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Analytical results and sample locality map of stream-sediment, heavy-mineral-concentrate, and rock samples from the Owlshead Mountains Wilderness Study Area (CDCA-156), San Bernardino County, California

By

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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 a geochemical survey of the Owlshead Mountains Wilderness Study Area (CDCA-156), San Bernardino County, California.

INTRODUCTION

In June 1982, the U.S. Geological Survey conducted a reconnaissance geochemical survey of the Owlshead Mountains Wilderness Study Area, San Bernardino County, California.

The part of the wilderness study area on which surveys were conducted comprises Owlshead Mountains Wilderness Study Area, which encompasses about 105,000 acres (165 mi^2) (427 km^2) at the northern edge of San Bernardino County, California (see fig. 1). The area lies about 43 miles northwest of Baker and about 26 miles east of Searles Lake, California. The area is bounded on the north and east by Death Valley National Monument, on the west by Mojave Range B of China Lake Naval Weapons Center, and on the south by Fort Irwin Military Reservation. Throughout this report "study area" and "wilderness study area" refer only to the part of the study area mentioned above.

The oldest rocks in the Owlshead Mountains are Precambrian schist and gneiss, which crop out along the northeastern and eastern edges of these mountains, north of and at the eastern boundary of the wilderness study area. Calcitic and dolomitic marble of uncertain age is exposed mainly in the southeast corner of the area but also in one small area west of Lost Lake. A diverse assemblage of Mesozoic plutonic rocks includes fine-grained quartz diorite, mildly altered medium-grained hornblende biotite quartz diorite and diorite, fine-grained hornblende biotite granodiorite and adamellite, medium-grained biotite granite, and coarse-grained leucocratic biotite adamellite. Volcanic and volcaniclastic rocks of Miocene age (Davis and Fleck, 1977) underlie much of the western ranges of the Owlshead Mountains. Large portions of the study area are covered by alluvial deposits. Tertiary and (or) Quaternary fanglomerate is composed largely of Tertiary volcanic rock but locally contains granitoid debris, schist, quartzite, and rare coarse-grained gneiss.

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.

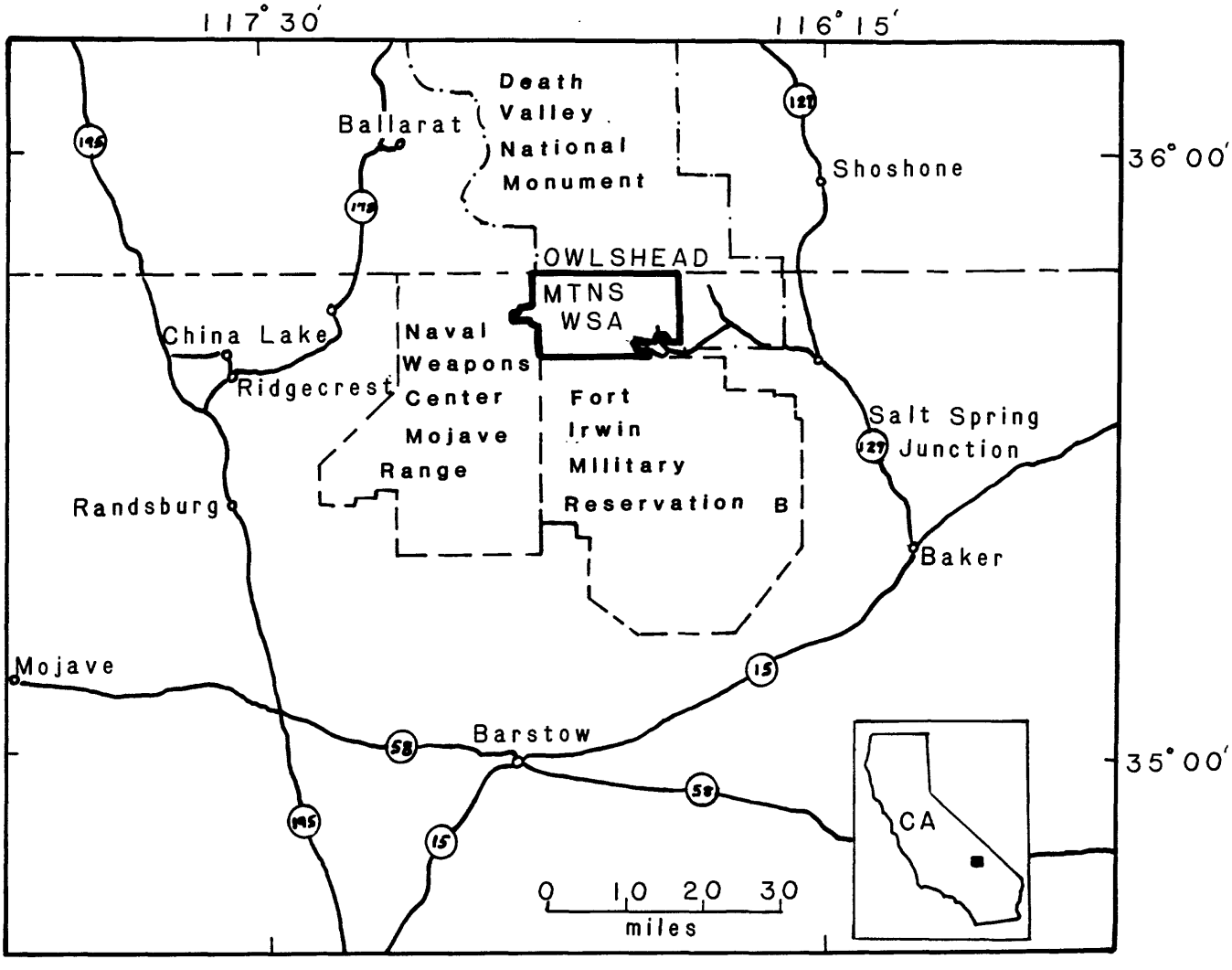

Figure 1. Index map of the Owlshead Mountains Wilderness Study Area, San Bernardino County, California.

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

Sample Collection

Stream-sediment and heavy-mineral-concentrate samples were collected at 158 sites (plate 1). Two hundred and seventy-nine rock samples were collected. Sampling density was about one sample site per 1 mi^2 for the stream sediments and heavy-mineral concentrates, and about one sample site per .7 mi^2 for the rocks. Table 7 lists 50 rock samples collected in conjunction with this study. These samples were collected outside of the map area and, consequently, do not appear on the sample locality map.

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: 62,500). 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.

Rock samples

Rock samples were collected from outcrops or exposures in the vicinity of the plotted site location. Samples were collected from unmineralized or mineralized rocks. Table 6 gives a brief description of rock samples.

Sample Preparation

The stream-sediment samples were air dried, then sieved using 80-mesh (0.17-mm) stainless steel sieves. The portion of the sediment passing through the sieve was saved for analysis.

After air drying, bromoform (specific gravity 2.8) was used to remove the remaining quartz and feldspar from the heavy-mineral-concentrate samples that had been panned in the field. The resultant heavy-mineral sample was separated into three fractions using a large electromagnet (in this case a modified Frantz Isodynamic Separator). The most magnetic material, primarily magnetite, was not analyzed. The second fraction, largely ferromagnesian silicates and iron oxides, was saved for analysis/archival storage. The third fraction (the least magnetic material which may include the nonmagnetic ore minerals, zircon, sphene, etc.) was split using a Jones splitter. One split was hand-ground for spectrographic analysis; the other split was saved for mineralogical analysis. These magnetic separates are the same separates that

would be produced by using a Frantz Isodynamic Separator set at a slope of 15° and a tilt of 10° with a current of 0.1 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.

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

Sample Analysis

Spectrographic method

The stream-sediment, heavy-mineral-concentrate, and rock samples were analyzed for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968; Myers and others, 1961). The elements analyzed and their lower limits of determination are listed in table 1. Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (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 Owlshead Mountains Wilderness Study Area are listed in tables 3-5.

Chemical Methods

Samples from this study area were also analyzed by several other methods. Rock samples were analyzed for gold (Au), arsenic (As), antimony (Sb), zinc (Zn), bismuth (Bi), and cadmium (Cd) using atomic absorption spectroscopy (AA), for mercury (Hg) using the Jerome Gold-Film Mercury Detector (I), and for tungsten (W) usign a colorimetric technique (CM). Sediments were analyzed for mercury using the Jerome Gold-Film Mercury Detector and for fluorine (F) using an ion-selective electrode method (SI). See table 2 for a more detailed summary of these chemical methods.

Analytical results for stream-sediment, heavy-mineral-concentrate, and rock samples are listed in tables 3, 4, and 5, respectively.

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 3-5 list the analyses for the samples of stream sediment, heavy-mineral concentrate, and rock, respectively. For the three 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 (plate 1). Columns in which the element headings show the letter "s" below the element symbol are emission spectrographic analyses; "aa" indicates atomic absorption analyses; "cm" indicates colorimetric analyses; "inst" indicates an instrument technique; and "si" indicates a specific ion analysis. 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 1. 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 3-5 in place of an analytical value. Because of the formatting used in the computer program that produced tables 3-5, 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.

ACKNOWLEDGMENTS

A number of our colleagues also participated in the collection, preparation, and analyses of these samples: collection, Barbara Chazin, J. C. Gray, and R. D. Koch; preparation, William Atkinson, Barbara Chazin, J. C. Gray, Mike Jenner, John Unruh, Dean Yannicito, and Sean Yasutake; and analyses, L. A. Bradley, P. H. Briggs, J. G. Crock, J. C. Gray, Aletha Gruzensky, J. D. Hoffman, K. A. Romine, and John Sharkey.

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

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

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

TABLE 2.--Chemical methods used

[AA = atomic absorption; I = instrumental; SI = specific ion; and CM = colorimetry]

Element or constituent determined	Sample Type	Method	Determination limit (micrograms/ gram or ppm)	Reference
Gold (Au)	rocks	AA	0.05	Thompson and others, 1968.
Mercury (Hg)	sediments rocks	I	0.02	Modification of McNerney and others, 1972, and Vaughn, and McCarthy, 1964.
Arsenic (As)	rocks	AA	10	Modification of Viets, 1978.
Antimony (Sb)	rocks	AA	2	
Zinc (Zn)	rocks	AA	5	
Bismuth (Bi)	rocks	AA	1	
Cadmium (Cd)	rocks	AA	0.1	
Fluorine (F)	sediments	SI	100	Hopkins, 1977.
Tungsten (W)	rocks	CM	1	Welsch, 1983.

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.

[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
OM001	35 47 13	116 54 17	10	5.0	5.0	1.0	3,000	N	N	N	200	2,000
OM002	35 47 6	116 54 44	7	3.0	7.0	1.0	5,000	N	N	N	150	3,000
OM003	35 47 30	116 53 26	10	2.0	5.0	1.0	3,000	N	N	N	150	1,500
OM004	35 48 0	116 52 26	7	3.0	7.0	1.0	3,000	N	N	N	100	2,000
OM005	35 46 43	116 52 51	7	3.0	7.0	1.0	3,000	N	N	N	100	1,500
OM006	35 46 7	116 53 32	10	3.0	10.0	>1.0	3,000	N	N	N	100	1,500
OM007	35 45 44	116 53 42	7	3.0	10.0	>1.0	>5,000	N	N	N	100	2,000
OM008	35 44 12	116 54 23	5	2.0	5.0	.7	3,000	N	N	N	150	2,000
OM009	35 44 51	116 54 8	10	5.0	10.0	>1.0	5,000	N	N	N	500	1,500
OM010	35 43 46	116 54 30	10	2.0	3.0	>1.0	>5,000	N	N	N	150	3,000
OM011	35 43 14	116 54 55	7	5.0	10.0	1.0	3,000	N	N	N	100	2,000
OM012	35 42 40	116 54 48	7	3.0	5.0	1.0	2,000	N	N	N	100	2,000
OM013	35 41 25	116 53 10	7	2.0	3.0	1.0	3,000	N	N	N	100	1,500
OM014	35 41 52	116 52 35	5	3.0	5.0	.7	3,000	N	N	N	100	2,000
OM015	35 42 20	116 52 30	7	3.0	3.0	1.0	3,000	N	N	N	100	1,500
OM016	35 42 52	116 51 56	7	3.0	7.0	1.0	2,000	1.0	N	N	100	1,500
OM017	35 43 5	116 51 56	7	2.0	5.0	1.0	5,000	1.5	N	N	150	2,000
OM018	35 44 15	116 51 34	15	5.0	10.0	>1.0	5,000	N	N	N	100	2,000
OM019	35 44 19	116 51 36	10	5.0	10.0	>1.0	5,000	<.5	N	N	150	2,000
OM020	35 45 0	116 51 9	7	3.0	7.0	>1.0	3,000	N	N	N	100	3,000
OM021	35 45 52	116 51 34	10	3.0	7.0	>1.0	2,000	N	N	N	100	2,000
OM022	35 46 28	116 51 36	7	5.0	10.0	>1.0	3,000	N	N	N	100	2,000
OM023	35 47 37	116 50 25	7	5.0	10.0	1.0	2,000	N	N	N	100	3,000
OM024	35 47 40	116 48 18	10	5.0	10.0	>1.0	3,000	N	N	N	100	2,000
OM025	35 48 18	116 48 0	7	5.0	10.0	1.0	2,000	N	N	N	200	3,000
OM026	35 46 43	116 48 4	5	3.0	7.0	1.0	2,000	N	N	N	150	2,000
OM027	35 45 32	116 47 58	7	5.0	10.0	1.0	2,000	N	N	N	200	3,000
OM028	35 44 32	116 48 30	7	2.0	7.0	1.0	2,000	N	N	N	100	2,000
OM029	35 43 21	116 48 45	7	2.0	5.0	1.0	2,000	N	N	N	150	1,500
OM030	35 44 0	116 47 22	10	5.0	7.0	>1.0	3,000	N	N	N	150	1,500
OM031	35 44 25	116 46 30	10	5.0	7.0	>1.0	3,000	<.5	N	N	100	1,500
OM032	35 44 47	116 47 10	7	1.5	5.0	.7	3,000	N	N	N	70	1,500
OM033	35 45 51	116 46 30	15	5.0	7.0	>1.0	5,000	N	N	N	100	1,500
OM034	35 45 26	116 45 55	7	5.0	7.0	.7	3,000	N	N	N	300	1,500
OM035	35 45 30	116 46 0	7	3.0	7.0	1.0	3,000	N	N	N	150	2,000
OM036	35 41 30	116 55 0	10	5.0	10.0	>1.0	5,000	N	N	N	150	2,000
OM037	35 41 11	116 54 7	7	3.0	7.0	1.0	3,000	N	N	N	100	2,000
OM038	35 40 43	116 53 30	7	3.0	10.0	>1.0	2,000	N	N	N	100	2,000
OM039	35 40 7	116 52 40	7	2.0	7.0	1.0	2,000	N	N	N	100	2,000
OM040	35 40 25	116 53 0	7	3.0	7.0	1.0	3,000	N	N	N	100	2,000
OM041	35 40 0	116 54 14	7	3.0	10.0	1.0	2,000	N	N	N	100	3,000
OM042	35 38 38	116 55 22	5	2.0	5.0	.7	2,000	N	N	N	150	1,500
OM043	35 38 27	116 55 28	7	1.5	5.0	.7	2,000	N	N	N	200	1,500
OM044	35 38 23	116 55 29	7	1.0	7.0	1.0	3,000	N	N	N	100	1,500
OM045	35 46 38	116 46 22	10	5.0	7.0	1.0	3,000	5.0	N	N	200	2,000

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Be-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
OM001	<5	N	20	150	70	150	N	70	70	N	--
OM002	N	N	20	200	30	200	N	70	150	N	--
OM003	N	N	20	150	30	200	N	50	70	N	--
OM004	N	N	20	150	30	200	N	50	150	N	--
OM005	<5	N	20	150	30	200	N	50	150	N	--
OM006	<5	N	20	100	50	300	N	30	100	N	--
OM007	<5	N	30	100	30	200	5	30	200	N	--
OM008	<5	N	20	100	50	150	5	30	150	N	--
OM009	N	N	30	300	50	150	7	100	100	N	--
OM010	N	N	30	150	50	150	15	70	200	N	--
OM011	N	N	20	200	70	100	N	70	100	N	--
OM012	<5	N	20	100	30	100	N	50	100	N	--
OM013	5	N	15	100	20	150	<5	20	150	N	--
OM014	<5	N	15	100	20	100	N	30	150	N	--
OM015	<5	N	15	100	30	200	<5	30	150	N	--
OM016	<5	N	15	100	30	200	5	30	500	N	--
OM017	<5	N	15	70	30	300	5	20	200	N	--
OM018	N	N	30	200	50	150	N	30	100	N	--
OM019	<5	N	30	200	50	200	7	50	150	N	--
OM020	N	N	20	150	50	200	N	30	100	N	--
OM021	N	N	20	150	50	200	N	30	70	N	--
OM022	<5	N	20	200	30	200	N	30	100	N	--
OM023	<5	N	20	300	30	200	N	50	100	N	--
OM024	N	N	30	500	50	300	N	70	70	N	--
OM025	N	N	30	200	30	200	N	50	70	N	--
OM026	<5	N	20	150	30	200	N	50	100	N	--
OM027	N	N	20	150	30	150	N	50	150	N	--
OM028	<5	N	15	300	20	200	N	30	100	N	--
OM029	<5	N	15	100	20	150	N	20	150	N	--
OM030	<5	N	30	200	50	200	N	50	100	N	--
OM031	<5	N	30	200	30	200	N	50	100	N	--
OM032	5	N	10	70	20	200	N	15	100	N	--
OM033	5	N	20	200	30	700	N	50	70	N	--
OM034	N	N	15	100	30	200	N	30	200	N	--
OM035	<5	N	20	150	30	200	N	30	150	N	--
OM036	<5	N	20	150	50	200	<5	50	100	N	--
OM037	<5	N	20	100	20	500	N	30	150	N	--
OM038	N	N	20	150	30	200	N	30	100	N	--
OM039	N	N	20	100	20	150	N	30	100	N	--
OM040	<5	N	50	100	30	150	N	30	100	N	--
OM041	N	N	30	100	30	200	N	50	100	N	--
OM042	<5	N	15	70	20	200	N	20	100	N	--
OM043	5	N	15	100	15	150	N	10	100	N	--
OM044	<5	N	10	100	15	300	N	10	200	N	--
OM045	5	N	30	200	70	200	N	50	150	N	--

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Hg-ppm inst	F-ppm si
OM001	N	1,500	300	N	50	<200	--	N	.08	800
OM002	N	5,000	300	N	30	N	--	N	.06	400
OM003	N	1,500	500	N	50	N	--	N	.04	400
OM004	N	2,000	200	N	70	N	--	N	.04	400
OM005	N	1,000	200	N	100	N	--	N	.04	300
OM006	N	1,000	300	N	100	N	--	N	.06	700
OM007	N	1,000	200	N	100	N	--	N	.04	700
OM008	N	1,000	200	N	50	N	--	N	.06	800
OM009	N	1,000	500	N	70	<200	--	N	.06	800
OM010	N	2,000	300	N	70	N	--	N	.06	900
OM011	N	1,000	300	N	30	N	--	N	.04	500
OM012	N	1,000	200	N	30	<200	--	N	.06	500
OM013	N	1,000	200	N	300	N	--	N	.08	400
OM014	N	1,000	200	N	70	N	--	N	.06	400
OM015	N	700	200	N	100	200	--	N	.04	500
OM016	N	1,500	200	N	100	300	--	N	.06	500
OM017	N	1,000	150	N	100	200	--	N	.06	600
OM018	N	700	300	N	100	<200	--	N	.06	600
OM019	N	1,000	200	N	70	N	--	N	.06	700
OM020	N	1,500	300	N	50	200	--	N	.04	700
OM021	N	1,000	300	N	100	<200	--	N	.04	600
OM022	N	1,000	200	N	100	N	--	N	.06	500
OM023	N	2,000	200	N	70	N	--	N	.08	500
OM024	N	1,500	500	N	70	300	--	N	.06	400
OM025	N	1,500	200	N	50	N	--	N	.04	400
OM026	N	2,000	200	N	50	<200	--	N	.06	400
OM027	N	1,500	200	N	50	<200	--	N	.04	400
OM028	N	1,000	300	N	70	N	--	N	.04	300
OM029	N	1,000	200	N	70	N	--	N	.04	200
OM030	N	1,500	300	N	50	200	--	N	.04	300
OM031	N	1,500	200	N	50	200	--	N	.04	400
OM032	N	700	150	N	300	N	--	N	.04	400
OM033	N	1,000	300	N	150	N	--	<100	.04	400
OM034	N	1,500	150	N	30	N	--	N	.06	500
OM035	N	2,000	200	N	50	N	--	N	.04	400
OM036	N	1,500	300	N	70	<200	--	N	.04	500
OM037	N	1,500	200	N	70	N	--	N	.04	300
OM038	N	2,000	200	N	50	N	--	N	.04	300
OM039	N	2,000	200	N	50	N	--	N	.04	300
OM040	N	1,500	200	N	30	N	--	N	.06	300
OM041	N	2,000	200	N	50	N	--	N	.04	400
OM042	N	1,500	200	N	50	N	--	N	.04	400
OM043	N	700	200	N	50	N	--	N	.04	400
OM044	N	1,500	300	N	100	N	--	N	.04	400
OM045	N	1,500	300	N	70	N	--	N	.04	600

