029S	1.5	N	N	7	30	10	50	N	<20	15	15	N	10	N
RJ030S	1.5	N	N	7	30	10	30	N	<20	7	15	N	7	N
RJ031S	1.5	N	N	15	50	20	70	<5	30	15	15	N	20	N
RJ032S	1.5	N	N	15	70	30	30	N	<20	20	15	N	15	N
RJ033S	1.5	N	N	15	50	20	50	N	<20	15	15	N	15	N
RJ034S	1.5	N	N	15	70	20	30	N	<20	15	15	N	15	N
RJ035S	1.5	N	N	15	30	20	50	<5	30	15	20	N	10	N
RJ036S	1.5	N	N	10	30	15	70	N	30	15	15	N	7	N
RJ037S	1.5	N	N	15	30	20	50	N	20	15	20	N	10	N
RJ038S	1.5	N	N	15	30	15	70	N	20	15	15	N	10	N
RJ039S	1.5	N	N	15	50	30	50	N	<20	15	15	N	15	N
RJ040S	1.5	N	N	15	50	15	70	N	20	15	15	N	10	N
RJ041S	1.5	N	N	10	30	20	70	N	<20	15	20	N	10	N
RJ042S	1.5	N	N	10	50	20	50	N	<20	15	15	N	10	N
RJ043S	1.5	N	N	10	50	30	30	N	<20	15	15	N	15	N
RJ044S	1.5	N	N	10	100	20	70	N	20	10	20	N	10	N
RJ045S	1.5	N	N	15	200	20	50	N	30	15	15	N	15	N

Table 7. Results of analyses of stream-sediment samples from the Big Jacks Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
BJ001S	300	70	N	30	N	200	N	<.1	<.02	<5	<2	.3	<2	57
BJ002S	300	50	N	30	N	200	N	<.1	.02	<5	<2	.3	<2	50
BJ003S	200	50	N	30	N	200	N	<.1	<.02	<5	<2	.3	<2	45
BJ004S	300	50	N	30	N	200	N	<.1	.02	<5	<2	.3	<2	43
BJ005S	300	70	N	20	N	150	N	<.1	.03	<5	<2	.5	<2	62
BJ006S	200	70	N	30	N	200	N	<.1	.02	<5	<2	.5	<2	60
BJ007S	300	70	N	30	N	200	N	<.1	.02	<5	<2	.5	<2	66
BJ008S	300	70	N	20	N	150	N	<.1	.03	<5	<2	.6	<2	80
BJ009S	300	70	N	30	N	150	N	<.1	.04	<5	<2	.5	<2	72
BJ010S	200	50	N	30	N	150	N	<.1	.03	<5	<2	.5	<2	60
BJ011S	200	70	N	30	N	200	N	<.1	.03	<5	<2	.5	<2	62
BJ012S	300	50	N	30	N	200	N	<.1	.06	<5	<2	.5	<2	60
BJ013S	200	70	N	30	N	300	N	<.1	.02	<5	<2	.3	<2	47
BJ014S	200	70	N	30	N	200	N	<.1	.03	5	<2	.4	<2	60
BJ015S	150	30	N	30	N	300	N	<.1	<.02	<5	<2	.2	<2	32
BJ016S	200	50	N	30	N	150	N	<.1	.05	<5	<2	.7	<2	80
BJ017S	150	30	N	30	N	150	N	<.1	.03	<5	<2	.5	<2	65
BJ018S	200	70	N	30	N	200	N	<.1	.05	<5	<2	.6	<2	76
BJ019S	200	70	N	30	N	150	N	<.1	.03	<5	<2	.5	<2	77
BJ020S	150	70	N	30	N	150	N	<.1	.02	<5	<2	.3	<2	56
BJ021S	200	70	N	30	N	150	N	<.1	.04	5	<2	.4	<2	64
BJ022S	300	70	N	30	N	200	N	<.1	.04	<5	<2	.5	<2	79
BJ023S	200	30	N	50	N	200	N	<.1	.02	<5	<2	.3	<2	59
BJ024S	200	50	N	30	N	150	N	<.1	.02	5	<2	.5	<2	56
BJ025S	150	150	N	30	N	200	N	<.1	<.02	<5	<2	1.8	<2	270
BJ026S	200	70	N	30	N	150	N	<.1	.02	<5	<2	.5	<2	74
BJ027S	200	50	N	30	N	150	N	<.1	.03	<5	<2	.4	<2	64
BJ028S	200	50	N	30	N	150	N	<.1	.04	<5	<2	.4	<2	69
BJ029S	300	70	N	30	N	150	N	<.1	.02	<5	<2	.5	<2	63
BJ030S	150	30	N	30	N	150	N	<.1	.03	<5	<2	.5	<2	77
BJ031S	500	100	N	30	N	300	N	<.1	<.02	<5	<2	.4	<2	120
BJ032S	700	100	N	20	N	200	N	<.1	.03	<5	<2	.5	<2	70
BJ033S	500	100	N	30	N	300	N	<.1	.03	<5	<2	.5	<2	68
BJ034S	500	100	N	30	N	200	N	<.1	.02	<5	<2	.6	<2	67
BJ035S	500	100	N	70	N	300	N	<.1	.02	<5	<2	.5	<2	67
BJ036S	300	70	N	50	N	300	N	<.1	.02	<5	<2	.4	<2	58
BJ037S	300	70	N	30	N	200	N	<.1	.03	<5	<2	.5	<2	56
BJ038S	500	70	N	50	N	300	N	<.1	<.02	<5	<2	.4	<2	47
BJ039S	300	70	N	30	N	300	N	<.1	.02	<5	<2	.4	<2	61
BJ040S	300	70	N	30	N	300	N	<.1	.02	<5	<2	.3	<2	44
BJ041S	300	70	N	30	N	200	N	<.1	.02	<5	<2	.5	<2	62
BJ042S	300	70	N	30	N	300	N	<.1	.02	<5	<2	.5	<2	57
BJ043S	500	100	N	30	N	200	N	<.1	.03	<5	<2	.5	<2	62
BJ044S	300	70	N	70	N	300	N	<.1	.04	5	<2	.4	<2	52
BJ045S	500	100	N	30	N	300	N	<.1	.03	<5	<2	.5	<2	54

