

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Analytical results and sample locality maps of
stream-sediment and heavy-mineral-concentrate samples from the
Honeycombs (OR-003-77A) and the Owyhee Canyon (OR-003-195)
Bureau of Land Management Wilderness Study Areas,
Malheur County, Oregon

By

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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 Honeycombs (OR-003-077A) and the Owyhee Canyon (OR-003-195) Bureau of Land Management Wilderness Study Areas, Malheur County, Oregon.

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INTRODUCTION

During May to August of 1984, the U.S. Geological Survey conducted reconnaissance geochemical surveys of the Honeycombs (OR-003-077A) and 138,915 acres of the Owyhee Canyon (OR-003-195) Bureau of Land Management Wilderness Study Areas, Malheur County, Oregon. The survey of the acreage given for the Owyhee Canyon Wilderness Study Area was requested by the Bureau of Land Management. In this report that studied area is called "wilderness study area" or just "study area."

TABLE 1. Bureau of Land Management Wilderness Study Areas in Malheur County, southeastern Idaho covered in this report

Wilderness Study Area	SIZE		
	mi ²	km ²	acres
Honeycombs	57	148	36,284
Owyhee Canyon	238	619	152,040

The Honeycombs Wilderness Study Area is in east central Malheur County, Oregon, about 40 mi (64 km) north of Jordan Valley, Oregon and about 50 mi (80 km) west of Boise, Idaho (see fig. 1). Access to this study area is provided on the east via an improved gravel road parallel to Succor Creek; this road connects to U.S. Highway 95 about 19 mi (30 km) north of Jordan Valley. Other access is several unimproved gravel roads and jeep trails. Access to the area from the south is by an improved gravel road that joins the road parallel to Succor Creek and follows Leslie Gulch along the southern boundary of the study area and terminates at Owyhee Reservoir. Access to the area from the west is by boat via Owyhee Reservoir.

The Honeycombs study area is underlain by volcanic and sedimentary rocks which were deposited in a broad north-plunging basin that evolved in eastern Oregon and western Idaho in late Miocene time (Gray and others, 1983). A

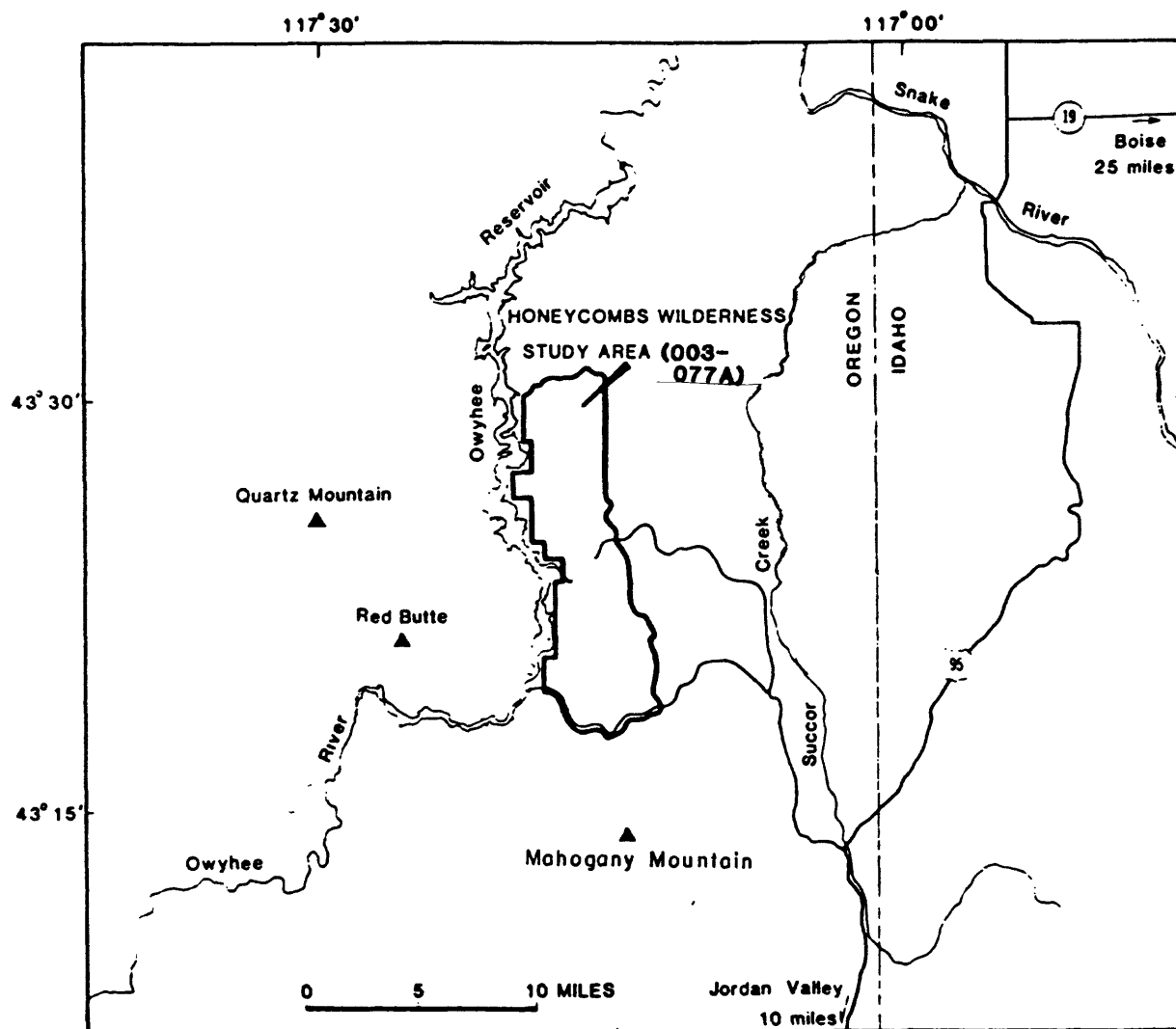


Figure 1. Location map of the Honeycombs (OR-003-77A) Bureau of Land Management Wilderness Study Areas, Malheur County, Oregon.

thick basal section formed by multifold rhyolitic and volcanoclastic rocks of Miocene age are overlain by sedimentary rocks interbedded with ash-flow and air-fall tuffs. Plugs, dikes, and sills of basalt, andesite, and rhyolite intrude the entire sequence. Basalt flows of Pliocene and Pleistocene age cap the section (Kittleman and others, 1965).

The topographic relief in the study area is about 2,360 ft (719 m) with a maximum elevation of 5,025 ft (1,532 m). The topographic pattern is dominated by north-trending ridges and valleys and deeply eroded west-trending canyons. The drainage systems of the entire area empty into Owyhee Reservoir.

The Owyhee Canyon wilderness study area is in the Owyhee Plateau in extreme southeastern Malheur County, Oregon, which is about 33 mi (53 km) south of Jordan Valley via improved and gravel roads. The center of the study area is at Three Forks, and lies about 5 mi (8 km) southeast of Rome, Oregon, via gravel roads to the extreme west end of the study area (see fig. 2). U.S. Highway 95 connects with the access roads both to the north and to the west. The area has a total relief of 2,400 ft (732 m) and consists of expansive flat fields and rolling hills cut by canyons of depths to 1,000 ft (305 m).

The Owyhee River Canyon wilderness study area is underlain by flat-lying volcanic, pyroclastic, and sedimentary rocks of Middle Miocene through Holocene age (Evans and others, unpublished data, 1986). Rhyolitic welded ash-flow tuff and tuff breccia comprise the Swisher Mountain Tuff, the oldest and most abundant rock unit in the study area. Basalt overlies the rhyolite and forms low, rounded buttes that are probably the remains of shield volcanos. In the middle part of the area the basalt and rhyolite are separated stratigraphically by a thin wedge of conglomerate, siltstone, tuff, and lacustrine deposits. In the northern part, the basalt is covered by conglomerate and silt. High-angle normal faults, ranging in age from Miocene through Holocene are common in the northern part of the study area.

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.

Sample Collection

TABLE 2.--Number of sample sites for each Wilderness Study Area

Wilderness Study Area	Number of sites
Honeycombs	53
Owyhee Canyon	201

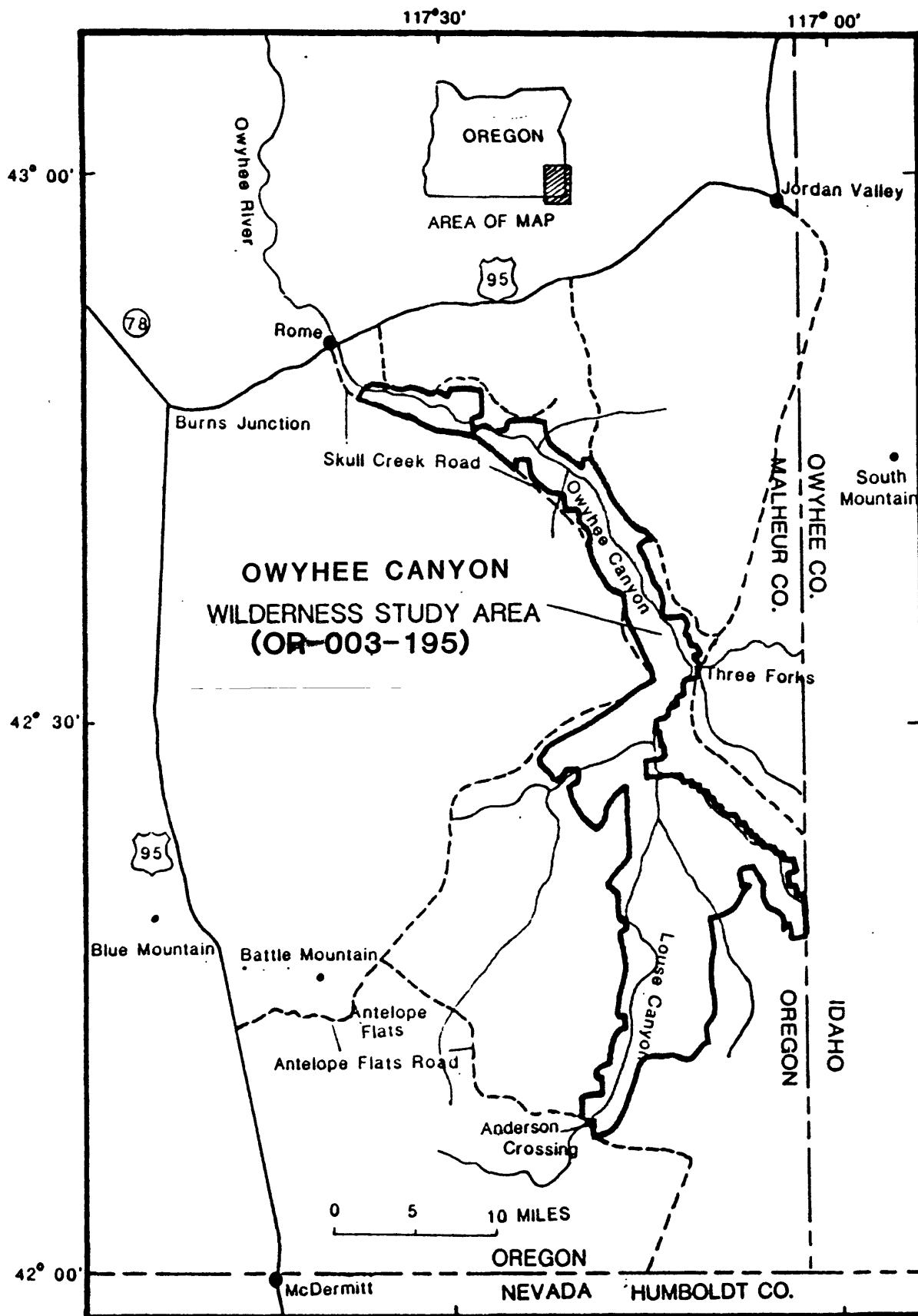


Figure 2. Location map of the Owyhee Canyon (OR-003-195) Bureau of Land Management wilderness study area, Malheur County, Oregon.

At nearly all of those sites, both a stream-sediment sample and a heavy-mineral-concentrate sample were collected. Sampling density was about one sample site per mi^2 for the stream sediments and heavy-mineral concentrates. The area of the drainage basins sampled ranged from 0.5 mi^2 (1.3 km^2) to 6 mi^2 (15.5 km^2).

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 50 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.

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. 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 0.1 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.

Sample Analysis

Spectrographic method

The stream-sediment and heavy-mineral-concentrate samples were analyzed for 31 elements using semiquantitative, direct-current arc emission spectrographic methods. Analyses for the stream-sediment samples were performed using the method of Myers and others (1961). Analyses for heavy-mineral-concentrate samples were performed using the method of Grimes and Marranzino (1968). The elements analyzed and their lower limits of determination are listed in table 3. 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 Honeycombs (OR-003-077A) and the Owyhee Canyon (OR-003-195) wilderness study areas, Malheur County, Oregon are listed in tables 5-8.

Chemical methods

Other methods of analysis used on samples from these wilderness study areas are summarized in table 4.

Analytical results for stream-sediment and heavy-mineral-concentrate samples are listed in tables 5-8, respectively.

The analytical method used for determining As, Bi, Cd, Sb, and Zn is a modification and adaptation for the inductively coupled plasma method (ICP) based on the method of O'Leary and Viets (1986).

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 5-8 list the analyses for the samples of stream sediment and heavy-mineral concentrate, 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, 2 and 3). Columns in which the element headings show the letter "s" below the element symbol are emission spectrographic analyses; "ICP" indicates inductively coupled plasma-atomic emission spectroscopy analyses. 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 3. 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. If an element was not looked for in a sample, two dashes (--) are entered in tables 5-8 in place of an analytical value. Because of the formatting used in the computer program that produced tables 5-8, 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 3.--Limits of determination for the spectrographic analysis of stream sediments, based on a 10-mg sample

[The values shown are the lower limits of determination assigned by the Grimes and Marranzino method (Grimes and Marranzino, 1968), except for those values in parentheses, which are the lower values assigned by the Myers and others method (Myers and others, 1961). The spectrographic limits of determination for heavy-mineral-concentrate samples (Grimes and Marranzino, 1968) are based on a 5-mg sample, and are therefore two reporting intervals higher than the limits given for 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 (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 4.--Chemical methods used

[ICP = inductively coupled plasma source spectrography]

Element or constituent determined	Sample Type	Method	Determination limit (micrograms/gram or ppm)	Analysts	Reference
Arsenic (As)	stream	ICP	5	Fey, David, and Briggs, P. H.	Crock and others, 1983, and modification of O'Leary and Viets, 1986.
Antimony (Sb)	sediment	ICP	2		
Bismuth (Bi)		ICP	2		
Cadmium (Cd)		ICP	0.1		
Zinc (Zn)		ICP	2		

Table 3.--Analyses of stream-sediment samples, Honeycombs Wilderness Study Area (N-003-77N),

Malheur County, Oregon

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

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	Be-ppm s
HC001HS	43 19 26	117 18 13	3.0	.30	1.5	.30	700	<.5	<700	<15	<10	1,000	2.0
HC002HS	43 18 57	117 17 43	2.0	.20	.3	.20	500	<.5	<700	<15	<10	1,500	2.0
HC003HS	43 18 21	117 17 22	2.0	.20	.5	.20	700	<.5	<700	<15	<10	1,500	3.0
HC004HS	43 17 53	117 15 35	3.0	.70	1.5	.30	1,000	<.5	<700	<15	<10	1,500	2.0
HC005HS	43 18 15	117 14 29	2.0	.70	1.0	.20	1,000	<.5	<700	<15	<10	1,500	3.0
HC006HS	43 20 7	117 18 44	7.0	2.00	3.0	1.00	1,500	<.5	<700	<15	<10	1,500	2.0
HC007HS	43 21 46	117 18 6	3.0	.70	1.5	.30	700	<.5	<700	<15	10	1,000	2.0
HC008HS	43 23 6	117 18 20	3.0	.70	1.0	.30	700	<.5	<700	<15	<10	1,000	2.0
HC009HS	43 29 55	117 16 52	5.0	2.00	3.0	.70	1,500	<.5	<700	<15	<10	1,000	<1.0
HC010HS	43 29 18	117 17 57	7.0	2.00	3.0	1.00	1,500	<.5	<700	<15	<10	1,000	1.0
HC201MS	43 19 55	117 15 13	3.0	.70	1.5	.30	1,000	<.5	<700	<15	10	1,000	3.0
HC202MS	43 19 49	117 14 25	3.0	1.50	1.5	.30	700	<.5	<700	<15	10	1,500	3.0
HC203MS	43 21 55	117 16 0	3.0	.70	1.5	.50	1,000	<.5	<700	<15	<10	2,000	3.0
HC204MS	43 22 24	117 15 25	3.0	1.50	2.0	.50	1,500	<.5	<700	<15	<10	1,500	1.5
HC205MS	43 26 52	117 15 13	7.0	7.00	5.0	.70	1,500	<.5	<700	<15	<10	1,000	2.0
HC206MS	43 27 29	117 16 19	5.0	3.00	3.0	3.00	700	<.5	<700	<15	<10	300	3.0
HC207MS	43 27 31	117 16 13	1.5	.20	.3	.15	300	<.5	<700	<15	<10	150	7.0
HC208MS	43 27 30	117 16 9	7.0	3.00	3.0	.70	1,000	<.5	<700	<15	<10	700	3.0
HC209MS	43 24 50	117 17 45	7.0	3.00	3.0	1.50	1,500	<.5	<700	<15	<10	700	3.0
HC210MS	43 24 51	117 17 58	7.0	3.00	3.0	.30	1,000	<.5	<700	<15	<10	700	2.0
HC211MS	43 24 44	117 17 49	2.0	.50	1.0	.30	500	<.5	<700	<15	<10	1,000	2.0
HC212MS	43 24 24	117 18 42	3.0	.70	1.5	.30	1,500	<.5	<700	<15	<10	1,000	3.0
HC213MS	43 29 52	117 16 52	3.0	1.50	5.0	.50	1,000	<.5	<700	<15	<10	700	<1.0
HC214MS	43 29 36	117 17 17	3.0	1.00	2.0	.50	1,000	<.5	<700	<15	<10	700	1.5
HC215MS	43 29 15	117 17 55	5.0	2.00	3.0	.50	1,000	<.5	<700	<15	<10	1,000	1.0
HC216MS	43 29 52	117 18 12	7.0	3.00	5.0	1.00	1,500	<.5	<700	<15	<10	700	<1.0
HC217MS	43 29 15	117 19 45	7.0	3.00	3.0	1.00	1,000	<.5	<700	<15	<10	500	<1.0
HC301KS	43 20 18	117 16 13	7.0	.30	3.0	1.50	1,500	<.5	<700	<15	<10	2,000	1.5
HC302KS	43 21 4	117 16 33	3.0	.30	1.5	.50	500	<.5	<700	<15	<10	1,500	2.0
HC303KS	43 21 52	117 16 55	3.0	.70	1.5	.30	1,000	<.5	<700	<15	<10	1,000	3.0
HC304KS	43 20 8	117 13 55	3.0	1.50	1.5	.30	700	<.5	<700	<15	15	1,000	3.0
HC305KS	43 20 30	117 14 0	3.0	.70	1.5	.30	700	<.5	<700	<15	10	1,000	1.5
HC307KS	43 22 44	117 16 25	3.0	1.50	2.0	.30	1,000	<.5	<700	<15	<10	1,500	2.0
HC308KS	43 23 19	117 16 45	5.0	1.50	2.0	.50	1,500	<.5	<700	<15	<10	700	2.0
HC309KS	43 24 20	117 15 15	3.0	1.50	1.5	.50	1,000	<.5	<700	<15	<10	700	1.5
HC319KS	43 25 55	117 19 55	7.0	3.00	3.0	.70	1,500	<.5	<700	<15	<10	1,500	2.0
HC310KS	43 28 59	117 16 44	7.0	3.00	3.0	1.00	1,000	<.5	<700	<15	15	1,000	1.5
HC311KS	43 28 42	117 17 47	7.0	3.00	3.0	.70	1,500	<.5	<700	<15	10	1,000	1.0
HC312KS	43 28 37	117 18 8	3.0	1.50	1.5	.30	700	<.5	<700	<15	<10	300	7.0
HC313KS	43 28 45	117 18 38	7.0	2.00	3.0	.50	1,500	<.5	<700	<15	<10	500	3.0
HC314KS	43 28 59	117 19 3	5.0	3.00	3.0	.50	1,000	<.5	<700	<15	<10	500	<1.0
HC315KS	43 29 3	117 19 2	7.0	5.00	3.0	.70	1,500	<.5	<700	<15	<10	1,000	<1.0
HC316KS	43 26 7	117 17 30	7.0	5.00	5.0	.70	1,000	<.5	<700	<15	<10	500	3.0
HC317KS	43 24 43	117 19 32	5.0	3.00	3.0	1.00	1,000	<.5	<700	<15	<10	700	1.0
HC318KS	43 24 5	117 18 15	3.0	.15	.5	.30	1,500	<.5	<700	<15	10	1,500	2.0

