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**Analyses of rock samples
from the Central mining and intrusive area, Marysville, Utah**

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

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INTRODUCTION

The Central mining and intrusive area, including parts of the Antelope Range, north of Marysville, Utah, (fig. 1) was selected for a geochemical study because Land Satellite (LANDSAT) information showed hydrothermally altered rocks (Podwysocki, in press). The study area starts approximately 2 miles north of Marysville and covers approximately 40 square miles. The area is semi-arid, mountainous, with an elevation range from 5000 to 8000 ft. For more detailed information of the geology of area, see Mineral resource potential of the Richfield quadrangle (Steven and Morris, 1984).

SAMPLE COLLECTION

Three hundred and sixty rock samples were collected by R.E. Tucker in the summer of 1982. The collected samples were taken to the U.S. Geological Survey laboratory in Denver, Colorado, for preparation and analyses. Fifty-seven rock samples were collected from subjective sites, that is sites that have a potential for mineralization, such as old mines, prospect holes, and veins. The remaining 303 rock samples were collected randomly throughout the study area. Density averaged about eight samples per square mile. Samples were collected by compositing several samples from about a 1-square-yard area or less. Samples were prepared by crushing and then were pulverized to minus 0.15 mm with ceramic plates.

ANALYTICAL PROCEDURES

Each sample was analyzed 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).

In addition, gold was determined in each sample using atomic-absorption spectrophotometry. A brief description of this procedure follows: A 10-g sample was roasted for 1 hour at 700°C. The sample was then digested using 10-ml hydrobromic acid, -0.5 percent bromine solution, and the gold was extracted into 10-ml of MIBK (methyl isobutyl ketone). An electrothermal atomic-absorption spectrophotometer was used to determine gold to 1 part per billion (O'Leary and Meier, 1986).

RESULTS

Tables 2 and 3 list the results of analyses for the samples. The data are arranged so that column 1 contains the USGS-assigned sample numbers. Columns 2 and 3 are sample localities in latitude and longitude. Values determined for the major elements (iron, magnesium, calcium, and titanium) are given in weight percent; all other element values are given in parts per

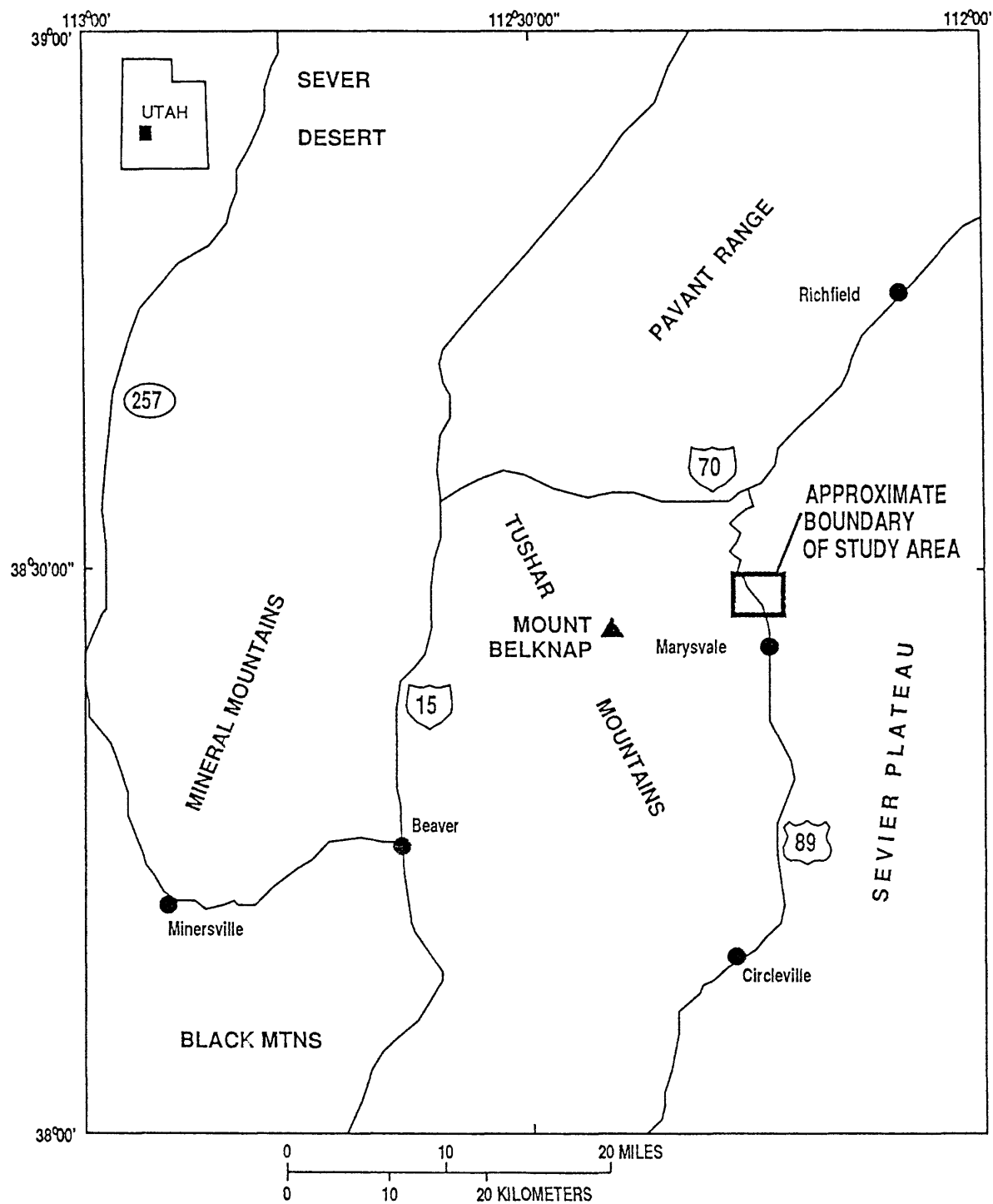


Figure 1. Location of the central mining and intrusive area, Marysvale, Utah.

million (micrograms/gram), except for gold, which was determined by atomic-absorption procedure, and is given in parts per billion (nanograms/gram). Not shown on tables 2 and 3 are gold and scandium values, which were also determined by emission spectrography. All samples were below detection limits of 10 ppm for gold and 5 ppm for scandium. A MF map will be published at a later date to explain the data in more detail.

REFERENCES CITED

- Grimes, D. J., and Marranzino, A. P., 1968, Direct-current arc and alternating-current spark emission spectrographic field methods for the semiquantitative analysis of geologic materials: U.S. Geological Survey Circular 591, 6 p.
- Motooka, J. M., and Grimes, D. J., 1976, Analytical precision of one-sixth order semiquantitative spectrographic analyses: U.S. Geological Survey Circular 738, 25 p.
- O'Leary, R. M., and Meier, A.L., 1986, Analytical methods used in geochemical exploration, 1984: U.S. Geological Survey Circular 948, 48 p.
- Podwysocki, M. H., Segal, D. B., Jones, O. D., and Nelson, M. G., in press, Map showing the distribution of hydrothermally altered rocks, Richfield, Utah, 1° x 2° quadrangle: U.S. Geological Survey Miscellaneous Investigations Series Map I-____, scale 1:250,000.
- Steven, T.A., and Morris, H.T., 1984, Mineral resource potential of the Richfield 1° x 2° quadrangle, west-central Utah: U.S. Geological Survey Open File Report 84-521, 53 p.

TABLE 1.--Limits of determination for the spectrographic analysis of rocks, stream sediments, and moss-trap 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 below]

Elements	Lower determination limit	Upper determination limit
Percent		
Iron (Fe)	0.05	20
Magnesium (Mg)	.02	10
Calcium	.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)	10	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Lanthanum (La)	50	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)	20	10,000
Yttrium (Y)	10	2,000
Zinc (Zn)	200	10,000
Zirconium (Zr)	10	1,000
Thorium (Th)	100	2,000

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH
[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR001	38 33 22	112 10 55	1.0	.50	.50	.07	700	N	N	50	100	3.0	N	N
AR002	38 33 5	112 11 5	1.5	.50	.70	.07	700	N	N	70	150	7.0	N	N
AR003	38 33 7	112 11 27	1.0	.30	1.50	.07	700	N	N	70	150	5.0	N	N
AR004	38 33 22	112 11 15	1.5	.20	.30	.07	700	<.5	N	70	100	5.0	N	N
AR005	38 33 5	112 10 44	.7	.10	.50	.05	700	N	N	50	150	3.0	N	N
AR006	38 33 22	112 10 37	1.0	.50	.70	.10	700	N	N	70	150	7.0	N	N
AR007	38 32 47	112 10 55	3.0	1.00	1.00	.30	500	N	N	30	1,000	1.0	N	N
AR008	38 32 31	112 11 3	7.0	2.00	2.00	.50	300	N	N	50	1,500	1.5	N	N
AR009	38 32 47	112 11 16	3.0	1.00	1.00	.50	500	N	N	50	1,000	1.5	N	N
AR010	38 33 57	112 12 16	1.0	.30	.20	.10	700	.5	N	50	100	3.0	N	N
AR011	38 33 22	112 11 57	1.0	.50	1.00	.07	1,000	N	N	70	150	5.0	N	N
AR012	38 33 39	112 12 8	.7	.20	.70	.05	300	N	N	30	50	7.0	N	N
AR013	38 33 5	112 12 29	3.0	.70	.70	.30	300	N	N	70	1,000	1.0	N	N
AR014	38 32 15	112 10 33	5.0	1.50	1.50	.30	700	N	N	30	1,000	1.0	N	N
AR015	38 32 15	112 10 10	5.0	1.50	1.00	.20	500	N	N	100	1,000	3.0	N	N
AR016	38 32 31	112 9 58	5.0	1.00	1.00	.30	700	N	N	50	1,000	3.0	N	N
AR017	38 32 31	112 10 13	5.0	1.00	1.50	.30	700	N	N	70	1,500	2.0	N	N
AR018	38 32 31	112 10 21	5.0	1.00	1.50	.30	1,000	N	N	100	2,000	3.0	N	N
AR019	38 33 39	112 11 26	1.0	.50	1.00	.10	500	N	N	30	300	5.0	N	N
AR020	38 33 25	112 11 35	.7	.30	1.50	.05	700	N	N	50	200	5.0	N	N
AR021	38 33 53	112 11 20	.7	.50	2.00	.07	700	N	N	50	100	2.0	N	N
AR022	38 33 40	112 11 50	1.5	.50	1.00	.07	1,000	N	N	50	100	5.0	N	N
AR023	38 33 56	112 12 2	1.0	.30	.70	.05	1,000	N	N	50	100	5.0	N	N
AR024	38 31 41	112 10 10	.2	.02	.10	.30	20	N	N	10	1,000	<1.0	N	N
AR025	38 31 38	112 10 28	2.0	1.50	.05	.30	200	<.5	N	>2,000	200	1.5	N	N
AR026	38 31 39	112 11 18	3.0	.05	.50	.50	15	N	N	30	700	3.0	N	N
AR027	38 32 3	112 11 26	7.0	3.00	2.00	.50	1,000	N	N	50	1,500	1.5	N	N
AR028	38 32 14	112 11 37	7.0	2.00	2.00	.30	1,000	N	N	30	1,500	1.0	N	N
AR029	38 31 57	112 11 45	7.0	3.00	2.00	.30	700	N	N	100	1,000	1.5	N	N
AR030	38 31 57	112 11 45	5.0	3.00	2.00	.30	1,000	N	N	100	1,000	1.5	N	N
AR031	38 32 29	112 11 45	3.0	1.00	1.00	.30	500	N	N	150	1,000	5.0	N	N
AR032	38 32 32	112 12 8	2.0	.15	.50	.50	15	N	N	70	700	N	N	N
AR033	38 31 38	112 11 37	3.0	.05	.30	.50	15	N	N	20	500	N	N	N
AR034	38 31 41	112 11 57	.5	.05	.70	1.00	15	N	N	10	1,000	N	N	N
AR035	38 31 24	112 11 47	7.0	.20	.30	.50	15	N	200	20	500	<1.0	N	N
AR036	38 30 50	112 11 24	1.5	.05	.20	.70	70	N	N	30	500	<1.0	N	N
AR037	38 30 35	112 11 15	2.0	.05	.15	.70	30	N	N	70	700	<1.0	N	N
AR038	38 30 34	112 10 53	1.5	.50	.70	.10	200	N	N	70	1,000	2.0	N	N
AR039	38 30 34	112 10 31	1.5	.50	.30	.10	300	N	N	100	300	5.0	N	N
AR040	38 30 52	112 10 43	.7	.05	.15	.50	15	N	N	20	700	2.0	N	N
AR041	38 31 11	112 10 31	5.0	.10	.10	.30	15	N	N	20	700	N	N	N
AR042	38 31 9	112 10 55	1.0	.50	.70	.03	300	N	N	30	200	3.0	N	N
AR043	38 31 10	112 11 16	.5	.15	.20	.70	70	.7	N	300	700	N	N	N
AR044	38 31 57	112 12 24	2.0	.07	.10	.30	10	N	<200	50	1,500	N	10	N
AR045	38 31 54	112 12 4	.3	.05	.15	.70	20	N	N	10	1,000	N	N	N