Table 7. Results of analyses of stream-sediment samples from the Big Jacks Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Latitude	Longitude	Fe-ppt. s	Hg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppt. s	Ag-ppt. s	As-ppt. s	Au-ppt. s	B-ppt. s	Ba-ppt. s
BJ046S	42 38 1	116 4 7	3	.7	2.0	.30	700	N	N	N	15	1,500
BJ047S	42 38 2	116 5 2	3	.5	1.5	.30	500	N	N	N	20	1,500
BJ048S	42 38 5	116 5 4	3	.7	2.0	.50	700	N	N	N	20	1,000
BJ049S	42 36 31	116 6 5	3	.7	2.0	.50	700	N	N	N	20	1,000
BJ050S	42 37 44	116 4 54	3	.7	1.5	.30	1,000	N	N	N	20	1,000
BJ051S	42 38 52	116 3 8	3	.7	2.0	.50	700	N	N	N	15	1,500
BJ052S	42 38 58	116 3 14	3	.7	3.0	.50	1,000	N	N	N	20	1,000
BJ053S	42 38 47	116 3 54	3	.7	3.0	.50	700	N	N	N	15	1,500
BJ054S	42 39 21	116 4 31	3	.7	2.0	.50	700	N	N	N	30	1,000
BJ055S	42 40 5	116 3 1	3	.7	2.0	.50	1,500	N	N	N	20	1,000
BJ056S	42 39 8	116 3 2	3	.7	3.0	.50	700	N	N	N	20	1,000
BJ057S	42 39 32	116 2 5	3	.7	2.0	.50	700	N	N	N	20	1,000
BJ058S	42 38 41	116 2 21	3	.7	2.0	.30	700	N	N	N	20	1,000
BJ059S	42 38 35	116 2 12	5	.5	2.0	.70	1,000	N	N	N	10	1,500
BJ060S	42 38 12	116 1 40	3	.7	2.0	.30	700	N	N	N	20	1,000
BJ061S	42 38 4	116 1 18	3	.7	1.5	.30	500	N	N	N	30	1,000
BJ062S	42 37 20	116 0 35	3	.7	2.0	.30	500	N	N	N	20	1,000
BJ063S	42 40 58	116 0 52	3	.7	2.0	.30	700	N	N	N	10	1,000
BJ064S	42 40 42	116 0 49	2	.5	1.5	.30	300	N	N	N	<10	1,500
BJ065S	42 41 18	116 0 36	5	.7	3.0	.50	500	N	N	N	10	1,500
BJ066S	42 40 48	116 57 58	3	1.0	3.0	.30	700	N	N	N	20	700
BJ067S	42 40 18	116 2 19	3	1.0	2.0	.30	500	N	N	N	30	700
BJ068S	42 40 32	116 59 23	3	1.0	2.0	.50	700	N	N	N	20	700
BJ069S	42 42 0	115 57 5	5	.7	3.0	.70	500	N	N	N	10	2,000
BJ070S	42 42 25	115 57 12	5	.7	3.0	.50	500	N	N	N	15	2,000
BJ071S	42 42 57	115 57 59	3	.7	3.0	.30	300	N	N	N	10	3,000
BJ072S	42 43 18	115 58 33	5	.7	2.0	1.00	500	N	N	N	20	1,500
BJ073S	42 42 9	115 59 58	3	.7	2.0	.30	700	N	N	N	30	1,000
BJ074S	42 42 31	115 59 41	3	.7	3.0	.30	500	N	N	N	20	1,500
BJ075S	42 42 48	116 1 25	5	1.0	3.0	.70	700	N	N	N	20	1,000
BJ076S	42 42 36	116 0 15	5	.7	2.0	.50	500	N	N	N	20	1,000
BJ077S	42 43 0	116 0 7	3	.7	2.0	.50	700	N	N	N	15	1,500
BJ078S	42 43 7	116 0 18	3	.7	2.0	.30	500	N	N	N	20	1,500
BJ079S	42 43 36	116 0 20	7	1.0	3.0	.70	700	N	N	N	10	1,500
BJ080S	42 44 21	116 0 25	10	1.0	3.0	>1.00	1,500	N	N	N	15	700
BJ081S	42 44 25	116 0 5	10	2.0	3.0	>1.00	1,500	N	N	N	<10	700

