UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Analytical results, geology, and sample locality map of mercury-sulfur-gypsum mineralization at Crater, Inyo County, California

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INTRODUCTION

The Crater mercury-sulfur-gypsum mineralized area is located in east-central California along the crest of the Last Chance Range, west of the north end of Death Valley (fig. 1). The area is in the northwest quarter of the Last Chance Range 15-minute quadrangle and occupies the area between 117 39 and 117 45 longitude and 37 10 and 37 15 latitude. The area studied lies between 5000 (1525 m) and 6000 (1830 m) feet above sea level. Relief is generally moderate but can be extreme in some places, as at Hanging Rock Canyon (plate 1). The climate is arid, and there are no active streams in the area. The range fronts east and west of the area are precipitous and incised by many steep canyons, whereas the range crest has relatively low relief. The old abandoned town and mine site of Crater lie in this area of low relief. Access to the Crater area is by paved and dirt roads from Big Pine to the west or from the north end of the Death Valley National Monument to the southeast.

Mining activity at Crater has been centered around sulfur and mercury and dates from the early 1900's. At one time, Crater was the largest sulfur mine in California (Wrucke and others, 1984). All that remains now are several large open pits and some relic equipment. About two miles northeast of Crater is the abandoned El Capitan mercury mine, and numerous prospect pits, small shafts, and bulldozer cuts occur over the entire area.

The geology of the Crater area can be divided into two major terranes. The eastern part of the area consists of a section of relatively flat-lying Paleozoic limestones, dolomites, and shales cut by north-to-northwest-trending normal faults. Formations represented in this area are the Carrara (Lower and Middle Cambrian), Bonanza King Dolomite (Middle and Upper Cambrian), Nopah (Upper Cambrian and Lower Ordovician), and Rest Spring Shale (Mississippian). The other geologic terrane occupies the western part of the area and is separated from the eastern terrane by a north-south trending normal fault. The western terrane has undergone extreme structural deformation as a result of the Last Chance Thrust. This thrust developed in the Mesozoic, probably in the Jurassic, and resulted in the emplacement of Cambrian siliceous and carbonate rocks over Mississippian shale, siltsone, and quartzite. Formations represented in the western part of the area are the Zabriski Quartzite (Lower Cambrian), Carrara (Lower and Middle Cambrian), and Perdido (Mississippian). This structurally prepared ground provided a locus for the Tertiary (Pliocene) hot spring activity and subsequent mineralization at Crater (Wrucke and others, 1984).

The mines at Crater are in large zones of sulfur-gypsum sinter that have replaced Carrara limestone and Bonanza King dolomite. These zones are centered along major northeast and north-south-trending faults and appear to have been the locus for the hot spring activity.

METHODS OF STUDY

Sample Media

The purpose of this study was to augment the rock sampling done during the mineral resource study of the Saline Valley Wilderness Study Area (Wrucke and others, 1984). Analytical data from samples collected during the examination of the study area helped in the identification of the mineral

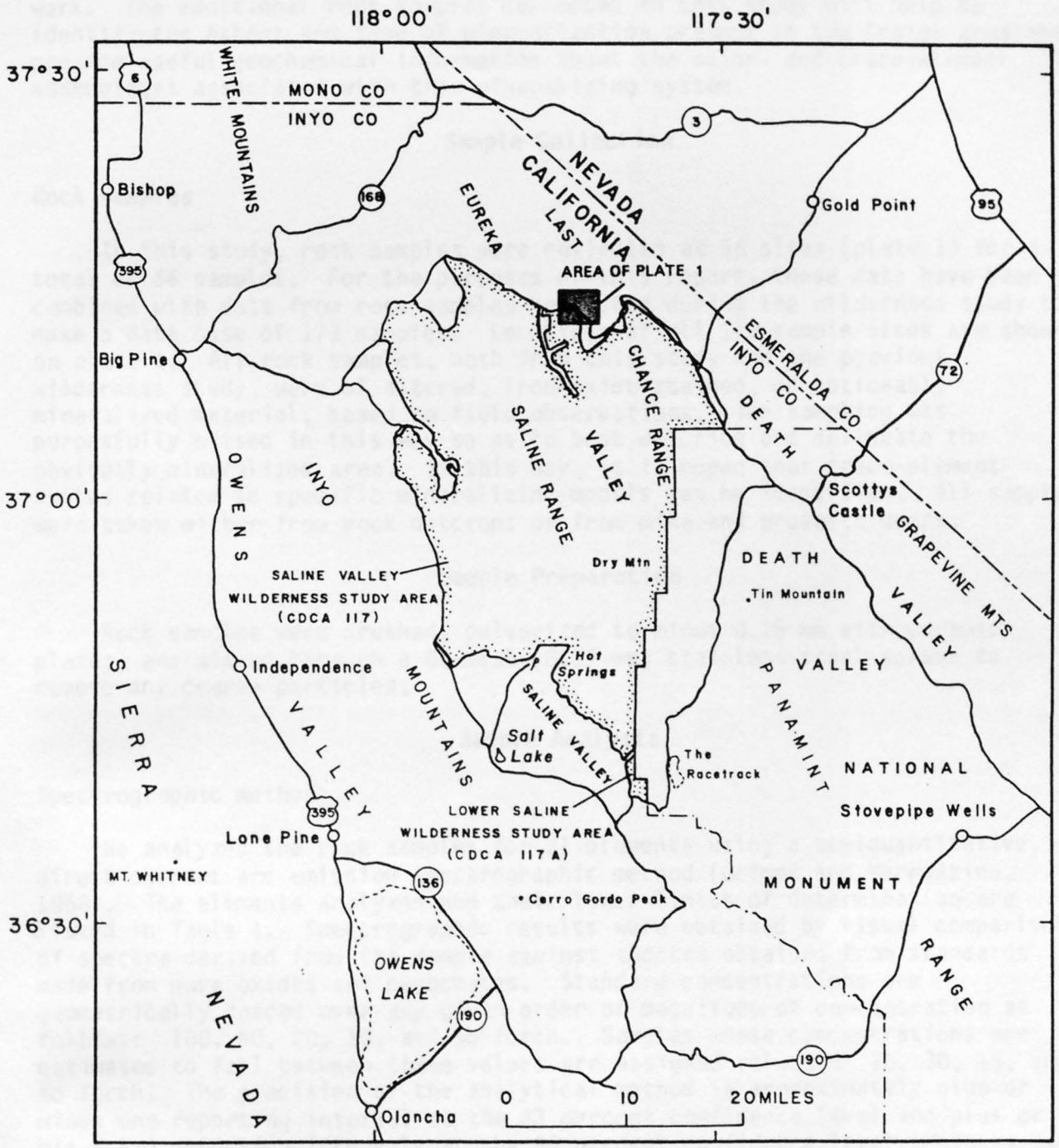

Fig. 1 -- Map showing the location of Saline Valley and Lower Saline Wilderness Study Areas and the Crater area of mercury-sulfur-gypsum mineralization (area of Plate 1), Inyo County, California.

potential of the Crater area and also identified the need for more detailed work. The additional rock samples collected in this study will help to identify the extent and type of mineralization present in the Crater area and provide useful geochemical information about the major- and trace-element assemblages associated with this mineralizing system.

Sample Collection

Rock samples

In this study, rock samples were collected at 56 sites (plate 1) for a total of 66 samples. For the purposes of this report, these data have been combined with data from rock samples collected during the wilderness study to make a data base of 173 samples. Locations of all 173 sample sites are shown on plate 1. All rock samples, both from this study and the previous wilderness study, were of altered, iron-oxide stained, or noticeably mineralized material, based on field observations. The sampling was purposfully biased in this way so as to best describe and delineate the obviously mineralized area. In this way, it is hoped that trace-element suites related to specific mineralizing models can be identified. All samples were taken either from rock outcrops or from mine and prospect dumps.

Sample Preparation

Rock samples were crushed, pulverized to minus 0.15 mm with ceramic plates, and sieved through a 80-mesh (0.17-mm) stainless-steel screen to remove any coarse particles.

Sample Analysis

Spectrographic method

We analyzed the rock samples for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). The elements analyzed and their lower limits of determination are listed in Table 1. Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (iron, magnesium, calcium, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram). Table 3 gives the descriptions of rock samples collected in the Crater mercury-gypsum-sulfur mineralized area. Analytical data for samples from the Crater area are listed in Table 4.

Chemical Methods

Other methods of analysis used on samples from the Crater area are summarized in Table 2.

Analytical results for rock samples are listed in Table 4.

ROCK ANALYSIS STORAGE SYSTEM

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

DESCRIPTION OF DATA TABLES

Table 4 lists the analyses for the rock samples. For the table, 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 map (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. 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 table 4 in place of an analytical value. Because of the formatting used in the computer program that produced table 4, 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.

The spectrographic determinations for Au, Sn, and Th in the rock samples were all below the lower limits of determinations shown in Table 1; consequently, the columns for these elements have been deleted from Table 4.