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR001	N	N	7	70	5	30	5	100	N	N	100	30	N	30	N	100	N	<1
AR002	N	N	10	70	10	20	7	100	N	N	100	15	N	20	N	100	N	<1
AR003	N	N	7	70	15	30	5	150	N	N	150	10	N	30	N	100	N	<1
AR004	<5	N	7	50	10	30	5	70	N	N	N	20	N	20	N	150	N	<1
AR005	N	N	N	50	<5	30	5	70	N	N	100	<10	N	20	N	150	N	<1
AR006	N	<10	5	30	N	30	5	70	N	N	<100	20	N	15	N	100	N	1
AR007	7	30	70	70	N	<20	20	100	N	N	700	150	N	30	N	200	N	1
AR008	20	50	100	70	10	<20	30	70	N	N	700	300	N	50	N	300	<100	1
AR009	10	30	70	70	5	<20	20	100	N	N	700	200	N	20	N	200	N	<1
AR010	N	N	10	50	15	30	5	150	N	N	150	20	N	20	N	150	N	<1
AR011	N	N	5	50	10	30	5	100	N	N	150	10	N	30	N	150	N	<1
AR012	N	N	10	30	N	20	7	70	N	N	N	10	N	10	N	100	N	1
AR013	30	20	50	70	15	<20	50	70	N	N	300	200	N	50	N	300	<100	<1
AR014	10	50	70	70	N	<20	30	70	N	N	700	200	N	30	N	200	N	<1
AR015	10	15	50	70	5	20	20	70	N	N	500	150	N	30	N	200	<100	<1
AR016	10	30	30	70	7	30	20	70	N	N	700	150	N	30	N	300	N	<1
AR017	20	50	50	70	N	<20	30	100	N	N	700	150	N	30	N	200	<100	<1
AR018	15	15	50	70	5	20	30	100	N	N	700	200	N	30	N	150	N	<1
AR019	<5	<10	15	50	5	20	7	100	N	N	150	20	N	20	N	150	N	1
AR020	N	N	10	50	N	30	5	100	N	N	N	<10	N	20	N	150	N	<1
AR021	N	N	7	70	N	30	5	100	N	N	100	50	N	30	N	150	N	<1
AR022	N	<10	5	50	5	30	7	50	N	N	150	20	N	20	N	200	N	<1
AR023	N	N	<5	50	5	30	5	100	N	N	N	15	N	30	N	150	<100	<1
AR024	N	30	7	70	N	<20	7	20	N	N	1,000	200	N	20	N	150	N	1
AR025	N	20	20	50	10	N	5	15	N	N	N	100	N	<10	N	150	N	3
AR026	N	30	15	50	5	<20	5	20	N	N	1,000	150	N	30	N	200	N	1
AR027	30	50	150	70	5	<20	30	50	N	N	700	300	N	30	N	300	N	<1
AR028	30	30	100	70	<5	<20	30	50	N	N	700	300	N	30	N	300	N	<1
AR029	30	70	100	70	7	<20	50	50	N	N	700	300	N	30	N	200	N	<1
AR030	30	50	100	70	5	<20	30	50	N	N	500	200	N	30	N	150	N	<1
AR031	10	20	50	70	10	20	20	100	N	N	300	150	N	30	N	200	<100	<1
AR032	N	100	20	30	10	N	7	15	N	N	1,000	150	N	15	N	200	N	1
AR033	N	70	30	50	<5	<20	5	30	N	N	1,500	200	N	30	N	200	N	<1
AR034	N	30	5	N	N	<20	7	N	N	N	500	50	N	N	N	150	N	<1
AR035	N	100	200	70	7	20	5	30	N	N	2,000	200	N	30	N	200	N	2
AR036	N	20	30	N	5	20	10	10	N	N	700	100	N	N	N	150	N	1
AR037	N	70	30	100	15	20	5	50	N	N	1,000	150	N	20	N	300	N	<1
AR038	N	<10	<5	50	N	<20	7	100	N	N	300	70	N	<10	N	150	N	<1
AR039	N	20	10	50	7	30	15	70	N	N	150	20	N	15	N	100	<100	<1
AR040	5	30	30	70	7	<20	7	50	N	N	1,000	200	N	20	N	300	N	<1
AR041	N	200	10	70	100	N	5	30	N	N	700	300	N	<10	N	150	N	<1
AR042	N	N	7	<20	N	<20	7	70	N	N	500	20	N	N	N	50	N	<1
AR043	N	<10	30	50	N	20	7	20	N	N	500	70	N	<10	N	150	N	<1
AR044	5	70	20	70	10	N	7	100	N	N	1,000	500	N	10	N	150	N	1
AR045	N	150	15	50	N	<20	5	50	N	N	1,000	200	N	20	N	200	N	2

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR046	38 31 42	112 12 18	.3	.05	.30	.10	15	<.5	N	20	700	N	N	N
AR047	38 31 26	112 12 7	2.0	.03	.50	.50	70	N	N	30	1,000	<1.0	N	N
AR048	38 30 34	112 12 18	7.0	2.00	2.00	.30	700	N	N	200	1,500	2.0	N	N
AR049	38 31 13	112 11 36	1.5	.30	.50	.07	300	N	N	50	500	3.0	N	N
AR050	38 30 50	112 11 40	3.0	.03	.07	.50	15	N	N	30	700	<1.0	N	N
AR051	38 30 52	112 11 4	1.5	.02	<.05	.50	10	N	N	15	1,000	N	N	N
AR052	38 31 25	112 10 20	2.0	.02	.70	.30	N	N	N	20	1,000	N	N	N
AR053	38 31 23	112 10 47	7.0	.07	.07	.50	20	N	200	70	1,000	2.0	10	N
AR054	38 31 39	112 10 53	3.0	.05	.50	.70	10	N	N	20	1,000	<1.0	N	N
AR055	38 31 24	112 11 5	.5	.05	1.00	.70	30	N	N	10	700	<1.0	N	N
AR056	38 31 24	112 11 26	7.0	.07	.20	.50	50	N	300	20	1,000	3.0	N	N
AR057	38 30 49	112 10 27	2.0	.70	.70	.15	200	N	N	70	500	3.0	N	N
AR058	38 30 17	112 11 24	5.0	1.50	1.50	.30	500	N	N	50	1,000	<1.0	N	N
AR059	38 30 6	112 11 30	5.0	1.00	.15	.30	500	N	N	70	1,000	2.0	N	N
AR060	38 30 17	112 11 47	7.0	2.00	3.00	.50	1,000	N	N	50	1,000	1.5	N	N
AR061	38 30 20	112 12 2	5.0	1.50	1.50	.30	700	N	N	50	1,500	1.5	N	N
AR062	38 30 34	112 11 37	3.0	1.00	.30	.30	300	N	N	70	1,000	3.0	N	N
AR063	38 30 35	112 11 53	7.0	2.00	2.00	.50	1,000	N	N	70	1,000	1.5	N	N
AR064	38 30 2	112 8 50	7.0	1.50	2.00	.30	1,000	N	N	30	1,000	2.0	N	N
AR065	38 30 11	112 8 54	1.5	.50	.50	.10	500	N	N	100	300	2.0	N	N
AR066	38 30 16	112 9 18	2.0	.70	.50	.10	500	N	N	100	300	7.0	N	N
AR067	38 30 2	112 9 28	2.0	.70	.70	.10	300	N	N	100	200	5.0	N	N
AR068	38 30 18	112 9 36	1.5	.70	.30	.07	500	N	N	150	150	7.0	N	N
AR069	38 30 1	112 9 7	1.5	.70	.70	.10	500	N	N	100	500	5.0	N	N
AR070	38 29 2	112 9 55	10.0	.05	.20	.30	50	N	N	50	700	2.0	N	N
AR071	38 29 2	112 9 57	1.0	.03	.07	.30	20	N	N	30	700	<1.0	N	N
AR072	38 30 0	112 9 50	1.5	.70	.50	.10	500	N	N	150	200	7.0	N	N
AR073	38 30 0	112 9 50	7.0	2.00	2.00	.30	1,000	N	N	50	1,000	1.5	N	N
AR074	38 30 19	112 10 0	1.0	.50	.30	.07	700	N	N	100	200	7.0	N	N
AR075	38 30 36	112 9 48	1.0	.50	.30	.07	300	N	N	150	200	7.0	N	N
AR076	38 30 37	112 10 12	1.0	.30	.20	.05	500	N	N	150	200	7.0	N	N
AR077	38 30 52	112 9 57	1.0	.30	.20	.07	300	N	N	150	150	10.0	N	N
AR078	38 30 36	112 9 25	1.5	.50	5.00	.10	300	N	N	150	200	7.0	N	N
AR079	38 30 18	112 11 12	2.0	.03	.15	.50	15	N	N	50	1,500	<1.0	N	N
AR080	38 29 55	112 11 58	7.0	2.00	2.00	.50	1,000	N	N	50	1,500	1.5	N	N
AR081	38 30 4	112 12 17	5.0	1.50	1.00	.30	700	N	N	50	2,000	1.0	N	N
AR082	38 30 2	112 12 42	1.5	.30	.70	.07	200	N	N	20	150	10.0	N	N
AR083	38 30 12	112 12 53	7.0	2.00	2.00	.50	700	N	N	100	1,000	1.5	N	N
AR084	38 28 18	112 12 24	3.0	1.00	.70	.30	700	N	N	70	1,000	3.0	N	N
AR085	38 28 21	112 12 1	5.0	1.50	.70	.30	200	N	N	100	1,500	1.5	N	N
AR086	38 28 36	112 10 48	3.0	1.00	1.50	.30	700	N	N	100	1,500	1.5	N	N
AR087	38 28 36	112 10 48	3.0	1.00	1.00	.30	700	<.5	N	50	2,000	1.5	N	N
AR088	38 28 18	112 10 59	5.0	.70	2.00	.30	700	N	N	20	1,500	1.0	N	N
AR089	38 28 20	112 11 11	3.0	.70	.30	.30	200	N	N	50	1,000	2.0	N	N
AR090	38 28 34	112 11 26	3.0	.02	.05	.50	20	N	N	20	1,500	1.0	N	N

