UNITED STATES DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

Reconnaissance Geochemistry of the Mormon Mountains Bureau of Land Management Wilderness Study Area (NV 050-0161), Lincoln County, Nevada

By

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Open-File Report 84-361

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 U.S. Geological Survey.

1984

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EXECUTIVE (MANAGER) SUMMARY

A reconnaissance geochemical study of the Mormon Mountains Wilderness Study Area (WSA NV 050-0161) was conducted during June 1983. The WSA is located in southeastern Nevada (Figure 1). This study supplements the Mormon Mountains Geology-Energy-Minerals (GEM) Report (Great Basin GEM Joint Venture, 1983) by locating areas with mineral resource potential not previously identified and classifies the study area as to metallic mineral resource favorability.

The Mormon Mountains consist of a dome of Paleozoic carbonate rocks over Precambrian rocks which are exposed in two small windows. Tertiary volcanic rocks occur in the north. There are mineral occurrences and prospects at two locations, the Whitmore mine and the Iron Blossom claim. A simplified geologic map is shown in Figure 2.

The centrally located window to Precambrian rocks near the Whitmore mine is rated as having moderate favorability for metallic mineral deposits as is an area in the north which includes the Iron Blossom claim, overthrust Permian carbonate rocks, and Tertiary volcanic rocks. The westernmost window to Precambrian rocks has a moderate favorability. The major portion of the WSA, the carbonate rocks, have a low favorability and contain only scattered anomalous sites. The surrounding alluvial filled valleys were rated as having low favorability in the GEM report and not studied.

INTRODUCTION

A geochemical study of the Mormon Mountains Wilderness Study Area (WSA NV 050-0161) (Figure 1) was undertaken on the basis of recommendations made in the Mormon Mountains GEM Report (Great Basin GEM Joint Venture, 1983). The GEM report, a survey of existing literature prepared for the Bureau of Land Management (BLM), rates each area's favorability for geology, energy, and minerals (GEM) resources within the Wilderness Study Area (WSA). The present study, a reconnaissance geochemical survey, supplements the GEM report by locating areas with metallic mineral resource potential not previously identified by prospects, claims, or private exploration. Regions within the study area are ranked for their resource potential using the BLM land classification system.

Stream sediment, heavy-mineral concentrate of stream sediment, and rock samples were collected during June 1983. Following chemical analysis for 31 elements by emission spectroscopy, the data were entered into the USGS Rock Analysis Storage System (RASS). Statistical analysis was performed by computer and areal plots of element distributions and other parameters were machine plotted.

LOCATION

The Mormon Mountains Wilderness Study Area (NV 050-0161) is approximately 208 square miles (540 km^2) in area, and is in southeastern Lincoln County, Nevada, approximately 65 miles northeast of Las Vegas. It is within the Mormon Mountains GEM Resources Area (GRA no. NV-27) in the BLM Caliente Resource Area, Las Vegas District. It is on the U.S. Geological Survey Las Vegas and Caliente 1:250,000 1° x 2° topographic maps and on the following

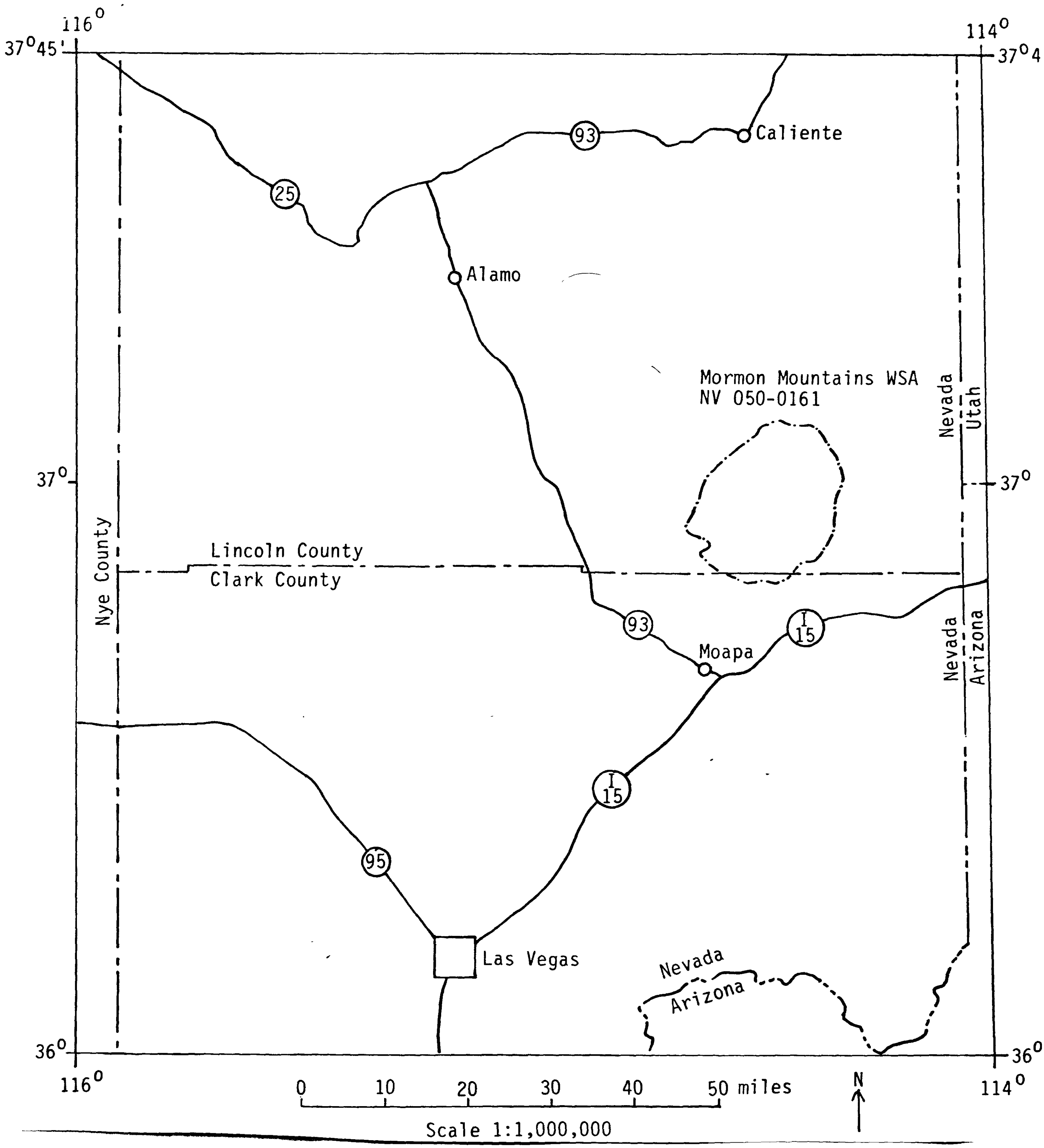

Figure 1.--Index map of the Mormon Mountains Wilderness Study Area, Lincoln County, Nevada

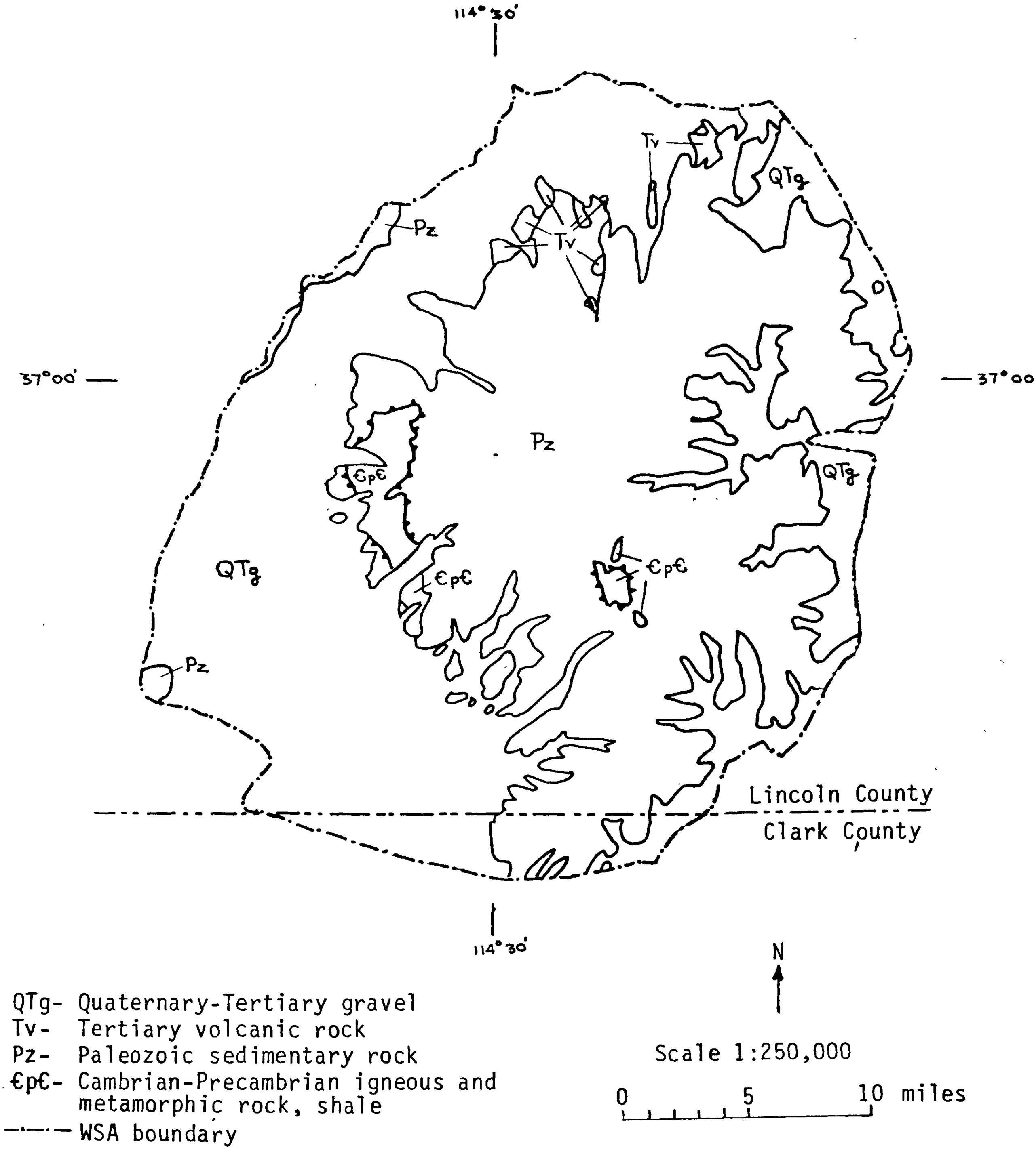

Figure 2.--Simplified geology map, Mormon Mountains Wilderness Study Area, Lincoln County, Nevada

USGS 1:24,000 7 1/2' quadrangles: Vigo, Carp, Toquop Gap, Rox NE, Moapa Peak NW, Davidson Peak, Rox SE, Moapa Peak SE. The southern boundary is approximately six miles north of Interstate Highway 15 and the northern boundary is approximately 36 miles south of the town of Caliente. Access to the area is from Interstate 15 or from Caliente. Access within the area is very limited on unimproved dirt roads. This study was conducted by helicopter.

GEOLOGY

The WSA includes most of the outcrop area of the Mormon Mountains, consisting mainly of Paleozoic carbonate rocks over Precambrian igneous and metamorphic rocks which are exposed in two windows. Tertiary volcanic rocks occur in several closely spaced locations on the northern side. The Cenozoic cover has been stripped away to leave the exhumed dissected dome surrounded by Quaternary and Tertiary alluvium filled valleys. A simplified geologic map is shown in Figure 2. Information relating to geology presented herein is summarized from Tschanz and Pampeyan (1970), Ekren et al. (1977), and the U.S. Bureau of Land Management GEM report (1983).

Physiography

The major portion of the WSA consists of the Mormon Mountains, a subcircular mountain mass 15 to 20 miles in diameter. Drainages from this dissected dome radiate in all directions to discharge into the surrounding valley washes which empty into the Colorado River. The highest point is Mormon Peak with an elevation of 7,411 feet with the lowest elevations along the Meadow Valley wash on the western boundary of less than 2,000 feet.

Rock Units

Basement rocks are Precambrian igneous and metamorphic rocks consisting of granite, pegmatite, amphibolite, and gneiss. They are exposed in a four mile window along the west side of the range and in a small window in the south-central part. Lower Cambrian Prospect Mountain Quartzite and Pioche Shale are exposed in the same windows.

Devonian to Cambrian limestone and dolomite has been thrust over the above older rocks and also over Permian red beds and Kaibab limestone at the northeast corner of the range.

Lower Mississippian Monte Cristo limestone crops out throughout the range and lies unconformably over the Devonian to Cambrian rocks.

Permian and Pennsylvanian limestone and sandstone are found on the north and south fringes.

Red beds were deposited in the lower Permian. Two hundred feet of pink and brown quartzite are exposed under a thrust in the northeast.

Tertiary volcanics ranging from rhyolite to basalt were deposited over the older sediments in the northern part of the area. They are predominantly an ignimbrite series of welded tuffs, pumice, tuff breccias, flows and perlitic rocks.

Quaternary and Tertiary gravels and alluvium derived from the eroding highlands have been deposited in the surrounding valleys.

Structural Geology and Tectonics

The Mormon Mountains were uplifted approximately 3,000 feet in post-Mississippian time into the Mormon Mountains Arch. Subsequent tectonic forces of the Cretaceous Laramide orogeny caused thrusting, folding, and shearing of the sediments. Tschantz and Pampeyan (1970) postulate a detachment thrust may underlie the carbonate section. The thrust surface probably follows a Cambrian shale and may be a structural control for weak mineralization. An unconformity at the base of the Mississippian Monte Cristo Limestone may be a the surface of a thrust or bedding plane fault or of a gravity block slide down the flanks of the uplift.

North trending Basin and Range normal faults displace the Paleozoic sediments in the central part of the range.

Paleontology

Abundant fossils are found in the Paleozoic sediments.

Historical Geology

Marine carbonate sediments of the Paleozoic era were deposited over Precambrian igneous and metamorphic basement rocks. Mesozoic sediments were largely eroded during the Laramide orogeny of uplift and thrust faulting. Tertiary volcanism was followed by Basin and Range normal faulting and accumulation of alluvium in the surrounding valleys.

MINERAL RESOURCES

Known Prospects

The Whitmore mine, a copper prospect, is located in the Moapa Peak NW 7 1/2' quadrangle.

The Iron Blossom lodes, shown in section 35 of T10S, R67E of the Carp 7 1/2' quadrangle, are for an unknown commodity.

GEOCHEMISTRY

The purpose of this regional geochemical survey was to provide information relating to possible mineralization and permit the land classification of the WSA for metallic mineral potential with greater certainty. No previous geochemical exploration studies are known to have been made. The GEM report (Great Basin GEM Joint Venture, 1983) classified the entire area as one of low favorability with the exception of the Whitmore and Iron Blossom prospect areas which were classified as moderate favorability.

Sampling Design

Samples were collected at 206 sites (plate 1), yielding a sampling density of 1.0 samples per square mile. Sites were generally selected on first-order streams (without tributaries as shown on USGS 1:24,000 topographic maps) or small second-order streams (formed by the juncture of two first-order or a first- and second-order stream). Sites were chosen to give near uniform coverage of the area for reconnaissance sampling.

Sample Media Selection

Stream sediments were chosen as the primary sample media because of the relatively large drainage area represented by each sample. Two sub-groups were utilized. They were (1) the medium to fine fraction (-80 mesh) of the active sediment in the bed load of the stream, and (2) the heavy minerals incorporated in the bed load of the stream.

The first of these media provides a geochemical cross section of the transported components of the drainage basin. The composition of the -80 mesh fraction is controlled mainly by the major geologic units and to a lesser extent by scavenging materials such as iron-manganese oxides, clays, and organic matter. Trace-metal components, which might originate from a potentially economic mineral deposit, may be reflected in this sample medium but the trace-metal concentration is small because of the dilution by the barren material from the major components of the basin.