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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.--Commonly used chemical methods

[AA = atomic absorption; I = instrumental;
S = spectrographic; CX = colorimetric]

Element or constituent determined	Method	Determination limit (micrograms/ gram or ppm)	Analyst	Reference
Gold (Au)	AA	0.05	T. A. Roemer and J. D. Sharkey	Thompson and others, 1968
Mercury (Hg)	I	0.02	do	Modification of McNerney and others, 1972, and Vaughn, and McCarthy, 1964.
Arsenic (As)	CX	10	do	Ward and others 1963
Arsenic (As)	AA	5 or 10	do	Modification of Viets, 1978
Antimony (Sb)	AA	2	do	Modification of Viets, 1978 and Ward and others, 1969
Zinc (Zn)	AA	5	do	-----do--------
Cadmium (Cd)	AA	0.1	do	-----do--------
Zinc (Zn)	AA	5	do	-----do--------
Silver (Ag)	AA	.05	do	-----do--------

Table 3. -- Descriptions of rock samples collected in the Crater mercury-gypsum-sulfur mineralized area, Inyo County, California

CR001	Gypsum and soft red iron oxides
CR002	Quartzite, jasperoid, breccia
CR003	Carrara Fm., silicified, iron oxide stained shale
CR004	Gypsum and soft iron oxides from prospect pit
CR005	Carrara Fm., dark-red-brown silicified limestone
CR006	Bonanza King Fm., gypsum intermixed with soft dark-red-brown iron oxides
CR007	Bonanza King Fm., Brecciated gypsum intermixed with light-brown iron oxides
CR008	Bonanza King Fm., silicified dolomite with iron oxides
CR007A	Bonanza King Fm., brecciated and iron oxide stained dolomite
CR009	Bonanza King Fm., dolomite replaced by gypsum and iron oxides
CR010	Carrara Fm., fine grained, silicified and finely brecciated, dark-red-brown limestone
CR011	Carrara Fm.(?), limestone, brecciated and stained with iron oxides
CR012	Carrara Fm.(?), limestone drill cuttings, unaltered
CR012A	Alluvium, gypsum and iron oxide cemented
CR013	Nopah Fm., fault gouge, red-brown iron oxides
CR014	Nopah Fm., fractured and iron oxide stained dolomite
CR014A	Nopah Fm., leached and iron oxide stained dolomite
CR015	Carrara Fm., red to red-brown silicified and brecciated limestone
CR015A	Carrara Fm., white sinter(?) nodules in silicified limestone
CR016	Carrara Fm., red, fine-grained, silicified limestone, with opaline nodules
CR017	Carrara Fm., red silicified limestone
CR018	Carrara Fm., brown silicified limestone with opaline quartz
CR019	Nopah Fm., dark-brown gossan with gypsum from fault zone
CR020	Nopah Fm.(Dunderberg Shale), bleached, containing iron oxides and gypsum
CR021	Nopah Fm.(Dunderberg Shale), limy, stained brown to yellow-brown, fractured
CR022	Perdido Fm., silicified shale with quartz veins, sulfur, and gypsum
CR023	Perdido Fm., silicified shale with iron and manganese oxides
CR024	Perdido Fm., intensly silicified shale, with iron oxides and alunite on fractures
CR025	Perdido Fm., silicified shale with brown iron oxides and some red jasperoid
CR026	Perdido Fm., silicified chert-pebble conglomerate with yellow-green stains

Table 3. -- Continued

CR027	Zabriski Quartzite, massive quartzite and quartz with some yellowish stains
CR028	Perdido Fm., silicified shale with brown iron oxides and small quartz veins
CR029	Perdido Fm., silicified shale, with brown iron oxides and yellowish stains on fractures
CR030	Perdido Fm., silicified and fractured shale with red and dark brown iron oxides
CR031	Perdido Fm., silicified shale with yellowish-green stains and brown iron oxides
CR032	Perdido Fm., black iron and manganese oxides, from thrust zone, siliceous
CR033	Perdido Fm., tan to brown jasperoid fracture filling with iron oxides
CR034	Zabriski Quartzite, fractured and cemented with iron oxides, silica, and gypsum
CR035	Nopah Fm., fractured and brecciated dolomite with red iron oxides
CR036	Nopah Fm., silicified and fractured dolomite with iron oxides on fractures
CR037	Nopah Fm., shear zone in dolomite with iron oxides and secondary calcite veins
CR038	Nopah Fm., recrystalized dolomite with red iron oxides
CR039	Nopah Fm., brown calcite vein in recrystalized dolomite, some iron oxides
CR040	Nopah Fm.(Dunderberg Shale), from fault zone, sheared and broken, abundant red iron oxides
CR041	Bonanza King Fm., silicified dolomite with some gypsum
CR041A	Bonanza King Fm., gossan, dark-red-brown, abundant iron oxides
CR041B	Bonanza King Fm., red and brown jasperoid
CR042	Bonanza King Fm., red silicified dolomite
CR043	Rest Spring Fm.(?), red silicified shale
CR043A	Tertiary conglomerate, light-brown, some jasperoid cement
CR044	Rest Spring Fm., recrystalized limestone with red-brown iron oxides and gypsum
CR045	Rest Spring Fm., recrystalized limestone and shale, red-brown iron oxides
CR046	Zabriski Quartzite, vuggy, with dark-brown iron oxides
CR047	Zabriski Quartzite, fractured and brecciated with brown iron oxides
CR048	Zabriski Quartzite, brown iron oxide gossan from fracture zone
CR049	Zabriski Quartzite, iron oxide stained and some yellowish stains, from adit
CR049A	Zabriski Quartzite, quartz vein with yellow-green stains
CR050	Zabriski Quartzite, brown iron oxide gossan, from shear zone
CR051	Perdido Fm., sheared and fractured chert, brown to red-brown iron oxide
CR052	Perdido Fm., fractured and silicified chert with yellow-green stains

Table 3. -- Continued

CR052A	Perdido Fm., brown iron oxide fracture filling
CR053	Perdido Fm., fractured chert with iron oxides and yellow stains
CR054	Carrara Fm., fractured, thin-bedded shale and quartzite, with iron oxides
CR055	Carrara Fm., yellow and brown iron oxide gouge
CR056	Zabriski Quartzite, iron oxide fault gouge with gypsum, from thrust zone
IV007R	Massive sulfur and gypsum
IV019R	Red iron oxide gossan from Last Chance Thrust
IV019RA	Brown iron oxide gossan
IV019RB	Quartzite with secondary copper staining
IV022R	Zabriski Quartzite, silicified, dark gray, from mine dump
IV022RA	Silicified shale with quartz veins and cinnabar
IV022RB	Silicified chert and shale with brown iron oxides
IV022RC	Silicified chert, fractured and brecciated, brown iron oxides
IV022RD	Brown iron oxide gossan from fault zone
IV022RE	Black iron oxide stained shale
IV022RF	Silicified shale with brown iron oxides
IV023R	Breccia with quartz veins and brown iron oxides
IV023RA	Quartz vein
IV023RB	Quartzite with brown iron oxides
IV023RC	Quartzite with brown iron oxides and some sulfide minerals
IV023RG	Quartzite and dark, banded chert with iron and manganese oxide stains
IV023RI	Banded-chert breccia
IV023RJ	Quartzite, sheared with iron oxides and clay in fractures
IV023RK	Quartzite, red iron oxide stained, from shear zone
IV023RL	Quartzite and shale, silicified and bleached
IV023RM	Quartzite, iron oxide stained with some secondary copper minerals
IV023RN	Gossan, black iron and manganese oxide
IV023RO	Chert breccia, fractured, with some clay
IV023RP	Clay, silicified, fractured, with iron oxides
IV023RQ	Breccia, silicified, yellow iron oxide stained

Table 3. -- Continued

IV023RR	Quartzite, silicified, brown iron oxides
IV023RS	Quartzite, silicified and fractured, relic pyrite, and calcite fracture fillings
IV023RT	Limestone, red iron oxide stained
IV023RU	Chert, pervasive secondary copper staining, fractured, with clay in fractures
IV023RV	Dolomite, silicified, red iron oxides, jarosite on fracture surfaces
IV023RW	Quartzite, bleached, red and yellow iron oxide stained
IV023RX	Zabriski Quartzite, basal conglomerate, red iron oxide stained
IV350R	Breccia, iron oxide stained
IV351R	Breccia, iron oxide stained, from near Last Chance Thrust zone
IV351RA	Quartzite, iron oxide stained
IV352R	Quartzite, iron oxide stained
IV352RA	Quartzite cobble with quartz veins and iron oxide staining
IV353R	Quartzite, iron oxide stained
IV354R	Quartzite, sheared and iron oxide stained
IV364R	Quartzite, iron oxide stained
IV371R	Dolomite, dark gray with some iron oxide stains
IV371RA	Argillite with small quartz veins, veins are iron oxide stained and have relic pyrite
IV371RB	Argillite, black-gray with clay
IV371RC	Zabriski Quartzite, with yellow iron oxide stains and pyrite in dark-gray veinlets
IV371RE	Zabriski Quartzite, stockwork quartz veins with pyrite crystals
IV371RF	Zabriski Quartzite, brecciated, iron and manganese oxide stained, relic pyrite
IV372R	Shale, red iron oxide stained, with quartz-calcite and quartz veins
IV375R	Tuff, water laid, white, coarse grained, and crossbedded
IV375RA	Volcanic conglomerate, brown and black iron and manganese stained
IV375RB	Shale, thin bedded with abundant oxidized pyrite, red weathering
IV375RC	Shale, gray-green, many quartz veins with oxidized pyrite
IV375RD	Limestone-dolomite conglomerate, red iron oxide stained
IV375RE	Shale, gray-green, some oxidized pyrite
IV375RF	Zabriski Quartzite, brecciated, some fine-grained sulfide minerals
IV375RG	Owl Canyon Fm., shale, red and green, thin bedded

