UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

**Analytical results and sample locality map
of stream-sediment, panned-concentrate, rock, and water samples
from the Andrus Canyon, Grassy Mountain, Last Chance Canyon,
Mustang Point, Nevershine Mesa, Pigeon Canyon, and
Snap Point Wilderness Study Areas, Mohave County, Arizona**

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

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STUDIES RELATED TO WILDERNESS

Bureau of Land Management Wilderness Study Areas

The Federal Land Policy and Management Act (Public Law 94-579, October 21, 1976) requires the U.S. Geological Survey and the U.S. Bureau of Mines to conduct mineral surveys on certain areas to determine their mineral resource potential. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of a mineral survey of the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona.

INTRODUCTION

In March 1981 and March 1982 we conducted a reconnaissance geochemical survey of the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona.

The Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas comprise about 260 mi² (674 km²) in the northwest corner of Mohave County, Arizona, and lie about 70 mi (113 km) south of St. George, Utah (see figure 1). Access to the vicinity of the study area is provided on the north by a secondary road from St. George, Utah, and on the west by a secondary road from Mesquite, Nevada. Access to the study areas is provided by U.S. Bureau of Land Management roads.

The study areas lie within the Colorado Plateau and Basin and Range Physiographic Provinces. They are underlain mainly by Paleozoic and Mesozoic limestones, shales, and sandstones. The western part of the Pigeon Canyon unit has abundant deposits of Tertiary and Quaternary rocks. Most of the major drainages are floored with a thin veneer of Quaternary alluvium. Also present are early Quaternary basalts (interbedded locally with tuff and agglomerate) that form caps on various upland surfaces. The individual formations have been mapped and described by Lucchitta, Beard, and Billingsley (Lucchitta, 1983).

The topographic relief in the study area is about 4200 ft (1280 m), with a maximum elevation of 6200 ft (1890 m). The study units are roughly centered on the Shivwits Plateau and include portions of the Upper and Lower Grand Wash Cliffs in this part of the Overthrust Belt. The higher elevations support scattered forests of pine and juniper. The climate is arid to semiarid.

Methods of Study

Sample Collection

We collected 330 samples (plate 1) consisting of 199 stream-sediment samples, 28 panned-concentrate samples, 84 rock samples, and 19 water samples, for a sampling density of about 1 sample per 1.2 mi² for the stream sediment, and about 1 sample per 3 mi² for the rock. The drainage basins ranged from 0.5 to 5 mi².

Figure 1. Location map of the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevarshine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona.

Stream-sediment samples

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.

The stream-sediment samples consisted of alluvium collected primarily from first-order (unbranched) and second-order (below the junction of two first-order) streams as shown on USGS topographic maps (scale = 1:24,000). Each sample was composited from several localities within an area that may extend as much as 150 ft from the site plotted on the map.

Heavy-mineral-concentrate samples

We panned heavy-mineral-concentrate samples from the same alluvium as the stream-sediment samples, but the material selected for panning was intentionally biased by collection from points of natural concentration of heavy minerals by stream processes. The material was panned until most of the quartz, feldspar, organic material, and clay-sized material was removed. The sample was air dried.

Rock samples

We collected rock samples from outcrops or exposures in the vicinity of the plotted site location. Most samples were collected from unaltered rock. Rock samples provide information on elements in rocks that have not been affected by alteration or mineralization. In addition, some altered and/or mineralized rocks were collected.

Water samples

We collected water samples from springs. A 500-mL sample was taken at each site and stored in a new untreated plastic bottle. In addition, a 500-mL sample, filtered through a 0.45-micrometer filter, was acidified with reagent-grade concentrated nitric acid to pH 2, and stored in an acid-rinsed polyethylene bottle.

Sample Preparation

Only the stream-sediment samples required extensive preparation. Rock samples were simply crushed and then pulverized with ceramic plates to minus 0.15 mm. Water samples required no preparation beyond that done in the process of collecting them.

Stream-sediment samples were air dried and sieved through minus-80 mesh stainless steel sieves. The portion of the sediment passing through the sieve was split and a representative fraction saved for analysis.

Panned concentrates were air dried and examined to determine heavy mineral composition. A small split of each sample was separated and hand ground for spectrographic analysis. The entire remainder of each concentrate was weighed and chemically analyzed by atomic absorption for gold content.

Sample Analysis

Spectrographic method

We analyzed the stream-sediment, heavy-mineral-concentrate, and rock samples for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). 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 unit at the 83 percent confidence level and plus or minus two reporting units 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) (table 1).

Chemical methods

Other methods of analysis used on samples from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas are summarized in table 2.

Analytical results for stream-sediment, panned-concentrate, soil, and rock samples are listed in Tables 3, 4, 5, and 6, respectively.

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 two reporting units 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

Sample type	Constituent determined	Analytical method	Determination limit ¹ micrograms/ gram or ppm	Analyst	Reference
Rocks	U, Th	Neutron Activation	Variable	USGS Branch of Analytical Laboratories	Millard and Keaton, 1982
Stream Sediments	U	Fluorometry	.05	Roemer	Modification of Centanni and others, 1956
	Cu, Pb, Zn	AA	5	W. L. Campbell	Modification of Viets, 1978
Panned Concentrates	Au	AA	.05	W. L. Campbell	Thompson and Others, 1968
Water ²	Specific Conductance	Conductivity Bridge	NA	J. B. McHugh	Miller and others, 1982
	Cu, Pb, Zn	AA	1 µg/L	J. B. McHugh	Miller and others, 1982
	U	Fluorometry	.1 µg/L	J. B. McHugh	Scintrex Corp., 1978
	SO ₄ ⁼	Ion Chromatography	.1 mg/L	J. B. McHugh	Miller and others, 1982
	F ⁻ , Cl ⁻	Ion Chromatography	.01 mg/L	J. B. McHugh	Miller and others, 1982
	HCO ₃ ⁼	Grans Plot Titration	1 mg/L	J. B. McHugh	Miller and others, 1982

¹The determination limit is dependent upon sample weight. Given limits imply use of sample weight required by method. Higher limits of determination result from using less than required sample weight.

²Untreated water samples were analyzed for anions, alkalinity, U, and specific conductance. Filtered and acidified water samples were analyzed for metals.

ROCK ANALYSIS STORAGE SYSTEM

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

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Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevreshine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona
[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	Latitude	Longitude	Fe-ppt. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-ppt. %	Ag-ppt. %	As-ppt. %	Au-ppt. %	B-ppt. %	Ba-ppt. %	Be-ppt. %
GW066S	36 25 14	113 42 59	2.0	1.0	.7	.50	700	N	N	N	100	1,000	1.0
GW067S	36 25 11	113 42 55	3.0	1.0	.7	.70	1,000	N	N	N	100	700	1.5
GW068S	36 26 20	113 42 50	3.0	1.0	7.0	.70	700	N	N	N	100	700	1.0
GW069S	36 26 18	113 42 48	2.0	1.0	7.0	.30	500	N	N	N	100	500	1.0
GW070S	36 27 10	113 42 25	2.0	1.0	2.0	.50	700	5.0	N	N	70	500	1.5
GW071S	36 28 23	113 41 20	1.5	.7	7.0	.50	200	N	N	N	100	300	1.0
GW072S	36 29 46	113 41 15	1.0	1.0	2.0	.30	150	N	N	N	70	300	<1.0
GW073S	36 30 5	113 41 24	1.5	2.0	3.0	.50	300	N	N	N	100	500	1.0
GW074S	36 25 14	113 45 14	1.5	1.5	3.0	.30	200	N	N	N	70	500	<1.0
GW075S	36 25 27	113 45 18	1.0	.7	1.5	.15	200	N	N	N	50	500	<1.0
GW076S	36 25 42	113 45 10	1.5	1.0	3.0	.30	300	N	N	N	70	500	1.0
GW077S	36 25 57	113 44 57	1.5	1.5	3.0	.30	200	N	N	N	70	500	<1.0
GW078S	36 26 7	113 44 44	1.5	1.5	3.0	.30	300	N	N	N	70	500	<1.0
GW079S	36 26 39	113 44 43	1.5	1.0	2.0	.20	200	N	N	N	50	300	<1.0
GW080S	36 26 42	113 44 57	1.5	1.5	3.0	.30	300	N	N	N	50	300	<1.0
GW081S	36 27 14	113 45 17	1.5	1.0	3.0	.30	200	N	N	N	50	200	<1.0
GW082S	36 27 40	113 45 12	1.0	1.0	2.0	.30	200	N	N	N	50	200	<1.0
GW083S	36 27 44	113 45 25	1.0	1.0	3.0	.20	150	N	N	N	50	200	<1.0
GW084S	36 28 4	113 45 30	1.0	.7	2.0	.20	150	N	N	N	70	200	<1.0
GW085S	36 28 33	113 45 30	1.5	1.5	3.0	.30	200	N	N	N	70	200	<1.0
GW086S	36 29 3	113 45 32	.7	.5	1.5	.15	150	N	N	N	50	200	N
GW087S	36 29 22	113 45 25	1.0	1.5	2.0	.20	150	N	N	N	70	200	<1.0
GW088S	36 30 50	113 44 59	.5	.5	1.0	.10	100	N	N	N	50	200	N
GW089S	36 31 6	113 44 42	.5	.7	1.5	.10	150	N	N	N	50	200	<1.0
GW090S	36 15 34	113 47 54	2.0	2.0	7.0	.50	300	1.5	N	N	70	1,500	<1.0
GW091S	36 16 25	113 48 6	2.0	2.0	7.0	.30	300	<.5	700	N	50	200	<1.0
GW092S	36 16 20	113 48 3	3.0	2.0	7.0	.20	200	1.0	1,000	N	50	200	<1.0
GW093S	36 16 16	113 48 10	1.5	2.0	10.0	.30	300	N	N	N	70	200	<1.0
GW094S	36 19 39	113 47 32	.7	1.5	5.0	.30	150	3.0	500	N	70	200	<1.0
GW095S	36 20 46	113 49 21	1.5	2.0	10.0	.20	300	N	N	N	50	200	<1.0
GW096S	36 20 53	113 49 24	.7	2.0	10.0	.15	200	N	N	N	30	150	N
GW097S	36 20 46	113 49 21	1.0	2.0	10.0	.15	300	N	N	N	30	200	<1.0
GW098S	36 20 45	113 49 44	1.5	2.0	10.0	.30	300	N	N	N	50	200	<1.0
GW099S	36 20 54	113 50 17	1.5	2.0	10.0	.30	500	N	N	N	50	300	<1.0
GW100S	36 19 25	113 45 53	1.0	1.0	5.0	.20	300	N	N	N	50	300	<1.0
GW101S	36 19 20	113 45 50	1.5	1.5	7.0	.30	300	N	N	N	50	500	<1.0
GW102S	36 19 17	113 46 21	1.5	1.5	5.0	.30	200	N	N	N	70	300	<1.0
GW103S	36 19 19	113 46 20	.7	1.0	3.0	.15	200	N	N	N	30	200	<1.0
GW104S	36 19 8	113 46 38	2.0	2.0	10.0	.50	500	N	N	N	30	300	1.0
GW105S	36 18 15	113 47 26	1.0	1.0	5.0	.20	200	N	N	N	30	300	<1.0
GW106S	36 18 19	113 47 40	1.5	1.0	5.0	.50	300	N	N	N	50	300	1.0
GW107S	36 17 54	113 47 47	1.0	1.5	10.0	.15	200	N	N	N	30	200	<1.0
GW108S	36 17 56	113 47 49	1.0	1.5	5.0	.20	300	N	N	N	50	300	<1.0
GW109S	36 16 58	113 49 3	1.5	2.0	10.0	.20	300	N	300	N	30	200	<1.0
GW110S	36 17 5	113 49 0	1.5	1.5	5.0	.30	300	N	N	N	70	300	1.0