Table 7. Results of analyses of stream-sediment samples from the Big Jacks Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Re-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Mi-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
BJ046S	1.5	N	N	10	30	15	30	N	20	15	30	N	15	N
BJ047S	1.5	N	N	10	50	15	50	N	20	15	15	N	10	N
BJ048S	1.5	N	N	10	50	20	50	N	20	15	15	N	10	N
BJ049S	1.5	N	N	15	70	20	50	N	<20	15	15	N	10	N
BJ050S	1.5	N	N	10	50	20	30	N	<20	15	15	N	10	N
BJ051S	1.5	N	N	10	30	15	70	N	30	15	15	N	10	N
BJ052S	1.5	N	N	10	70	20	30	<5	<20	15	15	N	10	N
BJ053S	1.5	N	N	15	70	15	50	N	<20	15	15	N	10	N
BJ054S	1.5	N	N	10	70	20	30	N	<20	20	15	N	15	N
BJ055S	1.5	N	N	15	50	20	50	N	20	20	15	N	15	N
BJ056S	1.5	N	N	10	50	20	50	N	<20	20	15	N	15	N
BJ057S	2.0	N	N	10	30	20	70	N	20	15	15	N	15	N
BJ058S	1.5	N	N	10	50	20	30	N	<20	15	15	N	10	N
BJ059S	2.0	N	N	7	30	15	70	5	50	10	20	N	10	N
BJ060S	1.5	N	N	10	50	20	50	N	<20	15	15	N	10	N
BJ061S	1.5	N	N	7	30	20	70	N	<20	15	15	N	10	N
BJ062S	1.5	N	N	7	30	15	70	N	<20	15	15	N	10	N
BJ063S	1.5	N	N	10	30	15	50	N	20	10	15	N	15	N
BJ064S	1.5	N	N	<5	15	7	70	N	20	5	15	N	7	N
BJ065S	2.0	N	N	15	30	15	70	N	20	7	20	N	15	N
BJ066S	1.0	N	N	15	30	20	30	N	<20	15	15	N	10	N
BJ067S	1.5	N	N	15	50	20	30	N	<20	20	15	N	10	N
BJ068S	1.0	N	N	15	70	20	30	N	<20	20	15	N	10	N
BJ069S	1.5	N	N	10	30	15	70	N	30	10	15	N	15	N
BJ070S	1.5	N	N	15	70	20	70	N	20	15	15	N	15	N
BJ071S	1.5	N	N	7	30	7	150	N	20	10	20	N	7	N
BJ072S	1.5	N	N	15	70	20	150	<5	30	15	20	N	15	N
BJ073S	1.5	N	N	15	50	30	50	N	<20	15	15	N	15	N
BJ074S	1.5	N	N	7	30	10	70	N	<20	10	15	N	7	N
BJ075S	1.5	N	N	15	50	20	50	N	20	15	15	N	15	N
BJ076S	1.5	N	N	15	50	30	50	N	<20	15	15	N	15	N
BJ077S	1.5	N	N	10	30	20	70	N	<20	10	15	N	10	N
BJ078S	1.5	N	N	10	150	15	70	N	<20	15	15	N	10	N
BJ079S	1.5	N	N	15	50	15	70	<5	20	15	15	N	15	N
BJ080S	1.5	N	N	15	50	15	70	N	30	15	15	N	20	N
BJ081S	1.5	N	N	30	150	20	100	N	30	30	20	N	30	N

Table 7. Results of analyses of stream-sediment samples from the Big Jacks Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
BJ046S	300	70	N	30	N	N	<.1	.03	<5	<2	.5	<2	54
BJ047S	500	70	N	30	N	N	<.1	.04	<5	<2	.4	<2	53
BJ048S	300	70	N	30	N	N	<.1	.04	<5	<2	.4	<2	59
BJ049S	500	70	N	30	N	N	<.1	.04	<5	<2	.5	<2	62
BJ050S	300	70	N	30	N	N	<.1	.04	<5	<2	.6	<2	59
BJ051S	500	70	N	50	N	N	<.1	.03	<5	<2	.4	<2	53
BJ052S	500	70	N	50	N	N	<.1	.04	<5	<2	.4	<2	54
BJ053S	500	100	N	50	N	N	<.1	.04	<5	<2	.4	<2	55
BJ054S	300	100	N	30	N	N	<.1	<.02	<5	<2	.4	<2	61
BJ055S	300	70	N	30	N	N	<.1	<.02	<5	<2	.5	<2	58
BJ056S	700	100	N	50	N	N	<.1	.04	<5	<2	.4	<2	62
BJ057S	300	70	N	50	N	N	<.1	.04	<5	<2	.5	<2	64
BJ058S	300	70	N	30	N	N	<.1	.04	<5	<2	.5	<2	64
BJ059S	300	70	N	70	N	N	<.1	.03	<5	<2	.5	<2	67
BJ060S	500	100	N	30	N	N	<.1	.03	<5	<2	.4	<2	62
BJ061S	300	70	N	30	N	N	<.1	.03	<5	<2	.4	<2	56
BJ062S	300	50	N	30	N	N	<.1	.03	<5	<2	.4	<2	55
BJ063S	300	70	N	70	N	N	<.1	.04	<5	<2	.5	<2	59
BJ064S	300	30	N	30	N	N	<.1	.02	<5	<2	.1	<2	28
BJ065S	300	70	N	50	N	N	<.1	.02	<5	<2	.4	<2	50
BJ066S	300	70	N	30	N	N	<.1	.04	<5	<2	.6	<2	68
BJ067S	300	100	N	30	N	N	<.1	.03	<5	<2	.4	<2	67
BJ068S	300	100	N	20	N	N	<.1	.03	<5	<2	.7	<2	70
BJ069S	700	70	N	50	N	N	<.1	.03	<5	<2	.3	<2	42
BJ070S	700	100	N	30	N	N	<.1	.02	<5	<2	.3	<2	56
BJ071S	700	70	N	30	N	N	<.1	<.02	<5	<2	.3	<2	37
BJ072S	500	150	N	30	N	N	<.1	<.02	<5	<2	.4	<2	62
BJ073S	500	70	N	30	N	N	<.2	.03	<5	<2	.4	<2	62
BJ074S	500	50	N	30	N	N	<.1	.04	<5	<2	.3	<2	66
BJ075S	500	100	N	30	N	N	<.1	.02	<5	<2	.4	<2	60
BJ076S	500	100	N	30	N	N	<.1	.06	<5	<2	.5	<2	66
BJ077S	300	70	N	30	N	N	<.1	.02	<5	<2	.3	<2	53
BJ078S	300	70	N	30	N	N	<.1	<.02	<5	<2	.3	<2	52
BJ079S	300	100	N	30	N	N	<.1	.03	<5	<2	.4	<2	65
BJ080S	300	150	N	30	N	N	<.1	<.02	<5	<2	.9	<2	130
BJ081S	300	300	N	30	N	N	<.1	<.02	<5	<2	1.2	<2	150