Table 3. -- Continued

IV375RH	Owl Canyon Fm., sandstone, fine grained, with fine-grained sulfide minerals
IV375RI	Owl Canyon Fm., shale, iron oxide stained
IV375RJ	Quartz veins, galena and pyrite bearing
IV375RK	Dolomite
IV375RL	Dolomite, galena bearing
IV375RM	Dolomite breccia, yellow iron oxide stained
IV375RN	Black shale, abundant calcite veinlets
IV375RO	Conglomerate, siliceous, black
IV376R	Rest Spring Fm., shale with slight iron oxide staining
IV376RA	Rest Spring Fm., shale, silicified, red iron oxide stained
IV376RB	Rest Spring Fm., silicified shale, fractured
IV376RC	Quartz vein, red iron oxide stained
IV376RD	Rest Spring Fm., silicified shale
IV376RE	Breccia, silicified, minor iron oxide staining
IV376RF	Dolomite, fractured, brown iron oxide stain on fractures
IV376RG	Quartzite, iron oxide stained on fractures
IV376RH	Limestone, iron oxide stained calcite veins
IV376RI	Perdido Fm.(?), shale with iron oxide stained quartz veins
IV376RJ	Gossan in dolomite, brown and black iron oxides
IV376RK	Dolomite, yellow iron oxide stained
IV376RL	Concretion in dolomite, brown iron oxide stained
IV376RM	Shale, iron oxide stained
IV377R	Limestone, brown-yellow iron oxide stained, some brown cacite veins
IV377RA	Dolomite, red iron oxide stained, some pyrite casts
IV377RB	Dolomite, red iron oxide stained and brecciated
IV377RC	Calcite vein, fractured and red iron oxide stained
IV377RD	Limestone, oxidized pyrite and iron oxide stained
IV377RE	Limestone, totally stained with brown iron oxide
IV377RF	Limestone with abundant oxidized pyrite
IV377RG	Dolomite with white dolomite veins

Table 3. -- Continued

IV389R	Zabriski Quartzite, fractured and bleached
IV389RA	Gossan, red and brown iron oxides
IV389RB	Limestone, red and yellow iron oxide stained
IV400RA	Gypsum-sinter
IV400RB	Gypsum-cinnabar ore from El Capitan mine
IV400RC	Brecciated dolomite from El Capitan Mine
IV400RD	Fault gouge, brown iron oxides
IV400RR	Gypsum-sulfur-sinter at Crater, channel sample
SV317R1	Zabriski Quartzite, iron oxide stained
SV317R2	Zabriski Quartzite, black iron or manganese oxide stained
SV321R1	Zabriski Quartzite, yellow iron oxide stained
SV321R2	Zabriski Quartzite, brecciated and iron oxide stained
SV322R1	Gypsum(?)
SV322R2	Shale, carbonaceous
SV322R3	Zabriski Quartzite, stockwork veining with some sulfides
SV334R1	Quartz vein, brecciated
SV334R2	Chert-jasperoid, gray and white
SV334R3	Chert-jasperoid, brown yellow
SV334R4	Chert, red, with siltstone
SV334R5	Chery, yellow gray, with quartz veins
SV334R6	Chert, olive green, with quartz veinlets
SV334R7	Chert, gray white, massive

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo 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	B-ppm s	Ba-ppm s	Be-ppm s	Bi-ppm s
CR001	37 12 20	117 41 23	1.00	.10	10.00	.100	70	N	N	100	200	1.0	N
CR002	37 12 23	117 41 24	.50	.20	2.00	.500	500	N	N	70	5,000	<1.0	N
CR003	37 12 21	117 41 19	.50	>10.00	>20.00	.050	100	N	N	70	100	<1.0	N
CR004	37 12 22	117 41 17	1.00	2.00	>20.00	.150	300	N	N	70	200	<1.0	N
CR005	37 12 22	117 41 6	5.00	.30	10.00	.500	30	N	N	100	300	<1.0	N
CR006	37 12 42	117 41 7	7.00	.10	.05	.200	50	N	N	100	500	1.0	N
CR007	37 12 33	117 41 2	1.00	.05	10.00	.005	20	N	N	50	<20	1.0	N
CR007A	37 12 33	117 41 2	.30	.10	10.00	.005	50	N	N	70	N	1.0	N
CR008	37 12 38	117 41 2	1.00	10.00	>20.00	.030	500	N	<200	50	100	<1.0	N
CR009	37 12 48	117 41 2	2.00	.05	5.00	.100	20	N	200	100	200	1.0	N
CR010	37 12 48	117 41 9	1.00	.10	1.50	.200	50	N	N	150	500	1.0	N
CR011	37 12 58	117 41 5	.70	.70	>20.00	.020	500	N	N	20	20	N	N
CR012	37 13 13	117 40 39	.15	>10.00	>20.00	.015	150	N	N	20	N	N	N
CR012A	37 13 13	117 40 39	.10	1.00	15.00	.020	10	N	N	N	50	N	N
CR013	37 12 48	117 39 43	.20	>10.00	20.00	<.002	100	N	N	20	N	N	N
CR014	37 12 37	117 39 53	.05	>10.00	20.00	<.002	100	N	N	N	N	N	N
CR014A	37 12 38	117 39 52	1.00	>10.00	>20.00	.005	1,000	N	N	30	50	1.0	N
CR015	37 12 48	117 41 9	1.00	.50	.70	.150	100	N	N	300	300	2.0	N
CR015A	37 12 48	117 41 9	.20	.03	.05	.003	50	N	N	100	200	2.0	N
CR016	37 12 42	117 41 12	.70	.50	.50	.150	150	N	N	70	500	1.0	N
CR017	37 12 43	117 41 15	1.00	.07	1.00	.200	100	N	<200	70	500	<1.0	N
CR018	37 12 47	117 41 19	1.00	.15	1.00	.200	50	N	N	70	500	1.5	N
CR019	37 14 15	117 39 38	3.00	2.00	>20.00	.100	>5,000	N	<200	150	1,500	1.5	N
CR020	37 14 14	117 39 42	.50	.02	3.00	.150	20	N	N	10	300	<1.0	N
CR021	37 14 17	117 39 37	10.00	.50	3.00	.150	500	N	1,000	100	500	5.0	N
CR022	37 12 34	117 41 39	.15	.10	.15	.070	50	N	N	20	1,000	N	N
CR023	37 12 41	117 41 45	10.00	.10	.20	.200	70	N	200	200	5,000	1.0	N
CR024	37 12 37	117 41 48	3.00	.07	.70	.150	200	<.5	2,000	100	2,000	1.0	N
CR025	37 12 33	117 41 47	15.00	<.02	.05	.100	30	N	500	100	500	N	N
CR026	37 12 31	117 41 53	1.00	.30	.20	.200	70	<.5	N	100	>5,000	1.0	N
CR027	37 12 28	117 42 0	.70	.05	.10	.050	30	N	N	20	1,000	N	N
CR028	37 12 25	117 42 0	10.00	.02	.05	.100	20	N	700	70	>5,000	1.0	N
CR029	37 12 16	117 42 16	10.00	.20	.07	.200	50	<.5	1,000	200	5,000	1.0	N
CR030	37 12 23	117 42 21	15.00	.07	.05	.070	100	N	500	150	2,000	2.0	N
CR031	37 12 24	117 42 23	5.00	.15	.10	.100	100	N	2,000	100	2,000	1.0	N
CR032	37 12 28	117 42 18	20.00	.20	.20	.100	1,000	N	500	200	2,000	5.0	N
CR033	37 12 27	117 42 19	15.00	.03	.05	.020	15	N	500	50	500	N	N
CR034	37 12 8	117 42 17	3.00	.10	10.00	.050	700	N	700	50	200	<1.0	N
CR035	37 12 21	117 40 26	5.00	5.00	10.00	.200	500	N	N	100	200	N	N
CR036	37 12 18	117 40 17	1.00	>10.00	15.00	.050	1,000	N	N	50	20	N	N
CR037	37 12 28	117 40 18	.10	>10.00	20.00	.010	500	N	N	<10	N	N	N
CR038	37 12 32	117 40 14	1.00	2.00	>20.00	.100	5,000	N	N	200	300	N	N
CR039	37 13 43	117 39 30	1.50	1.00	>20.00	.100	700	N	N	100	300	N	N
CR039A	37 13 43	117 39 30	10.00	2.00	20.00	.150	1,000	N	200	150	200	1.0	N
CR040	37 13 9	117 39 32	5.00	1.00	10.00	.500	1,000	N	N	200	500	1.5	N

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo County, California--Continued