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona

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
GW066S	N	N	7	150	20	30	N	N	30	30	N	7	N
GW067S	N	N	7	70	30	30	N	N	20	30	N	7	N
GW068S	N	N	7	100	30	30	N	N	30	30	N	7	N
GW069S	N	N	7	100	30	30	N	N	20	30	N	7	N
GW070S	N	N	7	100	20	30	N	N	30	30	N	7	N
GW071S	N	N	5	70	10	20	N	N	20	30	N	5	N
GW072S	N	N	5	70	<5	<20	N	N	10	15	N	<5	N
GW073S	N	N	5	100	<5	20	N	N	15	20	N	5	N
GW074S	N	N	5	100	5	<20	N	N	15	20	N	<5	N
GW075S	N	N	<5	50	<5	<20	N	N	10	15	N	<5	N
GW076S	N	N	5	70	15	20	N	N	15	20	N	5	N
GW077S	N	N	5	70	7	20	N	N	15	20	N	5	N
GW078S	N	N	5	50	5	20	N	N	15	20	N	5	N
GW079S	N	N	<5	70	<5	20	N	N	10	20	N	<5	N
GW080S	N	N	5	100	5	20	N	N	15	20	N	5	N
GW081S	N	N	<5	100	5	20	N	N	10	20	N	5	N
GW082S	N	N	N	70	<5	20	N	N	7	20	N	<5	N
GW083S	N	N	<5	70	<5	20	<5	N	10	20	N	<5	N
GW084S	N	N	5	70	5	20	N	N	10	20	N	5	N
GW085S	N	N	5	30	<5	20	N	N	10	20	N	5	N
GW086S	N	N	<5	50	<5	20	N	N	5	15	N	<5	N
GW087S	N	N	<5	50	<5	20	N	N	7	20	N	<5	N
GW088S	N	N	N	70	<5	<20	N	N	5	15	N	<5	N
GW089S	N	N	<5	50	<5	20	N	N	5	15	N	<5	N
GW090S	N	N	10	100	700	20	50	N	30	70	N	7	N
GW091S	N	N	10	70	3,000	20	30	N	20	70	<100	5	N
GW092S	N	N	10	70	5,000	<20	70	N	30	70	100	5	N
GW093S	N	N	7	70	50	20	N	N	20	30	N	5	N
GW094S	N	N	10	70	3,000	20	20	N	7	700	N	<5	N
GW095S	N	N	5	70	70	20	N	N	7	100	N	5	N
GW096S	N	N	5	50	10	20	N	N	5	30	N	<5	N
GW097S	N	N	N	70	10	20	N	N	5	20	N	<5	N
GW098S	N	N	5	70	10	20	N	N	7	30	N	5	N
GW099S	N	N	7	70	15	20	N	N	7	30	N	5	N
GW100S	N	N	5	100	10	20	N	N	7	20	N	<5	N
GW101S	N	N	7	70	15	30	N	N	10	30	N	5	N
GW102S	N	N	7	100	7	20	N	N	10	20	N	5	N
GW103S	N	N	5	70	5	20	N	N	5	30	N	<5	N
GW104S	N	N	7	70	20	30	N	N	15	30	N	7	N
GW105S	N	N	<5	50	5	20	N	N	10	20	N	5	N
GW106S	N	N	7	70	7	20	N	N	10	30	N	5	N
GW107S	N	N	5	70	10	20	N	N	15	30	N	<5	N
GW108S	N	N	5	70	7	20	N	N	10	20	N	<5	N
GW109S	N	N	7	70	700	20	15	N	10	50	N	<5	N
GW110S	N	N	7	70	15	20	N	N	10	30	N	5	N

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevcrshine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Cu-ppm aa	Pb-ppm aa	Zn-ppm aa	U-INST
GW066S	150	70	N	20	N	500	N	7	20	30	.60
GW067S	150	100	N	20	N	300	N	8	20	40	.95
GW068S	200	100	N	30	N	300	N	9	20	40	.80
GW069S	150	100	N	20	N	300	N	8	20	40	.50
GW070S	150	100	N	20	N	300	N	8	25	40	.60
GW071S	100	70	N	30	N	300	N	4	10	15	.45
GW072S	100	30	N	10	N	300	N	1	3	3	.15
GW073S	100	50	N	20	N	500	N	1	4	4	.25
GW074S	N	50	N	10	N	300	N	1	7	2	.35
GW075S	N	30	N	10	N	200	N	1	7	3	.20
GW076S	N	50	N	20	N	300	N	3	7	6	.30
GW077S	N	50	N	20	N	300	N	2	7	5	.25
GW078S	N	50	N	15	N	500	N	1	5	6	.15
GW079S	N	20	N	10	N	300	N	1	4	4	.15
GW080S	N	30	N	15	N	500	N	1	5	5	.25
GW081S	100	50	N	20	N	300	N	1	8	7	.40
GW082S	<100	30	N	20	N	300	N	1	8	3	.25
GW083S	<100	30	N	<10	N	300	N	1	5	4	.35
GW084S	100	50	N	15	N	300	N	2	8	7	.20
GW085S	N	30	N	15	N	300	N	1	6	4	.30
GW086S	N	20	N	<10	N	500	N	1	4	3	.10
GW087S	N	30	N	15	N	300	N	1	5	4	.20
GW088S	N	20	N	10	N	300	N	1	3	2	.05
GW089S	N	20	N	15	N	150	N	N	4	1	.10
GW090S	150	100	N	20	200	500	N	>1,000	60	500	1.20
GW091S	150	70	N	20	N	300	N	>1,000	50	200	1.20
GW092S	150	70	N	20	N	300	N	>1,000	50	145	1.70
GW093S	N	70	N	20	N	200	N	55	25	20	.55
GW094S	N	100	N	20	700	300	N	>1,000	500	>1,000	.45
GW095S	150	70	N	20	N	200	N	100	40	30	.55
GW096S	150	30	N	15	N	150	N	20	15	25	.30
GW097S	100	50	N	20	N	200	N	10	10	10	.40
GW098S	100	70	N	20	N	300	N	8	15	15	.25
GW099S	200	70	N	20	N	300	N	7	20	20	.40
GW100S	N	30	N	15	N	200	N	4	9	9	.20
GW101S	200	70	N	20	N	300	N	10	25	25	.35
GW102S	N	50	N	20	N	300	N	4	10	15	.15
GW103S	N	30	N	15	N	300	N	4	15	20	.20
GW104S	200	100	N	30	N	700	N	7	20	15	.30
GW105S	<100	30	N	20	N	200	N	2	8	8	.10
GW106S	100	70	N	20	N	500	N	3	9	9	.20
GW107S	200	50	N	20	N	200	N	5	15	15	.40
GW108S	N	50	N	20	N	300	N	2	10	8	.10
GW109S	200	50	N	20	N	300	N	800	20	40	.60
GW110S	<100	50	N	20	N	300	N	6	10	10	.20

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevadine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Latitude	Longitude	Fe-ppt. %	Mg-ppt. %	Ca-ppt. %	Ti-ppt. %	Mn-ppt. %	Ag-ppt. %	As-ppt. %	Au-ppt. %	B-ppt. %	Ba-ppt. %	Be-ppt. %
GW111S	36 16 58	113 49 24	1.5	1.5	10.0	.20	300	N	N	N	30	200	<1.0
GW112S	36 17 5	113 49 20	1.5	2.0	10.0	.15	300	N	N	N	70	200	<1.0
GW113S	36 17 28	113 50 30	1.0	2.0	7.0	.30	500	N	N	N	70	300	1.0
GW114S	36 13 28	113 51 28	1.0	1.5	7.0	.20	300	N	N	N	50	300	1.0
GW115S	36 13 30	113 52 6	1.5	2.0	10.0	.20	300	N	N	N	70	300	<1.0
GW116S	36 15 7	113 51 15	1.0	1.0	15.0	.20	300	N	N	N	30	150	<1.0
GW117S	36 21 33	113 50 46	2.0	3.0	15.0	.20	500	N	N	N	70	300	1.0
GW118S	36 21 25	113 50 50	1.5	2.0	15.0	.20	300	N	N	N	50	200	<1.0
GW119S	36 21 17	113 53 37	1.0	.7	3.0	.15	300	N	N	N	50	200	<1.0
GW120S	36 21 10	113 53 45	1.0	1.0	7.0	.15	200	N	N	N	30	300	<1.0
GW121S	36 21 4	113 53 48	2.0	3.0	10.0	.70	500	N	N	N	70	500	1.0
GW122S	36 21 31	113 55 44	1.5	.7	5.0	.30	300	N	N	N	70	300	<1.0
GW123S	36 21 21	113 55 57	2.0	1.5	7.0	.50	300	N	N	N	70	300	<1.0
GW124S	36 20 32	113 54 26	2.0	2.0	10.0	.50	500	N	N	N	70	500	1.0
GW125S	36 17 53	113 54 7	3.0	2.0	7.0	.70	700	N	N	N	70	500	1.5
GW126S	36 17 5	113 53 50	2.0	3.0	10.0	.30	500	N	N	N	100	300	1.5
GW127S	36 16 56	113 53 57	5.0	3.0	10.0	.50	1,000	N	N	N	70	500	1.0
GW128S	36 20 28	113 47 47	3.0	1.5	10.0	.50	700	N	N	N	70	700	1.0
GW129S	36 20 20	113 47 50	2.0	2.0	10.0	.50	500	<.5	N	N	70	500	1.0
GW130S	36 20 31	113 47 55	1.5	2.0	10.0	.30	500	N	N	N	70	300	1.0
GW131S	36 31 7	113 41 44	2.0	.7	1.5	.50	150	5.0	500	N	100	1,500	1.0
GW132S	36 31 14	113 41 43	1.5	1.0	3.0	.30	300	N	N	N	100	500	1.0
GW133S	36 13 54	113 33 39	3.0	1.5	2.0	1.00	1,000	N	N	N	70	700	1.0
GW134S	36 20 7	113 34 30	3.0	2.0	3.0	.70	1,000	N	N	N	70	700	1.5
GW135S	36 19 58	113 37 6	1.5	.5	1.5	.30	500	N	N	N	70	500	1.5
GW136S	36 19 40	113 37 0	2.0	.7	1.5	.50	700	N	N	N	70	500	1.5
GW137S	36 18 34	113 36 26	3.0	1.0	1.0	.50	1,000	N	N	N	100	700	1.5
GW138S	36 12 57	113 51 45	1.5	1.0	15.0	.30	500	N	N	N	70	300	1.0
GW139S	36 14 30	113 54 1	1.5	1.5	10.0	.30	300	N	N	N	70	300	1.0
GW140S	36 15 56	113 51 43	1.5	2.0	10.0	.20	500	N	N	N	70	500	1.0
GW141S	36 17 33	113 55 11	1.5	2.0	10.0	.15	500	N	N	N	50	300	1.0
GW142S	36 18 26	113 55 51	1.5	1.5	10.0	.20	500	N	N	N	50	300	1.0
GW143S	36 10 41	113 45 46	1.5	1.5	5.0	.50	500	N	N	N	100	200	1.0
GW144S	36 10 36	113 45 44	2.0	1.0	7.0	.50	500	N	N	N	50	300	1.0
GW145S	36 12 0	113 45 15	1.0	1.5	7.0	.30	300	N	N	N	70	300	1.0
GW146S	36 10 16	113 44 39	1.5	.7	7.0	.20	500	N	N	N	50	200	1.0
GW147S	36 14 12	113 46 13	1.5	1.5	7.0	.20	300	N	N	N	70	300	1.0
GW148S	36 14 12	113 48 13	1.5	1.5	7.0	.30	300	N	N	N	50	300	<1.0
GW149S	36 14 6	113 46 14	1.5	1.0	7.0	.30	300	N	N	N	70	200	<1.0
GW150S	36 14 3	113 47 38	1.0	1.5	7.0	.20	300	N	N	N	70	300	<1.0
GW151S	36 13 58	113 47 41	1.5	1.5	7.0	.30	300	N	N	N	50	300	<1.0
GW152S	36 13 27	113 50 12	1.5	2.0	10.0	.50	300	N	N	N	70	500	<1.0
GW153S	36 13 18	113 50 16	1.5	2.0	10.0	.30	300	N	N	N	70	300	<1.0
GW154S	36 13 57	113 46 13	1.5	1.5	7.0	.30	300	N	N	N	70	300	1.0
GW155S	36 13 50	113 46 23	1.0	1.5	7.0	.30	200	N	N	N	70	300	<1.0