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR046	N	100	70	70	7	N	7	30	N	N	1,000	200	N	10	N	150	N	<1
AR047	N	N	20	70	5	20	5	100	N	N	1,000	150	N	30	N	300	N	1
AR048	20	30	100	70	5	20	20	70	N	<10	700	200	N	30	N	150	<100	1
AR049	N	<10	10	70	N	20	5	70	N	N	200	50	N	20	N	100	N	1
AR050	N	70	15	100	N	<20	7	30	N	N	1,500	100	N	15	N	200	N	1
AR051	N	100	15	100	10	<20	5	150	N	N	1,000	150	N	N	N	100	N	<1
AR052	N	50	N	70	N	N	5	30	N	N	700	150	N	N	N	150	N	1
AR053	5	100	50	70	30	<20	50	50	N	N	3,000	200	N	50	N	200	N	<1
AR054	N	50	7	70	7	<20	5	70	N	N	700	200	N	30	N	300	N	<1
AR055	N	<10	5	20	N	20	5	10	N	N	500	20	N	10	N	300	N	<1
AR056	30	100	300	30	N	<20	50	20	N	N	500	700	N	15	N	200	N	60
AR057	N	N	10	50	N	30	7	50	N	N	200	50	N	30	N	100	N	<1
AR058	10	20	70	70	N	<20	15	70	N	N	700	200	N	30	N	300	N	1
AR059	7	<10	30	70	7	20	7	70	N	N	100	70	N	50	N	300	<100	<1
AR060	30	50	100	100	7	<20	30	70	N	N	700	200	N	30	N	300	N	<1
AR061	10	10	30	100	<5	20	5	150	N	N	700	150	N	30	N	200	N	<1
AR062	N	<10	15	50	10	20	5	70	N	N	300	100	N	20	N	300	N	1
AR063	30	50	150	100	<5	20	30	70	N	N	700	300	N	30	N	300	<100	1
AR064	20	70	70	70	N	20	50	50	N	N	700	200	N	30	N	300	N	<1
AR065	N	10	7	50	5	20	15	70	N	N	100	50	N	30	N	100	N	<1
AR066	N	10	10	50	<5	30	10	70	N	N	150	20	N	15	N	100	N	<1
AR067	N	10	10	70	7	20	20	70	N	N	150	50	N	30	N	150	N	<1
AR068	N	10	5	100	N	30	15	70	N	N	100	30	N	10	N	100	N	<1
AR069	5	20	15	70	7	30	30	70	N	N	300	50	N	30	N	150	N	<1
AR070	N	20	70	50	N	N	5	50	N	N	700	200	N	30	N	100	<100	<1
AR071	N	N	15	70	N	<20	<5	70	N	N	500	50	N	10	N	200	N	<1
AR072	N	20	5	70	N	30	15	70	N	N	150	20	N	20	N	100	N	<1
AR073	30	50	150	100	<5	20	30	70	N	N	700	300	N	30	N	300	<100	<1
AR074	N	15	<5	50	5	30	N	70	N	N	100	30	N	15	N	100	<100	1
AR075	N	10	<5	100	5	20	10	50	N	N	100	30	N	15	N	100	<100	1
AR076	N	N	5	50	5	30	10	100	N	N	<100	20	N	10	N	100	<100	<1
AR077	N	<10	<5	50	7	30	7	100	N	N	100	20	N	10	N	100	N	<1
AR078	N	<10	5	70	5	30	10	70	N	N	150	50	N	20	N	100	N	<1
AR079	N	70	30	70	5	<20	5	50	N	N	1,000	150	N	10	N	150	N	<1
AR080	30	70	150	100	N	20	30	70	N	N	700	300	N	50	N	300	N	1
AR081	7	10	50	100	7	<20	5	70	N	N	700	150	N	30	N	300	<100	<1
AR082	N	<10	<5	50	<5	30	7	100	N	N	100	30	N	20	N	150	N	1
AR083	30	50	100	70	7	<20	50	70	N	N	700	200	N	30	N	150	N	1
AR084	5	<10	20	70	N	20	<5	100	N	N	500	100	N	30	N	500	<100	<1
AR085	N	<10	20	100	7	20	5	70	N	N	200	150	N	20	N	700	N	<1
AR086	5	<10	30	100	10	<20	5	100	N	N	700	150	N	30	N	300	N	<1
AR087	5	<10	15	70	10	20	<5	70	N	N	500	150	N	30	N	300	N	<1
AR088	15	<10	50	50	N	N	7	30	N	N	500	100	N	30	N	200	N	<1
AR089	5	<10	30	70	5	20	5	50	N	N	150	100	N	30	N	300	<100	<1
AR090	N	N	10	70	5	20	<5	50	N	N	500	100	N	30	N	300	N	<1

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR091	38 28 22	112 11 34	.7	.10	.20	.50	10	N	N	20	1,000	1.5	N	N
AR092	38 28 32	112 12 10	.2	.10	.10	.03	70	N	N	150	70	1.0	N	N
AR093	38 28 37	112 11 48	5.0	3.00	.50	.30	700	N	N	50	1,500	1.5	N	N
AR094	38 28 53	112 12 0	5.0	.10	.15	.70	15	N	N	30	1,000	N	N	N
AR095	38 29 3	112 11 35	5.0	2.00	2.00	.30	300	N	N	50	1,500	1.5	N	N
AR096	38 28 59	112 11 39	7.0	2.00	3.00	.50	700	N	N	30	1,500	<1.0	N	N
AR097	38 28 54	112 11 20	2.0	.05	.20	.30	10	N	N	20	500	N	N	N
AR098	38 29 9	112 11 29	5.0	2.00	1.50	.30	500	N	N	50	1,000	2.0	N	N
AR099	38 29 26	112 11 43	7.0	3.00	3.00	.50	700	N	N	20	1,500	2.0	N	N
AR100	38 29 40	112 11 31	5.0	1.50	1.50	.30	500	N	N	50	1,500	1.0	N	N
AR101	38 29 42	112 11 6	1.0	.30	.20	.05	300	N	N	100	200	7.0	N	N
AR102	38 29 42	112 11 45	7.0	2.00	2.00	.50	1,000	N	N	50	1,500	1.0	N	N
AR103	38 29 44	112 12 9	7.0	2.00	1.50	.50	700	N	N	100	1,000	1.5	N	N
AR104	38 29 32	112 11 58	.7	.03	.10	.70	30	N	N	20	1,000	N	30	N
AR105	38 29 31	112 12 21	7.0	2.00	2.00	.50	1,000	N	N	150	1,000	1.5	N	N
AR106	38 29 38	112 12 28	2.0	.70	.10	.20	200	N	N	70	700	3.0	N	N
AR107	38 29 38	112 12 28	3.0	.70	.15	.20	100	2.0	N	50	1,000	2.0	N	N
AR108	38 29 43	112 12 47	7.0	.70	.30	.50	700	N	N	70	700	1.0	N	N
AR109	38 29 24	112 12 39	1.0	.30	.50	.07	300	N	N	70	150	7.0	N	N
AR110	38 29 24	112 12 39	1.5	.50	1.00	.10	300	N	N	70	150	3.0	N	N
AR111	38 29 4	112 12 25	3.0	.03	.20	.30	1,000	N	<200	20	700	N	N	N
AR112	38 29 59	112 13 25	.7	.30	.30	.05	300	N	N	50	150	5.0	N	N
AR113	38 29 48	112 13 10	2.0	.50	.15	.07	500	N	N	70	100	5.0	N	N
AR114	38 29 43	112 13 35	1.0	.30	.50	.07	500	N	N	50	100	5.0	N	N
AR115	38 29 58	112 13 2	5.0	2.00	.20	.20	700	.5	N	20	1,000	1.0	N	N
AR116	38 30 2	112 14 7	1.0	.30	.50	.05	500	<.5	N	70	100	5.0	N	N
AR117	38 29 36	112 13 53	1.0	.20	.20	.05	500	N	N	50	100	5.0	N	N
AR118	38 29 22	112 13 26	1.0	.50	.30	.07	700	N	N	30	150	7.0	N	N
AR119	38 29 8	112 13 13	1.0	.50	.70	.10	700	N	N	30	150	2.0	N	N
AR120	38 29 10	112 12 52	1.0	.30	.50	.07	500	N	N	50	100	7.0	N	N
AR121	38 28 40	112 12 47	1.5	.70	.10	.30	100	N	N	150	700	1.0	N	N
AR122	38 28 49	112 12 35	2.0	.70	.07	.20	150	N	N	100	700	1.0	N	N
AR123	38 29 9	112 11 49	7.0	1.50	1.50	.50	500	N	N	30	1,500	1.5	N	N
AR124	38 29 9	112 12 10	2.0	.50	1.50	.70	100	N	200	30	500	N	N	N
AR125	38 29 26	112 13 0	1.0	.30	.20	.10	700	<.5	N	30	150	3.0	N	N
AR126	38 29 25	112 14 10	1.0	.20	.30	.07	500	N	N	30	50	3.0	N	N
AR127	38 29 25	112 14 10	.7	.20	.50	.07	500	N	N	70	100	7.0	N	N
AR128	38 29 44	112 14 36	7.0	2.00	3.00	.50	700	N	N	70	1,000	2.0	N	N
AR129	38 29 59	112 14 43	10.0	5.00	3.00	.50	1,500	N	N	30	1,000	1.0	N	N
AR130	38 30 16	112 13 14	.5	.30	.07	.07	70	.7	N	20	700	1.5	N	N
AR131	38 30 21	112 13 10	5.0	2.00	2.00	.30	1,000	N	N	30	1,500	1.5	N	N
AR132	38 30 34	112 13 5	5.0	1.50	1.50	.30	700	N	N	100	1,500	1.5	N	N
AR133	38 30 23	112 12 26	7.0	2.00	3.00	.30	1,000	N	N	50	1,500	1.5	N	N
AR134	38 30 37	112 12 40	7.0	2.00	2.00	.50	1,000	N	N	50	1,500	1.5	N	N
AR135	38 30 37	112 12 40	7.0	3.00	2.00	.50	700	N	N	50	1,000	1.5	N	N