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM046	35 46 22	116 45 44	10	3.0	10.0	>1.0	5,000	N	N	N	200	1,500
OM047	35 47 21	116 45 14	10	5.0	10.0	>1.0	5,000	N	N	N	200	2,000
OM048	35 47 4	116 45 3	7	3.0	7.0	1.0	5,000	N	N	N	100	1,500
OM049	35 44 45	116 44 48	7	2.0	7.0	1.0	3,000	N	N	N	150	1,500
OM050	35 44 49	116 44 57	10	3.0	5.0	>1.0	>5,000	N	N	N	150	2,000
OM051	35 44 57	116 44 57	10	2.0	7.0	1.0	>5,000	N	N	N	100	1,500
OM052	35 43 45	116 46 27	20	3.0	7.0	>1.0	>5,000	N	N	N	100	1,500
OM053	35 42 29	116 48 21	10	5.0	10.0	>1.0	3,000	N	N	N	150	2,000
OM054	35 43 32	116 51 30	7	2.0	5.0	.7	5,000	1.0	N	N	100	2,000
OM055	35 44 10	116 52 2	7	3.0	7.0	>1.0	3,000	.5	N	N	100	2,000
OM056	35 44 34	116 52 10	7	3.0	10.0	.7	3,000	1.0	N	N	150	2,000
OM057	35 41 38	116 48 52	10	5.0	5.0	>1.0	3,000	N	N	N	70	1,500
OM058	35 43 28	116 52 48	7	2.0	5.0	.7	5,000	.7	N	N	150	2,000
OM059	35 39 53	116 47 10	10	5.0	10.0	>1.0	3,000	N	N	N	150	3,000
OM060	35 39 29	116 46 52	7	2.0	7.0	1.0	3,000	N	N	N	100	2,000
OM061	35 39 8	116 45 55	15	1.5	5.0	>1.0	3,000	N	N	N	150	5,000
OM062	35 37 52	116 46 16	7	2.0	5.0	1.0	5,000	N	N	N	100	2,000
OM063	35 38 42	116 48 25	10	2.0	5.0	>1.0	5,000	N	N	N	150	1,500
OM064	35 38 54	116 48 23	7	2.0	7.0	.7	2,000	N	N	N	100	3,000
OM065	35 43 21	116 52 22	7	2.0	3.0	1.0	3,000	1.5	N	N	150	1,500
OM066	35 42 55	116 52 26	10	3.0	7.0	>1.0	>5,000	.7	N	N	200	2,000
OM067	35 42 54	116 53 1	7	1.5	1.5	1.0	2,000	1.0	N	N	100	1,500
OM068	35 38 50	116 47 6	7	2.0	10.0	1.0	2,000	N	N	N	200	2,000
OM069	35 38 5	116 48 46	10	2.0	10.0	>1.0	3,000	N	N	N	150	2,000
OM070	35 38 0	116 48 42	10	2.0	7.0	>1.0	3,000	N	N	N	100	3,000
OM071	35 38 4	116 52 1	7	3.0	10.0	1.0	3,000	N	N	N	150	3,000
OM072	35 37 56	116 50 23	10	2.0	10.0	>1.0	3,000	N	N	N	100	3,000
OM073	35 38 1	116 51 20	20	2.0	7.0	>1.0	5,000	N	N	N	200	1,500
OM074	35 38 14	116 50 44	7	2.0	10.0	>1.0	2,000	N	N	N	150	3,000
OM075	35 38 17	116 50 46	10	2.0	7.0	>1.0	3,000	N	N	N	100	2,000
OM076	35 38 43	116 51 47	7	5.0	15.0	>1.0	5,000	N	N	N	100	5,000
OM077	35 38 46	116 51 54	10	2.0	10.0	>1.0	5,000	N	N	N	100	3,000
OM078	35 39 26	116 52 15	7	2.0	7.0	1.0	2,000	N	N	N	200	2,000
OM079	35 39 20	116 52 10	7	2.0	7.0	1.0	3,000	N	N	N	100	2,000
OM080	35 39 46	116 51 4	5	2.0	10.0	.7	3,000	N	N	N	100	2,000
OM081	35 38 7	116 53 20	7	3.0	10.0	>1.0	2,000	N	N	N	100	2,000
OM082	35 38 12	116 53 25	7	3.0	10.0	1.0	3,000	N	N	N	100	2,000
OM083	35 38 53	116 53 15	7	2.0	10.0	>1.0	5,000	N	N	N	70	3,000
OM084	35 38 48	116 53 10	7	5.0	15.0	>1.0	5,000	N	N	N	50	5,000
OM085	35 39 34	116 50 52	7	2.0	5.0	1.0	1,500	N	N	N	70	2,000
OM086	35 39 47	116 51 18	7	2.0	5.0	1.0	1,000	N	N	N	30	2,000
OM087	35 39 28	116 49 29	7	2.0	5.0	>1.0	1,500	N	N	N	100	3,000
OM088	35 38 51	116 49 20	5	2.0	5.0	1.0	1,500	N	N	N	70	2,000
OM089	35 38 27	116 49 33	7	3.0	7.0	1.0	1,500	N	N	N	100	1,500
OM090	35 38 33	116 49 35	5	2.0	7.0	.7	1,000	N	N	N	100	2,000

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Be-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
OM046	<5	N	20	100	30	150	N	20	100	N	--
OM047	<5	N	50	500	50	200	N	50	100	N	--
OM048	<5	N	20	100	20	150	N	50	100	N	--
OM049	N	N	20	200	30	100	N	50	100	N	--
OM050	<5	N	15	150	20	1,000	N	30	150	N	--
OM051	N	N	20	200	50	500	N	50	100	N	--
OM052	N	N	100	700	150	100	N	150	50	N	--
OM053	N	N	30	200	50	100	N	50	150	N	--
OM054	<5	N	15	100	30	200	5	20	500	N	--
OM055	N	N	30	200	50	200	<5	50	300	N	--
OM056	<5	N	15	100	30	200	7	30	200	N	--
OM057	N	N	30	200	30	70	N	50	70	N	--
OM058	N	N	15	150	50	100	<5	30	500	N	--
OM059	N	N	30	200	50	100	N	50	100	N	--
OM060	N	N	20	150	30	100	N	30	100	N	--
OM061	<5	N	30	200	50	100	N	50	150	N	--
OM062	N	N	20	150	70	100	N	30	300	N	--
OM063	N	N	20	200	20	100	N	30	70	N	--
OM064	N	N	20	200	20	200	N	30	100	N	--
OM065	<5	N	20	100	50	200	10	30	500	N	--
OM066	<5	N	20	150	50	200	7	30	1,000	N	--
OM067	<5	N	15	70	30	200	15	20	200	N	--
OM068	<5	N	20	200	50	150	N	30	100	N	--
OM069	N	N	50	150	50	200	N	30	70	N	--
OM070	<5	N	50	200	50	200	N	30	70	N	--
OM071	<5	N	50	100	30	100	N	30	100	N	--
OM072	N	N	30	150	30	100	N	30	100	N	--
OM073	N	N	50	500	100	200	N	30	100	N	--
OM074	<5	N	20	150	50	100	N	30	150	N	--
OM075	<5	N	30	150	50	150	N	30	100	N	--
OM076	N	N	50	300	30	150	N	50	150	N	--
OM077	<5	N	20	150	30	100	N	20	150	N	--
OM078	N	N	20	150	30	150	N	30	100	N	--
OM079	<5	N	20	100	30	150	N	20	70	N	--
OM080	<5	N	20	100	20	150	N	20	100	N	--
OM081	N	N	30	200	30	100	N	30	100	N	--
OM082	N	N	20	150	30	100	N	30	150	N	--
OM083	N	N	20	70	20	150	N	20	100	N	--
OM084	N	N	30	100	30	150	N	20	150	N	--
OM085	N	N	20	150	20	150	N	50	100	N	--
OM086	N	N	15	150	20	150	N	30	70	N	--
OM087	N	N	20	100	20	100	N	30	100	N	--
OM088	N	N	15	100	20	100	N	30	100	N	--
OM089	N	N	30	150	30	100	N	30	50	N	--
OM090	N	N	15	100	20	100	N	20	70	N	--

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Hg-ppm inst	F-ppm si
OM046	N	1,500	300	N	50	<200	--	N	.06	400
OM047	N	1,500	500	N	70	200	--	N	.02	400
OM048	N	1,000	200	N	50	N	--	N	.04	400
OM049	N	1,500	200	N	30	N	--	N	.02	300
OM050	N	1,000	300	N	500	N	--	300	.06	300
OM051	N	1,500	500	N	150	200	--	100	.02	300
OM052	N	1,000	2,000	N	50	700	--	N	.02	300
OM053	N	1,500	500	N	70	<200	--	N	.04	300
OM054	N	700	200	N	100	N	--	N	.04	500
OM055	N	1,000	300	N	70	N	--	N	.04	600
OM056	N	1,500	200	N	50	N	--	N	.06	800
OM057	N	1,500	1,000	N	30	N	--	N	.04	300
OM058	N	1,000	200	N	100	N	--	N	.06	500
OM059	N	2,000	500	N	70	N	--	N	.04	400
OM060	N	1,500	300	N	50	<200	--	N	.04	400
OM061	N	1,000	700	N	70	<200	--	N	.08	600
OM062	20	1,000	500	N	50	N	--	N	.04	200
OM063	N	1,000	500	N	70	<200	--	N	.02	300
OM064	N	1,500	300	N	70	N	--	N	.04	500
OM065	N	500	200	N	100	300	--	N	.06	600
OM066	N	700	200	N	100	300	--	N	.02	600
OM067	N	500	200	N	100	N	--	N	.02	500
OM068	N	2,000	300	N	200	N	--	N	.06	500
OM069	N	1,500	500	N	70	N	--	N	.04	500
OM070	N	1,500	500	N	100	<200	--	100	.04	500
OM071	N	2,000	200	N	50	N	--	N	.04	500
OM072	N	3,000	300	N	50	N	--	N	.06	400
OM073	N	700	1,500	N	100	N	--	N	.04	400
OM074	N	2,000	200	N	70	N	--	N	.26	500
OM075	N	1,500	300	N	70	<200	--	N	.18	500
OM076	N	3,000	300	N	70	N	--	N	.04	500
OM077	N	2,000	500	N	150	N	--	N	.08	400
OM078	N	1,500	300	N	70	N	--	N	.32	400
OM079	N	2,000	300	N	50	N	--	N	.06	400
OM080	N	1,500	200	N	70	N	--	N	.06	400
OM081	N	2,000	200	N	50	N	--	N	.04	300
OM082	N	2,000	200	N	50	N	--	N	.04	400
OM083	N	3,000	300	N	50	<200	--	N	.12	400
OM084	N	3,000	300	N	50	N	--	N	.06	500
OM085	N	1,000	200	N	30	N	--	N	.04	500
OM086	N	1,500	200	N	20	N	--	N	.04	400
OM087	N	700	300	N	50	N	--	N	.04	500
OM088	N	1,000	150	N	30	N	--	N	.04	400
OM089	N	1,500	300	N	30	<200	--	N	.08	400
OM090	N	1,500	200	N	50	N	--	N	.06	400

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM091	35 40 42	116 46 47	10	3.0	7.0	>1.0	2,000	N	N	N	200	1,500
OM092	35 41 20	116 46 42	10	5.0	5.0	>1.0	2,000	N	N	N	200	1,500
OM093	35 42 34	116 45 38	5	3.0	10.0	1.0	2,000	N	N	N	100	1,500
OM094	35 42 11	116 44 6	7	3.0	7.0	1.0	2,000	N	N	N	100	2,000
OM095	35 41 45	116 44 14	7	3.0	7.0	1.0	2,000	N	N	N	100	2,000
OM096	35 40 54	116 43 1	10	2.0	10.0	>1.0	2,000	N	N	N	100	2,000
OM097	35 40 18	116 43 44	3	1.5	10.0	.5	1,500	N	N	N	70	2,000
OM098	35 39 41	116 44 41	5	2.0	10.0	.7	2,000	N	N	N	50	3,000
OM099	35 39 23	116 45 0	15	2.0	7.0	>1.0	>5,000	N	N	N	100	5,000
OM100	35 39 49	116 43 25	10	2.0	10.0	1.0	3,000	N	N	N	70	2,000
OM101	35 39 44	116 42 55	7	1.5	7.0	.7	2,000	N	N	N	100	2,000
OM102	35 39 25	116 42 57	10	2.0	5.0	>1.0	2,000	N	N	N	100	2,000
OM103	35 38 17	116 42 24	5	2.0	5.0	.7	2,000	N	N	N	100	2,000
OM104	35 38 2	116 43 44	7	1.5	3.0	.7	2,000	N	N	N	100	1,500
OM105	35 38 47	116 39 52	5	2.0	15.0	.5	>5,000	N	N	N	70	2,000
OM106	35 38 39	116 39 55	10	1.5	5.0	1.0	2,000	N	N	N	100	1,000
OM107	35 39 48	116 39 52	7	5.0	15.0	.7	3,000	N	N	N	100	5,000
OM108	35 39 24	116 39 17	10	5.0	10.0	1.0	3,000	N	N	N	100	1,500
OM109	35 43 32	116 36 28	3	1.0	3.0	.5	1,500	N	N	N	70	1,500
OM110	35 43 24	116 36 23	5	1.5	3.0	.5	3,000	N	N	N	100	1,000
OM111	35 44 39	116 36 23	7	1.5	3.0	.7	3,000	N	N	N	70	1,500
OM112	35 45 41	116 36 20	3	1.0	2.0	.5	2,000	N	N	N	70	1,000
OM113	35 45 57	116 37 28	10	1.0	3.0	>1.0	>5,000	N	N	N	50	1,000
OM114	35 46 35	116 36 37	5	1.0	2.0	.7	3,000	N	N	N	70	1,000
OM115	35 47 19	116 36 40	5	1.5	3.0	.7	2,000	N	N	N	70	1,000
OM116	35 46 47	116 37 58	5	2.0	3.0	1.0	3,000	N	N	N	70	1,500
OM117	35 47 22	116 39 44	7	2.0	5.0	1.0	2,000	N	N	N	100	1,500
OM118	35 47 15	116 39 38	7	2.0	5.0	1.0	3,000	N	N	N	100	1,500
OM119	35 46 59	116 42 35	5	5.0	7.0	.7	2,000	N	N	N	100	2,000
OM120	35 46 32	116 43 0	7	1.5	2.0	1.0	5,000	N	N	N	100	1,000
OM121	35 45 31	116 39 36	7	2.0	5.0	1.0	3,000	N	N	N	70	2,000
OM122	35 44 35	116 38 23	5	1.5	5.0	.7	3,000	N	N	N	100	1,500
OM123	35 44 24	116 39 57	7	3.0	5.0	>1.0	5,000	N	N	N	50	1,500
OM124	35 43 57	116 39 18	5	2.0	5.0	1.0	3,000	N	N	N	70	1,500
OM125	35 43 29	116 38 25	5	1.5	5.0	.7	2,000	N	N	N	100	1,500
OM126	35 42 36	116 39 5	7	3.0	5.0	1.0	3,000	N	N	N	100	1,500
OM127	35 42 4	116 39 1	7	1.5	5.0	>1.0	3,000	N	N	N	50	1,500
OM128	35 42 47	116 37 16	10	1.5	3.0	1.0	>5,000	N	N	N	70	1,000
OM129	35 42 41	116 37 13	7	2.0	5.0	1.0	2,000	N	N	N	70	1,500
OM130	35 41 48	116 40 8	5	2.0	5.0	1.0	2,000	N	N	N	30	1,000
OM131	35 41 20	116 40 43	7	3.0	7.0	>1.0	3,000	N	N	N	50	1,500
OM132	35 40 50	116 40 52	7	5.0	10.0	1.0	3,000	N	N	N	50	1,500
OM133	35 40 51	116 40 59	5	5.0	10.0	.7	2,000	N	N	N	100	2,000
OM134	35 41 42	116 40 53	5	2.0	7.0	1.0	2,000	N	N	N	70	1,500
OM135	35 41 25	116 41 32	7	3.0	7.0	1.0	3,000	N	N	N	50	2,000

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Be-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
OM091	N	N	50	200	30	70	N	50	100	N	--
OM092	N	N	70	200	50	100	N	70	50	N	--
OM093	N	N	15	200	20	150	N	20	100	N	--
OM094	N	N	20	150	30	100	N	50	150	N	--
OM095	N	N	30	150	30	100	N	50	100	N	--
OM096	N	N	20	150	20	100	N	50	150	N	--
OM097	N	N	10	70	15	100	N	20	150	N	--
OM098	N	N	15	70	20	100	N	30	100	N	--
OM099	N	N	70	200	50	150	N	70	200	N	--
OM100	N	N	30	150	30	200	N	50	100	N	--
OM101	N	N	30	100	30	100	N	30	70	N	--
OM102	N	N	50	150	50	100	N	50	70	N	--
OM103	N	N	20	100	30	100	N	20	100	N	--
OM104	N	N	15	100	30	100	5	15	100	N	--
OM105	<5	N	15	70	20	100	10	20	150	N	--
OM106	N	N	20	100	30	300	N	20	100	N	--
OM107	10	N	15	50	30	100	N	15	200	N	--
OM108	<5	N	20	150	30	150	N	30	100	N	--
OM109	N	N	15	50	20	70	N	15	70	N	--
OM110	N	N	15	70	20	500	N	20	100	N	--
OM111	N	N	15	100	20	200	N	20	100	N	--
OM112	<5	N	10	50	10	100	N	15	70	N	--
OM113	N	N	15	70	20	300	N	20	100	N	--
OM114	<5	N	10	50	15	150	N	10	50	N	--
OM115	7	N	10	100	30	150	N	15	70	N	--
OM116	5	N	15	150	20	100	N	30	50	N	--
OM117	<5	N	15	100	20	200	N	20	100	N	--
OM118	<5	N	20	200	20	200	N	30	100	N	--
OM119	<5	N	20	200	30	100	N	50	70	N	--
OM120	<5	N	15	70	10	150	N	10	50	N	--
OM121	5	N	20	100	20	200	N	30	70	N	--
OM122	<5	N	15	70	10	200	N	20	70	N	--
OM123	N	N	30	300	20	300	N	50	30	N	--
OM124	<5	N	15	150	15	200	N	30	70	N	--
OM125	N	N	15	70	15	500	N	20	70	N	--
OM126	N	N	15	100	20	200	N	20	100	N	--
OM127	<5	N	15	50	10	150	N	15	70	N	--
OM128	N	N	15	70	20	1,000	N	20	100	N	--
OM129	<5	N	15	70	20	200	N	20	100	N	--
OM130	N	N	10	50	15	200	7	15	70	N	--
OM131	N	N	15	100	30	150	N	30	150	N	--
OM132	<5	N	20	150	30	100	<5	30	100	N	--
OM133	<5	N	20	150	30	150	N	50	100	N	--
OM134	<5	N	20	150	30	150	N	30	100	N	--
OM135	<5	N	30	150	30	150	<5	30	150	N	--

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Hg-ppm inst	F-ppm si
OM091	N	2,000	500	N	30	N	--	N	.04	400
OM092	N	1,000	500	N	30	300	--	N	.02	400
OM093	N	3,000	200	N	70	N	--	N	.04	400
OM094	N	1,500	200	N	100	N	--	N	.06	400
OM095	N	1,000	300	N	70	N	--	N	.04	400
OM096	N	1,500	300	N	100	N	--	N	.04	400
OM097	N	5,000	100	N	20	N	--	N	.04	300
OM098	N	3,000	150	N	30	N	--	N	.04	300
OM099	N	2,000	700	N	150	200	--	N	.16	600
OM100	N	1,000	200	N	50	N	--	N	.06	500
OM101	N	1,500	200	N	30	N	--	N	.04	500
OM102	N	1,500	300	N	50	N	--	N	.04	500
OM103	N	2,000	200	N	50	N	--	N	.04	400
OM104	N	700	200	N	50	N	--	<100	.02	300
OM105	N	1,000	100	N	100	<200	--	N	.08	600
OM106	N	500	300	N	150	N	--	N	N	700
OM107	50	700	100	N	100	200	--	N	.04	2,000
OM108	15	1,000	200	N	100	N	--	N	.02	700
OM109	N	1,000	150	N	30	N	--	N	<.02	300
OM110	N	500	100	N	100	N	--	100	.02	300
OM111	N	1,500	150	N	70	N	--	N	<.02	300
OM112	N	700	100	N	30	N	--	N	<.02	300
OM113	N	500	200	N	150	N	--	N	N	300
OM114	N	300	150	N	50	N	--	N	<.02	400
OM115	N	700	100	N	70	N	--	N	N	300
OM116	N	700	150	N	70	N	--	<100	.02	400
OM117	N	1,000	150	N	50	N	--	N	.02	400
OM118	N	1,000	150	N	50	N	--	N	.02	300
OM119	N	1,500	200	N	50	N	--	N	.02	500
OM120	N	500	200	N	70	N	--	N	.02	300
OM121	N	1,000	200	N	70	N	--	N	N	300
OM122	N	1,000	150	N	70	N	--	N	<.02	300
OM123	N	1,000	300	N	100	N	--	100	N	200
OM124	N	1,000	200	N	100	N	--	<100	.02	300
OM125	N	700	200	N	100	N	--	<100	.02	300
OM126	N	1,000	200	N	200	N	--	N	.02	300
OM127	N	500	150	N	150	N	--	<100	<.02	300
OM128	N	500	150	N	200	N	--	200	N	300
OM129	N	700	200	N	100	N	--	N	.02	600
OM130	N	500	150	N	100	N	--	N	.02	400
OM131	N	1,000	200	N	100	N	--	N	<.02	400
OM132	N	700	200	N	150	<200	--	N	.04	900
OM133	N	1,500	150	N	150	N	--	N	.04	900
OM134	N	1,000	200	N	100	N	--	N	.04	500
OM135	10	1,500	200	N	100	N	--	N	.04	800

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM136	35 43 35	116 43 23	5	2.0	5.0	.7	3,000	N	N	N	70	1,500
OM137	35 44 7	116 43 31	5	3.0	7.0	1.0	3,000	N	N	N	70	2,000
OM138	35 43 21	116 44 44	10	3.0	5.0	>1.0	2,000	N	N	N	100	2,000
OM139	35 44 38	116 43 45	15	3.0	5.0	>1.0	>5,000	N	N	N	100	1,500
OM140	35 45 17	116 43 2	10	1.5	3.0	1.0	>5,000	N	N	N	70	1,500
OM141	35 45 42	116 44 13	5	2.0	5.0	1.0	2,000	N	N	N	100	1,500
OM142	35 42 20	116 57 57	7	2.0	7.0	1.0	2,000	N	N	N	70	2,000
OM143	35 43 2	116 57 55	7	2.0	5.0	1.0	1,500	N	N	N	150	2,000
OM144	35 43 29	116 56 23	7	1.0	2.0	1.0	1,000	N	N	N	200	2,000
OM145	35 43 47	116 57 1	10	1.5	3.0	1.0	2,000	N	N	N	150	2,000
OM146	35 45 35	116 56 29	7	2.0	5.0	1.0	1,500	N	N	N	100	2,000
OM147	35 46 16	116 56 9	7	2.0	5.0	1.0	1,500	N	N	N	100	2,000
OM148	35 40 2	116 38 13	10	2.0	7.0	>1.0	3,000	N	N	N	70	1,000
OM149	35 40 26	116 37 55	7	1.5	5.0	1.0	2,000	N	N	N	70	1,000
OM150	35 38 55	116 37 22	10	5.0	15.0	>1.0	3,000	N	N	N	100	1,500
OM151	35 38 59	116 37 8	10	3.0	10.0	>1.0	3,000	N	N	N	100	1,500
OM152	35 39 53	116 35 54	7	2.0	5.0	1.0	2,000	N	N	N	100	1,500
OM153	35 40 54	116 35 52	10	1.5	3.0	>1.0	3,000	N	N	N	70	1,000
OM154	35 42 1	116 35 28	5	2.0	3.0	.7	3,000	N	N	N	150	1,500
OM155	35 41 33	116 37 22	7	2.0	5.0	1.0	2,000	N	N	N	100	1,500
83JA456S	35 38 54	116 38 9	5	2.0	2.0	1.0	500	N	N	N	30	1,000
83JA457S	35 38 54	116 37 16	20	1.5	3.0	>1.0	1,000	N	N	N	10	300
83JA458S	35 38 58	116 37 7	10	1.5	3.0	>1.0	700	N	N	N	15	300