The second sample medium, the heavy-mineral concentrate, is used to enhance the influence of minor components such as ore related minerals. Many ore minerals are resistant to abrasion, are of high specific gravity, and are nonmagnetic. Weathering products of these ore minerals are transported by streams as detrital grains and are separated from low specific gravity diluting minerals such as quartz, feldspar, and mica by field panning and laboratory specific gravity separation. In this heavy-mineral fraction produced by specific gravity separation, ore minerals are further separated on the basis of magnetic susceptibility, this time from interfering and diluting iron and magnesium silicate minerals. Removed also with these iron and magnesium silicate minerals in the more magentic fraction are ore elements incorporated in the silicate mineral lattice, while the same element in an ore mineral is retained in the nonmagnetic fraction. Anomalous element concentrations related to mineralization are thereby enhanced. Analysis of this subset, the nonmagnetic fraction of a heavy-mineral concentrate, results in more frequent detection of ore related anomalous element concentrations whose natural abundance in rock or stream-sediment material is often below analytical detection limits.

Rock samples from outcrop and float provide information on background concentrations of elements in unaltered rocks. Additionally, some rock samples were taken at localities showing alteration or mineralization.

Sample Collection

Both a stream sediment and stream sediment taken for preparation of a heavy-mineral concentrate were each collected at 191 sites. Both sediment samples were passed through a 10 mesh (2 mm sieve). Enough sample to fill a 4 1/2" by 6" cloth bag (0.5 lb) was collected for the stream sediment, and sample to fill two 5 1/2" by 10" bags (6.8 lb) was collected for the heavy mineral concentrate sample. The stream sediment sample was composited from throughout the stream bed to be as representative as possible; the stream sediment taken for preparation of a heavy-mineral concentrate was selected to give a high yield of heavy minerals. All heavy-mineral-concentrate samples were panned at the Meadow Valley Wash near Caliente. All but eight samples yielded enough heavy-mineral concentrate for analysis. Rock samples were collected at 25 sites.

Sampling sites were assigned a two letter prefix, the first letter "M" denotes the site as being in the Mormon Mountains WSA. The second letter identifies the person collecting the sample and therefore the pertinent field notebook. Consecutive three digit numbers were assigned from 192 to 433. A single letter suffix designates the sample type: S--stream sediment, C--heavy mineral concentrate, R--rock.

Sample Preparation

Stream sediment samples were passed through an 80-mesh stainless steel sieve and analyzed spectrographically.

Following panning, heavy-mineral concentrate samples were passed through a 30-mesh stainless steel sieve and minerals with a specific gravity of less than 2.85 separated by flotation in bromoform and discarded. The heavy minerals were separated into three fractions on the basis of magnetic susceptibility. The most magnetic (largely magnetite) was separated with a hand magnet and discarded. The remainder was separated into two fractions with a Frantz Isodynamic Separator set at a slope of 15°, tilt of 10°, and current of 1.0 ampere. The intermediate magnetic fraction of largely ferromagnesian silicates was saved but not analyzed. The nonmagnetic fraction can contain low-iron magnesium silicates, barite, apatite, sphene, zircon, tourmaline, brookite, rutile, most sulfide minerals and secondary minerals (alteration products) of base metals. This nonmagnetic fraction was split, one fraction was hand ground and analyzed spectrographically, the other saved for future mineralogic study.

Rock samples were crushed and pulverized to minus 0.15 mm and analyzed spectrographically.

Sample Analysis

All samples were analyzed for 31 elements by a D.C. arc semiquantitative emission spectrographic method (Grimes and Marranzino, 1968). Element concentrations are obtained by visual comparison of sample spectra with spectra of standards prepared in concentration steps of 1, 2, 5, 10, etc. Samples were estimated to be equal to a standard concentration step or intermediate and assigned a value of 1.5, 3, 7, 15, etc. Six values are therefore possible for a given order of magnitude (1, 1.5, 2, 3, 5, 7). Detection limits for rock and stream sediment samples for which a 10 mg sample is analyzed are presented in Table 1. Detection limits for heavy mineral concentrate samples for which only a 5 mg sample is analyzed to reduce spectral interferences are two reporting steps higher (approximately twice those of stream sediments).

Data Storage and Statistical Methods

Chemical analysis data and sample site locations (latitude and longitude) were entered in the U.S. Geological Survey computer data storage system entitled Rock Analysis Storage System (RASS). Statistical treatment of the data and plotting was performed with the U.S. Geological Survey Statistical Package (STATPAC) (VanTrump and Miesch, 1977).

Chemical analysis data for the three sample media (stream sediment, heavy mineral concentrate, and rock) along with sample site location are presented in Appendices A, B, and C.

Histograms of the distribution of analysis data for each of the 31 elements determined were obtained for each sample media and used in setting background levels and concentration ranges for symbol representation in element distribution plots for map overlay.

Plots at a scale of 1:50,000 of the distribution of lead, silver, and zinc are presented in plate 2 and those of copper and molybdenum in plate 3.

Associations of chemical elements may in some cases identify geologic features or geochemical processes such as weathering, secondary dispersion, adsorption, or mineralization more clearly than the untreated analysis data. Factor analysis is a mathematical technique for deriving these associations. R-mode factor analysis (VanTrump and Miesch, 1977) was used to simplify the analysis for 31 elements down to a few factors which could be assigned some geochemical meaning.

Table 2 presents the factor loadings for R-mode factor analysis of heavy mineral concentrates for 26 elements. Five elements (Au, Bi, Cd, W, and Th) were not included in the factor analysis due to lack of unqualified data. Also included is the percent of the total variance of the 26 elements which is explained by the use of up to six factors.

Factor 1 is an association related to the felsic group of minerals. High correlations with titanium, lanthanum, niobium, scandium, yttrium, and zirconium are related to the factor. Factor 2 is an association related to the ferride group of elements. High correlations with iron, manganese, and vanadium are associated with this factor. Factor 3 is an assemblage having high correlations with calcium, chromium, and strontium. Factor 4 is an association related to dolomite. High correlations with magnesium, calcium, and zinc and negative correlations with arsenic, lanthanum, yttrium, and strontium are related to this factor. Factor 5 is an association related to mineralization. High correlations with lead and silver are related to this factor. Factor 6 is an association related to barite. High correlations with barium and antimony are related to this factor.

Factor 5, a mineralization related factor with high loadings of lead and silver is plotted at a scale of 1:50,000 on plate 4.

Table 1.--Detection limits for stream sediment and rock analysis

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

Interpretation of Geochemical Anomalies

Some general trends in the distribution of ore related elements in the element distribution plots and factor score plots are apparent.

Both lead and silver in heavy mineral concentrates show four high plots in the undifferentiated Devonian-Cambrian unit to the west of the Precambrian window near the Whitmore mine. Factor 5, the lead-silver mineralization factor in heavy-mineral concentrates also shows anomalously high values.

Silver concentrations in heavy-mineral concentrates are anomalously high in the north, near the contorted thrust fault of Permian-Pennsylvanian units over the Mississippian Monte Cristo formation and near the Tertiary-Cretaceous undifferentiated volcanic rocks. Factor 5 also shows the anomaly. Associated elements with silver are lead, zinc, arsenic, antimony, copper, and molybdenum.

Zinc in heavy-mineral concentrates shows anomalous concentrations in the undifferentiated Devonian-Cambrian rocks in the northeast and southeast. In the northeast the zinc is without associated elements; in the southeast the association changes east to west from zinc-copper-molybdenum to zinc-lead to lead-silver without zinc.

Copper and molybdenum in heavy mineral concentrates are anomalous in a wide east-west band across the northern fringe of the range which includes the Permian-Pennsylvanian thrust fault and the Tertiary Cretaceous volcanic rocks.

Anomalous copper and molybdenum in heavy-mineral concentrates also follow a north-south band through the central part of the range, which includes the north trending Basin and Range normal faults in the Paleozoic sediments. The association of copper and molybdenum in heavy mineral concentrates is apparent from their distribution plots; the association did not, however, emerge as a separate factor in an eight factor model but stayed imbedded in the ferride element association.

Only modest geochemical anomalies were found associated with the two windows to the Precambrian basement rocks in the WSA. The three occurrences of detectable tungsten, one with associated bismuth, were in the western window.

The metallic mineral deposit types of Lincoln County given by Tschanz and Pampeyan (1970) are hydrothermal. In decreasing order of production, the deposits are: bedded replacement deposits in limestone, epithermal fissure veins and related silicified breccia deposits, irregular replacement deposits in limestone or dolomite, pyrometasomatic deposits, replacement veins, and deposits in jasperoid.

The structural and stratigraphic controls of ore deposition in the county are very marked. Deposits are concentrated in the lowest Cambrian limestone, the combined Metals Member of the Pioche Shale. The underlying Prospect Mountain Quartzite contains epithermal vein deposits. Most ore deposits are found under an overthrust plate. Incompetent Pioche or Chisholm Shales were favored horizons for movement which shattered limestones and provided channels for solution migration. Intrusive rocks may have acted as a source of metals.

Table 2.--Varimax factor loadings for heavy mineral concentrates, 26 elements, R-mode factor analysis (loadings not given when less than 0.2 absolute value).

Element	Factor 1 Felsic Assoc.	Factor 2 Ferride Assoc.	Factor 3 Ca, Cr, Sr	Factor 4 Dolomite	Factor 5 Mineralization Pb, Ag	Factor 6 Barite
Fe		0.9				
Mg				0.7		
Ca			0.8	0.3		
Ti	0.9					
Mn	0.5	0.5			-0.3	
Ag			0.3		0.7	
As		0.4		-0.3		
B	0.4	0.5				
Ba	0.3	0.2				0.6
Be	0.3	0.4				-0.3
Co		0.8				
Cr	0.3	0.4	0.6			
Cu		0.9				
La	0.7		0.3	-0.4		
Mo		0.7				
Nb	0.7					-0.3
Ni		0.8				
Pb					0.8	
Sb						0.7
Sc	0.9					
Sn	0.4					
Sr			0.7	-0.3		
V	0.5	0.5	0.4			
Y	0.8		0.3	-0.3		
Zn				0.3		
Zr	0.7					0.3
Percent of variance explained	25.2	39.0	47.9	54.0	59.0	63.6

LAND CLASSIFICATION FOR GEM RESOURCES POTENTIAL, METALLIC MINERALS

Land classifications are shown on plate 5 at a scale of 1:100,000. The boundaries and letter and number designation for the metallic mineral land classification areas are those presented in the GEM report (Great Basin GEM Joint Venture, 1983) except where modification of boundaries was indicated by the results of this geochemical study.

Areas are classified as to both level of favorability and level of certainty using the BLM classification scheme shown in table 3. This is the same rating system used in the GEM report.

Each area shown on plate 5 has an area designation number with an "M" prefix and a number rating of favorability and a letter designation of certainty. M1-3C, for example, indicates that metallic mineral resource area number one is rated as having moderate favorability (3) with a moderate level of confidence (C) for metallic mineral resource potential.

The areas shown on plate 5 are rated as follows:

M1-3C: This area which includes the window of Precambrian and Cambrian rocks near the Whitmore mine retains the GEM report rating of moderate favorability and moderate confidence level. A higher favorability rating is not justified on the basis of the geochemical data which fails to reinforce the previously known information of alteration, mineralization, prospects, and favorable stratigraphic and structural controls. Mineralization is at the thrust contact.

M2-3C: This area has redrawn boundaries and includes areas M2 and M5 of the GEM report and is rated to have moderate favorability at a moderate confidence level. The Iron Blossom claims, the area of Permian overthrust, and the area of Tertiary volcanic rocks are all included in this area which has the most pronounced geochemical anomalies found in this study. Anomalous concentrations of silver, lead, zinc, arsenic, antimony, copper, and molybdenum were found in this area.

M3-3B: This area includes the western window to Precambrian and Cambrian rocks and is rated to have moderate favorability at a low to moderate confidence level. It contains Lower Paleozoic rocks known to contain mineralization at other locations in Lincoln County. Geochemical anomalies found included the three detectable tungsten occurrences of the study (one with bismuth) and moderate lead occurrences.

M4-2C: This area which includes the major portion of the Paleozoic rocks in the WSA has a low to moderate level of favorability at a moderate confidence level. The thrust surface underlying these rocks is associated with some alteration and mineralization and is in contact with unknown older rocks. Several lead-silver anomalies occur in the undifferentiated Devonian-Cambrian carbonate rocks and the Mississippian Monte Cristo limestone of the upper plate. Copper and molybdenum anomalies occur in these same rocks in a belt which includes the major north striking normal Basin and Range faults near the center of the range. These anomalies may represent migration along the faults of fluids enriched from deposits in the limestone beds of the Pioche Shale or from a porphyry copper-molybdenum deposit at depth.

Table 3.--BLM Land Classification System

I. Level of Favorability	II. Level of Certainty
1. The geologic environment and the inferred geologic processes do not indicate favorability for accumulation of mineral resources.	A. The available data are insufficient and/or cannot be considered as direct or indirect evidence to support or refute the possible existence of mineral resources within the respective area.
2. The geologic environment and the inferred geologic processes indicate low favorability for accumulation of mineral resources.	B. The available data provide indirect evidence to support or refute the possible existence of mineral resources.
3. The geologic environment, the inferred geologic processes, and the reported mineral occurrences or valid geochemical/geophysical anomaly indicate moderate favorability for accumulation of mineral resources.	C. The available data provide direct evidence, but are quantitatively minimal to support or refute the possible existence of mineral resources.
4. The geologic environment, the inferred geologic processes, the reported mineral occurrences, and/or valid geochemical/ geophysical anomaly, and known mines or deposits indicate high favorability for accumulation of mineral resources.	D. The available data provide abundant direct and indirect evidence to support or refute the possible existence of mineral resources.

M5-3C: This area of the GEM report has been combined with area M2.

M6-2A: This area of alluvium in the northern portion of the WSA retains the classification of low favorability and very low confidence level given in the GEM report. No geochemical sampling was done in this area.

M7-2A: This area of alluvium in the southern portion of the WSA retains the classification of low favorability and very low confidence level given in the GEM report. No geochemical sampling was done in this area.

RECOMMENDATIONS FOR ADDITIONAL WORK

1. A detailed geochemical study should be made of area M2 to better delineate areas anomalous in silver-base metals and copper-molybdenum.

2. Detailed geologic mapping in area M2 should be undertaken to establish the relationship of geochemical anomalies to lithologic and structural controls.

3. The placer claims on the alluvium near the southern boundary mentioned in the GEM report should be investigated.

4. Area M4 should be mapped in more detail to relate lithology and structure to leakage of metalliferous solutions from underlying strata.

5. A more detailed geochemical study should be made of area M4 to delineate areas anomalous in lead-silver and copper-molybdenum.