Table 5.--Analyses of stream-sediment samples, Honeycombs Wilderness Study Area (UK-003-77A),
Malheur County, Oregon--Continued

Sample	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
HC001HS	<10	<30	5	20	15	150	<5	30	10	20	<100	7	<10
HC002HS	<10	<30	<5	<10	5	70	<5	30	<5	20	<100	<5	<10
HC003HS	<10	<30	<5	<10	7	100	<5	30	<5	30	<100	<5	<10
HC004HS	<10	<30	7	70	20	70	<5	20	20	15	<100	7	<10
HC005HS	<10	<30	5	30	10	100	<5	30	10	20	<100	7	<10
HC006HS	<10	<30	15	150	20	100	<5	70	20	30	<100	15	<10
HC007HS	<10	<30	10	30	20	70	<5	20	20	15	<100	10	<10
HC008HS	<10	<30	10	20	20	70	<5	30	10	20	<100	10	<10
HC009HS	<10	<30	20	100	50	50	<5	<20	50	10	<100	15	<10
HC010HS	<10	<30	30	150	70	50	<5	<20	50	10	<100	20	<10
HC201MS	<10	<30	7	30	30	70	<5	20	10	30	<100	7	<10
HC202MS	<10	<30	5	15	15	150	<5	20	7	30	<100	7	<10
HC203MS	<10	<30	10	70	15	70	<5	30	10	20	<100	7	<10
HC204MS	<10	<30	15	30	50	30	<5	<20	15	15	<100	7	<10
HC205MS	<10	<30	30	150	150	30	<5	20	100	20	<100	30	<10
HC206MS	<10	<30	15	70	70	50	<5	30	70	30	<100	15	10
HC207MS	<10	<30	<5	10	7	70	<5	50	5	50	<100	<5	10
HC208MS	<10	<30	15	30	30	70	<5	30	30	30	<100	15	<10
HC209MS	<10	<30	30	150	70	70	<5	20	70	20	<100	30	<10
HC210MS	<10	<30	15	30	70	70	<5	20	150	15	<100	10	<10
HC211MS	<10	<30	7	30	20	100	5	30	10	20	<100	5	<10
HC212MS	<10	<30	7	15	20	150	7	30	7	70	<100	7	<10
HC213MS	<10	<30	15	70	50	30	<5	<20	30	10	<100	15	<10
HC214MS	<10	<30	15	50	30	50	<5	<20	30	15	<100	15	<10
HC215MS	<10	<30	20	70	70	<30	<5	<20	50	10	<100	15	<10
HC216MS	<10	<30	30	300	50	<30	<5	<20	70	<10	<100	30	<10
HC217MS	<10	<30	20	70	70	<30	<5	<20	50	10	<100	20	<10
HC301KS	<10	<30	<5	15	7	70	<5	70	7	20	<100	7	<10
HC302KS	<10	<30	5	50	15	150	<5	30	10	20	<100	5	<10
HC303KS	<10	<30	7	30	15	150	<5	30	7	50	<100	5	<10
HC304KS	<10	<30	10	30	30	70	<5	20	15	20	<100	7	<10
HC305KS	<10	<30	10	50	30	<30	<5	<20	20	15	<100	10	<10
HC307KS	<10	<30	10	30	30	70	<5	<20	15	15	<100	7	<10
HC308KS	<10	<30	15	50	30	50	<5	<20	20	15	<100	15	<10
HC309KS	<10	<30	15	50	30	70	<5	30	20	15	<100	15	<10
HC319KS	<10	<30	30	100	70	30	<5	<20	70	20	<100	30	<10
HC310KS	<10	<30	20	70	50	150	<5	<20	50	<10	<100	30	<10
HC311KS	<10	<30	20	100	70	<30	<5	<20	50	15	<100	20	<10
HC312KS	<10	<30	10	50	30	100	<5	50	30	50	<100	10	10
HC313KS	<10	<30	15	50	50	50	<5	30	30	30	<100	15	<10
HC314KS	<10	<30	30	70	70	<30	<5	<20	70	10	<100	15	<10
HC315KS	<10	<30	20	100	70	<30	<5	<20	70	<10	<100	20	<10
HC316KS	<10	<30	30	150	70	70	<5	20	70	20	<100	30	<10
HC317KS	<10	<30	15	100	50	70	<5	<20	50	10	<100	20	<10
HC318KS	<10	<30	<5	<10	7	150	5	30	5	30	<100	<5	<10

Table 5.--Analyses of stream-sediment samples, Honeycombs Wilderness Study Area (OK-003-77A),
Malheur County, Oregon--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	As-ppm icp	Zn-ppm icp	Cd-ppm icp	Bi-ppm icp	Sb-ppm icp
HC001HS	200	50	<50	70	<200	500	<200	<5	93	.2	<2	<2
HC002HS	<100	10	<50	100	<200	500	<200	<5	112	.3	<2	<2
HC003HS	<100	15	<50	70	<200	1,000	<200	<5	133	.3	<2	<2
HC004HS	200	70	<50	100	<200	300	<200	<5	94	.3	<2	<2
HC005HS	150	30	<50	100	<200	500	<200	<5	100	.3	<2	<2
HC006HS	300	150	<50	70	<200	2,000	<200	<5	131	.4	<2	<2
HC007HS	300	70	<50	50	<200	300	<200	<5	73	.3	<2	<2
HC008HS	200	70	<50	70	<200	300	<200	8	113	.5	<2	<2
HC009HS	500	200	<50	20	<200	150	<200	<5	60	.4	<2	<2
HC010HS	700	300	<50	30	<200	200	<200	<5	64	.5	<2	<2
HC201MS	200	70	<50	70	<200	500	<200	7	111	.5	<2	<2
HC202MS	300	30	<50	70	<200	500	<200	5	116	.4	<2	<2
HC203MS	300	70	<50	70	<200	1,000	<200	9	96	.3	<2	<2
HC204MS	300	70	<50	70	<200	2,000	<200	16	95	.5	<2	<2
HC205MS	700	300	<50	70	<200	300	<200	<5	112	.7	<2	<2
HC206MS	300	150	<50	150	<200	700	<200	<5	166	.6	<2	<2
HC207MS	<100	15	<50	100	300	1,000	<200	<5	161	.3	<2	<2
HC208MS	300	150	<50	150	<200	1,000	<200	8	157	.7	<2	<2
HC209MS	300	300	<50	70	<200	300	<200	65	127	.7	<2	<2
HC210MS	300	70	<50	70	<200	300	<200	19	83	.6	<2	<2
HC211MS	150	50	<50	70	<200	700	<200	13	77	.2	<2	<2
HC212MS	150	30	<50	70	<200	1,000	<200	120	118	.7	<2	<2
HC213MS	500	150	<50	20	<200	200	<200	<5	55	.5	<2	<2
HC214MS	300	150	<50	30	<200	200	<200	10	58	.4	<2	<2
HC215MS	500	15	<50	20	<200	150	<200	7	55	.5	<2	<2
HC216MS	700	500	<50	20	<200	150	<200	<5	79	.5	<2	<2
HC217MS	500	150	<50	20	<200	150	<200	<5	69	.6	<2	<2
HC301KS	150	30	<50	100	<200	2,000	<200	<5	110	.5	<2	<2
HC302KS	300	100	<50	70	<200	1,500	<200	6	76	.2	<2	<2
HC303KS	150	30	<50	70	<200	1,500	<200	11	120	.3	<2	<2
HC304KS	300	70	<50	50	<200	500	<200	<5	65	.4	<2	<2
HC305KS	300	100	<50	50	<200	300	<200	<5	64	.2	<2	<2
HC307KS	500	70	<50	50	<200	300	<200	9	69	.4	<2	<2
HC308KS	300	150	<50	70	<200	300	<200	10	93	.5	<2	<2
HC309KS	300	70	<50	50	<200	500	<200	11	93	.5	<2	<2
HC319KS	300	200	<50	30	<200	300	<200	11	81	.7	<2	<2
HC310KS	500	200	<50	50	<200	300	<200	7	71	.6	<2	<2
HC311KS	500	150	<50	20	<200	150	<200	8	72	.6	<2	<2
HC312KS	200	100	<50	200	300	1,000	<200	<5	231	.5	<2	<2
HC313KS	300	150	<50	100	<200	700	<200	8	152	.6	<2	<2
HC314KS	500	150	<50	30	<200	150	<200	<5	73	.7	<2	<2
HC315KS	700	300	<50	30	<200	200	<200	<5	69	.7	<2	<2
HC316KS	500	300	<50	70	<200	200	<200	8	131	1.0	<2	<2
HC317KS	500	150	<50	20	<200	150	<200	<5	62	.6	<2	<2
HC318KS	100	15	<50	150	<200	1,500	<200	56	160	.6	<2	<2

Table 3.--Analyses of stream-sediment samples, Honeycombs Wilderness Study Area (OK-003-77A),
Malheur County, Oregon--Continued

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	Be-ppm s
HC320KS	43 27 23	117 20 3	5.0	2.00	2.0	.50	1,500	<.5	<700	<15	<10	700	<1.0
HC321KS	43 27 13	117 18 30	3.0	.70	1.0	.30	300	<.5	<700	<15	10	300	7.0
HC322KS	43 31 29	117 19 15	3.0	1.50	7.0	.30	700	<.5	<700	<15	<10	700	<1.0
HC323KS	43 30 28	117 18 41	5.0	2.00	3.0	.50	1,000	<.5	<700	<15	<10	500	<1.0
HC401PS	43 28 56	117 16 5	7.0	3.00	3.0	.70	1,500	<.5	<700	<15	15	1,000	<1.0
HC402PS	43 28 28	117 17 18	5.0	2.00	3.0	.50	1,000	<.5	<700	<15	<10	500	1.0
HC403PS	43 25 37	117 18 45	3.0	1.50	1.5	.30	700	<.5	<700	<15	10	300	7.0
HC404PS	43 25 36	117 19 20	7.0	3.00	3.0	>1.00	1,500	<.5	<700	<15	<10	500	<1.0

Table 5.--Analyses of stream-sediment samples, Honeycombs Wilderness Study Area (UX-V03-77A),
Malheur County, Oregon--Continued

Sample	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
HC320KS	<10	<30	20	70	70	<30	<5	<20	50	10	<100	20	<10
HC321KS	<10	<30	<5	15	15	150	<5	70	7	70	<100	<5	15
HC322KS	<10	<30	15	70	30	<30	<5	<20	30	<10	<100	15	<10
HC323KS	<10	<30	15	50	70	<30	<5	<20	30	10	<100	20	<10
HC401PS	<10	<30	20	150	70	50	<5	<20	50	15	<100	30	<10
HC402PS	<10	<30	15	50	70	<30	<5	<20	30	10	<100	20	<10
HC403PS	<10	<30	7	20	30	150	<5	70	15	50	<100	7	15
HC404PS	<10	<30	30	200	50	<30	<5	20	70	<10	<100	30	<10

Table 5.--Analyses of stream-sediment samples, Honeycombs Wilderness Study Area (UX-003-77A),
Malheur County, Oregon--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	As-ppm icp	Zn-ppm icp	Cd-ppm icp	Bi-ppm icp	Sb-ppm icp
HC320KS	300	150	<50	20	<200	100	<200	<5	76	.7	<2	<2
HC321KS	150	30	<50	300	<200	1,000	<200	6	163	.4	<2	<2
HC322KS	300	150	<50	15	<200	100	<200	8	52	.6	<2	<2
HC323KS	300	150	<50	20	<200	150	<200	<5	71	.6	<2	<2
HC401PS	700	300	<50	30	<200	200	<200	9	65	.6	<2	<2
HC402PS	300	150	<50	20	<200	150	<200	12	66	.6	<2	3
HC403PS	150	70	<50	150	300	1,000	<200	12	327	.6	<2	<2
HC404PS	500	500	<50	50	<200	150	<200	<5	102	.6	<2	2

Table 6.--Analyses of stream-sediment samples, Owyhee River Canyon wilderness study area (UH-003-093),

Malheur County, Oregon

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

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	Be-ppm s
OC001S	42 32 48	117 10 5	3.0	2.0	2.0	1.5	1,500	<.5	<700	<15	20	1,500	1.5
OC002S	42 32 39	117 9 21	5.0	3.0	3.0	1.5	700	<.5	<700	<15	<20	1,500	1.0
OC024S	42 20 43	117 3 20	3.0	2.0	1.5	.3	1,000	<.5	<700	<15	20	1,000	1.5
OC025S	42 22 32	117 4 21	3.0	1.5	1.5	.5	300	<.5	<700	<15	30	700	1.5
OC026S	42 22 56	117 5 51	3.0	1.5	1.5	.7	700	<.5	<700	<15	30	1,000	2.0
OC027S	42 23 31	117 6 42	3.0	1.5	1.5	.5	700	<.5	<700	<15	20	1,000	1.5
OC028S	42 24 6	117 6 56	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	1,500	1.5
OC029S	42 24 31	117 8 11	3.0	1.5	1.5	.3	700	<.5	<700	<15	20	1,000	1.5
OC030S	42 26 24	117 11 29	3.0	1.5	1.5	.3	700	<.5	<700	<15	15	1,000	1.0
OC031S	42 26 25	117 11 40	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC032S	42 27 0	117 12 59	2.0	.7	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC033S	42 27 52	117 12 46	2.0	.7	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC034S	42 28 7	117 13 8	3.0	1.0	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC035S	42 28 8	117 13 15	3.0	1.0	1.5	.5	500	<.5	<700	<15	15	700	1.5
OC036S	42 28 21	117 13 21	3.0	1.5	1.5	.7	300	<.5	<700	<15	<10	700	1.5
OC037S	42 29 31	117 13 33	3.0	1.5	1.5	.3	500	<.5	<700	<15	15	1,000	1.5
OC038S	42 30 2	117 13 28	3.0	1.5	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC039S	42 30 18	117 12 18	2.0	.7	1.5	.3	300	<.5	<700	<15	10	700	1.5
OC039SB	42 30 18	117 12 18	1.5	.7	1.5	.3	300	<.5	<700	<15	15	1,000	1.5
OC040S	42 30 20	117 12 20	3.0	1.5	1.5	.3	700	<.5	<700	<15	15	700	2.0
OC041S	42 31 6	117 12 3	2.0	1.0	1.5	.3	700	<.5	<700	<15	15	700	2.0
OC042S	42 31 49	117 11 4	3.0	1.0	1.5	.7	700	<.5	<700	<15	10	700	1.5
OC043S	42 32 4	117 10 16	2.0	.7	1.5	.3	500	<.5	<700	<15	15	1,000	1.5
OC044S	42 32 58	117 10 41	2.0	.7	1.5	.3	500	<.5	<700	<15	15	700	1.5
OC045S	42 33 46	117 11 3	1.5	1.0	1.5	.3	700	<.5	<700	<15	15	1,000	1.5
OC046S	42 34 47	117 11 8	3.0	1.5	1.5	.7	700	<.5	<700	<15	10	500	1.5
OC047S	42 35 9	117 11 26	3.0	3.0	3.0	.7	700	<.5	<700	<15	<10	300	1.0
OC048S	42 35 35	117 12 5	3.0	2.0	2.0	.3	700	<.5	<700	<15	10	300	1.5
OC049S	42 36 11	117 13 10	2.0	1.0	1.5	.3	700	<.5	<700	<15	10	700	1.5
OC050S	42 36 45	117 13 54	1.5	1.0	1.5	.2	700	<.5	<700	<15	10	700	1.5
OC051S	42 38 21	117 14 22	3.0	1.5	2.0	.5	700	<.5	<700	<15	10	500	1.5
OC052S	42 38 55	117 14 41	5.0	1.5	2.0	.5	700	<.5	<700	<15	<10	500	1.0
OC053S	42 39 17	117 15 48	2.0	.7	1.5	.3	500	<.5	<700	<15	15	700	1.0
OC054S	42 41 28	117 16 49	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	500	1.0
OC055S	42 43 6	117 19 0	2.0	1.0	1.0	.3	300	<.5	<700	<15	15	700	1.5
OC056S	42 43 9	117 19 28	3.0	.7	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC057S	42 43 31	117 19 56	3.0	1.5	1.5	.2	700	<.5	<700	<15	15	300	1.0
OC058S	42 43 40	117 20 43	2.0	.7	1.5	.3	700	<.5	<700	<15	15	500	1.5
OC059S	42 44 20	117 21 22	3.0	1.5	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC060S	42 44 42	117 21 11	3.0	1.5	1.5	.5	700	<.5	<700	<15	10	700	1.5
OC061S	42 44 50	117 22 7	2.0	.7	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC062S	42 44 55	117 23 26	3.0	1.0	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC063S	42 44 45	117 24 11	3.0	1.5	2.0	.3	700	<.5	<700	<15	15	500	1.5
OC064S	42 45 44	117 27 58	3.0	2.0	3.0	.5	1,000	<.5	<700	<15	10	500	1.5
OC065S	42 46 28	117 29 4	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	500	1.0