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Be-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
OM136	N	N	15	100	20	100	N	30	150	N	--
OM137	N	N	30	200	20	200	N	50	100	N	--
OM138	N	N	70	300	50	100	N	100	50	N	--
OM139	N	N	70	500	50	500	N	70	70	N	--
OM140	<5	N	15	100	15	200	N	20	100	N	--
OM141	<5	N	20	100	20	100	N	30	100	N	--
OM142	N	N	20	150	30	100	N	30	100	N	--
OM143	N	N	20	100	50	100	5	30	50	N	--
OM144	N	N	30	100	50	150	<5	50	50	N	--
OM145	N	N	30	100	50	150	7	30	70	N	--
OM146	N	N	20	100	30	100	N	30	100	N	--
OM147	N	N	20	100	30	100	N	30	70	N	--
OM148	N	N	20	100	30	300	N	20	70	N	--
OM149	N	N	20	100	20	200	N	20	50	N	--
OM150	<5	N	30	150	30	100	<5	20	1,000	N	--
OM151	N	N	30	150	50	100	N	20	1,500	N	--
OM152	<5	N	15	70	30	150	N	20	100	N	--
OM153	N	N	15	70	20	200	N	15	100	N	--
OM154	<5	N	15	70	20	150	5	20	100	N	--
OM155	<5	N	20	100	30	300	<5	20	100	N	--
83JA456S	<1	N	20	50	20	70	N	30	150	N	--
83JA457S	<1	N	50	70	50	50	N	20	200	N	--
83JA458S	<1	N	30	50	15	70	N	20	150	N	--

TABLE 3. ANALYSES OF STREAM-SEDIMENT SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Hg-ppm inst	F-ppm si
OM136	N	1,000	100	N	50	N	--	N	.02	300
OM137	N	2,000	200	N	70	N	--	N	.02	300
OM138	N	1,500	500	N	50	<200	--	N	<.02	400
OM139	N	1,000	500	N	150	<200	--	N	.02	300
OM140	N	1,000	200	N	100	N	--	N	.02	300
OM141	N	1,000	200	N	50	N	--	N	.04	200
OM142	N	2,000	200	N	50	N	--	N	.02	300
OM143	N	1,500	200	N	50	N	--	N	.06	500
OM144	N	1,500	200	N	30	N	--	N	.10	1,100
OM145	N	1,500	200	N	50	N	--	N	.12	700
OM146	N	1,500	150	N	50	N	--	N	.04	400
OM147	N	1,500	200	N	30	N	--	N	.04	300
OM148	N	500	200	N	150	N	--	N	.02	400
OM149	N	500	150	N	150	N	--	N	.02	400
OM150	50	500	300	N	100	300	--	N	.12	600
OM151	10	700	300	N	150	200	--	N	.02	500
OM152	N	700	200	N	100	<200	--	N	.02	500
OM153	N	700	200	N	200	N	--	<100	N	600
OM154	N	700	150	N	100	N	--	N	.04	500
OM155	N	700	200	N	150	N	--	N	.04	600
83JA456S	N	300	100	N	30	N	150	N	.06	675
83JA457S	N	150	300	N	70	N	700	N	.04	345
83JA458S	N	200	150	N	100	N	1,000	N	.04	625

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.

[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
OM001	35 47 10	116 54 17	.7	.20	5.0	>2.0	300	N	N	N	50	1,000
OM002	35 47 6	116 54 44	1.5	.70	10.0	>2.0	500	N	N	N	50	300
OM003	35 47 30	116 53 26	1.0	.70	15.0	>2.0	500	N	N	N	50	200
OM004	35 48 0	116 52 26	1.5	1.00	15.0	>2.0	500	N	N	N	70	3,000
OM005	35 46 43	116 52 51	.7	.30	15.0	2.0	300	N	N	N	20	10,000
OM006	35 46 7	116 53 32	.5	.15	15.0	>2.0	300	N	N	N	N	10,000
OM007	35 45 44	116 53 42	.7	.30	15.0	>2.0	500	N	N	N	<20	10,000
OM008	35 44 12	116 54 23	.7	.30	15.0	>2.0	700	N	N	N	200	5,000
OM009	35 44 50	116 54 8	.7	.30	20.0	>2.0	300	N	N	N	100	1,500
OM010	35 43 46	116 54 30	.7	.30	3.0	>2.0	300	N	N	N	100	>10,000
OM011	35 43 14	116 54 55	1.0	.50	20.0	>2.0	500	N	N	N	N	>10,000
OM012	35 42 40	116 54 48	1.0	.70	15.0	>2.0	500	N	N	N	70	>10,000
OM013	35 41 25	116 53 10	.7	.15	20.0	2.0	200	N	N	N	20	3,000
OM014	35 41 52	116 52 35	1.0	.30	15.0	>2.0	500	N	N	N	20	500
OM015	35 42 20	116 52 30	.7	.20	10.0	>2.0	300	N	N	N	<20	1,000
OM016	35 42 52	116 51 56	.5	.20	10.0	>2.0	500	N	N	N	<20	200
OM017	35 43 5	116 51 56	.5	.70	7.0	>2.0	500	7	N	N	<20	500
OM018	35 44 15	116 51 34	1.0	2.00	10.0	>2.0	1,000	N	N	N	50	500
OM019	35 44 19	116 51 36	1.5	10.00	20.0	2.0	1,500	N	N	N	150	50
OM020	35 45 0	116 51 9	1.0	.70	20.0	>2.0	700	N	N	N	<20	5,000
OM021	35 45 52	116 51 34	.7	.30	10.0	>2.0	500	N	N	N	20	700
OM022	35 46 28	116 51 36	1.0	.70	15.0	>2.0	700	N	N	N	<20	1,500
OM023	35 47 37	116 50 25	1.5	2.00	15.0	>2.0	700	N	N	N	<20	300
OM024	35 47 40	116 48 18	.7	.70	10.0	2.0	300	N	N	N	20	700
OM025	35 48 18	116 48 0	1.0	2.00	20.0	>2.0	700	N	N	N	30	1,500
OM026	35 46 43	116 48 4	1.0	1.00	10.0	>2.0	500	N	N	N	30	700
OM027	35 45 32	116 47 58	1.0	1.50	10.0	>2.0	300	N	N	N	50	500
OM028	35 44 32	116 48 30	1.0	3.00	15.0	>2.0	700	N	N	N	70	200
OM029	35 43 21	116 48 45	.7	.70	7.0	>2.0	700	N	N	N	20	200
OM030	35 44 0	116 47 22	1.0	2.00	10.0	>2.0	500	N	N	N	50	1,000
OM031	35 44 25	116 46 30	1.0	1.50	15.0	>2.0	700	N	N	N	30	300
OM032	35 44 47	116 47 10	.7	.70	10.0	>2.0	700	N	N	N	20	300
OM033	35 45 51	116 46 30	1.0	.70	5.0	2.0	700	N	N	N	20	1,000
OM034	35 45 26	116 45 55	1.0	1.50	10.0	>2.0	700	N	N	N	50	200
OM035	35 45 30	116 46 0	.7	1.00	10.0	>2.0	500	N	N	N	50	500
OM036	35 41 30	116 55 0	.7	.30	30.0	>2.0	700	N	N	N	<20	>10,000
OM037	35 41 11	116 54 7	.7	.30	10.0	>2.0	300	N	N	N	20	3,000
OM038	35 40 43	116 53 30	.7	.70	10.0	>2.0	500	N	N	N	N	2,000
OM039	35 40 7	116 52 40	1.0	.70	15.0	>2.0	700	N	N	N	<20	200
OM040	35 40 25	116 53 0	.7	.50	7.0	>2.0	300	N	N	N	N	500
OM041	35 40 0	116 54 14	1.0	1.00	10.0	>2.0	700	N	N	N	<20	300
OM042	35 38 38	116 55 22	.7	.30	7.0	>2.0	700	N	N	N	20	10,000
OM043	35 38 27	116 55 28	.7	.30	10.0	>2.0	300	N	N	N	20	>10,000
OM044	35 38 23	116 55 29	.7	.30	10.0	>2.0	500	N	N	N	30	>10,000
OM045	35 46 38	116 46 22	1.5	3.00	20.0	>2.0	1,000	N	N	N	20	1,000

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM001	3	N	N	N	50	30	100	N	70	<10	50
OM002	7	N	N	10	100	20	300	N	50	30	150
OM003	2	N	N	<10	100	30	700	N	50	20	150
OM004	5	N	N	10	150	30	700	N	70	20	70
OM005	2	N	N	<10	20	10	500	N	50	10	50
OM006	<2	N	N	N	<20	15	700	N	50	10	50
OM007	N	N	N	N	<20	20	1,000	<10	70	10	70
OM008	N	N	N	10	20	30	1,000	15	70	15	100
OM009	N	300	N	<10	20	30	1,000	N	50	15	70
OM010	N	N	N	<10	50	30	200	10	100	10	100
OM011	N	N	N	<10	70	30	700	10	70	10	50
OM012	<2	N	N	10	50	30	700	15	70	<10	50
OM013	2	150	N	N	<20	<10	200	N	70	10	70
OM014	N	N	N	N	20	30	700	<10	70	<10	150
OM015	N	N	N	<10	20	30	1,000	10	100	<10	100
OM016	N	N	N	<10	30	30	700	20	70	<10	1,500
OM017	N	N	N	<10	50	70	700	30	70	<10	3,000
OM018	3	N	N	10	70	30	700	15	100	<10	300
OM019	5	N	N	<10	30	<10	200	N	50	10	70
OM020	N	N	N	10	50	30	1,000	N	50	10	70
OM021	N	N	N	N	30	15	700	N	50	<10	150
OM022	N	N	N	N	150	30	700	<10	50	10	50
OM023	N	N	N	10	500	15	700	<10	70	30	50
OM024	N	N	N	<10	150	10	200	N	<50	10	50
OM025	N	N	N	15	200	20	700	<10	50	30	70
OM026	N	N	N	10	100	20	500	N	50	<10	70
OM027	N	N	N	10	70	20	500	<10	70	<10	70
OM028	5	N	N	10	50	30	700	<10	50	<10	70
OM029	N	N	N	10	50	30	700	<10	100	<10	100
OM030	5	N	N	10	70	20	700	<10	50	<10	50
OM031	N	N	N	10	150	30	700	<10	50	20	50
OM032	<2	N	N	N	50	70	700	N	<50	10	50
OM033	N	N	N	N	100	30	700	N	50	20	70
OM034	10	N	N	10	100	70	700	<10	50	15	50
OM035	N	N	N	10	50	10	500	N	70	10	50
OM036	N	N	N	<10	30	20	1,000	<10	50	<10	70
OM037	N	N	N	N	50	20	700	N	50	<10	50
OM038	N	N	N	<10	70	10	500	N	50	<10	50
OM039	N	N	N	<10	50	20	700	<10	70	<10	50
OM040	N	N	N	<10	50	15	200	N	50	10	50
OM041	N	N	N	<10	70	15	300	N	70	10	50
OM042	N	N	N	<10	<20	20	300	10	70	<10	50
OM043	100	N	N	N	<20	20	500	N	50	<10	100
OM044	100	N	N	N	30	20	700	N	50	<10	100
OM045	N	N	N	10	500	100	700	N	70	50	50

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM001	N	<10	N	700	100	N	100	N	1,500	N
OM002	N	<10	30	1,000	150	N	300	N	>2,000	N
OM003	N	<10	30	500	200	N	700	N	>2,000	N
OM004	N	15	50	700	200	N	700	N	>2,000	<200
OM005	N	<10	N	1,000	100	N	300	N	>2,000	N
OM006	N	<10	20	500	150	N	500	N	>2,000	N
OM007	N	<10	50	200	200	N	700	N	>2,000	N
OM008	N	<10	30	700	200	N	500	N	>2,000	N
OM009	N	<10	<20	700	150	N	300	N	>2,000	N
OM010	N	<10	50	1,000	200	N	300	N	>2,000	N
OM011	N	<10	30	1,000	200	N	300	N	>2,000	N
OM012	N	<10	<20	1,000	200	N	300	N	>2,000	N
OM013	N	70	<20	N	100	N	3,000	N	>2,000	1,500
OM014	N	70	70	N	200	N	1,500	N	>2,000	<200
OM015	N	20	100	N	300	N	1,000	N	>2,000	N
OM016	N	50	100	N	300	N	1,500	N	>2,000	N
OM017	N	50	100	N	200	N	1,500	N	>2,000	N
OM018	N	20	70	N	300	N	500	N	>2,000	N
OM019	N	15	30	N	100	N	150	N	>2,000	N
OM020	N	20	<20	1,000	150	N	500	N	>2,000	N
OM021	N	20	20	N	150	N	1,000	N	>2,000	300
OM022	N	20	50	N	200	N	1,500	N	>2,000	200
OM023	N	30	70	N	150	N	1,000	N	>2,000	1,000
OM024	N	20	<20	1,000	100	N	500	N	>2,000	200
OM025	N	20	30	1,000	200	N	500	N	>2,000	N
OM026	N	15	70	700	200	N	300	N	>2,000	200
OM027	N	15	20	700	200	N	300	N	>2,000	<200
OM028	N	30	50	N	200	N	500	N	>2,000	<200
OM029	N	30	70	N	200	N	700	N	>2,000	<200
OM030	N	20	50	300	200	N	500	N	>2,000	N
OM031	N	20	70	N	200	N	700	N	>2,000	700
OM032	N	50	<20	N	150	N	1,500	N	>2,000	300
OM033	N	50	<20	N	150	N	2,000	N	>2,000	1,500
OM034	N	20	50	N	200	N	500	N	>2,000	N
OM035	N	<10	30	700	200	N	300	N	>2,000	<200
OM036	N	15	30	1,500	300	N	700	N	>2,000	N
OM037	N	20	50	<200	200	N	700	N	>2,000	N
OM038	N	10	30	700	200	N	500	N	>2,000	N
OM039	N	10	50	300	200	N	700	N	>2,000	<200
OM040	N	<10	20	1,000	150	N	200	N	>2,000	N
OM041	N	<10	30	700	200	N	500	N	>2,000	N
OM042	N	<10	30	700	200	N	300	N	>2,000	N
OM043	N	30	200	N	200	N	1,000	N	>2,000	N
OM044	N	50	200	N	200	N	1,500	N	>2,000	N
OM045	N	20	50	1,000	200	N	500	N	>2,000	500

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM046	35 46 22	116 45 44	1.5	1.00	10.0	>2.0	700	N	N	N	70	500
OM047	35 47 21	116 45 14	1.5	1.50	10.0	>2.0	500	N	N	N	30	700
OM048	35 47 4	116 45 3	.7	.70	5.0	2.0	500	N	N	N	20	3,000
OM049	35 44 45	116 44 48	1.0	1.00	10.0	>2.0	500	N	N	N	<20	1,000
OM050	35 44 49	116 44 57	1.0	1.50	7.0	2.0	700	N	N	N	50	1,500
OM051	35 44 57	116 44 57	1.0	1.00	7.0	1.0	1,000	N	N	N	20	700
OM052	35 43 45	116 46 27	7.0	5.00	10.0	2.0	1,500	N	N	N	20	700
OM053	35 42 29	116 48 21	2.0	3.00	10.0	>2.0	1,500	N	N	N	20	300
OM054	35 43 32	116 51 30	1.0	.30	7.0	>2.0	500	N	N	N	20	200
OM055	35 44 10	116 52 2	1.5	1.50	7.0	>2.0	1,000	N	N	N	150	300
OM056	35 44 34	116 52 10	1.0	3.00	20.0	>2.0	700	N	N	N	100	700
OM057	35 41 38	116 48 52	2.0	3.00	10.0	>2.0	1,500	N	N	N	20	500
OM058	35 43 28	116 52 48	1.5	.50	7.0	>2.0	1,500	N	N	N	50	500
OM059	35 39 53	116 47 10	1.5	.70	7.0	>2.0	500	N	N	N	20	700
OM060	35 39 29	116 46 52	1.5	3.00	15.0	>2.0	1,500	N	N	N	50	2,000
OM061	35 39 8	116 45 55	2.0	1.50	7.0	2.0	1,500	N	N	N	30	>10,000
OM062	35 37 52	116 46 16	1.5	1.00	7.0	>2.0	1,500	N	N	N	20	1,500
OM063	35 38 42	116 48 25	1.5	1.50	7.0	>2.0	1,000	N	N	N	30	1,500
OM064	35 38 54	116 48 23	1.5	3.00	10.0	>2.0	1,500	N	N	N	N	7,000
OM065	35 43 21	116 52 22	2.0	.50	7.0	>2.0	1,500	20	N	N	20	3,000
OM066	35 42 55	116 52 26	1.5	.50	7.0	>2.0	1,500	N	N	N	N	1,000
OM067	35 42 54	116 53 1	1.5	.30	7.0	>2.0	1,500	N	N	N	20	3,000
OM068	35 38 50	116 47 6	1.5	1.00	10.0	>2.0	1,500	N	N	N	50	700
OM069	35 38 5	116 48 46	1.5	.70	10.0	>2.0	1,500	N	N	N	30	>10,000
OM070	35 38 0	116 48 42	1.5	.70	10.0	>2.0	1,000	N	N	N	30	>10,000
OM071	35 38 4	116 52 1	1.5	3.00	10.0	2.0	1,500	<1	N	N	50	>10,000
OM072	35 37 56	116 50 23	3.0	3.00	10.0	>2.0	1,500	N	N	N	50	1,000
OM073	35 38 1	116 51 20	1.0	.30	7.0	>2.0	300	N	N	N	70	300
OM074	35 38 14	116 50 44	2.0	1.00	5.0	>2.0	500	N	N	N	20	>10,000
OM075	35 38 17	116 50 46	1.5	.70	7.0	>2.0	500	N	N	N	20	>10,000
OM076	35 38 43	116 51 47	1.5	.70	7.0	2.0	700	N	N	N	50	>10,000
OM077	35 38 46	116 51 54	1.5	.70	7.0	>2.0	1,000	N	N	N	70	>10,000
OM078	35 39 26	116 52 15	1.5	1.00	10.0	>2.0	700	N	N	N	N	7,000
OM079	35 39 20	116 52 10	1.5	1.00	10.0	>2.0	1,000	N	N	N	N	3,000
OM080	35 39 46	116 51 4	1.5	.50	7.0	>2.0	700	N	N	N	<20	5,000
OM081	35 38 7	116 53 20	1.5	1.00	10.0	>2.0	500	N	N	N	20	500
OM082	35 38 12	116 53 25	1.5	.70	10.0	>2.0	500	N	N	N	30	500
OM083	35 38 53	116 53 15	2.0	2.00	10.0	>2.0	1,500	N	N	N	30	>10,000
OM084	35 38 48	116 53 10	1.5	1.50	15.0	>2.0	1,500	N	N	N	20	10,000
OM085	35 39 34	116 50 52	7.0	3.00	15.0	>2.0	1,500	N	N	N	20	10,000
OM086	35 39 47	116 51 18	3.0	2.00	15.0	>2.0	1,000	N	N	N	30	10,000
OM087	35 39 28	116 49 29	2.0	.30	3.0	2.0	1,500	N	N	N	20	>10,000
OM088	35 38 51	116 49 20	2.0	1.50	10.0	>2.0	1,500	N	N	N	30	10,000
OM089	35 38 27	116 49 33	1.0	1.50	7.0	>2.0	700	N	N	N	30	1,500
OM090	35 38 33	116 49 35	2.0	1.50	7.0	>2.0	1,000	N	N	N	50	3,000

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM046	<2	N	N	10	70	30	700	<10	70	10	50
OM047	N	N	N	<10	200	15	500	N	50	15	50
OM048	5	N	N	N	200	<10	500	N	<50	15	50
OM049	N	N	N	10	150	10	500	N	70	15	70
OM050	3	N	N	10	200	20	1,000	N	<50	30	1,000
OM051	3	N	N	15	150	20	700	N	50	20	70
OM052	N	N	N	20	700	150	700	N	70	100	50
OM053	<2	N	N	15	300	20	700	10	150	30	70
OM054	N	N	N	10	30	30	700	10	100	<10	150
OM055	<2	N	N	15	70	30	700	50	100	<10	300
OM056	2	N	N	10	30	20	1,000	N	70	<10	200
OM057	<2	N	N	15	200	200	700	15	100	30	70
OM058	N	N	N	15	70	70	1,000	10	100	<10	300
OM059	3	N	N	<10	50	20	500	<10	70	<10	50
OM060	2	N	N	10	150	30	700	5	150	20	70
OM061	2	N	N	10	100	20	700	N	50	30	50
OM062	7	N	N	10	100	500	1,500	15	200	<10	7,000
OM063	<2	N	N	<10	100	20	700	<10	100	<10	100
OM064	5	N	N	15	200	20	700	<10	100	30	70
OM065	N	N	N	10	70	50	700	20	150	<10	1,500
OM066	N	N	N	10	70	70	700	20	200	<10	1,500
OM067	<2	N	N	10	30	20	700	30	150	<10	500
OM068	7	N	N	15	100	20	700	15	100	15	70
OM069	<2	N	N	15	70	20	1,000	10	70	30	100
OM070	N	N	N	20	100	30	1,500	15	70	30	150
OM071	<2	N	N	15	150	20	150	N	50	70	15,000
OM072	N	N	N	20	200	30	500	<15	70	100	70
OM073	N	N	N	15	70	30	500	15	50	10	70
OM074	10	N	N	10	70	20	500	10	70	10	100
OM075	20	N	N	10	100	10	200	10	70	15	100
OM076	15	N	N	10	70	15	300	10	50	20	70
OM077	20	N	N	10	100	20	700	10	70	20	150
OM078	20	N	N	15	150	20	700	10	70	30	50
OM079	5	N	N	10	150	20	700	10	70	20	70
OM080	15	N	N	10	50	20	300	10	70	15	150
OM081	N	N	N	10	100	20	500	10	70	15	70
OM082	N	N	N	10	70	20	500	10	70	15	70
OM083	10	N	N	15	200	20	700	15	70	50	70
OM084	<2	N	N	15	150	20	700	15	70	30	70
OM085	N	N	N	15	700	10	1,000	<10	70	150	50
OM086	5	N	N	15	300	20	700	10	70	100	70
OM087	2	N	N	15	70	30	200	N	70	30	70
OM088	15	N	N	15	200	50	700	20	70	30	150
OM089	<2	N	N	15	150	20	700	15	70	30	50
OM090	10	N	N	15	150	20	500	15	70	20	300