6. A more detailed geochemical study should be made of area M3 to investigate the source of anomalous tungsten.

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APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MN192S	36 57 55	114 25 35	2.0	1.0	2	.20	200	N	N	N	30	150
MB193S	36 57 37	114 25 54	2.0	2.0	2	.30	500	N	N	N	50	200
MN194S	36 57 17	114 26 3	1.0	3.0	5	.10	100	N	N	N	20	50
MB195S	36 57 8	114 26 28	2.0	3.0	3	.20	200	N	N	N	30	50
MN196S	36 56 36	114 26 14	2.0	3.0	5	.30	500	N	N	N	30	200
MB197S	36 56 38	114 26 37	1.0	3.0	5	.20	200	N	N	N	50	100
MB198S	36 58 0	114 27 19	1.0	3.0	5	.10	200	N	N	N	30	100
MN199S	36 57 55	114 27 17	1.0	3.0	5	.10	200	N	N	N	70	100
MY200S	36 56 56	114 25 18	1.0	3.0	5	.10	200	N	N	N	20	100
MY201S	36 56 52	114 25 14	1.0	2.0	2	.20	500	N	N	N	50	100
MK202S	36 57 18	114 24 46	2.0	2.0	3	.20	500	N	N	N	50	200
MY203S	36 57 34	114 23 35	1.0	3.0	5	.20	500	N	N	N	30	200
MB204S	36 57 52	114 23 11	.5	5.0	10	.07	200	N	N	N	20	100
MK205S	36 58 25	114 23 33	1.0	2.0	5	.20	500	N	N	N	50	200
MY206S	36 58 33	114 25 21	2.0	2.0	5	.20	300	N	N	N	50	200
MB207S	36 58 43	114 25 15	2.0	5.0	10	.20	300	N	N	N	30	200
MY208S	36 59 44	114 22 37	2.0	2.0	5	.20	300	N	N	N	30	200
MY209S	36 59 51	114 22 39	1.0	5.0	10	.10	300	N	N	N	10	100
MK210S	36 59 15	114 25 22	2.0	3.0	5	.20	300	N	N	N	50	150
MB211S	36 59 51	114 25 5	1.0	3.0	5	.10	300	N	N	N	30	150
MK212S	37 0 8	114 22 7	1.0	3.0	5	.10	300	N	N	N	30	100
MY213S	37 0 28	114 22 27	1.0	2.0	3	.10	200	N	N	N	30	100
MB214S	37 0 55	114 22 25	1.0	2.0	5	.20	300	N	N	N	30	200
MY215S	37 0 34	114 24 47	2.0	5.0	10	.30	200	N	N	N	50	200
MK216S	37 0 4	114 24 19	2.0	10.0	20	.20	200	N	N	N	20	100
MB217S	37 0 3	114 23 27	2.0	5.0	10	.50	300	N	N	N	50	300
MK218S	37 0 55	114 22 27	2.0	5.0	10	.20	300	N	N	N	30	150
MY219S	37 1 1	114 23 41	3.0	5.0	10	.50	300	N	N	N	50	200
MB220S	37 1 20	114 23 9	2.0	5.0	10	.30	500	N	N	N	70	200
MK221S	37 2 9	114 22 58	2.0	5.0	15	.30	300	N	N	N	50	200
MY222S	37 2 4	114 22 46	2.0	5.0	15	.50	500	N	N	N	50	300
MB223S	37 2 7	114 22 41	3.0	5.0	10	.20	500	N	N	N	50	300
MK224S	37 2 19	114 23 12	1.0	5.0	15	.20	300	N	N	N	50	200
MY225S	37 2 42	114 23 1	2.0	5.0	15	.30	300	N	N	N	50	200
MB226S	37 3 1	114 23 3	2.0	5.0	15	.30	300	N	N	N	50	200
MK227S	37 3 25	114 23 28	3.0	3.0	10	.50	500	N	N	N	70	300
MY228S	37 3 41	114 23 55	2.0	2.0	15	.30	200	N	N	N	70	200
MB229S	37 4 1	114 23 34	3.0	5.0	15	.30	200	N	N	N	30	200
MK230S	37 4 48	114 23 11	3.0	5.0	15	.70	500	N	N	N	50	300
MY231S	37 4 54	114 24 25	10.0	5.0	10	1.00	1,000	N	N	N	50	200
MB232S	37 4 9	114 25 20	3.0	1.0	15	.50	500	N	N	N	70	300
MK233S	37 4 7	114 25 43	2.0	3.0	15	.20	300	N	N	N	50	200
MY234S	37 3 36	114 25 45	2.0	2.0	15	.20	500	N	N	N	50	200
MB235S	37 2 28	114 26 2	2.0	7.0	20	.20	300	N	N	N	30	200
MK236S	37 1 44	114 26 2	3.0	5.0	15	.50	300	N	N	N	30	200

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MN192S	<1	N	N	5	30	20	N	N	10	<10	N	5
MB193S	1	N	N	5	70	70	N	N	15	70	N	5
MN194S	<1	N	N	N	20	20	N	N	10	30	N	5
MB195S	<1	N	N	N	50	20	N	N	15	70	N	5
MN196S	<1	N	N	10	50	70	N	N	20	70	N	5
MB197S	1	N	N	5	30	20	N	N	15	70	N	5
MB198S	<1	N	N	5	30	20	N	N	15	50	N	5
MN199S	<1	N	N	5	30	20	N	N	15	50	N	5
MY200S	<1	N	N	5	30	20	N	N	10	70	N	5
MY201S	1	N	N	5	30	20	N	N	10	50	N	5
MK202S	1	N	N	5	30	20	N	N	10	70	N	5
MY203S	1	N	N	5	50	20	N	N	10	70	N	5
MB204S	<1	N	N	5	20	50	N	N	5	30	N	5
MK205S	1	N	N	5	30	20	N	N	15	70	N	5
MY206S	1	N	N	5	50	20	N	N	15	70	N	5
MB207S	1	N	N	5	30	20	N	N	20	70	N	5
MY208S	1	<10	N	5	30	20	N	N	15	70	N	5
MY209S	N	N	N	5	20	20	N	N	15	50	N	5
MK210S	<1	<10	N	5	30	20	N	N	20	70	N	5
MB211S	<1	N	N	5	30	20	N	N	10	70	N	5
MK212S	<1	N	N	5	20	20	N	N	10	30	N	5
MY213S	<1	N	N	5	30	20	N	N	10	50	N	5
MB214S	<1	N	N	5	30	20	N	N	10	50	N	5
MY215S	1	N	N	10	50	20	N	N	15	30	N	7
MK216S	<1	N	N	5	20	70	N	N	10	10	N	5
MB217S	1	N	N	5	50	20	N	N	10	30	N	7
MK218S	<1	N	N	10	30	70	N	N	15	20	N	5
MY219S	1	N	N	10	50	20	N	N	15	20	N	10
MB220S	1	N	N	20	30	20	N	N	15	30	N	7
MK221S	1	N	N	10	30	50	N	N	15	20	N	10
MY222S	1	N	N	10	30	20	N	N	15	20	N	7
MB223S	1	N	N	10	70	20	N	N	15	30	N	7
MK224S	1	N	N	10	30	20	N	N	15	10	N	7
MY225S	1	N	N	10	50	20	N	N	15	30	N	5
MB226S	1	N	N	10	30	20	N	N	15	15	N	5
MK227S	1	N	N	10	50	20	N	N	15	15	N	10
MY228S	1	N	N	10	50	20	N	N	15	15	N	5
MB229S	1	N	N	10	50	20	N	N	15	10	N	7
MK230S	1	N	N	10	30	20	N	N	10	10	N	10
MY231S	1	N	N	20	70	200	N	N	30	30	N	10
MB232S	1	N	N	10	30	20	N	N	15	15	N	7
MK233S	1	N	N	10	30	20	N	N	15	20	N	7
MY234S	1	N	N	10	50	20	N	N	20	70	N	5
MB235S	1	N	N	10	30	20	N	N	15	30	N	5
MK236S	1	N	N	10	30	20	N	N	15	30	N	10

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MN192S	N	100	70	N	15	N	200	N
MB193S	N	100	70	N	20	N	200	N
MN194S	N	100	50	N	10	N	100	N
MB195S	N	100	70	N	10	N	100	N
MN196S	N	100	70	N	20	N	200	N
MB197S	N	100	50	N	10	N	200	N
MB198S	N	100	50	N	10	N	100	N
MN199S	N	100	50	N	10	N	70	N
MY200S	N	100	50	N	10	N	50	N
MY201S	N	100	50	N	10	N	100	N
MK202S	N	100	50	N	10	N	100	N
MY203S	N	100	70	N	10	N	100	N
MB204S	N	100	20	N	10	N	50	N
MK205S	N	100	30	N	10	N	100	N
MY206S	N	100	50	N	15	N	100	N
MB207S	N	100	50	N	15	N	100	N
MY208S	N	100	50	N	15	N	100	N
MY209S	N	100	20	N	10	N	100	N
MK210S	N	100	50	N	15	N	100	N
MB211S	N	100	20	N	10	N	70	N
MK212S	N	100	20	N	10	N	70	N
MY213S	N	100	20	N	10	N	100	N
MB214S	N	100	20	N	15	N	100	N
MY215S	N	200	70	N	15	N	200	N
MK216S	N	100	50	N	10	N	100	N
MB217S	N	100	100	N	20	N	1,000	N
MK218S	N	N	50	N	10	N	100	N
MY219S	N	100	100	N	20	N	500	N
MB220S	N	100	100	N	15	N	300	N
MK221S	N	100	70	N	20	N	300	N
MY222S	N	100	70	N	20	N	300	N
MB223S	N	100	70	N	20	N	300	N
MK224S	N	100	50	N	15	N	200	N
MY225S	N	100	50	N	20	N	200	N
MB226S	N	100	50	N	10	N	200	N
MK227S	N	200	70	N	20	N	500	N
MY228S	N	200	70	N	20	N	500	N
MB229S	N	200	100	N	20	N	200	N
MK230S	N	200	100	N	30	N	1,000	N
MY231S	N	100	200	N	20	N	1,000	N
MB232S	N	200	100	N	20	N	500	N
MK233S	N	200	70	N	10	N	200	N
MY234S	N	200	70	N	20	N	200	N
MB235S	N	200	50	N	20	N	200	N
MK236S	N	100	50	N	15	N	200	N

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MY237S	37 1 23	114 26 8	1.0	3.0	7	.10	200	N	N	N	20	20
MB238S	37 1 21	114 26 1	1.0	3.0	7	.10	200	N	N	N	10	20
MK239S	37 1 25	114 27 17	1.0	3.0	7	.10	200	N	N	N	15	20
MY240S	37 1 24	114 27 13	1.0	3.0	5	.10	200	N	N	N	15	20
MB241S	37 2 17	114 27 19	3.0	1.0	7	.70	500	N	N	N	30	200
MN278S	37 3 43	114 22 9	1.0	5.0	5	.20	500	N	N	N	30	100
MK279S	37 3 3	114 22 13	1.0	3.0	5	.50	300	N	N	N	30	150
MB280S	37 3 6	114 22 23	2.0	3.0	5	.50	300	N	N	N	50	150
MN281S	37 3 44	114 21 11	2.0	3.0	3	.70	500	N	N	N	50	300
MK282S	37 3 24	114 21 19	1.0	3.0	7	.30	200	N	N	N	10	100
MB283S	37 3 14	114 21 1	2.0	3.0	10	.50	300	N	N	N	30	300
MN284S	37 3 7	114 20 59	1.0	2.0	5	.50	300	N	N	N	50	300
MK285S	37 2 50	114 20 47	2.0	3.0	10	.50	500	N	N	N	30	300
MB286S	37 2 42	114 20 41	2.0	2.0	3	.70	300	N	N	N	50	300
MN287S	37 2 17	114 20 37	2.0	3.0	5	.70	500	N	N	N	30	300
MK288S	37 2 3	114 20 34	2.0	3.0	5	.50	500	N	N	N	30	300
MB289S	37 1 22	114 20 37	2.0	2.0	5	.50	300	N	N	N	30	300
MN290S	37 0 54	114 20 23	2.0	2.0	5	.30	500	N	N	N	30	300
MK291S	37 0 38	114 20 22	2.0	3.0	7	.30	300	N	N	N	50	200
MB292S	37 0 30	114 20 22	2.0	3.0	5	.50	300	N	N	N	50	300
MN293S	37 0 14	114 20 23	1.0	3.0	7	.20	200	N	N	N	30	200
MK294S	36 59 19	114 20 27	2.0	2.0	7	.30	500	N	N	N	30	200
MB295S	36 59 8	114 20 19	2.0	2.0	5	.70	500	N	N	N	50	500
MN296S	36 59 32	114 21 33	2.0	3.0	7	.20	300	N	N	N	30	150
MK297S	36 58 4	114 21 52	2.0	3.0	7	.30	300	N	N	N	30	200
MB298S	36 57 13	114 21 33	1.0	3.0	10	.20	200	N	N	N	30	100
MN299S	36 56 55	114 21 47	2.0	2.0	3	.70	500	N	N	N	50	300
MK300S	36 56 7	114 22 17	2.0	3.0	5	.50	500	N	N	N	30	300
MK300S	36 56 16	114 24 13	2.0	2.0	3	.50	500	N	N	N	50	300
MB301S	36 56 18	114 22 48	1.0	3.0	10	.20	500	N	N	N	30	200
MB303S	36 56 13	114 24 18	2.0	1.0	3	.50	700	N	N	N	50	500
MN304S	36 56 5	114 23 40	1.0	3.0	5	.10	200	N	N	N	10	100
MY305S	36 55 55	114 23 13	1.0	3.0	3	.10	200	N	N	N	20	150
MK306S	36 55 51	114 22 45	1.0	3.0	5	.10	500	N	N	N	30	200
MB307S	36 56 5	114 22 14	1.0	3.0	7	.10	500	N	N	N	20	200
MY308S	36 56 16	114 21 30	2.0	3.0	7	.20	300	N	N	N	20	200
MK309S	36 55 48	114 21 17	2.0	3.0	5	.10	500	N	N	N	30	200
MB310S	36 55 27	114 21 18	2.0	3.0	7	.20	500	N	N	N	30	200
MY311S	36 55 8	114 21 40	2.0	3.0	5	.20	500	N	N	N	30	200
MK312S	36 54 37	114 22 16	1.0	3.0	7	.10	200	N	N	N	10	100
MB313S	36 54 7	114 21 32	1.0	2.0	5	.20	200	N	N	N	30	100
MY314S	36 53 7	114 21 39	1.0	3.0	7	.10	500	N	N	N	30	200
MK315S	36 53 38	114 22 10	1.0	3.0	10	.10	200	N	N	N	20	100
MB316S	36 54 21	114 23 8	1.0	3.0	7	.10	200	N	N	N	10	50
MY317S	36 50 2	114 29 51	.5	.3	7	.10	100	N	N	N	30	200

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MY237S	<1	N	N	N	30	20	N	N	5	30	N	5
MB238S	<1	N	N	N	30	20	N	N	5	50	N	5
MK239S	<1	N	N	N	30	20	N	N	5	30	N	5
MY240S	1	N	N	N	20	20	N	N	5	20	N	5
MB241S	1	N	N	15	70	50	N	N	20	10	N	5
MN278S	1	N	N	5	30	20	N	N	15	50	N	5
MK279S	1	N	N	5	30	20	N	N	10	50	N	5
MB280S	1	N	N	5	30	20	N	N	10	30	N	5
MN281S	1	N	N	5	30	20	N	N	10	50	N	5
MK282S	1	N	N	N	15	20	N	N	5	30	N	N
MB283S	1	N	N	5	30	20	N	N	10	30	N	5
MN284S	1	N	N	5	30	20	N	N	10	20	N	5
MK285S	1	N	N	5	50	50	N	N	10	20	N	5
MB286S	1	N	N	5	30	20	N	N	10	20	N	5
MN287S	1	N	N	5	30	50	N	N	5	30	N	5
MK288S	1	N	N	5	30	20	N	N	5	50	N	5
MB289S	1	N	N	5	20	20	N	N	5	30	N	5
MN290S	1	N	N	5	50	20	N	N	5	30	N	5
MK291S	1	N	N	5	30	20	N	N	10	50	N	5
MB292S	1	N	N	5	30	50	N	N	5	30	N	5
MN293S	1	N	N	5	20	20	N	N	5	50	N	5
MK294S	1	N	N	5	20	20	N	N	15	20	N	5
MB295S	1	N	N	5	30	50	N	N	10	50	N	5
MN296S	1	N	N	5	30	50	N	N	10	30	N	5
MK297S	1	N	N	5	30	20	N	N	10	50	N	5
MB298S	1	N	N	5	30	50	N	N	10	70	N	5
MN299S	1	N	N	10	30	50	N	N	15	30	N	5
MK300S	1	N	N	5	30	30	N	N	20	70	N	5
MK300S	1	10	N	5	30	20	N	N	10	70	N	5
MB301S	1	N	N	5	20	20	N	N	10	50	N	5
MB303S	1	N	N	5	30	20	N	N	15	30	N	10
MN304S	<1	N	N	N	10	20	N	N	5	30	N	5
MY305S	<1	N	N	N	10	20	N	N	5	30	N	5
MK306S	<1	N	N	N	10	20	N	N	5	20	N	5
MB307S	<1	N	N	5	10	20	N	N	5	20	N	5
MY308S	1	N	N	5	15	20	N	N	5	50	N	5
MK309S	1	N	N	5	30	20	N	N	10	70	N	5
MB310S	1	N	N	5	30	20	N	N	10	70	N	5
MY311S	<1	N	N	5	30	20	N	N	10	70	N	5
MK312S	<1	N	N	5	10	20	N	N	5	50	N	5
MB313S	<1	N	N	5	20	20	N	N	10	50	N	5
MY314S	<1	N	N	5	30	20	N	N	10	70	N	5
MK315S	<1	<10	N	5	20	20	N	N	5	30	N	5
MB316S	<1	N	N	5	20	20	N	N	10	50	N	5
MY317S	<1	<10	N	N	10	20	N	N	5	20	N	5