Sample	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	Sr-ppm s	V-ppm s
CR001	N	N	70	50	N	<5	N	7	<10	N	7	500	200
CR002	N	5	30	30	N	<5	<20	10	<10	N	5	150	50
CR003	N	N	15	20	N	5	N	10	10	N	N	100	30
CR004	N	5	20	100	N	N	N	7	15	N	5	200	30
CR005	N	N	15	10	N	15	<20	7	100	N	5	150	50
CR006	N	N	20	50	N	<5	N	5	20	N	10	500	150
CR007	N	N	20	15	N	N	N	7	N	N	N	<100	50
CR007A	N	N	20	50	N	5	N	<5	<10	N	5	100	150
CR008	N	N	15	10	N	<5	N	10	50	100	N	100	50
CR009	N	N	20	20	N	5	N	5	70	N	<5	700	150
CR010	N	N	70	70	N	<5	N	5	30	N	10	500	150
CR011	N	N	10	50	N	N	N	5	N	N	N	200	15
CR012	N	N	15	7	N	N	N	10	N	N	N	<100	10
CR012A	N	N	30	7	N	N	N	5	<10	N	N	N	30
CR013	N	N	30	7	N	N	N	5	<10	N	N	N	10
CR014	N	N	20	7	N	N	N	5	N	N	N	N	<10
CR014A	N	5	20	7	N	N	N	15	<10	N	<5	100	30
CR015	N	N	50	50	N	5	N	7	20	N	10	100	100
CR015A	N	N	30	70	N	<5	N	5	<10	N	10	200	15
CR016	N	N	70	50	N	10	N	10	20	N	10	300	70
CR017	N	N	100	70	N	15	N	5	30	N	15	700	300
CR018	N	N	70	100	N	7	N	7	20	N	10	500	100
CR019	N	30	20	70	50	5	N	70	30	N	15	100	20
CR020	N	N	20	<5	<20	N	N	<5	N	N	N	N	20
CR021	N	5	30	20	N	7	<20	100	50	<100	5	500	150
CR022	N	N	10	5	N	<5	N	10	20	N	N	<100	100
CR023	N	N	200	30	50	30	N	15	N	N	15	700	1,000
CR024	N	N	200	30	N	20	N	10	50	N	20	100	500
CR025	N	N	500	10	N	<5	N	15	N	N	<5	200	100
CR026	N	N	100	30	<20	5	<20	10	30	N	10	300	200
CR027	N	N	70	7	N	7	N	7	N	N	<5	200	20
CR028	N	N	150	20	N	<5	N	10	50	N	10	200	300
CR029	N	N	200	30	N	<5	N	5	20	N	15	200	500
CR030	N	20	200	100	70	<5	N	200	15	N	10	200	500
CR031	N	N	150	15	N	<5	N	7	10	N	10	<100	200
CR032	50	20	100	100	N	200	N	500	70	N	7	200	3,000
CR033	N	N	150	5	N	10	N	10	N	N	10	150	150
CR034	N	<5	10	5	N	20	N	70	10	N	<5	<100	200
CR035	N	5	30	20	N	15	N	15	20	N	5	300	50
CR036	N	7	15	7	N	N	N	15	N	N	<5	100	20
CR037	N	N	20	7	N	7	N	7	N	N	N	<100	10
CR038	N	7	20	15	N	5	N	15	20	N	7	100	10
CR039	N	7	20	15	<20	N	N	50	15	N	<5	100	30
CR039A	N	20	20	30	N	7	N	100	30	N	10	100	150
CR040	N	7	100	20	70	<5	N	30	10	N	15	150	100

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo County, California--Continued

Sample	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Au-ppm aa	Hg-ppm inst	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Sb-ppm aa	As-ppm cm	As-ppm aa
CR001	N	10	N	50	N	N	--	.10	--	N	--	20.0
CR002	<50	15	N	200	.30	N	--	.10	--	N	--	<10.0
CR003	N	10	N	50	.05	N	--	.05	--	2	--	10.0
CR004	N	15	N	50	<.05	.160	--	.05	--	<2	--	20.0
CR005	N	15	N	150	.10	.720	--	<.05	--	2	--	100.0
CR006	N	<10	N	150	N	.040	--	.05	--	N	--	20.0
CR007	<50	10	N	N	N	.340	--	.15	--	6	--	60.0
CR007A	<50	<10	N	N	.05	.040	--	.05	--	N	--	110.0
CR008	<50	10	N	10	N	N	--	N	--	46	--	110.0
CR009	<50	10	N	150	.25	.380	--	<.05	--	10	--	600.0
CR010	N	10	N	100	N	.100	--	<.05	--	<2	--	10.0
CR011	N	N	N	N	<.05	.100	--	N	--	N	--	<10.0
CR012	N	N	N	N	.05	.440	--	N	--	<2	--	N
CR012A	N	N	N	<10	N	.140	--	N	--	<2	--	N
CR013	N	N	N	N	N	N	--	N	--	<2	--	10.0
CR014	N	N	N	N	.50	.020	--	.10	--	N	--	N
CR014A	N	<10	N	N	N	N	--	.15	--	2	--	80.0
CR015	N	15	N	100	N	.020	--	<.05	--	<2	--	N
CR015A	N	<10	N	N	N	N	--	N	--	N	--	N
CR016	N	10	N	100	N	N	--	.05	--	N	--	N
CR017	N	15	N	100	N	.020	--	<.05	--	N	--	10.0
CR018	N	10	N	100	N	.140	--	<.05	--	N	--	20.0
CR019	N	30	N	50	N	>5.000	--	N	--	<2	--	190.0
CR020	<50	<10	N	100	N	.140	--	N	--	<2	--	30.0
CR021	70	30	500	100	N	.620	--	N	--	38	--	1,600.0
CR022	<50	N	N	30	.15	.300	--	.40	--	N	--	10.0
CR023	N	20	N	150	N	.020	--	.45	--	N	--	940.0
CR024	N	20	N	100	N	.060	--	.40	--	8	--	1,100.0
CR025	N	15	N	100	N	N	--	.20	--	2	--	900.0
CR026	<50	15	N	100	N	1.800	--	.70	--	2	--	80.0
CR027	<50	<10	N	70	.25	2.000	--	.30	--	22	--	90.0
CR028	N	10	N	50	N	.220	--	.10	--	N	--	1,200.0
CR029	N	15	N	100	<.06	.140	--	.70	--	2	--	1,500.0
CR030	N	20	500	30	N	3.700	--	.35	--	24	--	1,100.0
CR031	N	10	N	100	N	.480	--	.30	--	20	--	>2,000.0
CR032	N	50	5,000	50	N	>5.000	--	.30	--	52	--	850.0
CR033	N	N	N	N	N	.420	--	.20	--	12	--	920.0
CR034	N	15	500	150	N	>5.000	--	<.05	--	18	--	1,100.0
CR035	<50	10	N	100	N	N	--	.10	--	N	--	40.0
CR036	N	10	N	30	N	.460	--	N	--	<2	--	40.0
CR037	N	<10	N	N	N	.100	--	.05	--	N	--	<10.0
CR038	N	20	N	30	N	.040	--	N	--	<2	--	40.0
CR039	N	20	N	50	N	.060	--	N	--	2	--	30.0
CR039A	<50	30	200	50	<.05	.040	--	N	--	24	--	210.0
CR040	N	20	<200	100	N	.040	--	N	--	N	--	20.0