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR091	N	30	7	50	N	N	7	50	N	N	500	100	N	50	N	150	N	<1
AR092	N	<10	5	N	N	N	7	N	N	N	N	10	N	N	N	50	N	<1
AR093	20	50	70	70	5	20	30	70	N	N	500	200	N	30	N	500	<100	1
AR094	N	70	100	100	20	20	5	50	N	N	1,000	300	N	20	N	300	N	1
AR095	20	50	70	100	5	20	30	70	N	N	700	300	N	30	N	300	N	1
AR096	30	70	70	70	7	<20	50	70	N	N	700	300	N	50	N	200	N	2
AR097	N	70	50	50	5	N	5	50	N	N	1,000	200	N	10	N	100	N	1
AR098	15	30	70	70	<5	<20	50	70	N	N	700	150	N	30	N	300	N	<1
AR099	30	150	150	70	N	<20	100	50	N	N	700	300	N	30	N	200	N	1
AR100	15	30	100	70	5	<20	50	100	N	N	700	200	N	30	N	500	N	<1
AR101	N	N	<5	50	7	30	7	70	N	N	N	15	N	<10	N	70	<100	<1
AR102	20	50	100	70	N	<20	30	70	N	N	700	300	N	30	N	200	N	1
AR103	30	50	100	70	N	<20	30	50	N	N	700	300	N	30	N	150	N	<1
AR104	N	<10	N	N	20	<20	5	10	N	50	100	15	N	N	N	300	N	<1
AR105	30	70	100	100	5	<20	30	100	N	<10	700	300	N	50	N	200	N	1
AR106	N	<10	30	70	15	20	5	100	N	<10	150	50	N	30	N	300	100	1
AR107	N	<10	30	100	30	30	5	50	N	<10	100	50	N	30	N	500	100	2
AR108	20	50	100	100	20	<20	20	70	N	N	500	200	<50	30	N	500	N	6
AR109	N	N	10	50	5	30	5	100	N	N	N	10	N	20	N	150	N	<1
AR110	<5	<10	5	70	5	20	5	100	N	N	100	30	N	30	N	100	N	<1
AR111	N	30	15	150	15	20	5	50	N	N	700	200	N	20	N	300	<100	<1
AR112	N	N	N	50	5	30	7	100	N	N	N	30	N	20	N	100	N	1
AR113	N	N	<5	50	N	30	5	100	N	N	N	10	N	20	N	150	N	<1
AR114	N	N	5	50	5	30	7	100	N	N	N	10	N	30	N	150	N	<1
AR115	15	30	100	70	50	<20	20	100	N	<10	300	200	N	30	N	300	N	2
AR116	N	N	<5	50	10	30	5	70	N	N	<100	20	N	20	N	150	N	1
AR117	N	N	<5	50	<5	30	7	100	N	N	N	10	N	20	N	150	N	<1
AR118	N	N	5	50	5	50	5	100	N	N	N	15	N	20	N	150	N	<1
AR119	N	<10	<5	50	5	30	5	100	N	N	N	30	N	20	N	150	N	<1
AR120	N	N	<5	70	<5	30	7	100	N	N	N	15	N	20	N	150	N	<1
AR121	N	N	5	70	5	20	<5	70	N	N	100	70	N	30	N	500	N	<1
AR122	N	N	N	100	5	20	<5	50	N	N	100	70	N	30	N	500	N	<1
AR123	20	50	100	100	7	<20	50	70	N	N	700	200	N	30	N	200	<100	<1
AR124	N	70	7	20	15	<20	5	150	N	<10	700	150	N	<10	N	300	<100	1
AR125	N	N	15	50	5	30	5	100	N	N	N	15	N	20	N	150	N	<1
AR126	N	N	N	50	5	30	5	100	N	N	N	20	N	20	N	200	N	<1
AR127	N	N	N	50	7	30	5	100	N	N	N	10	N	20	N	150	N	<1
AR128	30	50	100	100	7	20	50	50	N	N	700	200	N	30	N	200	N	1
AR129	50	300	150	50	N	<20	150	30	N	N	1,000	300	N	30	N	200	N	1
AR130	N	N	7	100	15	20	7	30	N	N	100	30	N	10	N	100	N	1
AR131	15	50	100	100	5	<20	30	100	N	N	1,000	200	N	30	N	200	N	1
AR132	10	20	70	100	<5	30	15	70	N	10	700	150	N	30	N	500	<100	<1
AR133	30	30	150	70	N	<20	50	70	N	<10	700	300	N	30	N	200	N	1
AR134	30	50	150	50	N	<20	50	70	N	N	700	300	N	30	N	200	N	1
AR135	30	50	150	70	<5	20	50	50	N	N	700	300	N	50	N	300	N	1

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR136	38 31 10	112 13 0	5.0	.03	.07	.50	30	N	N	50	700	<1.0	N	N
AR137	38 31 25	112 13 13	3.0	.05	.10	.20	20	N	N	30	1,000	N	N	N
AR138	38 31 23	112 12 51	.1	.05	.15	.50	20	N	N	10	1,000	<1.0	N	N
AR139	38 31 24	112 12 35	7.0	.10	.15	.30	20	N	N	20	1,000	N	N	N
AR140	38 31 7	112 12 40	3.0	.07	.15	.50	20	N	N	30	1,000	N	N	N
AR141	38 31 5	112 12 22	3.0	.20	.20	.50	20	N	N	50	1,000	N	N	N
AR142	38 30 55	112 12 31	3.0	.20	.30	.30	50	N	N	30	1,000	<1.0	N	N
AR143	38 30 33	112 13 25	7.0	2.00	2.00	.50	1,000	N	N	50	1,000	1.0	N	N
AR144	38 30 53	112 13 53	3.0	1.00	.10	.30	70	N	N	1,500	1,500	1.0	N	N
AR145	38 30 47	112 13 15	7.0	3.00	3.00	.50	1,000	N	N	30	1,000	1.0	N	N
AR146	38 30 47	112 13 15	7.0	3.00	2.00	.50	1,000	N	N	50	1,000	1.5	N	N
AR147	38 30 46	112 12 50	7.0	2.00	2.00	.50	1,500	1.0	N	30	1,000	1.5	N	N
AR148	38 30 50	112 13 33	5.0	3.00	2.00	.50	1,500	N	N	200	1,000	1.0	N	N
AR149	38 31 27	112 13 37	7.0	2.00	.70	.30	2,000	N	N	50	1,500	N	N	N
AR150	38 31 39	112 12 59	.3	.10	.10	.30	50	N	N	150	1,000	2.0	N	N
AR151	38 31 42	112 12 41	.7	.02	.07	.70	15	N	N	15	500	<1.0	N	N
AR152	38 31 58	112 12 45	.2	.03	<.05	.50	100	N	N	20	700	N	N	N
AR153	38 32 14	112 12 18	5.0	.02	.20	.50	10	N	N	50	1,000	<1.0	N	N
AR154	38 32 28	112 12 31	1.5	.07	.50	.30	10	N	N	30	500	<1.0	N	N
AR155	38 32 17	112 12 41	.7	.03	<.05	.30	100	<.5	N	1,000	700	N	N	N
AR156	38 32 36	112 12 57	7.0	2.00	3.00	.50	1,000	N	N	15	1,000	N	N	N
AR157	38 32 41	112 12 44	1.0	.07	.20	.30	15	N	N	10	1,000	N	N	N
AR158	38 32 46	112 13 20	7.0	3.00	2.00	.30	1,000	N	N	15	1,000	<1.0	N	N
AR159	38 32 12	112 13 2	.2	.02	.15	.50	30	N	<200	150	1,000	N	N	N
AR160	38 32 19	112 13 29	7.0	3.00	5.00	.50	1,000	N	N	20	1,000	N	N	N
AR161	38 32 15	112 13 44	2.0	1.50	.07	.20	200	.5	N	>2,000	200	1.0	N	N
AR162	38 31 58	112 13 37	7.0	3.00	3.00	.30	1,500	N	N	15	700	<1.0	N	N
AR163	38 31 38	112 13 33	5.0	1.50	3.00	.30	1,000	N	N	100	1,000	<1.0	N	N
AR164	38 31 37	112 13 43	5.0	1.50	1.50	.30	500	N	N	50	1,500	1.5	N	N
AR165	38 30 56	112 14 2	.5	.20	.07	.02	200	N	N	30	300	2.0	N	N
AR166	38 30 56	112 14 8	5.0	2.00	1.50	.20	1,000	N	N	50	1,000	<1.0	N	N
AR167	38 30 56	112 14 17	5.0	1.50	1.00	.30	1,000	1.0	N	10	1,500	N	N	N
AR168	38 30 58	112 14 7	7.0	2.00	2.00	.20	700	N	N	30	1,000	1.0	N	N
AR169	38 30 36	112 13 52	1.5	.30	.07	.15	200	1.0	N	30	700	1.0	N	N
AR170	38 30 39	112 13 49	.3	.30	.07	.03	200	<.5	N	20	100	3.0	N	N
AR171	38 30 38	112 13 50	7.0	2.00	2.00	.50	1,000	N	N	70	1,000	1.5	N	N
AR172	38 31 15	112 14 10	7.0	3.00	2.00	.50	1,500	N	N	50	1,500	N	N	N
AR173	38 30 53	112 14 28	7.0	2.00	2.00	.30	20	N	N	150	1,500	1.0	N	N
AR174	38 31 0	112 14 35	7.0	2.00	1.00	.20	1,000	N	N	30	1,000	<1.0	N	N
AR175	38 30 32	112 14 47	7.0	2.00	3.00	.50	700	N	N	50	1,000	1.5	N	N
AR176	38 30 27	112 14 58	7.0	2.00	3.00	.30	1,000	N	N	30	1,000	1.5	N	N
AR177	38 30 27	112 14 58	7.0	2.00	2.00	.70	1,000	N	N	50	1,500	1.5	N	N
AR178	38 30 21	112 14 52	5.0	2.00	2.00	.30	1,000	N	N	50	1,000	1.5	N	N
AR179	38 30 23	112 14 38	7.0	3.00	2.00	.50	700	N	N	20	1,000	1.5	N	N
AR180	38 30 53	112 15 7	1.0	.30	.07	.15	200	1.5	N	30	700	1.0	N	N