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MY237S	N	N	20	N	N	N	50	N
MB238S	N	N	20	N	N	N	10	N
MK239S	N	N	20	N	N	N	50	N
MY240S	N	N	20	N	10	N	70	N
MB241S	N	200	200	N	20	N	500	N
MN278S	N	100	50	N	10	N	150	N
MK279S	N	100	50	N	10	N	200	N
MB280S	N	100	50	N	15	N	300	N
MN281S	N	100	50	N	15	N	200	N
MK282S	N	100	20	N	10	N	100	N
MB283S	N	100	50	N	10	N	100	N
MN284S	N	100	50	N	10	N	200	N
MK285S	N	100	70	N	15	N	300	N
MB286S	N	100	50	N	10	N	300	N
MN287S	N	100	50	N	15	N	200	N
MK288S	N	100	50	N	10	N	300	N
MB289S	N	100	50	N	15	N	100	N
MN290S	N	100	50	N	10	N	200	N
MK291S	N	100	50	N	10	N	300	N
MB292S	N	100	30	N	15	N	200	N
MN293S	N	100	30	N	10	N	200	N
MK294S	N	100	30	N	10	N	200	N
MB295S	N	100	70	N	20	N	200	N
MN296S	N	100	20	N	10	N	200	N
MK297S	N	100	30	N	15	N	200	N
MB298S	N	100	30	N	15	N	200	N
MN299S	N	200	70	N	15	N	200	N
MK300S	N	200	70	N	15	N	200	N
MK300S	N	100	70	N	30	N	500	N
MB301S	N	100	50	N	20	N	200	N
MB303S	N	100	100	N	20	N	200	N
MN304S	N	N	20	N	10	N	100	N
MY305S	N	N	50	N	10	N	150	N
MK306S	N	100	50	N	15	N	150	N
MB307S	N	N	50	N	10	N	100	N
MY308S	N	N	50	N	20	N	200	N
MK309S	N	100	50	N	10	N	100	N
MB310S	N	100	70	N	15	N	150	N
MY311S	N	100	70	N	20	N	200	N
MK312S	N	N	50	N	10	N	100	N
MB313S	N	N	50	N	10	N	1,000	N
MY314S	N	100	50	N	10	N	300	N
MK315S	N	100	30	N	10	N	150	N
MB316S	N	100	30	N	10	N	50	N
MY317S	N	100	30	N	10	N	200	N

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MK318S	36 49 39	114 29 27	2.0	.5	5	.30	500	N	N	N	50	300
MB319S	36 50 18	114 28 36	2.0	.5	10	.20	200	N	N	N	30	200
MY320S	36 48 53	114 28 45	1.0	.5	2	.20	150	N	N	N	30	200
MK321S	36 48 48	114 28 11	2.0	.5	3	.30	200	N	N	N	30	200
MB322S	36 48 32	114 28 8	1.0	.5	3	.20	200	N	N	N	50	200
MY323S	36 49 52	114 28 15	1.0	1.0	5	.20	200	N	N	N	50	300
MK324S	36 50 45	114 29 7	2.0	1.0	10	.50	200	N	N	N	50	100
MB325S	36 50 43	114 26 38	2.0	1.0	10	.50	200	N	N	N	30	100
MY326S	36 51 3	114 26 0	1.0	2.0	10	.20	200	N	N	N	10	100
MK327S	36 51 2	114 25 37	2.0	1.0	5	.70	500	N	N	N	50	200
MB328S	36 51 21	114 24 57	2.0	1.0	5	.70	200	N	N	N	50	200
MY329S	36 51 50	114 24 29	2.0	1.0	5	.70	500	N	N	N	30	200
MK330S	36 52 19	114 25 5	2.0	3.0	7	.20	200	N	N	N	20	100
MB331S	36 52 35	114 25 55	2.0	3.0	5	.50	500	N	N	N	20	150
MY332S	36 51 51	114 29 31	2.0	3.0	7	.50	500	N	N	N	50	300
MN333S	36 51 48	114 28 28	2.0	3.0	7	.50	500	N	N	N	70	300
MB334S	36 51 22	114 28 17	2.0	3.0	7	.50	500	N	N	N	50	300
MY335S	36 52 28	114 28 19	2.0	3.0	7	.30	500	N	N	N	50	300
MN336S	36 52 8	114 27 18	2.0	3.0	7	.30	500	N	N	N	50	300
MB337S	36 52 13	114 27 35	2.0	3.0	7	.30	500	N	N	N	50	300
MY338S	36 53 3	114 25 38	1.0	3.0	10	.20	200	N	N	N	20	150
MN339S	36 53 7	114 25 57	1.0	3.0	10	.10	200	N	N	N	20	100
MB340S	36 53 23	114 25 44	1.0	3.0	7	.20	200	N	N	N	20	100
MY341S	36 53 20	114 25 17	2.0	3.0	10	.20	300	N	N	N	50	200
MN342S	36 54 13	114 25 19	1.0	5.0	10	.10	200	N	N	N	15	70
MB343S	36 54 16	114 24 25	2.0	3.0	7	.20	500	N	N	N	30	150
MY344S	36 54 32	114 24 22	2.0	3.0	7	.20	200	N	N	N	30	100
MN345S	36 54 30	114 24 27	3.0	2.0	7	.30	500	N	N	N	50	200
MB346S	36 55 16	114 24 10	2.0	5.0	10	.20	500	N	N	N	30	150
MY347S	36 54 38	114 26 5	1.0	3.0	10	.05	100	N	N	N	10	50
MN348S	36 55 0	114 26 23	2.0	3.0	7	.20	500	N	N	N	50	150
MB349S	36 54 55	114 26 31	5.0	2.0	3	.50	700	N	N	N	70	500
MY350S	36 54 55	114 26 44	2.0	2.0	7	.20	200	N	N	N	30	200
MN351S	36 55 18	114 27 7	5.0	2.0	5	.70	500	N	N	N	50	500
MY352S	36 54 23	114 27 31	1.0	2.0	7	.20	300	N	N	N	50	150
MN353S	36 53 28	114 27 36	2.0	2.0	7	.20	500	N	N	N	30	150
MB354S	36 53 51	114 27 16	1.0	3.0	7	.10	200	N	N	N	20	100
MY355S	36 52 53	114 28 15	2.0	2.0	3	.30	500	N	N	N	20	200
MN356S	36 52 59	114 29 41	2.0	1.0	3	.30	200	N	N	N	20	200
MB357S	36 53 13	114 30 40	1.0	2.0	5	.10	200	N	N	N	15	100
MY358S	36 53 38	114 28 58	2.0	2.0	3	.20	200	N	N	N	20	100
MN359S	36 54 7	114 28 40	1.0	3.0	5	.10	200	N	N	N	20	70
MB360S	36 54 28	114 28 42	2.0	2.0	5	.20	200	N	N	N	30	200
MN361S	36 54 23	114 31 2	1.0	3.0	5	.10	200	N	N	N	10	100
MK362S	36 55 23	114 28 10	2.0	3.0	5	.10	200	N	N	N	20	70

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MK318S	<1	N	N	5	30	50	N	N	10	20	N	7
MB319S	<1	<10	N	5	30	20	N	N	15	50	N	7
MY320S	<1	N	N	N	20	20	N	N	5	20	N	5
MK321S	<1	N	N	N	15	70	N	N	10	10	N	5
MB322S	<1	N	N	5	15	20	N	N	10	10	N	5
MY323S	<1	<10	N	5	30	30	N	N	10	70	N	5
MK324S	1	N	N	10	50	20	N	N	15	50	N	5
MB325S	1	N	N	10	30	20	N	N	15	10	N	5
MY326S	<1	N	N	10	20	20	N	N	15	20	N	5
MK327S	1	N	N	10	30	20	N	N	15	20	N	7
MB328S	1	<10	N	10	30	20	N	N	15	20	N	7
MY329S	1	N	N	10	50	20	N	N	15	20	N	7
MK330S	<1	N	N	5	30	20	N	N	10	20	N	5
MB331S	1	N	N	10	30	20	N	N	15	50	N	7
MY332S	1	N	N	10	30	20	N	N	10	50	N	10
MN333S	1	<10	N	10	50	50	N	N	15	70	N	10
MB334S	1	N	N	10	20	50	N	N	15	30	N	10
MY335S	1	10	N	10	30	20	N	N	10	70	N	7
MN336S	1	N	N	15	50	20	N	N	15	50	N	7
MB337S	1	N	N	10	50	20	N	N	15	70	N	7
MY338S	<1	N	N	5	20	20	N	N	10	30	N	5
MN339S	<1	<10	N	N	30	20	N	N	10	70	N	5
MB340S	<1	10	N	N	30	100	N	N	10	50	N	5
MY341S	1	N	N	N	30	20	N	N	10	70	N	5
MN342S	<1	N	N	N	50	20	N	N	10	70	N	N
MB343S	<1	N	N	N	50	20	N	N	10	50	N	5
MY344S	<1	N	N	N	50	20	N	N	10	70	N	5
MN345S	<1	<10	N	N	50	20	N	N	10	100	N	5
MB346S	1	N	N	N	50	20	N	N	10	70	N	5
MY347S	1	N	N	N	30	20	N	N	5	50	N	5
MN348S	<1	N	N	N	50	20	N	N	10	70	N	5
MB349S	2	N	N	20	70	50	N	N	30	70	N	10
MY350S	1	N	N	5	50	20	N	N	20	70	N	5
MN351S	2	N	N	20	100	70	N	N	30	70	N	10
MY352S	1	N	N	N	30	20	N	N	15	100	N	5
MN353S	<1	N	N	5	30	20	N	N	15	70	N	5
MB354S	<1	N	N	5	20	20	N	N	15	50	N	5
MY355S	1	N	N	5	50	20	N	N	10	20	N	10
MN356S	1	N	N	5	50	20	N	N	20	20	N	10
MB357S	<1	N	N	5	10	20	N	N	10	20	N	5
MY358S	1	N	N	5	50	N	N	N	10	50	N	5
MN359S	1	<10	N	N	20	N	N	N	10	20	N	5
MB360S	1	N	N	5	50	20	N	N	15	50	N	7
MN361S	<1	N	N	N	20	20	N	N	10	20	N	5
MK362S	1	N	N	N	30	20	N	N	10	30	N	5

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MK318S	N	200	70	N	20	N	300	N
MB319S	N	200	70	N	10	N	200	N
MY320S	N	100	50	N	10	N	500	N
MK321S	N	100	70	N	10	N	100	N
MB322S	N	200	50	N	10	N	200	N
MY323S	N	200	50	N	15	N	200	N
MK324S	N	100	50	N	20	N	300	N
MB325S	N	100	50	N	15	N	200	N
MY326S	N	100	20	N	10	N	300	N
MK327S	N	200	50	N	20	N	300	N
MB328S	N	200	50	N	15	N	200	N
MY329S	N	200	70	N	30	N	300	N
MK330S	N	100	50	N	15	N	300	N
MB331S	N	100	50	N	15	N	200	N
MY332S	N	200	100	N	20	N	500	N
MN333S	N	200	100	N	20	N	300	N
MB334S	N	200	100	N	20	N	200	N
MY335S	N	200	100	N	15	N	300	N
MN336S	N	200	100	N	20	N	300	N
MB337S	N	200	100	N	20	N	200	N
MY338S	N	100	70	N	10	N	150	N
MN339S	N	100	30	N	10	N	100	N
MB340S	N	100	70	N	10	N	200	N
MY341S	N	100	70	N	15	N	100	N
MN342S	N	100	20	N	N	N	20	N
MB343S	N	100	50	N	10	N	500	N
MY344S	N	100	70	N	10	N	300	N
MN345S	N	200	70	N	15	N	200	N
MB346S	N	100	70	N	10	N	200	N
MY347S	N	100	10	N	N	N	100	N
MN348S	N	100	70	N	10	N	100	N
MB349S	N	200	150	N	20	N	300	N
MY350S	N	200	70	N	10	N	200	N
MN351S	N	200	100	N	20	N	300	N
MY352S	N	200	30	N	10	N	200	N
MN353S	N	100	50	N	10	N	200	N
MB354S	N	100	50	N	10	N	100	N
MY355S	N	100	70	N	20	N	300	N
MN356S	N	100	70	N	15	N	100	N
MB357S	N	100	30	N	10	N	100	N
MY358S	N	100	70	N	10	N	200	N
MN359S	N	100	20	N	10	N	100	N
MB360S	N	100	50	N	10	N	200	N
MN361S	N	100	20	N	<10	N	70	N
MK362S	N	100	20	N	20	N	100	N

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MB363S	36 54 8	114 29 23	1.0	3.0	5	.20	200	N	N	N	20	100
MN364S	36 56 38	114 28 48	2.0	3.0	5	.20	500	N	N	N	20	100
MK365S	36 57 17	114 28 39	2.0	2.0	3	.20	500	N	N	N	20	100
MB366S	36 57 21	114 28 43	2.0	2.0	5	.20	300	N	N	N	20	100
MN367S	36 56 33	114 28 55	2.0	2.0	3	.20	300	N	N	N	20	100
MK368S	36 56 39	114 29 7	2.0	3.0	7	.10	300	N	N	N	10	100
MB369S	36 55 43	114 29 32	2.0	2.0	5	.20	500	N	N	N	20	150
MN370S	36 55 17	114 29 42	2.0	2.0	5	.20	300	N	N	N	10	200
MK371S	36 55 14	114 30 6	1.0	2.0	5	.05	100	N	N	N	10	50
MB372S	36 54 42	114 31 27	1.0	1.0	5	.20	200	N	N	N	10	100
MN373S	36 55 13	114 32 14	2.0	1.0	3	.50	300	N	N	N	10	200
MK374S	36 55 52	114 31 48	1.0	1.0	3	.10	200	N	N	N	10	100
MB375S	36 56 32	114 31 52	1.0	1.0	5	.10	200	N	N	N	10	100
MN376S	36 56 26	114 31 9	1.0	1.0	5	.20	200	N	N	N	10	100
MK377S	36 56 55	114 31 24	1.0	1.0	2	.20	200	N	N	N	10	100
MB378S	36 57 3	114 31 13	1.0	1.0	7	.10	150	N	N	N	20	150
MN379S	36 57 6	114 30 32	1.0	2.0	7	.10	200	N	N	N	20	150
MK380S	36 57 22	114 30 32	1.0	1.0	5	.10	200	N	N	N	30	100
MB381S	36 57 26	114 30 11	1.0	2.0	10	.10	200	N	N	N	30	100
MN382S	36 56 4	114 33 36	2.0	1.0	2	.50	500	N	N	N	50	300
MK383S	36 57 47	114 33 7	2.0	2.0	3	.20	200	N	N	N	30	200
MB384S	36 56 48	114 32 56	2.0	2.0	5	.30	200	N	N	N	50	300
MN385S	36 57 2	114 34 20	2.0	1.0	2	.50	200	N	N	N	70	300
MK386S	36 57 33	114 34 10	5.0	1.0	2	.70	700	N	N	N	20	300
MB387S	36 57 37	114 33 31	5.0	1.0	1	.70	1,000	N	N	N	70	300
MN388S	36 57 53	114 34 31	7.0	2.0	2	.70	1,000	N	N	N	50	300
MK389S	36 58 58	114 34 13	1.0	2.0	10	.10	100	N	N	N	20	100
MB390S	36 59 31	114 34 13	3.0	1.0	5	.70	500	N	N	N	70	200
MK391S	36 58 7	114 32 55	5.0	1.0	2	.50	500	N	N	N	50	300
MY392S	36 58 23	114 32 57	5.0	1.0	5	.70	500	N	N	N	100	300
MB393S	36 59 15	114 33 7	2.0	1.0	3	.50	500	1.0	N	N	70	200
MK394S	37 0 10	114 34 17	1.0	1.0	7	.20	200	N	N	N	20	200
MY395S	37 0 28	114 34 7	1.0	2.0	10	.20	200	N	N	N	70	100
MB396S	37 0 43	114 33 23	1.0	2.0	10	.20	200	N	N	N	30	100
MK397S	36 58 18	114 28 43	1.0	2.0	10	.10	200	N	N	N	30	100
MY398S	36 58 21	114 28 37	1.0	2.0	5	.10	200	N	N	N	20	100
MB399S	36 58 55	114 28 48	1.0	1.0	3	.10	100	N	N	N	20	100
MB400S	36 58 47	114 28 57	.5	3.0	7	.05	70	N	N	N	10	50
MK401S	36 59 24	114 29 13	2.0	2.0	5	.20	700	N	N	N	70	500
MY402S	36 59 27	114 29 27	2.0	3.0	7	.20	300	N	N	N	50	300
MB403S	36 59 36	114 29 43	1.0	5.0	10	.10	200	N	N	N	30	300
MK404S	36 59 52	114 30 3	2.0	3.0	10	.20	700	N	N	N	70	500
MY405S	37 0 34	114 31 14	2.0	2.0	10	.20	500	N	N	N	70	700
MB406S	36 59 58	114 31 37	1.0	5.0	10	.20	500	N	N	N	50	200
MK407S	37 2 0	114 30 20	1.0	5.0	15	.20	200	N	N	N	50	200