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM046	N	20	50	700	200	N	700	N	>2,000	N
OM047	N	15	30	700	150	N	500	N	>2,000	N
OM048	N	15	<20	500	100	N	500	N	>2,000	200
OM049	N	10	<20	1,000	150	N	300	N	>2,000	N
OM050	N	50	20	N	700	N	1,500	N	>2,000	5,000
OM051	N	10	N	700	300	N	700	N	>2,000	>5,000
OM052	N	50	50	700	300	N	300	N	>2,000	N
OM053	N	30	70	300	300	N	700	N	>2,000	N
OM054	N	30	70	N	200	N	1,000	N	>2,000	N
OM055	N	30	70	<200	300	N	500	N	>2,000	N
OM056	N	20	50	200	200	N	500	N	>2,000	N
OM057	N	20	70	500	300	N	500	N	>2,000	N
OM058	N	50	70	N	300	N	700	N	>2,000	N
OM059	N	<10	<20	1,000	200	N	200	N	>2,000	N
OM060	N	10	70	200	200	N	1,000	N	>2,000	200
OM061	N	30	500	10,000	150	N	700	N	>2,000	N
OM062	N	30	150	N	700	N	1,000	N	>2,000	200
OM063	N	30	70	1,000	150	N	1,000	N	>2,000	N
OM064	N	30	70	N	150	N	700	N	>2,000	500
OM065	N	50	150	N	150	N	1,000	N	>2,000	200
OM066	N	50	150	N	150	N	700	N	>2,000	N
OM067	N	50	150	N	100	N	1,000	N	>2,000	300
OM068	N	15	100	200	200	N	700	N	>2,000	200
OM069	N	20	50	700	200	N	700	N	>2,000	1,500
OM070	N	30	70	700	300	N	1,000	N	>2,000	1,500
OM071	N	15	30	1,000	150	N	150	N	2,000	N
OM072	N	30	70	500	200	N	300	N	>2,000	N
OM073	N	30	50	N	300	N	500	N	>2,000	1,500
OM074	N	15	700	700	200	N	700	N	>2,000	300
OM075	N	20	200	1,000	150	N	500	N	>2,000	<200
OM076	N	15	100	700	150	N	700	N	>2,000	N
OM077	N	30	150	700	150	N	700	N	>2,000	N
OM078	N	20	70	1,000	150	N	300	N	>2,000	N
OM079	N	20	50	700	200	N	500	N	>2,000	1,000
OM080	N	20	50	500	100	N	500	N	>2,000	N
OM081	N	20	30	1,000	150	N	200	N	>2,000	N
OM082	N	15	20	1,000	200	N	200	N	>2,000	N
OM083	N	30	70	1,000	200	N	500	N	>2,000	200
OM084	N	15	50	1,000	200	N	500	N	>2,000	N
OM085	N	20	N	700	700	N	700	N	>2,000	N
OM086	N	20	300	700	200	N	300	N	>2,000	200
OM087	N	<10	20	3,000	70	N	150	N	>2,000	N
OM088	N	20	70	700	300	N	500	N	>2,000	<200
OM089	N	20	50	700	200	N	500	N	>2,000	200
OM090	N	30	70	500	200	N	700	N	>2,000	200

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM091	35 40 42	116 46 47	2.0	1.50	15.0	>2.0	1,000	N	N	N	30	2,000
OM092	35 41 20	116 46 42	1.5	.70	10.0	>2.0	700	N	N	N	30	700
OM093	35 42 34	116 45 38	.7	.50	15.0	>2.0	1,000	70	N	N	20	300
OM094	35 42 11	116 44 6	.7	2.00	10.0	>2.0	1,000	N	N	N	30	200
OM095	35 41 45	116 44 14	.7	1.00	10.0	>2.0	1,000	N	N	N	20	300
OM096	35 40 54	116 43 1	.7	5.00	15.0	>2.0	1,500	N	N	N	50	10,000
OM097	35 40 18	116 43 44	1.0	3.00	10.0	>2.0	1,500	N	N	N	30	10,000
OM098	35 39 41	116 44 41	.7	1.00	7.0	.3	1,000	N	N	N	N	>10,000
OM099	35 39 23	116 45 0	1.5	.50	7.0	1.5	500	N	N	N	<20	>10,000
OM100	35 39 49	116 43 25	1.5	1.00	10.0	>2.0	700	N	N	N	30	10,000
OM101	35 39 44	116 42 55	2.0	1.50	10.0	>2.0	1,500	N	N	N	20	2,000
OM102	35 39 25	116 42 57	2.0	.70	7.0	1.5	1,500	N	N	N	20	10,000
OM103	35 38 17	116 42 24	5.0	5.00	10.0	>2.0	2,000	N	N	N	30	700
OM104	35 38 2	116 43 44	2.0	.50	3.0	>2.0	3,000	N	N	N	20	1,000
OM105	35 38 47	116 39 52	1.0	1.50	10.0	>2.0	3,000	N	N	N	20	2,000
OM106	35 38 39	116 39 55	1.5	1.50	7.0	>2.0	1,000	N	N	N	20	700
OM107	35 39 48	116 39 52	1.5	7.00	20.0	1.5	1,500	N	N	N	<20	>10,000
OM108	35 39 24	116 39 17	1.5	5.00	20.0	2.0	1,000	N	N	N	20	700
OM109	35 43 32	116 36 28	1.5	2.00	7.0	>2.0	1,500	N	N	N	30	700
OM110	35 43 24	116 36 23	1.5	.70	2.0	1.5	2,000	N	N	N	30	500
OM111	35 44 39	116 36 23	2.0	3.00	5.0	>2.0	3,000	N	N	N	50	300
OM112	35 45 41	116 36 20	2.0	2.00	10.0	>2.0	1,500	N	N	N	20	300
OM113	35 45 57	116 37 28	1.5	.70	3.0	1.5	2,000	N	N	N	20	300
OM114	35 46 35	116 36 37	1.5	1.00	7.0	2.0	1,500	N	N	N	20	300
OM115	35 47 19	116 36 40	1.0	.70	7.0	1.5	1,000	N	N	N	30	300
OM116	35 46 47	116 37 58	1.5	2.00	7.0	1.5	700	N	N	N	20	1,000
OM117	35 47 22	116 39 44	1.5	1.50	10.0	>2.0	1,500	N	N	N	50	300
OM118	35 47 15	116 39 38	1.0	2.00	7.0	>2.0	700	N	N	N	20	200
OM119	35 46 59	116 42 35	1.5	3.00	10.0	>2.0	700	N	N	N	<20	300
OM120	35 46 32	116 43 0	1.5	.70	7.0	>2.0	1,000	N	N	N	30	200
OM121	35 45 31	116 39 36	5.0	3.00	10.0	>2.0	1,500	N	N	N	50	500
OM122	35 44 35	116 38 23	5.0	2.00	10.0	>2.0	2,000	N	N	N	50	200
OM123	35 44 24	116 39 57	2.0	3.00	10.0	>2.0	700	N	N	N	<20	300
OM124	35 43 57	116 39 18	2.0	2.00	10.0	>2.0	1,000	N	N	N	20	200
OM125	35 43 29	116 38 25	1.0	1.50	10.0	>2.0	700	N	N	N	20	300
OM126	35 42 36	116 39 5	1.0	.70	10.0	>2.0	1,000	N	N	N	20	150
OM127	35 42 4	116 39 1	1.0	.20	10.0	>2.0	1,000	N	N	N	<20	500
OM128	35 42 47	116 37 16	2.0	.70	5.0	>2.0	2,000	N	N	N	20	300
OM129	35 42 41	116 37 13	1.0	.30	7.0	>2.0	1,000	N	N	N	20	150
OM130	35 41 48	116 40 8	1.0	.20	10.0	>2.0	700	N	N	N	N	200
OM131	35 41 20	116 40 43	1.0	1.00	10.0	>2.0	700	N	N	N	N	300
OM132	35 40 50	116 40 52	1.5	7.00	20.0	2.0	1,000	N	N	N	20	5,000
OM133	35 40 51	116 40 59	1.5	3.00	15.0	>2.0	1,000	N	N	N	30	>10,000
OM134	35 41 42	116 40 53	1.5	5.00	20.0	>2.0	1,500	N	N	N	20	5,000
OM135	35 41 25	116 41 32	1.5	7.00	20.0	>2.0	1,500	N	N	N	30	700

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM091	N	N	N	15	150	20	700	15	70	30	30
OM092	<2	N	N	15	100	20	700	15	100	15	50
OM093	2	N	N	15	50	30	700	20	100	10	70
OM094	<2	N	N	15	200	30	1,000	20	150	30	70
OM095	N	N	N	15	70	30	1,000	20	150	15	50
OM096	2	N	N	15	100	30	1,000	15	150	15	70
OM097	2	N	N	15	200	70	500	10	70	100	70
OM098	<2	N	N	10	50	20	150	N	N	20	70
OM099	2	N	N	10	70	15	300	N	50	20	70
OM100	2	N	N	15	100	70	700	N	50	20	1,000
OM101	2	N	N	10	150	30	700	20	150	30	50
OM102	<2	N	N	15	70	50	200	N	50	20	70
OM103	3	N	N	20	500	30	500	<10	150	100	70
OM104	<2	N	N	15	50	50	700	20	200	<10	300
OM105	3	N	N	N	100	30	1,000	15	100	<10	70
OM106	7	N	N	<10	70	30	1,000	15	70	<10	100
OM107	30	N	N	N	20	<10	150	<10	100	<10	70
OM108	30	N	N	N	<20	<10	150	15	70	<10	30
OM109	7	N	N	10	200	15	1,000	10	70	30	50
OM110	2	N	N	N	70	10	>2,000	<10	<50	30	70
OM111	5	N	N	10	500	15	1,000	<10	100	50	50
OM112	7	N	N	10	200	20	2,000	N	50	30	70
OM113	<2	N	N	<10	70	10	>2,000	<10	<50	20	70
OM114	<2	N	N	<10	100	50	700	N	50	20	70
OM115	7	N	N	<10	70	10	1,000	N	50	20	50
OM116	<2	N	N	10	300	<10	700	N	50	50	70
OM117	N	N	N	10	200	15	500	N	70	30	50
OM118	N	N	N	<10	500	15	1,000	N	50	50	50
OM119	N	N	N	10	1,000	15	700	<10	70	50	50
OM120	<2	N	N	<10	200	10	1,000	N	50	30	70
OM121	N	N	N	N	700	20	2,000	N	N	20	100
OM122	5	N	N	<10	200	30	2,000	10	<50	30	100
OM123	2	N	N	10	1,000	10	500	10	150	100	30
OM124	N	N	N	<10	300	20	1,500	15	<50	30	70
OM125	5	N	N	N	70	50	700	10	50	10	70
OM126	N	N	N	N	70	15	500	15	100	15	70
OM127	N	N	N	N	30	20	700	20	100	15	70
OM128	N	N	N	N	100	15	>2,000	N	<50	30	200
OM129	N	N	N	<10	20	20	700	30	50	20	300
OM130	N	N	N	N	30	20	700	15	100	10	50
OM131	N	N	N	<10	50	30	700	15	70	10	50
OM132	10	N	N	<10	20	10	300	<10	70	10	50
OM133	15	N	N	<10	50	15	300	10	150	10	50
OM134	7	N	N	<10	50	20	300	15	100	10	70
OM135	15	N	N	N	70	15	500	10	150	10	50

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM091	N	20	30	700	200	N	500	N	>2,000	N
OM092	N	15	30	1,000	200	N	300	N	>2,000	N
OM093	N	30	150	N	300	N	1,000	N	>2,000	<200
OM094	N	50	150	N	200	N	1,000	N	>2,000	<200
OM095	N	30	150	N	300	N	1,000	N	>2,000	200
OM096	N	20	150	700	300	N	700	N	>2,000	N
OM097	N	20	50	700	200	N	500	N	>2,000	200
OM098	N	15	N	10,000	70	N	70	N	>2,000	N
OM099	N	30	70	10,000	100	N	1,500	N	>2,000	200
OM100	N	30	50	N	200	N	1,000	N	>2,000	<200
OM101	N	20	100	700	200	N	1,000	N	>2,000	500
OM102	N	15	N	1,000	200	N	150	N	>2,000	300
OM103	N	20	30	700	300	N	300	N	>2,000	<200
OM104	N	30	30	300	150	N	300	N	>2,000	300
OM105	N	30	100	N	200	N	1,000	N	>2,000	500
OM106	N	30	150	N	200	N	1,000	N	>2,000	500
OM107	N	15	100	1,000	70	N	150	N	2,000	N
OM108	N	10	70	N	100	N	200	N	>2,000	700
OM109	N	15	50	<200	150	N	500	N	>2,000	700
OM110	N	30	30	N	100	N	1,000	N	>2,000	1,500
OM111	N	30	70	N	150	N	700	N	>2,000	1,000
OM112	N	50	20	N	200	N	700	N	>2,000	2,000
OM113	N	30	20	N	200	N	1,000	N	>2,000	2,000
OM114	N	20	30	N	150	N	700	N	>2,000	1,000
OM115	N	30	20	N	300	N	1,000	N	>2,000	3,000
OM116	N	20	20	N	200	N	700	N	>2,000	3,000
OM117	N	30	30	N	200	N	700	N	>2,000	1,500
OM118	N	50	30	N	200	N	700	N	>2,000	1,500
OM119	N	50	50	N	200	N	700	N	>2,000	1,000
OM120	N	30	30	N	200	N	700	N	>2,000	2,000
OM121	N	50	50	200	700	N	2,000	N	>2,000	>5,000
OM122	N	70	70	N	200	N	1,500	N	>2,000	1,500
OM123	N	30	50	300	150	N	500	N	>2,000	1,000
OM124	N	50	70	N	300	N	1,000	N	>2,000	1,500
OM125	N	30	70	N	300	N	1,000	N	>2,000	700
OM126	N	70	300	N	200	N	2,000	N	>2,000	1,500
OM127	N	50	150	N	150	N	1,000	N	>2,000	200
OM128	N	200	70	N	150	N	3,000	N	>2,000	3,000
OM129	N	50	100	N	150	N	1,500	N	>2,000	2,000
OM130	N	20	100	N	200	N	700	N	>2,000	<200
OM131	N	20	70	N	300	N	700	N	>2,000	N
OM132	N	15	70	<200	150	N	200	N	2,000	N
OM133	N	15	150	700	100	N	500	N	1,500	<200
OM134	N	15	100	N	150	N	500	N	>2,000	N
OM135	N	15	150	N	100	N	500	N	>2,000	<200

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM136	35 43 35	116 43 23	5.0	5.00	10.0	>2.0	1,500	N	N	N	30	500
OM137	35 44 7	116 43 31	3.0	5.00	15.0	2.0	1,000	N	N	N	20	300
OM138	35 43 21	116 44 44	1.0	1.00	7.0	>2.0	300	N	N	N	20	2,000
OM139	35 44 38	116 43 45	1.0	1.00	7.0	>2.0	500	N	N	N	20	300
OM140	35 45 17	116 43 2	1.5	2.00	10.0	2.0	1,000	N	N	N	50	150
OM141	35 45 42	116 44 13	2.0	5.00	10.0	>2.0	1,000	N	N	N	20	500
OM142	35 42 20	116 57 57	2.0	5.00	15.0	>2.0	1,500	N	N	N	20	300
OM143	35 43 2	116 57 55	2.0	2.00	5.0	2.0	1,000	N	N	N	30	10,000
OM144	35 43 29	116 56 23	2.0	.30	1.5	1.5	1,000	N	N	N	30	>10,000
OM145	35 43 47	116 57 1	2.0	1.00	7.0	2.0	700	N	N	N	20	>10,000
OM146	35 45 35	116 56 29	3.0	5.00	15.0	>2.0	1,500	N	N	N	20	10,000
OM147	35 46 16	116 56 9	10.0	3.00	7.0	>2.0	2,000	N	N	N	20	1,000
OM148	35 40 2	116 38 13	1.0	3.00	10.0	>2.0	1,500	N	N	N	N	150
OM149	35 40 26	116 37 55	1.0	.30	7.0	>2.0	1,000	N	N	N	N	200
OM150	35 38 55	116 37 22	1.5	10.00	20.0	>2.0	1,500	N	N	N	20	2,000
OM151	35 38 59	116 37 8	2.0	7.00	15.0	>2.0	2,000	N	N	N	20	700
OM152	35 39 53	116 35 54	1.0	.70	7.0	>2.0	1,000	N	N	N	20	300
OM153	35 40 54	116 35 52	1.0	.30	10.0	>2.0	1,500	N	N	N	N	700
OM154	35 42 1	116 35 28	1.5	.50	7.0	>2.0	1,500	N	N	N	N	10,000
OM155	35 41 33	116 37 22	1.5	.50	7.0	>2.0	1,000	N	N	N	20	>10,000
83JA456P	35 38 54	116 38 9	7.0	20.00	>50.0	>2.0	1,500	100	N	N	100	>10,000
83JA457P	35 38 54	116 37 16	2.0	7.00	15.0	>2.0	1,500	N	N	N	70	2,000
83JA458P	35 38 58	116 37 7	2.0	7.00	15.0	>2.0	1,000	N	N	N	50	300

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM136	N	N	N	20	700	30	2,000	N	50	100	70
OM137	N	N	N	20	700	20	2,000	N	<50	200	500
OM138	N	N	N	10	200	10	300	N	<50	20	50
OM139	N	N	N	<10	200	10	1,500	10	50	50	70
OM140	N	N	N	N	500	10	>2,000	N	<50	70	100
OM141	N	N	N	15	700	15	1,500	10	50	150	50
OM142	N	N	N	20	500	20	700	<10	70	150	30
OM143	<2	N	N	15	700	30	200	N	<50	100	70
OM144	<2	N	N	15	100	50	100	<10	<50	30	70
OM145	N	N	N	15	300	30	300	N	<50	50	50
OM146	<2	N	N	20	1,000	30	500	10	100	200	70
OM147	<2	N	N	30	500	70	500	N	50	150	100
OM148	5	N	N	10	50	20	700	15	150	<10	50
OM149	2	N	N	10	50	20	700	15	150	10	50
OM150	30	N	N	10	50	10	200	10	100	<10	500
OM151	10	N	N	10	30	15	300	70	150	10	2,000
OM152	N	N	N	<10	70	20	1,000	15	100	10	100
OM153	N	N	N	<10	30	30	1,000	20	100	10	200
OM154	N	N	N	<10	70	20	1,000	10	100	30	70
OM155	<2	N	N	<10	70	15	700	10	150	30	70
83JA456P	10	N	N	N	200	20	700	150	150	10	2,000
83JA457P	10	N	N	N	20	<10	300	100	200	N	700
83JA458P	5	N	N	10	30	<10	500	70	150	10	200

TABLE 4. ANALYSES OF HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM136	N	50	30	N	200	N	1,000	N	>2,000	1,500
OM137	N	50	30	N	200	N	500	N	>2,000	1,500
OM138	N	20	30	700	100	N	300	N	>2,000	<200
OM139	N	50	30	N	300	N	1,000	N	>2,000	2,000
OM140	N	70	30	N	300	N	2,000	N	>2,000	2,000
OM141	N	50	70	N	200	N	700	N	>2,000	500
OM142	N	50	50	700	300	N	300	N	>2,000	N
OM143	N	50	<20	1,000	200	N	150	N	>2,000	N
OM144	N	20	N	>10,000	150	N	100	N	>2,000	N
OM145	N	30	N	3,000	200	N	200	N	>2,000	N
OM146	N	50	50	1,000	200	N	300	N	>2,000	<200
OM147	N	50	30	300	500	N	300	N	>2,000	N
OM148	N	15	100	N	200	N	700	N	1,500	<200
OM149	N	30	150	N	200	N	1,000	N	>2,000	300
OM150	N	15	1,000	N	150	N	300	N	700	<200
OM151	N	15	100	N	200	N	700	N	2,000	500
OM152	N	50	100	N	300	N	1,000	N	>2,000	700
OM153	N	50	150	N	200	N	1,500	N	>2,000	700
OM154	N	70	200	N	200	N	2,000	N	>2,000	700
OM155	N	50	150	500	150	N	2,000	N	>2,000	1,000
83JA456P	N	--	500	10,000	200	2,000	700	N	>2,000	700
83JA457P	N	--	150	N	100	200	500	N	>2,000	500
83JA458P	N	--	70	N	200	N	700	N	>2,000	300