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR136	N	30	20	N	10	20	5	N	N	N	N	50	N	15	N	300	N	<1
AR137	N	70	20	50	10	<20	5	100	N	N	500	200	N	20	N	150	N	1
AR138	N	20	7	70	N	<20	<5	50	N	N	1,000	150	N	30	N	200	N	<1
AR139	N	15	50	70	N	20	<5	70	N	N	500	150	N	30	N	500	N	<1
AR140	N	70	70	70	50	<20	<5	70	N	N	1,000	300	N	15	N	300	N	<1
AR141	N	20	70	100	5	<20	5	70	N	N	1,000	150	N	10	N	200	N	1
AR142	N	10	50	70	7	<20	5	50	N	N	1,000	150	N	30	N	300	N	<1
AR143	20	50	150	70	5	<20	30	70	N	N	700	300	N	50	N	300	N	1
AR144	N	20	70	50	5	N	5	20	N	N	200	200	N	10	N	150	N	3
AR145	30	50	300	70	N	<20	50	50	N	N	700	300	N	50	N	300	N	1
AR146	30	50	150	100	N	<20	30	70	N	N	700	300	N	30	N	200	N	<1
AR147	20	50	150	50	<5	20	30	50	N	N	500	200	N	30	N	200	N	25
AR148	30	50	70	50	N	N	30	30	N	N	1,000	200	N	30	N	70	N	1
AR149	10	<10	<5	30	N	N	5	20	N	N	500	300	N	30	N	150	N	<1
AR150	N	30	10	100	N	<20	5	70	N	N	1,000	200	N	20	N	200	N	<1
AR151	N	50	10	20	<5	<20	7	20	N	N	500	70	N	N	N	200	N	1
AR152	N	15	N	N	10	<20	5	N	N	<10	N	30	N	N	N	50	N	36
AR153	N	200	5	70	N	<20	<5	30	N	N	500	200	N	10	N	200	N	<1
AR154	N	30	10	50	N	N	N	30	N	N	700	150	N	10	N	100	N	<1
AR155	N	<10	20	N	5	<20	5	N	N	N	N	<10	N	N	N	200	N	<1
AR156	30	10	100	50	N	N	20	50	N	N	700	500	N	30	N	150	N	1
AR157	N	20	10	70	30	20	<5	30	N	N	200	200	N	50	N	300	N	<1
AR158	30	15	30	30	N	N	10	30	N	N	700	200	N	30	N	100	N	1
AR159	N	15	5	N	5	20	7	N	N	N	N	20	N	N	N	70	N	<1
AR160	30	30	50	50	N	N	20	20	N	N	1,000	300	N	30	N	100	N	1
AR161	5	20	30	50	10	N	7	10	N	N	N	150	N	<10	N	150	N	1
AR162	30	50	100	30	N	N	20	20	N	N	700	500	N	30	N	150	N	1
AR163	15	<10	5	30	N	N	5	30	N	N	700	200	N	30	N	100	N	<1
AR164	7	10	50	100	<5	20	10	70	N	N	700	200	N	30	N	300	N	1
AR165	N	N	5	N	N	30	7	50	N	N	100	10	N	10	N	70	N	<1
AR166	20	30	200	50	N	N	20	70	N	N	700	150	N	15	<200	100	N	19
AR167	15	30	1,000	50	N	<20	15	100	N	N	700	300	N	30	200	100	N	250
AR168	30	30	50	20	N	N	20	30	N	N	700	200	N	15	N	100	N	1
AR169	N	<10	N	50	5	30	5	70	N	N	<100	50	N	30	N	200	<100	2
AR170	N	N	<5	N	N	20	5	100	N	N	N	<10	N	10	N	50	N	2
AR171	30	50	100	70	5	<20	30	100	N	N	700	500	N	30	N	200	N	1
AR172	20	15	5	20	N	N	7	20	N	N	1,000	500	N	30	N	100	N	<1
AR173	20	30	100	70	N	<20	30	100	N	N	700	200	N	30	N	200	<100	<1
AR174	20	50	N	30	N	N	30	30	N	N	700	200	N	20	N	100	N	1
AR175	30	50	150	100	5	<20	50	50	N	N	700	300	N	50	N	500	<100	1
AR176	30	30	150	70	N	<20	30	70	N	N	700	200	N	30	N	150	N	1
AR177	30	50	150	70	N	<20	50	70	N	N	1,000	300	N	30	N	150	N	1
AR178	20	50	100	100	N	<20	30	50	N	N	700	200	N	30	N	200	N	<1
AR179	30	50	100	100	N	20	30	50	N	N	700	200	N	30	N	200	N	1
AR180	N	N	<5	50	5	20	5	70	N	N	<100	50	N	30	N	150	N	<1

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR181	38 31 1	112 15 7	7.0	.70	.15	.50	50	.7	N	20	3,000	<1.0	N	N
AR182	38 30 39	112 15 7	10.0	3.00	3.00	.50	1,000	N	N	50	1,500	1.0	N	N
AR183	38 30 50	112 14 57	7.0	3.00	2.00	.50	1,000	N	N	100	1,000	1.5	N	N
AR184	38 31 31	112 14 23	5.0	.70	2.00	.20	500	N	N	30	1,000	1.0	N	N
AR185	38 31 23	112 14 17	7.0	3.00	1.50	.30	1,500	N	N	20	1,000	<1.0	N	N
AR186	38 31 41	112 14 26	7.0	2.00	2.00	.30	700	N	N	20	1,500	<1.0	N	N
AR187	38 33 5	112 16 25	7.0	3.00	1.50	.30	1,000	N	N	10	1,500	N	N	N
AR188	38 32 49	112 16 13	7.0	2.00	3.00	.30	1,000	N	N	20	2,000	N	N	N
AR189	38 32 35	112 16 8	7.0	2.00	2.00	.30	700	N	N	10	1,500	N	N	N
AR190	38 32 19	112 15 58	5.0	1.50	2.00	.20	500	N	N	30	700	1.0	N	N
AR191	38 31 38	112 17 14	7.0	1.50	3.00	.30	700	N	N	20	2,000	<1.0	N	N
AR192	38 31 43	112 16 58	7.0	1.50	2.00	.30	2,000	N	N	15	1,500	<1.0	N	N
AR193	38 31 54	112 16 42	7.0	2.00	2.00	.20	1,500	N	N	20	1,000	2.0	N	N
AR194	38 31 58	112 16 22	5.0	1.50	2.00	.30	1,500	N	N	10	1,500	1.0	N	N
AR195	38 31 59	112 13 12	.2	.03	.05	.50	1,000	N	200	100	1,500	1.0	N	N
AR196	38 32 30	112 13 21	7.0	3.00	2.00	.50	1,000	N	N	30	700	N	N	N
AR197	38 32 0	112 13 54	7.0	2.00	1.50	.50	1,000	N	N	20	1,500	<1.0	N	N
AR198	38 33 6	112 14 6	7.0	2.00	2.00	.30	1,500	N	N	20	1,500	<1.0	N	N
AR199	38 33 6	112 14 17	7.0	2.00	2.00	.30	1,000	N	N	10	1,500	N	N	N
AR200	38 32 58	112 13 40	3.0	.70	1.00	.50	700	N	N	50	1,000	<1.0	N	N
AR201	38 32 58	112 13 40	2.0	.70	1.00	.30	700	N	N	70	1,500	2.0	N	N
AR202	38 32 50	112 13 44	7.0	2.00	2.00	.30	1,500	N	N	20	1,500	<1.0	N	N
AR203	38 32 50	112 14 28	7.0	2.00	3.00	.30	1,000	N	N	10	700	N	N	N
AR204	38 32 46	112 15 7	7.0	2.00	2.00	.30	700	N	N	10	1,000	<1.0	N	N
AR205	38 32 57	112 14 46	5.0	.70	2.00	.30	700	N	N	30	700	1.0	N	N
AR206	38 32 31	112 13 58	5.0	1.50	1.50	.30	300	N	N	30	1,500	1.0	N	N
AR207	38 32 27	112 14 27	7.0	1.00	3.00	.30	1,000	N	N	20	1,000	<1.0	N	N
AR208	38 32 26	112 14 35	5.0	2.00	1.50	.20	1,000	N	N	20	1,500	1.0	N	N
AR209	38 32 13	112 14 21	5.0	1.00	2.00	.30	700	N	N	30	1,000	<1.0	N	N
AR210	38 31 58	112 14 36	7.0	3.00	3.00	.50	1,500	N	N	10	700	<1.0	N	N
AR211	38 32 31	112 14 59	7.0	3.00	3.00	.50	1,000	N	N	10	1,000	N	N	N
AR212	38 32 31	112 14 59	7.0	2.00	2.00	.50	1,500	N	N	20	1,500	<1.0	N	N
AR213	38 32 17	112 14 56	7.0	1.50	2.00	.30	700	N	N	30	700	1.0	N	N
AR214	38 32 8	112 14 57	7.0	3.00	2.00	.50	1,500	N	N	20	1,000	<1.0	N	N
AR215	38 31 50	112 14 47	1.0	.20	.50	.07	500	N	N	50	100	3.0	N	N
AR216	38 31 58	112 14 58	1.0	.20	.50	.07	700	N	N	50	70	2.0	N	N
AR217	38 31 58	112 14 56	1.0	.05	.10	.30	50	N	N	150	2,000	1.5	N	N
AR218	38 32 2	112 15 18	1.0	.70	.70	.10	500	N	N	15	300	3.0	N	N
AR219	38 32 16	112 15 33	2.0	.20	.10	.50	200	N	N	50	500	<1.0	N	N
AR220	38 31 58	112 15 38	5.0	1.00	2.00	.20	700	N	N	20	1,500	1.0	N	N
AR221	38 31 51	112 15 26	7.0	.70	3.00	.30	1,000	N	N	30	1,500	<1.0	N	N
AR222	38 31 38	112 15 26	7.0	1.50	3.00	.30	1,500	N	N	20	100	<1.0	N	N
AR223	38 31 43	112 15 5	5.0	.70	3.00	.30	700	5.0	N	30	700	<1.0	N	N
AR224	38 31 42	112 14 54	.7	.30	.70	.07	700	N	N	50	50	2.0	N	N
AR225	38 31 27	112 15 2	1.0	.20	.50	.05	700	N	N	50	70	5.0	N	N