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--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
GW111S	N	N	5	70	15	20	N	N	7	30	N	<5	N
GW112S	N	N	5	70	10	20	N	N	10	50	N	5	N
GW113S	N	N	7	50	10	20	N	N	10	30	N	5	N
GW114S	N	N	7	70	5	20	N	N	10	30	N	<5	N
GW115S	N	N	7	70	10	20	N	N	10	30	N	5	N
GW116S	N	N	5	50	7	20	N	N	<5	30	N	<5	N
GW117S	N	N	7	70	50	30	N	N	15	50	N	5	N
GW118S	N	N	5	70	20	20	N	N	7	30	N	<5	N
GW119S	N	N	5	70	5	20	N	N	10	15	N	<5	N
GW120S	N	N	5	70	7	20	N	N	5	30	N	<5	N
GW121S	N	N	7	100	20	30	<5	<20	20	30	N	7	N
GW122S	N	N	5	100	10	20	<5	N	20	20	N	5	N
GW123S	N	N	7	70	20	20	N	N	30	20	N	7	N
GW124S	N	N	7	70	20	30	N	N	20	30	N	7	N
GW125S	N	N	10	100	15	30	N	<20	30	30	N	10	N
GW126S	N	N	7	70	15	20	7	N	20	30	N	7	N
GW127S	N	N	10	150	30	30	15	N	50	30	N	10	N
GW128S	N	N	10	70	30	50	N	N	20	30	N	7	N
GW129S	N	N	10	70	1,000	30	20	N	30	300	N	7	N
GW130S	N	N	5	50	20	30	5	N	10	30	N	5	N
GW131S	N	N	10	50	500	20	2,000	<20	15	150	N	5	N
GW132S	N	N	5	100	20	20	10	<20	10	20	N	5	N
GW133S	N	N	10	150	30	50	N	<20	70	30	N	15	N
GW134S	N	N	10	100	30	50	N	N	50	30	N	10	N
GW135S	N	N	5	100	15	50	N	N	15	20	N	7	N
GW136S	N	N	5	150	20	50	5	<20	15	30	N	7	N
GW137S	N	N	10	100	20	50	<5	<20	30	30	N	7	N
GW138S	N	N	5	50	10	30	<5	N	10	30	N	5	N
GW139S	N	N	5	70	10	30	10	N	15	30	N	5	N
GW140S	N	N	5	50	15	30	N	N	10	30	N	5	N
GW141S	N	N	5	50	10	20	N	N	10	30	N	5	N
GW142S	N	N	5	70	10	30	5	N	10	50	N	5	N
GW143S	N	N	7	100	10	20	N	N	15	30	N	5	N
GW144S	N	N	7	100	20	30	N	N	30	30	N	7	N
GW145S	N	N	7	100	10	30	N	N	15	20	N	7	N
GW146S	N	N	7	70	15	20	10	N	15	30	N	5	N
GW147S	N	N	7	100	15	20	N	N	15	30	N	5	N
GW148S	N	N	7	70	15	30	N	N	15	30	N	7	N
GW149S	N	N	7	70	7	30	N	<20	10	20	N	<5	N
GW150S	N	N	7	70	10	20	N	N	15	20	N	5	N
GW151S	N	N	7	100	15	20	N	N	15	20	N	7	N
GW152S	N	N	7	100	10	20	N	<20	15	20	N	7	N
GW153S	N	N	7	100	15	20	N	<20	15	30	N	7	N
GW154S	N	N	7	70	15	20	N	N	15	30	N	5	N
GW155S	N	N	7	50	5	20	N	<20	15	15	N	5	N

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Cu-ppm aa	Pb-ppm aa	Zn-ppm aa	U-INST
GW111S	100	50	N	20	N	500	N	7	15	15	.45
GW112S	200	50	N	15	N	150	N	5	25	20	.60
GW113S	<100	50	N	20	N	200	N	3	10	10	.20
GW114S	<100	50	N	20	N	200	N	2	10	9	.25
GW115S	200	50	N	20	N	300	N	10	10	10	.30
GW116S	<100	50	N	20	N	500	N	3	10	20	.40
GW117S	300	70	N	20	N	200	N	45	20	20	.35
GW118S	200	50	N	20	N	200	N	15	15	15	.35
GW119S	N	50	N	15	N	300	N	4	15	15	.15
GW120S	200	50	N	15	N	300	N	4	8	10	.25
GW121S	700	70	N	30	N	200	N	--	--	--	.55
GW122S	<100	70	N	20	N	300	N	--	--	--	.25
GW123S	300	100	N	20	N	300	N	--	--	--	.55
GW124S	5,000	70	N	20	N	300	N	--	--	--	.70
GW125S	500	100	N	30	N	300	N	--	--	--	1.40
GW126S	300	70	N	20	N	150	N	--	--	--	.90
GW127S	500	150	N	30	N	500	N	4	--	--	.60
GW128S	300	70	N	20	N	300	N	--	--	--	.15
GW129S	300	100	N	20	N	300	N	--	--	--	.55
GW130S	200	70	N	20	N	500	N	--	--	--	.20
GW131S	700	100	N	15	200	500	N	--	--	--	5.10
GW132S	<100	50	N	20	N	500	N	--	--	--	.55
GW133S	200	150	N	30	N	500	N	--	--	--	.70
GW134S	300	150	N	30	N	300	N	--	--	--	.80
GW135S	200	70	N	30	N	300	N	--	--	--	1.40
GW136S	200	100	N	50	N	1,000	N	--	--	--	1.50
GW137S	200	100	N	30	N	500	N	--	--	--	.70
GW138S	150	50	N	15	N	300	N	--	--	--	.40
GW139S	100	50	N	20	N	300	N	--	--	--	.25
GW140S	150	70	N	20	N	300	N	--	--	--	.45
GW141S	2,000	50	N	20	N	200	N	--	--	--	2.10
GW142S	5,000	70	N	20	N	300	N	--	--	--	1.10
GW143S	100	70	N	20	N	500	N	--	--	--	.35
GW144S	100	100	N	30	N	300	N	--	--	--	.45
GW145S	100	50	N	20	N	500	N	--	--	--	.35
GW146S	<100	50	N	20	N	200	N	--	--	--	.35
GW147S	100	50	N	20	N	300	N	--	--	--	.05
GW148S	200	70	N	20	N	300	N	--	--	--	.75
GW149S	100	50	N	30	N	500	N	--	--	--	.70
GW150S	100	50	N	50	N	300	N	--	--	--	.55
GW151S	200	70	N	20	N	300	N	--	--	--	1.00
GW152S	150	70	N	30	N	500	N	--	--	--	.45
GW153S	200	70	N	20	N	300	N	--	--	--	.40
GW154S	150	50	N	20	N	300	N	--	--	--	.40
GW155S	100	50	N	20	N	300	N	--	--	--	.40

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Latitude	Longitude	Fe-pct. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-pptm s	Ag-pptm s	As-pptm s	Au-pptm s	B-pptm s	Ba-pptm s	Be-pptm s
GW156S	36 15 6	113 47 44	1.5	1.5	7.0	.30	200	N	N	N	70	500	<1.0
GW157S	36 15 3	113 47 37	1.5	1.5	7.0	.30	300	N	N	N	70	500	<1.0
GW158S	36 11 52	113 48 34	1.5	1.5	2.0	.50	300	N	N	N	70	500	<1.0
GW159S	36 10 58	113 49 1	1.5	2.0	5.0	.50	300	N	N	N	100	300	<1.0
GW160S	36 11 0	113 49 7	1.0	.7	5.0	.15	200	N	N	N	50	500	<1.0
GW161S	36 8 25	113 46 55	1.5	2.0	3.0	.50	300	N	N	N	100	300	1.0
GW162S	36 8 20	113 46 53	1.5	1.5	3.0	.30	200	N	N	N	70	500	1.0
GW163S	36 9 36	113 49 51	1.5	1.5	5.0	.50	300	N	N	N	70	500	1.0
GW164S	36 9 32	113 49 53	1.0	1.5	5.0	.30	200	N	N	N	70	300	1.0
GW165S	36 10 2	113 44 47	1.5	1.0	2.0	.50	200	N	N	N	70	300	1.0
GW166S	36 21 52	113 49 5	1.5	1.5	15.0	.30	300	N	N	N	50	300	1.0
GW167S	36 21 17	113 47 52	2.0	1.5	7.0	.30	500	N	N	N	70	500	1.0
GW168S	36 21 21	113 47 46	2.0	2.0	7.0	.30	500	N	N	N	50	500	1.0
GW169S	36 21 44	113 44 36	1.0	1.0	2.0	.30	300	N	N	N	100	300	1.0
GW170S	36 21 53	113 44 43	1.5	1.5	3.0	.30	300	N	N	N	100	300	1.0
GW171S	36 21 56	113 44 12	1.0	1.5	2.0	.30	300	N	N	N	70	300	1.0
GW172S	36 22 21	113 44 25	1.5	1.5	2.0	.30	300	N	N	N	100	500	1.0
GW173S	36 22 54	113 44 33	1.0	1.5	2.0	.20	200	N	N	N	70	500	<1.0
GW174S	36 24 41	113 45 33	1.0	1.0	3.0	.20	200	N	N	N	100	500	<1.0
GW175S	36 19 47	113 46 15	1.0	1.0	2.0	.30	300	N	N	N	70	500	1.0
GW176S	36 18 11	113 44 32	1.5	1.0	5.0	.30	300	N	N	N	100	300	1.0
GW177S	36 17 58	113 44 1	1.5	1.5	7.0	.50	500	N	N	N	100	500	1.0
GW178S	36 18 9	113 42 58	1.5	1.0	5.0	.20	300	N	N	N	100	500	1.0
GW179S	36 18 1	113 42 3	1.5	1.5	3.0	.30	300	N	N	N	100	500	1.0
GW180S	36 17 59	113 41 36	1.5	1.5	3.0	.30	300	N	N	N	100	500	1.0
GW181S	36 17 54	113 41 18	1.5	1.5	3.0	.30	300	N	N	N	100	300	1.0
GW182S	36 17 57	113 41 17	1.5	1.0	5.0	.30	500	N	N	N	100	500	1.0
GW183S	36 16 34	113 27 35	1.5	.7	.7	.70	700	N	N	N	70	700	1.5
GW184S	36 9 30	113 26 50	5.0	1.5	1.5	1.00	1,000	N	N	N	50	300	<1.0
GW185S	36 11 22	113 27 40	7.0	2.0	5.0	1.00	1,000	N	N	N	100	300	<1.0
GW186S	36 11 26	113 27 55	3.0	2.0	7.0	.50	1,000	N	N	N	70	300	1.0
GW187S	36 11 43	113 25 55	1.5	2.0	5.0	.50	300	N	N	N	100	300	<1.0
GW188S	36 11 52	113 25 58	1.5	2.0	3.0	.50	300	N	N	N	100	300	<1.0
GW189S	36 13 28	113 32 6	7.0	1.5	2.0	1.00	1,000	N	N	N	70	500	<1.0
GW190S	36 14 34	113 30 8	3.0	3.0	10.0	.70	700	N	N	N	70	300	<1.0
GW191S	36 14 39	113 30 17	5.0	3.0	10.0	.70	1,000	N	N	N	100	300	<1.0
GW192S	36 20 8	113 33 52	5.0	1.5	3.0	.70	1,000	N	N	N	100	500	1.0
GW193S	36 19 46	113 32 5	5.0	1.5	2.0	1.00	1,000	N	N	N	100	700	1.5
GW194S	36 19 30	113 32 18	5.0	1.5	1.5	1.00	1,000	N	N	N	70	700	1.5
GW195S	36 17 46	113 31 4	5.0	1.5	1.0	.70	1,000	N	N	N	100	700	1.5
GW196S	36 17 42	113 36 46	3.0	.7	.5	.70	700	N	N	N	100	500	1.5
GW197S	36 16 47	113 36 54	2.0	.7	3.0	.50	700	N	N	N	70	500	1.0
GW198S	36 16 22	113 37 9	3.0	1.0	3.0	.70	700	N	N	N	100	500	1.0
GW199S	36 15 6	113 38 47	1.5	.7	5.0	.30	500	N	N	N	70	500	1.0
GW200S	36 15 7	113 38 58	2.0	.7	2.0	.50	700	N	N	N	70	500	1.5