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MB363S	1	N	N	N	30	20	N	N	10	50	N	5
MN364S	1	N	N	5	30	20	N	N	15	50	N	5
MK365S	1	N	N	5	30	20	N	N	10	50	N	5
MB366S	1	N	N	5	30	20	N	N	10	50	N	5
MN367S	1	N	N	5	30	30	N	N	10	50	N	5
MK368S	<1	N	N	N	30	20	N	N	10	50	N	5
MB369S	<1	N	N	5	30	20	N	N	10	20	N	5
MN370S	1	N	N	5	30	20	N	N	15	20	N	5
MK371S	N	N	N	N	10	N	N	N	5	10	N	5
MB372S	1	<10	N	5	20	20	N	N	15	20	N	5
MN373S	1	<10	N	5	30	20	N	N	20	20	N	7
MK374S	1	<10	N	N	10	20	N	N	7	20	N	5
MB375S	1	<10	N	5	30	20	N	N	20	10	N	5
MN376S	1	<10	N	5	30	50	N	N	20	10	N	5
MK377S	1	<10	N	5	20	20	N	N	10	10	N	5
MB378S	<1	N	N	N	20	N	N	N	10	20	N	5
MN379S	1	N	N	N	50	50	N	N	10	50	N	5
MK380S	1	N	N	N	30	N	N	N	10	20	N	5
MB381S	1	N	N	N	30	50	N	N	10	50	N	7
MN382S	1	<10	N	10	30	20	N	N	20	30	N	10
MK333S	<1	N	N	5	30	20	N	N	10	20	N	7
MB384S	1	N	N	7	30	20	N	N	15	50	N	7
MN385S	1	N	N	5	30	50	N	N	20	10	N	10
MK386S	1	N	N	10	50	70	N	N	20	15	N	15
MB387S	1	N	N	10	30	50	N	N	20	10	N	15
MN388S	1	N	N	10	50	150	N	N	20	20	N	15
MK389S	<1	N	N	N	10	N	N	N	10	10	N	5
MB390S	1	N	N	10	30	50	N	N	20	10	N	7
MK391S	1	N	N	15	100	50	N	N	50	50	N	15
MY392S	1	<10	N	10	50	50	N	N	30	70	N	10
MB393S	1	N	N	10	30	20	N	N	20	20	N	10
MK394S	1	N	N	N	30	20	N	N	10	20	N	7
MY395S	1	N	N	N	30	20	N	N	20	20	N	7
MB396S	1	N	N	N	20	20	N	N	10	20	N	5
MK397S	<1	N	N	N	30	20	N	N	10	30	N	5
MY398S	1	N	N	N	30	20	N	N	10	70	N	5
MB399S	1	N	N	N	30	20	N	N	10	30	N	5
MB400S	N	N	N	N	20	N	N	N	10	15	N	N
MK401S	2	N	N	N	70	70	N	N	10	30	N	5
MY402S	1	N	N	N	100	70	N	N	10	50	N	5
MB403S	<1	N	N	N	20	70	N	N	10	30	N	5
MK404S	1	N	N	10	100	100	N	N	20	70	N	10
MY405S	1	N	N	N	100	70	N	N	20	50	N	10
MB406S	<1	N	N	N	50	N	N	N	20	50	N	5
MK407S	<1	N	N	N	50	N	N	N	10	30	N	5

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MB363S	N	100	50	N	10	N	100	N
MN364S	N	100	50	N	10	N	100	N
MK365S	N	100	50	N	10	N	150	N
MB366S	N	100	50	N	10	N	100	N
MN367S	N	100	30	N	10	N	150	N
MK368S	N	100	20	N	10	N	70	N
MB369S	N	100	50	N	10	N	200	N
MN370S	N	100	50	N	10	N	200	N
MK371S	N	100	20	N	N	N	70	N
MB372S	N	100	50	N	10	N	200	N
MN373S	N	100	50	N	20	N	300	N
MK374S	N	100	20	N	10	N	150	N
MB375S	N	100	50	N	10	N	100	N
MN376S	N	100	50	N	20	N	200	N
MK377S	N	100	50	N	10	N	200	N
MB378S	N	100	30	N	10	N	100	N
MN379S	N	100	30	N	10	N	100	N
MK380S	N	100	30	N	10	N	100	N
MB381S	N	100	30	N	15	N	200	N
MN382S	N	100	70	N	30	N	500	N
MK383S	N	100	50	N	10	N	100	N
MB384S	N	100	50	N	20	N	100	N
MN385S	N	100	70	N	20	N	200	N
MK386S	N	200	70	N	30	N	200	N
MB387S	N	200	70	N	30	N	300	N
MN388S	N	300	100	N	50	N	500	N
MK389S	N	100	20	N	10	N	100	N
MB390S	N	100	100	N	100	N	500	N
MK391S	N	100	100	N	30	N	200	N
MY392S	N	100	100	N	30	N	200	N
MB393S	N	100	70	N	30	N	300	N
MK394S	N	200	50	N	20	N	300	N
MY395S	N	100	50	N	15	N	150	N
MB396S	N	100	20	N	10	N	70	N
MK397S	N	100	30	N	10	N	50	N
MY398S	N	100	30	N	10	N	200	N
MB399S	N	100	20	N	10	N	200	N
MB400S	N	100	10	N	N	N	100	N
MK401S	N	200	70	N	20	N	200	N
MY402S	N	N	50	N	20	N	300	N
MB403S	N	N	50	N	10	N	200	N
MK404S	N	200	70	N	20	N	300	N
MY405S	N	500	70	N	20	N	500	N
MB406S	N	200	30	N	15	N	200	N
MK407S	N	200	70	N	15	N	200	N

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MY408S	37 1 36	114 30 46	1.0	2.0	15	.20	500	N	N	N	50	500
MB409S	37 1 31	114 31 47	2.0	2.0	10	.50	500	N	N	N	70	500
MK410S	37 1 15	114 29 48	1.0	3.0	10	.20	200	N	N	N	30	200
MB411S	37 0 35	114 28 19	2.0	1.0	5	.20	500	N	N	N	70	500
MY412S	37 0 38	114 29 35	1.0	2.0	5	.10	200	N	N	N	50	200
MK413S	37 0 15	114 26 57	1.0	5.0	10	.07	200	N	N	N	20	150
MY414S	37 0 9	114 26 56	1.0	3.0	5	.20	500	N	N	N	50	200
MB415S	36 59 40	114 27 33	2.0	2.0	3	.50	700	N	N	N	100	500
MK416S	36 59 27	114 27 22	2.0	1.0	3	.50	700	N	N	N	70	500
MY417S	36 59 23	114 27 17	1.0	2.0	7	.20	500	N	N	N	70	200
MK418S	37 2 43	114 33 4	1.0	2.0	10	.20	500	N	N	N	50	500
MY419S	37 2 43	114 32 37	2.0	2.0	10	.50	500	N	N	N	50	500
MB420S	37 2 54	114 30 26	2.0	2.0	10	.20	200	N	N	N	50	500
MN421S	37 3 45	114 26 59	1.0	2.0	10	.30	500	N	N	N	50	300
MB422S	37 3 26	114 27 12	5.0	2.0	10	.70	500	N	N	N	50	700
MN423S	37 3 45	114 27 59	1.0	1.0	10	.20	200	N	N	N	70	200
MB424S	37 3 22	114 28 19	2.0	1.0	10	.20	500	N	N	N	50	200
MN425S	37 2 58	114 28 18	2.0	3.0	20	.20	200	N	N	N	30	200
MB426S	37 2 59	114 28 12	1.0	1.0	20	.10	200	N	N	N	30	100
MN427S	37 2 23	114 29 7	1.0	5.0	20	.20	200	N	N	N	20	100
MB428S	37 2 48	114 29 57	2.0	2.0	10	.50	700	N	N	N	50	300
MN429S	37 3 7	114 25 7	2.0	3.0	20	.20	300	N	N	N	50	200
MB430S	37 2 54	114 24 54	2.0	3.0	20	.20	300	N	N	N	50	300
MN431S	37 3 8	114 24 30	2.0	3.0	20	.20	300	N	N	N	50	300
MB432S	37 2 43	114 24 25	2.0	3.0	10	.20	300	N	N	N	30	200
MN433S	37 2 29	114 24 40	2.0	5.0	10	.20	300	N	N	N	30	200

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-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
MY408S	1	N	N	N	50	N	N	N	20	50	N	5
MB409S	1	N	N	N	50	70	N	N	30	50	N	10
MK410S	1	N	N	N	50	70	N	N	10	50	N	5
MB411S	2	N	N	N	50	20	N	N	20	70	N	10
MY412S	1	N	N	N	50	50	N	N	5	30	N	5
MK413S	<1	N	N	N	70	70	N	N	10	50	N	5
MY414S	1	N	N	N	50	50	N	N	20	70	N	5
MB415S	2	N	N	N	50	50	N	N	20	70	N	10
MK416S	1	N	N	N	30	50	N	N	20	50	N	10
MY417S	1	N	N	N	50	50	N	N	20	70	N	10
MK418S	1	N	N	N	50	50	N	N	10	20	N	10
MY419S	1	N	N	N	20	50	N	N	20	20	N	10
MB420S	1	<10	N	N	100	50	N	N	10	20	N	5
MN421S	1	N	N	N	50	50	N	N	10	N	N	5
MB422S	1	N	N	20	50	70	N	N	50	20	N	10
MN423S	1	N	N	N	50	70	N	N	20	10	N	5
MB424S	1	N	N	N	20	70	N	N	15	20	N	5
MN425S	1	N	N	N	150	70	N	N	15	50	N	5
MB426S	1	N	N	N	50	N	N	N	10	10	N	5
MN427S	1	N	N	N	50	N	N	N	10	20	N	5
MB428S	2	N	N	20	70	70	N	N	20	20	N	10
MN429S	1	<10	N	N	100	70	N	N	20	70	N	5
MB430S	1	N	N	N	100	70	N	N	20	70	N	7
MN431S	1	N	N	N	20	70	N	N	20	20	N	10
MB432S	1	N	N	N	50	50	N	N	10	50	N	10
MN433S	1	N	N	N	70	50	N	N	10	50	N	5

APPENDIX A.--Chemical analyses of stream-sediment samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MY408S	70	500	50	N	20	N	200	N
MB409S	N	500	70	N	20	N	500	N
MK410S	N	200	50	N	20	N	300	N
MB411S	N	200	70	N	20	N	200	N
MY412S	N	100	70	N	15	N	300	N
MK413S	N	100	20	N	10	N	70	N
MY414S	N	100	50	N	10	N	100	N
MB415S	N	200	100	N	30	N	300	N
MK416S	N	200	100	N	30	N	300	N
MY417S	N	200	70	N	10	N	200	N
MK418S	N	200	70	N	20	N	200	N
MY419S	N	500	100	N	20	N	300	N
MB420S	N	500	70	N	20	N	300	N
MN421S	N	500	100	N	20	N	300	N
MB422S	N	500	200	N	50	N	500	N
MN423S	N	500	70	N	30	N	300	N
MB424S	N	500	100	N	30	N	500	N
MN425S	N	500	100	N	20	N	200	N
MB426S	N	100	50	N	20	N	100	N
MN427S	N	100	50	N	10	N	100	N
MB428S	N	1,000	100	N	20	N	200	N
MN429S	N	1,000	100	N	10	N	200	N
MB430S	N	500	100	N	20	N	200	N
MN431S	N	500	70	N	20	N	500	N
MB432S	N	100	70	N	10	N	500	N
MN433S	N	100	70	N	10	N	200	N

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MN192H	36 57 55	114 25 35	2.0	5.00	10	.20	300	N	N	N	30	3,000
MB193H	36 57 37	114 25 54	5.0	5.00	7	.50	300	N	N	N	50	3,000
MN194H	36 57 17	114 26 3	7.0	5.00	7	.10	500	N	N	N	50	500
MB195H	36 57 8	114 26 28	7.0	2.00	7	.10	200	N	N	N	50	200
MN196H	36 56 36	114 26 14	10.0	2.00	5	.20	700	N	1,000	N	100	300
MB197H	36 56 38	114 26 37	5.0	2.00	5	.15	200	N	N	N	100	200
MB198H	36 58 0	114 27 19	10.0	1.00	2	.10	500	N	500	N	100	200
MN199H	36 57 55	114 27 17	2.0	2.00	5	.10	200	N	N	N	20	150
MY200H	36 56 56	114 25 18	5.0	5.00	10	.10	200	N	N	N	20	100
MY201H	36 56 52	114 25 14	2.0	2.00	2	.15	300	N	N	N	70	200
MK202H	36 57 18	114 24 46	1.0	1.50	7	.10	200	N	N	N	20	200
MY203H	36 57 34	114 23 35	7.0	1.00	7	.50	1,500	N	N	N	50	100
MB204H	36 57 52	114 23 11	7.0	2.00	7	.50	700	N	N	N	70	500
MK205H	36 58 25	114 23 33	5.0	1.50	7	.20	700	N	N	N	50	300
MY206H	36 58 33	114 25 21	20.0	2.00	5	.20	700	N	N	N	100	200
MB207H	36 58 43	114 25 15	2.0	2.00	7	.15	200	N	N	N	20	>10,000
MY208H	36 59 44	114 22 37	5.0	2.00	7	1.00	300	N	N	N	50	5,000
MY209H	36 59 51	114 22 39	5.0	2.00	7	.70	300	N	N	N	100	1,000
MK210H	36 59 15	114 25 22	1.0	.50	20	.07	50	7	N	N	30	1,500
MB211H	36 59 51	114 25 5	2.0	2.00	10	.50	200	N	N	N	20	700
MY213H	37 0 28	114 22 27	2.0	2.00	7	1.00	200	N	N	N	70	200
MB214H	37 0 55	114 22 25	5.0	2.00	5	.50	150	N	N	N	50	50
MY215H	37 0 34	114 24 47	5.0	2.00	10	.50	500	N	N	N	70	1,500
MK216H	37 0 4	114 24 19	1.5	2.00	10	.20	300	N	N	N	20	700
MB217H	37 0 3	114 23 27	2.0	2.00	5	.50	500	N	N	N	70	2,000
MK218H	37 0 55	114 22 27	2.0	5.00	10	.50	500	N	N	N	70	200
MY219H	37 1 1	114 23 41	1.0	2.00	5	.30	200	N	N	N	70	500
MB220H	37 1 20	114 23 9	5.0	5.00	7	.50	500	N	N	N	50	1,000
MK221H	37 2 9	114 22 58	7.0	2.00	10	.50	500	N	N	N	70	1,500
MY222H	37 2 4	114 22 46	5.0	2.00	5	1.00	700	N	N	N	70	200
MB223H	37 2 7	114 22 41	1.0	5.00	10	.10	500	N	N	N	20	200
MK224H	37 2 19	114 23 12	1.5	5.00	10	.20	200	N	N	N	20	1,000
MY225H	37 2 42	114 23 1	5.0	5.00	7	.50	300	N	N	N	100	700
MB226H	37 3 1	114 23 3	5.0	5.00	10	.70	500	N	N	N	70	1,000
MK227H	37 3 25	114 23 28	2.0	5.00	10	.70	500	N	N	N	70	500
MY228H	37 3 41	114 23 55	1.0	1.00	10	.50	300	N	N	N	20	1,000
MB229H	37 4 1	114 23 34	2.0	5.00	10	.70	500	N	N	N	30	500
MK230H	37 4 48	114 23 11	5.0	2.00	10	1.00	700	N	N	N	70	100
MY231H	37 4 54	114 24 25	5.0	2.00	10	1.00	700	N	N	N	20	10,000
MB232H	37 4 9	114 25 20	5.0	1.00	10	1.00	1,000	N	N	N	50	1,500
MK233H	37 4 7	114 25 43	2.0	5.00	20	.50	300	7	N	N	50	300
MY234H	37 3 36	114 25 45	1.5	2.00	30	.20	200	7	N	N	50	200
MB235H	37 2 28	114 26 2	2.0	5.00	20	.20	200	N	N	N	20	50
MK236H	37 1 44	114 26 2	5.0	5.00	10	.50	300	N	N	N	70	100
MY237H	37 1 23	114 26 8	2.0	5.00	10	.10	200	N	N	N	20	50