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR181	N	100	100	30	10	N	7	30	N	N	300	300	N	15	N	200	N	9
AR182	30	50	150	100	N	<20	50	70	N	N	1,000	500	N	30	N	200	N	<1
AR183	20	50	100	100	N	<20	30	100	N	N	700	300	N	50	N	200	N	<1
AR184	20	30	50	50	N	N	20	30	N	N	700	150	N	15	N	150	N	1
AR185	20	50	20	50	N	N	20	20	N	N	300	200	N	15	N	200	N	1
AR186	20	20	70	50	N	N	20	50	N	N	700	200	N	15	N	100	N	2
AR187	10	15	30	30	N	N	10	30	N	N	1,000	500	N	30	N	100	N	<1
AR188	30	20	100	70	N	N	10	20	N	N	1,500	300	N	30	N	150	N	<1
AR189	20	20	70	50	N	N	10	30	N	N	700	500	N	20	N	150	N	<1
AR190	20	30	20	50	N	N	20	30	N	N	700	150	N	20	N	150	N	1
AR191	20	10	50	50	N	<20	15	20	N	N	1,000	300	N	30	N	150	N	<1
AR192	20	10	30	50	N	N	5	30	N	N	1,000	200	N	30	N	150	N	1
AR193	15	50	30	50	N	N	30	30	N	N	500	150	N	20	N	100	N	1
AR194	20	<10	20	50	N	N	5	30	N	N	1,000	150	N	30	N	150	N	1
AR195	N	10	5	N	10	20	<5	N	N	N	N	20	<50	N	N	100	N	<1
AR196	30	30	10	30	N	N	20	10	N	N	1,000	500	N	30	N	100	N	<1
AR197	20	10	70	50	N	N	15	30	N	N	700	200	N	30	N	150	N	<1
AR198	30	10	100	50	N	N	15	30	N	N	1,000	300	N	30	N	150	N	1
AR199	20	30	70	70	N	N	15	30	N	N	1,000	200	N	30	N	150	N	<1
AR200	N	N	20	70	5	<20	5	100	N	N	500	100	N	50	N	300	N	<1
AR201	N	<10	15	100	<5	<20	<5	100	N	<10	300	70	N	30	N	200	N	1
AR202	30	15	150	50	N	N	20	30	N	N	1,000	300	N	30	N	150	N	1
AR203	30	20	50	30	N	N	15	15	N	N	700	300	N	30	N	100	N	<1
AR204	20	<10	20	30	N	N	7	30	N	N	700	200	N	30	N	100	N	<1
AR205	10	N	15	50	N	N	5	20	N	N	700	150	N	30	N	150	N	1
AR206	10	30	50	50	N	N	20	20	N	N	100	200	N	20	N	150	N	1
AR207	30	<10	20	50	N	N	7	20	N	N	700	300	N	30	N	150	N	<1
AR208	20	30	50	30	N	N	15	30	N	N	700	150	N	20	N	100	N	<1
AR209	20	20	70	50	N	N	20	30	N	N	700	200	N	20	N	150	N	<1
AR210	30	30	150	30	N	N	15	10	N	N	700	300	N	30	N	150	N	1
AR211	30	50	70	30	N	N	20	20	N	N	1,000	300	N	30	N	150	N	<1
AR212	30	50	70	30	N	N	20	30	N	N	1,000	300	N	30	N	150	N	<1
AR213	20	30	15	50	N	N	30	50	N	N	300	150	N	15	N	100	N	<1
AR214	30	30	100	30	N	N	20	20	N	N	700	300	N	30	N	100	N	1
AR215	N	N	N	50	5	30	7	100	N	N	N	20	N	20	N	150	N	<1
AR216	N	N	N	50	N	30	5	100	N	N	N	20	N	20	N	150	N	<1
AR217	N	50	20	30	N	N	7	30	N	N	1,500	150	N	10	N	100	N	1
AR218	N	10	10	20	N	<20	10	100	N	N	700	30	N	<10	N	70	N	<1
AR219	5	N	70	50	5	<20	30	50	N	N	200	50	N	30	N	300	N	<1
AR220	10	20	30	30	N	N	10	30	N	N	700	150	N	20	N	150	N	<1
AR221	30	50	70	50	N	N	30	30	N	N	1,000	300	N	30	N	100	N	<1
AR222	20	N	20	30	N	N	5	20	N	N	700	300	N	30	N	150	N	1
AR223	30	50	70	50	N	N	30	30	N	N	700	300	N	20	N	150	N	<1
AR224	N	N	<5	50	5	30	5	150	N	N	N	20	N	30	N	100	N	<1
AR225	N	N	N	30	N	30	5	70	N	N	N	10	N	20	N	100	N	<1

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR226	38 31 35	112 15 1	2.0	.30	.50	.50	100	N	N	20	1,000	<1.0	N	N
AR227	38 31 23	112 14 43	5.0	2.00	1.00	.30	700	N	N	30	1,000	2.0	N	N
AR228	38 31 16	112 14 27	.7	.20	.15	.05	500	N	N	50	50	2.0	N	N
AR229	38 31 52	112 14 14	5.0	2.00	2.00	.50	700	N	N	20	1,000	1.0	N	N
AR230	38 32 0	112 14 5	5.0	2.00	1.00	.20	1,500	N	N	20	1,500	1.0	N	N
AR231	38 31 58	112 14 17	5.0	2.00	2.00	.30	1,000	N	N	20	1,500	1.0	N	N
AR232	38 31 44	112 14 8	5.0	2.00	1.50	.30	700	N	N	20	1,000	N	N	N
AR233	38 31 41	112 13 54	10.0	3.00	5.00	.30	1,500	N	N	30	1,000	N	N	N
AR234	38 31 41	112 13 54	7.0	3.00	3.00	.30	1,000	N	N	20	1,000	N	N	N
AR235	38 31 33	112 14 5	5.0	3.00	1.50	.50	1,000	1.0	N	20	1,000	1.0	N	N
AR236	38 31 25	112 14 27	2.0	.05	.10	.50	20	N	N	100	1,500	<1.0	N	N
AR237	38 31 26	112 14 26	7.0	1.00	5.00	.70	1,500	N	N	30	1,500	1.0	N	N
AR238	38 31 33	112 14 18	7.0	2.00	2.00	.30	1,000	N	N	20	1,500	<1.0	N	N
AR239	38 31 5	112 14 35	5.0	1.00	.30	.30	700	1.0	N	20	1,000	<1.0	N	N
AR240	38 31 12	112 14 39	7.0	3.00	3.00	.50	1,000	N	N	20	1,500	1.0	N	N
AR241	38 30 53	112 14 41	5.0	2.00	2.00	.50	700	N	N	100	1,000	2.0	N	N
AR242	38 30 58	112 14 46	5.0	.70	.50	.20	100	2.0	N	20	3,000	N	N	N
AR243	38 31 5	112 14 45	5.0	2.00	1.00	.30	1,000	N	N	20	1,500	<1.0	N	N
AR244	38 31 17	112 14 49	1.5	.02	.07	.20	15	N	N	50	300	1.0	N	N
AR245	38 31 16	112 14 59	5.0	2.00	1.50	.30	700	N	N	20	700	1.0	N	N
AR246	38 31 15	112 15 11	3.0	1.00	.70	.15	300	N	N	70	1,000	<1.0	N	N
AR247	38 31 31	112 15 16	5.0	1.50	3.00	.50	1,000	N	N	20	700	N	N	N
AR248	38 31 27	112 15 24	7.0	2.00	3.00	.30	2,000	N	N	10	700	N	N	N
AR249	38 31 25	112 15 27	.2	.02	2.00	.50	15	N	N	50	1,000	N	N	N
AR250	38 31 16	112 15 29	5.0	3.00	1.00	.30	2,000	N	N	20	1,000	<1.0	N	N
AR251	38 31 7	112 15 28	5.0	1.50	2.00	.20	700	N	N	70	700	1.0	N	N
AR252	38 31 4	112 15 14	5.0	2.00	2.00	.20	1,000	N	N	10	1,000	1.0	N	N
AR253	38 31 1	112 15 12	3.0	3.00	7.00	.20	1,000	N	N	100	700	<1.0	N	N
AR254	38 30 56	112 15 13	7.0	3.00	2.00	.50	700	N	N	70	1,000	1.5	N	N
AR255	38 31 0	112 15 22	2.0	.50	.15	.15	150	N	N	10	2,000	<1.0	N	N
AR256	38 30 51	112 15 28	7.0	3.00	2.00	.50	1,000	N	N	50	1,500	1.0	N	N
AR257	38 32 42	112 15 58	7.0	2.00	3.00	.30	1,000	N	N	30	1,500	<1.0	N	N
AR258	38 32 42	112 15 58	10.0	3.00	3.00	.50	1,500	N	N	20	2,000	<1.0	N	N
AR259	38 32 28	112 16 1	5.0	1.50	2.00	.20	1,000	N	N	20	1,000	1.0	20	N
AR260	38 32 10	112 16 0	5.0	3.00	3.00	.20	1,000	N	N	20	1,000	<1.0	N	N
AR261	38 31 52	112 16 4	7.0	2.00	2.00	.30	1,500	N	N	20	1,500	<1.0	N	N
AR262	38 31 41	112 15 50	7.0	2.00	5.00	.50	1,000	N	N	10	1,500	N	N	N
AR263	38 31 28	112 15 40	7.0	2.00	3.00	.50	1,500	N	N	30	1,500	1.0	N	N
AR264	38 31 12	112 15 40	3.0	1.00	.05	.50	150	N	N	200	1,000	<1.0	N	N
AR265	38 31 11	112 15 32	7.0	3.00	2.00	.30	1,500	N	N	50	1,500	<1.0	N	N
AR266	38 31 47	112 16 11	7.0	2.00	3.00	.30	1,000	N	N	20	700	1.0	N	N
AR267	38 31 30	112 15 56	5.0	2.00	2.00	.30	1,000	N	N	50	1,500	<1.0	N	N
AR268	38 31 23	112 16 18	7.0	2.00	2.00	.30	1,000	N	N	15	1,500	<1.0	N	N
AR269	38 32 52	112 15 24	7.0	1.50	3.00	.30	500	N	N	20	1,000	<1.0	N	N
AR270	38 32 36	112 15 23	.7	.70	1.00	.07	300	N	N	50	300	7.0	N	N

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR226	N	N	15	70	N	<20	<5	100	N	N	700	100	N	20	N	300	N	<1
AR227	30	50	100	50	N	N	50	30	N	N	500	150	N	30	N	150	N	<1
AR228	N	N	5	30	<5	30	5	100	N	N	N	<10	N	30	N	150	N	<1
AR229	20	20	70	50	N	N	20	50	N	N	700	200	N	20	N	100	N	1
AR230	20	30	70	50	N	N	20	70	N	N	500	200	N	20	N	100	N	<1
AR231	20	20	100	50	N	N	30	30	N	N	700	300	N	30	N	150	N	<1
AR232	15	30	10	50	N	N	20	20	N	N	500	300	N	30	N	100	N	<1
AR233	30	15	70	30	N	N	15	20	N	N	1,000	500	N	30	N	150	N	1
AR234	30	15	50	30	N	N	10	20	N	N	700	300	N	30	N	100	N	2
AR235	20	30	50	50	N	N	20	50	N	N	700	200	N	20	N	100	N	1
AR236	N	50	50	70	<5	<20	5	100	N	N	1,000	150	N	15	N	200	N	<1
AR237	50	100	100	70	5	<20	50	70	N	N	1,000	500	N	30	N	300	N	1
AR238	30	20	50	50	N	N	20	50	N	N	500	300	N	30	N	200	N	2
AR239	15	30	70	30	70	N	20	30	N	N	300	200	N	15	N	150	N	5
AR240	30	70	150	70	N	<20	50	30	N	N	700	300	N	30	N	200	N	1
AR241	30	50	70	70	N	20	30	70	N	N	500	200	N	30	N	200	N	1
AR242	10	70	300	50	7	N	20	70	N	N	500	150	N	10	N	150	N	4
AR243	20	30	70	50	20	N	20	100	N	N	700	200	N	20	N	100	N	4
AR244	N	N	20	20	N	N	5	30	N	N	700	150	N	20	N	70	N	<1
AR245	20	50	50	50	7	N	30	30	N	N	700	200	N	20	N	70	N	<1
AR246	7	20	15	30	5	N	15	50	N	N	500	150	N	10	N	100	N	1
AR247	15	<10	50	30	N	N	5	20	N	N	700	300	N	30	N	150	N	<1
AR248	20	<10	20	30	N	N	<5	20	N	N	700	200	N	30	N	150	N	<1
AR249	N	10	N	50	7	N	5	30	N	N	1,500	200	N	20	N	150	N	<1
AR250	10	30	15	30	N	N	20	30	N	N	300	200	N	15	N	150	N	1
AR251	5	<10	20	70	N	N	5	30	N	N	700	150	N	30	N	100	N	1
AR252	15	30	20	50	N	<20	30	30	N	N	500	150	N	20	N	100	N	1
AR253	5	50	150	30	5	N	20	200	N	N	150	150	N	30	N	150	N	2
AR254	30	30	70	70	N	<20	50	70	N	N	700	200	N	30	N	200	N	1
AR255	N	N	70	20	100	N	10	20	N	N	500	50	N	N	N	150	N	<1
AR256	30	70	200	100	N	<20	50	50	N	N	700	300	N	50	N	150	N	2
AR257	30	10	70	50	N	N	15	30	N	N	1,000	300	N	30	N	100	N	<1
AR258	30	10	100	50	N	N	10	30	N	N	1,000	300	N	30	N	150	N	<1
AR259	10	20	100	50	N	N	20	50	N	N	700	200	N	20	N	150	N	2
AR260	20	50	30	50	N	N	20	30	N	N	700	200	N	15	N	100	N	<1
AR261	30	70	50	50	N	N	30	50	N	N	700	200	N	30	N	150	N	1
AR262	30	20	50	30	N	N	10	15	N	N	1,000	500	N	50	N	100	N	1
AR263	30	10	100	30	N	N	7	30	N	N	700	300	N	30	N	100	N	2
AR264	N	<10	10	30	N	N	5	30	N	N	300	300	N	20	N	200	N	<1
AR265	30	50	50	50	N	N	30	30	N	N	1,500	500	N	30	N	150	N	<1
AR266	20	<10	50	50	N	N	5	30	N	<10	500	200	N	20	N	100	N	1
AR267	20	<10	50	50	N	N	5	15	N	N	150	200	N	30	N	100	N	<1
AR268	20	10	50	50	N	N	10	20	N	N	1,000	200	N	30	N	150	N	1
AR269	20	<10	30	50	N	N	7	30	N	N	700	200	N	30	N	150	N	<1
AR270	N	N	5	50	N	20	5	70	N	N	1,000	15	N	15	N	70	N	<1