Table 8. Results of analyses of heavy-mineral-concentrate samples from the Big Jacks Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Ca-pct. S	Ti-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
BJ025	42 35 35	115 59 6	.3	.10	2.0	.30	150	N	N	N	<20	1,500
BJ063	42 40 58	116 0 52	.3	.05	3.0	.20	150	N	N	N	20	1,000
BJ072	42 43 18	116 58 33	.5	.15	2.0	.50	150	N	N	N	20	1,000
BJ075	42 42 48	116 1 25	.3	.10	2.0	.05	70	N	N	N	20	1,000
BJ076	42 42 36	116 0 15	.2	.10	2.0	.10	70	N	N	N	<20	1,000
BJ077	42 43 0	116 0 7	1.0	.20	1.5	.50	500	N	N	N	<20	1,000
BJ078	42 43 7	116 0 18	.5	.07	2.0	.20	100	N	N	N	20	1,000
BJ079	42 43 36	116 0 20	.5	.07	2.0	.15	100	N	N	N	<20	1,000
BJ080	42 44 21	116 0 25	.3	.07	2.0	.10	50	N	N	N	<20	1,000
BJ081	42 44 25	116 0 5	.3	.10	2.0	.07	70	N	N	N	<20	1,000

Sample	Si-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm lcp	Bi-ppm lcp	Cd-ppm lcp	Sb-ppm lcp	Zn-ppm lcp
BJ025	500	30	N	200	N	>2,000	N	--	--	--	--	--	--	--
BJ063	700	<20	N	150	N	>2,000	N	--	--	--	--	--	--	--
BJ072	500	50	N	1,000	N	>2,000	N	--	--	--	--	--	--	--
BJ075	500	30	N	20	N	>2,000	N	--	--	--	--	--	--	--
BJ076	500	20	N	70	N	>2,000	N	--	--	--	--	--	--	--
BJ077	500	50	N	70	N	>2,000	N	--	--	--	--	--	--	--
BJ078	700	30	N	100	N	>2,000	N	--	--	--	--	--	--	--
BJ079	1,000	20	N	100	N	>2,000	N	--	--	--	--	--	--	--
BJ080	1,000	20	N	50	N	>2,000	N	--	--	--	--	--	--	--
BJ081	700	20	N	30	N	>2,000	N	--	--	--	--	--	--	--

Sample	Re-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
BJ025	<2	N	N	N	<20	<10	N	N	N	N	N	N	N	N
BJ063	2	N	N	N	<20	<10	N	N	N	N	N	N	N	N
BJ072	N	<20	N	N	<20	<10	<50	N	N	N	N	N	N	>2,000
BJ075	<2	N	N	N	<20	<10	N	N	N	N	20	N	N	N
BJ076	<2	N	N	N	<20	<10	N	N	N	N	70	N	N	N
BJ077	<2	N	N	N	30	<10	N	N	N	N	N	N	N	N
BJ078	N	N	N	N	<20	<10	N	N	N	N	N	N	N	N
BJ079	<2	N	N	N	<20	<10	N	N	N	N	N	N	N	N
BJ090	<2	N	N	N	20	<10	N	N	N	N	<20	N	N	N
BJ081	<2	N	N	N	20	<10	N	N	N	N	N	N	N	N

Table 9. Results of analyses of rock samples from the Big Jacks Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Cu-pct. S	Tl-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
BJ077R	42 43 0	116 0 7	3.0	.30	1.5	.3	300	N	N	N	<10	1,500
BJ027R	42 34 26	116 0 30	3.0	.10	.7	.3	200	N	N	N	<10	2,000
BJ029R	42 35 54	116 1 48	2.0	.10	.7	.2	200	N	N	N	10	2,000
BJ032R	42 36 58	115 59 55	1.5	.10	.7	.2	150	N	N	N	<10	2,000
BJ037R	42 36 26	116 2 50	2.0	.10	.7	.2	150	N	N	N	10	2,000
BJ042R	42 37 24	116 3 38	2.0	.10	.7	.2	150	N	N	N	10	2,000
BJ047R	42 38 2	116 5 2	2.0	.05	.7	.2	150	N	N	N	<10	2,000
BJ053R	42 38 47	116 3 54	2.0	.07	.7	.2	150	N	N	N	10	2,000
BJ057R	42 39 32	116 2 5	2.0	.15	.7	.2	300	N	N	N	<10	2,000
BJ061R	42 38 4	116 1 18	1.5	.10	.7	.2	150	N	N	N	<10	2,000
BJ062R	42 37 20	116 0 35	2.0	.15	.7	.2	150	N	N	N	<10	2,000
BJ067R	42 40 18	116 2 19	2.0	.07	.7	.2	200	N	N	N	<10	2,000
BJ073R	42 42 9	115 59 58	2.0	.30	1.5	.3	300	N	N	N	<10	1,500
BJ076R	42 42 36	116 0 15	3.0	.30	1.5	.3	200	N	N	N	<10	1,500

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Mi-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
BJ077R	2	N	N	N	<10	7	100	5	30	<5	15	N	7	N
BJ027R	2	N	N	<5	<10	7	100	5	30	<5	20	N	7	N
BJ029R	2	N	N	N	<10	5	150	5	50	<5	30	N	7	N
BJ032R	2	N	N	N	<10	5	70	<5	30	<5	20	N	5	N
BJ037R	2	N	N	N	<10	<5	150	5	30	<5	20	N	7	N
BJ042R	2	N	N	N	<10	<5	100	5	30	<5	20	N	7	N
BJ047R	2	N	N	<5	<10	<5	150	7	30	<5	20	N	7	N
BJ053R	2	N	N	<5	<10	5	100	5	30	<5	30	N	7	N
BJ057R	2	N	N	<5	<10	<5	100	5	30	<5	20	N	7	N
BJ051R	2	N	N	<5	<10	<5	100	5	30	<5	20	N	7	N
BJ062R	2	N	N	<5	<10	<5	150	<5	30	<5	20	N	7	N
BJ067R	2	N	N	<5	<10	5	200	5	50	<5	20	N	7	N
BJ073R	2	N	N	5	<10	7	70	<5	30	<5	20	N	7	N
BJ076R	2	N	N	5	<10	7	100	<5	30	<5	20	N	7	N