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo 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	B-ppm s	Ba-ppm s	Be-ppm s	Bi-ppm s
CR041	37 13 10	117 41 13	2.00	1.00	>20.00	.050	1,000	N	N	100	150	<1.0	N
CR041A	37 13 10	117 41 13	2.00	.03	10.00	.050	30	N	500	150	150	1.5	N
CR041B	37 13 10	117 41 13	1.00	.10	7.00	.100	50	N	N	150	1,000	<1.0	N
CR042	37 13 8	117 41 14	7.00	.20	.05	.500	30	N	<200	200	500	N	N
CR043	37 13 1	117 41 25	5.00	.20	.30	.300	30	N	N	100	500	<1.0	N
CR043A	37 13 1	117 41 25	5.00	.10	.15	.200	50	N	N	50	700	N	N
CR044	37 13 10	117 41 33	3.00	10.00	15.00	.100	1,000	N	N	70	200	<1.0	N
CR045	37 13 13	117 41 47	3.00	1.00	15.00	.300	1,000	N	N	200	500	1.5	N
CR046	37 13 47	117 42 53	10.00	.50	.10	.200	20	10.0	700	200	2,000	1.0	20
CR047	37 13 46	117 42 54	15.00	.05	.07	.150	30	N	500	100	200	N	N
CR048	37 13 44	117 42 56	15.00	.10	.20	.050	10	3.0	5,000	100	500	N	N
CR049	37 13 47	117 42 58	2.00	.20	.20	.200	50	<.5	<200	150	500	2.0	10
CR049A	37 13 47	117 42 58	3.00	.70	.30	.300	50	3.0	200	200	500	2.0	15
CR050	37 13 48	117 42 54	5.00	.70	.50	.100	1,500	.5	500	100	300	2.0	N
CR051	37 13 48	117 42 48	10.00	.05	.20	.150	10	<.5	200	100	>5,000	N	N
CR052	37 13 48	117 42 49	2.00	.20	.07	.150	15	N	N	100	1,000	<1.0	N
CR052A	37 13 48	117 42 49	15.00	.50	.10	.200	10	N	2,000	200	2,000	2.0	N
CR053	37 13 48	117 42 51	5.00	.30	.15	.300	20	N	<200	100	2,000	1.0	N
CR054	37 13 48	117 42 52	5.00	.20	.05	.150	1,500	N	N	100	500	1.0	N
CR055	37 13 52	117 42 44	10.00	1.00	10.00	.070	100	N	1,500	100	1,000	1.0	N
CR056	37 12 21	117 41 53	10.00	2.00	5.00	.200	100	.7	500	200	500	1.0	N
IV007R	37 12 45	117 41 10	N	<.02	7.00	.100	N	<.5	N	N	300	<1.0	N
IV019R	37 13 45	117 42 58	15.00	1.00	1.00	.700	100	2.0	2,000	500	>5,000	3.0	50
IV019RA	37 13 46	117 42 59	>20.00	.50	.30	.100	100	5.0	10,000	50	2,000	2.0	N
IV019RB	37 13 46	117 42 59	5.00	.50	1.00	.500	50	300.0	500	100	1,500	3.0	<10
IV022R	37 11 14	117 42 57	1.50	.10	.07	.070	30	2.0	200	300	3,000	N	<10
IV022RA	37 11 14	117 42 57	10.00	.10	.10	.100	70	5.0	700	200	1,000	N	N
IV022RB	37 11 14	117 42 57	1.50	.30	.10	.100	20	1.0	<200	200	500	N	<10
IV022RC	37 11 14	117 42 57	1.00	.50	.10	.500	10	1.5	N	300	>5,000	<1.0	<10
IV022RD	37 11 14	117 42 57	7.00	.30	.05	.200	50	.7	700	200	1,000	<1.0	N
IV022RE	37 11 26	117 43 5	10.00	2.00	3.00	.500	500	2.0	N	500	700	<1.0	N
IV022RF	37 11 26	117 43 24	15.00	1.50	.20	.700	700	2.0	N	500	500	<1.0	N
IV023R	37 10 48	117 42 24	2.00	.02	<.05	.100	30	.5	500	20	2,000	N	N
IV023RA	37 10 48	117 42 24	.10	.02	.15	.070	30	1.0	N	20	3,000	N	N
IV023RB	37 11 21	117 42 14	.07	<.02	<.05	.070	15	N	N	<10	700	N	N
IV023RC	37 10 45	117 42 2	.05	N	.07	.300	N	N	N	<10	200	N	N
IV023RG	37 11 0	117 42 45	1.50	5.00	10.00	.050	150	1.0	N	70	1,500	2.0	N
IV023RI	37 11 0	117 42 45	.15	.10	.15	.150	50	N	N	10	1,500	N	N
IV023RJ	37 11 0	117 42 45	.05	.05	.20	.500	<10	N	N	300	700	N	N
IV023RK	37 11 0	117 42 45	15.00	.07	.05	.300	70	.5	3,000	50	>5,000	N	<10
IV023RL	37 10 18	117 42 28	.07	.10	.70	.300	150	N	N	30	700	N	N
IV023RM	37 10 20	117 42 30	1.50	.10	.07	.300	10	N	N	70	150	1.0	N
IV023RN	37 10 22	117 42 31	10.00	.20	5.00	.007	300	N	2,000	100	70	20.0	10
IV023RO	37 10 26	117 42 35	1.00	.15	.30	1.000	30	N	N	200	2,000	1.0	N
IV023RP	37 10 26	117 42 35	.20	.05	.05	.500	10	N	N	70	1,000	N	N

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo County, California--Continued

Sample	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	Sr-ppm s	V-ppm s
CR041	N	5	20	15	N	5	N	10	15	N	7	200	100
CR041A	N	N	50	20	N	5	N	<5	15	N	5	1,000	200
CR041B	N	N	15	10	N	N	N	5	10	N	5	150	100
CR042	N	N	150	100	50	20	<20	10	30	N	20	1,000	300
CR043	N	N	70	100	<20	5	N	15	20	N	10	200	200
CR043A	N	N	100	20	50	5	N	7	20	N	5	700	200
CR044	N	10	15	15	N	N	N	10	70	N	5	200	10
CR045	N	15	30	50	<20	5	N	20	50	N	10	200	50
CR046	N	5	20	70	N	<5	N	10	100	N	7	100	20
CR047	N	7	20	50	N	70	N	10	50	N	7	100	30
CR048	N	5	50	70	N	20	N	20	200	500	<5	700	20
CR049	N	5	50	50	<20	100	N	7	70	<100	7	<100	50
CR049A	N	10	70	150	50	150	<20	50	200	150	15	100	70
CR050	N	15	15	100	N	15	N	70	<10	N	10	100	50
CR051	N	<5	100	200	N	20	N	15	N	N	10	700	200
CR052	N	N	70	10	N	7	N	7	N	N	10	200	200
CR052A	N	N	100	100	N	100	N	7	N	500	15	<100	300
CR053	N	<5	100	50	N	20	N	7	10	N	10	500	200
CR054	N	<5	20	20	N	5	N	15	N	N	10	N	30
CR055	N	5	100	150	N	30	N	50	150	500	7	500	200
CR056	N	10	50	70	<20	5	N	20	20	N	15	150	50
IV007R	N	N	N	5	20	N	N	<5	2,000	N	N	N	10
IV019R	N	20	150	1,000	150	1,000	<20	150	3,000	700	20	700	100
IV019RA	N	50	30	2,000	20	2,000	N	150	1,000	700	N	N	30
IV019RB	N	7	70	10,000	50	100	N	100	300	5,000	10	N	70
IV022R	20	5	10	20	30	30	N	70	150	100	--	100	500
IV022RA	<20	15	20	150	50	20	<20	150	500	1,000	--	N	150
IV022RB	30	5	20	30	50	15	N	70	50	150	--	100	1,000
IV022RC	N	N	100	20	70	10	<20	20	50	N	--	200	500
IV022RD	N	5	100	30	50	15	<20	100	15	N	--	N	300
IV022RE	<20	20	200	50	100	15	<20	100	50	<100	--	200	300
IV022RF	N	20	200	30	70	50	<20	100	100	<100	--	300	500
IV023R	N	<5	10	7	50	10	N	7	50	700	--	100	50
IV023RA	N	<5	N	<5	50	N	N	<5	20	200	--	<100	10
IV023RB	N	<5	10	10	50	N	N	<5	30	N	--	N	<10
IV023RC	N	N	N	10	100	N	N	<5	30	N	--	<100	<10
IV023RG	50	7	30	30	N	15	N	70	300	3,000	5	<100	200
IV023RI	N	N	15	10	<20	N	N	<5	30	300	N	N	50
IV023RJ	N	N	15	5	N	5	100	N	50	200	10	N	30
IV023RK	N	N	30	15	100	30	<20	10	300	2,000	5	300	150
IV023RL	N	N	10	15	N	N	50	N	15	N	<5	N	15
IV023RM	N	N	30	70	N	20	<20	7	N	N	5	N	150
IV023RN	50	70	<10	<5	N	70	N	1,000	70	200	N	N	300
IV023RO	N	5	20	30	150	30	100	100	200	100	10	N	150
IV023RP	N	<5	10	10	100	10	70	5	70	N	5	N	30

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo County, California--Continued