Table 6.--Analyses of stream-sediment samples, Owyhee River Canyon wilderness study area (OR-003-095),
Malheur County, Oregon--Continued

Sample	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
OC001S	<10	<30	15	100	30	70	<5	30	30	30	<100	15	<10
OC002S	<10	<30	20	200	30	30	<5	30	70	20	<100	30	<10
OC024S	<10	<30	15	150	70	50	<5	<20	50	20	<100	15	50
OC025S	<10	<30	10	70	70	70	<5	<20	30	15	<100	15	30
OC026S	<10	<30	15	100	70	70	<5	<20	50	15	<100	20	30
OC027S	<10	<30	15	100	50	70	<5	20	30	15	<100	15	50
OC028S	<10	<30	15	100	30	70	<5	20	30	20	<100	15	50
OC029S	<10	<30	15	150	30	50	<5	<20	30	20	<100	15	30
OC030S	<10	<30	15	150	50	30	<5	<20	30	20	<100	10	<10
OC031S	<10	<30	15	100	30	70	<5	<20	30	15	<100	15	<10
OC032S	<10	<30	7	70	20	30	<5	<20	15	15	<100	7	<10
OC033S	<10	<30	7	30	50	50	<5	<20	15	15	<100	7	<10
OC034S	<10	<30	10	30	30	50	<5	<20	15	15	<100	7	<10
OC035S	<10	<30	10	30	50	30	<5	<20	15	15	<100	7	<10
OC036S	<10	<30	10	150	15	70	<5	20	15	15	<100	15	<10
OC037S	<10	<30	10	30	30	50	<5	<20	15	15	<100	7	<10
OC038S	<10	<30	10	70	30	30	<5	<20	15	15	<100	7	<10
OC039S	<10	<30	7	70	7	70	<5	20	7	20	<100	7	<10
OC039SB	<10	<30	7	50	7	70	<5	<20	7	15	<100	7	<10
OC040S	<10	<30	7	30	20	70	<5	<20	10	20	<100	7	<10
OC041S	<10	<30	10	70	20	30	<5	<20	10	15	<100	7	<10
OC042S	<10	<30	10	150	15	50	<5	20	7	20	<100	7	<10
OC043S	<10	<30	7	30	10	70	<5	<20	7	15	<100	7	<10
OC044S	<10	<30	7	30	30	70	<5	<20	15	15	<100	7	<10
OC045S	<10	<30	7	70	30	50	<5	<20	15	15	<100	7	<10
OC046S	<10	<30	15	150	20	30	<5	<20	30	15	<100	10	<10
OC047S	<10	<30	20	150	20	30	<5	<20	30	15	<100	15	<10
OC048S	<10	<30	15	150	30	30	<5	<20	30	15	<100	10	<10
OC049S	<10	<30	10	30	30	30	<5	<20	10	15	<100	7	<10
OC050S	<10	<30	10	70	20	30	<5	<20	15	20	<100	7	<10
OC051S	<10	<30	15	150	30	30	<5	<20	70	15	<100	20	<10
OC052S	<10	<30	15	200	30	<30	<5	<20	70	15	<100	15	<10
OC053S	<10	<30	7	70	30	70	<5	<20	15	15	<100	7	<10
OC054S	<10	<30	15	150	30	<30	<5	<20	50	15	<100	10	<10
OC055S	<10	<30	7	20	15	30	<5	20	7	20	<100	7	<10
OC056S	<10	<30	15	150	20	50	<5	<20	15	15	<100	10	<10
OC057S	<10	<30	15	50	30	30	<5	<20	30	15	<100	7	<10
OC058S	<10	<30	15	50	30	30	<5	<20	15	15	<100	7	<10
OC059S	<10	<30	15	70	30	30	<5	<20	30	15	<100	15	<10
OC060S	<10	<30	15	50	30	30	<5	<20	30	15	<100	10	<10
OC061S	<10	<30	10	70	30	30	<5	<20	15	15	<100	7	<10
OC062S	<10	<30	15	70	30	30	<5	<20	30	15	<100	15	<10
OC063S	<10	<30	15	70	30	30	<5	<20	30	15	<100	15	<10
OC064S	<10	<30	15	100	30	<30	<5	<20	50	15	<100	15	<10
OC065S	<10	<30	15	70	30	30	<5	<20	30	15	<100	15	<10

Table 6.--Analyses of stream-sediment samples, Owyhee River Canyon wilderness study area (OR-003-095),
Malheur County, Oregon--Continued

Sample	Sr-ppm s	V-ppm s	N-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	As-ppm icp	Zn-ppm icp	Cd-ppm icp	Bi-ppm icp	Sb-ppm icp
OC001S	700	150	<50	100	<200	1,500	<200	<5	68	.5	<2	<2
OC002S	700	300	<50	70	<200	3,000	<200	<5	68	.7	<2	<2
OC024S	300	150	<50	30	<200	200	<200	<5	65	.7	<2	<2
OC025S	300	100	<50	30	<200	300	<200	<5	62	.5	<2	<2
OC026S	300	150	<50	50	<200	300	<200	<5	60	.4	<2	<2
OC027S	500	150	<50	30	<200	300	<200	6	55	.4	<2	<2
OC028S	300	150	<50	50	<200	500	<200	<5	48	.3	<2	<2
OC029S	500	100	<50	50	<200	150	<200	5	48	.4	<2	<2
OC030S	700	150	<50	30	<200	300	<200	<5	46	.3	<2	<2
OC031S	300	150	<50	30	<200	200	<200	<5	52	.4	<2	<2
OC032S	300	70	<50	20	<200	300	<200	<5	49	.3	<2	<2
OC033S	300	70	<50	20	<200	200	<200	<5	56	.3	<2	<2
OC034S	500	100	<50	20	<200	300	<200	<5	68	.3	<2	<2
OC035S	300	100	<50	20	<200	200	<200	<5	57	.4	<2	<2
OC036S	300	150	<50	20	<200	200	<200	<5	36	.1	<2	<2
OC037S	300	100	<50	30	<200	200	<200	<5	50	.3	<2	<2
OC038S	300	100	<50	20	<200	200	<200	7	54	.4	<2	<2
OC039S	300	70	<50	30	<200	300	<200	6	40	.2	<2	<2
OC039SB	300	70	<50	30	<200	300	<200	<5	42	.3	<2	<2
OC040S	300	70	<50	30	<200	150	<200	7	62	.4	<2	<2
OC041S	300	70	<50	15	<200	200	<200	<5	60	.4	<2	<2
OC042S	300	150	<50	30	<200	300	<200	<5	85	.3	<2	<2
OC043S	300	70	<50	20	<200	300	<200	<5	42	.2	<2	<2
OC044S	300	70	<50	30	<200	200	<200	5	66	.5	<2	<2
OC045S	300	70	<50	30	<200	300	<200	<5	57	.4	<2	<2
OC046S	300	150	<50	15	<200	300	<200	<5	55	.4	<2	<2
OC047S	300	150	<50	15	<200	70	<200	<5	63	.6	<2	<2
OC048S	300	150	<50	15	<200	150	<200	<5	53	.4	<2	<2
OC049S	300	70	<50	15	<200	200	<200	<5	47	.3	<2	<2
OC050S	300	70	<50	15	<200	150	<200	<5	50	.3	2	<2
OC051S	300	150	<50	30	<200	200	<200	<5	66	.6	<2	<2
OC052S	200	150	<50	20	<200	70	<200	<5	84	<1	<2	<2
OC053S	300	70	<50	30	<200	70	<200	<5	69	.5	<2	<2
OC054S	150	70	<50	15	<200	70	<200	<5	85	1.0	<2	<2
OC055S	200	30	<50	30	<200	300	<200	<5	42	.4	<2	<2
OC056S	300	100	<50	30	<200	300	<200	<5	60	.5	<2	<2
OC057S	150	50	<50	15	<200	70	<200	<5	73	1.0	<2	<2
OC058S	300	70	<50	30	<200	150	<200	<5	65	.6	<2	<2
OC059S	300	150	<50	30	<200	100	<200	<5	65	.6	<2	<2
OC060S	300	150	<50	20	<200	100	<200	<5	61	.5	<2	<2
OC061S	300	150	<50	20	<200	200	<200	<5	50	.4	<2	<2
OC062S	300	150	<50	30	<200	100	<200	<5	69	.7	<2	<2
OC063S	200	150	<50	30	<200	200	<200	<5	68	.9	<2	<2
OC064S	300	150	<50	15	<200	100	<200	<5	73	.8	<2	<2
OC065S	300	150	<50	20	<200	150	<200	<5	71	.8	<2	<2

Table 6.--Analyses of stream-sediment samples, Owyhee River Canyon wilderness study area (OR-003-095),
Malheur County, Oregon--Continued

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	Be-ppm s
OC066S	42 46 59	117 30 15	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC067S	42 47 4	117 32 28	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC068S	42 47 24	117 33 36	1.5	.7	1.5	.3	300	<.5	<700	<15	10	700	1.5
OC069S	42 47 38	117 34 28	3.0	.7	1.5	.5	700	<.5	<700	<15	15	500	1.5
OC070S	42 47 27	117 35 17	2.0	.7	1.5	.7	700	<.5	<700	<15	15	500	1.5
OC071S	42 47 28	117 35 27	2.0	.7	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC201S	42 47 8	117 29 22	3.0	1.5	2.0	.7	700	<.5	<700	<15	15	700	<1.0
OC202S	42 47 9	117 28 1	5.0	1.5	2.0	.7	700	<.5	<700	<15	15	700	<1.0
OC203S	42 45 57	117 21 38	5.0	1.5	3.0	.7	700	<.5	<700	<15	15	700	1.5
OC204S	42 39 42	117 13 59	5.0	1.5	3.0	.7	700	<.5	<700	<15	10	700	<1.0
OC205S	42 39 28	117 13 47	5.0	1.5	2.0	.7	700	<.5	<700	<15	30	700	1.0
OC206S	42 40 18	117 15 15	3.0	1.5	3.0	.3	700	<.5	<700	<15	20	700	1.0
OC207S	42 46 58	117 34 52	3.0	1.5	1.5	.3	700	<.5	<700	<15	20	700	1.0
OC208S	42 46 28	117 31 52	5.0	1.5	2.0	1.0	700	<.5	<700	<15	10	700	1.0
OC209S	42 45 51	117 30 45	5.0	1.5	2.0	.7	700	<.5	<700	<15	20	700	1.5
OC210S	42 45 25	117 28 48	3.0	1.5	2.0	.7	700	<.5	<700	<15	15	700	1.5
OC211S	42 44 35	117 24 49	3.0	1.5	1.5	.7	700	<.5	<700	<15	15	700	1.0
OC212S	42 44 10	117 22 58	3.0	1.5	2.0	.7	700	<.5	<700	<15	10	700	1.5
OC213S	42 42 55	117 21 23	3.0	1.5	1.5	.5	300	<.5	<700	<15	15	700	1.5
OC214S	42 42 48	117 19 34	3.0	1.5	2.0	.7	700	<.5	<700	<15	15	700	1.5
OC215S	42 42 24	117 19 37	3.0	1.5	1.5	.5	300	<.5	<700	<15	15	700	1.5
OC216S	42 41 33	117 19 27	3.0	1.5	1.5	.3	300	<.5	<700	<15	20	700	1.5
OC217S	42 41 10	117 18 34	3.0	1.0	1.5	.7	300	<.5	<700	<15	20	700	1.5
OC218S	42 40 42	117 18 10	3.0	1.5	2.0	.7	300	<.5	<700	<15	15	700	1.5
OC219S	42 39 55	117 17 28	3.0	1.0	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC220S	42 39 4	117 17 23	3.0	1.0	1.5	.7	300	<.5	<700	<15	15	700	1.5
OC221S	42 38 17	117 15 52	3.0	1.5	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC222S	42 37 48	117 17 1	3.0	1.0	1.5	.7	300	<.5	<700	<15	15	700	1.5
OC223S	42 37 4	117 16 26	3.0	1.0	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC224S	42 36 51	117 15 56	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC225S	42 36 24	117 15 15	3.0	1.5	1.5	.3	300	<.5	<700	<15	15	700	1.5
OC226S	42 35 36	117 15 15	3.0	1.5	1.5	.5	700	<.5	<700	<15	20	700	1.5
OC227S	42 34 17	117 14 24	2.0	.7	1.5	.3	300	<.5	<700	<15	15	700	1.5
OC228S	42 33 55	117 11 55	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC229S	42 34 17	117 12 20	2.0	.7	1.5	.3	500	<.5	<700	<15	15	700	1.5
OC230S	42 34 22	117 12 56	3.0	1.5	1.5	.3	300	<.5	<700	<15	15	700	1.5
OC231S	42 34 28	117 12 38	2.0	.7	1.5	.3	500	<.5	<700	<15	15	700	1.5
OC232S	42 34 57	117 13 30	3.0	1.0	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC233S	42 34 19	117 12 50	2.0	.7	1.5	.3	500	<.5	<700	<15	15	500	1.5
OC234S	42 36 5	117 11 52	3.0	1.0	1.5	.3	700	<.5	<700	<15	20	700	1.5
OC235S	42 34 38	117 10 18	3.0	1.5	1.5	.3	500	<.5	<700	<15	20	700	1.5
OC236S	42 33 48	117 13 48	1.5	.7	1.5	.5	300	<.5	<700	<15	20	700	1.5
OC238S	42 32 4	117 12 12	1.5	1.5	1.5	.3	500	<.5	<700	<15	15	300	1.5
OC239S	42 30 32	117 15 13	3.0	1.0	1.5	.5	500	<.5	<700	<15	30	700	3.0
OC240S	42 30 51	117 15 30	3.0	1.5	1.5	.5	1,500	<.5	<700	<15	30	700	1.5

Table 6.--Analyses of stream-sediment samples, Uwyhee River Canyon wilderness study area (UX-003-045),
Malheur County, Oregon--Continued

Sample	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
0C066S	<10	<30	15	100	30	50	<5	<20	30	15	<100	15	<10
0C067S	<10	<30	15	70	30	30	<5	<20	30	15	<100	15	<10
0C068S	<10	<30	7	70	15	30	<5	<20	15	15	<100	7	<10
0C069S	<10	<30	10	70	15	30	<5	<20	20	15	<100	10	<10
0C070S	<10	<30	10	50	15	30	<5	<20	20	15	<100	10	<10
0C071S	<10	<30	7	100	15	30	<5	<20	15	15	<100	10	<10
0C201S	<10	<30	15	70	50	30	<5	<20	20	15	<100	15	<10
0C202S	<10	<30	20	150	70	70	<5	20	30	15	<100	20	<10
0C203S	<10	<30	15	150	70	70	<5	20	30	20	<100	15	<10
0C204S	<10	<30	15	200	70	30	<5	20	30	15	<100	15	<10
0C205S	<10	<30	20	150	70	30	<5	20	70	30	<100	15	<10
0C206S	<10	<30	15	70	50	30	<5	<20	30	15	<100	15	<10
0C207S	<10	<30	15	70	50	30	<5	<20	30	15	<100	15	<10
0C208S	<10	<30	15	200	70	70	<5	20	30	15	<100	30	<10
0C209S	<10	<30	15	150	70	70	<5	<20	30	20	<100	20	<10
0C210S	<10	<30	15	100	50	<30	<5	<20	30	15	<100	15	<10
0C211S	<10	<30	15	150	70	30	<5	20	30	15	<100	15	<10
0C212S	<10	<30	15	70	50	70	<5	30	30	30	<100	15	<10
0C213S	<10	<30	15	70	50	30	<5	<20	20	15	<100	15	<10
0C214S	<10	<30	15	70	50	70	<5	<20	30	15	<100	15	<10
0C215S	<10	<30	15	70	30	30	<5	<20	15	15	<100	10	<10
0C216S	<10	<30	15	70	50	50	<5	<20	30	15	<100	15	<10
0C217S	<10	<30	15	70	30	70	<5	30	15	15	<100	15	<10
0C218S	<10	<30	15	100	50	70	<5	20	15	20	<100	15	<10
0C219S	<10	<30	15	70	30	50	<5	20	15	15	<100	15	<10
0C220S	<10	<30	15	70	50	70	<5	20	15	15	<100	15	<10
0C221S	<10	<30	15	70	50	30	<5	30	15	20	<100	15	<10
0C222S	<10	<30	15	100	50	70	<5	30	15	30	<100	15	<10
0C223S	<10	<30	15	30	30	70	<5	20	15	20	<100	7	<10
0C224S	<10	<30	15	70	70	30	<5	<20	15	20	<100	15	<10
0C225S	<10	<30	15	70	50	70	<5	<20	15	15	<100	15	<10
0C226S	<10	<30	15	70	50	70	<5	30	15	20	<100	15	<10
0C227S	<10	<30	15	70	30	30	<5	<20	15	15	<100	7	<10
0C228S	<10	<30	15	70	30	70	<5	<20	20	20	<100	15	<10
0C229S	<10	<30	15	30	30	30	<5	20	15	15	<100	10	<10
0C230S	<10	<30	15	70	30	70	<5	<20	30	15	<100	15	<10
0C231S	<10	<30	7	30	15	30	<5	<20	15	15	<100	7	<10
0C232S	<10	<30	10	30	15	50	<5	20	15	15	<100	7	<10
0C233S	<10	<30	10	70	20	30	<5	<20	15	15	<100	7	<10
0C234S	<10	<30	15	70	20	30	<5	<20	30	15	<100	10	<10
0C235S	<10	<30	15	70	200	30	<5	<20	20	15	<100	10	<10
0C236S	<10	<30	7	70	20	30	<5	<20	15	15	<100	7	<10
0C238S	<10	<30	10	70	20	70	<5	<20	15	15	<100	7	<10
0C239S	<10	<30	10	30	30	70	<5	30	15	30	<100	7	<10
0C240S	<10	<30	15	70	30	70	<5	30	20	30	<100	7	<10