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greeter 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
82JA002A	35 43 10	116 53 45	5.00	2.00	3.00	1.000	700	N	N	N	10	1,500	1.0
82JA003A	35 46 7	116 53 19	5.00	1.00	2.00	1.000	700	N	N	N	15	1,000	1.5
82JA003B	35 46 7	116 53 19	1.50	.15	.30	.150	100	N	N	N	<10	200	1.5
82JA004A	35 45 35	116 51 35	1.00	.10	.30	.100	50	N	N	N	<10	<20	1.0
82JA004C	35 45 35	116 51 35	10.00	3.00	5.00	>1.000	1,500	1.0	N	N	20	700	<1.0
82JA005A	35 44 44	116 51 51	5.00	1.00	2.00	1.000	700	N	N	N	20	1,000	3.0
82JA007A	35 42 55	116 52 38	7.00	2.00	5.00	1.000	1,000	N	N	N	20	1,000	1.5
82JA008A	35 43 14	116 52 40	5.00	<.02	10.00	.050	1,000	20.0	N	N	20	100	1.0
82JA008B	35 43 15	116 52 40	1.50	.20	.30	.300	700	N	N	N	15	700	1.0
82JA008C	35 43 15	116 52 40	.70	<.02	3.00	.010	300	200.0	N	N	10	70	1.0
82JA015A	35 47 9	116 36 26	1.50	.20	1.00	.150	700	N	N	N	10	500	3.0
82JA019A	35 41 40	116 36 38	1.50	.15	.50	.150	200	N	N	N	10	300	2.0
82JA020A	35 41 28	116 37 35	3.00	.50	1.00	.300	300	N	N	N	10	700	1.5
82JA020B	35 41 28	116 37 35	5.00	.70	1.50	.700	700	N	N	N	15	1,000	3.0
82JA021A	35 40 6	116 36 0	1.50	.20	.70	.150	300	N	N	N	10	70	2.0
82JA022A	35 41 26	116 55 22	15.00	7.00	7.00	>1.000	1,500	N	N	N	15	2,000	1.5
82JA025A	35 38 44	116 52 59	7.00	.70	5.00	1.000	700	N	N	N	20	1,500	1.5
82JA025B	35 38 44	116 52 59	10.00	2.00	3.00	>1.000	1,500	N	N	N	30	1,500	1.0
82JA026A	35 39 30	116 52 35	10.00	2.00	7.00	1.000	700	N	N	N	20	2,000	1.5
82JA028A	35 38 25	116 50 55	10.00	1.50	3.00	1.000	700	N	N	N	50	1,000	<1.0
82JA030A	35 38 37	116 48 58	3.00	.50	.50	.500	200	N	N	N	50	1,500	2.0
82JA031A	35 50 0	116 39 29	3.00	.30	.70	.500	300	N	N	N	20	2,000	<1.0
82JA032A	35 43 5	116 48 36	7.00	1.50	3.00	1.000	1,000	N	N	N	50	1,000	1.5
82JA033A	35 42 41	116 46 39	.70	.05	.20	.070	30	N	N	N	15	70	1.5
82JA033B	35 42 41	116 46 39	15.00	3.00	5.00	>1.000	1,000	N	N	N	20	1,000	<1.0
82JA035A	35 38 41	116 46 37	5.00	.30	1.50	1.000	1,500	N	N	N	50	500	1.5
82JA036A	35 39 14	116 45 21	10.00	1.50	3.00	1.000	1,000	N	N	N	20	1,500	1.0
82JA036B	35 39 14	116 45 21	3.00	2.00	3.00	.300	300	N	N	N	30	1,000	1.5
82JA037A	35 39 35	116 44 18	5.00	1.00	5.00	.700	300	N	N	N	20	1,500	2.0
82JA038A	35 39 53	116 44 3	.15	>10.00	>20.00	.020	700	N	N	N	N	N	N
82JA042A	35 40 16	116 41 12	2.00	.20	.70	.200	300	.7	N	N	10	300	1.0
82JA042C	35 40 16	116 41 12	7.00	.70	1.50	.700	500	3.0	N	N	10	700	1.5
82JA043A	35 44 14	116 40 5	1.50	.30	1.00	.150	1,000	N	N	N	<10	500	1.5
82JA044A	35 43 5	116 36 9	.70	.07	.30	.030	500	N	N	N	<10	20	1.5
82JA045A	35 42 37	116 35 50	1.00	.07	.20	.020	700	N	N	N	<10	<20	1.5
82JA047B	35 41 36	116 39 29	7.00	1.00	2.00	1.000	1,000	N	N	N	<10	2,000	1.5
82JA065A	35 43 57	116 54 17	.50	.30	.10	1.000	20	N	N	N	20	1,000	1.0
82JA068A	35 44 26	116 53 51	5.00	2.00	3.00	1.000	700	N	N	N	20	1,500	1.5
82JA402A	35 47 36	117 4 2	5.00	1.00	3.00	.500	500	N	N	N	50	1,000	1.0
82JA402B	35 47 36	117 4 2	3.00	1.00	2.00	.500	300	N	N	N	70	1,000	1.5
82JA403B	35 47 37	117 5 21	5.00	2.00	3.00	.500	700	<.5	N	N	50	1,000	1.5
82JA404A	35 48 29	117 4 48	5.00	1.00	2.00	.500	500	N	N	N	50	1,500	1.5
82JA404B	35 48 29	117 4 48	7.00	1.50	3.00	.500	700	N	N	N	70	2,000	3.0
82JA407A	35 50 46	117 1 22	5.00	.70	1.50	.300	700	N	N	N	100	1,000	2.0
82JA409A	35 50 11	117 2 35	7.00	7.00	3.00	1.000	700	N	N	N	100	1,000	1.5

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82JA002A	N	N	20	20	30	150	N	N	50	50	N	--	N
82JA003A	N	N	15	10	20	100	N	<20	10	50	N	--	N
82JA003B	N	N	N	<10	N	70	N	N	N	20	N	--	N
82JA004A	N	N	N	N	N	30	N	N	N	20	N	--	N
82JA004C	N	N	50	150	100	20	N	N	100	N	N	--	N
82JA005A	N	N	15	15	15	100	N	20	10	30	N	--	N
82JA007A	N	N	50	70	50	70	N	N	50	20	N	--	N
82JA008A	N	30	N	N	>20,000	N	7	N	N	5,000	N	--	<10
82JA008B	N	N	N	N	10	50	N	N	N	20	N	--	N
82JA008C	N	100	N	N	10,000	N	N	N	N	>20,000	N	--	N
82JA015A	N	N	N	<10	N	50	N	<20	N	N	N	--	N
82JA019A	N	N	N	<10	N	100	N	<20	N	20	N	--	N
82JA020A	N	N	N	<10	N	200	N	<20	N	20	N	--	N
82JA020B	N	N	10	<10	5	70	N	<20	5	10	N	--	N
82JA021A	N	N	N	<10	N	N	N	N	N	30	N	--	N
82JA022A	N	N	20	50	30	100	N	N	20	50	N	--	N
82JA025A	N	N	15	10	7	100	N	N	10	20	N	--	N
82JA025B	N	N	30	15	15	70	N	N	10	10	N	--	N
82JA026A	N	N	30	100	50	200	N	N	50	20	N	--	N
82JA028A	N	N	15	30	15	70	N	<20	10	50	N	--	N
82JA030A	N	N	15	10	15	100	N	<20	5	30	N	--	N
82JA031A	N	N	10	50	10	100	N	N	10	50	N	--	N
82JA032A	N	N	20	50	30	100	<5	<20	30	30	N	--	N
82JA033A	N	N	5	<10	N	50	N	N	N	70	N	--	N
82JA033B	N	N	30	150	50	30	N	N	50	10	N	--	N
82JA035A	N	N	20	150	20	N	N	N	100	N	N	--	N
82JA036A	N	N	15	<10	10	200	N	N	10	50	N	--	N
82JA036B	N	N	10	70	15	150	N	N	20	50	N	--	N
82JA037A	N	N	15	<10	7	150	N	N	N	70	N	--	N
82JA038A	N	N	N	N	N	N	N	N	N	N	N	--	N
82JA042A	N	N	N	N	<5	200	N	<20	N	50	N	--	N
82JA042C	N	N	10	<10	5	100	N	<20	N	30	N	--	N
82JA043A	N	N	N	N	N	30	N	N	N	N	N	--	N
82JA044A	N	N	N	N	N	30	N	N	N	15	N	--	N
82JA045A	N	N	N	N	N	50	N	N	N	20	N	--	N
82JA047B	N	N	7	<10	5	70	N	<20	N	20	N	--	N
82JA065A	N	N	N	N	N	70	N	N	N	N	N	--	N
82JA068A	N	N	20	30	10	100	N	N	30	30	N	--	N
82JA402A	N	N	20	100	7	50	N	N	70	10	N	--	N
82JA402B	N	N	10	20	20	100	N	N	20	70	N	--	N
82JA403B	N	N	30	150	70	70	N	N	100	30	N	--	N
82JA404A	N	N	15	20	20	150	<5	N	20	30	N	--	N
82JA404B	N	N	20	20	20	150	5	<20	30	50	N	--	N
82JA407A	N	N	10	10	15	70	N	N	7	70	N	--	N
82JA409A	N	N	20	100	70	50	N	N	70	10	N	--	N

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continuec

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	As-ppm aa	Zn-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	W-ppm cm
82JA002A	700	150	N	20	N	200	N	--	--	N	20	.10	N	<2	--
82JA003A	500	100	N	20	N	500	N	--	--	N	55	.20	N	<2	--
82JA003B	N	<10	N	30	N	150	N	N	--	N	25	<.10	N	<2	--
82JA004A	N	<10	N	15	N	150	N	N	--	N	10	<.10	N	<2	--
82JA004C	500	200	N	30	N	150	N	--	--	N	50	.10	N	N	--
82JA005A	700	100	N	30	N	500	N	--	--	N	40	.10	N	<2	--
82JA007A	500	150	N	50	N	500	N	N	.04	N	40	<.10	N	<2	--
82JA008A	100	<10	N	N	5,000	15	N	<.05	>6.00	--	--	--	--	--	N
82JA008B	N	30	N	10	N	300	N	N	.04	N	35	.20	N	<2	--
82JA008C	3,000	<10	N	N	10,000	N	N	.10	5.40	--	--	--	--	--	1
82JA015A	100	15	N	20	N	100	N	--	--	N	25	N	N	N	--
82JA019A	N	10	N	50	N	200	N	--	--	<10	40	N	N	N	--
82JA020A	100	30	N	70	N	500	N	--	--	N	35	N	N	N	--
82JA020B	200	50	N	70	N	300	N	--	--	N	55	N	N	N	--
82JA021A	N	<10	N	20	N	20	N	--	--	N	35	N	N	N	--
82JA022A	1,500	300	N	20	N	700	N	--	--	N	70	.10	N	<2	--
82JA025A	700	70	N	30	N	200	N	N	.02	N	35	<.10	N	<2	--
82JA025B	700	200	N	30	N	300	N	N	.04	N	30	<.10	N	<2	--
82JA026A	1,500	200	N	30	N	300	N	--	--	N	45	<.10	N	<2	--
82JA028A	500	150	N	50	N	300	N	N	2.20	N	45	<.10	N	<2	--
82JA030A	200	50	N	20	N	200	N	N	.18	20	50	<.10	N	24	--
82JA031A	200	70	N	20	N	300	N	--	--	N	40	.10	N	2	--
82JA032A	700	100	N	30	N	300	N	--	--	N	25	N	N	<2	--
82JA033A	N	<10	N	30	N	150	N	--	--	N	10	<.10	N	<2	--
82JA033B	500	300	N	30	N	300	N	--	--	N	45	<.10	N	<2	--
82JA035A	500	70	N	15	N	70	N	N	.04	20	20	N	N	<2	--
82JA036A	1,000	150	N	30	N	300	N	--	--	N	65	N	N	N	--
82JA036B	500	70	N	15	N	200	N	--	--	N	60	<.10	N	N	--
82JA037A	1,000	70	N	30	N	200	N	--	--	N	65	.10	N	N	--
82JA038A	N	N	N	N	N	N	N	--	--	N	10	.10	N	N	--
82JA042A	100	N	N	50	N	300	N	--	--	N	40	N	N	<2	--
82JA042C	200	70	N	50	N	500	N	--	--	N	80	N	N	N	--
82JA043A	N	10	N	20	N	150	N	--	--	N	25	N	N	N	--
82JA044A	N	<10	N	15	N	100	N	--	--	N	10	N	N	N	--
82JA045A	N	<10	N	20	N	50	N	--	--	N	15	<.10	N	N	--
82JA047B	300	50	N	70	N	1,000	N	--	--	N	85	N	N	N	--
82JA065A	150	50	N	30	N	300	N	--	--	N	10	<.10	N	<2	--
82JA068A	700	100	N	20	N	300	N	--	--	N	45	<.10	N	<2	--
82JA402A	700	100	N	15	N	150	N	--	--	N	15	<.10	N	<2	--
82JA402B	1,000	70	N	15	N	300	N	--	--	N	25	<.10	N	<2	--
82JA403B	1,000	100	N	20	N	200	N	--	--	N	10	<.10	N	<2	--
82JA404A	700	70	N	20	N	500	N	--	--	N	30	<.10	N	N	--
82JA404B	1,500	100	N	30	N	500	N	--	--	N	25	<.10	N	<2	--
82JA407A	200	50	N	20	N	100	N	--	--	N	15	N	N	<2	--
82JA409A	1,000	150	N	15	N	200	N	--	--	N	15	N	N	<2	--

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82JA411B	35 52 0	117 0 46	7.00	3.00	2.00	>1.000	300	N	N	N	50	1,500	1.5
82JA412B	35 52 57	117 0 28	5.00	1.50	3.00	.700	500	N	N	N	50	2,000	2.0
82JA414A	35 53 32	117 6 30	2.00	.50	1.00	.300	300	N	N	N	10	700	1.5
82JA415A	35 52 11	117 6 12	5.00	1.00	2.00	.500	1,000	N	N	N	15	1,000	1.0
82JA416A	35 50 42	117 5 25	5.00	2.00	3.00	1.000	700	N	N	N	100	1,500	2.0
82JA423B	35 50 54	117 6 47	.30	.20	1.00	.050	70	N	N	N	20	700	2.0
82JA423D	35 50 54	117 6 47	7.00	1.50	2.00	1.000	700	<.5	N	N	30	1,500	1.5
82JA432A	35 48 54	117 8 54	1.50	.20	.50	.200	500	N	N	N	<10	700	1.0
82JA435A	35 39 51	116 43 9	3.00	2.00	5.00	.500	700	N	N	N	10	700	1.0
82JA436A	35 53 1	116 57 15	5.00	1.00	2.00	1.000	200	N	N	N	50	1,500	2.0
82JA440A	35 53 13	116 57 3	3.00	.70	1.00	.500	500	N	N	N	70	1,000	2.0
82RK023A	35 49 57	117 3 42	5.00	1.50	3.00	.500	500	N	N	N	20	1,000	1.0
82RK029A	35 49 0	117 3 27	5.00	1.00	3.00	.500	700	N	N	N	30	1,500	2.0
82RK030A	35 51 11	117 3 35	5.00	1.00	3.00	.700	200	N	N	N	50	1,000	1.5
82RK032A	35 48 53	116 58 55	3.00	.70	2.00	.300	300	N	N	N	50	700	1.0
82RK033A	35 49 14	116 58 4	5.00	1.50	3.00	.500	500	N	N	N	70	1,000	1.5
82RK036A	35 49 32	116 56 12	7.00	1.50	5.00	1.000	500	N	N	N	50	1,500	1.5
82RK036B	35 49 32	116 56 12	5.00	1.00	2.00	.700	700	N	N	N	30	1,500	2.0
82RK038A	35 47 35	116 57 4	3.00	.70	2.00	.500	500	N	N	N	15	1,500	1.5
82RK041A	35 51 3	116 57 47	3.00	1.00	2.00	.500	300	N	N	N	70	1,000	1.5
82RK043A	35 51 58	116 57 20	7.00	1.50	5.00	1.000	500	N	N	N	30	1,500	1.5
82RK044A	35 51 27	116 58 26	5.00	1.00	3.00	.500	500	N	N	N	100	1,500	1.5
82RK045A	35 51 39	116 59 6	5.00	1.50	3.00	1.000	700	N	N	N	100	1,500	2.0
82RK046A	35 51 9	116 59 36	5.00	1.50	3.00	1.000	700	N	N	N	100	1,500	2.0
82RK047A	35 50 18	116 58 57	2.00	.50	1.50	.300	300	N	N	N	70	1,000	2.0
82RK048A	35 52 3	116 59 12	5.00	1.50	2.00	.500	500	N	N	N	30	1,500	2.0
82RK049A	35 52 25	116 58 58	7.00	2.00	3.00	.500	1,000	N	N	N	15	1,500	1.0
82RK049B	35 52 25	116 58 58	2.00	.30	1.00	.700	200	N	N	N	50	1,500	2.0
82RK050A	35 52 10	116 59 31	7.00	2.00	3.00	.700	300	N	N	N	30	1,500	2.0
82RK051A	35 51 55	116 56 35	3.00	1.00	3.00	.500	500	N	N	N	70	1,000	1.0
82RK053A	35 50 40	116 55 41	5.00	.50	3.00	.700	150	N	N	N	70	2,000	2.0
82RK054A	35 51 43	117 3 6	5.00	1.50	3.00	1.000	500	N	N	N	100	1,500	2.0
82RK056A	35 53 26	117 2 50	3.00	1.50	2.00	.700	500	N	N	N	70	1,500	1.5
82RK056B	35 53 26	117 2 50	5.00	1.00	2.00	1.000	500	N	N	N	70	1,500	1.5
82RK057A	35 53 46	117 4 5	7.00	2.00	5.00	1.000	700	N	N	N	70	2,000	2.0
82RK058A	35 52 38	117 3 31	.70	.20	1.50	.100	100	N	N	N	70	300	3.0
82RK058B	35 52 38	117 3 31	.70	.20	.70	.070	50	N	N	N	50	200	1.5
82RK059A	35 48 40	117 3 3	3.00	.70	2.00	.500	500	N	N	N	70	1,000	2.0
82RK061A	35 48 20	117 6 9	7.00	1.00	3.00	1.000	700	N	N	N	70	1,500	2.0
82RK062A	35 49 9	117 5 11	3.00	1.50	3.00	.500	700	N	N	N	70	1,000	1.5
82RK062B	35 49 9	117 5 11	3.00	1.00	3.00	.500	500	N	N	N	70	1,000	1.0
82RK062D	35 49 9	117 5 11	7.00	2.00	5.00	.700	700	N	N	N	50	1,000	<1.0
82RK064A	35 51 35	117 4 55	5.00	1.50	3.00	.300	500	N	N	N	30	1,500	1.5
82RK064B	35 51 35	117 4 55	5.00	2.00	2.00	.700	700	N	N	N	50	1,000	1.5
82RK065A	35 47 10	117 6 50	10.00	5.00	5.00	>1.000	1,000	N	N	N	30	1,000	1.0

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82JA411B	N	N	20	50	150	100	N	N	30	70	N	--	N
82JA412B	N	N	20	50	30	150	N	<20	50	50	N	--	N
82JA414A	N	N	5	10	5	50	N	N	N	30	N	--	N
82JA415A	N	N	15	10	5	100	N	N	5	20	N	--	N
82JA416A	N	N	30	100	50	100	N	N	100	50	N	--	N
82JA423B	N	N	N	N	N	30	N	N	N	20	N	--	N
82JA423D	N	N	20	70	20	100	N	N	70	50	N	--	N
82JA432A	N	N	N	N	N	50	N	N	N	N	N	--	N
82JA435A	N	N	30	150	30	20	N	N	150	10	N	--	N
82JA436A	N	N	15	20	50	150	N	<20	30	50	N	--	N
82JA440A	N	N	10	<10	5	50	N	N	7	30	N	--	N
82RK023A	N	N	15	50	20	50	<5	N	20	20	N	--	N
82RK029A	N	N	20	30	70	150	N	N	50	70	N	--	N
82RK030A	N	N	20	70	30	100	N	N	50	20	N	--	N
82RK032A	N	N	15	10	10	30	N	N	10	10	N	--	N
82RK033A	N	N	15	50	10	70	N	<20	30	20	N	--	N
82RK036A	N	N	30	30	100	150	N	N	70	30	N	--	N
82RK036B	N	N	20	<10	15	150	N	N	7	30	N	--	N
82RK038A	N	N	5	15	20	70	N	N	15	20	N	--	N
82RK041A	N	N	15	50	20	50	N	N	50	20	N	--	N
82RK043A	N	N	50	150	70	200	N	N	100	50	N	--	N
82RK044A	N	N	20	70	50	150	N	N	70	70	N	--	N
82RK045A	N	N	20	70	30	150	<5	<20	50	50	N	--	N
82RK046A	N	N	20	50	50	100	<5	<20	50	70	N	--	N
82RK047A	N	N	10	10	7	50	N	N	10	50	N	--	N
82RK048A	N	N	20	70	50	150	N	<20	50	70	N	--	N
82RK049A	N	N	30	200	50	70	N	N	100	30	N	--	N
82RK049B	N	N	5	15	30	200	5	20	15	70	N	--	N
82RK050A	N	N	20	70	50	100	N	N	70	30	N	--	N
82RK051A	N	N	10	30	10	50	N	N	10	50	N	--	N
82RK053A	N	N	10	<10	5	150	N	<20	5	50	N	--	N
82RK054A	N	N	15	50	15	150	N	N	20	30	N	--	N
82RK056A	N	N	15	70	15	100	N	N	50	20	N	--	N
82RK056B	N	N	20	70	30	100	N	N	70	20	N	--	N
82RK057A	N	N	20	100	20	150	N	N	70	50	N	--	N
82RK058A	N	N	N	<10	N	70	N	N	N	70	N	--	N
82RK058B	N	N	N	N	N	50	N	N	N	50	N	--	N
82RK059A	N	N	15	50	20	100	N	N	15	30	N	--	N
82RK061A	N	N	20	10	20	200	<5	<20	5	50	N	--	N
82RK062A	N	N	15	15	20	150	N	N	15	70	N	--	N
82RK062B	N	N	10	10	10	100	N	N	10	50	N	--	N
82RK062D	N	N	30	100	50	100	N	N	100	20	N	--	N
82RK064A	N	N	10	50	30	150	N	N	30	70	N	--	N
82RK064B	N	N	10	100	30	100	N	N	50	20	N	--	N
82RK065A	N	N	50	300	50	70	N	N	150	20	N	--	N

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	As-ppm aa	Zn-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	W-ppm cm
82JA411B	1,000	100	N	30	N	300	N	--	--	N	45	<.10	2	<2	--
82JA412B	1,000	100	N	30	N	300	N	--	--	N	35	N	N	<2	--
82JA414A	100	30	N	30	N	200	N	--	--	N	30	<.10	N	<2	--
82JA415A	100	70	N	30	N	300	N	--	--	N	30	N	N	<2	--
82JA416A	1,500	100	N	20	N	300	N	--	--	N	60	N	N	N	--
82JA423B	1,000	10	N	10	N	50	N	--	--	N	20	N	N	N	--
82JA423D	1,000	150	N	20	N	300	N	--	--	N	40	N	N	N	--
82JA432A	100	10	N	30	N	200	N	--	--	N	30	<.10	N	<2	--
82JA435A	700	70	N	15	N	100	N	N	.02	--	--	--	--	--	<1
82JA436A	1,000	100	N	20	N	300	N	--	--	N	60	<.10	N	<2	--
82JA440A	300	30	N	10	N	100	N	--	--	N	30	<.10	N	N	--
82RK023A	500	50	N	15	N	200	N	N	.04	--	--	--	--	--	1
82RK029A	1,000	100	N	20	N	300	N	--	--	N	25	<.10	N	<2	--
82RK030A	1,000	100	N	20	N	300	N	--	--	N	40	<.10	N	N	--
82RK032A	500	70	N	10	N	150	N	--	--	N	15	<.10	N	N	--
82RK033A	1,000	100	N	15	N	300	N	--	--	N	15	N	N	N	--
82RK036A	1,500	150	N	20	N	200	N	--	--	N	35	<.10	N	N	--
82RK036B	1,000	100	N	20	N	300	N	--	--	N	60	<.10	N	N	--
82RK038A	700	50	N	15	N	300	N	N	.02	--	--	--	--	--	1
82RK041A	700	70	N	10	N	200	N	N	.02	N	15	N	N	<2	--
82RK043A	1,500	200	N	30	N	300	N	N	.04	N	45	<.10	N	<2	--
82RK044A	1,000	100	N	15	N	200	N	--	--	N	15	N	N	N	--
82RK045A	1,000	150	N	30	N	300	N	--	--	N	20	N	N	N	--
82RK046A	1,000	150	N	20	N	300	N	--	--	N	20	<.10	N	N	--
82RK047A	500	50	N	10	N	150	N	--	--	N	15	N	N	N	--
82RK048A	700	100	N	20	N	300	N	N	.06	N	50	<.10	N	N	--
82RK049A	500	100	N	15	N	200	N	N	.06	N	85	.10	N	N	--
82RK049B	500	100	N	20	N	500	N	N	.06	N	55	.10	N	<2	--
82RK050A	1,000	100	N	20	N	500	N	N	.04	N	50	<.10	N	N	--
82RK051A	500	50	N	10	N	150	N	--	--	N	20	N	N	<2	--
82RK053A	2,000	30	N	20	N	700	N	--	--	N	25	<.10	N	N	--
82RK054A	700	100	N	20	N	500	N	--	--	N	30	<.10	N	<2	--
82RK056A	1,000	70	N	15	N	200	N	--	--	N	25	<.10	N	<2	--
82RK056B	1,000	100	N	20	N	200	N	--	--	N	35	N	N	<2	--
82RK057A	2,000	150	N	30	N	500	N	--	--	N	25	<.10	N	<2	--
82RK058A	100	<10	N	15	N	150	N	--	--	N	30	<.10	N	<2	--
82RK058B	N	<10	N	10	N	50	N	--	--	N	15	<.10	N	<2	--
82RK059A	1,000	100	N	20	N	300	N	--	--	N	35	<.10	N	N	--
82RK061A	1,500	100	N	50	N	500	N	--	--	N	60	.10	N	<2	--
82RK062A	1,000	100	N	20	N	300	N	--	--	N	30	<.10	N	<2	--
82RK062B	1,000	70	N	15	N	200	N	--	--	N	15	.10	N	N	--
82RK062D	1,000	150	N	20	N	200	N	--	--	N	35	.10	N	<2	--
82RK064A	1,500	70	N	20	N	200	N	--	--	N	55	.10	N	<2	--
82RK064B	1,000	100	N	20	N	200	N	--	--	N	60	.10	N	<2	--
82RK065A	700	200	N	30	N	200	N	--	--	N	45	<.10	N	N	--