Sample	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Au-ppm aa	Hg-ppm inst	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Sb-ppm aa	As-ppm cm	As-ppm aa
CR041	N	20	N	50	<.05	.200	--	<.05	--	N	--	140.0
CR041A	<50	10	N	20	N	.280	--	.05	--	30	--	1,100.0
CR041B	N	15	N	200	<.07	.440	--	N	--	<2	--	60.0
CR042	N	10	N	200	N	.120	--	N	--	<2	--	140.0
CR043	N	10	N	150	N	.020	--	<.05	--	N	--	10.0
CR043A	N	10	N	150	N	.020	--	.10	--	<2	--	30.0
CR044	N	20	N	100	N	1.100	--	N	--	<2	--	130.0
CR045	N	50	N	200	N	.040	--	.05	--	4	--	70.0
CR046	N	30	N	1,000	.10	.440	--	8.00	--	30	--	1,800.0
CR047	N	50	N	>1,000	<.05	.060	--	.25	--	10	--	880.0
CR048	N	10	<200	100	.25	.560	--	1.80	--	300	--	>2,000.0
CR049	50	200	N	>1,000	N	.060	--	.65	--	50	--	300.0
CR049A	<50	150	N	500	N	.320	--	2.30	--	92	--	450.0
CR050	<50	20	200	700	N	N	--	1.00	--	24	--	760.0
CR051	N	30	N	200	N	.160	--	.20	--	15	--	360.0
CR052	<50	15	N	100	N	.600	--	.45	--	10	--	150.0
CR052A	N	15	N	150	N	3.400	--	.35	--	300	--	>2,000.0
CR053	N	20	N	200	.35	1.100	--	.25	--	22	--	210.0
CR054	N	30	N	1,000	N	.300	--	<.05	--	2	--	100.0
CR055	N	10	200	150	<.05	N	--	.45	--	24	--	1,000.0
CR056	N	20	<200	100	.05	>5.000	--	.30	--	380	--	>2,000.0
IV007R	N	N	N	70	N	.080	150	1.20	.8	--	N	--
IV019R	N	70	<200	200	.20	.180	260	1.60	2.0	--	>3,000	--
IV019RA	N	30	200	50	.45	.500	370	3.00	2.6	--	>3,000	--
IV019RB	N	150	N	300	.10	9.000	160	80.00	.9	--	120	--
IV022R	70	15	200	--	N	2.800	10	--	--	58	60	--
IV022RA	<50	20	700	--	N	>5.000	80	--	--	330	200	--
IV022RB	50	15	N	--	N	>5.000	10	--	--	91	80	--
IV022RC	<50	30	N	--	N	>5.000	<5	--	--	7	10	--
IV022RD	<50	20	500	--	N	>5.000	40	--	--	8	200	--
IV022RE	N	70	200	--	N	>5.000	70	--	--	1	20	--
IV022RF	N	50	200	--	N	>50.000	80	--	--	2	20	--
IV023R	N	15	N	--	N	2.400	10	--	--	--	140	--
IV023RA	N	10	N	--	N	7.500	5	--	--	--	<10	--
IV023RB	N	15	N	--	N	2.300	5	--	--	--	<10	--
IV023RC	N	20	N	--	N	.060	15	--	--	--	510	--
IV023RG	N	30	200	70	<.05	>10.000	320	--	20.0	3,100	--	30.0
IV023RI	N	30	N	150	<.05	>10.000	N	--	.2	120	--	<5.0
IV023RJ	N	50	N	1,000	<.05	>10.000	N	--	.3	6	--	<5.0
IV023RK	N	30	N	200	.05	1.100	10	--	.3	2,700	--	1,800.0
IV023RL	N	70	N	500	<.05	.760	N	--	.1	9	--	N
IV023RM	N	20	N	300	<.05	>10.000	10	--	.1	3	--	25.0
IV023RN	N	300	1,000	N	N	>10.000	12,000	--	63.0	360	--	3,900.0
IV023RO	N	70	<200	500	<.05	>10.000	190	--	1.7	46	--	45.0
IV023RP	N	50	N	500	N	>10.000	30	--	.4	27	--	20.0

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo 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	B-ppm s	Ba-ppm s	Be-ppm s	Bi-ppm s
IV023RQ	37 10 26	117 42 35	20.00	.02	.50	.050	15	.5	2,000	<10	700	1.0	<10
IV023RR	37 10 26	117 42 35	1.00	.15	.70	1.000	150	1.0	N	100	1,500	<1.0	N
IV023RS	37 10 26	117 42 35	10.00	.50	.30	.500	500	N	700	500	1,500	3.0	<10
IV023RT	37 10 40	117 42 42	1.50	10.00	20.00	.007	300	<.5	N	N	30	1.5	N
IV023RU	37 10 40	117 42 42	3.00	.20	.50	.150	20	.5	500	150	1,000	3.0	N
IV023RV	37 10 57	117 42 51	2.00	7.00	20.00	.015	300	3.0	1,000	30	200	1.0	N
IV023RW	37 11 26	117 42 43	1.50	.30	.20	.150	10	N	1,000	100	300	<1.0	N
IV023RX	37 11 26	117 42 43	15.00	.30	.15	.200	20	N	2,000	200	700	3.0	<10
IV350R	37 14 3	117 43 56	3.00	.70	3.00	.200	700	.5	N	70	500	N	N
IV351R	37 13 24	117 44 4	5.00	.10	5.00	.050	500	30.0	1,000	50	2,000	N	N
IV351RA	37 13 24	117 44 4	2.00	.20	.50	.150	50	1.0	N	70	1,000	N	N
IV352R	37 12 27	117 44 18	5.00	.50	.20	.300	100	N	1,000	200	1,500	<1.0	N
IV352RA	37 12 27	117 44 18	1.00	.30	.70	.150	300	.7	N	150	1,500	N	N
IV353R	37 12 36	117 44 45	.70	.15	.15	.020	50	1.0	200	50	500	N	N
IV354R	37 11 49	117 44 25	5.00	1.50	.30	.300	300	N	N	100	200	N	N
IV364R	37 10 19	117 43 28	20.00	2.00	.15	.300	500	.7	N	70	50	N	N
IV371R	37 14 36	117 43 24	.15	>10.00	20.00	.010	150	<.5	N	N	<20	N	N
IV371RA	37 14 36	117 43 24	15.00	1.50	.50	.200	500	1.5	N	70	20	1.5	<10
IV371RB	37 14 29	117 43 11	10.00	.50	.30	1.000	1,000	.5	N	500	700	5.0	<10
IV371RC	37 14 38	117 43 4	1.50	.15	.20	.070	150	N	N	50	300	<1.0	N
IV371RE	37 14 38	117 43 4	.10	.07	.05	.050	15	N	N	50	150	N	N
IV371RF	37 14 41	117 43 1	.15	.07	.05	.100	15	N	N	70	150	N	N
IV372R	37 10 26	117 41 27	5.00	.30	5.00	.150	3,000	N	N	100	200	2.0	N
IV375P	37 10 16	117 43 32	1.00	.50	.50	.050	300	<.5	N	70	<20	2.0	N
IV375RA	37 10 16	117 43 32	7.00	7.00	10.00	.500	700	<.5	N	10	700	1.0	N
IV375RB	37 10 16	117 43 32	5.00	1.50	.70	.300	700	N	N	150	700	2.0	N
IV375RC	37 10 16	117 43 32	7.00	1.50	.20	.500	500	<.5	N	100	700	3.0	N
IV375RD	37 10 16	117 43 32	1.00	5.00	>20.00	.070	200	N	N	20	70	<1.0	N
IV375RE	37 10 20	117 43 27	5.00	1.50	.70	.300	500	N	N	100	500	3.0	N
IV375RF	37 10 15	117 43 19	.70	.15	.10	.020	100	N	N	2,000	<20	N	N
IV375RG	37 10 15	117 43 19	5.00	.70	.50	.300	500	N	N	100	500	1.5	N
IV375RH	37 10 22	117 43 18	1.50	.50	20.00	.150	1,500	N	N	50	200	1.0	N
IV375RI	37 10 22	117 43 18	5.00	3.00	.50	.500	150	<.5	N	200	1,500	5.0	N
IV375RJ	37 10 36	117 43 10	2.00	.50	7.00	.020	700	70.0	N	10	700	<1.0	N
IV375RK	37 10 36	117 43 10	.70	.50	>20.00	.070	1,000	<.5	N	<10	1,500	<1.0	N
IV375RL	37 10 37	117 43 3	.50	10.00	20.00	.010	300	200.0	N	<10	500	<1.0	<10
IV375RM	37 10 37	117 43 3	1.50	7.00	20.00	.100	1,000	2.0	N	50	500	1.0	N
IV375RN	37 10 41	117 42 54	2.00	.15	2.00	.100	20	.5	N	70	5,000	1.5	N
IV375RO	37 10 41	117 42 54	1.50	.20	.50	.200	10	.7	N	100	2,000	1.5	N
IV376R	37 12 17	117 44 28	7.00	1.50	.30	.500	700	<.5	N	200	300	3.0	<10
IV376RA	37 12 22	117 43 52	.50	.15	<.05	.200	<10	.7	<200	200	2,000	1.5	N
IV376RB	37 12 22	117 43 52	.70	.30	1.00	.200	150	1.0	N	150	1,500	1.0	N
IV376RC	37 12 22	117 43 52	.05	.02	.20	.005	<10	N	N	10	20	N	N
IV376RD	37 12 18	117 43 49	5.00	2.00	2.00	.300	500	.5	N	200	700	2.0	<10
IV376RE	37 12 12	117 43 42	.70	.15	.50	.150	50	<.5	N	100	1,000	N	N

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo County, California--Continued