Table 6.--Analyses of stream-sediment samples, Uwynee River Canyon wilderness study area (ON-003-0737), Malheur County, Oregon--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	As-ppm icp	Zn-ppm icp	Cd-ppm icp	Bi-ppm icp	Sb-ppm icp
QC066S	300	150	<50	30	<200	150	<200	<5	69	.7	<2	<2
QC067S	300	150	<50	30	<200	300	<200	<5	64	.4	<2	<2
QC068S	300	70	<50	20	<200	150	<200	<5	42	.3	<2	<2
QC069S	300	100	<50	20	<200	200	<200	<5	59	.5	<2	<2
QC070S	300	100	<50	20	<200	300	<200	7	55	.5	<2	<2
QC071S	300	100	<50	15	<200	150	<200	<5	49	.3	<2	<2
QC201S	700	150	<50	30	<200	300	<200	<5	48	<.1	<2	<2
QC202S	700	200	<50	30	<200	500	<200	<5	67	.4	2	<2
QC203S	300	150	<50	30	<200	300	<200	<5	58	.3	3	<2
QC204S	300	150	<50	30	<200	300	<200	<5	59	.4	<2	<2
QC205S	300	150	<50	30	<200	150	<200	<5	70	.7	<2	<2
QC206S	300	70	<50	30	<200	150	<200	<5	57	.4	<2	<2
QC207S	300	70	<50	30	<200	200	<200	<5	57	.3	<2	<2
QC208S	300	200	<50	30	<200	300	<200	<5	81	.7	<2	<2
QC209S	700	200	<50	30	<200	200	<200	<5	65	.4	<2	<2
QC210S	500	150	<50	30	<200	300	<200	<5	57	.3	<2	<2
QC211S	700	150	<50	30	<200	200	<200	<5	50	.3	<2	<2
QC212S	300	150	<50	70	<200	700	<200	<5	56	.3	<2	<2
QC213S	300	150	<50	30	<200	300	<200	<5	44	.3	<2	<2
QC214S	300	150	<50	50	<200	300	<200	<5	53	.4	<2	<2
QC215S	300	150	<50	30	<200	200	<200	<5	52	.2	<2	<2
QC216S	300	150	<50	30	<200	200	<200	<5	53	.3	<2	<2
QC217S	500	150	<50	50	<200	500	<200	<5	39	.2	<2	<2
QC218S	300	150	<50	30	<200	300	<200	<5	52	.3	<2	<2
QC219S	300	150	<50	30	<200	500	<200	<5	43	.3	<2	<2
QC220S	300	150	<50	30	<200	200	<200	<5	47	.2	<2	<2
QC221S	300	150	<50	30	<200	200	<200	<5	48	.3	<2	<2
QC222S	300	150	<50	30	<200	300	<200	<5	46	.3	<2	<2
QC223S	300	70	<50	30	<200	300	<200	<5	48	.3	<2	<2
QC224S	300	150	<50	30	<200	300	<200	<5	61	.5	<2	<2
QC225S	300	150	<50	50	<200	500	<200	<5	54	.3	<2	<2
QC226S	300	150	<50	30	<200	500	<200	<5	64	.3	<2	<2
QC227S	300	150	<50	30	<200	200	<200	<5	34	.3	<2	<2
QC228S	300	150	<50	30	<200	300	<200	<5	51	.4	3	<2
QC229S	300	150	<50	50	<200	300	<200	<5	59	.3	<2	<2
QC230S	300	70	<50	30	<200	200	<200	<5	56	.5	<2	<2
QC231S	300	70	<50	20	<200	300	<200	<5	60	<.1	<2	<2
QC232S	300	100	<50	15	<200	300	<200	<5	61	.1	<2	<2
QC233S	300	70	<50	15	<200	200	<200	<5	48	<.1	<2	<2
QC234S	300	70	<50	15	<200	200	<200	<5	57	.2	<2	<2
QC235S	300	70	<50	20	<200	150	<200	<5	72	.4	<2	<2
QC236S	300	70	<50	20	<200	200	<200	<5	46	.2	<2	<2
QC238S	200	70	<50	30	<200	200	<200	<5	56	.5	<2	<2
QC239S	300	70	<50	30	<200	300	<200	<5	58	.3	<2	<2
QC240S	300	100	<50	30	<200	300	<200	<5	60	.5	<2	<2

Table 6.--Analyses of stream-sediment samples, Uwyhee River Canyon wilderness study area (OR-003-095),
Malheur County, Oregon--Continued

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	Be-ppm s
OC241S	42 28 33	117 15 19	3.0	1.5	1.5	.5	700	<.5	<700	<15	30	700	1.5
OC242S	42 28 57	117 16 42	3.0	.7	1.5	.5	700	<.5	<700	<15	20	700	1.5
OC243S	42 26 58	117 17 49	3.0	1.0	1.5	.5	700	<.5	<700	<15	20	700	1.5
OC244S	42 27 21	117 18 0	2.0	.7	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC245S	42 27 10	117 17 22	2.0	.7	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC246S	42 26 58	117 17 16	2.0	.7	1.5	.3	500	<.5	<700	<15	20	700	1.5
OC247S	42 27 26	117 16 8	3.0	.7	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC248S	42 7 52	117 18 55	3.0	1.0	1.5	1.0	700	<.5	<700	<15	15	1,500	1.5
OC249S	42 8 13	117 18 46	3.0	.7	1.5	1.0	700	<.5	<700	<15	10	1,500	1.5
OC250S	42 8 17	117 18 47	3.0	1.5	1.5	.3	1,000	<.5	<700	<15	20	1,000	1.5
OC251S	42 10 44	117 17 15	3.0	1.0	1.5	.3	1,000	<.5	<700	<15	30	1,500	1.5
OC252S	42 10 47	117 17 16	3.0	1.0	1.5	.3	1,000	<.5	<700	<15	30	1,000	1.5
OC272S	42 9 30	117 19 14	5.0	1.0	1.5	.5	700	<.5	<700	<15	15	1,500	1.5
OC276S	42 9 19	117 17 11	5.0	1.0	2.0	>1.0	1,000	<.5	<700	<15	10	2,000	1.5
OC277S	42 9 14	117 16 49	3.0	1.0	1.5	.7	1,000	<.5	<700	<15	10	2,000	1.5
OC278S	42 9 8	117 16 48	3.0	.7	2.0	.7	700	<.5	<700	<15	<10	3,000	1.5
OC279S	42 8 26	117 17 59	7.0	1.5	2.0	>1.0	1,500	<.5	<700	<15	<10	2,000	1.5
OC280S	42 8 20	117 18 1	7.0	1.0	1.5	>1.0	1,000	<.5	<700	<15	50	1,500	1.5
OC281S	42 8 2	117 18 0	3.0	1.5	1.5	.5	1,000	<.5	<700	<15	20	1,500	1.5
OC282S	42 8 1	117 18 3	3.0	1.0	1.5	.3	1,000	<.5	<700	<15	20	1,500	2.0
OC283S	42 10 5	117 16 17	3.0	1.5	1.5	.3	1,000	<.5	<700	<15	20	1,000	1.5
OC284S	42 10 4	117 16 18	7.0	1.0	2.0	>1.0	1,000	<.5	<700	<15	10	3,000	2.0
OC285S	42 10 54	117 16 1	3.0	.7	2.0	.5	700	<.5	<700	<15	20	1,000	1.5
OC286S	42 11 44	117 15 38	3.0	.7	1.5	.3	700	<.5	<700	<15	50	1,000	1.5
OC287S	42 11 45	117 15 26	2.0	.5	2.0	.2	700	<.5	<700	<15	10	1,500	2.0
OC288S	42 11 29	117 16 32	3.0	1.0	1.5	.3	1,000	<.5	<700	<15	20	1,000	1.5
OC289S	42 12 20	117 15 7	3.0	1.0	1.5	.5	1,000	<.5	<700	<15	20	1,000	1.5
OC290S	42 17 3	117 13 22	5.0	1.5	1.5	.5	1,000	<.5	<700	<15	20	1,000	1.5
OC291S	42 18 3	117 14 48	5.0	1.5	1.5	.3	1,000	<.5	<700	<15	30	700	1.5
OC292S	42 17 50	117 15 24	5.0	1.5	2.0	.5	1,000	<.5	<700	<15	20	700	1.0
OC293S	42 12 41	117 10 7	5.0	1.5	1.5	.7	1,000	<.5	<700	<15	10	1,500	1.5
OC294S	42 12 46	117 10 10	3.0	1.0	2.0	.5	1,000	<.5	<700	<15	20	1,500	1.5
OC295S	42 12 48	117 9 59	3.0	1.0	2.0	.5	1,000	<.5	<700	<15	30	1,500	1.5
OC296S	42 14 36	117 12 21	3.0	1.0	2.0	.5	1,500	<.5	<700	<15	20	1,500	1.5
OC297S	42 13 58	117 12 33	5.0	1.5	2.0	.5	1,500	<.5	<700	<15	30	1,000	1.5
OC298S	42 27 17	117 13 39	3.0	.7	2.0	.7	700	<.5	<700	<15	15	1,000	1.5
OC299S	42 26 27	117 12 55	3.0	1.0	2.0	.5	700	<.5	<700	<15	20	1,000	1.5
OC300S	42 23 20	117 13 32	5.0	1.5	2.0	.5	1,000	<.5	<700	<15	20	700	1.5
OC301S	42 23 13	117 14 0	3.0	2.0	1.5	.3	1,000	<.5	<700	<15	30	1,000	1.0
OC302S	42 23 8	117 13 58	7.0	3.0	3.0	.7	1,000	<.5	<700	<15	15	1,000	1.0
OC303S	42 28 0	117 15 10	3.0	1.5	1.5	.5	1,000	<.5	<700	<15	30	1,500	1.5
OC304S	42 27 22	117 15 21	3.0	1.5	1.5	.5	700	<.5	<700	<15	30	1,000	1.0
OC305S	42 27 18	117 15 17	3.0	1.5	1.5	.5	700	<.5	<700	<15	20	1,000	1.5
OC306S	42 21 33	117 15 5	3.0	1.5	1.5	.3	700	<.5	<700	<15	30	700	1.5
OC307S	42 21 40	117 15 18	3.0	1.5	1.5	.3	700	<.5	<700	<15	30	1,000	1.5

Table 6.--Analyses of stream-sediment samples, Uwyhee River Canyon wilderness study area (OK-003-095),
Malheur County, Oregon--Continued

Sample	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
OC241S	<10	<30	15	30	30	70	<5	<20	15	30	<100	7	<10
OC242S	<10	<30	10	30	30	70	<5	<20	15	30	<100	10	<10
OC243S	<10	<30	15	70	30	50	<5	<20	30	30	<100	15	<10
OC244S	<10	<30	10	30	30	70	<5	<20	15	30	<100	7	<10
OC245S	<10	<30	10	30	30	50	<5	<20	15	30	<100	7	<10
OC246S	<10	<30	10	30	30	50	<5	<20	15	20	<100	7	<10
OC247S	<10	<30	15	30	30	30	<5	<20	15	20	<100	7	<10
OC248S	<10	<30	15	150	15	70	<5	30	15	30	<100	10	<10
OC249S	<10	<30	10	70	15	70	<5	30	15	30	<100	7	<10
OC250S	<10	<30	15	30	70	30	<5	<20	20	30	<100	10	<10
OC251S	<10	<30	15	70	50	70	<5	<20	30	15	<100	15	<10
OC252S	<10	<30	15	50	50	50	<5	<20	20	15	<100	15	<10
OC272S	<10	<30	15	70	50	50	<5	<20	30	15	<100	15	<10
OC276S	<10	<30	15	30	50	70	<5	30	20	20	<100	15	<10
OC277S	<10	<30	10	20	30	70	<5	20	10	20	<100	10	<10
OC278S	<10	<30	10	70	15	100	<5	20	15	20	<100	10	<10
OC279S	<10	<30	15	100	70	70	<5	50	15	20	<100	15	<10
OC280S	<10	<30	15	70	70	70	<5	30	20	20	<100	15	<10
OC281S	<10	<30	15	50	50	70	<5	20	20	15	<100	15	<10
OC282S	<10	<30	15	70	50	50	<5	<20	20	20	<100	15	<10
OC283S	<10	<30	15	70	50	50	<5	<20	30	20	<100	15	<10
OC284S	<10	<30	15	150	15	70	<5	50	20	20	<100	15	<10
OC285S	<10	<30	10	50	30	50	<5	<20	15	15	<100	7	<10
OC286S	<10	<30	10	70	50	70	<5	<20	20	15	<100	10	<10
OC287S	<10	<30	5	<10	15	100	<5	20	5	20	<100	7	<10
OC288S	<10	<30	10	50	50	30	<5	<20	20	15	<100	10	<10
OC289S	<10	<30	15	70	50	50	<5	<20	20	20	<100	10	<10
OC290S	<10	<30	15	70	50	70	<5	<20	30	20	<100	15	<10
OC291S	<10	<30	15	70	50	50	<5	<20	30	20	<100	15	<10
OC292S	<10	<30	15	150	50	30	<5	<20	30	15	<100	15	<10
OC293S	<10	<30	15	150	30	70	<5	30	20	20	<100	15	30
OC294S	<10	<30	15	70	50	70	<5	<20	20	20	<100	10	<10
OC295S	<10	<30	10	50	50	50	<5	<20	20	20	<100	10	<10
OC296S	<10	<30	15	70	50	50	<5	<20	20	20	<100	10	<10
OC297S	<10	<30	15	70	70	30	<5	<20	30	20	<100	7	<10
OC298S	<10	<30	10	70	50	70	<5	<20	20	15	<100	10	<10
OC299S	<10	<30	10	70	30	50	<5	<20	15	15	<100	10	<10
OC300S	<10	<30	15	70	50	50	<5	<20	30	15	<100	15	<10
OC301S	<10	<30	15	150	50	50	<5	<20	30	15	<100	15	<10
OC302S	<10	<30	15	100	30	70	<5	20	30	20	<100	15	<10
OC303S	<10	<30	15	70	30	70	<5	20	15	15	<100	10	<10
OC304S	<10	<30	15	70	30	30	<5	20	15	15	<100	10	<10
OC305S	<10	<30	15	70	30	30	<5	20	15	15	<100	10	<10
OC306S	<10	<30	15	70	30	30	<5	<20	20	20	<100	15	<10
OC307S	<10	<30	15	70	30	30	<5	<20	30	15	<100	15	<10

Table 8.--Analyses of stream-sediment samples, Uwyhee River Canyon Wilderness Study area (OK-003-093), Malheur County, Oregon--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	As-ppm icp	Zn-ppm icp	Cd-ppm icp	Bi-ppm icp	Sb-ppm icp
0C241S	300	70	<50	30	<200	300	<200	--	--	--	--	--
0C242S	300	70	<50	30	<200	300	<200	<5	61	.3	<2	<2
0C243S	300	150	<50	30	<200	300	<200	<5	62	.3	<2	<2
0C244S	300	70	<50	30	<200	300	<200	<5	53	.4	<2	<2
0C245S	300	70	<50	30	<200	300	<200	<5	63	.4	<2	<2
0C246S	300	70	<50	30	<200	300	<200	--	--	--	--	--
0C247S	300	70	<50	20	<200	300	<200	<5	59	.4	<2	<2
0C248S	300	100	<50	30	<200	700	<200	<5	47	.2	<2	<2
0C249S	300	70	<50	30	<200	700	<200	<5	46	.2	<2	<2
0C250S	300	100	<50	30	<200	300	<200	<5	107	.6	<2	<2
0C251S	500	150	<50	30	<200	200	<200	<5	62	.4	<2	<2
0C252S	500	150	<50	30	<200	200	<200	<5	88	.5	<2	<2
0C272S	500	150	<50	30	<200	300	<200	<5	68	.2	<2	<2
0C276S	500	150	<50	50	<200	1,500	<200	<5	52	.3	<2	<2
0C277S	500	100	<50	30	<200	500	<200	<5	39	.2	<2	<2
0C278S	500	100	<50	30	<200	500	<200	<5	27	.1	<2	<2
0C279S	500	150	<50	30	<200	1,000	<200	<5	49	.2	<2	<2
0C280S	500	150	<50	30	<200	500	<200	<5	80	.5	<2	<2
0C281S	500	100	<50	50	<200	300	<200	<5	62	.4	<2	<2
0C282S	500	150	<50	30	<200	300	<200	<5	76	.5	<2	<2
0C283S	500	150	<50	30	<200	200	<200	<5	72	.5	<2	<2
0C284S	500	150	<50	50	<200	1,500	<200	<5	40	.2	<2	<2
0C285S	500	100	<50	30	<200	300	<200	5	46	.3	<2	<2
0C286S	500	100	<50	30	<200	150	<200	5	74	.5	<2	<2
0C287S	300	20	<50	30	<200	300	<200	<5	27	.1	<2	<2
0C288S	300	100	<50	20	<200	300	<200	<5	66	.5	<2	<2
0C289S	500	150	<50	30	<200	300	<200	<5	72	.5	<2	<2
0C290S	500	150	<50	30	<200	300	<200	5	70	.4	<2	<2
0C291S	300	150	<50	30	<200	300	<200	<5	72	.4	<2	<2
0C292S	500	150	<50	20	<200	150	<200	<5	60	.4	<2	<2
0C293S	500	150	<50	50	<200	1,000	<200	<5	47	.3	<2	<2
0C294S	500	100	<50	30	<200	300	<200	<5	50	.5	<2	<2
0C295S	500	100	<50	20	<200	200	<200	<5	49	.4	<2	<2
0C296S	500	100	<50	30	<200	300	<200	<5	52	.5	<2	<2
0C297S	500	150	<50	20	<200	200	<200	<5	66	.5	<2	<2
0C298S	500	150	<50	50	<200	300	<200	<5	42	.3	<2	<2
0C299S	500	100	<50	20	<200	300	<200	<5	45	.2	<2	<2
0C300S	300	150	<50	20	<200	200	<200	<5	68	.4	<2	<2
0C301S	500	150	<50	20	<200	200	<200	<5	53	.3	<2	<2
0C302S	500	150	<50	30	<200	500	<200	<5	64	.6	<2	<2
0C303S	500	150	<50	30	<200	700	<200	<5	48	.2	<2	<2
0C304S	500	150	<50	30	<200	500	<200	<5	46	.2	<2	<2
0C305S	500	150	<50	30	<200	300	<200	<5	42	.3	<2	<2
0C306S	300	100	<50	30	<200	150	<200	<5	59	.5	<2	<2
0C307S	300	70	<50	20	<200	150	<200	<5	56	.3	<2	<2

Table 6.--Analyses of stream-sediment samples, Owyhee River Canyon wilderness study area (OR-003-095),
Malheur County, Oregon--Continued