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevadine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--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
GW156S	N	N	7	50	20	20	<5	N	10	30	N	5	N
GW157S	N	N	7	100	15	20	<5	N	10	30	N	5	N
GW158S	N	N	7	100	15	20	N	<20	15	30	N	7	N
GW159S	N	N	7	100	10	20	N	N	15	30	N	7	N
GW160S	N	N	5	70	<5	20	N	N	10	20	N	<5	N
GW161S	N	N	7	70	5	30	N	N	15	20	N	5	N
GW162S	N	N	5	100	5	20	N	<20	10	20	N	5	N
GW163S	N	N	7	70	5	30	N	<20	10	20	N	5	N
GW164S	N	N	5	70	5	30	N	N	10	20	N	<5	N
GW165S	N	N	7	100	7	30	N	N	15	20	N	5	N
GW166S	N	N	5	70	100	30	N	N	10	30	N	<5	N
GW167S	N	N	7	100	20	30	<5	N	20	30	N	5	N
GW168S	N	N	7	100	70	30	<5	<20	15	30	N	5	N
GW169S	N	N	5	70	5	30	N	N	10	15	N	5	N
GW170S	N	N	5	70	5	30	N	N	15	15	N	5	N
GW171S	N	N	5	100	5	30	N	N	10	15	N	<5	N
GW172S	N	N	5	70	5	30	N	N	10	20	N	5	N
GW173S	N	N	5	100	5	20	N	N	10	20	N	5	N
GW174S	N	N	5	70	5	30	N	N	10	20	N	5	N
GW175S	N	N	5	70	5	30	N	<20	10	20	N	<5	N
GW176S	N	N	7	50	7	30	N	<20	10	20	N	5	N
GW177S	N	N	7	100	7	30	N	<20	10	20	N	5	N
GW178S	N	N	7	100	7	30	N	N	15	20	N	5	N
GW179S	N	N	5	100	5	30	N	<20	15	20	N	5	N
GW180S	N	N	7	70	7	30	N	N	15	20	N	5	N
GW181S	N	N	7	70	7	20	N	<20	15	20	N	5	N
GW182S	N	N	7	100	15	30	N	<20	15	30	N	7	N
GW183S	N	N	10	100	20	50	N	<20	50	30	N	10	N
GW184S	N	N	15	200	30	30	N	N	70	30	N	10	N
GW185S	N	N	20	150	30	20	N	<20	70	30	N	15	N
GW186S	N	N	10	70	20	30	N	N	30	30	N	10	N
GW187S	N	N	5	50	5	30	N	N	10	20	N	<5	N
GW188S	N	N	5	70	30	20	N	N	15	20	N	<5	N
GW189S	N	N	20	200	50	50	N	N	70	30	N	10	N
GW190S	N	N	10	100	30	30	N	N	30	20	N	7	N
GW191S	N	N	15	150	30	20	N	N	50	30	N	10	N
GW192S	N	N	10	100	30	50	N	<20	50	30	N	10	N
GW193S	N	N	10	150	30	50	N	<20	50	50	N	10	N
GW194S	N	N	10	100	30	30	N	N	30	30	N	15	N
GW195S	N	N	15	100	30	30	N	N	50	50	N	15	N
GW196S	N	N	10	100	20	50	N	N	20	30	N	10	N
GW197S	N	N	7	70	20	30	N	N	15	30	N	7	N
GW198S	N	N	10	100	30	30	N	<20	30	30	N	10	N
GW199S	N	N	7	70	20	50	N	N	10	30	N	5	N
GW200S	N	N	7	70	20	30	N	N	15	30	N	7	N

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Neveshire Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Sr-ppm _s	V-ppm _s	W-ppm _s	Y-ppm _s	Zn-ppm _s	Zr-ppm _s	Th-ppm _s	Cu-ppm _{aa}	Pb-ppm _{aa}	Zn-ppm _{aa}	U-INSI
GW156S	100	50	N	15	N	500	N	--	--	--	.45
GW157S	100	50	N	30	N	500	N	--	--	--	.40
GW158S	100	70	N	20	N	500	N	--	--	--	.70
GW159S	100	70	N	20	N	500	N	--	--	--	.40
GW160S	100	30	N	15	N	300	N	--	--	--	.30
GW161S	N	50	N	20	N	500	N	--	--	--	.30
GW162S	N	50	N	20	N	300	N	--	--	--	.30
GW163S	150	50	N	20	N	500	N	--	--	--	.30
GW164S	100	30	N	20	N	500	N	--	--	--	.40
GW165S	100	70	N	20	N	300	N	--	--	--	.60
GW166S	200	50	N	20	N	200	N	--	--	--	.50
GW167S	200	70	N	20	N	300	N	--	--	--	.90
GW168S	200	70	N	20	N	300	N	--	--	--	.75
GW169S	N	50	N	15	N	300	N	--	--	--	.30
GW170S	N	50	N	20	N	500	N	--	--	--	.25
GW171S	N	30	N	15	N	300	N	--	--	--	.30
GW172S	<100	50	N	15	N	300	N	--	--	--	.50
GW173S	N	30	N	15	N	300	N	--	--	--	.20
GW174S	<100	30	N	15	N	300	N	--	--	--	.30
GW175S	N	30	N	20	N	300	N	--	--	--	.30
GW176S	<100	50	N	20	N	300	N	--	--	--	.55
GW177S	<100	50	N	20	N	500	N	--	--	--	.40
GW178S	<100	50	N	20	N	150	N	--	--	--	.55
GW179S	N	50	N	20	N	500	N	--	--	--	.50
GW180S	<100	50	N	20	N	500	N	--	--	--	.35
GW181S	N	50	N	20	N	300	N	--	--	--	.40
GW182S	200	70	N	20	N	300	N	--	--	--	.80
GW183S	150	100	N	30	N	300	N	--	--	--	.35
GW184S	200	200	N	50	N	1,000	N	--	--	--	.50
GW185S	300	200	N	50	N	700	N	--	--	--	.90
GW186S	200	150	N	30	N	200	N	--	--	--	.85
GW187S	<100	70	N	20	N	300	N	--	--	--	.60
GW188S	100	70	N	20	N	500	N	--	--	--	.90
GW189S	200	200	N	50	N	500	N	--	--	--	.80
GW190S	500	100	N	30	N	300	N	--	--	--	.75
GW191S	300	150	N	30	N	300	N	--	--	--	.40
GW192S	300	150	N	30	N	700	N	--	--	--	.40
GW193S	500	150	N	50	N	500	N	--	--	--	.45
GW194S	300	150	N	30	N	500	N	--	--	--	.50
GW195S	300	150	N	50	N	300	N	--	--	--	.90
GW196S	300	100	N	50	N	1,000	N	--	--	--	.70
GW197S	200	70	N	20	N	1,000	N	--	--	--	.80
GW198S	200	100	N	50	N	1,000	N	--	--	--	.60
GW199S	200	70	N	30	N	300	N	--	--	--	1.20
GW200S	200	70	N	30	N	300	N	--	--	--	1.20

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevadashine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Latitude	Longitude	Fe-pct. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s	Be-ppm s
GW2015	36 15 15	113 40 10	2.0	.7	1.0	.70	500	N	N	N	50	500	1.5
GW2025	36 15 21	113 40 18	2.0	.7	1.5	.70	700	N	N	N	70	500	1.5
GW2035	36 15 19	113 41 20	2.0	.7	1.0	.70	500	N	N	N	70	300	1.5
GW2045	36 15 6	113 42 4	2.0	.5	.7	.50	700	N	N	N	50	500	1.0
GW2055	36 15 57	113 28 30	3.0	2.0	7.0	.50	700	N	N	N	70	200	1.0
GW2065	36 15 39	113 28 38	3.0	3.0	7.0	.50	1,000	N	N	N	70	300	1.0
GW2075	36 15 20	113 28 45	2.0	3.0	10.0	.50	700	N	N	N	70	300	1.0
GW2085	36 15 20	113 28 38	3.0	3.0	7.0	.70	700	N	N	N	70	300	<1.0
GW2095	36 15 15	113 28 43	2.0	3.0	7.0	.30	700	N	N	N	70	300	1.5
GW2105	36 15 4	113 27 51	2.0	3.0	10.0	.30	500	N	N	N	70	200	1.0
GW2115	36 14 26	113 27 18	3.0	3.0	7.0	.50	1,000	N	N	N	70	500	1.5
GW2125	36 14 6	113 26 46	2.0	3.0	10.0	.30	700	N	N	N	50	200	1.0
GW2135	36 14 24	113 26 57	1.5	1.5	7.0	.30	300	N	N	N	100	200	1.5
GW2145	36 13 15	113 25 30	1.5	1.5	3.0	.30	300	N	N	N	70	300	1.0
GW2155	36 11 46	113 24 20	1.5	3.0	7.0	.20	300	N	N	N	50	200	N
GW2165	36 11 43	113 24 27	2.0	3.0	10.0	.50	700	N	N	N	50	200	N
GW2175	36 9 37	113 24 21	3.0	2.0	7.0	.50	700	N	N	N	70	300	<1.0
GW2185	36 11 1	113 23 30	1.5	2.0	10.0	.20	500	N	N	N	70	300	1.0
GW2195	36 15 54	113 27 4	3.0	2.0	7.0	.30	700	N	N	N	70	300	1.0
GW2205	36 15 54	113 27 8	2.0	2.0	7.0	.50	700	N	N	N	70	200	1.5
GW2215	36 16 2	113 26 13	2.0	3.0	5.0	.30	700	N	N	N	70	300	1.0
GW2225	36 16 27	113 26 28	3.0	1.5	2.0	.70	1,000	N	N	N	70	500	1.5
GW2235	36 17 34	113 26 37	3.0	2.0	7.0	.50	1,000	N	N	N	70	300	1.5
GW2245	36 18 38	113 27 36	3.0	1.5	5.0	.70	700	N	N	N	100	300	1.5
GW2255	36 18 23	113 29 20	3.0	3.0	3.0	.50	700	N	N	N	100	500	1.5
GW2265	36 15 28	113 33 22	5.0	1.5	1.5	.70	1,000	N	N	N	70	300	1.0
GW2275	36 16 34	113 33 26	7.0	1.5	1.5	1.00	1,000	N	N	N	70	300	<1.0
GW2285	36 18 17	113 34 55	5.0	1.5	1.5	1.00	700	N	N	N	70	300	<1.0
GW2295	36 17 39	113 39 49	1.0	.7	3.0	.30	200	N	N	N	100	200	1.0
GW2305	36 17 42	113 39 43	1.5	.7	5.0	.30	500	N	N	N	70	300	1.0
GW2315	36 20 35	113 48 50	1.0	1.5	15.0	.30	500	<.5	N	N	50	700	1.5
GW2325	36 16 2	113 39 11	2.0	1.0	5.0	.50	700	N	N	N	100	700	2.0
GW2335	36 15 58	113 39 18	2.0	.7	2.0	.70	700	N	N	N	70	700	1.5
GW2345	36 18 41	113 53 47	3.0	1.5	15.0	.70	700	N	N	N	70	1,000	2.0
GW2355	36 18 33	113 54 29	1.0	5.0	20.0	.20	500	N	N	N	70	500	2.0
GW2365	36 18 40	113 55 13	1.0	5.0	20.0	.20	500	N	N	N	70	500	2.0
GW2375	36 10 14	113 49 22	.7	.3	7.0	.20	300	N	N	N	50	500	1.5
GW2385	36 10 50	113 49 18	2.0	1.5	10.0	.50	700	N	N	N	70	700	2.0
GW2395	36 12 19	113 50 50	1.0	1.5	10.0	.30	500	N	N	N	100	500	1.5
GW2405	36 12 24	113 50 50	1.5	1.0	10.0	.30	300	N	N	N	100	500	1.0
GW2415	36 8 37	113 50 19	1.0	2.0	10.0	.30	500	N	N	N	100	700	1.5
GW2425	36 8 30	113 50 24	1.5	2.0	20.0	.30	500	N	N	N	70	300	1.5
GW2435	36 10 45	113 43 42	3.0	1.5	15.0	.50	700	N	N	N	100	700	2.0
GW2445	36 11 6	113 43 39	5.0	1.5	2.0	.70	1,000	N	N	N	150	1,000	2.0
GW2455	36 11 9	113 43 37	3.0	2.0	15.0	.50	700	N	N	N	150	1,000	1.5