Sample	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	Sr-ppm s	V-ppm s
IV023RQ	N	N	100	100	100	300	N	15	1,500	300	7	700	300
IV023RR	N	7	20	50	50	150	50	10	300	500	10	<100	200
IV023RS	N	30	50	20	200	15	50	200	10	N	N	N	100
IV023RT	N	<5	<10	7	N	15	N	30	70	<100	N	N	20
IV023RU	N	5	70	300	N	50	N	150	<10	<100	10	200	1,500
IV023RV	<20	<5	10	15	N	5	N	30	100	200	N	200	50
IV023RW	N	N	30	7	<20	N	N	<5	<10	<100	7	300	70
IV023RX	N	N	100	15	70	N	50	<5	15	N	20	N	150
IV350R	N	10	100	15	50	5	N	50	30	N	--	<100	100
IV351R	N	15	<10	2,000	50	50	N	150	500	7,000	--	150	30
IV351RA	N	5	70	150	30	5	N	10	15	300	--	<100	150
IV352R	N	7	150	150	50	<5	N	100	10	N	--	<100	200
IV352RA	N	20	100	70	30	10	N	150	10	N	--	<100	150
IV353R	N	<5	15	10	30	15	N	30	15	N	--	<100	500
IV354R	N	15	150	15	70	10	N	100	70	N	--	100	150
IV364R	N	30	100	300	70	70	N	50	70	N	--	N	100
IV371R	N	N	<10	20	<20	N	N	<5	70	N	N	N	<10
IV371RA	N	50	50	150	50	20	<20	50	70	N	20	N	70
IV371RB	N	50	200	30	200	15	20	100	70	N	30	200	300
IV371RC	N	5	30	30	N	N	N	7	20	N	<5	N	30
IV371RE	N	N	10	10	N	N	N	<5	20	N	N	N	10
IV371RF	N	N	10	10	N	N	N	<5	30	N	N	N	10
IV372R	N	70	30	50	50	<5	N	70	70	N	15	N	30
IV375R	N	N	<10	50	N	N	<20	<5	50	N	<5	<100	<10
IV375RA	N	50	150	50	50	N	<20	70	10	N	30	1,000	150
IV375RB	N	20	70	50	70	N	<20	30	20	N	15	<100	70
IV375RC	N	30	100	50	100	N	20	50	30	N	30	N	100
IV375RD	N	7	30	15	N	N	N	7	10	N	5	500	20
IV375RE	N	30	70	20	100	N	20	30	10	N	20	N	100
IV375RF	N	N	<10	10	N	N	N	10	<10	N	N	<100	15
IV375RG	N	30	50	20	50	N	<20	20	10	N	10	N	50
IV375RH	N	5	30	15	<20	N	N	5	30	N	7	500	30
IV375RI	N	30	150	5	150	N	30	50	15	N	30	N	150
IV375RJ	70	10	10	15	N	70	N	15	>20,000	<100	N	200	<10
IV375RK	N	N	20	10	N	N	N	5	150	N	<5	300	15
IV375RL	50	N	<10	7	N	150	N	7	>20,000	150	<5	700	20
IV375RM	N	5	30	20	<20	N	N	10	1,500	N	7	200	30
IV375RN	N	N	30	20	70	N	N	5	50	N	7	N	150
IV375RO	N	5	70	20	<20	N	<20	20	20	N	10	N	200
IV376R	N	30	150	15	50	15	20	100	30	N	30	150	200
IV376RA	N	N	100	7	70	N	<20	7	10	N	10	<100	200
IV376RB	N	5	50	10	<20	N	N	30	10	N	7	<100	100
IV376RC	N	N	<10	<5	N	N	N	N	10	N	N	N	<10
IV376RD	N	50	150	70	100	15	<20	100	100	N	20	500	150
IV376RE	N	N	20	10	N	10	N	5	10	N	N	N	100

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo County, California--Continued

Sample	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Au-ppm aa	Hg-ppm inst	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Sb-ppm aa	As-ppm cm	As-ppm aa
IV023RQ	N	10	N	30	.25	>10.000	85	--	2.2	360	--	2,300.0
IV023RR	N	30	N	300	.10	>10.000	70	--	2.7	370	--	40.0
IV023RS	N	70	500	>1,000	.05	>10.000	570	--	.4	4	--	270.0
IV023RT	N	15	N	20	.05	>10.000	65	--	.9	41	--	30.0
IV023RU	N	70	<200	100	.05	>10.000	110	--	.7	48	--	190.0
IV023RV	N	15	<200	<10	<.05	>10.000	140	--	1.6	82	--	330.0
IV023RW	N	15	N	500	<.05	.890	<5	--	.3	75	--	660.0
IV023RX	N	30	N	200	<.05	.130	<5	--	.2	6	--	1,300.0
IV350R	N	20	<200	--	N	.070	130	--	--	--	10	--
IV351R	N	150	<200	--	.30	16.000	70	--	--	--	200	--
IV351RA	N	15	N	--	.05	.460	20	--	--	--	10	--
IV352R	N	30	500	--	<.05	.420	160	--	--	--	200	--
IV352RA	N	20	300	--	N	.130	330	--	--	--	10	--
IV353R	N	10	N	--	N	.380	55	--	--	--	20	--
IV354R	N	30	N	--	N	.110	85	--	--	--	10	--
IV364R	N	30	200	--	N	.090	190	--	--	--	40	--
IV371R	N	10	N	<10	.05	.320	45	--	.2	N	--	N
IV371RA	N	30	300	150	<.05	.270	230	--	1.2	N	--	20.0
IV371RB	N	70	200	200	<.05	.250	170	--	.8	2	--	85.0
IV371RC	N	15	N	200	<.05	.140	30	--	.3	N	--	5.0
IV371RF	N	10	N	200	<.05	.080	5	--	.1	1	--	N
IV371RF	N	15	N	300	<.05	.080	5	--	.1	N	--	N
IV372R	N	50	200	100	<.05	.140	160	--	.3	N	--	<5.0
IV375R	N	20	N	50	N	.040	10	--	N	N	--	N
IV375RA	N	30	N	100	N	.240	50	--	N	N	--	N
IV375RB	N	50	N	100	N	.080	1,200	--	1.9	2	--	20.0
IV375RC	N	70	N	100	N	.040	90	--	N	N	--	5.0
IV375RD	N	20	N	30	N	.080	15	--	N	N	--	10.0
IV375RE	N	70	N	200	N	.020	80	--	N	N	--	5.0
IV375RF	N	10	N	70	N	.060	5	--	N	5	--	100.0
IV375RG	N	50	N	300	N	.040	50	--	N	N	--	5.0
IV375RH	N	70	N	200	N	.020	10	--	N	N	--	N
IV375RI	N	70	<200	300	N	.020	60	--	N	N	--	10.0
IV375RJ	N	15	700	20	<.05	.280	1,400	--	39.0	40	--	60.0
IV375RK	N	30	N	150	N	.040	50	--	.2	2	--	15.0
IV375RL	N	10	N	N	N	>10.000	50	--	16.0	130	--	N
IV375RM	N	50	N	100	N	.040	15	--	.1	2	--	5.0
IV375RN	N	70	N	70	N	.840	30	--	.2	1	--	20.0
IV375RO	N	20	N	100	N	.300	45	--	.2	1	--	30.0
IV376R	N	70	N	300	N	.040	100	--	.7	N	--	5.0
IV376RA	N	30	N	150	N	>10.000	10	--	N	7	--	150.0
IV376RB	N	20	<200	100	N	>10.000	190	--	.6	25	--	15.0
IV376RC	N	10	N	N	N	.060	5	--	N	1	--	N
IV376RD	N	100	<200	200	N	>10.000	280	--	.5	3	--	55.0
IV376RE	N	20	N	70	N	<.020	10	--	.2	5	--	40.0

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo 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	B-ppm s	Ba-ppm s	Be-ppm s	Bi-ppm s
IV376RF	37 12 5	117 43 31	.50	>10.00	20.00	.005	200	N	N	N	5,000	N	N
IV376RG	37 12 8	117 43 22	.07	.20	.30	.050	15	N	N	20	300	N	N
IV376RH	37 12 11	117 42 58	1.00	5.00	20.00	.150	1,000	.5	N	100	700	<1.0	N
IV376RI	37 12 5	117 42 42	2.00	5.00	.70	.500	100	.5	<200	200	2,000	1.5	N
IV376RJ	37 12 5	117 42 42	15.00	.07	2.00	.010	1,000	N	500	50	3,000	5.0	N
IV376RK	37 12 5	117 42 42	7.00	10.00	20.00	.050	700	2.0	500	20	3,000	3.0	N
IV376RL	37 12 5	117 42 42	10.00	5.00	15.00	<.002	2,000	N	700	20	300	7.0	N
IV376RM	37 12 4	117 42 34	5.00	1.00	.50	.300	300	N	N	150	500	2.0	N
IV377R	37 10 31	117 41 31	1.50	1.00	>20.00	.070	300	N	N	20	20	N	N
IV377RA	37 10 32	117 41 28	10.00	3.00	5.00	.500	300	N	N	300	700	3.0	N
IV377RB	37 10 39	117 41 25	.70	7.00	>20.00	.070	100	N	N	20	<20	N	N
IV377RC	37 10 39	117 41 25	.30	.50	>20.00	.030	200	N	N	<10	<20	N	N
IV377RD	37 10 39	117 41 25	.50	.50	>20.00	.015	70	N	N	<10	N	N	N
IV377RE	37 10 42	117 41 12	2.00	10.00	20.00	.100	200	N	N	70	70	1.5	N
IV377RF	37 10 42	117 41 12	.70	.50	>20.00	.015	200	<.5	N	N	N	N	N
IV377RG	37 10 46	117 41 8	.50	10.00	20.00	.030	150	N	N	N	N	<1.0	N
IV389P	37 12 31	117 41 59	.10	.05	.50	.050	<10	N	N	15	1,500	<1.0	N
IV389RA	37 12 31	117 41 59	3.00	.07	.10	.050	10	N	300	50	200	<1.0	N
IV389RP	37 12 31	117 41 59	.70	10.00	20.00	.005	200	<.5	N	N	100	<1.0	N
IV400RA	37 12 49	117 41 15	.07	.05	.70	>1.000	N	N	N	20	5,000	N	N
IV400RB	37 14 36	117 41 12	N	.02	20.00	.050	N	N	N	N	<20	N	N
IV400RC	37 14 36	117 41 12	1.50	>10.00	>20.00	.050	700	<.5	N	N	200	N	N
IV400RD	37 14 36	117 41 12	15.00	.20	.70	.150	70	2.0	2,000	150	>5,000	N	N
IV400RR	37 12 49	117 41 15	.05	<.02	>20.00	.150	N	N	N	N	200	N	N
SV317R1	37 11 13	117 42 57	3.00	<.02	<.05	.005	20	<.5	<200	30	700	N	N
SV317R2	37 11 13	117 42 57	7.00	.10	<.05	.100	10	.5	200	50	1,500	1.0	N
SV321R1	37 13 57	117 42 57	2.00	.20	2.00	.100	100	.5	<200	20	300	<1.0	N
SV321R2	37 13 59	117 42 51	.30	.02	.20	.070	300	N	N	20	200	<1.0	N
SV322R1	37 14 35	117 43 10	7.00	5.00	5.00	.500	500	1.0	N	200	300	1.0	N
SV322R2	37 14 41	117 43 5	5.00	.20	1.00	.200	30	.7	<200	50	1,500	N	N
SV322R3	37 14 41	117 43 5	.05	.02	<.05	.015	10	N	N	20	100	N	N
SV334R1	37 10 26	117 42 35	1.50	.15	.10	.100	20	1.0	N	150	>5,000	<1.0	N
SV334R2	37 10 26	117 42 35	.07	.05	<.05	1.000	15	N	N	300	>5,000	N	N
SV334R3	37 10 36	117 42 35	20.00	.15	.07	.300	10	N	700	50	1,500	N	N
SV334R4	37 10 36	117 42 35	20.00	.50	.10	.500	100	N	N	300	5,000	2.0	N
SV334R5	37 10 36	117 42 35	.07	.02	.05	1.000	10	N	N	200	2,000	N	N
SV334R6	37 10 36	117 42 35	10.00	<.02	<.05	.100	N	<.5	200	50	1,500	N	N
SV334R7	37 10 36	117 42 35	1.00	<.02	<.05	.500	1,000	N	N	200	1,000	N	N