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	Be-ppm s
OC308S	42 20 59	117 15 21	3.0	1.5	1.5	.3	700	<.5	<700	<15	20	1,000	1.5
OC309S	42 26 0	117 13 50	3.0	1.5	1.5	.3	1,000	<.5	<700	<15	15	1,500	1.5
OC310S	42 26 18	117 13 30	1.5	1.5	1.5	.2	700	<.5	<700	<15	20	1,000	1.5
OC311S	42 26 20	117 13 27	3.0	1.5	1.5	.3	700	<.5	<700	<15	20	1,500	1.5
OC312S	42 26 0	117 13 11	3.0	1.5	1.5	.7	700	<.5	<700	<15	20	1,500	1.5
OC313S	42 25 54	117 13 10	3.0	1.5	1.5	.3	700	<.5	<700	<15	20	1,000	1.5
OC314S	42 25 9	117 14 27	3.0	1.5	1.5	.3	700	<.5	<700	<15	20	1,000	1.5
OC315S	42 25 23	117 13 10	3.0	1.5	1.5	.3	700	<.5	<700	<15	30	1,500	1.5
OC316S	42 24 58	117 13 18	3.0	1.5	1.5	.3	1,000	<.5	<700	<15	30	1,000	1.5
OC600S	42 13 15	117 13 10	5.0	1.0	2.0	.5	1,000	<.5	<700	<15	20	1,000	1.5
OC601S	42 15 32	117 9 17	5.0	1.0	1.5	.7	1,500	<.5	<700	<15	20	1,000	1.5
OC602S	42 17 50	117 12 46	3.0	1.0	1.5	.5	1,000	<.5	<700	<15	20	1,000	1.5
OC603S	42 28 24	117 15 40	3.0	.7	1.5	.5	700	<.5	<700	<15	20	1,500	1.5
OC604S	42 28 18	117 15 40	3.0	.7	1.5	.3	1,000	<.5	<700	<15	20	1,000	1.5
OC605S	42 16 11	117 12 59	3.0	1.0	1.5	.7	1,000	<.5	<700	<15	20	1,500	1.5
OC606S	42 16 6	117 12 22	3.0	1.0	1.5	.5	1,000	<.5	<700	<15	20	1,000	1.5
OC607S	42 19 54	117 13 27	3.0	.7	1.5	.3	1,000	<.5	<700	<15	15	1,000	1.5
OC608S	42 19 51	117 13 34	3.0	1.0	1.5	.5	1,000	<.5	<700	<15	20	1,000	1.5
OC609S	42 21 52	117 12 8	3.0	1.0	1.5	.3	700	<.5	<700	<15	30	1,000	1.0
OC610S	42 21 52	117 10 43	5.0	.7	1.5	.7	1,500	<.5	<700	<15	10	1,000	1.5
OC611S	42 22 48	117 11 34	3.0	1.0	1.5	.3	700	<.5	<700	<15	15	1,000	1.5
OC702S	42 9 18	117 15 48	3.0	1.5	1.5	.3	500	<.5	<700	<15	20	1,000	1.5
OC703S	42 11 39	117 14 43	5.0	1.5	3.0	.5	1,500	<.5	<700	<15	20	1,500	1.5
OC704S	42 13 40	117 15 11	5.0	1.5	1.5	.5	1,500	<.5	<700	<15	20	1,000	1.5
OC705S	42 14 3	117 14 6	5.0	1.5	1.5	.5	1,000	<.5	<700	<15	20	1,000	1.5
OC800S	42 12 47	117 13 34	2.0	1.5	1.5	.7	700	<.5	<700	<15	15	700	1.5
OC801S	42 15 15	117 9 17	2.0	.7	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC802S	42 16 16	117 9 20	3.0	.7	1.5	.5	500	<.5	<700	<15	20	700	1.5
OC803S	42 31 58	117 12 12	3.0	1.5	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC804S	42 32 4	117 12 1	3.0	1.0	1.5	.7	700	<.5	<700	<15	10	700	1.5
OC805S	42 17 7	117 9 41	1.5	.7	1.5	.3	700	<.5	<700	<15	15	1,000	1.5
OC806S	42 17 54	117 9 22	3.0	1.0	1.5	.7	700	<.5	<700	<15	10	1,000	1.5
OC807S	42 18 27	117 9 22	2.0	.7	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC808S	42 18 47	117 9 22	2.0	.7	1.5	.5	700	<.5	<700	<15	15	1,000	1.5
OC809S	42 18 56	117 9 19	1.5	.7	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC810S	42 20 9	117 9 41	3.0	1.0	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC811S	42 20 43	117 10 10	3.0	.7	1.5	.3	300	<.5	<700	<15	15	1,000	1.5
OC812S	42 21 12	117 9 51	3.0	1.0	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC813S	42 21 54	117 10 9	3.0	1.0	1.5	.5	700	<.5	<700	<15	15	700	1.5
OC814S	42 19 45	117 10 31	3.0	.7	1.5	.5	700	<.5	<700	<15	<10	1,500	1.5
OC815S	42 20 36	117 6 7	2.0	.7	1.5	.7	700	<.5	<700	<15	10	700	1.5
OC816S	42 21 42	117 5 5	2.0	.7	1.5	.5	700	<.5	<700	<15	10	700	1.5
OC817S	42 23 41	117 8 10	2.0	1.0	1.5	.3	700	<.5	<700	<15	10	700	1.5
OC818S	42 20 2	117 6 36	1.5	.7	1.5	.5	700	<.5	<700	<15	10	700	1.5
OC819S	42 23 23	117 10 19	1.5	.7	1.5	.3	500	<.5	<700	<15	15	700	1.5

Table 6.--Analyses of stream-sediment samples, Uwynee River Canyon Wilderness Study Area (ON-003-073),
Malheur County, Oregon--Continued

Sample	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
OC308S	<10	<30	15	150	30	30	<5	<20	30	15	<100	15	<10
OC309S	<10	<30	15	50	30	30	<5	<20	15	20	<100	10	<10
OC310S	<10	<30	7	30	30	30	<5	<20	7	15	<100	10	<10
OC311S	<10	<30	10	70	30	70	<5	20	15	15	<100	15	<10
OC312S	<10	<30	15	70	30	30	<5	30	15	20	<100	15	<10
OC313S	<10	<30	15	50	30	30	<5	20	15	15	<100	10	<10
OC314S	<10	<30	15	50	30	70	<5	<20	15	15	<100	15	<10
OC315S	<10	<30	15	50	30	50	<5	<20	15	15	<100	10	<10
OC316S	<10	<30	15	50	30	70	<5	<20	15	15	<100	15	<10
OC600S	<10	<30	15	70	50	50	<5	<20	30	15	<100	15	<10
OC601S	<10	<30	15	70	50	50	<5	<20	30	20	<100	15	<10
OC602S	<10	<30	15	50	30	50	<5	<20	20	20	<100	10	<10
OC603S	<10	<30	10	30	50	70	<5	<20	20	20	<100	10	<10
OC604S	<10	<30	10	100	50	50	<5	<20	20	15	<100	10	<10
OC605S	<10	<30	15	50	30	50	<5	20	20	15	<100	10	<10
OC606S	<10	<30	15	50	50	50	<5	<20	20	15	<100	10	<10
OC607S	<10	<30	10	50	30	70	<5	<20	20	15	<100	10	<10
OC608S	<10	<30	10	50	50	50	<5	<20	20	15	<100	10	<10
OC609S	<10	<30	7	30	50	50	<5	<20	20	15	<100	10	<10
OC610S	<10	<30	15	50	50	70	<5	20	20	20	<100	15	<10
OC611S	<10	<30	10	50	50	50	<5	<20	20	15	<100	10	<10
OC702S	<10	<30	10	50	50	30	<5	<20	30	15	<100	10	<10
OC703S	<10	<30	20	150	50	50	<5	<20	30	15	<100	15	<10
OC704S	<10	<30	20	70	50	50	<5	<20	30	15	<100	15	<10
OC705S	<10	<30	15	100	50	50	<5	<20	30	15	<100	15	<10
OC800S	<10	<30	15	70	30	30	<5	<20	30	15	<100	7	<10
OC801S	<10	<30	10	30	30	30	<5	<20	15	15	<100	7	<10
OC802S	<10	<30	10	30	30	30	<5	<20	15	15	<100	7	<10
OC803S	<10	<30	15	200	30	30	<5	<20	20	15	<100	10	<10
OC804S	<10	<30	10	150	30	30	<5	<20	30	15	<100	15	<10
OC805S	<10	<30	7	30	20	70	<5	<20	15	15	<100	7	<10
OC806S	<10	<30	10	30	15	70	<5	20	15	15	<100	7	<10
OC807S	<10	<30	10	30	20	70	<5	<20	15	20	<100	7	<10
OC808S	<10	<30	7	30	20	70	<5	<20	15	20	<100	7	<10
OC809S	<10	<30	7	30	20	50	<5	<20	15	15	<100	7	<10
OC810S	<10	<30	15	70	30	30	<5	<20	30	15	<100	10	<10
OC811S	<10	<30	7	50	20	70	<5	<20	10	20	<100	7	<10
OC812S	<10	<30	15	100	30	30	<5	<20	30	15	<100	10	<10
OC813S	<10	<30	15	70	30	30	<5	<20	20	15	<100	15	<10
OC814S	<10	<30	15	30	15	70	<5	20	15	15	<100	7	<10
OC815S	<10	<30	15	70	20	50	<5	<20	20	15	<100	7	<10
OC816S	<10	<30	10	70	30	50	<5	<20	20	20	<100	10	<10
OC817S	<10	<30	15	150	500	30	<5	<20	30	15	<100	7	<10
OC818S	<10	<30	15	70	15	30	<5	<20	15	15	<100	7	<10
OC819S	<10	<30	10	70	15	30	<5	<20	15	15	<100	7	<10

Table 6.--Analyses of stream-sediment samples, Uwyhee River Canyon wilderness study area (OK-003-095),
Malheur County, Oregon--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	As-ppm icp	Zn-ppm icp	Cd-ppm icp	Bi-ppm icp	Sb-ppm icp
OC308S	300	150	<50	20	<200	150	<200	<5	60	1.1	<2	<2
OC309S	500	70	<50	30	<200	300	<200	<5	48	.7	<2	<2
OC310S	300	30	<50	30	<200	300	<200	<5	51	.4	<2	<2
OC311S	700	70	<50	30	<200	1,000	<200	<5	52	.2	<2	<2
OC312S	500	100	<50	30	<200	300	<200	<5	64	.3	<2	<2
OC313S	300	70	<50	30	<200	300	<200	<5	51	.2	<2	<2
OC314S	500	70	<50	30	<200	150	<200	<5	54	.4	<2	<2
OC315S	700	100	<50	30	<200	300	<200	<5	45	.3	<2	<2
OC316S	500	150	<50	20	<200	700	<200	<5	51	.3	<2	<2
OC600S	500	150	<50	30	<200	300	<200	<5	58	.2	<2	<2
OC601S	500	150	<50	30	<200	300	<200	<5	57	.3	<2	<2
OC602S	500	100	<50	30	<200	200	<200	<5	59	.4	<2	<2
OC603S	300	100	<50	30	<200	200	<200	<5	52	.3	<2	<2
OC604S	500	100	<50	30	<200	200	<200	<5	57	.4	<2	<2
OC605S	500	100	<50	30	<200	300	<200	5	46	.3	<2	<2
OC606S	500	100	<50	30	<200	200	<200	<5	48	.3	<2	<2
OC607S	300	100	<50	30	<200	300	<200	<5	55	.3	<2	<2
OC608S	300	100	<50	20	<200	300	<200	<5	60	.3	<2	<2
OC609S	500	100	<50	20	<200	200	<200	<5	50	.3	<2	<2
OC610S	500	150	<50	30	<200	200	<200	<5	53	.2	<2	<2
OC611S	500	70	<50	20	<200	150	<200	<5	58	.3	<2	<2
OC702S	300	70	<50	20	<200	200	<200	<5	61	.3	<2	<2
OC703S	500	150	<50	30	<200	200	<200	<5	57	.4	<2	<2
OC704S	300	150	<50	30	<200	200	<200	5	61	.4	<2	<2
OC705S	500	150	<50	30	<200	200	<200	<5	65	.4	<2	<2
OC800S	300	100	<50	15	<200	200	<200	<5	41	.4	<2	<2
OC801S	300	70	<50	15	<200	150	<200	<5	54	.4	<2	<2
OC802S	300	70	<50	15	<200	300	<200	<5	49	.3	<2	<2
OC803S	300	70	<50	15	<200	300	<200	<5	61	.4	<2	<2
OC804S	300	100	<50	30	<200	300	<200	<5	49	.2	<2	<2
OC805S	300	70	<50	30	<200	300	<200	<5	39	.2	<2	<2
OC806S	300	70	<50	30	<200	300	<200	<5	51	.3	<2	<2
OC807S	300	70	<50	30	<200	300	<200	<5	48	.4	<2	<2
OC808S	300	70	<50	30	<200	300	<200	<5	42	.3	<2	<2
OC809S	300	70	<50	30	<200	200	<200	<5	46	.4	<2	<2
OC810S	300	70	<50	20	<200	150	<200	<5	60	.4	<2	<2
OC811S	300	70	<50	30	<200	300	<200	<5	39	.2	<2	<2
OC812S	300	70	<50	30	<200	200	<200	<5	60	.4	<2	<2
OC813S	300	70	<50	30	<200	200	<200	<5	53	.4	<2	<2
OC814S	300	70	<50	30	<200	300	<200	<5	43	.4	<2	<2
OC815S	500	100	<50	30	<200	300	<200	<5	36	.5	<2	<2
OC816S	300	70	<50	30	<200	150	<200	<5	42	.2	<2	<2
OC817S	300	70	<50	30	<200	150	<200	<5	45	.4	<2	<2
OC818S	300	70	<50	15	<200	200	<200	<5	30	.3	<2	<2
OC819S	300	70	<50	15	<200	200	<200	<5	34	.3	<2	<2

Table 6.--Analyses of stream-sediment samples, Uwynee River Canyon wilderness study area (UX-003-073),
Malheur County, Oregon--Continued

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	Be-ppm s
OC820S	42 25 15	117 11 5	3.0	1.5	1.5	.3	700	<.5	<700	<15	10	700	1.5
OC821S	42 25 27	117 10 57	3.0	1.0	1.5	.3	1,000	<.5	<700	<15	15	700	1.5
OC822S	42 25 11	117 12 25	3.0	1.5	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC900S	42 9 28	117 18 12	3.0	1.5	1.5	.3	700	<.5	<700	<15	30	1,000	<1.0
OC901S	42 9 30	117 18 12	3.0	1.5	1.5	.7	500	<.5	<700	<15	15	700	1.5
OC902S	42 9 14	117 17 18	3.0	1.5	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC903S	42 14 4	117 12 35	3.0	1.5	1.5	.3	700	<.5	<700	<15	20	700	1.0
OC904S	42 15 48	117 14 8	2.0	1.0	1.5	.3	300	<.5	<700	<15	<10	1,000	1.0
OC905S	42 15 44	117 14 9	3.0	1.5	1.5	.3	700	<.5	<700	<15	30	700	1.0
OC906S	42 16 49	117 12 26	2.0	1.5	1.5	.3	700	<.5	<700	<15	20	1,000	1.5
OC907S	42 20 5	117 14 18	3.0	1.5	1.5	.7	700	<.5	<700	<15	15	1,000	1.5
OC908S	42 20 6	117 14 17	3.0	1.5	1.5	.3	700	<.5	<700	<15	15	1,000	1.0
OC909S	42 21 47	117 14 8	3.0	1.5	1.5	.3	700	1.5	<700	<15	20	700	1.5
OC910S	42 21 48	117 14 11	7.0	1.5	1.5	>1.0	700	<.5	<700	<15	<10	1,500	<1.0
OC911S	42 22 20	117 14 4	3.0	1.5	1.5	.3	500	<.5	<700	<15	15	700	1.0
OC912S	42 22 27	117 13 48	1.5	.7	1.5	.3	300	<.5	<700	<15	15	700	1.0
OC913S	42 23 8	117 13 25	3.0	1.5	1.5	.3	700	<.5	<700	<15	15	700	1.5
OC914S	42 23 33	117 13 18	3.0	1.5	1.5	.3	500	<.5	<700	<15	15	700	2.0
OC915S	42 23 46	117 13 20	3.0	1.0	1.5	.3	700	<.5	<700	<15	10	700	1.5
OC916S	42 24 9	117 12 43	3.0	1.0	1.5	.7	300	<.5	<700	<15	<10	2,000	1.5
OC917S	42 24 7	117 12 38	2.0	1.0	1.5	.3	300	<.5	<700	<15	20	700	1.5

Table 6.--Analyses of stream-sediment samples, Owyhee River Canyon Wilderness Study Area (OK-003-073),
Malheur County, Oregon--Continued

Sample	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
OC820S	<10	<30	15	70	30	30	<5	<20	30	15	<100	10	<10
OC821S	<10	<30	15	150	30	30	<5	<20	30	20	<100	10	<10
OC822S	<10	<30	15	70	30	30	<5	<20	30	15	<100	10	<10
OC900S	<10	<30	15	70	30	50	<5	<20	20	15	<100	15	<10
OC901S	<10	<30	15	70	30	70	<5	30	15	15	<100	15	<10
OC902S	<10	<30	10	30	30	30	<5	<20	15	15	<100	7	<10
OC903S	<10	<30	15	70	50	50	<5	<20	30	15	<100	15	<10
OC904S	<10	<30	7	70	15	70	<5	<20	7	30	<100	7	<10
OC905S	<10	<30	15	50	30	30	<5	<20	15	15	<100	10	<10
OC906S	<10	<30	15	70	30	50	<5	<20	15	15	<100	15	<10
OC907S	<10	<30	15	70	30	50	<5	20	15	15	<100	15	<10
OC908S	<10	<30	15	50	30	50	<5	20	15	20	<100	15	<10
OC909S	<10	<30	15	30	30	30	<5	<20	15	15	<100	15	<10
OC910S	<10	<30	15	100	15	70	<5	70	10	15	<100	30	<10
OC911S	<10	<30	15	70	30	50	<5	<20	20	15	<100	15	<10
OC912S	<10	<30	7	30	30	30	<5	<20	15	15	<100	7	<10
OC913S	<10	<30	10	30	30	30	<5	<20	15	15	<100	15	<10
OC914S	<10	<30	10	70	50	70	<5	<20	15	15	<100	15	<10
OC915S	<10	<30	15	50	30	50	<5	<20	15	15	<100	15	<10
OC916S	<10	<30	10	70	7	70	<5	30	7	30	<100	15	<10
OC917S	<10	<30	7	50	30	70	<5	<20	15	15	<100	15	<10

Table 6.--Analyses of stream-sediment samples, Owyhee River Canyon wilderness study area (UX-003-073),
Malheur County, Oregon--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	As-ppm icp	Zn-ppm icp	Cd-ppm icp	Bi-ppm icp	Sb-ppm icp
0C820S	300	70	<50	20	<200	150	<200	<5	56	.4	<2	<2
0C821S	300	70	<50	20	<200	150	<200	<5	53	.5	<2	<2
0C822S	300	70	<50	20	<200	150	<200	<5	67	.5	<2	<2
0C900S	500	100	<50	30	<200	200	<200	6	63	.4	<2	<2
0C901S	300	150	<50	50	<200	700	<200	8	60	.5	<2	<2
0C902S	300	70	<50	70	<200	200	<200	10	74	.6	<2	<2
0C903S	300	150	<50	30	<200	150	<200	9	72	.7	<2	<2
0C904S	300	70	<50	30	<200	300	<200	<5	32	.3	<2	<2
0C905S	300	100	<50	30	<200	200	<200	12	71	.6	<2	<2
0C906S	500	100	<50	30	<200	300	<200	6	47	.6	<2	<2
0C907S	500	150	<50	30	<200	500	<200	10	65	.6	<2	<2
0C908S	300	100	<50	50	<200	700	<200	9	64	.6	<2	<2
0C909S	300	70	<50	30	<200	300	<200	7	63	.6	<2	<2
0C910S	300	150	<50	50	<200	1,500	<200	<5	83	.8	<2	<2
0C911S	300	100	<50	30	<200	300	<200	<5	65	.5	<2	<2
0C912S	300	70	<50	30	<200	300	<200	<5	54	.5	<2	<2
0C913S	300	70	<50	30	<200	300	<200	6	61	.5	<2	<2
0C914S	300	70	<50	50	<200	500	<200	7	75	.5	<2	<2
0C915S	500	70	<50	30	<200	300	<200	7	64	.5	<2	<2
0C916S	500	70	<50	30	<200	700	<200	<5	38	.2	<2	<2
0C917S	200	70	<50	30	<200	300	<200	6	61	.4	<2	<2