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MN192H	N	N	N	10	N	20	N	N	N	30	70	N	10
MB193H	N	N	N	10	N	50	150	10	N	70	500	N	30
MN194H	<2	N	N	10	N	50	50	20	N	70	100	N	<10
MB195H	<2	N	N	10	N	70	N	70	N	100	150	N	<10
MN196H	2	N	N	20	100	70	70	30	N	150	200	N	10
MB197H	N	N	N	<10	50	20	N	N	N	20	2,000	N	N
MB198H	5	N	N	10	N	70	N	50	N	100	150	N	<10
MN199H	N	N	N	N	N	15	N	N	N	10	150	N	N
MY200H	N	N	N	N	N	30	50	N	N	10	100	N	N
MY201H	<2	N	N	N	N	10	50	N	N	10	20	N	N
MK202H	N	N	N	N	N	<10	N	N	N	<10	20	N	N
MY203H	<2	N	N	15	N	30	500	N	<50	70	150	N	15
MB204H	N	N	N	15	N	30	150	N	N	70	150	N	15
MK205H	<2	N	N	10	N	15	50	N	N	20	70	N	N
MY206H	2	N	N	50	100	100	50	100	N	200	200	N	<10
MB207H	N	N	N	10	N	20	N	10	N	10	300	N	N
MY208H	N	N	N	10	N	20	70	N	50	10	100	N	30
MY209H	<2	N	N	10	N	30	150	10	50	10	100	N	20
MK210H	N	N	N	10	200	20	300	N	N	70	2,000	N	N
MB211H	N	N	N	10	50	10	100	N	N	100	500	N	15
MY213H	N	N	N	N	N	<10	300	N	<50	10	150	N	30
MB214H	N	N	N	10	N	30	100	10	N	10	150	N	30
MY215H	2	N	N	15	100	50	200	10	N	70	150	N	20
MK216H	<2	N	N	N	N	15	150	N	N	10	70	N	10
MB217H	N	N	N	10	N	20	150	N	<50	50	70	N	30
MK218H	N	N	N	N	50	20	100	N	N	10	70	N	30
MY219H	N	N	N	N	N	<10	N	N	N	10	20	N	20
MB220H	N	N	N	10	N	20	150	10	N	10	100	N	30
MK221H	2	N	N	10	N	50	50	30	N	70	100	N	10
MY222H	N	N	N	20	200	50	150	20	70	70	100	N	30
MB223H	<2	N	N	N	N	20	N	N	N	10	N	N	N
MK224H	N	N	N	N	N	10	N	N	N	10	100	N	10
MY225H	<2	N	N	15	70	30	150	15	N	70	100	N	15
MB226H	N	N	N	N	50	20	150	N	N	50	150	N	30
MK227H	N	N	N	N	N	10	200	N	N	10	1,000	N	30
MY228H	N	N	N	N	100	20	200	N	N	10	100	N	10
MB229H	2	N	N	10	N	10	150	N	N	10	50	N	30
MK230H	2	N	N	10	50	30	700	N	70	30	70	N	30
MY231H	2	N	N	20	100	30	500	N	N	70	100	N	30
MB232H	2	N	N	20	100	20	500	N	N	50	150	N	50
MK233H	N	N	N	N	150	10	200	N	N	70	20	N	20
MY234H	N	N	N	10	200	10	500	N	N	30	20	N	N
MB235H	N	N	N	N	N	20	50	N	N	10	50	N	10
MK236H	<2	N	N	10	50	30	100	N	N	70	70	N	15
MY237H	N	N	N	N	N	10	N	N	N	10	30	N	10

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MN192H	N	200	20	N	50	N	2,000	N
MB193H	70	200	100	N	100	N	>2,000	N
MN194H	N	N	50	N	30	N	1,500	N
MB195H	N	N	100	N	20	<500	1,500	N
MN196H	N	N	150	N	50	N	700	N
MB197H	N	N	50	N	<20	N	200	N
MB198H	N	N	100	N	30	<500	500	N
MN199H	N	N	20	N	20	N	1,000	N
MY200H	N	200	20	N	50	N	1,000	N
MY201H	N	N	20	N	50	N	1,000	N
MK202H	N	<200	20	N	30	N	700	N
MY203H	N	700	70	N	200	N	>2,000	N
MB204H	30	200	70	N	150	N	>2,000	N
MK205H	N	200	50	N	50	N	1,000	N
MY206H	N	N	100	N	50	N	1,000	N
MB207H	N	2,000	50	N	30	N	1,500	N
MY208H	200	200	50	N	150	N	>2,000	N
MY209H	20	200	50	N	100	700	>2,000	N
MK210H	N	1,000	200	N	500	N	1,000	N
MB211H	N	200	70	N	150	700	>2,000	N
MY213H	150	N	50	N	200	N	>2,000	N
MB214H	N	N	50	N	70	N	>2,000	N
MY215H	N	500	70	N	200	N	>2,000	N
MK216H	N	200	50	N	70	N	>2,000	N
MB217H	70	N	70	N	150	N	>2,000	N
MK218H	30	N	50	N	150	N	>2,000	N
MY219H	N	N	20	N	70	N	>2,000	N
MB220H	N	N	70	N	150	N	>2,000	N
MK221H	N	N	100	N	70	N	>2,000	N
MY222H	N	N	150	N	200	5,000	>2,000	N
MB223H	N	200	20	N	20	N	200	N
MK224H	N	200	70	N	70	500	2,000	N
MY225H	30	200	70	N	150	N	>2,000	N
MB226H	50	N	70	N	200	500	>2,000	N
MK227H	100	N	150	N	200	N	>2,000	N
MY228H	N	500	70	N	150	N	>2,000	N
MB229H	N	N	70	N	200	N	>2,000	N
MK230H	70	N	100	N	500	N	>2,000	N
MY231H	20	500	150	N	500	N	>2,000	N
MB232H	70	200	150	N	500	N	>2,000	N
MK233H	N	700	150	N	200	N	>2,000	N
MY234H	N	1,000	150	N	500	N	1,500	N
MB235H	N	200	70	N	100	N	>2,000	N
MK236H	N	200	70	N	150	<500	>2,000	N
MY237H	N	N	20	N	50	N	>2,000	N

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MB238H	37 1 21	114 26 1	2.0	5.00	10	.10	300	N	N	N	<20	200
MK239H	37 1 25	114 27 17	.5	7.00	10	.10	300	N	N	N	<20	50
MY240H	37 1 24	114 27 13	2.0	5.00	7	.07	200	N	N	N	20	70
MB241H	37 2 17	114 27 19	2.0	.20	15	.30	300	N	1,500	N	20	7,000
MN278H	37 3 43	114 22 9	1.5	7.00	15	.50	500	N	N	N	70	1,000
MK279H	37 3 3	114 22 13	1.5	7.00	20	.50	500	N	N	N	50	1,000
MB280H	37 3 6	114 22 23	2.0	7.00	20	.50	500	N	N	N	100	700
MN281H	37 3 44	114 21 11	10.0	5.00	20	1.00	1,000	N	N	N	50	1,000
MK282H	37 3 24	114 21 19	2.0	7.00	20	1.00	500	N	N	N	50	10,000
MB283H	37 3 14	114 21 1	5.0	7.00	20	.50	500	N	N	N	50	10,000
MN284H	37 3 7	114 20 59	1.0	2.00	20	.10	500	N	N	N	50	700
MK285H	37 2 50	114 20 47	2.0	5.00	20	.70	500	N	N	N	70	1,000
MN287H	37 2 17	114 20 37	7.0	5.00	10	1.50	500	N	N	N	50	10,000
MK288H	37 2 3	114 20 34	2.0	5.00	10	2.00	200	N	N	N	50	10,000
MB289H	37 1 22	114 20 37	7.0	5.00	10	2.00	700	N	N	N	70	2,000
MK291H	37 0 38	114 20 22	2.0	7.00	20	.50	500	N	N	N	70	700
MB292H	37 0 30	114 20 22	1.5	5.00	20	.20	500	N	N	N	100	700
MN293H	37 0 14	114 20 23	2.0	5.00	20	.50	500	N	N	N	70	700
MK294H	36 59 19	114 20 27	2.0	5.00	10	2.00	500	N	N	N	100	700
MB295H	36 59 8	114 20 19	2.0	5.00	20	.50	500	N	N	N	100	700
MN296H	37 0 54	114 20 23	2.0	5.00	15	1.00	500	N	N	N	100	700
MN296H	36 59 30	114 21 33	2.0	7.00	20	.20	500	N	N	N	150	2,000
MK297H	36 58 4	114 21 52	2.0	7.00	20	.50	500	N	N	N	70	1,000
MB298H	36 57 13	114 21 33	5.0	2.00	20	1.00	1,000	N	N	N	100	7,000
MN299H	36 56 55	114 21 47	2.0	5.00	10	2.00	500	N	N	N	100	700
MK300H	36 55 7	114 22 17	2.0	5.00	15	1.00	1,000	N	N	N	150	700
MB301H	36 56 18	114 22 48	2.0	5.00	20	1.00	700	N	N	N	200	500
MK302H	36 56 16	114 24 13	1.5	1.00	20	.70	300	N	N	N	70	1,000
MB303H	36 56 13	114 24 18	1.0	2.00	30	.50	300	N	N	N	70	700
MN304H	36 56 5	114 23 40	2.0	7.00	30	.20	700	N	N	N	100	200
MY305H	36 55 55	114 23 13	1.5	5.00	7	.70	200	N	N	N	50	200
MK306H	36 55 51	114 22 45	1.5	2.00	7	.20	500	N	N	N	50	150
MB307H	36 56 5	114 22 14	.5	2.00	10	.50	500	N	N	N	50	200
MY308H	36 56 16	114 21 30	5.0	2.00	10	.30	700	N	N	N	70	100
MK309H	36 55 48	114 21 17	2.0	2.00	10	.50	500	N	N	N	70	500
MB310H	36 55 27	114 21 18	1.5	2.00	10	.50	200	N	N	N	50	1,000
MY311H	36 55 8	114 21 40	1.5	5.00	10	.50	300	N	N	N	50	50
MK312H	36 54 7	114 22 16	2.0	5.00	7	1.00	300	N	N	N	100	50
MB313H	36 53 7	114 21 32	2.0	5.00	7	.70	200	N	N	N	100	50
MY314H	36 53 38	114 21 39	5.0	5.00	7	.50	500	N	N	N	100	1,000
MK315H	36 54 21	114 22 10	.5	2.00	10	.20	50	N	N	N	20	100
MB316H	36 50 2	114 23 8	2.0	2.00	7	.20	100	N	N	N	70	500
MY317H	36 49 39	114 29 51	.5	.50	10	1.00	200	N	N	N	100	150
MK318H	36 50 18	114 29 27	.5	.50	10	.70	100	N	N	N	100	500
MB319H	36 48 53	114 28 36	1.5	.50	10	.70	100	N	N	N	70	100

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MB238H	2	N	N	N	N	10	N	N	N	<10	70	N	10
MK239H	N	N	N	N	N	<10	N	N	N	<10	<20	N	<10
MY240H	<2	N	N	10	N	10	N	N	N	10	50	N	<10
MB241H	2	N	N	N	100	30	500	N	N	10	70	200	20
MN278H	2	50	N	N	100	10	50	N	N	10	50	N	20
MK279H	2	N	N	N	50	<10	N	N	N	10	50	N	20
MB280H	2	N	N	N	100	10	50	N	N	10	50	N	20
MN281H	2	N	N	20	300	20	300	N	70	50	300	N	50
MK282H	2	N	N	N	100	20	N	N	50	10	3,000	N	30
MB283H	<2	N	N	N	100	30	N	N	50	10	2,000	N	20
MN284H	<2	N	N	N	100	10	N	N	N	10	100	N	20
MK285H	2	N	N	N	100	10	N	N	<50	10	100	N	20
MN287H	2	N	N	20	200	30	500	N	100	50	150	N	70
MK288H	2	N	N	N	100	<10	100	N	150	10	50	N	70
MB289H	2	N	N	20	200	50	200	N	150	50	100	N	70
MK291H	<2	N	N	N	70	20	100	N	N	10	100	N	20
MB292H	<2	N	N	N	70	10	N	N	N	10	70	N	20
MN293H	<2	N	N	N	100	10	N	70	N	10	200	N	20
MK294H	2	N	N	N	150	20	150	N	150	10	100	N	70
MB295H	2	N	N	N	100	10	100	N	N	10	50	N	20
MN296H	2	N	N	N	100	20	150	N	70	10	100	N	20
MN296H	2	N	N	N	100	15	N	N	N	10	50	N	20
MK297H	2	N	N	N	100	20	100	N	N	10	100	N	20
MB298H	2	N	N	20	200	20	200	N	50	50	2,000	N	30
MN299H	2	N	N	N	150	10	150	N	150	10	200	N	70
MK300H	2	N	N	10	100	10	150	N	50	10	100	N	30
MB301H	2	N	N	10	100	30	150	N	70	10	70	N	20
MK302H	<2	N	N	N	150	<10	100	N	50	10	700	N	30
MB303H	<2	N	N	N	150	<10	50	N	N	10	30	N	30
MN304H	2	N	N	N	70	10	300	N	N	10	50	N	10
MY305H	N	N	N	N	N	<10	70	N	50	10	20	N	30
MK306H	<2	N	N	N	N	<10	70	N	N	<10	20	N	N
MB307H	<2	N	N	N	N	<10	150	N	N	10	100	N	20
MY308H	<2	N	N	10	N	20	200	N	N	10	200	N	10
MK309H	<2	N	N	N	N	20	150	N	N	10	70	N	30
MB310H	<2	N	N	N	N	<10	150	N	N	10	20	N	15
MY311H	<2	N	N	N	N	10	150	N	N	10	70	N	20
MK312H	<2	N	N	N	N	20	200	N	70	10	150	N	30
MB313H	<2	N	N	N	N	20	200	N	50	10	70	N	30
MY314H	N	N	N	20	N	30	50	30	N	50	150	N	15
MK315H	N	N	N	N	N	10	150	N	N	10	70	N	10
MB316H	N	N	N	N	N	10	50	N	N	10	200	N	10
MY317H	<2	N	N	N	50	<10	300	N	70	10	70	N	30
MK318H	<2	N	N	N	N	<10	150	N	50	10	500	N	20
MB319H	<2	N	N	N	N	<10	150	N	<50	10	70	N	30

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MB238H	N	200	20	N	50	N	2,000	N
MK239H	N	N	20	N	30	N	1,000	N
MY240H	N	N	20	N	30	N	1,000	N
MB241H	70	700	50	N	500	N	>2,000	N
MN278H	N	200	70	N	100	N	>2,000	N
MK279H	N	200	50	N	70	N	>2,000	N
MB280H	500	N	70	N	200	N	>2,000	N
MN281H	20	200	200	N	500	N	>2,000	N
MK282H	N	200	50	N	300	N	>2,000	N
MB283H	N	200	200	N	100	N	>2,000	N
MN284H	N	200	50	N	50	N	>2,000	N
MK285H	N	200	70	N	150	N	>2,000	N
MN287H	N	N	200	N	700	N	>2,000	N
MK288H	N	200	100	N	700	2,000	>2,000	N
MB289H	N	N	200	N	700	N	>2,000	N
MK291H	N	200	70	N	100	N	>2,000	N
MB292H	N	200	50	N	50	N	>2,000	N
MN293H	N	200	70	N	100	N	>2,000	N
MK294H	N	700	150	N	700	2,000	>2,000	N
MB295H	N	200	70	N	100	1,000	>2,000	N
MN296H	700	200	100	N	200	N	>2,000	N
MN296H	N	200	50	N	30	5,000	2,000	N
MK297H	N	200	70	N	150	N	>2,000	N
MB298H	N	200	500	N	500	N	>2,000	N
MN299H	150	N	150	N	700	N	>2,000	N
MK300H	N	200	150	N	150	N	>2,000	N
MB301H	N	200	100	N	150	N	>2,000	N
MK302H	100	200	200	N	150	N	>2,000	N
MB303H	N	200	70	N	150	N	>2,000	N
MN304H	N	700	50	N	150	N	>2,000	N
MY305H	20	200	50	N	150	N	>2,000	N
MK306H	N	500	20	N	100	1,000	1,500	N
MB307H	N	700	20	N	150	N	>2,000	N
MY308H	N	500	20	N	150	N	>2,000	N
MK309H	N	300	50	N	150	N	>2,000	N
MB310H	20	300	20	N	150	N	>2,000	N
MY311H	50	300	20	N	150	N	>2,000	N
MK312H	N	N	100	N	300	N	>2,000	N
MB313H	N	N	20	N	150	N	>2,000	N
MY314H	N	200	50	N	100	700	>2,000	N
MK315H	N	300	50	N	200	N	>2,000	N
MB316H	N	N	70	N	70	1,000	>2,000	N
MY317H	N	200	70	N	300	N	>2,000	N
MK318H	N	200	50	N	150	N	>2,000	N
MB319H	N	200	50	N	200	N	>2,000	N