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
BJ077R	150	30	N	50	N	300	N	<.1	<.02	<5	<2	.1	<2	57
BJ027R	150	30	N	70	N	300	N	<.1	<.02	<5	<2	.3	<2	50
BJ029R	100	10	N	70	N	300	N	<.1	<.02	<5	<2	.2	<2	50
BJ032R	100	<10	N	30	N	300	N	<.1	<.02	<5	<2	.3	<2	60
BJ037R	150	<10	N	70	N	300	N	<.1	<.02	<5	<2	<.1	<2	29
BJ042R	100	<10	N	50	N	300	N	<.1	<.02	<5	<2	.2	<2	65
BJ047R	100	30	N	70	N	300	N	<.1	<.02	9	<2	.2	<2	62
BJ053R	100	<10	N	50	N	300	N	<.1	.02	<5	<2	.2	<2	82
BJ057R	150	10	N	50	N	300	N	<.1	<.02	<5	<2	.3	<2	62
BJ061R	150	<10	N	50	N	300	N	<.1	<.02	<5	<2	<.1	<2	56
BJ062R	100	<10	N	70	N	300	N	<.1	<.02	<5	<2	.1	<2	30
BJ067R	100	30	N	70	N	300	N	<.1	<.02	9	<2	.4	<2	73
BJ073R	150	30	N	30	N	300	N	<.1	<.02	<5	<2	.3	<2	51
BJ076R	150	30	N	50	N	300	N	<.1	<.02	<5	<2	.3	<2	57

Table 10. Results of analyses of stream-sediment samples from the Duncan Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Mg-pct. S	Ca-pct. S	Ti-pct. S	Mn-pptm S	Ag-pptm S	As-pptm S	Au-pptm S	B-pptm S	Ba-pptm S
DU001S	42 27 12	116 3 32	1.5	.3	.7	.30	200	N	N	N	10	1,000
DU002S	42 28 21	116 3 9	1.5	.3	.7	.20	300	N	N	N	10	1,000
DU003S	42 28 37	116 3 29	1.5	.5	.7	.30	300	N	N	N	15	700
DU004S	42 28 36	116 4 30	2.0	.5	.7	.20	300	N	N	N	15	700
DU005S	42 29 24	116 2 40	1.5	.3	.7	.15	300	N	N	N	15	700
DU006S	42 29 25	116 2 31	2.0	.5	.7	.20	300	N	N	N	15	700
DU007S	42 29 20	116 3 51	1.5	.5	1.0	.30	300	N	N	N	15	700
DU008S	42 29 28	116 3 50	2.0	.5	.7	.20	300	N	N	N	15	700
DU009S	42 30 9	116 3 51	1.5	.3	1.5	.15	300	N	N	N	15	700
DU010S	42 30 52	116 3 35	1.5	.5	1.5	.15	300	N	N	N	15	700
DU011S	42 32 3	116 3 43	1.5	.5	1.0	.15	300	N	N	N	15	700
DU012S	42 31 40	116 2 4	1.5	.5	1.0	.20	700	N	N	N	15	700
DU013S	42 32 10	116 0 31	3.0	.5	.7	.30	300	N	N	N	15	700
DU014S	42 32 19	116 0 40	2.0	.3	.7	.15	300	N	N	N	15	700
DU015S	42 32 35	116 1 25	2.0	.5	1.0	.20	300	N	N	N	15	700
DU016S	42 32 42	116 1 45	1.5	.7	1.0	.15	300	N	N	N	10	700
DU017S	42 33 8	116 2 3	2.0	.7	1.5	.20	300	N	N	N	15	700

Table 10. Results of analyses of stream-sediment samples from the Duncan Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
DU001S	1.5	N	N	5	50	7	70	<5	30	<5	15	N	7	N
DU002S	1.5	N	N	7	30	7	70	N	<20	5	15	N	7	N
DU003S	1.5	N	N	7	30	10	70	N	30	7	15	N	10	N
DU004S	1.5	N	N	7	30	10	70	N	20	7	15	N	10	N
DU005S	1.5	N	N	7	30	10	50	N	<20	7	15	N	7	N
DU006S	1.5	N	N	7	50	15	70	N	<20	7	15	N	10	N
DU007S	1.5	N	N	7	30	10	70	N	20	7	15	N	7	N
DU008S	1.5	N	N	7	50	15	50	N	20	7	15	N	7	N
DU009S	1.5	N	N	7	30	15	30	N	20	7	15	N	7	N
DU010S	1.5	N	N	7	30	20	30	N	<20	7	15	N	10	N
DU011S	1.5	N	N	7	30	15	30	N	<20	7	15	N	7	N
DU012S	1.5	N	N	10	30	10	50	N	<20	7	15	N	7	N
DU013S	1.5	N	N	7	30	7	70	<5	30	5	15	N	7	N
DU014S	1.5	N	N	7	20	7	70	N	30	<5	15	N	7	N
DU015S	1.5	N	N	7	30	7	50	N	20	5	15	N	7	N
DU016S	1.5	N	N	7	30	7	70	N	20	5	15	N	7	N
DU017S	1.5	N	N	10	30	10	50	<5	<20	7	15	N	10	N