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Piyeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--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
GW201S	N	N	10	100	20	50	N	<20	20	30	N	10	N
GW202S	N	N	7	100	20	30	N	<20	20	30	N	10	N
GW203S	N	N	10	30	20	50	N	<20	20	30	N	10	N
GW204S	N	N	10	100	20	30	N	N	20	30	N	7	N
GW205S	N	N	10	150	30	30	N	N	30	30	N	10	N
GW206S	N	N	10	100	30	30	N	N	30	30	N	10	N
GW207S	N	N	10	70	30	30	N	N	20	30	N	10	N
GW208S	N	N	15	150	30	30	N	N	50	30	N	10	N
GW209S	N	N	10	70	20	20	N	N	20	30	N	7	N
GW210S	N	N	10	100	20	30	N	N	30	30	N	10	N
GW211S	N	N	10	100	30	30	N	N	30	30	N	10	N
GW212S	N	N	10	100	20	30	N	N	30	20	N	7	N
GW213S	N	N	7	50	15	30	N	N	15	30	N	<5	N
GW214S	N	N	5	70	5	20	N	N	15	20	N	5	N
GW215S	N	N	7	100	7	<20	N	N	20	20	N	<5	N
GW216S	N	N	10	150	20	<20	N	N	50	20	N	10	N
GW217S	N	N	10	150	20	<20	N	N	50	20	N	7	N
GW218S	N	N	7	70	20	<20	N	N	15	20	N	7	N
GW219S	N	N	10	150	30	20	N	N	30	30	N	7	N
GW220S	N	N	10	100	20	20	N	N	20	30	N	7	N
GW221S	N	N	10	100	30	20	N	N	30	30	N	7	N
GW222S	N	N	15	200	30	20	N	<20	50	30	N	10	N
GW223S	N	N	10	150	30	50	N	N	50	30	N	7	N
GW224S	N	N	10	100	20	30	N	N	30	20	N	7	N
GW225S	N	N	10	100	30	30	N	N	30	30	N	10	N
GW226S	N	N	10	100	30	30	N	<20	70	30	N	10	N
GW227S	N	N	15	150	30	30	N	<20	100	30	N	10	N
GW228S	N	N	15	150	30	30	N	<20	70	30	N	10	N
GW229S	N	N	5	70	15	20	N	N	15	15	N	<5	N
GW230S	N	N	7	70	15	30	N	N	20	20	N	<5	N
GW231S	N	N	5	100	100	20	N	N	15	70	N	5	N
GW232S	N	N	7	70	30	30	N	<20	30	50	N	10	N
GW233S	N	N	7	100	20	30	N	<20	15	7	N	7	N
GW234S	N	N	7	100	20	50	N	<20	20	50	N	7	N
GW235S	N	N	5	50	15	20	N	N	20	50	N	<5	N
GW236S	N	N	5	50	15	30	N	N	15	30	N	5	N
GW237S	N	N	5	30	10	20	N	N	15	30	N	<5	N
GW238S	N	N	7	70	20	30	N	<20	20	70	N	7	N
GW239S	N	N	5	70	10	20	N	<20	15	30	N	<5	N
GW240S	N	N	5	100	15	20	N	<20	15	30	N	<5	N
GW241S	N	N	7	50	10	20	N	N	15	30	N	<5	N
GW242S	N	N	7	70	15	20	N	N	15	50	N	5	N
GW243S	N	N	10	70	20	30	N	<20	20	50	N	7	N
GW244S	N	N	10	100	30	30	N	<20	30	50	N	10	N
GW245S	N	N	7	100	20	30	N	<20	20	50	N	7	N

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Cu-ppm aa	Pb-ppm aa	Zn-ppm aa	U-INST
GW201S	200	70	N	20	N	300	N	13	20	25	.55
GW202S	200	70	N	30	N	300	N	10	15	20	.40
GW203S	150	70	N	20	N	300	N	15	20	25	.70
GW204S	300	70	N	20	N	300	N	15	15	25	.90
GW205S	200	100	N	30	N	300	N	25	15	15	.20
GW206S	300	100	N	20	N	100	N	15	20	15	.55
GW207S	300	100	N	30	N	150	N	15	15	20	.90
GW208S	300	100	N	20	N	200	N	15	15	30	.45
GW209S	300	70	N	30	N	200	N	15	15	25	.40
GW210S	200	100	N	30	N	200	N	10	15	25	.70
GW211S	200	100	N	30	N	150	N	10	15	15	.65
GW212S	200	100	N	30	N	200	N	15	15	25	.80
GW213S	200	50	N	20	N	200	N	16	10	15	.45
GW214S	<100	50	N	20	N	300	N	5	4	9	.55
GW215S	100	50	N	15	N	150	N	4	6	10	.50
GW216S	200	100	N	20	N	300	N	10	9	30	.50
GW217S	150	100	N	20	N	300	N	10	10	20	.20
GW218S	200	70	N	20	N	150	N	9	9	20	.45
GW219S	200	100	N	20	N	200	N	20	20	20	.20
GW220S	300	100	N	20	N	200	N	15	15	15	.50
GW221S	200	100	N	20	N	150	N	20	20	20	.40
GW222S	200	150	N	20	N	200	N	20	25	25	.55
GW223S	200	150	N	20	N	150	N	20	25	25	.30
GW224S	200	150	N	30	N	200	N	20	15	15	.30
GW225S	200	100	N	20	N	150	N	15	15	15	.40
GW226S	100	150	N	30	N	300	N	25	25	35	.50
GW227S	150	200	N	30	N	500	N	30	20	45	.30
GW228S	100	150	N	30	N	300	N	25	20	25	.45
GW229S	N	30	N	15	N	500	N	8	6	15	.25
GW230S	150	50	N	20	N	150	N	10	15	20	.45
GW231S	200	70	N	20	N	200	N	--	--	--	.60
GW232S	200	100	N	50	N	200	N	--	--	--	.85
GW233S	200	100	N	50	N	700	N	--	--	--	.20
GW234S	700	100	N	30	N	300	N	--	--	--	.70
GW235S	>5,000	30	N	15	N	100	N	--	--	--	3.90
GW236S	>5,000	30	N	15	N	70	N	--	--	--	4.00
GW237S	<100	50	N	10	N	150	N	--	--	--	.20
GW238S	200	100	N	30	N	200	N	--	--	--	.45
GW239S	150	50	N	20	N	300	N	--	--	--	.30
GW240S	100	70	N	20	N	500	N	--	--	--	.25
GW241S	100	70	N	30	N	300	N	--	--	--	.40
GW242S	200	70	N	15	N	150	N	--	--	--	.80
GW243S	200	100	N	50	N	300	N	--	--	--	.95
GW244S	200	150	N	30	N	500	N	--	--	--	1.10
GW245S	150	100	N	50	N	300	N	--	--	--	1.20

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevreshine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Latitude	Longitude	Fe-pct. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-ppm S	Ag-ppm S	As-ppm S	Au-ppm S	B-ppm S	Ba-ppm S	Be-ppm S
GW246S	36 18 36	113 41 32	1.0	1.5	3.0	.30	500	N	N	N	100	700	1.5
GW247S	36 16 22	113 43 24	2.0	1.0	10.0	.70	700	N	N	N	100	1,000	1.5
GW248S	36 13 30	113 50 51	2.0	3.0	10.0	.30	700	N	N	N	70	500	1.5
GW249S	36 19 13	113 50 29	2.0	3.0	15.0	.30	700	N	N	N	150	700	2.0
GW250S	36 18 48	113 51 11	2.0	3.0	20.0	.30	700	N	N	N	100	700	1.5
GW251S	36 18 29	113 53 11	3.0	7.0	15.0	.30	1,000	N	N	N	150	700	2.0
GW252S	36 22 59	113 43 46	1.5	1.0	5.0	.50	300	N	N	N	150	500	1.5
GW253S	36 22 54	113 43 48	1.5	1.0	3.0	.50	300	N	N	N	100	500	1.5
GW254S	36 23 21	113 43 23	2.0	1.5	2.0	.50	200	N	N	N	150	300	1.5
GW255S	36 30 23	113 42 57	1.0	1.0	2.0	.30	300	N	N	N	100	500	1.0
GW256S	36 31 43	113 43 48	.7	1.0	3.0	.30	300	N	N	N	70	300	1.0
GW257S	36 31 42	113 43 40	1.0	1.0	7.0	.30	300	N	N	N	70	300	1.0
GW258S	36 12 41	113 32 14	3.0	3.0	10.0	.50	1,000	N	N	N	100	700	1.5
GW259S	36 16 20	113 29 2	7.0	2.0	3.0	.70	1,500	N	N	N	100	700	2.0
GW260S	36 11 25	113 25 25	1.5	1.5	10.0	.20	500	N	N	N	70	500	1.5
GW261S	36 11 27	113 25 35	.5	.5	15.0	.15	100	N	N	N	50	100	1.0
GW262S	36 11 51	113 24 23	2.0	2.0	10.0	.30	500	N	N	N	70	500	1.0
GW263S	36 11 43	113 24 37	3.0	2.0	10.0	.30	700	N	N	N	100	500	1.5
GW264S	36 11 43	113 24 46	2.0	2.0	10.0	.30	500	N	N	N	100	500	1.5
GW283S	36 20 12	113 49 14	.7	1.0	10.0	.20	200	N	N	N	30	150	<1.0
GW284S	36 18 47	113 49 8	1.0	1.5	10.0	.20	300	<.5	N	N	50	300	1.0
GW285S	36 18 47	113 49 3	.7	5.0	10.0	.20	300	N	N	N	70	100	1.0
GW286S	36 19 30	113 47 55	1.0	1.0	5.0	.20	300	N	N	N	50	300	<1.0

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--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
GW246S	N	N	5	70	7	30	N	N	10	30	N	5	N
GW247S	N	N	7	100	20	30	N	<20	20	50	N	7	N
GW248S	N	N	5	70	20	20	N	N	15	30	N	5	N
GW249S	N	N	5	100	15	30	N	<20	20	50	N	5	N
GW250S	N	N	5	70	15	20	N	<20	15	50	N	5	N
GW251S	N	N	7	50	20	30	N	<20	15	50	N	5	N
GW252S	N	N	5	50	15	20	<5	<20	15	30	N	<5	N
GW253S	N	N	5	70	10	20	N	<20	15	30	N	5	N
GW254S	N	N	7	70	10	20	N	<20	30	20	N	7	N
GW255S	N	N	5	50	5	20	N	<20	15	20	N	5	N
GW256S	N	N	5	70	7	20	N	N	15	20	N	5	N
GW257S	N	N	7	50	10	20	N	<20	15	20	N	5	N
GW258S	N	N	15	100	50	30	N	N	30	50	N	10	N
GW259S	N	N	30	150	70	30	N	<20	70	50	N	15	N
GW260S	N	N	7	30	15	20	N	N	15	30	N	5	N
GW261S	N	N	N	30	10	20	N	N	5	15	N	<5	N
GW262S	N	N	7	70	20	20	N	N	20	20	N	7	N
GW263S	N	N	7	70	20	20	N	N	20	30	N	5	N
GW264S	N	N	7	70	20	20	N	N	15	30	N	5	N
GW283S	N	N	<5	30	7	20	N	N	15	20	N	5	N
GW284S	N	N	5	50	15	20	<5	N	15	50	N	5	N
GW285S	N	N	5	50	7	20	<5	N	20	20	N	5	N
GW286S	N	N	5	30	15	20	N	N	15	30	N	<5	N