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MY320H	36 48 53	114 28 45	.7	.50	5	1.00	100	N	N	N	100	100
MK321H	36 48 48	114 28 11	.7	.50	2	1.50	300	N	N	N	70	1,500
MB322H	36 48 32	114 28 8	2.0	.50	2	.50	200	N	N	N	20	500
MY323H	36 49 52	114 28 15	.7	.50	2	1.50	200	N	N	N	50	150
MK324H	36 50 45	114 27 7	.5	.50	20	.10	50	N	N	N	50	50
MB325H	36 50 43	114 26 38	.5	.50	20	.07	50	N	N	N	20	70
MY326H	36 51 3	114 26 0	1.0	1.00	10	.20	50	N	N	N	20	50
MK327H	36 51 2	114 25 37	1.0	.50	20	.15	50	2	N	N	50	150
MB328H	36 51 21	114 24 57	1.0	.20	20	.15	50	2	N	N	70	500
MY329H	36 51 50	114 24 29	1.5	.50	7	1.00	200	N	N	N	100	500
MK330H	36 52 19	114 25 5	1.0	2.00	7	.20	100	N	N	N	20	150
MB331H	36 52 35	114 25 55	5.0	2.00	10	1.00	500	N	N	N	200	70
MY332H	36 51 51	114 29 31	1.0	1.00	2	1.00	200	N	N	N	20	5,000
MN333H	36 51 48	114 28 28	1.0	2.00	5	.50	200	N	N	N	20	2,000
MB334H	36 51 22	114 28 17	1.0	2.00	7	.50	200	N	N	N	50	100
MY335H	36 52 28	114 28 19	5.0	1.50	2	1.00	500	N	N	N	50	200
MN336H	36 52 8	114 27 18	1.0	2.00	7	.70	300	N	N	N	20	500
MN336H	36 52 59	114 29 41	1.0	2.00	7	.70	100	N	N	N	<20	100
MB337H	36 52 13	114 27 35	2.0	1.50	2	.50	500	N	N	N	70	500
MY338H	36 53 3	114 25 38	2.0	2.00	7	1.00	700	N	N	N	200	200
MB340H	36 53 23	114 25 44	.5	2.00	7	.20	200	N	N	N	20	500
MY341H	36 53 20	114 25 17	1.0	2.00	5	.20	100	N	N	N	20	300
MN342H	36 54 13	114 25 19	.5	5.00	10	.10	100	N	N	N	<20	200
MB343H	36 54 16	114 24 25	.5	5.00	7	1.00	50	N	N	N	20	1,000
MY344H	36 54 32	114 24 22	5.0	5.00	10	.20	200	N	N	N	20	50
MN345H	36 54 30	114 24 27	1.0	2.00	15	.70	50	N	N	N	20	50
MB346H	36 55 16	114 24 10	.5	5.00	10	.50	100	N	N	N	<20	50
MY347H	36 54 38	114 26 5	.2	5.00	10	.02	50	N	N	N	<20	50
MN348H	36 55 0	114 26 23	1.0	5.00	10	1.00	500	N	N	N	30	5,000
MB349H	36 54 55	114 26 31	.5	.50	10	1.50	300	N	N	N	50	>10,000
MY350H	36 54 55	114 26 44	.2	2.00	10	1.00	300	N	N	N	<20	700
MN351H	36 55 18	114 27 7	1.0	2.00	10	1.00	300	N	N	N	20	1,000
MY352H	36 54 23	114 27 31	.5	2.00	10	.20	200	N	N	N	<20	200
MN353H	36 53 28	114 27 36	.5	2.00	10	.10	700	N	N	N	20	700
MB354H	36 53 51	114 27 16	1.0	2.00	7	.50	200	N	N	N	20	700
MY355H	36 52 53	114 28 15	1.0	2.00	5	.10	200	N	N	N	70	500
MB357H	36 53 13	114 30 40	2.0	5.00	7	.50	100	N	N	N	20	700
MY358H	36 53 38	114 28 58	1.0	5.00	7	.50	50	N	N	N	20	100
MN359H	36 54 7	114 28 40	5.0	5.00	7	.50	500	7	N	N	20	100
MB360H	36 54 28	114 28 42	2.0	5.00	7	.07	50	N	N	N	<20	50
MN361H	36 54 23	114 31 2	1.0	5.00	5	.30	50	N	N	N	<20	1,000
MK362H	36 55 23	114 28 10	5.0	5.00	5	.10	200	20	N	N	20	300
MB363H	36 54 8	114 29 23	1.5	5.00	7	.15	50	7	N	N	<20	50
MB366H	36 57 21	114 28 43	2.0	5.00	5	.10	100	N	N	N	50	50
MN367H	36 56 33	114 28 55	1.0	5.00	5	.07	50	N	N	N	20	>10,000

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MY320H	<2	N	N	N	N	<10	150	N	50	10	70	N	30
MK321H	<2	N	N	N	50	10	700	N	150	10	500	N	50
MB322H	<2	N	N	N	N	<10	150	N	<50	10	1,000	N	30
MY323H	<2	N	N	N	N	<10	300	N	70	10	20	N	30
MK324H	N	N	N	N	100	10	300	N	N	70	150	N	10
MB325H	N	N	N	N	50	<10	150	N	N	10	200	N	10
MY326H	<2	N	N	N	N	<10	N	N	N	15	300	N	15
MK327H	<2	N	N	N	100	<10	300	N	N	20	20	N	10
MB328H	N	N	N	N	150	<10	500	N	N	70	100	N	N
MY329H	N	N	N	N	200	10	500	N	70	10	2,000	N	30
MK330H	N	N	N	N	N	<10	100	N	N	10	100	N	10
MB331H	<2	N	N	15	100	70	300	N	70	70	1,000	N	30
MY332H	N	N	N	N	N	<10	200	N	70	10	150	N	30
MN333H	N	N	N	N	N	<10	70	N	<50	10	50	N	20
MB334H	N	N	N	N	N	<10	100	N	N	10	50	N	30
MY335H	N	N	N	15	100	15	150	N	70	10	100	N	30
MN336H	N	N	N	N	N	<10	150	N	<50	10	200	N	30
MN336H	<2	N	N	N	N	<10	50	N	70	10	500	N	30
MB337H	<2	N	N	15	N	15	100	N	N	10	700	N	15
MY338H	<2	N	N	20	70	30	500	N	70	50	700	N	30
MB340H	N	N	N	N	N	30	N	N	N	10	100	N	15
MY341H	N	N	N	N	N	<10	N	N	N	10	5,000	N	15
MN342H	N	N	N	N	N	<10	N	N	N	N	2,000	N	10
MB343H	N	N	N	N	N	10	50	N	N	10	700	N	30
MY344H	<2	N	N	N	50	30	50	N	N	30	150	N	10
MN345H	N	N	N	N	N	10	70	N	N	10	700	N	30
MB346H	N	N	N	N	N	<10	N	N	N	10	150	N	20
MY347H	N	N	N	N	N	N	N	N	N	N	200	N	10
MN348H	N	N	N	N	N	10	N	N	N	10	700	N	30
MB349H	N	N	N	N	N	<10	150	N	N	10	5,000	N	30
MY350H	<2	N	N	N	N	<10	150	N	N	10	200	N	10
MN351H	<2	N	N	N	N	10	200	N	50	10	3,000	N	30
MY352H	<2	N	N	N	N	N	150	N	N	10	150	N	10
MN353H	<2	N	N	N	N	<10	200	N	N	10	700	N	15
MB354H	<2	N	N	N	N	<10	100	N	N	10	300	N	30
MY355H	<2	N	N	N	N	<10	N	N	N	10	<20	N	N
MB357H	N	N	N	N	N	10	50	N	N	10	200	N	15
MY358H	N	N	N	N	N	<10	50	N	N	10	150	N	15
MN359H	<2	N	N	N	N	30	200	20	N	30	15,000	N	10
MB360H	N	N	N	N	N	10	N	N	N	10	100	N	N
MN361H	N	N	N	N	N	<10	N	N	N	10	1,500	N	10
MK362H	<2	N	N	10	N	30	N	N	N	30	30,000	N	N
MB363H	<2	N	N	N	100	10	N	N	N	10	15,000	N	N
MB366H	<2	N	N	N	N	10	N	N	N	10	1,500	N	N
MN367H	N	N	N	N	N	<10	N	N	N	<10	1,000	N	N

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MY320H	N	200	50	N	150	N	>2,000	N
MK321H	50	N	70	N	500	N	>2,000	N
MB322H	30	200	50	N	150	N	>2,000	N
MY323H	N	N	70	N	300	N	>2,000	N
MK324H	N	700	100	N	300	N	>2,000	N
MB325H	N	500	50	N	150	N	2,000	N
MY326H	N	N	30	N	70	500	>2,000	N
MK327H	N	700	100	N	300	N	700	N
MB328H	N	700	100	N	700	N	>2,000	N
MY329H	N	<200	70	N	200	700	>2,000	N
MK330H	N	N	20	N	100	N	>2,000	N
MB331H	N	200	100	N	300	N	>2,000	N
MY332H	70	200	70	N	200	N	>2,000	N
MN333H	N	N	50	N	100	N	>2,000	N
MB334H	N	N	20	N	100	N	>2,000	N
MY335H	N	N	100	N	200	N	>2,000	N
MN336H	N	N	50	N	150	N	>2,000	N
MN336H	N	N	70	N	150	700	>2,000	N
MB337H	N	N	50	N	70	N	>2,000	N
MY338H	100	200	50	N	300	N	>2,000	N
MB340H	N	N	20	N	70	N	>2,000	N
MY341H	N	N	20	N	50	N	>2,000	N
MN342H	N	200	50	N	50	N	1,500	N
MB343H	N	N	100	N	200	500	>2,000	N
MY344H	N	N	20	N	30	N	2,000	N
MN345H	70	N	150	N	150	1,500	>2,000	N
MB346H	N	N	50	N	150	N	>2,000	N
MY347H	N	N	20	N	<20	N	700	N
MN348H	N	200	50	N	200	N	>2,000	N
MB349H	N	700	50	N	700	N	>2,000	N
MY350H	N	300	20	N	700	N	>2,000	N
MN351H	20	700	50	N	700	N	>2,000	N
MY352H	N	300	20	N	500	N	>2,000	N
MN353H	150	1,000	20	N	150	N	>2,000	N
MB354H	N	300	30	N	150	N	>2,000	N
MY355H	N	200	30	N	30	N	700	N
MB357H	N	N	50	N	100	N	>2,000	N
MY358H	N	N	20	N	100	N	>2,000	N
MN359H	N	N	70	N	100	N	>2,000	N
MB360H	N	N	20	N	20	N	200	N
MN361H	N	N	20	N	70	N	>2,000	N
MK362H	N	N	50	N	50	N	1,500	N
MB363H	N	N	20	N	50	N	2,000	N
MB366H	N	N	20	N	20	N	500	N
MN367H	N	1,500	20	N	30	N	200	N

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MK368H	36 56 39	114 29 7	2.0	5.00	7	.05	100	N	N	N	20	100
MB369H	36 55 43	114 29 32	2.0	2.00	7	.20	100	N	N	N	20	200
MN370H	36 55 17	114 29 42	1.0	5.00	10	.10	50	N	N	N	<20	70
MB372H	36 54 42	114 31 27	2.0	5.00	10	.30	500	N	N	N	20	1,500
MN373H	36 55 13	114 32 14	1.0	2.00	5	.70	50	N	N	N	20	1,500
MB375H	36 56 32	114 31 52	2.0	5.00	10	.30	200	N	N	N	50	200
MN376H	36 56 26	114 31 9	1.0	5.00	10	.30	200	N	N	N	20	100
MK377H	36 56 55	114 31 24	1.0	5.00	10	.20	100	N	N	N	20	50
MB378H	36 57 3	114 31 13	.5	5.00	10	.15	50	N	N	N	<20	<50
MN379H	36 56 6	114 30 32	.5	5.00	7	.10	50	10	N	N	<20	700
MK380H	36 57 22	114 30 32	1.0	.50	10	1.00	500	N	N	N	20	500
MB381H	36 57 26	114 30 11	5.0	2.00	7	.50	100	N	N	N	70	10,000
MN382H	36 56 4	114 33 36	1.0	.50	1	1.50	100	N	N	N	70	700
MK383H	36 56 47	114 33 7	1.0	1.00	2	1.50	50	N	N	N	50	100
MB384H	36 56 48	114 32 56	2.0	2.00	5	.70	100	2	N	N	50	1,500
MN385H	36 57 2	114 34 20	1.0	.50	5	1.50	200	N	N	N	70	700
MK386H	36 57 33	114 34 10	1.0	5.00	10	.20	50	N	N	N	20	50
MB387H	36 57 37	114 33 31	.7	.20	10	.30	500	N	N	N	20	500
MN388H	36 57 53	114 34 31	1.5	1.00	10	1.00	700	N	N	N	50	100
MK389H	36 58 58	114 34 13	2.0	5.00	10	1.00	300	N	N	N	100	1,500
MB390H	36 59 31	114 34 13	1.0	1.00	10	1.50	200	N	N	N	20	700
MK391H	36 58 7	114 32 55	1.0	5.00	10	1.00	200	N	N	N	70	1,500
MY392H	36 58 23	114 32 57	2.0	1.50	5	1.50	300	N	N	N	100	1,500
MB393H	36 59 15	114 33 7	1.5	.50	10	1.50	300	N	N	N	70	1,000
MK394H	37 0 10	114 34 17	2.0	2.00	10	1.00	200	N	N	N	50	200
MY395H	37 0 28	114 34 7	1.0	5.00	10	.10	50	N	N	N	<20	50
MB396H	37 0 43	114 33 23	1.0	5.00	10	.20	50	N	N	N	20	50
MK397H	36 58 18	114 28 43	5.0	5.00	7	.20	200	N	N	N	50	50
MY398H	36 58 21	114 28 37	1.0	2.00	7	.70	200	N	N	N	50	300
MB399H	36 58 55	114 28 48	5.0	2.00	5	.50	100	N	N	N	20	2,000
MB400H	36 58 47	114 28 57	1.0	5.00	7	.02	50	N	N	N	20	<50
MK401H	36 59 24	114 29 13	5.0	2.00	7	.20	200	N	N	N	150	700
MY402H	36 59 27	114 29 27	2.0	5.00	7	.10	100	N	N	N	20	<50
MB403H	36 59 36	114 29 43	1.0	2.00	5	.07	50	N	N	N	<20	>10,000
MK404H	36 59 52	114 30 3	7.0	2.00	5	.20	500	N	N	N	100	500
MY405H	37 0 34	114 31 14	2.0	1.00	10	1.50	300	N	N	N	20	1,500
MB406H	36 59 58	114 31 37	1.5	1.00	5	.70	200	N	N	N	20	>10,000
MK407H	37 2 0	114 30 20	1.5	5.00	15	.10	100	N	N	N	20	500
MY408H	37 1 36	114 30 46	1.0	.50	20	.50	50	N	N	N	20	500
MB409H	37 1 31	114 31 47	1.0	2.00	15	.20	50	N	N	N	20	300
MK410H	37 1 15	114 29 48	2.0	.50	5	.20	50	N	N	N	<20	5,000
MB411H	37 0 35	114 28 19	1.0	.20	15	.30	50	N	N	N	20	5,000
MY412H	37 0 38	114 29 35	1.0	5.00	10	.20	100	N	N	N	30	5,000
MK413H	37 0 15	114 26 57	5.0	5.00	10	.50	200	N	N	N	100	700
MY414H	37 0 9	114 26 56	1.5	5.00	15	.20	200	N	N	N	50	700