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR271	38 32 44	112 15 50	5.0	2.00	2.00	.30	1,000	N	N	20	1,000	<1.0	N	N
AR272	38 32 36	112 15 41	5.0	1.00	3.00	.30	500	N	N	15	1,000	1.0	N	N
AR273	38 30 29	112 17 2	7.0	2.00	2.00	.30	1,500	N	N	30	1,000	<1.0	N	N
AR274	38 30 35	112 17 13	7.0	3.00	2.00	.50	1,500	N	N	10	1,000	N	N	N
AR275	38 30 51	112 17 8	7.0	2.00	2.00	.50	1,000	N	N	30	200	N	N	N
AR276	38 30 51	112 17 48	7.0	2.00	3.00	.30	1,000	N	N	10	1,500	<1.0	N	N
AR277	38 30 28	112 17 47	.2	.03	<.05	.50	70	N	N	10	1,000	N	N	N
AR278	38 30 56	112 17 29	7.0	3.00	3.00	.50	1,500	N	N	15	1,500	<1.0	N	N
AR279	38 31 5	112 17 15	5.0	2.00	1.50	.30	700	N	N	20	1,500	<1.0	N	N
AR280	38 30 20	112 17 30	2.0	.50	.20	.15	200	N	N	20	700	2.0	N	N
AR281	38 30 0	112 16 57	7.0	2.00	5.00	.50	1,500	N	N	20	1,000	1.5	N	N
AR282	38 30 0	112 16 35	1.5	.10	.50	.07	700	N	N	70	100	7.0	N	N
AR283	38 30 1	112 16 15	.7	.10	.50	.05	300	N	N	15	100	7.0	N	N
AR284	38 30 17	112 16 14	2.0	.05	.07	.50	15	N	N	30	1,000	N	N	N
AR285	38 30 18	112 16 8	.2	<.02	.05	.70	<10	N	N	15	1,000	N	N	N
AR286	38 31 9	112 16 35	7.0	2.00	3.00	.50	700	20.0	N	20	1,500	<1.0	N	N
AR287	38 31 25	112 17 19	7.0	2.00	3.00	.30	1,000	N	N	10	1,500	<1.0	N	N
AR288	38 31 28	112 17 28	.7	.03	.05	1.00	50	N	N	10	700	<1.0	N	N
AR289	38 31 16	112 17 37	7.0	2.00	2.00	.30	1,000	N	N	10	1,500	<1.0	N	N
AR290	38 31 32	112 16 56	5.0	.05	.07	.50	20	N	N	20	1,000	<1.0	N	N
AR291	38 31 37	112 16 43	7.0	3.00	3.00	.50	1,000	N	N	10	1,000	<1.0	N	N
AR292	38 31 25	112 16 47	7.0	2.00	3.00	.30	1,000	N	N	10	1,500	<1.0	N	N
AR293	38 31 28	112 17 2	7.0	2.00	3.00	.50	1,000	N	N	10	700	N	N	N
AR294	38 31 23	112 17 1	.7	.03	.10	.50	20	N	N	100	1,500	1.0	N	N
AR295	38 31 11	112 17 7	5.0	2.00	1.50	.20	700	N	N	20	1,000	1.0	N	N
AR296	38 31 10	112 16 9	5.0	1.00	.30	.50	150	N	N	150	1,000	<1.0	N	N
AR297	38 31 12	112 16 13	7.0	2.00	2.00	.30	1,500	N	N	70	1,000	<1.0	N	N
AR298	38 30 51	112 15 57	7.0	2.00	1.00	.30	500	N	N	100	700	N	N	N
AR299	38 30 49	112 16 13	1.0	1.00	3.00	.50	100	N	N	150	1,000	1.0	N	N
AR300	38 30 30	112 16 28	.5	<.02	.10	.50	15	N	N	10	2,000	N	N	N
AR301	38 30 32	112 16 11	5.0	.15	.07	.30	20	N	N	10	1,000	1.0	N	N
AR302	38 30 37	112 15 55	2.0	.03	.10	.20	15	N	N	15	700	N	N	N
AR303	38 30 18	112 15 47	.3	.10	.05	.50	30	<.5	N	15	500	N	N	N

TABLE 2. ANALYTICAL RESULTS FOR 303 ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR271	20	20	50	70	N	N	15	20	N	N	1,000	200	N	20	N	150	N	<1
AR272	15	<10	20	30	N	N	5	20	N	N	700	150	N	20	N	150	N	1
AR273	20	<10	30	50	N	N	7	20	N	N	700	300	N	30	N	100	N	<1
AR274	30	20	150	20	N	N	15	30	N	N	500	300	N	30	N	100	N	<1
AR275	30	20	100	30	N	N	10	20	N	N	700	500	N	50	N	100	N	<1
AR276	15	20	20	50	N	N	10	20	N	N	1,000	300	N	20	N	150	N	<1
AR277	N	<10	5	N	5	N	5	N	N	N	100	10	N	N	N	50	N	1
AR278	30	10	100	50	N	N	7	30	N	N	1,500	300	N	30	N	150	N	1
AR279	20	30	70	50	N	N	20	50	N	N	500	200	N	30	N	100	N	<1
AR280	N	<10	10	70	N	20	10	70	N	N	100	50	N	15	N	150	N	<1
AR281	30	100	100	50	N	<20	50	50	N	N	500	300	N	30	N	200	N	1
AR282	N	N	N	50	10	30	7	150	N	N	100	N	N	20	N	150	N	<1
AR283	N	N	N	50	N	30	5	70	N	N	100	N	N	20	N	100	N	<1
AR284	7	50	20	70	15	<20	10	30	N	N	1,500	150	N	20	N	200	N	1
AR285	N	100	15	100	7	20	7	50	N	N	1,500	300	N	30	N	200	N	<1
AR286	30	15	100	50	N	N	10	15	N	N	1,500	300	N	30	N	150	N	1
AR287	30	<10	20	50	N	N	7	30	N	N	1,500	300	N	30	N	150	N	1
AR288	N	N	10	N	7	<20	7	N	N	N	N	30	N	10	N	150	N	<1
AR289	20	20	50	50	N	N	15	20	N	N	1,000	300	N	30	N	150	N	<1
AR290	N	<10	70	50	N	N	7	15	N	N	1,000	300	N	30	N	150	N	<1
AR291	30	20	150	50	N	N	20	15	N	N	1,000	300	N	30	N	150	N	1
AR292	30	15	50	50	N	N	10	20	N	N	1,000	300	N	30	N	150	N	<1
AR293	30	10	100	50	N	N	7	20	N	N	1,000	500	N	30	N	100	N	<1
AR294	N	<10	<5	50	N	<20	7	20	N	N	1,000	200	N	20	N	150	N	<1
AR295	20	50	50	50	N	N	20	30	N	N	500	200	N	20	N	150	N	1
AR296	N	<10	30	N	N	N	5	30	N	N	500	200	N	20	N	150	N	<1
AR297	20	10	50	50	N	N	10	20	N	N	500	200	N	30	N	150	N	<1
AR298	10	<10	50	30	N	N	5	30	N	N	300	200	N	30	N	100	N	<1
AR299	N	10	15	50	N	N	5	50	N	N	500	300	N	20	N	100	N	<1
AR300	N	<10	N	N	5	20	5	N	N	N	N	30	N	N	N	300	N	<1
AR301	N	<10	50	50	5	<20	5	30	N	N	1,000	100	N	20	N	200	N	<1
AR302	N	<10	30	70	15	<20	5	50	N	N	1,000	100	N	15	N	150	N	<1
AR303	N	10	30	20	10	20	5	50	N	N	500	150	N	10	N	300	N	<1