Table 3.-- Analytical data for stream sediments from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesas, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S	Cu-ppm aa	Pb-ppm aa	Zn-ppm aa	U-INST
GW246S	<100	50	N	30	N	300	N	--	--	--	.40
GW247S	200	100	N	30	N	500	N	--	--	--	.55
GW248S	200	70	N	20	N	200	N	--	--	--	.50
GW249S	150	70	N	20	N	200	N	--	--	--	.90
GW250S	200	100	N	20	N	200	N	--	--	--	.60
GW251S	5,000	100	N	30	N	200	N	--	--	--	1.90
GW252S	100	70	N	30	N	300	N	--	--	--	.25
GW253S	150	50	N	20	N	300	N	--	--	--	<.05
GW254S	150	100	N	50	N	500	N	--	--	--	1.70
GW255S	N	50	N	15	N	300	N	--	--	--	.20
GW256S	N	50	N	15	N	150	N	--	--	--	.20
GW257S	150	50	N	30	N	200	N	--	--	--	.60
GW258S	200	150	N	30	N	200	N	--	--	--	.65
GW259S	200	200	N	50	N	300	N	--	--	--	.70
GW260S	150	50	N	15	N	150	N	--	--	--	.25
GW261S	700	30	N	15	N	100	N	--	--	--	.30
GW262S	150	70	N	20	N	300	N	--	--	--	.55
GW263S	100	70	N	30	N	200	N	--	--	--	.65
GW264S	100	50	N	20	N	300	N	--	--	--	.50
GW283S	200	30	N	20	N	200	N	--	--	--	.40
GW284S	150	50	N	15	N	200	N	--	--	--	.80
GW285S	100	30	N	15	N	150	N	--	--	--	.50
GW286S	100	30	N	15	N	200	N	--	--	--	.30

Table 4.-- Analytical data for panned concentrates from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang

Point, Nevcrshine Mesa,Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona

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

Sample	Latitude	Longitude	Fe-ppt. s	Mg-ppt. s	Ca-ppt. s	Ti-ppt. s	Mn-ppt. s	Ag-ppt. s	As-ppt. s	Au-ppt. s	B-ppt. s	Ba-ppt. s
GW016P	36 29 22	113 45 25	1.5	1.50	5.00	.30	1,000	N	N	N	70	10,000
GW017P	36 15 34	113 47 54	5.0	2.00	7.00	.30	300	10	2,000	N	200	3,000
GW018P	36 20 46	113 49 21	1.5	2.00	30.00	.50	700	N	N	N	70	200
GW019P	36 18 9	113 47 35	1.0	.70	20.00	.15	300	N	N	N	50	300
GW020P	36 17 6	113 49 25	1.5	1.00	30.00	.30	700	N	N	N	50	200
GW021P	36 20 23	113 47 50	1.5	1.50	30.00	.30	700	N	N	N	20	200
GW022P	36 11 22	113 27 40	30.0	5.00	3.00	2.00	5,000	N	N	N	N	300
GW023P	36 15 20	113 28 45	15.0	7.00	10.00	1.00	1,500	N	N	N	70	700
GW025P	36 21 29	113 51 21	1.5	.10	1.00	>2.00	300	N	N	N	100	7,000
GW026P	36 21 46	113 49 35	1.5	.15	.70	>2.00	300	N	N	N	150	700
GW027P	36 20 13	113 53 20	2.0	.15	1.00	>2.00	700	N	N	N	100	2,000
GW028P	36 20 35	113 48 50	2.0	.30	2.00	>2.00	500	N	N	N	150	>10,000
GW029P	36 16 3	113 39 14	7.0	.30	7.00	>2.00	500	N	N	N	200	300
GW030P	36 18 41	113 53 47	2.0	.20	1.00	>2.00	500	N	N	N	200	150
GW031P	36 10 14	113 49 22	1.5	.20	1.00	>2.00	300	N	N	N	200	5,000
GW032P	36 12 22	113 50 56	.7	.30	1.50	>2.00	300	N	N	N	200	7,000
GW034P	36 8 38	113 50 25	1.5	1.00	20.00	2.00	500	N	N	N	150	>10,000
GW035P	36 11 9	113 43 51	2.0	.20	2.00	>2.00	700	N	N	N	200	5,000
GW037P	36 16 22	113 43 24	10.0	.50	3.00	2.00	1,500	N	N	N	500	700
GW038P	36 19 13	113 50 29	1.0	.15	1.00	>2.00	200	N	N	N	70	5,000
GW039P	36 18 48	113 51 11	2.0	.30	5.00	>2.00	700	N	N	N	300	>10,000
GW041P	36 30 23	113 42 57	1.5	.30	.70	>2.00	500	N	N	N	500	>10,000
GW042P	36 31 43	113 43 48	.5	.10	.30	2.00	300	N	N	N	150	>10,000
GW043P	36 31 42	113 43 40	3.0	.20	1.50	>2.00	300	N	N	N	300	>10,000
GW044P	36 12 41	113 32 14	7.0	2.00	5.00	2.00	700	N	N	N	150	10,000
GW045P	36 12 50	113 31 4	3.0	2.00	3.00	1.50	500	N	N	N	50	5,000
GW046P	36 11 51	113 24 23	1.0	2.00	20.00	1.00	300	N	N	N	70	10,000
GW047P	36 11 43	113 24 37	1.5	2.00	15.00	1.00	500	N	N	N	100	>10,000
GW057P	36 20 12	113 49 14	.7	1.00	15.00	.50	200	N	N	N	150	150
GW058P	36 18 47	113 49 8	.7	3.00	20.15	.15	300	N	N	N	70	100
GW059P	36 18 47	113 49 3	1.0	1.00	20.00	.30	500	N	N	N	100	3,000
GW060P	36 19 30	113 47 55	1.5	1.00	10.00	.70	700	N	N	N	100	300

Table 4.-- Analytical data for panned concentrates from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
GW016P	<2	N	N	10	100	15	<50	N	N	20	50	N
GW017P	2	N	N	50	70	15,000	50	150	N	70	150	N
GW018P	N	N	N	10	100	150	<50	N	N	20	150	N
GW019P	<2	N	N	<10	100	100	50	N	N	10	50	N
GW020P	N	N	N	10	100	10	<50	N	N	20	30	N
GW021P	N	N	N	10	100	700	<50	10	N	20	300	N
GW022P	N	N	N	100	1,000	100	200	N	<50	300	70	N
GW023P	N	N	N	50	700	150	<50	N	<50	300	70	N
GW025P	<2	N	N	N	150	50	50	10	N	<10	200	N
GW026P	N	N	N	<10	200	20	70	N	N	<10	100	N
GW027P	<2	N	N	<10	150	50	100	N	<50	15	150	N
GW028P	<2	N	N	N	150	50	150	N	N	20	150	N
GW029P	N	N	N	10	150	150	700	15	<50	70	300	N
GW030P	N	N	N	N	100	50	300	N	<50	15	100	N
GW031P	N	N	N	<10	150	30	150	N	N	20	70	N
GW032P	N	N	N	N	200	<10	150	N	N	30	70	N
GW034P	N	N	N	N	200	30	150	N	N	20	70	N
GW035P	<2	N	N	N	150	70	1,500	N	N	15	150	N
GW037P	<2	N	N	20	500	100	1,000	20	N	100	150	N
GW038P	N	N	N	N	70	15	50	<10	N	10	70	N
GW039P	N	N	N	10	150	70	1,000	N	<50	15	100	N
GW041P	N	N	N	10	1,500	20	50	N	<50	10	50	N
GW042P	N	N	N	N	500	<10	<50	N	N	10	50	N
GW043P	N	N	N	N	200	100	500	30	<50	50	200	N
GW044P	N	N	N	20	200	50	700	N	<50	70	70	N
GW045P	N	N	N	20	500	15	500	N	<50	300	50	N
GW046P	N	N	N	<10	70	10	50	N	N	50	30	N
GW047P	N	N	N	10	200	100	70	N	N	150	200	N
GW057P	N	N	N	<10	100	<10	50	N	N	<10	20	N
GW058P	N	N	N	<10	30	10	50	N	N	<10	20	N
GW059P	<2	N	N	10	50	15	50	N	N	10	20	N
GW060P	N	N	N	10	200	15	70	N	N	10	30	N

Table 4.-- Analytical data for panned concentrates from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona

Sample	Sc-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa
Gw016P	10	N	100	N	50	N	>2,000	N	N
Gw017P	<10	N	200	N	20	5,000	700	N	N
Gw018P	<10	N	100	N	30	N	700	N	N
Gw019P	N	N	70	N	20	N	1,500	N	N
Gw020P	<10	N	70	N	30	N	1,000	N	N
Gw021P	<10	N	100	N	50	N	700	N	N
Gw022P	50	N	700	N	100	N	200	N	N
Gw023P	10	N	300	N	30	N	200	N	N
Gw025P	100	N	200	N	700	N	>2,000	N	--
Gw026P	70	N	150	N	700	N	>2,000	N	--
Gw027P	70	50	200	N	700	N	>2,000	N	--
Gw028P	200	N	200	N	2,000	N	>2,000	N	--
Gw029P	50	N	200	N	700	N	>2,000	N	--
Gw030P	70	<20	200	N	500	N	>2,000	N	--
Gw031P	70	<20	150	N	700	N	>2,000	N	--
Gw032P	70	N	200	N	500	N	>2,000	N	--
Gw034P	20	N	100	N	300	N	>2,000	N	--
Gw035P	100	30	150	N	700	N	>2,000	N	--
Gw037P	70	<20	200	N	700	N	>2,000	N	--
Gw038P	100	N	100	N	700	N	>2,000	N	--
Gw039P	100	20	200	N	1,000	N	>2,000	N	--
Gw041P	100	N	200	N	700	N	>2,000	N	--
Gw042P	70	N	70	N	700	N	>2,000	N	--
Gw043P	70	N	200	N	1,000	N	>2,000	N	--
Gw044P	50	N	150	N	500	N	>2,000	N	--
Gw045P	30	N	150	N	300	N	>2,000	N	--
Gw046P	10	N	70	N	200	N	>2,000	N	--
Gw047P	30	N	70	N	300	N	>2,000	N	--
Gw057P	N	N	50	N	50	N	>2,000	N	--
Gw058P	<10	N	50	N	20	N	1,500	N	--
Gw059P	<10	N	70	N	50	N	2,000	N	--
Gw060P	<10	N	100	N	100	N	>2,000	N	--