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MK368H	N	N	N	N	N	30	N	N	N	10	200	N	N
MB369H	<2	N	N	N	N	10	50	N	N	10	700	N	15
MN370H	N	N	N	N	N	<10	N	N	N	10	1,500	N	N
MB372H	N	N	N	N	N	10	150	N	N	10	3,000	N	30
MN373H	N	N	N	N	N	<10	50	N	N	10	700	N	15
MB375H	7	N	N	N	N	10	50	N	N	10	1,500	N	10
MN376H	N	N	N	N	50	<10	50	N	N	10	200	N	10
MK377H	N	N	N	N	N	10	70	N	N	10	50	N	10
MB378H	N	N	N	N	N	<10	N	N	N	10	2,000	N	10
MN379H	N	N	N	N	N	<10	N	N	N	10	20,000	N	10
MK380H	<2	N	N	N	N	<10	500	N	<50	10	200	N	20
MB381H	N	N	N	N	N	20	200	N	N	10	200	N	15
MN382H	2	N	N	N	N	<10	100	N	50	10	20	N	30
MK383H	2	N	N	N	N	<10	50	N	50	10	300	N	30
MB384H	2	N	N	N	N	20	50	N	N	10	300	N	30
MN385H	2	N	N	N	70	<10	300	N	50	10	3,000	N	20
MK386H	N	N	N	N	N	<10	50	N	N	10	500	N	10
MB387H	2	N	N	N	N	<10	1,000	N	N	10	200	N	20
MN388H	5	N	N	N	100	10	700	N	50	30	150	N	50
MK389H	2	N	N	10	N	10	150	N	70	30	700	N	30
MB390H	<2	N	N	N	N	<10	100	N	70	10	100	N	30
MK391H	2	N	N	N	N	<10	150	N	50	10	200	N	50
MY392H	2	N	N	N	50	20	100	N	70	10	1,000	N	50
MB393H	2	70	N	N	N	20	150	N	70	10	70	N	50
MK394H	<2	N	N	N	N	200	150	N	N	10	50	N	30
MY395H	N	N	N	N	N	<10	N	N	N	10	20	N	10
MB396H	N	N	N	N	N	<10	N	N	N	10	N	N	10
MK397H	N	N	N	N	N	10	150	N	N	10	50	N	10
MY398H	<2	N	N	N	N	10	200	N	70	30	N	N	30
MB399H	<2	N	N	N	N	50	50	N	N	70	200	N	20
MB400H	N	N	N	N	N	<10	N	N	N	<10	150	N	N
MK401H	<2	N	N	N	N	50	100	N	N	50	700	700	10
MY402H	N	N	N	N	N	10	N	N	N	10	150	N	10
MB403H	N	N	N	N	N	<10	N	N	N	10	70	N	N
MK404H	2	N	N	15	N	30	70	10	N	70	100	N	<10
MY405H	N	N	N	N	N	<10	200	N	70	10	20	N	30
MB406H	N	N	N	N	70	10	100	N	N	20	70	500	20
MK407H	<2	N	N	N	N	<10	N	N	N	10	20	N	N
MY408H	N	N	N	N	N	<10	100	N	N	10	N	700	15
MB409H	N	N	N	N	N	<10	50	N	N	10	N	N	<10
MK410H	<2	N	N	N	N	10	50	N	N	10	20	200	15
MB411H	N	N	N	15	150	<10	150	N	N	50	20	2,000	N
MY412H	N	N	N	N	N	<10	50	N	N	10	20	700	15
MK413H	N	N	N	10	N	30	70	50	N	50	150	N	15
MY414H	<2	N	N	10	50	10	150	N	N	30	30	N	<10

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MK368H	N	N	20	N	30	N	700	N
MB369H	N	N	50	N	70	N	>2,000	N
MN370H	N	N	20	N	30	N	2,000	N
MB372H	N	200	50	N	150	700	>2,000	N
MN373H	N	N	20	N	100	N	>2,000	N
MB375H	N	N	50	N	70	N	2,000	N
MN376H	N	N	50	N	70	N	>2,000	N
MK377H	N	N	20	N	50	N	2,000	N
MB378H	N	N	20	N	50	N	2,000	N
MN379H	N	N	20	N	20	N	1,500	N
MK380H	N	200	30	N	700	N	>2,000	N
MB381H	N	500	30	N	100	N	>2,000	N
MN382H	N	N	50	N	200	N	>2,000	N
MK383H	30	N	50	N	200	N	>2,000	N
MB384H	N	200	50	N	200	N	>2,000	N
MN385H	N	N	30	N	300	N	>2,000	N
MK386H	N	200	50	N	100	500	2,000	N
MB387H	N	200	20	N	700	N	>2,000	N
MN388H	N	N	70	N	700	N	>2,000	N
MK389H	N	N	70	N	200	N	>2,000	N
MB390H	N	N	50	150	700	N	>2,000	N
MK391H	N	N	70	<100	700	N	>2,000	N
MY392H	N	200	70	N	700	N	>2,000	N
MB393H	20	200	70	200	1,000	N	>2,000	N
MK394H	70	N	70	N	150	N	>2,000	N
MY395H	N	N	20	N	30	N	2,000	N
MB396H	N	N	20	N	50	N	2,000	N
MK397H	N	N	50	N	50	N	2,000	N
MY398H	N	200	50	N	200	N	>2,000	N
MB399H	N	N	50	N	150	500	>2,000	N
MB400H	N	N	20	N	20	N	700	N
MK401H	N	N	50	N	100	N	>2,000	N
MY402H	N	N	20	N	50	N	>2,000	N
MB403H	N	700	20	N	30	N	1,500	N
MK404H	N	N	50	N	70	N	1,500	N
MY405H	70	200	70	N	200	N	>2,000	N
MB406H	N	700	30	N	150	N	>2,000	N
MK407H	N	200	20	N	20	N	2,000	N
MY408H	N	200	30	N	150	N	>2,000	N
MB409H	N	200	20	N	50	N	2,000	N
MK410H	N	N	30	N	70	N	>2,000	N
MB411H	N	500	50	N	200	N	2,000	N
MY412H	N	300	20	N	100	N	>2,000	N
MK413H	30	N	30	N	100	N	>2,000	N
MY414H	N	500	50	N	200	N	>2,000	N

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MK416H	36 59 27	114 27 22	1.0	2.00	7	.50	200	N	N	N	70	200
MY417H	36 59 23	114 27 17	5.0	2.00	2	.30	500	N	N	N	150	500
MK418H	37 2 43	114 33 4	5.0	2.00	7	2.00	1,500	N	N	N	100	1,000
MY419H	37 2 43	114 32 37	2.0	2.00	7	1.00	1,000	N	N	N	50	700
MB420H	37 2 54	114 30 26	5.0	2.00	7	1.00	700	5	N	N	100	2,000
MN421H	37 3 45	114 26 59	2.0	2.00	10	1.00	300	N	N	N	70	200
MB422H	37 3 26	114 27 12	5.0	1.50	7	.70	500	N	700	N	50	10,000
MN423H	37 3 45	114 27 59	.2	.05	5	.02	<20	N	N	N	<20	1,000
MB424H	37 3 22	114 28 19	5.0	1.00	15	.50	200	N	N	N	70	>10,000
MN425H	37 2 58	114 28 18	5.0	1.50	20	.50	100	5	700	N	70	5,000
MB426H	37 2 59	114 28 12	5.0	1.00	30	.20	100	2	500	N	70	2,000
MN427H	37 2 23	114 29 7	7.0	1.50	10	.20	100	1	N	N	50	>10,000
MB428H	37 2 48	114 29 57	5.0	2.00	7	2.00	5,000	N	700	N	20	5,000
MN429H	37 3 7	114 25 7	5.0	5.00	10	.50	1,000	N	N	N	20	700
MB430H	37 2 54	114 24 54	7.0	1.00	15	.20	200	5	500	N	70	1,000
MN431H	37 3 8	114 24 30	2.0	1.50	7	1.00	500	N	N	N	20	700
MB432H	37 2 43	114 24 25	7.0	2.00	5	.50	500	N	N	N	100	700
MN433H	37 2 29	114 24 40	7.0	5.00	7	.50	500	N	N	N	50	200

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MK416H	N	N	N	N	N	10	150	N	N	50	20	N	20
MY417H	<2	N	N	10	50	20	50	N	N	30	70	N	15
MK418H	<2	N	N	10	100	50	1,000	N	50	50	70	N	50
MY419H	<2	N	N	10	N	20	200	N	70	10	70	N	30
MB420H	2	N	N	20	70	50	200	N	50	50	200	200	15
MN421H	N	N	N	10	N	30	200	N	N	10	5,000	1,500	30
MB422H	<2	N	N	10	100	50	150	N	N	30	5,000	N	30
MN423H	N	N	N	N	N	<10	N	N	N	N	N	N	N
MB424H	<2	N	N	N	70	30	200	10	N	70	200	500	15
MN425H	2	N	N	10	150	70	200	20	N	100	200	500	20
MB426H	<2	N	N	10	150	30	150	20	N	100	1,500	N	10
MN427H	<2	N	N	10	N	70	50	20	N	100	2,000	200	15
MB428H	2	N	N	100	150	70	700	N	100	70	200	N	30
MN429H	<2	N	N	15	150	30	150	15	<50	70	100	N	30
MB430H	2	N	N	20	200	70	300	30	N	150	100	N	10
MN431H	<2	N	N	N	50	30	300	N	70	50	200	N	20
MB432H	2	N	N	15	50	70	200	30	<50	100	200	N	10
MN433H	2	N	N	15	150	50	300	30	<50	70	150	N	20

APPENDIX B.--Chemical analyses of heavy-mineral-concentrate samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MK416H	50	200	50	N	150	N	>2,000	N
MY417H	N	N	50	N	70	N	>2,000	N
MK418H	70	N	100	N	1,000	N	>2,000	N
MY419H	300	200	70	N	300	N	>2,000	N
MB420H	100	200	100	N	150	N	>2,000	N
MN421H	N	200	70	N	150	N	>2,000	N
MB422H	N	500	100	N	150	N	>2,000	N
MN423H	N	200	20	N	50	N	150	N
MB424H	70	700	50	N	150	N	>2,000	N
MN425H	N	700	100	N	500	500	>2,000	N
MB426H	N	700	100	N	200	<500	>2,000	N
MN427H	N	500	70	N	100	N	>2,000	N
MB428H	30	200	100	N	500	N	>2,000	N
MN429H	N	200	70	N	100	<500	>2,000	N
MB430H	N	700	150	N	200	<500	2,000	N
MN431H	20	200	70	N	200	700	>2,000	N
MB432H	N	N	100	N	70	500	2,000	N
MN433H	N	N	70	N	100	N	>2,000	N

APPENDIX C.--Chemical analyses of rock samples for the Mormon Mountains, Nevada

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
MN192R	36 57 55	114 25 35	.20	3.00	10.0	.010	100	N	<200	N	10	<20
MB195R	36 57 8	114 26 28	.50	5.00	10.0	.020	100	N	<200	N	<10	<20
MN199R	36 57 55	114 27 17	.10	10.00	20.0	.010	100	N	<200	N	10	<20
MB207R	36 58 43	114 25 15	.10	1.00	20.0	.010	300	N	<200	N	<10	<20
MK279R	37 3 3	114 22 13	.10	2.00	3.0	.010	500	N	<200	N	10	20
MB286R	37 2 42	114 20 41	.20	.20	.3	.200	100	N	<200	N	20	300
MY302R	36 56 16	114 24 13	2.00	7.00	10.0	.050	300	N	<200	N	20	100
MK306R	36 55 51	114 25 41	2.00	5.00	10.0	.100	200	N	<200	N	30	50
MY314R	36 53 7	114 21 39	.50	5.00	10.0	.020	100	N	<200	N	10	<20
MY329R	36 51 50	114 24 49	.05	.20	20.0	.010	30	N	N	N	N	N
MN339R	36 53 7	114 25 57	5.00	5.00	10.0	.100	700	N	<200	N	10	20
MY347R	36 54 48	114 26 5	20.00	.20	5.0	.002	50	N	300	N	70	<20
MB349R	36 54 55	114 26 31	3.00	.20	.3	.200	100	N	N	N	50	200
MY350R	36 54 55	114 26 44	1.00	.10	.3	.050	20	N	N	N	30	1,000
MN351R	36 55 18	114 27 7	2.00	.20	.2	.100	100	N	N	N	20	500
MN353R	36 53 28	114 27 36	5.00	.20	20.0	.100	700	N	N	N	10	100
MB366R	36 57 21	114 28 43	.10	.05	.5	.010	20	N	N	N	10	<20
MK368R	36 56 39	114 29 7	N	2.00	3.0	N	10	N	N	N	N	N
MB369R	36 55 43	114 29 32	.70	5.00	10.0	.070	100	N	N	N	N	<20
MB381R	36 57 26	114 30 11	.50	.20	10.0	.020	200	N	N	N	N	<20
MK383R	36 56 47	114 33 7	7.00	1.00	1.0	.700	50	.5	N	N	100	200
MB384R	36 56 48	114 32 56	1.00	.05	.1	.500	20	N	N	N	15	300
MK386R	36 57 53	114 34 10	10.00	3.00	5.0	1.000	1,500	N	N	N	20	20
MK389R	36 58 58	114 34 13	7.00	.20	10.0	.100	1,000	N	N	N	50	20
MY392R	36 58 23	114 32 57	2.00	.20	2.0	.300	500	N	N	N	20	700

APPENDIX C.--Chemical analyses of rock samples for the Mormon Mountains, Nevada (continued)

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
MN192R	N	N	N	N	30	20	N	N	10	10	N	N
MB195R	N	N	N	N	20	N	N	N	10	10	N	N
MN199R	N	N	N	N	10	N	N	N	N	<10	N	N
MB207R	N	N	N	N	10	N	N	N	N	N	N	N
MK279R	N	N	N	N	10	N	N	N	N	N	N	N
MB286R	<1	N	N	N	20	N	N	N	10	10	N	N
MY302R	<1	N	N	5	50	N	N	N	10	70	N	5
MK306R	<1	N	N	N	20	N	N	N	10	20	N	5
MY314R	N	N	N	N	10	N	N	N	10	10	N	N
MY329R	N	N	N	N	10	N	N	N	5	10	N	N
MN339R	N	N	N	30	50	N	N	N	30	30	N	10
MY347R	3	N	30	N	20	30	50	N	10	30	N	N
MB349R	1	N	N	10	20	20	N	N	10	N	N	5
MY350R	2	N	N	N	<10	N	N	N	5	10	N	N
MN351R	2	N	N	N	<10	20	N	N	5	20	N	5
MN353R	1	N	N	10	30	20	N	N	10	<10	N	5
MB366R	N	N	N	N	<10	N	N	N	N	N	N	N
MK368R	N	N	N	N	<10	N	N	N	N	N	N	N
MB369R	<1	N	N	N	10	N	N	N	5	<10	N	5
MB381R	N	N	N	N	<10	N	N	N	N	N	N	N
MK383R	5	N	N	15	50	100	N	N	20	10	N	15
MB384R	N	N	N	N	10	N	N	N	10	<10	N	5
MK385R	N	N	N	50	700	N	N	N	200	N	N	20
MK389R	N	N	N	20	30	N	5	N	30	<10	N	7
MY392R	2	N	N	10	10	100	N	N	10	20	N	7

APPENDIX C.--Chemical analyses of rock samples for the Mormon Mountains, Nevada (continued)

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
MN192R	N	N	10	N	10	N	N	N
MB195R	N	N	20	N	10	N	20	N
MN199R	N	100	10	N	N	N	N	N
MB207R	N	100	10	N	N	N	N	N
MK279R	N	N	10	N	10	N	N	N
MB286R	N	N	10	N	10	N	200	N
MY302R	N	100	20	N	15	N	100	N
MK306R	N	N	10	N	10	N	100	N
MY314R	N	N	30	N	N	N	20	N
MY329R	N	200	10	N	15	N	N	N
MN339R	N	100	50	N	10	N	10	N
MY347R	N	N	300	N	N	1,000	N	N
MB349R	N	N	30	N	30	N	300	N
MY350R	N	500	10	N	N	N	10	N
MN351R	N	200	20	N	10	N	100	N
MN353R	N	100	70	N	15	N	50	N
MB366R	N	N	10	N	N	N	N	N
MK368R	N	N	10	N	N	N	N	N
MB369R	N	N	20	N	N	N	10	N
MB381R	N	N	10	N	N	N	N	N
MK383R	N	N	100	N	100	N	300	N
MB384R	N	N	50	N	10	N	200	N
MK386R	N	200	300	N	20	N	300	N
MK389R	N	100	30	N	30	N	20	N
MY392R	N	500	70	N	20	N	100	N