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82RK067A	35 48 57	117 7 6	7.00	2.00	3.00	1.000	700	<.5	N	N	20	1,500	2.0
82RK067B	35 48 57	117 7 6	5.00	1.00	3.00	.300	500	N	N	N	70	1,500	1.5
82RK068A	35 48 38	117 7 41	1.00	.20	.70	.070	500	N	N	N	100	200	3.0
82RK068B	35 48 38	117 7 41	1.00	.30	1.00	.100	500	N	N	N	100	200	3.0
82RK069D	35 53 0	116 58 57	20.00	.30	7.00	<.002	>5,000	N	N	N	10	2,000	N
82RK069E	35 53 0	116 58 58	5.00	1.50	3.00	.500	2,000	N	N	N	10	1,500	1.0
82RK070A	35 50 15	117 1 9	5.00	.70	2.00	.500	700	N	N	N	100	1,500	2.0
82RK073A	35 51 15	117 2 35	5.00	1.50	2.00	.500	300	N	N	N	30	1,500	1.5
82RK077A	35 53 1	117 1 49	10.00	2.00	5.00	>1.000	1,000	N	N	N	70	2,000	1.5
82RK080A	35 49 35	117 6 6	5.00	1.00	2.00	1.000	700	N	N	N	50	1,500	2.0
82RK080B	35 49 35	117 6 6	7.00	5.00	7.00	1.000	1,000	N	N	N	30	1,500	1.0
82RK081A	35 52 47	116 59 37	5.00	2.00	5.00	>1.000	500	N	N	N	20	1,000	1.5
82RK082A	35 53 3	117 4 29	7.00	1.50	5.00	>1.000	1,000	N	N	N	70	1,500	2.0
82RK082D	35 53 3	117 4 29	3.00	1.00	2.00	.500	200	N	N	N	10	1,500	1.0
82RK089C	35 51 48	117 6 25	.70	.05	.70	.050	150	N	N	N	50	500	1.5
82RK093A	35 52 11	117 3 47	5.00	2.00	7.00	1.000	500	N	N	N	30	1,500	1.5
82RK093D	35 52 11	117 3 47	1.50	.50	.20	.100	150	N	N	N	50	300	2.0
82RK094A	35 49 54	117 6 46	5.00	1.50	5.00	.700	200	N	N	N	20	700	1.0
82RK094B	35 49 54	117 6 46	1.00	.30	.50	.070	200	N	N	N	30	300	1.5
82RK096C	35 47 54	117 8 13	5.00	1.00	.70	.700	500	N	N	N	50	100	1.0
82RK099A	35 47 33	117 8 15	.50	.10	.20	.070	200	N	<200	N	<10	100	1.5
82RK104A	35 52 53	116 57 19	2.00	.50	2.00	.500	150	N	N	N	10	1,000	1.5
82RK105C	35 52 34	116 55 59	1.50	.70	2.00	.500	500	N	N	N	30	700	1.5
82RK109A	35 51 6	116 56 19	3.00	1.50	3.00	.500	300	N	N	N	70	1,000	1.5
82RK401A	35 46 17	116 40 12	5.00	2.00	5.00	.500	200	N	N	N	<10	200	N
82RK403A	35 46 21	116 38 39	7.00	2.00	5.00	1.000	700	5.0	N	N	15	1,500	1.5
82RK403C	35 46 21	116 38 39	5.00	1.50	3.00	.700	300	2.0	N	N	30	1,000	1.0
82RK404A	35 47 0	116 38 7	1.00	.20	.50	.070	200	<.5	N	N	N	300	1.0
82RK405A	35 47 36	116 38 58	5.00	1.50	3.00	.500	300	<.5	N	N	30	1,000	1.0
82RK405B	35 47 36	116 38 58	7.00	2.00	5.00	1.000	500	N	N	N	30	1,000	1.0
82RK407A	35 45 31	116 38 28	1.50	.30	.30	.150	500	N	N	N	10	300	<1.0
82RK408A	35 45 23	116 36 27	.50	.20	.70	.100	300	N	N	N	<10	300	2.0
82RK409A	35 43 50	116 35 45	.70	.10	.30	.070	200	N	N	N	N	500	<1.0
82RK411B	35 41 21	116 40 6	3.00	.70	1.50	1.000	500	N	N	N	10	700	1.5
82RK413A	35 43 40	116 38 0	1.00	.10	.30	.100	200	N	N	N	N	500	1.0
82RK414A	35 44 43	116 39 55	5.00	2.00	3.00	.700	700	N	N	N	20	1,000	1.0
82RK415A	35 47 24	116 54 50	3.00	1.50	3.00	.700	500	N	N	N	15	200	1.0
82RK416A	35 47 42	116 53 36	15.00	3.00	5.00	>1.000	1,000	N	N	N	10	200	<1.0
82RK420A	35 47 16	116 46 27	5.00	1.50	2.00	.500	500	N	N	N	30	1,000	1.0
82RK421A	35 45 56	116 47 14	5.00	1.50	3.00	.500	500	N	N	N	30	1,000	1.0
82RK422A	35 44 44	116 47 47	5.00	1.50	3.00	.700	500	N	N	N	30	1,000	1.0
82RK423A	35 45 23	116 47 6	1.50	.20	.30	.100	500	N	N	N	10	200	1.5
82RK426A	35 45 28	116 44 57	5.00	1.50	5.00	.500	300	N	N	N	30	1,000	1.0
82RK427A	35 44 30	116 44 30	5.00	2.00	5.00	.700	500	N	N	N	50	1,000	1.0
82RK428A	35 43 43	116 46 1	7.00	1.50	5.00	.700	700	N	N	N	30	1,000	1.0

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82RK067A	N	N	20	100	50	150	N	N	100	30	N	--	N
82RK067B	N	N	10	30	30	150	N	N	20	50	N	--	N
82RK068A	N	N	N	<10	<5	N	N	<20	N	100	N	--	N
82RK068B	N	N	N	10	<5	N	N	<20	N	100	N	--	N
82RK069D	N	N	5	N	20	N	20	N	20	10	N	--	30
82RK069E	N	N	20	150	30	50	N	N	100	20	N	--	N
82RK070A	N	N	10	10	7	100	N	<20	7	70	N	--	N
82RK073A	N	N	15	50	50	70	N	N	30	30	N	--	N
82RK077A	N	N	20	10	30	150	N	N	10	50	N	--	N
82RK080A	N	N	20	10	20	200	N	<20	20	50	N	--	N
82RK080B	N	N	50	200	150	70	N	N	200	20	N	--	N
82RK081A	N	N	30	70	70	150	N	N	70	50	N	--	N
82RK082A	N	N	20	20	20	150	5	N	20	50	N	--	N
82RK082D	N	N	5	N	20	50	N	N	5	30	N	--	N
82RK089C	N	N	N	N	N	N	N	N	N	20	N	--	N
82RK093A	N	N	20	100	50	100	N	N	70	20	N	--	N
82RK093D	N	N	N	<10	<5	50	N	N	5	30	N	--	N
82RK094A	N	N	20	150	30	70	N	N	150	20	N	--	N
82RK094B	N	N	N	N	N	20	N	N	N	50	N	--	N
82RK096C	N	N	10	20	70	N	N	N	20	N	N	--	N
82RK099A	N	N	N	N	N	N	N	N	N	15	N	--	N
82RK104A	N	N	5	10	30	70	N	N	10	20	N	--	N
82RK105C	N	N	5	N	10	50	N	N	7	20	N	--	N
82RK109A	N	N	15	70	20	50	N	N	50	30	N	--	N
82RK401A	N	N	50	200	50	N	N	N	100	N	N	--	N
82RK403A	N	N	50	50	70	150	N	N	50	150	N	--	N
82RK403C	N	N	15	<10	20	100	N	N	N	70	N	--	N
82RK404A	N	N	N	N	N	N	N	N	N	10	N	--	N
82RK405A	N	N	20	10	15	70	N	N	15	50	N	--	N
82RK405B	N	N	30	50	30	100	N	N	30	20	N	--	N
82RK407A	N	N	N	N	N	N	N	N	N	N	N	--	N
82RK408A	N	N	N	N	N	50	N	N	N	15	N	--	N
82RK409A	N	N	N	N	N	20	N	N	N	10	N	--	N
82RK411B	N	N	10	<10	<5	100	<5	<20	N	10	N	--	N
82RK413A	N	N	N	N	N	N	N	N	N	10	N	--	N
82RK414A	N	N	20	30	30	50	N	N	50	10	N	--	N
82RK415A	N	N	50	50	30	20	N	N	50	10	N	--	N
82RK416A	N	N	70	70	50	50	N	N	70	N	N	--	N
82RK420A	N	N	30	30	20	70	N	N	20	20	N	--	N
82RK421A	N	N	20	50	15	70	N	N	30	20	N	--	N
82RK422A	N	N	20	50	20	100	N	N	30	20	N	--	N
82RK423A	N	N	N	N	N	50	N	<20	N	20	N	--	N
82RK426A	N	N	20	50	7	70	N	N	20	50	N	--	N
82RK427A	N	N	30	150	30	100	N	N	100	50	N	--	N
82RK428A	N	N	30	20	20	70	N	N	15	20	N	--	N

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	As-ppm aa	Zn-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	W-ppm cm
82RK067A	1,500	150	N	30	N	300	N	--	--	N	50	.10	N	<2	--
82RK067B	1,000	70	N	20	N	300	N	--	--	N	25	<.10	N	<2	--
82RK068A	100	<10	N	20	N	50	N	N	--	N	20	<.10	N	<2	--
82RK068B	100	10	N	20	N	70	N	N	--	N	20	.10	N	<2	--
82RK069D	N	10	N	N	N	10	N	.05	.04	--	--	--	--	--	<1
82RK069E	700	50	N	20	N	200	N	N	.04	--	--	--	--	--	1
82RK070A	500	50	N	20	N	150	N	N	<.02	N	25	N	N	N	--
82RK073A	700	70	N	20	N	200	N	N	.02	N	60	N	N	N	--
82RK077A	1,000	100	N	30	N	500	N	N	N	N	30	<.10	N	N	--
82RK080A	500	100	N	30	N	500	N	--	--	N	50	<.10	N	N	--
82RK080B	700	100	N	20	N	300	N	--	--	N	5	N	N	N	--
82RK081A	100	150	N	20	N	300	N	N	.04	N	65	<.10	N	N	--
82RK082A	1,000	100	N	30	N	500	N	--	--	N	35	N	N	N	--
82RK082D	700	50	N	20	N	300	N	N	<.02	--	--	--	--	--	<1
82RK089C	200	<10	N	10	N	70	N	--	--	N	30	<.10	N	N	--
82RK093A	1,000	150	N	20	N	300	N	--	--	N	50	<.10	N	N	--
82RK093D	100	<10	N	15	N	100	N	--	--	N	35	N	N	N	--
82RK094A	1,000	100	N	20	N	200	N	--	--	N	60	.10	N	N	--
82RK094B	300	<10	N	10	N	70	N	--	--	N	20	<.10	N	<2	--
82RK096C	N	50	N	50	N	300	N	--	--	N	75	<.10	N	<2	--
82RK099A	100	N	N	10	N	10	N	N	<.02	--	--	--	--	--	<1
82RK104A	1,000	30	N	15	N	300	N	N	.02	--	--	--	--	--	<1
82RK105C	500	20	N	15	N	100	N	N	.04	--	--	--	--	--	<1
82RK109A	1,000	70	N	10	N	200	N	--	--	N	5	<.10	N	<2	--
82RK401A	300	50	N	10	N	30	N	<.05	.04	--	--	--	--	--	1
82RK403A	1,500	150	N	20	N	200	N	N	N	N	55	<.10	N	N	--
82RK403C	700	100	N	20	N	300	N	N	.02	N	25	<.10	N	N	--
82RK404A	100	<10	N	50	N	150	N	N	.02	N	20	<.10	N	N	--
82RK405A	700	100	N	15	N	200	N	N	<.02	N	30	.10	N	<2	--
82RK405B	1,000	150	N	20	N	300	N	N	<.02	N	35	.10	N	<2	--
82RK407A	100	<10	N	10	N	70	N	N	<.02	N	25	<.10	N	<2	--
82RK408A	100	<10	N	20	N	50	N	N	<.02	--	--	--	--	--	<1
82RK409A	100	<10	N	10	N	100	N	N	N	N	15	<.10	N	<2	--
82RK411B	200	50	N	70	N	500	N	N	<.02	N	50	.10	N	N	--
82RK413A	150	<10	N	15	N	100	N	N	<.02	N	15	<.10	N	N	--
82RK414A	700	100	N	20	N	150	N	N	.04	N	30	.10	N	N	--
82RK415A	500	70	N	20	N	100	N	N	<.02	--	--	--	--	--	<1
82RK416A	500	200	N	30	N	200	N	N	<.02	N	70	<.10	N	<2	--
82RK420A	500	100	N	20	N	150	N	N	.02	N	30	<.10	N	<2	--
82RK421A	700	100	N	20	N	200	N	.05	<.02	N	20	<.10	N	<2	--
82RK422A	700	100	N	20	N	200	N	N	<.02	N	25	.10	N	<2	--
82RK423A	100	<10	N	30	N	70	N	N	<.02	N	15	<.10	N	<2	--
82RK426A	700	100	N	20	N	200	N	N	<.02	N	20	<.10	N	<2	--
82RK427A	1,000	150	N	20	N	300	N	N	<.02	N	10	<.10	N	<2	--
82RK428A	700	150	N	30	N	300	N	N	<.02	N	45	.10	N	<2	--

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82RK429A	35 41 54	116 46 39	5.00	2.00	7.00	1.000	700	N	N	N	50	500	<1.0
82RK430A	35 42 15	116 48 39	10.00	1.50	3.00	.500	500	N	N	N	50	1,000	1.5
82RK432A	35 40 2	116 46 43	.70	.02	.07	.300	20	N	N	N	20	700	N
82RK434A	35 40 9	116 53 6	7.00	.50	5.00	.500	1,000	N	N	N	20	1,500	1.5
82RK436A	35 40 19	116 43 39	.70	.02	.15	.070	70	N	N	N	10	100	1.5
82RK436B	35 40 19	116 43 39	1.00	.07	.20	.100	50	N	N	N	10	200	1.0
82RK437A	35 42 37	116 53 14	.20	.02	.07	.050	10	<.5	N	N	<10	50	1.5
82RK437C	35 42 37	116 53 14	10.00	3.00	5.00	>1.000	1,500	N	N	N	10	1,500	1.0
82RK440A	35 40 11	116 47 51	3.00	.50	2.00	.500	700	N	N	N	10	1,000	1.0
82RK441A	35 40 6	116 43 31	5.00	1.00	2.00	1.000	500	N	N	N	20	1,000	<1.0
82RK442A	35 39 51	116 39 51	>20.00	<.02	5.00	<.002	1,500	N	1,500	N	700	>5,000	100.0
82RK443A	35 40 14	116 40 25	>20.00	.20	.05	.010	3,000	N	700	N	300	200	70.0
82RK444A	35 40 14	116 40 21	5.00	1.00	2.00	1.000	300	N	N	N	<10	1,000	1.5
82RK445A	35 40 21	116 40 21	.30	.03	.10	.020	50	N	N	N	10	<20	1.0
82RK445B	35 40 21	116 40 21	5.00	.70	2.00	1.000	500	N	N	N	10	700	1.5
82RK446A	35 47 37	116 51 10	.50	.30	.70	.150	150	N	N	N	<10	200	2.0
82RK446B	35 47 37	116 51 11	.30	.10	.50	.300	200	N	N	N	<10	50	3.0
82RK450D	35 46 14	116 51 49	15.00	3.00	5.00	>1.000	1,500	N	N	N	10	1,000	1.0
82RK451A	35 45 14	116 52 41	1.50	.20	.30	.200	300	N	N	N	10	700	2.0
82RK451B	35 45 14	116 52 41	5.00	1.00	2.00	1.000	700	N	N	N	15	1,500	1.5
82RK451C	35 45 14	116 52 41	15.00	1.50	3.00	>1.000	1,000	N	N	N	20	700	1.0
82RK451D	35 45 14	116 52 41	15.00	3.00	5.00	>1.000	3,000	N	N	N	30	1,000	<1.0
82RK451E	35 45 14	116 52 41	10.00	3.00	5.00	1.000	1,500	N	N	N	10	5,000	1.0
82RK451F	35 45 14	116 52 41	.70	.10	1.00	.050	100	N	N	N	10	100	1.5
82RK452A	35 43 46	116 52 50	1.50	.03	.20	.150	10	N	N	N	10	100	<1.0
82RK452B	35 43 46	116 52 50	7.00	1.50	2.00	1.000	700	N	N	N	10	1,500	1.0
82RK455C	35 44 56	116 54 3	15.00	5.00	7.00	>1.000	1,000	N	N	N	30	500	<1.0
82RK457B	35 43 55	116 51 59	10.00	3.00	5.00	>1.000	1,000	N	N	N	20	1,000	1.0
82RK458A	35 43 14	116 53 7	.50	.10	.30	.500	10	N	N	N	<10	50	<1.0
82RK459B	35 42 34	116 52 54	1.00	.70	.70	.200	200	N	N	N	30	1,000	1.0
82RK462A	35 43 15	116 52 35	2.00	.30	15.00	.010	>5,000	70.0	N	N	N	50	<1.0
82RK462B	35 43 15	116 52 34	1.50	<.02	5.00	.010	5,000	50.0	N	N	30	150	1.0
82RK462C	35 43 14	116 52 34	1.50	.02	7.00	.007	>5,000	50.0	N	N	100	70	1.0
82RK462D	35 43 14	116 52 35	.50	.10	.10	.200	70	<.5	N	N	10	300	1.0
82RK463A	35 38 0	116 51 30	3.00	1.00	2.00	.500	700	N	N	N	50	700	1.0
82RK463B	35 38 0	116 51 31	.30	.02	<.05	.050	30	2.0	N	N	10	500	<1.0
82RK463C	35 38 1	116 51 31	5.00	.05	<.05	.070	50	15.0	<200	10	20	100	1.0
82RK464A	35 39 1	116 39 47	.50	.05	<.05	.002	>5,000	N	2,000	N	<10	>5,000	50.0
82RK464B	35 39 2	116 39 47	20.00	.10	.07	.050	2,000	N	5,000	N	500	5,000	20.0
82RK464C	35 39 1	116 39 48	10.00	.15	1.00	.070	1,000	N	1,500	N	150	3,000	15.0
82RK474A	35 42 56	116 34 32	1.50	.05	.30	.050	700	N	N	N	15	50	1.5
82RK474B	35 42 56	116 34 32	10.00	.02	.10	.050	500	N	N	N	50	70	1.0
82RK474C	35 42 56	116 34 32	10.00	.05	.70	.030	200	N	N	N	50	70	<1.0
82RK476B	35 42 16	116 37 37	7.00	1.50	3.00	1.000	1,500	N	N	N	10	2,000	1.0
82RK477A	35 41 3	116 35 48	2.00	.30	.70	.300	500	N	N	N	10	700	2.0