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo County, California--Continued

Sample	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	Sr-ppm s	V-ppm s
IV376RF	N	N	<10	<5	N	N	N	7	200	N	N	200	15
IV376RG	N	N	<10	7	N	N	N	N	10	N	N	N	10
IV376RH	N	N	100	7	N	N	N	20	15	N	5	500	100
IV376RI	N	5	150	50	50	N	<20	30	15	N	10	N	300
IV376RJ	<20	15	<10	30	50	70	N	200	70	<100	5	N	70
IV376RK	N	5	30	15	<20	15	N	150	100	1,000	<5	N	100
IV376RL	N	7	N	<5	50	7	N	200	N	150	N	N	30
IV376RM	N	20	100	50	50	N	<20	50	30	200	15	N	50
IV377R	N	7	20	<5	<20	N	N	5	20	N	<5	500	20
IV377RA	N	20	200	30	150	N	20	50	10	N	30	N	100
IV377RB	N	<5	20	5	N	N	N	5	20	N	N	500	15
IV377RC	N	5	<10	5	N	N	N	7	15	N	N	<100	<10
IV377RD	N	<5	<10	5	N	N	N	5	30	N	N	300	<10
IV377RE	N	5	30	<5	<20	N	N	10	15	N	5	200	20
IV377RF	N	N	<10	<5	N	N	N	<5	20	N	N	300	10
IV377RG	N	N	<10	5	N	N	N	<5	10	N	<5	N	10
IV389R	N	N	<10	<5	N	N	N	N	<10	N	N	N	20
IV389RA	N	N	20	100	N	15	N	10	15	500	<5	<100	100
IV389RB	N	N	<10	30	N	N	N	10	100	N	N	N	10
IV400RA	N	N	20	<5	N	15	50	N	20	N	--	N	50
IV400RB	N	N	<10	N	50	N	N	N	N	N	--	N	<10
IV400RC	N	5	10	10	N	N	N	5	50	N	--	100	50
IV400RD	N	15	150	500	100	50	N	200	1,000	500	--	1,000	700
IV400RR	N	N	<10	<5	N	N	N	N	10	N	--	100	10
SV317R1	N	N	10	10	N	20	N	20	10	150	--	N	20
SV317R2	N	N	20	50	N	N	N	100	10	N	--	N	150
SV321R1	N	N	20	30	N	30	N	10	5,000	N	--	N	20
SV321R2	N	N	<10	5	N	N	N	N	50	N	--	N	20
SV322R1	N	30	300	50	20	10	N	200	50	N	--	N	70
SV322R2	N	N	100	20	N	200	N	50	20	N	--	N	2,000
SV322R3	N	N	N	N	N	N	N	N	N	N	--	N	20
SV334R1	N	N	50	50	N	N	N	50	N	N	--	N	100
SV334R2	N	N	20	<5	150	7	20	N	100	N	--	N	50
SV334R3	N	N	2,000	20	200	200	N	20	150	N	--	1,500	2,000
SV334R4	N	N	200	20	150	20	N	50	N	N	--	100	300
SV334R5	N	N	<10	5	150	20	20	N	70	N	--	N	50
SV334R6	N	N	300	70	150	100	N	30	300	N	--	700	1,000
SV334R7	N	N	70	10	100	70	<20	10	10	N	--	N	20

Table 4 -- Analyses of rock samples collected from the Crater mercury-sulfur-gypsum mineralized area, Inyo County, California--Continued

Sample	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Au-ppm aa	Hg-ppm inst	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Sb-ppm aa	As-ppm cm	As-ppm aa
IV376RF	N	15	N	<10	N	.040	50	--	.2	6	--	5.0
IV376RG	N	<10	N	300	N	>10.000	N	--	N	N	--	5.0
IV376RH	N	30	<200	70	N	.080	80	--	.3	2	--	5.0
IV376RI	N	30	<200	200	N	>10.000	100	--	.1	12	--	160.0
IV376RJ	N	70	2,000	N	N	>10.000	7,600	--	25.0	200	--	2,100.0
IV376RK	50	30	500	100	N	>10.000	650	--	.9	700	--	880.0
IV376RL	N	15	2,000	N	.15	>10.000	6,500	--	.8	230	--	2,100.0
IV376RM	N	50	<200	500	N	>10.000	85	--	.1	70	--	20.0
IV377R	N	20	N	10	N	.020	20	--	N	1	--	10.0
IV377RA	N	70	N	100	N	.020	40	--	N	N	--	5.0
IV377RB	N	10	N	<10	N	<.020	20	--	N	1	--	N
IV377RC	N	15	N	<10	N	<.020	20	--	N	N	--	5.0
IV377RD	N	<10	N	N	N	<.020	5	--	N	N	--	5.0
IV377RE	N	15	N	15	N	<.020	15	--	N	N	--	N
IV377RF	N	<10	N	N	N	.020	60	--	.2	N	--	10.0
IV377RG	N	<10	N	<10	N	<.020	10	--	N	N	--	10.0
IV389R	N	10	N	200	N	>10.000	5	--	N	15	--	15.0
IV389RA	N	10	N	70	.05	>10.000	25	--	.2	320	--	430.0
IV389RB	N	10	<200	N	N	>10.000	230	--	1.2	5	--	130.0
IV400RA	N	10	N	--	N	.240	5	--	.1	6	--	N
IV400RB	N	N	N	--	N	>10.000	<5	--	N	N	--	N
IV400RC	N	15	N	--	N	>10.000	20	--	N	11	--	25.0
IV400RD	N	50	1,000	--	N	>10.000	1,200	--	16.0	350	--	2,300.0
IV400RR	N	N	N	--	N	.660	5	--	N	N	--	N
SV317R1	N	N	N	N	.05	600.000	50	--	.4	180	--	500.0
SV317R2	N	10	N	50	N	35.000	135	--	>100.0	17	--	300.0
SV321R1	N	10	N	500	N	.960	10	--	N	8	--	45.0
SV321R2	N	10	N	150	N	.160	30	--	N	10	--	35.0
SV322R1	N	30	<200	100	--	--	250	--	.3	N	--	10.1
SV322R2	N	15	N	50	N	.076	15	--	.2	6	--	250.0
SV322R3	N	N	N	50	N	.040	<5	--	N	N	--	N
SV334R1	N	N	N	20	N	.500	10	--	.1	6	--	30.0
SV334R2	N	100	N	1,000	N	7.000	5	--	.2	22	--	15.0
SV334R3	N	20	N	200	N	16.000	40	--	.8	170	--	1,950.0
SV334R4	N	70	N	1,000	N	2.000	110	--	1.2	22	--	200.0
SV334R5	N	50	N	700	N	6.000	<5	--	N	36	--	5.0
SV334R6	N	N	N	15	N	2.700	50	--	.5	60	--	750.0
SV334R7	N	50	N	500	N	.900	<5	--	.1	6	--	5.0