Table 5.-- Analytical data for rocks from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevadine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona
 [N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	Latitude	Longitude	Fe-ppt. s	My-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppt. s	Ag-ppt. s	As-ppt. s	AU-ppt. s	B-ppt. s	Ba-ppt. s
GW031R	36 27 34	113 41 57	.30	.50	20.00	.050	100	N	N	N	30	50
GW032R	36 10 24	113 47 58	7.00	5.00	7.00	1.000	1,000	N	N	N	N	300
GW033R	36 15 56	113 47 54	.30	10.00	20.00	.020	200	N	N	N	N	1,500
GW034R	36 15 56	113 47 54	.70	10.00	20.00	.030	200	N	N	N	N	3,000
GW035R	36 15 56	113 47 54	20.00	.20	.15	.070	50	30.0	7,000	N	N	1,500
GW036R	36 15 56	113 47 54	1.00	.20	.20	.150	50	7.0	500	N	70	3,000
GW037R	36 19 33	113 47 29	.15	.15	15.00	.070	150	2.0	N	N	10	150
GW038R	36 19 33	113 47 29	.30	7.00	15.00	.100	300	N	N	N	<10	70
GW039R	36 18 50	113 47 34	10.00	7.00	7.00	>1.000	1,000	N	N	N	10	1,500
GW040R	36 22 10	113 48 43	.15	.50	20.00	.070	100	N	N	N	N	20
GW041R	36 31 6	113 41 40	.70	1.00	3.00	.300	200	N	N	N	70	300
GW042R	36 31 6	113 41 40	5.00	.30	.20	.300	100	1.5	700	N	100	200
GW043R	36 16 34	113 54 5	.50	.70	7.00	.150	150	N	N	N	70	200
GW044R	36 16 41	113 54 31	.30	.30	10.00	.150	70	N	N	N	70	150
GW045R	36 11 20	113 47 14	.07	.07	7.00	.015	30	N	N	N	150	20
GW046R	36 14 43	113 51 45	.20	.30	20.00	.020	150	N	N	N	50	150
GW047R	36 8 51	113 47 3	1.00	2.00	7.00	.100	300	N	N	N	30	500
GW048R	36 10 45	113 46 40	.20	.20	20.00	.030	100	N	N	N	150	30
GW049R	36 10 30	113 44 43	1.50	2.00	20.00	.200	300	N	N	N	70	200
GW050R	36 10 30	113 44 43	1.50	1.50	20.00	.700	300	N	N	N	15	150
GW051R	36 21 50	113 49 8	.10	7.00	>20.00	.015	200	N	N	N	N	20
GW052R	36 17 15	113 28 55	7.00	7.00	20.00	.700	1,000	N	N	N	10	700
GW053R	36 18 4	113 28 37	15.00	5.00	10.00	.700	1,500	N	N	N	<10	500
GW054R	36 16 35	113 27 37	3.00	5.00	15.00	.500	1,500	N	N	N	N	1,500
GW055R	36 9 15	113 28 13	3.00	5.00	7.00	.500	1,500	N	N	N	20	1,000
GW056R	36 9 35	113 26 47	7.00	7.00	5.00	.700	1,500	N	N	N	N	300
GW057R	36 6 16	113 24 10	.30	3.00	>20.00	.020	200	N	N	N	N	20
GW058R	36 10 6	113 25 22	.50	1.50	>20.00	.030	200	N	N	N	N	300
GW059R	36 11 57	113 26 15	1.50	.30	.50	.300	30	2.0	700	N	100	1,500
GW060R	36 11 59	113 26 15	1.50	3.00	3.00	.300	300	N	N	N	150	500
GW061R	36 23 46	113 42 18	<.05	.50	>20.00	.010	50	N	N	N	20	30
GW062R	36 23 18	113 42 7	.30	2.00	20.00	.030	100	1.5	N	N	70	150
GW063R	36 21 27	113 42 40	.50	.07	2.00	.030	150	1.0	N	N	150	150
GW064R	36 14 32	113 30 8	.70	7.00	20.00	.050	500	N	N	N	15	200
GW065R	36 14 32	113 30 8	.50	10.00	20.00	.050	1,000	N	N	N	10	300
GW066R	36 14 47	113 30 15	10.00	7.00	7.00	1.000	1,000	N	N	N	N	700
GW067R	36 14 47	113 30 15	20.00	.20	.15	.100	150	<.5	1,500	N	50	150
GW068R	36 16 47	113 36 59	1.50	.70	7.00	.070	300	.5	N	N	150	70
GW069R	36 10 18	113 27 18	5.00	5.00	5.00	.700	1,500	N	N	N	N	300
GW070R	36 16 5	113 28 41	10.00	7.00	7.00	1.000	1,500	N	N	N	<10	500
GW071R	36 16 5	113 28 41	1.00	.70	10.00	.100	500	N	N	N	10	300
GW072R	36 15 51	113 28 30	.30	.30	20.00	.030	300	N	N	N	20	300
GW073R	36 9 36	113 24 28	.30	.50	20.00	.030	100	N	N	N	10	20
GW074R	36 15 40	113 26 49	N	<.02	10.00	N	N	N	N	N	N	N
GW075R	36 18 21	113 34 57	.50	3.00	10.00	.020	300	N	N	N	30	70

Table 5.--- Analytical data for rocks from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
GW031R	N	N	N	N	50	<5	<20	N	N	5	N	N
GW032R	<1.0	N	N	30	500	50	30	N	N	100	10	N
GW033R	N	N	N	N	50	70	<20	20	N	7	<10	N
GW034R	N	N	N	N	50	100	<20	70	N	30	10	N
GW035R	N	N	N	30	70	10,000	<20	200	N	30	100	700
GW036R	N	N	N	20	70	20,000	N	50	N	50	30	300
GW037R	N	N	N	5	20	500	<20	N	N	<5	500	N
GW038R	N	N	N	N	50	70	<20	N	N	N	10	N
GW039R	<1.0	N	N	70	1,000	70	100	N	<20	300	20	N
GW040R	N	N	N	N	30	10	<20	N	N	<5	<10	N
GW041R	1.0	N	N	5	70	50	20	N	N	10	30	N
GW042R	<1.0	N	N	10	50	500	20	500	N	20	100	N
GW043R	3.0	N	N	N	15	20	20	<5	N	<5	20	N
GW044R	1.5	N	N	N	10	5	20	N	N	N	20	N
GW045R	N	N	N	N	15	<5	N	N	N	5	<10	N
GW046R	N	N	N	N	50	<5	<20	N	N	5	10	N
GW047R	<1.0	N	N	N	100	5	20	N	N	10	15	N
GW048R	N	N	N	N	50	5	<20	N	N	10	15	N
GW049R	<1.0	N	N	5	70	5	20	N	N	10	20	N
GW050R	N	N	N	5	70	5	<20	N	N	30	20	N
GW051R	N	N	N	N	50	5	N	N	<20	N	N	N
GW052R	N	N	N	30	700	50	20	N	N	150	30	N
GW053R	<1.0	N	N	50	150	70	50	N	<20	50	30	N
GW054R	<1.0	N	N	15	100	50	50	N	N	50	20	N
GW055R	<1.0	N	N	15	50	50	30	N	N	20	20	N
GW056R	N	N	N	50	500	50	<20	N	N	150	10	N
GW057R	N	N	N	N	70	<5	<20	N	N	5	15	N
GW058R	N	N	N	N	50	<5	<20	N	N	10	15	N
GW059R	1.0	N	N	15	70	500	20	500	N	30	30	N
GW060R	1.0	N	N	5	100	15	20	<5	N	15	20	N
GW061R	N	N	N	N	50	<5	<20	N	N	N	10	N
GW062R	N	N	N	N	50	5	<20	N	N	5	150	N
GW063R	<1.0	N	N	N	100	15	<20	N	N	10	15	N
GW064R	N	N	N	N	30	10	<20	N	N	<5	20	N
GW065R	N	N	N	<5	30	<5	<20	N	N	<5	10	N
GW066R	N	N	N	50	70	70	20	N	<20	150	15	N
GW067R	1.0	N	N	20	50	300	<20	30	N	100	70	N
GW068R	N	N	N	5	70	20	<20	N	N	15	20	N
GW069R	<1.0	N	N	20	300	50	20	N	N	70	<10	N
GW070R	N	N	N	70	700	100	30	N	20	150	15	N
GW071R	<1.0	N	N	7	100	100	<20	N	N	15	20	N
GW072R	N	N	N	N	50	<5	<20	N	N	<5	<10	N
GW073R	N	N	N	N	50	<5	<20	N	N	<5	15	N
GW074R	N	N	N	N	N	<5	<20	N	N	N	N	N
GW075R	N	N	N	<5	70	5	20	N	N	5	10	N

Table 5.-- Analytical data for rocks from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona

Sample	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	U(N-act)	Th(N-act)
GW031R	N	N	100	30	N	<10	N	30	N	1.750	<2.10
GW032R	20	N	500	150	N	30	N	150	N	.782	3.00
GW033R	N	N	100	20	N	<10	N	10	N	2.940	<2.70
GW034R	N	N	150	30	N	<10	N	20	N	3.850	<2.90
GW035R	N	N	300	70	N	N	700	150	N	15.400	<4.50
GW036R	N	N	150	30	N	<10	N	200	N	9.750	<4.40
GW037R	N	N	N	70	N	10	N	150	N	2.720	<2.30
GW038R	N	N	N	15	N	N	N	50	N	.777	<1.70
GW039R	15	N	1,000	150	N	30	N	300	N	2.750	10.20
GW040R	N	N	300	20	N	<10	N	15	N	1.570	<2.10
GW041R	5	N	N	70	N	15	N	300	N	2.680	5.70
GW042R	<5	N	N	100	N	20	<200	300	N	7.010	<3.90
GW043R	N	N	1,500	50	N	10	N	70	N	3.650	17.00
GW044R	<5	N	1,500	100	N	10	N	70	N	12.100	<6.60
GW045R	N	N	N	15	N	<10	N	<10	N	1.220	<2.20
GW046R	<5	N	100	15	N	15	N	10	N	1.340	<1.60
GW047R	<5	N	100	50	N	20	N	200	N	1.110	3.65
GW048R	N	N	N	30	N	20	N	30	N	2.010	<1.80
GW049R	5	N	150	50	N	20	N	300	N	3.090	4.82
GW050R	<5	N	N	50	N	15	N	150	N	4.180	<2.40
GW051R	N	N	150	15	N	15	N	15	N	.933	<1.30
GW052R	30	N	500	150	N	30	N	150	N	1.020	3.63
GW053R	50	N	700	150	N	30	N	150	N	1.010	10.30
GW054R	30	N	500	100	N	50	N	100	N	1.120	4.33
GW055R	30	N	500	150	N	30	N	100	N	1.620	5.79
GW056R	30	N	300	150	N	30	N	150	N	.472	2.60
GW057R	N	N	150	20	N	<10	N	10	N	.568	<1.90
GW058R	<5	N	150	20	N	20	N	70	N	.578	<1.60
GW059R	5	N	150	50	N	20	N	500	N	67.400	<16.00
GW060R	5	N	N	50	N	30	N	500	N	2.730	8.16
GW061R	N	N	300	15	N	10	N	N	N	2.130	<2.30
GW062R	N	N	200	20	N	10	N	30	N	2.290	<2.70
GW063R	<5	N	N	30	N	30	N	70	N	2.560	<4.00
GW064R	5	N	700	30	N	10	N	50	N	1.500	<2.40
GW065R	N	N	300	20	N	10	N	30	N	2.220	<2.50
GW066R	30	N	500	200	N	50	N	200	N	.959	3.60
GW067R	<5	N	N	50	N	15	N	200	N	85.700	<19.00
GW068R	<5	N	150	30	N	15	N	70	N	3.280	<2.90
GW069R	20	N	300	150	N	20	N	70	N	1.040	2.60
GW070R	30	N	500	200	N	30	N	150	N	1.030	5.72
GW071R	5	N	700	100	N	20	N	70	N	3.810	<3.10
GW072R	N	N	200	15	N	10	N	70	N	.962	<2.00
GW073R	N	N	300	20	N	10	N	30	N	2.620	<2.60
GW074R	N	N	500	<10	N	N	N	N	N	<1.60	<1.60
GW075R	N	N	N	20	N	15	N	30	N	2.310	<2.40