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82RK429A	N	N	70	150	30	50	N	N	70	10	N	--	N
82RK430A	N	N	15	15	10	70	5	N	15	50	N	--	N
82RK432A	N	N	N	<10	N	50	10	N	N	10	N	--	N
82RK434A	N	N	30	30	20	100	N	N	20	30	N	--	N
82RK436A	N	N	N	N	N	20	N	<20	N	20	N	--	N
82RK436B	N	N	N	N	N	N	N	N	N	20	N	--	N
82RK437A	N	N	N	N	N	30	N	N	N	20	N	--	N
82RK437C	N	N	50	30	30	70	N	N	15	20	N	--	N
82RK440A	N	N	10	10	20	70	N	N	10	20	N	--	N
82RK441A	N	N	50	100	20	70	N	N	50	20	N	--	N
82RK442A	N	N	N	N	10	N	100	N	5	150	500	--	N
82RK443A	N	N	N	10	5	N	50	N	5	300	700	--	N
82RK444A	N	N	10	N	7	70	N	N	N	10	N	--	N
82RK445A	N	N	N	N	<5	30	N	N	N	20	N	--	N
82RK445B	N	N	15	<10	5	30	N	N	N	N	N	--	N
82RK446A	N	N	N	N	N	50	N	N	N	10	N	--	N
82RK446B	N	N	N	N	N	N	N	N	N	20	N	--	N
82RK450D	N	N	70	70	50	50	N	N	30	N	N	--	N
82RK451A	N	N	N	<10	N	100	N	<20	N	70	N	--	N
82RK451B	N	N	15	15	N	100	N	<20	10	20	N	--	N
82RK451C	N	N	20	10	15	150	N	<20	N	20	N	--	N
82RK451D	N	N	20	<10	N	50	N	N	5	20	N	--	N
82RK451E	N	N	50	30	100	100	N	N	30	20	N	--	N
82RK451F	N	N	N	<10	N	20	N	N	N	50	N	--	N
82RK452A	N	N	N	N	N	20	N	N	N	20	N	--	N
82RK452B	N	N	20	20	30	150	N	N	10	50	N	--	N
82RK455C	N	N	70	300	150	50	N	N	70	N	N	--	N
82RK457B	N	N	50	100	50	50	N	N	20	10	N	--	N
82RK458A	N	N	N	N	N	N	10	N	N	10	N	--	N
82RK459B	N	N	N	<10	N	50	N	N	N	15	N	--	N
82RK462A	N	>500	N	N	5,000	N	7	N	5	>20,000	700	--	10
82RK462B	N	>500	N	N	5,000	N	N	N	N	>20,000	N	--	N
82RK462C	N	>500	N	N	20,000	N	5	N	5	>20,000	N	--	10
82RK462D	N	N	N	N	20	50	5	N	N	100	N	--	N
82RK463A	N	N	15	<10	50	30	N	N	<5	30	N	--	N
82RK463B	N	N	N	N	1,000	N	N	N	N	500	N	--	N
82RK463C	N	N	5	N	5,000	N	<5	N	5	15	N	--	N
82RK464A	N	N	N	N	200	50	200	N	5	2,000	2,000	--	150
82RK464B	N	N	N	N	20	20	10	N	5	150	1,000	--	N
82RK464C	N	N	N	N	30	20	10	N	N	100	500	--	N
82RK474A	N	N	N	<10	N	70	N	N	N	50	N	--	N
82RK474B	N	N	N	10	5	20	5	N	5	100	N	--	N
82RK474C	N	N	N	N	20	20	N	N	N	150	N	--	N
82RK476B	N	N	10	10	7	150	N	<20	5	50	N	--	N
82RK477A	N	N	N	10	N	100	N	20	5	50	N	--	N

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	As-ppm aa	Zn-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	W-ppm cm
82RK429A	500	200	N	20	N	150	N	N	<.02	N	55	<.10	N	<2	--
82RK430A	500	70	N	30	N	500	N	N	<.02	N	30	.10	N	<2	--
82RK432A	700	70	N	N	N	150	N	N	.06	--	--	--	--	--	--
82RK434A	500	100	N	20	N	200	N	N	.04	30	60	<.10	N	10	--
82RK436A	N	<10	N	30	N	20	N	N	<.02	<10	20	N	N	<2	--
82RK436B	100	<10	N	15	N	70	N	N	<.02	<10	15	N	N	2	--
B2RK437A	N	N	N	10	N	100	N	N	<.02	--	--	--	--	--	<1
82RK437C	700	200	N	30	N	500	N	N	<.02	N	65	.10	N	<2	--
82RK440A	500	20	N	20	N	200	N	N	.06	--	--	--	--	--	1
82RK441A	700	100	N	15	N	200	N	N	.02	N	80	<.10	N	<2	--
82RK442A	200	N	50	30	1,000	N	N	N	1.00	--	--	--	--	--	690
82RK443A	100	10	<50	15	5,000	N	N	N	1.40	--	--	--	--	--	16
82RK444A	200	50	N	50	N	500	N	N	<.02	N	70	<.10	N	N	--
82RK445A	N	N	N	10	N	20	N	<.05	<.02	--	--	--	--	--	2
82RK445B	200	30	N	50	N	500	N	N	<.02	N	80	.10	N	N	--
82RK446A	100	<10	N	20	N	20	N	N	<.02	--	--	--	--	--	1
82RK446B	N	N	N	15	N	N	N	N	<.02	--	--	--	--	--	1
82RK450D	500	300	N	50	N	300	N	--	--	N	50	<.10	N	<2	--
82RK451A	N	15	N	30	N	200	N	--	--	N	30	<.10	N	<2	--
82RK451B	500	70	N	20	N	300	N	--	--	<10	50	<.10	N	<2	--
82RK451C	300	100	N	70	N	1,000	N	--	--	N	95	.10	N	<2	--
82RK451D	200	200	N	50	200	150	N	N	.02	20	120	.10	N	<2	--
82RK451E	700	150	N	30	N	300	N	--	--	N	80	.10	N	<2	--
82RK451F	N	<10	N	20	N	200	N	--	--	N	10	<.10	N	N	--
82RK452A	N	<10	N	20	N	300	N	N	.04	N	5	<.10	N	<2	--
82RK452B	700	70	N	30	N	500	N	N	.04	N	60	.20	N	<2	--
82RK455C	500	200	N	30	N	200	N	--	--	<10	20	.10	N	<2	--
82RK457B	200	200	N	70	N	500	N	N	.02	N	30	.10	N	<2	--
82RK458A	N	N	N	30	N	100	N	<.05	<.02	--	--	--	--	--	1
82RK459B	200	20	N	20	N	200	N	N	.04	N	20	.20	N	<2	--
82RK462A	500	10	N	N	>10,000	<10	N	.05	>6.00	--	--	--	--	--	1
82RK462B	700	10	N	N	>10,000	N	N	.05	>6.00	--	--	--	--	--	3
82RK462C	150	15	N	N	>10,000	N	N	<.05	>6.00	--	--	--	--	--	1
82RK462D	N	<10	N	50	N	50	N	N	.04	--	--	--	--	--	1
82RK463A	500	100	N	15	N	70	N	N	.02	--	--	--	--	--	1
82RK463B	N	15	N	N	1,500	<10	N	.45	.06	--	--	--	--	--	<1
82RK463C	N	30	<50	N	N	20	N	18.00	.26	--	--	--	--	--	23
82RK464A	>5,000	500	300	20	200	10	N	.15	1.00	--	--	--	--	--	1,100
82RK464B	100	50	200	70	300	10	N	<.05	.30	--	--	--	--	--	1,800
82RK464C	100	50	70	15	<200	30	N	<.05	.48	--	--	--	--	--	830
82RK474A	N	<10	N	30	N	70	N	N	.02	<10	25	N	N	N	--
82RK474B	N	<10	N	N	N	70	N	N	.06	70	55	.10	N	N	--
82RK474C	N	<10	N	10	N	20	N	<.05	<.02	--	--	--	--	--	<1
82RK476B	500	100	N	100	N	1,000	N	N	.02	N	100	N	N	N	--
82RK477A	N	15	N	70	N	300	N	N	<.02	N	30	N	N	N	--

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82RK478A	35 41 3	116 38 26	2.00	.15	.70	.200	300	N	N	N	<10	200	1.0
82RK478B	35 41 3	116 38 26	7.00	.70	2.00	1.000	700	N	N	N	15	1,500	1.5
82RK479A	35 39 59	116 37 8	1.00	.10	.30	.100	100	<.5	N	N	15	200	1.5
82RK479C	35 39 59	116 37 8	20.00	5.00	10.00	>1.000	2,000	N	N	N	20	700	1.0
82RK481A	35 40 3	116 55 10	7.00	1.50	2.00	.500	500	N	N	N	30	2,000	2.0
82RK481B	35 40 3	116 55 10	1.00	.50	.50	.100	200	<.5	N	N	50	1,500	2.0
82RK482A	35 39 1	116 54 34	20.00	7.00	10.00	>1.000	1,500	N	N	N	20	2,000	1.0
82RK484A	35 38 10	116 54 45	1.50	.30	1.50	.150	300	N	N	N	70	2,000	2.0
82RK485A	35 38 29	116 55 21	10.00	3.00	7.00	1.000	2,000	N	N	N	70	1,000	<1.0
82RK485D	35 38 29	116 55 21	2.00	.07	.07	.050	2,000	100.0	N	200	50	100	1.5
82RK485E	35 38 30	116 55 21	2.00	.05	.05	.070	1,000	20.0	N	15	20	1,000	1.5
82RK486A	35 38 2	116 53 13	15.00	1.50	7.00	>1.000	500	N	N	N	20	1,500	<1.0
82RK489A	35 38 13	116 52 32	15.00	3.00	10.00	>1.000	2,000	N	N	N	15	700	1.0
82RK490A	35 38 16	116 52 47	1.00	.07	.20	.100	150	N	N	N	10	2,000	1.0
82RK491A	35 38 34	116 51 37	10.00	2.00	3.00	.700	1,000	N	N	N	70	1,000	<1.0
82RK491B	35 38 34	116 51 37	5.00	.50	2.00	.300	2,000	2.0	N	N	20	200	1.5
82RK494A	35 39 32	116 47 51	7.00	2.00	5.00	1.000	1,000	N	N	N	50	1,000	1.0
82RK496A	35 40 59	116 47 56	7.00	2.00	3.00	1.000	1,000	N	N	N	50	1,500	1.5
82RK500A	35 37 40	116 46 21	2.00	.30	1.00	.300	200	<.5	N	N	70	700	1.5
82RK500C	35 37 40	116 46 21	2.00	1.00	2.00	.300	200	<.5	N	N	100	1,000	2.0
82RK504A	35 40 46	116 42 35	7.00	1.00	3.00	1.000	1,500	N	N	N	15	2,000	1.0
82RK506A	35 41 47	116 53 2	3.00	.07	.20	.070	100	N	N	N	10	20	2.0
82RK506B	35 41 47	116 53 2	7.00	2.00	3.00	1.000	1,000	N	N	N	30	1,000	1.5
82RK509B	35 42 56	116 43 49	7.00	1.00	3.00	1.000	1,500	N	N	N	10	1,000	1.0
82RK511A	35 40 38	116 40 40	1.00	.02	.15	.050	70	N	N	N	10	<20	1.5
82RK515C	35 41 57	116 35 31	20.00	<.02	<.05	.010	1,000	N	1,500	N	500	>5,000	50.0
82RK517A	35 40 52	116 39 33	2.00	.20	.50	.200	700	<.5	N	N	10	200	3.0
82RK517B	35 40 52	116 39 33	10.00	5.00	7.00	>1.000	2,000	N	N	N	10	700	1.0
82RK518B	35 40 1	116 38 29	.70	.05	.30	.070	100	N	N	N	<10	150	1.5
82RK518D	35 40 1	116 38 29	7.00	1.00	3.00	1.000	1,000	N	N	N	15	1,000	1.5
82RK519B	35 38 58	116 38 2	3.00	.20	.50	.200	500	N	N	N	10	150	1.5
82RK520A	35 39 56	116 40 59	2.00	.20	.50	.500	200	N	N	N	<10	700	1.5
82RK521B	35 39 43	116 40 9	>20.00	.02	1.00	<.002	5,000	N	700	N	300	>5,000	100.0
82RK521C	35 39 43	116 40 9	5.00	.15	.70	.300	700	N	N	N	10	200	1.5
82RK526A	35 47 17	116 44 38	5.00	1.50	5.00	1.000	700	N	N	N	20	1,500	1.5
82RK532A	35 46 37	116 43 35	1.00	.30	.50	.150	300	N	N	N	<10	300	1.5
82RK534A	35 47 0	116 51 51	2.00	.20	.50	.200	300	N	N	N	<10	100	1.5
LOSTLAKE	35 45 21	116 49 42	5.00	3.00	3.00	.500	1,500	N	N	N	150	1,000	2.0
NEWDELFE	35 39 0	116 39 47	10.00	.20	.30	.100	1,500	N	2,000	N	70	2,000	15.0
NEWDELMN	35 39 1	116 39 47	1.00	.07	.10	.020	>5,000	N	3,000	30	N	>5,000	20.0
OH10-A1	35 43 50	116 53 13	1.00	.20	.10	.200	20	N	N	N	100	200	2.0
OH10-B1	35 43 43	116 53 15	1.00	.10	.07	.020	20	.5	N	N	50	100	2.0
OH10-C1	35 43 38	116 53 13	5.00	.10	.10	.100	50	<.5	N	N	30	100	2.0
OH10-D1A	35 43 33	116 53 9	1.50	.07	.15	.100	50	N	N	N	20	100	1.5
OH10-D1B	35 43 33	116 53 9	3.00	1.00	.70	.500	1,000	.5	N	N	10	1,000	3.0

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
82RK478A	N	N	N	N	N	20	N	N	N	10	N	--	N
82RK478B	N	N	5	10	N	150	N	<20	N	10	N	--	N
82RK479A	N	N	N	<10	N	20	N	N	N	20	N	--	N
82RK479C	N	N	70	100	70	50	N	N	50	10	N	--	N
82RK481A	N	N	15	10	7	150	N	<20	7	70	N	--	N
82RK481B	N	N	N	<10	<5	50	N	<20	N	100	N	--	N
82RK482A	N	N	30	15	50	50	N	N	10	50	N	--	N
82RK484A	N	N	N	N	5	70	N	N	N	70	N	--	N
82RK485A	N	N	30	30	50	100	N	N	20	10	N	--	N
82RK485D	1,000	N	10	N	20,000	N	5	N	5	100	N	--	N
82RK485E	15	N	7	N	7,000	N	N	N	N	70	N	--	N
82RK486A	N	N	15	150	30	20	N	N	30	20	N	--	N
82RK489A	N	N	30	50	100	100	N	N	15	20	N	--	N
82RK490A	N	N	N	<10	30	50	N	N	5	30	N	--	N
82RK491A	N	N	30	30	100	100	N	N	10	20	N	--	N
82RK491B	N	N	15	N	100	20	10	N	10	20	N	--	N
82RK494A	N	N	30	70	30	70	N	N	30	10	N	--	N
82RK496A	N	N	30	30	50	150	N	N	20	30	N	--	N
82RK500A	N	N	5	10	7	50	N	<20	5	10	N	--	N
82RK500C	N	N	5	10	10	30	N	N	5	50	N	--	N
82RK504A	N	N	15	<10	15	100	N	<20	5	30	N	--	N
82RK506A	N	N	N	<10	<5	N	N	<20	N	30	N	--	N
82RK506B	N	N	20	15	50	100	N	<20	30	30	N	--	N
82RK509B	N	N	10	<10	7	100	N	<20	N	20	N	--	N
82RK511A	N	N	N	N	<5	N	N	N	N	50	N	--	N
82RK515C	N	N	N	N	10	100	200	N	5	150	N	--	N
82RK517A	N	N	N	<10	N	100	N	<20	N	30	N	--	N
82RK517B	N	N	70	50	50	100	<5	N	30	10	N	--	N
82RK518B	N	N	N	N	N	N	N	N	N	30	N	--	N
82RK518D	N	N	15	10	7	150	N	N	5	15	N	--	N
82RK519B	N	N	N	<10	N	200	N	<20	N	50	N	--	N
82RK520A	N	N	N	<10	N	100	N	N	N	10	N	--	N
82RK521B	N	N	N	N	100	N	50	N	5	500	500	--	N
82RK521C	N	N	N	<10	N	500	N	<20	N	70	N	--	N
82RK526A	N	N	30	50	30	70	N	N	30	30	N	--	N
82RK532A	N	N	N	N	N	30	N	N	N	N	N	--	N
82RK534A	N	N	N	N	N	200	N	N	N	N	N	--	N
LOSTLAKE	N	N	20	70	50	50	N	<20	50	70	N	15	N
NEWDELFE	N	N	N	<10	50	20	50	<20	<5	300	N	5	N
NEWDELMN	N	N	<5	150	200	100	300	N	10	700	N	N	N
OH10-A1	N	N	N	N	7	50	<5	<20	5	N	N	<5	N
OH10-B1	N	N	N	N	70	<20	5	N	5	50	N	10	N
OH10-C1	N	N	N	N	5	50	<5	<20	5	10	N	5	N
OH10-D1A	N	N	N	N	<5	100	N	N	5	10	N	<5	N
OH10-D1B	N	N	15	<10	20	50	N	<20	20	30	N	5	N

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	As-ppm aa	Zn-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	W-ppm cm
82RK478A	N	<10	N	10	N	200	N	N	<.02	N	20	N	N	N	--
82RK478B	200	50	N	70	N	500	N	N	.06	N	45	<.10	N	N	--
82RK479A	N	15	N	10	N	100	N	N	<.02	N	15	N	N	N	--
82RK479C	500	300	N	50	N	150	N	N	<.02	N	60	N	N	N	--
82RK481A	700	100	N	20	N	200	N	N	.04	N	70	<.10	N	N	--
82RK481B	200	10	N	10	N	100	N	N	.02	N	20	<.10	N	N	--
82RK482A	1,000	500	N	20	N	500	N	N	.02	N	60	<.10	N	N	--
82RK484A	700	20	N	10	N	100	N	N	.04	N	20	N	N	N	--
82RK485A	500	200	N	50	N	50	N	N	.04	N	40	N	N	N	--
82RK485D	N	200	<50	10	N	10	N	280.00	>6.00	--	--	--	--	--	<1
82RK485E	N	200	<50	N	N	10	N	28.00	2.40	--	--	--	--	--	6
82RK486A	1,500	100	N	15	N	500	N	N	<.02	N	35	N	N	N	--
82RK489A	500	200	N	70	N	200	N	N	.08	N	65	.10	N	N	--
82RK490A	100	10	N	10	N	100	N	N	.04	90	10	<.10	N	26	--
82RK491A	300	200	N	30	N	100	N	N	.02	N	50	<.10	N	N	--
82RK491B	100	150	N	20	N	200	N	3.40	.48	--	--	--	--	--	1
82RK494A	1,000	200	N	20	N	500	N	--	--	N	25	N	N	N	--
82RK496A	1,000	150	N	30	N	300	N	--	--	N	40	<.10	N	N	--
82RK500A	300	50	N	20	N	150	N	--	--	N	30	N	N	N	--
82RK500C	1,000	50	N	15	N	150	N	--	--	N	25	N	N	N	--
82RK504A	700	70	N	20	N	500	N	--	--	N	50	.10	N	N	--
82RK506A	N	<10	N	50	N	300	N	--	--	N	25	<.10	N	N	--
82RK506B	700	150	N	20	N	200	N	--	--	<10	65	.10	N	N	--
82RK509B	100	70	N	50	N	500	N	--	--	N	60	<.10	N	N	--
82RK511A	N	<10	N	50	N	150	N	--	--	N	10	N	N	N	--
82RK515C	150	70	N	50	1,000	N	N	<.05	.42	--	--	--	--	--	6
82RK517A	N	10	N	50	N	200	N	--	--	<10	45	N	N	<2	--
82RK517B	500	300	N	70	N	500	N	--	--	N	55	<.10	N	4	--
82RK518B	N	<10	N	15	N	70	N	--	--	N	10	<.10	N	<2	--
82RK518D	300	70	N	70	N	500	N	--	--	N	65	<.10	N	N	--
82RK519B	N	<10	N	50	200	700	N	--	--	10	180	N	N	N	--
82RK520A	100	<10	N	30	N	500	N	--	--	<10	50	N	N	N	--
82RK521B	300	10	<50	15	1,000	N	N	<.05	.48	--	--	--	--	--	13
82RK521C	N	N	N	70	N	700	N	--	--	20	90	N	N	N	--
82RK526A	1,000	150	N	20	N	300	N	--	--	N	35	.20	N	<2	--
82RK532A	100	<10	N	15	N	100	N	--	--	N	15	<.10	N	<2	--
82RK534A	N	<10	N	20	N	300	N	--	--	N	55	.10	N	2	--
LOSTLAKE	500	150	N	30	N	70	N	<.05	.04	--	--	--	--	--	--
NEWDELFE	150	100	N	50	200	200	N	N	.28	--	--	--	--	--	--
NEWDELMN	5,000	500	N	15	200	N	N	5.00	.20	--	--	--	--	--	--
OH10-A1	N	15	N	20	N	100	N	.05	.22	N	5	N	N	N	--
OH10-B1	N	20	N	20	N	200	N	<.10	.12	15	10	N	N	N	--
OH10-C1	N	10	N	50	N	200	N	<.05	1.20	5	10	N	N	N	--
OH10-D1A	N	10	N	30	N	100	N	N	.04	<5	20	N	N	N	--
OH10-D1B	300	70	N	10	N	150	N	N	.04	5	85	N	N	N	--