Table 10. Results of analyses of stream-sediment samples from the Duncan Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm S	Y-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
DU001S	300	50	N	30	N	300	N	<.1	<.02	<5	<2	.4	<2	34
DU002S	200	50	N	30	N	200	N	<.1	<.02	<5	<2	.5	<2	38
DU003S	150	50	N	30	N	200	N	<.1	.03	6	<2	.8	<2	72
DU004S	150	70	N	30	N	150	N	<.1	.03	7	<2	.8	<2	72
DU005S	150	30	N	30	N	150	N	<.1	.02	5	<2	.5	<2	48
DU006S	200	50	N	30	N	150	N	<.1	.06	<5	<2	.9	<2	66
DU007S	200	30	N	30	N	200	N	<.1	.04	<5	<2	.5	<2	44
DU008S	200	70	N	30	N	150	N	<.1	.06	<5	<2	.9	<2	76
DU009S	200	30	N	30	N	150	N	<.1	.08	<5	<2	.7	<2	65
DU010S	200	50	N	30	N	150	N	<.1	.06	<5	<2	.9	<2	81
DU011S	200	30	N	20	N	150	N	<.1	.08	<5	<2	.8	<2	78
DU012S	200	30	N	15	N	150	N	<.1	.06	<5	<2	.7	<2	61
DU013S	200	50	N	30	N	200	N	<.1	.04	<5	<2	.7	<2	71
DU014S	200	30	N	30	N	150	N	<.1	.03	<5	<2	.4	<2	40
DU015S	200	50	N	20	N	150	N	<.1	.04	<5	<2	.6	<2	52
DU016S	300	50	N	30	N	150	N	<.1	.06	<5	<2	.6	<2	50
DU017S	300	70	N	15	N	150	N	<.1	.04	<5	<2	.7	<2	63

Table 11. Results of analyses of heavy-mineral-concentrate samples from the Duncan Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Cu-pct. S	Tl-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
DU001	42 27 12	116 3 32	.5	.05	.7	1.0	100	N	N	N	20	1,500
DU003	42 28 37	116 3 29	.2	.05	.7	.5	100	N	N	N	20	2,000
DU004	42 28 36	116 4 30	.3	.10	1.0	.7	100	N	N	N	20	2,000
DU013	42 32 10	116 0 31	.5	.05	1.0	.2	100	N	N	N	<20	5,000
DU015	42 32 35	116 1 25	.7	.15	1.0	.7	200	N	N	N	20	3,000
DU016	42 32 42	116 1 45	.7	.15	1.0	.3	100	N	N	N	20	3,000
DU017	42 33 8	116 2 3	3.0	.20	.7	.7	500	N	N	N	<20	2,000

Sample	Re-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
DU001	5	N	N	N	50	N	<50	N	N	<10	70	N	N	1,000
DU003	5	N	N	N	30	N	<50	N	N	<10	20	N	N	>2,000
DU004	7	N	N	N	30	N	<50	N	N	<10	N	N	N	2,000
DU013	2	N	N	N	30	N	<50	N	N	<10	N	N	N	N
DU015	5	20	N	N	50	N	100	N	N	<10	N	N	N	>2,000
DU016	3	N	N	N	50	N	N	N	N	<10	50	N	N	<20
DU017	7	N	N	N	30	N	150	N	N	<10	N	N	15	2,000

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
DU001	1,000	50	<100	500	N	>2,000	N	--	--	--	--	--	--	--
DU003	1,000	30	<100	700	N	>2,000	N	--	--	--	--	--	--	--
DU004	1,000	30	<100	300	N	>2,000	N	--	--	--	--	--	--	--
DU013	700	20	<100	100	N	>2,000	N	--	--	--	--	--	--	--
DU015	1,000	30	<100	300	N	>2,000	N	--	--	--	--	--	--	--
DU016	700	20	<100	200	N	>2,000	N	--	--	--	--	--	--	--
DU017	500	50	<100	300	N	>2,000	N	--	--	--	--	--	--	--

Table 12. Results of analyses of rock samples from the Duncan Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Ca-pct. S	Tl-pct. S	Hn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
DU003R	42 28 37	116 4 30	1.5	.07	.5	.15	200	N	N	N	<10	1,500
DU006R	42 29 25	116 2 31	1.5	.05	.5	.10	150	N	N	N	N	1,000

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
DU003R	<100	<10	N	50	N	300	N	<.1	.02	<5	<2	.2	<2	49
DU006R	<100	10	N	20	N	300	N	<.1	.02	<5	<2	.3	<2	60

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Mi-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
DU003R	2	N	N	N	<10	<5	100	<5	30	<5	15	N	5	N
DU006R	2	N	N	N	<10	<5	70	<5	20	<5	15	N	5	N

Table 13. Results of analyses of stream-sediment samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Ca-pct. S	Ti-pct. g	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
UD001S	42 31 52	116 40 48	7	.3	1.5	.7	300	N	N	N	10	2,000
UD002S	42 31 15	116 41 59	5	.5	1.5	.7	700	N	N	N	15	1,500
UD003S	42 30 50	116 41 53	5	.3	1.5	.7	700	N	N	N	15	1,500
UD004S	42 30 19	116 41 28	3	.7	1.5	.5	300	N	N	N	15	1,500
UD005S	42 31 15	116 39 48	5	.5	1.5	>1.0	300	N	N	N	15	3,000
UD006S	42 31 28	116 39 52	3	.5	1.5	.5	500	N	N	N	10	1,500
UD007S	42 31 29	116 39 55	7	.3	1.5	1.0	700	N	N	N	15	1,500
UD009S	42 29 2	116 40 15	3	.3	1.5	1.0	300	N	N	N	10	2,000
UD010S	42 27 41	116 41 14	5	1.5	3.0	1.0	700	N	N	N	10	700
UD011S	42 26 50	116 39 34	7	1.5	3.0	.5	700	N	N	N	15	700
UD012S	42 26 28	116 38 53	7	1.5	3.0	.7	1,500	N	N	N	15	700