Table 7.--Analyses of heavy-mineral concentrate samples, Honeycombs Wilderness Study Area (UM-003-77N),

Malheur County, Oregon

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

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
HC001HC3	43 19 26	117 18 13	1.5	.20	.5	.5	200	N	N	N	<20	200
HC002HC3	43 18 57	117 17 43	1.5	.05	1.0	.5	200	N	N	N	<20	500
HC003HC3	43 18 21	117 17 22	.7	.20	<.2	.7	300	N	N	N	50	1,500
HC004HC3	43 17 53	117 15 35	1.0	.07	.5	.2	500	N	N	N	<20	150
HC005HC3	43 18 15	117 14 29	1.0	.10	<.2	1.5	700	N	N	N	50	500
HC006HC3	43 20 7	117 18 44	2.0	1.00	2.0	>2.0	1,000	N	N	N	30	1,000
HC007HC3	43 21 46	117 18 6	1.0	.20	5.0	>2.0	200	<1	N	N	<20	700
HC008HC3	43 23 6	117 18 20	1.5	.50	30.0	.1	200	N	N	N	<50	700
HC009HC3	43 29 55	117 16 52	1.0	.10	<.1	2.0	300	<1	N	N	20	>10,000
HC010HC3	43 29 18	117 17 57	2.0	.30	<.1	>2.0	300	N	N	N	20	5,000
HC202HC3	43 19 49	117 14 25	10.0	.50	.7	2.0	2,000	N	N	N	70	700
HC203HC3	43 21 55	117 16 0	.3	<.05	<.1	.2	200	N	N	N	20	5,000
HC204HC3	43 22 24	117 15 25	2.0	.15	1.0	1.0	500	N	N	N	N	>10,000
HC205HC3	43 26 52	117 15 13	10.0	7.00	15.0	2.0	2,000	N	N	N	<20	300
HC206HC3	43 27 29	117 16 19	10.0	10.00	15.0	1.0	2,000	N	N	N	50	200
HC207HC3	43 27 31	117 16 13	10.0	7.00	.1	1.5	3,000	N	N	N	20	100
HC208HC3	43 27 30	117 16 9	15.0	10.00	20.0	1.0	>10,000	N	N	N	<20	2,000
HC209HC3	43 24 50	117 17 45	10.0	7.00	20.0	2.0	1,500	N	N	N	<20	1,000
HC210HC3	43 24 51	117 17 58	15.0	10.00	15.0	>2.0	2,000	N	N	N	<20	200
HC212HC3	43 24 24	117 18 42	10.0	.50	10.0	1.5	1,500	N	N	N	300	>10,000
HC213HC3	43 29 52	117 16 52	1.0	.20	<.1	>2.0	1,000	N	N	N	20	5,000
HC214HC3	43 29 36	117 17 17	1.0	.20	20.0	>2.0	500	N	N	N	<20	>10,000
HC215HC3	43 29 15	117 17 55	1.0	.15	<.2	>5.0	300	N	N	N	50	3,000
HC216HC3	43 29 52	117 18 12	2.0	.70	<.1	2.0	300	N	N	N	20	3,000
HC217HC3	43 29 15	117 19 45	2.0	1.00	<.1	1.0	1,000	N	N	N	20	1,000
HC301KC3	43 20 18	117 16 13	3.0	.50	1.0	1.5	2,000	N	N	N	<20	7,000
HC302KC3	43 21 4	117 16 33	.7	.05	.3	.3	200	N	N	N	<20	500
HC303KC3	43 21 52	117 16 55	10.0	2.00	1.0	>2.0	10,000	N	N	N	20	2,000
HC304KC3	43 20 8	117 13 55	5.0	.50	1.0	2.0	1,000	N	N	N	<20	200
HC305KC3	43 20 30	117 14 0	1.0	.07	1.5	.7	200	N	N	N	<20	200
HC307KC3	43 22 44	117 16 25	2.0	.20	1.0	1.5	1,000	N	N	N	20	>10,000
HC309KC3	43 24 20	117 15 15	.7	.10	10.0	2.0	500	N	N	N	<20	>10,000
HC310KC3	43 28 59	117 16 44	5.0	1.50	10.0	>2.0	1,000	N	N	N	<20	>10,000
HC311KC3	43 28 42	117 17 45	10.0	5.00	15.0	>2.0	1,500	N	N	N	30	>10,000
HC312KC3	43 28 37	117 18 8	2.0	.50	10.0	.3	200	N	N	N	70	5,000
HC313KC3	43 28 45	117 18 38	2.0	.50	<.1	.5	200	N	N	N	20	700
HC314KC3	43 28 59	117 19 3	2.0	.50	30.0	>2.0	500	<1	N	N	<20	5,000
HC315KC3	43 29 3	117 19 2	7.0	2.00	15.0	>2.0	1,000	N	N	N	N	3,000
HC316KC3	43 26 7	117 17 30	10.0	5.00	20.0	2.0	1,000	N	N	N	30	1,000
HC317KC3	43 24 43	117 19 32	.7	.50	<.1	2.0	300	N	N	N	70	3,000
HC318KC3	43 24 5	117 18 15	7.0	3.00	20.0	1.5	2,000	N	N	N	<20	2,000
HC319KC3	43 25 55	117 19 55	10.0	10.00	15.0	>2.0	2,000	N	N	N	<20	10,000
HC320KC3	43 27 23	117 20 3	2.0	1.50	15.0	1.0	500	N	N	N	<20	1,500
HC321KC3	43 27 13	117 18 30	15.0	5.00	10.0	>2.0	3,000	N	N	N	<20	500
HC322KC3	43 31 29	117 19 15	7.0	5.00	15.0	>2.0	1,500	N	N	N	<20	300

Table 7.--Analyses of heavy-mineral concentrate samples, Honeycomb Wilderness Study Area (OK-003-111),
Malheur County, Oregon--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
HC001HC3	N	N	N	N	<20	N	300	N	N	30	N
HC002HC3	7	N	N	N	20	N	200	N	N	50	N
HC003HC3	5	N	N	N	50	<20	200	N	N	200	N
HC004HC3	2	N	N	N	<20	N	N	N	N	50	N
HC005HC3	10	N	N	N	50	<20	200	N	N	70	N
HC006HC3	<2	N	N	N	100	15	300	N	<50	50	N
HC007HC3	3	N	N	N	<20	N	150	N	N	50	N
HC008HC3	N	N	N	N	<50	N	700	N	N	<20	N
HC009HC3	N	N	N	N	<20	<10	<50	N	<50	<10	N
HC010HC3	N	N	N	N	<20	20	300	N	70	20	N
HC202HC3	5	N	N	N	50	<20	500	N	<100	70	N
HC203HC3	<2	N	N	N	N	<10	500	N	N	30	N
HC204HC3	<2	N	N	N	20	<10	2,000	N	N	50	N
HC205HC3	<2	N	N	70	1,000	100	1,000	N	<50	200	100
HC206HC3	<5	N	N	100	300	20	300	N	N	100	N
HC207HC3	<2	N	N	70	200	50	200	N	<50	50	200
HC208HC3	5	N	N	100	150	100	2,000	N	N	70	500
HC209HC3	<2	N	N	50	500	20	300	300	N	100	700
HC210HC3	<2	N	N	70	500	70	300	<10	50	150	100
HC212HC3	3	N	N	N	20	50	1,000	20	150	30	100
HC213HC3	5	N	N	N	<20	N	1,000	N	N	<10	N
HC214HC3	<2	N	N	N	<20	10	500	N	50	<10	N
HC215HC3	N	N	N	N	N	<20	700	N	300	<20	N
HC216HC3	N	N	N	N	20	20	100	N	<50	20	N
HC217HC3	N	N	N	N	20	20	1,000	20	N	70	N
HC301KC3	<2	N	N	N	20	<10	N	N	N	30	20
HC302KC3	N	N	N	N	<20	N	200	N	N	70	N
HC303KC3	3	N	N	N	30	50	>2,000	N	70	70	500
HC304KC3	<2	N	N	N	50	15	500	N	50	100	N
HC305KC3	N	N	N	N	20	N	<50	N	N	70	N
HC307KC3	<2	N	N	N	50	15	2,000	N	N	50	N
HC309KC3	5	N	N	N	<20	N	500	N	N	70	N
HC310KC3	<2	N	N	10	500	150	>2,000	20	300	50	N
HC311KC3	<2	N	N	70	1,000	200	2,000	20	100	100	<20
HC312KC3	3	N	N	N	20	10	500	N	N	<10	N
HC313KC3	3	N	N	N	20	100	500	N	<50	50	N
HC314KC3	N	N	N	N	<20	N	500	N	N	20	N
HC315KC3	<2	N	N	10	500	100	2,000	20	150	70	30
HC316KC3	<2	N	N	50	100	20	700	N	N	50	N
HC317KC3	2	N	N	N	50	20	500	N	<50	15	N
HC318KC3	5	N	N	N	150	50	2,000	10	N	50	150
HC319KC3	<2	N	N	70	2,000	100	2,000	N	100	300	50
HC320KC3	N	N	N	N	100	N	200	N	N	50	N
HC321KC3	5	N	N	30	300	150	>2,000	N	100	100	500
HC322KC3	<2	N	N	70	1,000	150	>2,000	20	100	100	5,000

Table 7.--Analyses of heavy-mineral concentrate samples, Honeycombs Wilderness Study Area (UN-003-17A),
Malheur County, Oregon--Continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
HC001HC3	N	<10	N	<200	50	N	3,000	N	>2,000	N
HC002HC3	N	<10	N	<200	20	N	>5,000	N	>2,000	N
HC003HC3	N	<20	100	<500	50	N	>5,000	N	>5,000	N
HC004HC3	N	<10	N	<200	30	N	3,000	N	>2,000	N
HC005HC3	N	<20	N	<500	100	N	>5,000	N	>5,000	N
HC006HC3	N	<10	700	N	100	N	>5,000	N	>2,000	N
HC007HC3	N	<10	1,000	200	150	N	1,500	N	>2,000	N
HC008HC3	N	<20	N	<500	50	N	5,000	N	>5,000	N
HC009HC3	N	<10	N	1,000	50	N	500	N	>2,000	N
HC010HC3	N	<10	20	500	300	N	500	N	>2,000	N
HC202MC3	N	<20	N	N	100	N	>10,000	N	>5,000	700
HC203MC3	N	<10	N	<200	<20	N	3,000	N	>2,000	N
HC204MC3	N	<10	N	7,000	30	N	>5,000	N	>2,000	N
HC205MC3	N	<10	N	N	500	N	>5,000	N	>2,000	N
HC206MC3	N	<20	<50	N	500	N	300	N	>5,000	N
HC207MC3	N	20	N	N	500	N	100	N	>2,000	N
HC208MC3	N	<10	N	<200	500	N	5,000	N	>2,000	N
HC209MC3	N	<10	N	<200	500	N	>5,000	N	>2,000	N
HC210MC3	N	<10	N	<200	500	N	5,000	N	>2,000	N
HC212MC3	N	<10	N	2,000	50	N	>5,000	N	>2,000	N
HC213MC3	N	<10	70	700	200	N	1,000	N	>2,000	N
HC214MC3	N	<10	N	10,000	100	N	1,500	N	>2,000	N
HC215MC3	N	<20	100	N	200	N	1,500	N	>5,000	N
HC216MC3	N	<10	100	500	100	N	500	N	>2,000	N
HC217MC3	N	<10	N	1,000	100	N	1,000	N	>2,000	N
HC301KC3	N	<10	N	N	20	N	>5,000	N	>2,000	N
HC302KC3	N	<10	N	<200	30	N	>5,000	N	>2,000	N
HC303KC3	N	<10	200	N	100	N	>5,000	N	>2,000	<200
HC304KC3	N	<10	N	N	70	N	>5,000	N	>2,000	500
HC305KC3	N	<10	N	<200	50	N	3,000	N	>2,000	N
HC307KC3	N	<10	N	N	50	N	>5,000	N	>2,000	N
HC309KC3	N	<10	N	<200	50	N	>5,000	N	>2,000	N
HC310KC3	N	<10	100	1,500	200	N	>5,000	N	>2,000	N
HC311KC3	N	<10	70	1,000	300	N	5,000	N	>2,000	N
HC312KC3	N	<10	N	<200	30	N	2,000	N	>2,000	N
HC313KC3	N	<10	<20	<200	70	N	2,000	N	>2,000	N
HC314KC3	N	<10	N	500	150	N	1,000	N	>2,000	N
HC315KC3	N	<10	100	<200	200	N	5,000	N	>2,000	<200
HC316KC3	N	<10	N	700	300	N	>5,000	N	>2,000	N
HC317KC3	N	<10	100	300	100	N	1,500	N	>2,000	N
HC318KC3	N	<10	N	N	100	N	>5,000	N	>2,000	<200
HC319KC3	N	<10	50	N	300	N	5,000	N	>2,000	N
HC320KC3	N	<10	N	<200	100	N	1,500	N	>2,000	N
HC321KC3	N	<10	50	N	300	N	>5,000	N	>2,000	N
HC322KC3	N	<10	100	N	300	N	>5,000	N	>2,000	<200

Table 7.--Analyses of heavy-mineral concentrate samples, Honeycombs Wilderness Study Area (UX-VV3-77A),
Malheur County, Oregon--Continued

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
HC401PC3	43 28 56	117 16 5	15.0	7.00	15.0	>5.0	10,000	N	N	N	70	1,500
HC402PC3	43 28 28	117 17 18	2.0	.50	<.1	.2	200	N	N	N	20	1,500
HC403PC3	43 25 37	117 18 45	20.0	7.00	10.0	>2.0	2,000	N	N	N	20	300
HC404PC3	43 25 36	117 19 20	2.0	1.00	10.0	.5	150	N	N	N	<20	1,500

Table 7.--Analyses of heavy-mineral concentrate samples, Honeycombs Wilderness Study Area (OK-003-77N),
Malheur County, Oregon--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
HC401PC3	<5	N	N	70	1,000	3,000	1,000	20	500	500	100
HC402PC3	N	N	N	N	<20	<10	300	N	50	<10	N
HC403PC3	3	N	N	70	300	100	>2,000	N	50	150	200
HC404PC3	N	N	N	N	<20	N	N	N	N	<10	N

Table 7.--Analyses of heavy-mineral concentrate samples, Honeycombs Wilderness Study Area (ON-003-17A),
Malheur County, Oregon--Continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
HC401PC3	N	<20	150	500	700	N	1,000	N	>5,000	N
HC402PC3	N	<10	N	500	50	N	500	N	>2,000	N
HC403PC3	N	<10	N	N	500	N	>5,000	N	>2,000	N
HC404PC3	N	<10	N	700	50	N	100	N	>2,000	N

Table B.--Analyses of heavy-mineral concentrate samples, Owyhee River Canyon wilderness study area (UK-003-195).

Malheur County, Oregon

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

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
OC027C3	42 23 31	117 6 42	.7	.10	2.0	.05	70	N	N	N	20	7,000
OC028C3	42 24 6	117 6 56	1.0	.30	3.0	.30	200	N	N	N	50	5,000
OC033C3	42 27 52	117 12 46	1.0	.30	2.0	.30	200	N	N	N	50	5,000
OC036C3	42 28 21	117 13 21	1.0	.20	2.0	.50	100	N	N	N	50	3,000
OC038C3	42 30 2	117 13 28	1.0	.30	2.0	.30	100	N	N	N	30	3,000
OC040C3	42 30 20	117 12 20	1.0	.20	2.0	.20	100	N	N	N	30	5,000
OC042C3	42 31 49	117 11 4	1.0	.10	2.0	.20	100	N	N	N	30	3,000
OC044C3	42 32 58	117 10 41	1.5	.15	2.0	.30	200	N	N	N	30	5,000
OC045C3	42 33 46	117 11 3	1.0	.15	2.0	.20	100	N	N	N	50	10,000
OC046C3	42 34 47	117 11 8	1.0	.20	3.0	.30	100	N	N	N	50	5,000
OC047C3	42 35 9	117 11 26	1.5	.50	10.0	.20	200	N	N	N	20	7,000
OC048C3	42 35 35	117 12 5	1.0	.20	5.0	.30	50	N	N	N	50	2,000
OC049C3	42 36 11	117 13 10	1.0	.15	2.0	1.00	100	N	N	N	30	2,000
OC050C3	42 36 45	117 13 54	1.0	.20	1.5	.50	200	N	N	N	20	7,000
OC051C3	42 38 21	117 14 22	2.0	1.00	20.0	2.00	500	N	N	N	70	3,000
OC055C3	42 43 6	117 19 0	7.0	2.00	5.0	2.00	1,000	N	N	N	<20	2,000
OC056C3	42 43 9	117 19 28	15.0	2.00	3.0	>2.00	2,000	1	N	N	<20	1,500
OC057C3	42 43 31	117 19 56	7.0	5.00	15.0	1.00	1,500	N	N	N	<20	500
OC058C3	42 43 40	117 20 43	3.0	1.00	3.0	2.00	500	N	N	N	20	1,000
OC059C3	42 44 20	117 21 22	3.0	1.00	20.0	>2.00	500	1	N	N	20	300
OC060C3	42 44 42	117 21 11	3.0	1.00	15.0	>2.00	700	3	N	N	50	500
OC061C3	42 44 50	117 22 7	2.0	.50	5.0	2.00	500	N	N	N	50	1,000
OC062C3	42 44 55	117 23 26	5.0	1.50	5.0	>2.00	700	N	N	N	<20	500
OC063C3	42 44 45	117 24 11	10.0	5.00	7.0	1.50	1,500	N	N	N	<20	700
OC065C3	42 46 28	117 29 4	5.0	1.50	7.0	>2.00	1,000	N	N	N	50	500
OC066C3	42 46 59	117 30 15	10.0	7.00	10.0	>2.00	1,000	N	N	N	100	1,000
OC067C3	42 47 4	117 32 28	2.0	.50	10.0	>2.00	500	N	N	N	20	1,000
OC069C3	42 47 38	117 34 28	2.0	1.50	7.0	>2.00	500	N	N	N	30	1,000
OC070C3	42 47 27	117 35 17	1.5	.70	15.0	2.00	300	N	N	N	50	1,000
OC071C3	42 47 28	117 35 27	2.0	1.00	15.0	>2.00	500	N	N	N	30	1,000
OC201C3	42 47 8	117 29 22	2.0	1.00	15.0	>2.00	1,000	N	N	N	50	5,000
OC202C3	42 47 9	117 28 1	3.0	1.50	15.0	>2.00	1,000	N	N	N	50	2,000
OC203C3	42 45 57	117 21 38	2.0	.50	10.0	>2.00	500	N	N	N	50	5,000
OC207C3	42 46 58	117 34 52	2.0	1.00	10.0	>2.00	700	N	N	N	100	2,000
OC208C3	42 46 28	117 31 52	2.0	.50	15.0	>2.00	700	N	N	N	50	1,500
OC240C3	42 30 51	117 15 30	2.0	1.00	7.0	2.00	700	N	N	N	20	5,000
OC210C3	42 45 25	117 28 48	1.5	.20	15.0	>2.00	700	N	N	N	50	1,000
OC211C3	42 44 35	117 24 49	2.0	.30	10.0	>2.00	700	N	N	N	100	700
OC212C3	42 44 10	117 22 58	3.0	1.00	10.0	>2.00	1,000	N	N	N	50	1,000
OC213C3	42 42 55	117 21 23	3.0	.50	3.0	>2.00	700	N	N	N	50	2,000
OC214C3	42 42 48	117 19 34	2.0	.50	3.0	>2.00	500	N	N	N	50	2,000
OC216C3	42 41 33	117 19 27	5.0	1.50	5.0	>2.00	1,000	N	N	N	50	5,000
OC217C3	42 41 10	117 18 34	2.0	.20	3.0	2.00	300	N	N	N	50	5,000
OC218C3	42 40 42	117 18 10	2.0	.50	3.0	>2.00	500	N	N	N	30	5,000
OC219C3	42 39 55	117 17 28	5.0	.50	2.0	>2.00	1,000	N	N	N	20	3,000