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OH10-E1A	35 43 32	116 53 13	2.00	.20	.10	.200	50	N	N	N	150	100	2.0
OH10-E1B	35 43 32	116 53 13	1.00	.10	.10	.150	30	.5	N	N	100	150	1.5
OH10-F1	35 43 28	116 53 16	3.00	.10	<.05	.100	20	N	N	N	100	100	1.0
OH10-G1	35 43 0	116 53 16	1.00	.07	.15	.300	20	.7	N	N	30	1,000	2.0
OH10-H1	35 43 0	116 53 18	2.00	.70	1.00	.300	1,000	N	N	N	20	1,000	2.0
OH10-I1	35 43 0	116 53 23	3.00	1.00	1.00	.500	700	N	N	N	10	1,500	2.0
OH10-J1	35 43 0	116 53 26	5.00	2.00	.70	.500	1,000	.5	N	N	<10	2,000	2.0
OH10-K1	35 43 0	116 53 32	5.00	1.00	1.00	.500	1,000	N	N	N	10	1,000	2.0
OH10-L1	35 43 0	116 53 42	3.00	.70	.50	.300	700	N	N	N	10	1,000	2.0
OH10-M1	35 43 0	116 53 48	5.00	1.50	.50	.500	500	N	N	N	10	1,000	3.0
OH2-1A	35 39 53	116 43 30	15.00	1.50	>20.00	.070	5,000	3.0	N	N	50	100	5.0
OH2-1B	35 39 53	116 43 30	2.00	.10	.30	.300	200	1.5	N	N	30	150	2.0
OH2-1C	35 39 53	116 43 30	1.00	.10	10.00	.150	5,000	1.5	N	N	<10	300	2.0
OH3-1A	35 40 9	116 40 35	>20.00	1.00	15.00	.070	>5,000	N	700	N	200	1,500	50.0
OH3-1B	35 40 9	116 40 35	>20.00	.20	.50	.015	1,000	N	1,500	N	300	300	150.0
OH6-1A	35 41 5	115 30 9	2.00	.20	.30	.200	100	N	N	N	70	300	3.0
OH6-1B	35 41 5	115 30 9	1.00	.15	.20	.200	70	N	N	N	30	100	3.0
OH7-1A	35 40 7	116 47 8	7.00	.50	2.00	>1.000	70	.5	N	N	150	300	<1.0
OH7-1B	35 40 7	116 47 8	.30	<.02	.20	1.000	N	N	N	N	70	700	<1.0
OH7-1D	35 40 7	116 47 8	10.00	.05	.30	>1.000	20	N	N	N	50	50	1.0
OH8-11A1	35 43 3	116 52 46	1.00	.20	.30	.200	300	.5	N	N	70	700	3.0
OH8-11B1	35 42 58	116 52 47	1.50	.50	.20	.200	2,000	<.5	N	N	50	1,000	3.0
OH8-11C1	35 42 54	116 52 46	2.00	.50	.70	.300	1,000	N	N	N	30	1,000	1.5
OH8-11D1	35 42 52	116 52 49	3.00	1.00	1.00	.500	1,000	N	N	N	<10	1,000	2.0
OH8-11E1	35 42 52	116 52 53	7.00	2.00	2.00	.500	1,000	N	N	N	20	1,500	5.0
OH8-11F1	35 42 56	116 52 56	.70	.20	.20	.070	100	<.5	N	N	30	500	3.0
OH8-11G1	35 42 55	116 53 2	10.00	.20	.20	.300	100	1.5	N	N	70	500	2.0
OH8-11H1	35 42 48	116 53 7	1.00	.10	.07	.200	20	<.5	N	N	20	200	2.0
OH8-11I1	35 42 42	116 52 58	2.00	.70	1.00	.300	1,000	N	N	N	20	1,000	3.0
OH8-11J1	35 42 36	116 52 54	7.00	1.50	2.00	1.000	1,500	N	N	N	10	1,500	3.0
OH8-1B	35 43 18	116 53 10	>20.00	.20	1.50	.070	150	<.5	N	N	100	200	5.0
OH8-2A	35 43 22	116 53 10	5.00	.03	.10	.500	20	N	N	N	30	1,000	<1.0
OH8-2B	35 43 22	116 53 10	10.00	.10	.05	.700	20	N	N	N	70	1,000	1.5
OH8-3A	35 43 22	116 53 10	.50	.10	.05	.050	10	3.0	N	N	15	300	1.5
OH8-4A	35 43 22	116 53 10	15.00	.50	>20.00	.100	>5,000	2.0	N	N	30	5,000	1.5
OH8-50	35 43 35	116 52 30	1.50	<.02	3.00	.010	1,500	70.0	<700	<15	<10	150	<1.0
OH8-53	35 43 40	116 54 30	7.00	.30	.20	.200	300	1.5	<700	<15	10	700	3.0
OH9-1A	35 43 54	116 54 10	2.00	.30	.30	1.000	50	N	N	N	70	700	1.5
OH9-2A	35 44 1	116 54 14	7.00	1.50	1.50	1.000	500	N	N	N	30	1,500	1.5
OH9-3A	35 44 7	116 54 26	7.00	.50	.07	.300	50	N	N	N	1,000	700	3.0
OM009	35 44 51	116 54 8	5.00	.30	>20.00	.015	3,000	N	N	N	N	300	<1.0
OM010	35 43 46	116 54 30	2.00	<.02	.20	.300	150	N	N	N	<10	1,000	<1.0
OM017	35 43 5	116 51 56	10.00	.10	.30	.070	150	2.0	N	N	<10	200	1.0
OM018	35 44 15	116 51 34	.30	.30	.20	.150	15	.5	N	N	15	700	1.5
OM055A	35 44 10	116 52 2	.30	.15	.70	.150	1,000	.5	N	N	15	700	1.0

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OH10-E1A	N	N	N	<10	15	N	20	N	5	N	N	5	N
OH10-E1B	N	N	N	N	20	N	20	N	5	15	N	N	N
OH10-F1	N	N	N	N	10	70	7	N	5	<10	N	N	N
OH10-G1	N	N	N	50	5	50	N	N	15	20	N	5	N
OH10-H1	N	N	7	30	10	70	N	N	50	20	N	5	N
OH10-I1	N	N	10	20	15	70	N	N	20	20	N	7	N
OH10-J1	N	N	30	150	50	70	N	<20	200	20	N	10	N
OH10-K1	N	N	15	<10	15	<20	N	N	20	10	N	7	N
OH10-L1	N	N	15	10	20	50	N	N	20	30	N	7	N
OH10-M1	N	N	10	100	200	100	N	N	100	30	N	10	N
OH2-1A	N	N	10	20	50	20	5	N	10	50	N	--	N
OH2-1B	N	N	N	<10	7	300	N	<20	N	30	N	--	N
OH2-1C	N	N	N	<10	<5	200	N	N	N	50	N	--	N
OH3-1A	N	N	N	20	10	50	70	N	15	7,000	100	--	N
OH3-1B	N	N	N	15	5	70	150	N	5	1,500	500	--	N
OH6-1A	N	N	5	<10	N	50	N	<20	N	30	N	--	N
OH6-1B	N	N	5	<10	N	150	N	N	N	N	N	--	N
OH7-1A	N	N	5	10	15	50	N	<20	5	N	N	--	N
OH7-1B	N	N	N	10	N	50	N	N	N	10	N	--	N
OH7-1D	N	N	15	15	15	20	N	<20	30	N	N	--	N
OH8-11A1	N	N	N	N	5	<20	N	N	5	15	N	N	N
OH8-11B1	N	N	5	10	30	<20	N	N	7	100	N	<5	N
OH8-11C1	N	N	5	N	70	<20	N	N	5	500	N	N	N
OH8-11D1	N	N	10	10	70	70	N	N	20	50	N	7	N
OH8-11E1	N	N	20	15	70	70	N	20	20	30	N	15	N
OH8-11F1	N	N	N	N	<5	<20	N	N	5	15	N	N	N
OH8-11G1	N	N	N	10	50	100	30	N	5	30	N	7	N
OH8-11H1	N	N	N	N	<5	N	N	<20	5	15	N	7	N
OH8-11I1	N	N	7	10	10	70	N	N	10	20	N	<5	N
OH8-11J1	N	N	20	10	20	50	N	N	10	20	N	30	N
OH8-1B	N	N	10	20	150	20	70	N	20	100	N	--	N
OH8-2A	N	N	N	<10	<5	100	15	<20	N	30	N	--	N
OH8-2B	N	N	N	<10	7	150	N	<20	N	50	N	--	N
OH8-3A	N	N	N	N	N	20	N	N	N	15	N	--	N
OH8-4A	N	N	15	<10	5	50	N	N	50	2,000	N	--	N
OH8-50	<10	70	<5	<10	1,500	<30	<5	<20	<5	>20,000	<100	<5	<10
OH8-53	<10	<30	15	20	70	70	7	<20	20	2,000	<100	7	<10
OH9-1A	N	N	N	70	20	100	N	N	N	70	N	--	N
OH9-2A	N	N	N	50	20	150	N	N	20	50	N	--	N
OH9-3A	N	N	N	<10	10	30	<5	<20	5	10	N	--	N
OM009	N	N	10	<10	5	<20	20	N	10	30	N	<5	N
OM010	N	N	<5	30	20	20	30	<20	15	70	N	<5	N
OM017	N	N	<5	N	20	30	N	<20	15	30	N	7	N
OM018	N	N	N	N	<5	20	N	N	<5	30	N	<5	N
OM055A	N	N	N	N	5	20	N	N	5	30	N	<5	N

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--Continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	As-ppm aa	Zn-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	W-ppm cm
OH10-E1A	N	20	N	30	N	100	N	N	<.02	10	10	N	N	N	--
OH10-E1B	N	20	N	15	N	100	N	N	.32	10	5	N	N	N	--
OH10-F1	N	20	N	20	N	70	N	N	<.02	10	10	N	N	N	--
OH10-G1	300	30	N	10	N	200	N	N	.02	15	35	N	N	N	--
OH10-H1	500	30	N	10	N	150	N	N	<.02	N	90	.20	N	N	--
OH10-I1	500	70	N	10	200	200	N	N	.02	5	160	N	N	N	--
OH10-J1	500	200	N	15	N	150	N	N	.02	<5	100	N	N	N	--
OH10-K1	500	100	N	15	N	200	N	N	.02	N	95	N	N	N	--
OH10-L1	500	70	N	15	N	200	N	N	.04	N	65	N	N	N	--
OH10-M1	1,000	100	N	20	N	300	N	N	.02	10	100	N	N	N	--
OH2-1A	150	70	70	70	N	100	N	N	.44	10	120	.60	N	N	--
OH2-1B	N	<10	N	50	N	500	N	N	.08	10	35	.20	N	N	--
OH2-1C	200	20	N	50	N	300	N	N	.12	15	15	.50	N	N	--
OH3-1A	500	30	150	30	3,000	30	N	N	.40	750	>2,000	2.10	N	150	--
OH3-1B	N	50	300	100	5,000	N	N	N	.52	2,000	>2,000	1.00	N	460	--
OH6-1A	N	15	N	30	N	100	N	N	.16	10	55	N	N	4	--
OH6-1B	N	10	N	30	N	100	N	N	.84	5	40	N	N	N	--
OH7-1A	300	150	N	20	N	1,000	N	N	.26	<5	10	.10	N	N	--
OH7-1B	1,000	100	N	N	N	200	N	N	.02	10	<5	.10	N	N	--
OH7-1D	N	500	N	15	N	700	N	N	.08	N	<5	.20	N	N	--
OH8-11A1	150	20	N	10	N	100	N	N	.06	5	30	.55	N	N	--
OH8-11B1	150	30	N	15	500	200	N	N	.02	N	250	4.00	N	N	--
OH8-11C1	200	20	N	10	300	100	N	N	<.02	N	120	1.40	N	N	--
OH8-11D1	200	100	N	15	<200	200	N	N	.02	N	65	.10	N	N	--
OH8-11E1	500	200	N	50	N	500	N	N	.02	N	45	N	N	N	--
OH8-11F1	150	15	N	<10	N	50	N	N	.02	<5	25	.20	N	N	--
OH8-11G1	150	70	N	70	<200	300	N	N	.04	30	25	1.20	N	N	--
OH8-11H1	N	10	N	70	N	70	N	N	.02	N	20	.10	N	N	--
OH8-11I1	200	50	N	10	N	200	N	N	<.02	N	40	.05	N	N	--
OH8-11J1	500	300	N	50	<200	300	N	N	.02	N	70	.05	N	N	--
OH8-1B	500	300	N	20	N	30	N	N	.08	50	220	.40	N	N	--
OH8-2A	1,000	50	N	70	N	500	N	N	4.00	70	10	.20	N	N	--
OH8-2B	N	70	N	50	N	500	N	N	.10	<5	5	.20	N	N	--
OH8-3A	100	<10	N	15	N	<10	N	.05	.24	N	5	.20	N	N	--
OH8-4A	N	30	N	100	700	70	N	N	.36	N	>2,000	25.00	N	N	--
OH8-50	2,000	<10	<50	<10	15,000	15	<200	<.10	4.30	<5	13,300	68.70	<2	357	--
OH8-53	700	70	<50	15	700	100	<200	<.10	.12	9	446	1.30	2	17	--
OH9-1A	100	150	N	70	N	500	N	N	.14	<5	10	N	2	N	--
OH9-2A	700	100	N	20	N	300	N	N	.10	10	70	.20	N	N	--
OH9-3A	500	70	N	20	N	300	N	N	.26	N	5	.20	N	N	--
OM009	700	100	N	15	N	N	N	N	.02	--	--	--	--	--	--
OM010	2,000	70	N	<10	N	100	N	N	.02	--	--	--	--	--	--
OM017	<100	200	N	30	N	150	N	N	N	--	--	--	--	--	--
OM018	150	15	N	<10	N	50	N	N	N	--	--	--	--	--	--
OM055A	150	15	N	10	N	70	N	N	.02	--	--	--	--	--	--

TABLE 5. ANALYSES OF ROCK SAMPLES FROM THE OWLSHEAD MOUNTAINS WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA.--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
OM055B	35 44 10	116 52 3	.15	5.00	20.00	.007	5,000	N	N	N	50	200	<1.0
OM056	35 44 34	116 52 10	1.00	10.00	15.00	.100	1,500	N	N	N	300	N	2.0
OM066	35 42 55	116 52 26	.70	.30	.50	.200	300	N	N	N	10	700	1.5
OM067	35 42 54	116 53 1	15.00	.15	.70	.200	500	.5	N	N	10	2,000	7.0
OM073	35 38 1	116 51 20	.30	.07	.10	.070	50	2.0	N	N	15	150	<1.0
OM148	35 40 2	116 38 13	5.00	.30	20.00	.200	5,000	N	N	N	50	200	1.5
OM154	35 42 1	116 35 28	10.00	.03	.30	.030	1,000	N	300	N	100	>5,000	7.0
QUAILSPR	35 38 30	116 51 30	3.00	.15	.10	.150	1,500	N	<200	N	30	300	<1.0
QUAILTRM	35 38 35	116 51 37	3.00	.50	15.00	.150	3,000	150.0	N	100	N	200	1.5

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
OM055B	N	N	N	N	5	<20	N	N	N	20	N	N	N
OM056	N	N	N	N	7	20	N	N	<5	10	N	<5	30
OM066	N	N	<5	<10	5	20	N	<20	15	50	N	<5	N
OM067	N	N	5	N	500	N	50	N	30	2,000	N	5	N
OM073	N	N	N	N	1,500	<20	N	N	7	15	N	<5	N
OM148	N	N	20	10	70	20	10	N	20	50	N	7	N
OM154	N	N	N	<10	20	N	200	N	5	500	N	<5	N
QUAILSPR	N	N	7	<10	20	<20	7	<20	10	30	N	<5	N
QUAILTRM	N	N	5	10	20	<20	15	<20	5	70	N	5	N

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	As-ppm aa	Zn-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	W-ppm cm
OM055B	200	<10	N	N	N	N	N	<.05	.02	--	--	--	--	--	--
OM056	<100	30	N	15	N	300	N	N	.02	--	--	--	--	--	--
OM066	200	20	N	15	N	100	N	N	.02	--	--	--	--	--	--
OM067	150	100	N	30	N	70	N	<.05	.02	--	--	--	--	--	--
OM073	N	30	N	N	N	15	N	.46	.26	--	--	--	--	--	--
OM148	200	200	N	50	N	10	N	N	N	--	--	--	--	--	--
OM154	200	100	N	20	N	30	N	N	N	--	--	--	--	--	--
QUAILSPR	<100	70	N	15	N	50	N	.20	.06	--	--	--	--	--	--
QUAILTRM	150	70	N	20	N	70	N	360.00	.36	--	--	--	--	--	--

TABLE 6.--Description of rock samples

82JA002A	andesite
003A	andesite
003B	adamellite
004A	adamellite
004C	diorite; dike/sill
005A	granodiorite
007A	diorite
008A	mineralized sample from vein
008B	dacite
008C	mineralized sample from vein
015A	adamellite
019A	adamellite
020A	adamellite
020B	granodiorite
021A	adamellite
022A	andesite
025A	andesite; breccia
025B	basalt
026A	lahar
028A	diorite
030A	andesite; breccia
031A	andesite; breccia
032A	andesite; lava flow
033A	adamellite
033B	diorite; dike/sill
035A	andesite; breccia
036A	andesite; lava flow
036B	lahar
037A	dacite; breccia
038A	marble
042A	andesite
042C	adamellite
043A	adamellite
044A	adamellite
045A	adamellite
047B	granodiorite
065A	andesite
068A	granodiorite
402A	dacite
402B	lahar
403B	lahar
404A	andesite
404B	dacite
407A	dacite; lava flow
409A	lahar
411B	andesite; dike/sill
412B	lahar
414A	granodiorite
416A	dacite
423B	sandstone
423D	dacite; lava flow
432A	adamellite
435A	andesite
436A	andesite; lava flow
82JA440A	andesite

TABLE 6.--Continued

401A	basalt
403A	andesite
82RK403C	basalt
82RK404A	adamellite
405A	agglomerate
405B	agglomerate
407A	adamellite
408A	adamellite
409A	adamellite
411B	granodiorite
413A	adamellite
414A	basalt
415A	basalt
416A	basalt
420A	andesite
421A	andesite
422A	andesite
423A	adamellite
426A	basalt
427A	volcanic breccia
428A	basalt
429A	basalt
430A	andesite
432A	rhyolite
434A	tuff
436A	granite
436B	granite
437A	granite
437C	andesite
440A	andesite
441A	andesite
442A	unidentified rock
443A	unidentified rock
444A	granodiorite
445A	adamellite
445B	granodiorite
446A	adamellite
446B	granite; dike/sill
450D	quartz diorite; dike/sill
451A	adamellite
451B	dacite; dike/sill
451C	quartz diorite
451D	basalt; dike/sill
451E	andesite; dike/sill
451F	adamellite
452A	adamellite
452B	andesite; dike/sill
455C	diorite
457B	quartz diorite
458A	adamellite
459B	rhyolite
462A	calcite
462B	mineralized sample
462C	mineralized sample
462D	aplite
463A	granodiorite
463B	quartz vein; mineralized sample

TABLE 6.--Continued

463C	quartz vein; mineralized sample
464A	mineralized sample
464B	mineralized sample
464C	mineralized sample
474A	adamellite
82RK474B	adamellite
82RK474C	adamellite
476B	granodiorite
477A	granodiorite
478A	granodiorite
478B	granodiorite
479A	adamellite
479C	quartz diorite; dike/sill
481A	andesite; lava flow
481B	rhyolite
482A	basalt clast
484A	dacite; lava flow
485A	diorite
485D	quartz vein; mineralized sample
485E	quartz vein; mineralized sample
486A	andesite; lava flow
489A	diorite
490A	sandstone
491A	diorite
491B	mineralized sample
494A	andesite; lava flow
496A	andesite; lava flow
500A	lithic wacke
500C	siltstone
504A	dacite; lava flow
506A	adamellite
506B	andesite; dike/sill
509B	granodiorite; dike/sill
511A	adamellite
515C	mineralized sample from vein
517A	granodiorite
517B	diorite; dike/sill
518B	adamellite
518D	granodiorite; dike/sill
519B	granodiorite
520A	granodiorite
521B	mineralized sample
521C	granodiorite
526A	andesite; lava flow
532A	adamellite
82RK534A	adamellite
LOSTLAKE	dry lake sediments
NEWDELFE	Fe oxide mineralized
NEWDELMN	Mn oxide mineralized
OH10-A1	felsic igneous
10-B1	felsic igneous
10-C1	felsic igneous
10-D1A	felsic igneous
10-D1B	intermediate igneous
10-E1A	felsic igneous

TABLE 6.--Continued

463C	quartz vein; mineralized sample
464A	mineralized sample
464B	mineralized sample
464C	mineralized sample
474A	adamellite
82RK474B	adamellite
82RK474C	adamellite
476B	granodiorite
477A	granodiorite
478A	granodiorite
478B	granodiorite
479A	adamellite
479C	quartz diorite; dike/sill
481A	andesite; lava flow
481B	rhyolite
482A	basalt clast
484A	dacite; lava flow
485A	diorite
485D	quartz vein; mineralized sample
485E	quartz vein; mineralized sample
486A	andesite; lava flow
489A	diorite
490A	sandstone
491A	diorite
491B	mineralized sample
494A	andesite; lava flow
496A	andesite; lava flow
500A	lithic wacke
500C	siltstone
504A	dacite; lava flow
506A	adamellite
506B	andesite; dike/sill
509B	granodiorite; dike/sill
511A	adamellite
515C	mineralized sample from vein
517A	granodiorite
517B	diorite; dike/sill
518B	adamellite
518D	granodiorite; dike/sill
519B	granodiorite
520A	granodiorite
521B	mineralized sample
521C	granodiorite
526A	andesite; lava flow
532A	adamellite
82RK534A	adamellite
LOSTLAKE	dry lake sediments
NEWDELFE	Fe oxide mineralized
NEWDELMN	Mn oxide mineralized
OH10-A1	felsic igneous
10-B1	felsic igneous
10-C1	felsic igneous
10-D1A	felsic igneous
10-D1B	intermediate igneous
10-E1A	felsic igneous
10-E1B	felsic igneous
10-F1	felsic igneous

TABLE 6.--Continued

10-G1	unidentified rock
10-H1	unidentified rock
10-I1	intermediate igneous
10-J1	intermediate igneous
10-J1	intermediate igneous
10-K1	intermediate igneous
OH10-L1	intermediate igneous
OH10-M1	intermediate igneous
2-1A	carbonate
2-1B	carbonate
2-1C	carbonate
3-1A	carbonate
3-1B	carbonate
6-1A	igneous rock
6-1B	igneous rock
7-1A	igneous rock
7-1B	igneous rock
7-1D	igneous rock
8-11A1	felsic igneous
8-11B1	intermediate igneous
8-11C1	felsic igneous
8-11D1	intermediate igneous
8-11E1	intermediate igneous
8-11F1	felsic igneous
8-11G1	sedimentary rock
8-11H1	felsic igneous
8-11I1	felsic igneous
8-11J1	unidentified rock
8-1B	intermediate igneous; intrusive
8-2A	intermediate igneous; intrusive
8-2B	intermediate igneous; intrusive
8-3A	intermediate igneous; intrusive
8-4A	intermediate igneous; intrusive
8-50	galena
8-53	conglomerate
9-1A	intermediate igneous; intrusive
9-2A	intermediate igenous; intrusive
OH9-3A	intermediate igneous; intrusive
OM009	limonitic cobble
010	silicified andesite
017	limonitic quartz breccia
018	disseminated pyrite in felsic igneous rock
055A	disseminated pyrite in felsic igneous rock
055B	silicified limestone
056	calc-silicate rock
066	disseminated pyrite in felsic igneous rock
067	limonitic breccia
073	Cu minerals in quartz veins
148	calcite-limonite
OM154	limonitic breccia
QUAILSPR	quartz veins
QUAILTRM	quartz veins

TABLE 7.--Latitudes and longitudes of rock samples not appearing on Plate 1

Sample	Latitude	Longitude
82JA402A,B	35 47 36	117 4 2
403B	35 47 37	117 5 21
404A,B	35 48 29	117 4 48
407A	35 50 46	117 1 22
409A	35 50 11	117 2 35
411B	35 52 0	117 0 46
412B	35 52 57	117 0 28
414A	35 53 32	117 6 30
415A	35 52 11	117 6 12
416A	35 50 42	117 5 25
423B,D	35 50 54	117 6 47
432A	35 48 54	117 8 54
RK023A	35 49 57	117 3 42
029A	35 49 0	117 3 27
030A	35 51 11	117 3 35
054A	35 51 43	117 3 6
056A,B	35 53 26	117 2 50
057A	35 53 46	117 4 5
058A,B	35 52 38	117 3 31
059A	35 48 40	117 3 3
061A	35 48 20	117 6 9
062A,B,D	35 49 9	117 5 11
064A,B	35 51 35	117 4 55
065A	35 47 10	117 6 50
067A,D	35 48 57	117 7 6
068A,B	35 48 38	117 7 41
070A	35 50 15	117 1 9
073A	35 51 15	117 2 35
077A	35 53 1	117 1 49
080A,B	35 49 35	117 6 6
082A,D	35 53 3	117 4 29
089C	35 51 48	117 6 25
093A,D	35 52 11	117 3 47
094A,B	35 49 54	117 6 46
096C	35 47 54	117 8 13
82RK099A	35 47 33	117 8 15