TABLE 3. ANALYTICAL RESULTS FOR 57 SUBJECTIVE ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE, UTAH

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

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR601	38 32 55	112 11 4	.70	.50	1.50	.020	500	N	N	20	100	7.0	N	N
AR602	38 31 21	112 14 45	.07	<.02	<.05	.010	N	N	N	20	200	N	N	N
AR603	38 34 58	112 11 27	1.00	.20	.20	.030	700	--	N	30	70	5.0	N	N
AR604	38 34 57	112 10 4	1.00	.20	.20	.100	700	N	N	50	100	5.0	N	N
AR605	38 32 58	112 11 3	1.50	.70	.70	.030	500	N	N	70	150	5.0	N	N
AR606	38 31 37	112 10 32	7.00	.05	.07	.500	<10	N	N	50	1,000	1.0	N	N
AR607	38 32 7	112 11 18	7.00	2.00	2.00	.500	700	N	N	30	1,000	2.0	N	N
AR608	38 32 4	112 11 22	7.00	2.00	5.00	.500	500	N	N	20	1,500	1.0	N	N
AR609	38 31 39	112 11 36	.20	.02	.20	.500	10	N	N	20	1,000	<1.0	N	N
AR610	38 31 35	112 11 36	10.00	2.00	1.50	.500	1,000	N	N	50	2,000	1.5	N	N
AR611	38 31 23	112 11 44	7.00	1.00	.20	.700	70	N	300	100	150	1.0	N	N
AR612	38 31 3	112 10 37	10.00	.05	.10	.300	15	N	N	150	700	1.5	N	N
AR613	38 31 3	112 10 41	1.00	.20	.50	.020	500	N	N	50	200	3.0	N	N
AR614	38 31 3	112 10 49	1.00	.20	.50	.020	300	N	N	100	200	3.0	N	N
AR615	38 31 13	112 11 1	1.50	.05	.50	.700	10	N	N	30	700	N	N	N
AR616	38 31 17	112 11 8	.50	.03	.10	.500	10	<.5	N	20	1,000	<1.0	N	N
AR617	38 30 55	112 10 56	7.00	1.00	1.50	.500	200	N	N	50	1,000	5.0	N	N
AR618	38 30 58	112 10 57	3.00	.70	1.50	.200	300	N	N	30	1,500	1.5	N	N
AR619	38 31 3	112 10 58	1.50	.05	.15	.500	50	.5	N	20	1,000	2.0	N	N
AR620	38 31 17	112 10 27	.30	.03	.15	.700	N	N	N	50	1,000	N	N	N
AR621	38 31 23	112 10 41	5.00	2.00	2.00	.500	500	N	N	50	1,000	2.0	N	N
AR622	38 31 23	112 11 19	5.00	.20	.20	1.000	20	1.5	N	30	300	<1.0	N	N
AR623	38 30 5	112 12 24	.70	.20	.05	.020	300	2.0	N	20	100	5.0	N	N
AR624	38 30 1	112 12 37	7.00	2.00	3.00	.500	700	N	N	50	1,000	1.5	N	N
AR625	38 28 40	112 14 27	1.00	.10	.20	.030	700	N	N	70	100	5.0	<10	N
AR626	38 28 0	112 12 53	1.00	.05	.07	.300	30	N	N	20	500	<1.0	N	N
AR627	38 28 20	112 12 27	5.00	.70	.10	.200	20	N	N	300	1,500	2.0	<10	N
AR628	38 28 37	112 11 49	3.00	.30	.15	.300	30	N	N	100	5,000	1.0	N	N
AR629	38 28 59	112 11 50	3.00	.07	.15	1.000	15	N	N	20	300	N	N	N
AR630	38 30 32	112 11 12	7.00	.02	.20	N	>5,000	N	500	10	700	150.0	N	N
AR631	38 29 47	112 11 38	1.00	.05	.70	1.000	700	N	<200	20	5,000	1.0	N	N
AR632	38 29 44	112 11 42	1.00	.50	.20	.020	150	N	N	30	100	1.5	N	N
AR633	38 30 1	112 11 37	5.00	1.50	.20	.200	500	N	N	70	700	5.0	N	N
AR634	38 29 49	112 11 41	.20	.10	.05	.015	70	N	N	50	150	1.0	N	N
AR635	38 29 50	112 14 0	1.00	.50	.20	.050	150	N	N	50	50	5.0	N	N
AR636	38 29 58	112 13 0	7.00	1.50	3.00	.700	3,000	N	N	30	2,000	2.0	N	N
AR637	38 29 2	112 12 38	1.00	.20	.20	.030	500	N	N	50	100	7.0	N	N
AR638	38 29 58	112 14 41	7.00	.70	.15	.500	70	N	200	100	2,000	1.0	N	N
AR639	38 30 4	112 14 31	.20	<.02	.05	.500	10	N	N	20	1,000	1.0	15	N
AR640	38 30 4	112 14 33	7.00	2.00	1.50	.300	500	N	N	300	1,000	3.0	N	N
AR641	38 30 49	112 13 2	.20	.05	.15	.015	200	100.0	N	30	50	150.0	N	N
AR642	38 32 4	112 12 32	.50	.05	.05	.300	N	N	N	70	500	<1.0	N	N
AR643	38 30 54	112 14 16	1.50	.20	.20	.015	100	7.0	N	30	150	1.0	N	N
AR644	38 30 26	112 14 59	5.00	1.00	.30	.500	150	7.0	N	30	2,000	1.0	N	N
AR645	38 31 31	112 14 22	3.00	.30	.07	.200	50	5.0	N	50	3,000	5.0	N	N

TABLE 3. ANALYTICAL RESULTS FOR 57 SUBJECTIVE ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE,
UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR601	N	N	<5	50	N	15	<5	100	N	N	100	10	N	20	N	100	N	<1
AR602	N	N	7	N	N	N	N	10	N	N	200	200	N	N	N	10	N	<1
AR603	N	N	<5	50	5	15	5	150	N	N	N	70	N	20	--	150	N	1
AR604	N	<10	7	50	N	30	5	150	N	N	N	50	N	20	N	150	N	1
AR605	N	<10	10	50	15	20	5	100	N	N	N	50	N	20	N	150	N	<1
AR606	N	100	10	70	7	<10	<5	100	N	N	700	150	N	<10	N	150	N	1
AR607	20	50	50	50	N	<10	30	50	N	N	700	200	N	30	N	200	N	1
AR608	20	50	100	70	N	<10	30	70	N	N	700	300	N	30	N	200	N	1
AR609	N	30	30	50	5	N	5	50	N	N	1,500	200	N	10	N	150	N	2
AR610	100	200	150	70	5	<10	150	50	N	N	300	300	N	50	N	200	N	1
AR611	N	70	30	70	15	<10	<5	50	N	N	150	200	N	30	N	200	N	3
AR612	N	100	150	50	N	<10	10	30	N	N	700	200	N	20	N	150	N	1
AR613	N	N	5	20	N	<10	5	100	N	N	100	30	N	N	N	70	N	<1
AR614	N	<10	7	20	N	<10	7	150	N	N	150	20	N	N	N	70	N	1
AR615	N	50	<5	20	5	N	5	30	N	N	300	150	N	N	N	150	N	1
AR616	N	50	15	70	N	N	<5	50	N	N	700	200	N	10	N	150	N	1
AR617	150	100	200	70	5	<10	200	50	N	N	500	200	N	30	200	200	N	1
AR618	10	10	50	50	N	N	15	70	N	N	700	100	N	10	N	150	N	<1
AR619	N	70	50	50	5	N	5	50	N	N	1,000	150	N	20	N	150	N	5
AR620	N	70	30	30	5	15	N	70	N	N	700	200	N	10	N	200	N	3
AR621	30	50	200	70	5	<10	30	70	N	N	700	300	N	30	N	300	N	1
AR622	N	50	700	30	15	20	15	70	N	10	700	150	N	20	N	700	N	2
AR623	N	N	<5	50	50	15	5	150	N	N	<100	20	N	20	N	150	N	100
AR624	30	70	150	70	5	10	50	70	N	N	700	300	N	50	N	300	N	3
AR625	N	<10	7	70	20	15	5	150	N	N	N	10	N	30	N	150	N	1
AR626	N	10	20	70	15	<10	5	150	N	N	1,000	100	N	10	N	150	N	1
AR627	N	50	15	30	15	N	5	50	N	N	100	150	N	10	N	150	N	2
AR628	N	<10	7	70	10	10	N	50	N	N	200	100	N	15	N	300	N	1
AR629	N	70	20	50	5	<20	N	30	N	N	2,000	200	N	<10	N	300	N	1
AR630	N	<10	70	N	10	N	7	N	N	N	<100	200	50	20	N	N	N	9
AR631	N	70	300	50	10	10	50	70	N	N	100	100	N	N	N	500	N	3
AR632	N	10	15	70	N	N	10	N	N	N	<100	30	N	20	N	150	N	10
AR633	20	<10	30	100	15	15	15	50	N	N	100	70	N	30	N	500	100	2
AR634	N	<10	10	N	N	N	<5	N	N	N	N	20	N	N	N	70	N	1
AR635	N	N	N	70	10	30	5	100	N	N	N	<10	N	30	N	100	N	<1
AR636	30	70	200	70	500	<10	50	50	N	N	500	200	<50	30	N	150	N	15
AR637	N	<10	<5	50	15	15	5	150	N	N	N	15	N	15	N	150	N	<1
AR638	5	70	200	30	20	<10	15	30	N	N	500	300	N	<10	N	200	N	2
AR639	N	70	<5	20	10	<10	<5	--	N	N	700	200	N	N	N	150	N	1
AR640	15	30	100	70	20	<20	20	100	N	N	100	200	N	30	N	300	N	1
AR641	N	<10	15	N	N	N	5	N	200	N	N	20	N	N	N	N	N	1,800
AR642	N	70	<5	30	5	N	N	150	N	N	700	500	N	N	N	100	N	<1
AR643	N	N	100	N	70	N	5	70	N	N	N	30	N	N	N	15	N	90
AR644	10	50	100	50	30	<10	10	150	N	N	300	200	N	20	N	200	N	6
AR645	N	20	20	20	30	N	<5	150	N	N	200	150	<50	10	N	100	N	14

TABLE 3. ANALYTICAL RESULTS FOR 57 SUBJECTIVE ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE,
UTAH--Continued

Sample	LATITUDE	LONGITUD	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CD
AR646	38 31 18	112 14 22	15.00	.30	.70	.200	700	N	N	N	700	1.0	N	N
AR647	38 31 43	112 17 25	3.00	.02	.10	.700	20	N	N	50	2,000	N	N	N
AR648	38 31 58	112 13 11	15.00	<.02	.05	.500	300	N	300	10	1,000	N	N	N
AR649	38 32 31	112 14 0	1.00	.30	.05	.100	30	3.0	N	30	300	3.0	N	N
AR650	38 31 43	112 15 21	5.00	1.50	1.00	.200	200	N	N	100	1,000	<1.0	N	N
AR651	38 32 0	112 14 2	3.00	.70	.07	.500	50	2.0	N	100	300	1.0	N	N
AR652	38 31 23	112 14 23	.70	.07	<.05	.020	30	7.0	N	10	150	--	N	N
AR653	38 31 29	112 15 56	5.00	1.00	.50	.300	150	N	N	150	2,000	1.0	N	N
AR654	38 32 42	112 15 8	1.50	.05	.20	.300	70	N	N	50	300	1.0	N	N
AR655	38 31 3	112 17 18	2.00	.70	.10	.200	50	3.0	<200	50	700	2.0	N	N
AR656	38 31 16	112 16 58	2.00	.70	.15	.150	200	150.0	N	20	500	2.0	N	N
AR657	38 30 23	112 15 47	.10	<.02	.07	.200	<10	N	N	10	500	7.0	N	N

TABLE 3. ANALYTICAL RESULTS FOR 57 SUBJECTIVE ROCK SAMPLES FROM THE CENTRAL MINING AND INTRUSIVE AREA MARYSVALE,
UTAH--Continued

Sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AU(PPB)
AR646	70	70	150	N	N	N	50	15	N	N	N	150	N	30	<200	100	N	<1
AR647	N	10	20	70	N	N	5	50	N	N	2,000	150	N	20	N	200	N	1
AR648	N	100	20	N	100	10	5	70	N	N	700	200	N	30	N	500	N	1
AR649	N	10	15	20	15	N	7	20	N	N	300	70	N	N	N	100	N	9
AR650	<5	<10	15	30	N	N	<5	15	N	N	700	100	N	15	N	100	N	1
AR651	N	10	30	20	10	N	<5	30	N	N	150	200	N	20	--	150	N	20
AR652	N	<10	10	N	N	--	<5	150	N	N	N	--	N	N	N	50	N	70
AR653	<5	<10	20	30	N	N	5	70	N	N	200	150	N	20	N	150	N	<1
AR654	N	N	10	50	<5	<10	5	20	N	N	1,500	50	N	15	N	150	N	2
AR655	N	30	30	30	30	N	10	50	N	N	150	150	N	20	N	150	N	15
AR656	7	30	300	20	15	N	10	1,500	N	N	100	150	N	10	1,000	50	N	100
AR657	N	200	15	100	N	N	5	100	N	N	1,000	700	N	N	N	30	N	1