Table B.--Analyses of heavy-mineral concentrate samples, Owyhee River Canyonwilderness study area (UH-003-193),
Malheur County, Oregon--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
OC027C3	N	N	N	N	<20	<10	<50	N	N	15	N
OC028C3	N	N	N	N	30	<10	100	N	N	30	N
OC033C3	N	N	N	N	20	10	<50	N	N	30	N
OC036C3	N	N	N	N	50	<10	N	N	N	20	N
OC038C3	N	N	N	N	20	<10	N	N	N	15	N
OC040C3	N	N	N	N	20	<10	N	N	N	15	N
OC042C3	N	N	N	N	20	<10	<50	N	N	15	N
OC044C3	N	N	N	N	30	10	N	N	N	20	N
OC045C3	N	N	N	N	20	10	100	N	N	20	N
OC046C3	N	N	N	N	30	10	100	N	N	15	N
OC047C3	N	N	N	N	20	10	<50	N	N	20	N
OC048C3	N	N	N	N	<20	<10	N	N	N	10	N
OC049C3	N	N	N	N	20	10	N	N	N	20	N
OC050C3	N	N	N	N	20	10	N	N	N	30	N
OC051C3	<2	N	N	N	100	20	200	N	N	30	N
OC055C3	<2	N	N	30	300	30	300	N	N	30	N
OC056C3	<2	N	N	70	2,000	200	500	N	50	50	N
OC057C3	<2	N	N	50	1,000	150	300	N	N	50	N
OC058C3	<2	N	N	N	200	50	300	N	N	50	N
OC059C3	N	N	N	N	100	30	300	N	70	20	N
OC060C3	N	N	N	10	200	30	300	N	N	30	N
OC061C3	<2	N	N	N	150	20	200	N	N	20	N
OC062C3	3	N	N	20	300	70	300	N	N	70	N
OC063C3	N	N	N	70	500	70	200	N	N	50	N
OC065C3	N	N	N	20	200	100	500	N	N	30	N
OC066C3	N	N	N	70	500	70	700	N	50	200	N
OC067C3	<2	N	N	N	100	30	500	N	N	10	N
OC069C3	<2	N	N	N	200	30	300	N	N	20	N
OC070C3	<2	N	N	N	50	15	200	N	<50	15	N
OC071C3	<2	N	N	N	150	15	300	N	<50	15	N
OC201C3	<2	N	N	N	200	30	1,000	N	<50	20	N
OC202C3	<2	N	N	N	200	50	1,000	N	50	30	N
OC203C3	<2	N	N	N	50	15	200	N	50	20	N
OC207C3	<2	N	N	N	100	150	500	N	N	30	N
OC208C3	<2	N	N	N	50	20	1,000	N	<50	20	N
OC240C3	<2	N	N	N	200	10	100	N	N	30	N
OC210C3	<2	N	N	N	30	30	1,000	N	N	20	N
OC211C3	<2	N	N	N	100	20	500	N	N	20	N
OC212C3	<2	N	N	N	150	70	700	N	N	50	N
OC213C3	<2	N	N	N	200	20	500	N	N	20	N
OC214C3	<2	N	N	N	50	150	200	N	<50	20	N
OC216C3	<2	N	N	N	150	200	300	N	N	50	N
OC217C3	<2	N	N	N	50	10	200	N	N	20	N
OC218C3	N	N	N	N	50	10	200	N	N	15	N
OC219C3	N	N	N	N	30	20	300	N	N	20	N

Table 8.--Analyses of heavy-mineral concentrate samples, Owyhee River Canyonwilderness study area (OK-003-173),
Malheur County, Oregon--Continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
0C027C3	N	<10	N	500	<20	N	200	N	>2,000	N
0C028C3	N	<10	<20	500	30	N	1,000	N	>2,000	N
0C033C3	N	<10	100	500	30	N	1,500	N	>2,000	N
0C036C3	N	<10	200	500	50	N	1,000	N	>2,000	N
0C038C3	N	<10	70	300	20	N	500	N	>2,000	N
0C040C3	N	<10	N	500	20	N	500	N	>2,000	N
0C042C3	N	<10	N	500	20	N	500	N	>2,000	N
0C044C3	N	<10	N	500	30	N	700	N	>2,000	N
0C045C3	N	<10	N	500	30	N	1,000	N	>2,000	N
0C046C3	N	<10	N	700	50	N	300	N	>2,000	N
0C047C3	N	<10	N	700	50	N	200	N	>2,000	N
0C048C3	N	<10	N	500	30	N	100	N	>2,000	N
0C049C3	N	<10	300	300	50	N	1,000	N	>2,000	N
0C050C3	N	<10	N	500	50	N	700	N	>2,000	N
0C051C3	N	<10	>2,000	500	150	N	700	N	>2,000	N
0C055C3	N	<10	<20	500	200	N	1,500	N	>2,000	N
0C056C3	N	<10	20	200	300	N	1,000	N	>2,000	N
0C057C3	N	<10	1,000	500	300	N	1,000	N	>2,000	N
0C058C3	N	<10	N	300	150	N	1,000	N	>2,000	N
0C059C3	N	<10	N	200	300	N	700	N	>2,000	N
0C060C3	N	<10	N	500	300	N	700	N	>2,000	N
0C061C3	N	<10	200	700	200	N	700	N	>2,000	N
0C062C3	N	<10	300	<200	200	N	1,500	N	>2,000	N
0C063C3	N	<10	N	<200	300	N	500	N	>2,000	N
0C065C3	N	<10	70	<200	300	N	700	N	>2,000	N
0C066C3	N	<10	500	500	300	N	500	N	>2,000	N
0C067C3	N	<10	500	700	200	N	700	N	>2,000	N
0C069C3	N	<10	700	700	200	N	500	N	>2,000	N
0C070C3	N	<10	300	1,000	200	N	500	N	>2,000	N
0C071C3	N	<10	500	700	200	N	700	N	>2,000	N
0C201C3	N	<10	700	500	500	N	1,000	N	>2,000	N
0C202C3	N	<10	>2,000	300	300	N	1,500	N	>2,000	N
0C203C3	N	<10	2,000	1,000	200	N	1,000	N	>2,000	N
0C207C3	N	<10	500	700	300	N	1,500	N	>2,000	N
0C208C3	N	<10	70	300	300	N	1,500	N	>2,000	N
0C240C3	N	<10	<20	500	150	N	500	N	>2,000	N
0C210C3	N	<10	700	200	500	N	1,500	N	>2,000	N
0C211C3	N	<10	500	200	300	N	1,500	N	>2,000	N
0C212C3	N	<10	1,500	200	300	N	2,000	N	>2,000	N
0C213C3	N	<10	300	200	200	N	700	N	>2,000	N
0C214C3	N	<10	500	300	200	N	1,000	N	>2,000	N
0C216C3	N	<10	>2,000	300	200	N	1,500	N	>2,000	N
0C217C3	N	<10	700	500	150	N	1,000	N	>2,000	N
0C218C3	N	<10	20	1,000	150	N	1,000	N	>2,000	N
0C219C3	N	<10	N	300	150	N	1,500	N	>2,000	N

Table 8.--Analyses of heavy-mineral concentrate samples, Uwyhee River Canyon Wilderness Study Area (UN-003-1737),
Malheur County, Oregon--Continued

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
OC220C3	42 39 4	117 17 23	1.0	.10	2.0	.70	100	N	N	N	20	5,000
OC221C3	42 38 17	117 15 52	5.0	.50	2.0	>2.00	700	N	N	N	30	2,000
OC222C3	42 37 48	117 17 1	2.0	.10	1.5	1.50	200	N	N	N	20	2,000
OC223C3	42 37 4	117 16 26	2.0	.15	1.5	1.50	200	N	N	N	30	3,000
OC224C3	42 36 51	117 15 56	5.0	.20	2.0	2.00	1,000	N	N	N	20	5,000
OC225C3	42 36 24	117 15 15	3.0	.20	1.5	>2.00	500	N	N	N	20	3,000
OC228C3	42 33 55	117 11 55	5.0	2.00	3.0	2.00	70	N	N	N	30	5,000
OC229C3	42 34 17	117 12 20	5.0	.50	1.0	>2.00	1,000	N	N	N	20	3,000
OC230C3	42 34 22	117 12 56	3.0	.30	1.5	1.50	500	N	N	N	20	10,000
OC231C3	42 34 28	117 12 38	5.0	.50	1.0	>2.00	1,000	N	N	N	20	5,000
OC232C3	42 34 57	117 13 30	5.0	.20	2.0	>2.00	500	N	N	N	30	10,000
OC238C3	42 32 4	117 12 12	5.0	5.00	10.0	>2.00	1,000	N	N	N	50	700
OC241C3	42 28 33	117 15 19	5.0	1.00	10.0	>2.00	1,000	N	N	N	30	2,000
OC242C3	42 28 57	117 16 42	5.0	1.00	15.0	>2.00	1,000	N	N	N	30	1,500
OC243C3	42 26 58	117 17 49	2.0	2.00	10.0	2.00	700	N	N	N	30	1,500
OC244C3	42 27 21	117 18 0	7.0	1.50	2.0	>2.00	1,000	N	N	N	20	3,000
OC245C3	42 27 10	117 17 22	5.0	1.50	2.0	2.00	1,000	N	N	N	20	5,000
OC247C3	42 27 26	117 16 8	5.0	1.00	2.0	2.00	700	N	N	N	20	2,000
OC248C3	42 7 52	117 18 55	2.0	.50	2.0	2.00	300	N	N	N	20	1,500
OC249C3	42 8 13	117 18 46	1.0	.20	2.0	1.50	200	N	N	N	20	1,500
OC250C3	42 8 16	117 18 47	3.0	.70	5.0	2.00	500	N	N	N	20	3,000
OC251C3	42 10 44	117 17 15	1.0	.15	2.0	1.00	150	N	N	N	20	1,000
OC252C3	42 10 47	117 17 16	2.0	.50	5.0	2.00	500	N	N	N	30	1,500
OC272C3	42 9 30	117 19 14	5.0	.70	3.0	.30	1,000	N	N	N	<50	2,000
OC276C3	42 9 19	117 17 11	5.0	.15	1.0	1.50	500	N	N	N	N	1,000
OC277C3	42 9 14	117 16 49	1.0	.10	1.5	.30	100	N	N	N	<20	1,000
OC278C3	42 9 8	117 16 48	1.5	.10	1.0	.50	150	N	N	N	<20	1,000
OC279C3	42 8 26	117 17 59	1.0	.05	.5	.50	70	N	N	N	20	1,000
OC280C3	42 8 20	117 18 1	1.0	.10	1.0	.70	150	N	N	N	<20	1,500
OC281C3	42 8 2	117 18 0	1.0	.20	1.0	.50	100	N	N	N	<20	1,500
OC282C3	42 8 1	117 18 3	1.5	.20	1.5	.70	150	N	N	N	<20	1,500
OC283C3	42 10 5	117 16 17	3.0	2.00	2.0	2.00	300	N	N	N	<50	500
OC284C3	42 10 4	117 16 18	2.0	.20	1.0	2.00	200	N	N	N	20	1,000
OC285C3	42 10 54	117 16 1	1.5	.20	1.0	.70	100	N	N	N	<20	500
OC287C3	42 11 45	117 15 26	.7	.10	1.5	.10	50	N	N	N	<20	7,000
OC288C3	42 11 29	117 16 32	5.0	.50	1.0	1.00	700	N	N	N	<20	1,000
OC289C3	42 12 20	117 15 7	1.0	.50	1.5	.50	150	N	N	N	<20	2,000
OC290C3	42 17 3	117 13 22	1.5	.50	2.0	2.00	300	N	N	N	<20	700
OC291C3	42 18 3	117 14 48	1.5	1.00	5.0	2.00	300	N	N	N	30	1,500
OC292C3	42 17 50	117 15 24	1.0	1.00	2.0	1.00	200	N	N	N	<20	1,000
OC293C3	42 12 41	117 10 7	2.0	.50	1.0	1.00	200	N	N	N	<20	1,000
OC294C3	42 12 46	117 10 10	3.0	1.00	2.0	1.50	500	N	N	N	<20	1,000
OC295C3	42 12 48	117 9 59	2.0	.20	1.5	1.00	200	N	N	N	<20	700
OC296C3	42 14 36	117 12 21	1.5	.15	7.0	>2.00	300	N	N	N	<20	700
OC297C3	42 13 58	117 12 33	2.0	.20	5.0	2.00	200	N	N	N	20	1,000

Table 8.--Analyses of heavy-mineral concentrate samples, Owyhee River Canyon Wilderness Study Area (on-005-1737), Malheur County, Oregon--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
0C220C3	N	N	N	N	30	<10	N	N	N	10	70
0C221C3	N	N	N	N	100	30	200	N	<50	15	N
0C222C3	N	N	N	N	30	<10	100	N	N	10	N
0C223C3	<2	N	N	N	20	15	<50	N	N	15	N
0C224C3	<2	N	N	N	50	20	200	N	<50	15	N
0C225C3	N	N	N	N	20	20	100	N	N	15	N
0C228C3	<2	N	N	10	700	20	<50	N	N	70	N
0C229C3	N	N	N	N	200	15	300	N	N	50	N
0C230C3	N	N	N	N	100	15	N	N	N	20	N
0C231C3	<2	N	N	N	300	20	N	N	N	30	N
0C232C3	<2	N	N	N	100	20	N	N	<50	20	50
0C238C3	10	N	N	30	1,000	20	300	N	50	30	N
0C241C3	<2	N	N	<10	100	20	100	N	N	30	N
0C242C3	<2	N	N	N	50	20	150	N	N	30	N
0C243C3	N	N	N	N	300	15	200	N	N	50	N
0C244C3	N	N	N	10	200	20	100	N	N	50	N
0C245C3	N	N	N	N	100	200	N	N	N	30	1,500
0C247C3	N	N	N	N	20	15	100	N	N	50	N
0C248C3	N	N	N	N	70	10	<50	N	N	30	N
0C249C3	N	N	N	N	30	<10	<50	N	N	30	N
0C250C3	N	N	N	N	50	20	200	N	N	50	500
0C251C3	7	N	N	N	<20	<10	100	N	N	20	N
0C252C3	5	N	N	N	20	15	200	N	N	20	N
0C272C3	5	N	N	N	100	50	200	N	N	100	N
0C276C3	3	N	N	N	<50	30	N	N	N	50	N
0C277C3	7	N	N	N	<20	<10	<50	N	N	20	N
0C278C3	3	N	N	N	<20	10	N	N	N	30	N
0C279C3	5	N	N	N	<20	<10	N	N	N	30	N
0C280C3	10	N	N	N	<20	10	100	N	N	30	N
0C281C3	3	N	N	N	20	<10	70	N	N	30	N
0C282C3	5	N	N	N	N	15	70	N	N	30	N
0C283C3	15	N	N	N	100	50	N	N	N	100	N
0C284C3	7	N	N	N	50	<10	50	N	N	20	N
0C285C3	7	N	N	N	<20	10	<50	N	N	30	N
0C287C3	<2	N	N	N	N	<10	N	N	N	<10	N
0C288C3	3	N	N	N	30	10	<50	N	N	30	N
0C289C3	5	N	N	N	20	<10	<50	N	N	50	N
0C290C3	3	N	N	N	50	10	150	N	N	50	N
0C291C3	2	N	N	N	100	10	100	N	N	50	N
0C292C3	2	N	N	N	150	15	<50	N	N	50	N
0C293C3	<2	N	N	N	50	<10	N	N	N	30	N
0C294C3	<2	N	N	N	150	15	<50	N	N	50	N
0C295C3	3	N	N	N	N	10	150	N	N	30	N
0C296C3	10	N	N	N	<20	10	200	N	N	50	N
0C297C3	2	N	N	N	50	10	200	N	<50	30	N