Table 5.-- Analytical data for rocks from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevadine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Latitude	Longitude	Fe-pct. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-ppt %	Ag-ppt %	As-ppt %	Au-ppt %	B-ppt %	Ba-ppt %
GW076R	36 19 42	113 47 26	.20	7.00	15.00	.100	500	7.0	N	N	20	500
GW077R	36 10 32	113 49 14	N	1.50	>20.00	N	N	N	N	N	N	200
GW078R	36 10 40	113 43 58	.07	5.00	20.00	.015	100	N	N	N	30	20
GW079R	36 11 0	113 43 43	.10	.70	>20.00	.020	150	<.5	N	N	15	N
GW080R	36 16 5	113 44 30	.20	.07	1.50	.030	100	N	N	N	200	150
GW081R	36 13 30	113 50 51	15.00	7.00	10.00	1.000	2,000	N	N	N	N	1,000
GW082R	36 19 12	113 50 29	.07	10.00	20.00	.010	500	N	N	N	N	30
GW083R	36 19 2	113 50 33	.30	5.00	>20.00	.070	150	N	N	N	20	500
GW084R	36 18 54	113 50 46	.05	2.00	15.00	.007	70	1.0	N	N	100	200
GW085R	36 18 34	113 53 13	.05	.20	20.00	.020	<10	N	N	N	N	20
GW086R	36 26 59	113 43 46	.15	.50	>20.00	.020	300	N	N	N	N	<20
GW087R	36 23 22	113 43 21	.10	1.00	20.00	.300	3,000	N	N	N	70	500
GW088R	36 23 15	113 43 29	>20.00	.15	.20	.070	100	N	7,000	N	50	1,000
GW089R	36 23 53	113 48 11	.70	.03	3.00	.003	100	N	N	N	30	70
GW090R	36 23 56	113 48 13	.15	.50	>20.00	.003	700	.7	N	N	N	<20
GW091R	36 23 56	113 48 13	.15	10.00	20.00	.050	700	.5	N	N	20	<20
GW092R	36 23 38	113 46 32	3.00	.15	.20	.150	100	N	2,000	N	70	700
GW093R	36 30 7	113 43 4	2.00	7.00	10.00	.300	700	N	N	N	150	500
GW094R	36 29 33	113 42 7	.10	.30	20.00	.020	100	1.0	N	N	150	20
GW095R	36 29 15	113 43 32	.05	.15	20.00	.010	70	1.5	N	N	150	<20
GW096R	36 28 12	113 44 4	<.05	.20	>20.00	.010	50	<.5	N	N	70	<20
GW097R	36 21 0	113 43 58	.05	.20	>20.00	.010	70	.5	N	N	50	<20
GW098R	36 12 47	113 32 1	.20	.02	.15	.030	70	N	N	N	30	30
GW099R	36 16 20	113 29 2	N	.07	>20.00	.020	<10	3.0	N	N	N	<20
GW100R	36 14 30	113 31 10	7.00	3.00	10.00	.700	1,500	N	N	N	N	500
GW144R	36 25 6	113 46 49	.30	7.00	20.00	.030	200	.5	N	N	15	<20
GW145R	36 25 6	113 48 49	1.00	7.00	20.00	.050	200	N	N	N	70	N
GW146R	36 25 6	113 48 49	20.00	1.50	>20.00	.010	200	N	700	N	50	30
GW147R	36 25 6	113 48 49	20.00	3.00	>20.00	.005	150	N	700	N	10	30
GW0020	36 16 16	113 47 59	20.00	.70	1.00	.030	100	15.0	10,000	N	N	300
GW0040	36 31 7	113 41 44	3.00	.10	.30	.150	100	30.0	1,000	N	50	500
GW0030	36 19 42	113 47 22	2.00	.03	.10	.030	70	5.0	N	20	20	300
GW0050	36 12 0	113 26 19	.70	.30	7.00	.100	500	N	N	N	100	200
GW0060	36 12 0	113 26 19	.50	1.50	2.00	.300	200	30.0	2,000	N	100	1,000
GW0070	36 12 0	113 26 15	1.00	.30	.30	.500	200	3.0	500	N	100	1,000
GW0080	36 12 0	113 26 15	10.00	.70	7.00	.030	1,000	<.5	300	N	20	700
GW0100	36 12 2	113 26 18	.70	.50	.50	.300	200	15.0	1,000	N	100	300
GW0110	36 14 47	113 30 15	7.00	.15	1.50	.200	150	200.0	2,000	N	50	500
GW0360	36 15 34	113 48 0	5.00	.15	.15	.100	150	1.0	1,500	N	150	>5,000

Table 5.-- Analytical data for rocks from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Never-shine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
GW076R	N	N	N	<5	30	150	20	N	N	7	150	N
GW077R	N	N	N	N	15	N	<20	N	N	N	<10	N
GW078R	<1.0	N	N	N	20	5	20	N	N	<5	10	N
GW079R	<1.0	N	N	N	30	5	20	N	N	<5	70	N
GW080R	<1.0	N	N	<5	30	<5	20	N	N	5	10	N
GW081R	N	N	N	50	300	100	30	N	20	100	30	N
GW082R	N	N	N	N	15	<5	20	N	N	<5	<10	N
GW083R	N	N	N	N	30	10	20	N	N	5	20	N
GW084R	N	N	N	N	30	<5	20	N	N	5	10	N
GW085R	<1.0	N	N	N	15	5	20	N	N	<5	10	N
GW086R	N	N	N	N	30	<5	20	15	N	5	10	N
GW087R	<1.0	N	N	10	100	5	30	N	N	70	50	N
GW088R	1.5	N	N	30	150	20	<20	150	N	150	150	N
GW089R	<1.0	N	N	N	20	<5	20	N	N	5	20	N
GW090R	N	N	N	N	30	<5	20	N	N	<5	20	N
GW091R	N	N	N	N	50	<5	20	N	N	5	15	N
GW092R	1.0	N	N	10	50	50	20	N	<20	50	50	N
GW093R	1.5	N	N	7	70	7	30	N	<20	20	30	N
GW094R	N	N	N	N	50	<5	20	N	N	7	15	N
GW095R	N	N	N	N	20	7	20	N	N	5	10	N
GW096R	<1.0	N	N	N	30	<5	20	N	N	5	15	N
GW097R	N	N	N	N	30	<5	20	N	N	<5	10	N
GW098R	N	N	N	N	30	<5	20	N	N	<5	10	N
GW099R	<1.0	N	N	N	15	<5	20	N	N	<5	<10	N
GW100R	<1.0	N	N	30	100	70	20	N	N	50	15	N
GW144R	<1.0	N	N	N	50	15	20	N	N	5	15	N
GW145R	1.0	N	N	N	30	20	20	N	N	7	15	N
GW146R	2.0	N	N	<5	70	300	<20	N	N	50	50	<100
GW147R	2.0	N	N	10	70	150	20	30	N	70	70	100
GW0020	N	N	N	20	50	20,000	<20	700	N	70	150	500
GW0040	N	N	N	20	30	20,000	<20	2,000	N	50	7,000	N
GW0030	3.0	N	N	<5	15	20,000	<20	10	N	<5	70	N
GW0050	<1.0	N	N	5	30	20	20	N	N	10	15	N
GW0060	1.0	N	20	30	70	10,000	20	N	N	50	70	N
GW0070	2.0	N	N	300	70	10,000	30	100	N	200	30	N
GW0080	1.5	N	N	100	30	300	20	20	N	300	30	N
GW0100	1.5	N	N	150	50	>20,000	20	50	N	200	50	N
GW0110	<1.0	N	N	300	20	>20,000	<20	100	N	700	200	N
GW0360	1.5	N	N	30	70	>20,000	<20	200	N	100	150	150

Table 5.-- Analytical data for rocks from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona--continued

Sample	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	U(N-act)	Th(N-act)
GW076R	<5	N	100	300	N	10	N	200	N	--	--
GW077R	<5	N	500	<10	N	N	N	N	N	--	--
GW078R	N	N	N	20	N	10	N	15	N	--	--
GW079R	N	N	150	30	N	15	N	20	N	--	--
GW080R	N	N	N	30	N	10	N	70	N	--	--
GW081R	50	N	500	300	N	50	N	200	N	--	--
GW082R	N	N	150	10	N	N	N	N	N	--	--
GW083R	N	N	1,000	30	N	10	N	50	N	--	--
GW084R	N	N	<100	30	N	<10	N	10	N	--	--
GW085R	N	N	5,000	15	N	N	N	15	N	--	--
GW086R	N	N	200	70	N	<10	N	50	N	--	--
GW087R	5	N	200	50	N	20	N	300	N	--	--
GW088R	N	N	300	300	N	<10	1,500	200	N	--	--
GW089R	N	N	N	30	N	N	N	10	N	--	--
GW090R	N	N	500	20	N	15	N	15	N	--	--
GW091R	N	N	<100	20	N	<10	N	100	N	--	--
GW092R	<5	N	1,500	20	N	10	N	200	N	--	--
GW093R	7	N	150	50	N	30	N	500	N	--	--
GW094R	N	N	150	30	N	15	N	15	N	--	--
GW095R	N	N	150	20	N	<10	N	10	N	--	--
GW096R	N	N	150	20	N	10	N	10	N	--	--
GW097R	N	N	150	20	N	10	N	10	N	--	--
GW098R	N	N	N	20	N	10	N	300	N	--	--
GW099R	N	N	700	<10	N	N	N	15	N	--	--
GW100R	30	N	500	200	N	30	N	100	N	--	--
GW144R	N	N	100	30	N	<10	N	15	N	--	--
GW145R	<5	N	100	70	N	10	N	20	N	--	--
GW146R	N	N	<100	300	N	10	N	30	N	--	--
GW147R	<5	N	<100	200	N	10	N	N	N	--	--
GW0020	<5	N	1,500	500	N	15	500	70	N	131.000	<23.00
GW0040	<5	N	300	100	N	<10	500	100	N	37.400	<8.60
GW0030	N	N	N	50	N	<10	N	15	N	18.800	<5.20
GW0050	<5	N	500	500	N	15	N	30	N	749.000	<150.00
GW0060	7	N	150	70	N	20	2,000	300	N	66.900	<16.00
GW0070	7	N	100	70	N	50	N	300	N	128.000	<23.00
GW0080	<5	N	N	20	N	30	1,500	50	N	126.000	<23.00
GW0100	5	N	<100	50	N	50	3,000	300	N	157.000	<28.00
GW0110	<5	N	<100	200	N	15	>10,000	50	N	56.600	<11.00
GW0360	5	N	300	50	N	20	1,000	200	N	41.300	<9.50

Table 6.--Analytical data for waters from the Andrus Canyon, Grassy Mountain, Last Chance Canyon, Mustang Point, Nevershine Mesa, Pigeon Canyon, and Snap Point Wilderness Study Areas, Mohave County, Arizona

[The following qualifiers are used when reporting data:---, no determination made; and <, detected--but present at a concentration less than the value reported.]

Sample Number	Latitude	Longitude	Cu (μ g/L)	U (μ g/L)	Pb (μ g/L)	Zn (μ g/L)	SO ₄ ²⁻ (mg/L)	F ⁻ (mg/L)	Cl ⁻ (mg/L)	HCO ₃ ⁻ (mg/L)	Specific Conductance (μ mhos/cm)
GW021W	36 27 55	113 41 29	--	1.2	--	--	10	.18	9.0	239	440
GW022W	36 28 43	113 41 23	--	1.1	--	--	12	.40	12	209	400
GW023W	36 30 15	113 45 13	--	.16	--	--	3.9	.07	2.6	64	140
GW024W	36 29 57	113 42 32	--	1.2	--	--	61	.30	76	61	760
GW025W	36 13 31	113 33 13	--	2.8	--	--	165	.15	49	215	720
GW026W	36 13 51	113 33 30	--	4.8	--	--	636	.11	49	286	1600
GW027W	36 10 42	113 44 35	--	2.2	--	--	9.7	.32	9.8	213	370
GW028W	36 18 00	113 41 13	--	2.4	--	--	17	.31	27	256	530
GW028WA	36 08 43	113 29 14	--	.16	--	--	.46	.14	1.1	65	135
GW029W	36 11 34	113 27 20	--	2.8	--	--	275	.29	35	272	910
GW030W	36 12 04	113 26 24	--	1.9	--	--	911	.51	24	149	1650
GW031W	36 13 27	113 32 06	--	.16	--	--	1.7	.11	.97	108	190
GW032W	36 14 49	113 30 02	--	2.6	--	--	227	.75	72	316	1080
GW033W	36 13 10	113 41 59	--	.18	--	--	.91	.25	1.2	94	165
GW034W	36 16 02	113 28 45	--	5.8	--	--	2200	1.7	55	125	3000
GW035W	36 17 32	113 39 49	--	2.2	--	--	23	.59	29	223	510
GW036W	36 11 27	113 44 19	3.0	.4	1.0	4.1	17	1.2	3.2	--	160
GW037W	36 18 39	113 41 35	3.2	2.4	1.0	4.2	13	.2	6.9	--	410
GW038W	36 30 07	113 42 00	1.2	.5	1.0	2.0	19	.3	14	--	420