Table 13. Results of analyses of stream-sediment samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
UD001S	2.0	N	N	7	30	20	150	5	70	10	15	N	15	N
UD002S	2.0	N	N	7	70	20	70	<5	70	10	15	N	15	N
UD003S	2.0	N	N	10	30	20	70	5	70	10	15	N	10	N
UD004S	1.5	N	N	5	30	20	70	N	30	10	15	N	7	N
UD005S	1.5	N	N	5	15	15	70	5	150	5	15	N	7	N
UD006S	1.5	N	N	5	20	15	70	N	30	10	15	N	10	N
UD007S	2.0	N	N	7	15	20	70	5	70	10	20	N	10	N
UD009S	1.5	N	N	<5	30	10	70	<5	70	5	30	N	10	N
UD010S	1.0	N	N	15	150	30	50	N	<20	30	15	N	20	N
UD011S	1.5	N	N	15	150	30	50	N	<20	50	15	N	20	N
UD012S	1.0	N	N	30	150	30	50	N	<20	70	15	N	20	<10

Table 13. Results of analyses of stream-sediment samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
UD001S	300	70	N	100	N	2,000	N	<.1	.04	<5	<2	1.2	<2	88
UD002S	300	70	N	70	N	1,500	N	<.2	.17	6	<2	1.3	<2	94
UD003S	300	70	N	70	N	1,500	N	<.2	.08	8	<2	1.0	<2	62
UD004S	300	70	N	70	N	700	N	<.2	.05	<5	<2	1.0	<2	70
UD005S	200	70	N	70	N	2,000	N	--	1.40	<5	<2	.9	<2	77
UD006S	150	50	N	100	N	1,000	N	<.1	.08	<5	<2	.9	<2	85
UD007S	150	70	N	100	N	2,000	N	<.1	.09	<5	<2	1.0	<2	100
UD009S	300	50	N	70	N	1,500	N	<.1	.04	<5	<2	.6	<2	48
UD010S	300	150	N	30	N	300	N	<.1	.10	<5	<2	1.3	<2	71
UD011S	300	150	N	30	N	200	N	<.2	.05	5	<2	1.4	<2	75
UD012S	300	150	N	30	N	200	N	<.2	.26	5	<2	1.7	<2	64

Table 14. Results of sample analyses of heavy-mineral concentrate samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Hg-pct. S	Cu-pct. S	Ti-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
UD001	42 31 52	116 40 48	.20	<.05	.2	.10	100	N	N	N	20	1,000
UD002	42 31 15	116 41 59	.20	.05	.2	.10	100	N	N	N	20	500
UD003	42 30 50	116 41 53	.30	.05	.2	2.00	150	N	N	N	30	100
UD004	42 30 19	116 41 28	.20	.05	.2	.20	100	N	N	N	30	1,000
UD005	42 31 15	116 39 48	.20	.05	.2	.30	100	N	N	N	30	300
UD006	42 31 28	116 39 52	.20	<.05	.3	.05	70	N	N	N	30	1,500
UD007	42 31 29	116 39 55	.15	<.05	.3	.05	70	N	N	N	20	1,500
UD009	42 29 2	116 40 15	.15	<.05	.3	.20	70	N	N	N	20	700
UD010	42 27 41	116 40 14	.50	.20	1.0	.70	150	N	N	N	20	300
UD011	42 26 50	116 39 34	.20	.07	2.0	.70	100	N	N	N	30	700
UD012	42 26 28	116 38 53	.20	.05	1.5	1.00	100	N	N	N	20	1,500

Table 14. Results of sample analyses of heavy-metal concentrate samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Re-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Mi-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
UD001	20	N	N	N	<20	<10	70	N	N	15	N	N	N	500
UD002	20	N	N	N	<20	<10	70	N	N	20	N	N	<10	N
UD003	20	N	N	N	<20	<10	<50	N	N	20	N	N	30	300
UD004	20	N	N	N	<20	<10	100	N	N	20	N	N	50	<20
UD005	20	N	N	N	<20	<10	100	N	N	20	N	N	50	100
UD006	10	N	N	N	<20	<10	<50	N	N	<10	N	N	N	N
UD007	15	N	N	N	<20	10	<50	N	N	15	N	N	N	N
UD009	10	N	N	N	<20	15	100	N	N	10	N	N	N	1,500
UD010	15	N	N	N	20	10	<50	N	N	20	N	N	N	N
UD011	2	N	N	N	30	10	<50	N	N	15	N	N	N	>2,000
UD012	5	N	N	N	<20	10	<50	N	N	10	N	N	N	500

Table 14. Results of sample analyses of heavy-mineral concentrate samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm aa	As-ppm icp	Bi-ppm icp	Cd-ppm icp	Sb-ppm icp	Zn-ppm icp
UD001	300	20	<100	1,000	N	>2,000	200	--	--	--	--	--	--	--
UD002	300	30	<100	2,000	N	>2,000	200	--	--	--	--	--	--	--
UD003	500	30	<100	3,000	N	>2,000	300	--	--	--	--	--	--	--
UD004	500	30	<100	3,000	N	>2,000	N	--	--	--	--	--	--	--
UD005	500	30	<100	5,000	N	>2,000	N	--	--	--	--	--	--	--
UD006	300	<20	<100	500	N	>2,000	N	--	--	--	--	--	--	--
UD007	300	<20	<100	500	N	>2,000	N	--	--	--	--	--	--	--
UD009	500	20	<100	2,000	N	>2,000	N	--	--	--	--	--	--	--
UD010	500	50	<100	1,000	N	>2,000	N	--	--	--	--	--	--	--
UD011	500	30	<100	300	N	>2,000	N	--	--	--	--	--	--	--
UD012	500	30	<100	500	N	>2,000	N	--	--	--	--	--	--	--

Table 15. Results of analyses of rock samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho

Sample	Latitude	Longitude	Fe-pct. S	Mg-pct. S	Ca-pct. S	Ti-pct. S	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S
SUD1	42 28 29	116 40 22	7.0	3.00	5.0	.70	700	N	N	N	<10	300
SUD3	42 28 25	116 40 14	1.5	.07	.3	.07	70	N	N	N	10	700
SUD4	42 28 32	116 40 10	1.5	.07	.3	.07	100	N	N	N	<10	700
SUD5	42 28 33	116 40 6	1.5	.05	.2	.15	100	N	N	N	10	700
SUD7	42 32 27	116 40 52	.3	<.02	.3	.07	50	N	N	N	<10	700
SUD8	42 31 52	116 40 45	1.0	.03	.3	.07	150	N	N	N	<10	700
SUD10	42 31 27	116 41 2	1.0	.03	.3	.07	150	N	N	N	<10	700
SUD12	42 31 44	116 40 11	.7	<.02	.3	.10	70	N	N	N	10	1,000
IO35	42 27 32	116 41 4	1.0	.03	.3	.10	150	N	N	N	10	1,000
IO37	42 31 18	116 41 58	1.5	.02	.3	.10	70	N	N	N	10	700
IO41	42 31 8	116 42 13	.7	.03	.3	.10	70	N	N	N	10	700
OM113KT	42 31 3	116 40 53	.5	.02	.3	.10	150	N	N	N	10	700
OM116KT	42 30 32	116 41 2	.7	<.02	.3	.15	70	N	N	N	10	700
OM119KT	42 30 8	116 40 58	.5	<.02	.3	.10	50	N	N	N	10	700
UD009R	42 29 2	116 40 15	1.5	.05	.5	.10	150	N	N	N	N	2,000
UD010R	42 27 41	116 40 14	1.5	.07	.3	.10	150	N	N	N	N	1,000
UD012R	42 26 28	116 38 53	7.0	5.00	7.0	.50	700	N	N	N	N	300

Table 15. Results of analyses of rock samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Be-ppm S	Bi-ppm S	Cd-ppm S	Co-ppm S	Cr-ppm S	Cu-ppm S	La-ppm S	Mo-ppm S	Nb-ppm S	Ni-ppm S	Pb-ppm S	Sb-ppm S	Sc-ppm S	Sn-ppm S
SUD1	<1.0	N	N	30	150	15	30	N	<20	50	10	N	30	N
SUD3	1.5	N	N	<5	<10	<5	30	N	20	<5	15	N	<5	N
SUD4	1.5	N	N	<5	<10	<5	70	<5	20	<5	15	N	<5	N
SUD5	1.5	N	N	N	<10	<5	70	<5	20	<5	15	N	<5	N
SUD7	1.5	N	N	<5	<10	<5	70	N	<20	<5	15	N	<5	N
SUD8	1.5	N	N	<5	<10	<5	70	<5	20	<5	15	N	<5	N
SUD10	1.5	N	N	<5	<10	<5	70	<5	<20	<5	15	N	<5	N
SUD12	1.5	N	N	<5	<10	<5	70	<5	30	<5	15	N	<5	N
IO35	1.5	N	N	<5	<10	<5	70	<5	30	<5	15	N	<5	N
IO37	1.5	N	N	<5	<10	<5	50	<5	20	<5	15	N	<5	N
IO41	1.5	N	N	<5	<10	<5	50	<5	30	<5	15	N	<5	N
OH113KT	1.5	N	N	<5	<10	<5	70	N	30	<5	15	N	<5	N
OH116KT	1.5	N	N	<5	<10	<5	50	<5	30	<5	15	N	<5	N
OH119KT	1.5	N	N	<5	<10	<5	100	5	30	<5	15	N	<5	N
UD009R	1.5	N	N	N	<10	<5	70	<5	20	N	20	N	<5	N
UD010R	1.5	N	N	N	<10	<5	150	<5	20	N	15	N	<5	N
UD012R	<1.0	N	<30	30	200	30	<30	N	<20	70	<10	N	50	N

Table 15. Results of analyses of rock samples from the Upper Deep Creek Wilderness Study Area, Owyhee County, Idaho--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm aa	As-ppm lcp	Bi-ppm lcp	Cd-ppm lcp	Sb-ppm lcp	Zn-ppm lcp
SUD1	150	200	N	30	N	70	N	<.1	.03	<5	<2	1.6	<2	72
SUD3	<100	10	N	15	N	150	N	<.1	<.02	<5	<2	.4	<2	18
SUD4	<100	<10	N	30	N	150	N	<.1	<.02	<5	<2	.3	<2	69
SUD5	<100	10	N	50	N	200	N	<.1	<.02	18	<2	.3	<2	48
SUD7	<100	<10	N	15	N	200	N	<.1	<.02	<5	<2	.1	<2	40
SUD8	<100	<10	N	30	N	150	N	<.1	<.02	<5	<2	.2	<2	57
SUD10	<100	<10	N	30	N	150	N	<.1	<.02	<5	<2	.2	<2	25
SUD12	<100	<10	N	20	N	150	N	<.1	<.02	<5	<2	.1	<2	35
IO35	<100	<10	N	30	N	150	N	<.1	<.02	<5	<2	.3	<2	42
IO37	<100	15	N	30	N	150	N	<.1	<.02	<5	<2	.2	<2	61
IO41	<100	<10	N	15	N	150	N	<.1	<.02	<5	<2	<.1	<2	55
OM113KT	<100	<10	N	15	N	150	N	<.1	.03	<5	<2	.2	<2	40
OM116KT	<100	<10	N	20	N	150	N	<.1	<.02	<5	<2	.1	<2	37
OM119KT	<100	<10	N	70	N	150	N	<.1	<.02	<5	<2	<.1	<2	54
UD009R	<100	<10	N	30	N	200	N	<.1	.02	<5	<2	.1	<2	67
UD010R	<100	<10	N	30	N	200	N	<.1	.02	<5	<2	.1	<2	58
UD012R	<100	300	N	15	N	100	N	<.1	.04	<5	<2	1.2	<2	56