Table 8.--Analyses of heavy-mineral concentrate samples, Owyhee River Canyon wilderness study area (OR-003-195), Malheur County, Oregon--Continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
0C220C3	N	<10	>2,000	500	30	N	500	N	>2,000	N
0C221C3	N	<10	200	300	100	N	1,000	N	>2,000	N
0C222C3	N	<10	200	300	70	N	1,000	N	>2,000	N
0C223C3	N	<10	1,000	300	70	N	1,500	N	>2,000	N
0C224C3	N	<10	>2,000	500	100	N	1,000	N	>2,000	N
0C225C3	N	<10	20	300	100	N	1,000	N	>2,000	N
0C228C3	N	<10	300	500	200	N	500	N	>2,000	N
0C229C3	N	<10	N	300	100	N	1,500	N	>2,000	N
0C230C3	N	<10	700	500	70	N	500	N	>2,000	N
0C231C3	N	<10	N	500	100	N	1,000	N	>2,000	N
0C232C3	N	<10	>2,000	500	100	N	500	N	>2,000	N
0C238C3	N	<10	>2,000	500	300	N	500	N	>2,000	N
0C241C3	N	<10	N	500	200	N	700	N	>2,000	N
0C242C3	N	<10	N	500	200	N	1,500	N	>2,000	N
0C243C3	N	<10	N	500	200	N	1,000	N	>2,000	N
0C244C3	N	<10	N	500	150	N	1,000	N	>2,000	N
0C245C3	N	<10	N	300	70	N	700	N	>2,000	N
0C247C3	N	<10	N	300	150	N	1,500	N	>2,000	N
0C248C3	N	<10	N	200	70	N	1,000	N	>2,000	N
0C249C3	N	<10	500	200	70	N	1,500	N	>2,000	N
0C250C3	N	<10	300	200	100	N	1,500	N	>2,000	N
0C251C3	N	<10	200	<200	100	N	1,000	N	>2,000	N
0C252C3	N	<10	1,000	200	150	N	1,000	N	>2,000	N
0C272C3	N	<20	N	<500	200	N	3,000	N	>5,000	N
0C276C3	N	<20	N	<500	100	N	1,000	N	>5,000	N
0C277C3	N	<10	N	<500	30	N	1,000	N	>2,000	N
0C278C3	N	<10	<20	N	50	N	1,000	N	>2,000	N
0C279C3	N	<10	N	200	20	N	700	N	>2,000	N
0C280C3	N	<10	300	<200	50	N	1,000	N	>2,000	N
0C281C3	N	<10	N	<200	30	N	1,000	N	>2,000	N
0C282C3	N	<10	200	200	50	N	1,500	N	>2,000	N
0C283C3	N	<20	N	N	150	N	1,500	N	>5,000	N
0C284C3	N	<10	300	<200	70	N	1,000	N	>2,000	N
0C285C3	N	<10	300	<200	50	N	1,000	N	>2,000	N
0C287C3	N	<10	N	200	<20	N	500	N	>2,000	N
0C288C3	N	<10	N	<200	70	N	700	N	>2,000	N
0C289C3	N	<10	N	<200	30	N	700	N	>2,000	N
0C290C3	N	<10	700	<200	70	N	1,000	N	>2,000	N
0C291C3	N	<10	70	300	100	N	700	N	>2,000	N
0C292C3	N	<10	>2,000	300	70	N	700	N	>2,000	N
0C293C3	N	<10	100	200	70	N	700	N	>2,000	N
0C294C3	N	<10	300	200	100	N	1,000	N	>2,000	N
0C295C3	N	<10	200	200	70	N	1,000	N	>2,000	N
0C296C3	N	<10	70	200	100	N	1,500	N	>2,000	N
0C297C3	N	<10	2,000	200	100	N	700	N	>2,000	N

Table 8.--Analyses of heavy-mineral concentrate samples, Uwyhee River Canyon Wilderness Study area (UM-003-193), Malheur County, Oregon--Continued

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
0C299C3	42 26 27	117 12 55	2.0	.10	2.0	1.00	100	N	N	N	<20	700
0C300C3	42 23 20	117 13 32	2.0	.70	3.0	.50	150	N	N	N	<20	3,000
0C302C3	42 23 8	117 13 58	5.0	3.00	2.0	2.00	1,000	N	N	N	20	2,000
0C303C3	42 28 0	117 15 10	7.0	2.00	2.0	>2.00	1,000	N	N	N	30	2,000
0C305C3	42 27 18	117 15 17	5.0	1.50	2.0	2.00	1,000	N	N	N	50	2,000
0C306C3	42 21 33	117 15 5	2.0	1.00	3.0	1.00	500	N	N	N	30	2,000
0C307C3	42 21 40	117 15 18	2.0	2.00	5.0	.70	700	N	N	N	30	3,000
0C308C3	42 20 59	117 15 21	3.0	3.00	7.0	.70	1,000	N	N	N	50	1,000
0C310C3	42 26 18	117 13 30	2.0	1.00	5.0	.50	300	N	N	N	30	5,000
0C311C3	42 26 20	117 13 27	2.0	1.00	5.0	1.00	500	N	N	N	30	5,000
0C315C3	42 25 23	117 13 10	2.0	.15	3.0	.50	200	N	N	N	20	7,000
0C600C3	42 13 15	117 13 10	2.0	.70	3.0	2.00	300	N	N	N	50	1,500
0C601C3	42 15 32	117 9 17	1.5	.15	2.0	2.00	200	N	N	N	30	1,000
0C602C3	42 17 50	117 12 46	1.0	.15	2.0	1.00	200	N	N	N	30	1,000
0C605C3	42 16 11	117 12 59	1.5	.15	3.0	1.50	300	N	N	N	50	1,500
0C606C3	42 16 6	117 12 22	1.5	.20	2.0	.50	150	N	N	N	30	2,000
0C607C3	42 19 54	117 13 27	2.0	.30	2.0	1.50	200	N	N	N	30	1,000
0C608C3	42 19 51	117 13 34	1.5	.15	2.0	1.00	200	N	N	N	30	1,500
0C609C3	42 21 52	117 12 8	1.5	.10	1.5	.50	150	N	N	N	20	1,500
0C610C3	42 21 52	117 10 43	1.5	.30	2.0	.30	150	N	N	N	20	3,000
0C702C3	42 9 18	117 15 48	1.0	.10	.5	1.50	150	N	N	N	30	200
0C703C3	42 11 39	117 14 43	2.0	1.00	5.0	>2.00	500	N	N	N	30	500
0C705C3	42 14 3	117 14 6	2.0	.70	5.0	>2.00	300	N	N	N	30	700
0C800C3	42 12 47	117 13 34	2.0	1.50	5.0	>2.00	500	N	N	N	70	300
0C801C3	42 15 15	117 9 17	2.0	1.50	5.0	>2.00	500	N	N	N	100	1,500
0C802C3	42 16 16	117 9 20	3.0	1.50	5.0	>2.00	700	N	N	N	100	1,000
0C803C3	42 31 58	117 12 12	2.0	1.00	5.0	>2.00	500	N	N	N	50	1,500
0C804C3	42 32 4	117 12 1	2.0	1.50	5.0	2.00	500	N	N	N	70	1,500
0C805C3	42 17 7	117 9 41	3.0	1.00	2.0	1.50	500	N	N	N	50	2,000
0C807C3	42 18 27	117 9 22	1.5	.50	2.0	1.00	150	N	N	N	70	3,000
0C808C3	42 18 47	117 9 22	2.0	.70	2.0	1.00	300	N	N	N	50	1,500
0C809C3	42 18 56	117 9 19	2.0	.70	2.0	.70	200	N	N	N	50	700
0C810C3	42 20 9	117 9 41	5.0	5.00	10.0	1.50	1,000	N	N	N	50	1,000
0C811C3	42 20 43	117 10 10	2.0	.30	1.0	.50	200	N	N	N	50	2,000
0C812C3	42 21 12	117 9 51	3.0	2.00	2.0	2.00	500	N	N	N	50	300
0C813C3	42 21 54	117 10 9	2.0	1.50	5.0	2.00	500	N	N	N	70	1,000
0C814C3	42 19 45	117 10 31	2.0	.30	2.0	1.00	300	N	N	N	50	1,000
0C816C3	42 21 42	117 5 8	3.0	1.50	5.0	>2.00	700	N	N	N	70	300
0C817C3	42 23 41	117 8 10	3.0	1.50	5.0	2.00	500	N	N	N	70	1,000
0C818C3	42 20 2	117 6 36	3.0	1.50	5.0	>2.00	500	N	N	N	70	1,000
0C819C3	42 23 23	117 10 19	1.5	1.00	5.0	>2.00	500	N	N	N	20	500
0C820C3	42 25 15	117 11 5	3.0	1.50	5.0	>2.00	700	N	N	N	20	200
0C821C3	42 25 27	117 10 57	5.0	2.00	10.0	>2.00	1,500	N	N	N	70	2,000
0C822C3	42 25 11	117 12 25	7.0	3.00	10.0	>2.00	1,500	N	N	N	100	1,000
0C900C3	42 9 28	117 18 12	5.0	.70	3.0	2.00	1,000	N	N	N	50	2,000

Table 8.--Analyses of heavy-mineral concentrate samples, Owyhee River Canyon wilderness study area (UH-003-195), Malheur County, Oregon--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
0C299C3	5	N	N	N	N	<10	N	N	N	<10	N
0C300C3	<2	N	N	N	70	<10	100	N	N	30	N
0C302C3	N	N	N	15	500	15	70	N	N	70	N
0C303C3	N	N	N	10	100	50	100	N	N	50	N
0C305C3	N	N	N	N	150	50	150	N	N	50	N
0C306C3	N	N	N	N	100	20	100	N	N	30	N
0C307C3	N	N	N	N	150	20	200	N	N	50	N
0C308C3	N	N	N	10	500	20	<50	N	N	70	N
0C310C3	N	N	N	N	100	10	70	N	N	30	N
0C311C3	N	N	N	N	100	15	200	N	N	20	N
0C315C3	N	N	N	N	20	<10	100	N	N	15	N
0C600C3	N	N	N	N	50	15	150	N	N	30	N
0C601C3	N	N	N	N	100	10	100	N	N	50	N
0C602C3	N	N	N	N	20	10	100	N	N	50	300
0C605C3	N	N	N	N	20	10	150	N	N	50	N
0C606C3	N	N	N	N	20	10	70	N	N	20	N
0C607C3	N	N	N	N	100	15	200	N	N	50	N
0C608C3	N	N	N	N	20	15	200	N	N	50	N
0C609C3	N	N	N	N	20	<10	<50	N	N	30	N
0C610C3	N	N	N	N	20	<10	N	N	N	20	N
0C702C3	N	N	N	N	30	<10	<50	N	N	70	N
0C703C3	N	N	N	N	200	20	700	N	N	50	N
0C705C3	N	N	N	N	200	15	200	N	N	50	N
0C800C3	N	N	N	N	150	15	500	N	50	50	N
0C801C3	N	N	N	N	100	20	300	N	N	30	20
0C802C3	N	N	N	N	200	20	300	N	N	50	N
0C803C3	N	N	N	N	500	20	500	N	N	30	N
0C804C3	N	N	N	N	500	15	200	N	N	50	N
0C805C3	N	N	N	N	100	20	<50	N	N	30	100
0C807C3	N	N	N	N	50	15	100	N	N	20	N
0C808C3	N	N	N	N	30	15	100	N	N	20	N
0C809C3	N	N	N	N	50	10	100	N	N	20	N
0C810C3	<2	N	N	30	700	30	200	N	N	100	N
0C811C3	N	N	N	N	20	<10	N	N	N	15	N
0C812C3	N	N	N	10	500	20	N	<10	<50	100	N
0C813C3	N	N	N	N	500	15	300	N	N	50	N
0C814C3	N	N	N	N	30	10	<50	N	<50	20	N
0C816C3	N	N	N	<10	700	30	700	N	N	70	N
0C817C3	N	N	N	N	1,000	50	300	N	N	70	N
0C818C3	N	N	N	<10	500	30	500	N	N	50	N
0C819C3	N	N	N	N	200	15	200	N	N	15	N
0C820C3	N	N	N	15	1,000	30	300	N	N	100	N
0C821C3	N	N	N	10	2,000	30	500	N	N	50	N
0C822C3	<2	N	N	30	2,000	100	1,000	N	N	100	N
0C900C3	N	N	N	N	100	20	300	N	N	20	N

Table 8.--Analyses of heavy-mineral concentrate samples, Dwyhee River Canyon Wilderness study area (UK-003-195),
Malheur County, Oregon--Continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
0C299C3	N	<10	N	<200	50	N	700	N	>2,000	N
0C300C3	N	<10	>2,000	200	70	N	700	N	>2,000	N
0C302C3	N	<10	N	300	200	N	1,000	N	>2,000	N
0C303C3	N	<10	N	300	200	N	1,000	N	>2,000	N
0C305C3	N	<10	N	300	200	N	1,500	N	>2,000	N
0C306C3	N	<10	300	700	150	N	500	N	>2,000	N
0C307C3	N	<10	1,500	500	150	N	500	N	>2,000	N
0C308C3	N	<10	N	700	200	N	200	N	>2,000	N
0C310C3	N	<10	2,000	700	70	N	700	N	>2,000	N
0C311C3	N	<10	1,000	300	100	N	1,000	N	>2,000	N
0C315C3	N	<10	700	500	30	N	1,000	N	>2,000	N
0C600C3	N	<10	2,000	700	200	N	1,500	N	>2,000	N
0C601C3	N	<10	200	500	100	N	1,500	N	>2,000	N
0C602C3	N	<10	N	500	100	N	1,500	N	>2,000	N
0C605C3	N	<10	N	500	100	N	1,500	N	>2,000	N
0C606C3	N	<10	100	500	50	N	1,000	N	>2,000	N
0C607C3	N	<10	>2,000	500	100	N	1,000	N	>2,000	N
0C608C3	N	<10	70	500	100	N	1,500	N	>2,000	N
0C609C3	N	<10	N	500	70	N	1,000	N	>2,000	N
0C610C3	N	<10	N	500	30	N	500	N	>2,000	N
0C702C3	N	<10	200	200	70	N	2,000	N	>2,000	N
0C703C3	N	<10	50	300	200	N	1,500	N	>2,000	N
0C705C3	N	<10	200	300	200	N	1,500	N	>2,000	N
0C800C3	N	<10	30	N	300	N	1,000	N	>2,000	N
0C801C3	N	<10	N	700	200	N	700	N	>2,000	N
0C802C3	N	<10	N	300	200	N	1,000	N	>2,000	N
0C803C3	N	<10	500	300	200	N	1,000	N	>2,000	N
0C804C3	N	<10	N	300	200	N	700	N	>2,000	N
0C805C3	N	<10	N	200	70	N	500	N	>2,000	N
0C807C3	N	<10	N	300	50	N	500	N	>2,000	N
0C808C3	N	<10	N	300	100	N	700	N	>2,000	N
0C809C3	N	<10	N	200	100	N	700	N	>2,000	N
0C810C3	N	<10	N	300	300	N	300	N	>2,000	N
0C811C3	N	<10	N	200	30	N	700	N	>2,000	N
0C812C3	N	<10	N	200	200	N	1,000	N	>2,000	N
0C813C3	N	<10	500	300	200	N	1,000	N	>2,000	N
0C814C3	N	<10	N	200	100	N	1,000	N	>2,000	N
0C816C3	N	<10	100	200	300	N	1,500	N	>2,000	N
0C817C3	N	<10	150	300	200	N	500	N	>2,000	N
0C818C3	N	<10	N	500	200	N	700	N	>2,000	N
0C819C3	N	<10	50	500	150	N	500	N	>2,000	N
0C820C3	N	<10	700	200	200	N	1,000	N	>2,000	N
0C821C3	N	<10	20	500	500	N	1,500	N	>2,000	N
0C822C3	N	<10	1,000	200	500	N	2,000	N	>2,000	<200
0C900C3	N	<10	N	200	200	N	2,000	N	>2,000	N

Table 8.--Analyses of heavy-mineral concentrate samples, Owyhee River Canyon Wilderness study area (UM-V03-173),
Malheur County, Oregon--Continued

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
0C901C3	42 9 30	117 18 12	7.0	.50	1.5	>2.00	1,000	N	N	N	70	1,500
0C902C3	42 9 14	117 17 18	5.0	.70	2.0	2.00	1,000	N	N	N	70	2,000
0C903C3	42 14 4	117 12 35	2.0	1.00	15.0	>2.00	500	N	N	N	70	1,500
0C904C3	42 15 48	117 14 8	3.0	.50	2.0	>2.00	700	N	N	N	50	500
0C905C3	42 15 44	117 14 9	5.0	.50	3.0	2.00	1,000	N	N	N	70	3,000
0C906C3	42 16 49	117 12 26	2.0	.70	3.0	2.00	700	N	N	N	50	1,500
0C907C3	42 20 5	117 14 18	3.0	1.00	3.0	2.00	1,000	N	N	N	50	1,500
0C908C3	42 20 6	117 14 17	3.0	1.00	2.0	2.00	1,000	N	N	N	50	1,000
0C909C3	42 21 47	117 14 8	2.0	.70	2.0	.50	700	N	N	N	100	5,000
0C910C3	42 21 48	117 14 11	2.0	.50	1.0	1.50	700	N	N	N	70	500
0C911C3	42 22 20	117 14 4	3.0	1.00	3.0	1.00	700	N	N	N	70	3,000
0C913C3	42 23 8	117 13 25	3.0	1.00	3.0	1.00	100	N	N	N	50	10,000
0C914C3	42 23 33	117 13 18	3.0	1.00	3.0	1.50	1,500	N	N	N	50	3,000

Table 8.--Analyses of heavy-mineral concentrate samples, Uwyhee River Canyon Wilderness study area (UM-003-173),
Malheur County, Oregon--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
0C901C3	N	N	N	N	70	20	N	N	N	20	N
0C902C3	N	N	N	N	100	30	100	N	N	20	N
0C903C3	N	N	N	N	200	30	500	N	<50	20	N
0C904C3	N	N	N	N	100	15	<50	N	N	20	N
0C905C3	N	N	N	N	200	10	<50	N	N	20	N
0C906C3	N	N	N	N	20	20	100	N	N	20	N
0C907C3	N	N	N	N	20	20	<50	N	N	20	N
0C908C3	N	N	N	N	20	20	<50	N	N	20	N
0C909C3	N	N	N	N	30	15	100	N	N	20	N
0C910C3	N	N	N	N	200	10	100	N	N	20	N
0C911C3	N	N	N	N	200	15	100	N	N	20	N
0C913C3	N	N	N	N	50	50	<50	N	N	20	N
0C914C3	N	N	N	N	30	10	300	N	N	20	N

Table 8.--Analyses of heavy-mineral concentrate samples, Uwynee River Canyonwilderness Study area (UM-003-173),
Malheur County, Oregon--Continued

Sample	Sb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
QC901C3	N	<10	>2,000	200	200	N	5,000	N	>2,000	N
QC902C3	N	<10	70	200	200	N	2,000	N	>2,000	N
QC903C3	N	<10	500	200	300	N	1,500	N	>2,000	N
QC904C3	N	<10	N	<200	200	N	3,000	N	>2,000	N
QC905C3	N	<10	300	200	200	N	1,500	N	>2,000	N
QC906C3	N	<10	500	200	200	N	2,000	N	>2,000	N
QC907C3	N	<10	1,000	200	100	N	2,000	N	>2,000	N
QC908C3	N	<10	500	200	100	N	3,000	N	>2,000	N
QC909C3	N	<10	700	500	50	N	700	N	>2,000	N
QC910C3	N	<10	N	<200	70	N	1,500	N	>2,000	N
QC911C3	N	<10	N	300	100	N	1,000	N	>2,000	N
QC913C3	N	<10	N	700	100	N	1,000	N	>2,000	N
QC914C3	N	<10	N	300	100	N	1,500	N	>2,000	N