UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

DATA FOR FOUR DRILL HOLES, MOUNT MARGARET COPPER-MOLYBDENUM-GOLD DEPOSIT, SKAMANIA COUNTY, WASHINGTON

by

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Open-File Report 94-2-A (Paper copy)
94-2-B (Diskette)

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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1994

CONTENTS

ILLUSTRATION

TABLE

INTRODUCTION

This report tabulates locations, analyses, rock descriptions, and alteration types for 67 samples of core from four drill holes completed during exploration for the Mount Margaret copper-molybdenum-gold deposit. The deposit occurs in sections 8 and 17, T10N, R6E, in Skamania County, Washington (fig. 1). The geology and other features of the deposit area have been described by Hollister (1979) and Taylor (1980). Mineralization is associated with a quartz diorite porphyry stock of Miocene age. Alteration zoning is typical of the Lowell-Guilbert (1970) model for porphyry copper deposits and exhibits a potassic core surrounded by phyllic and propylitic haloes. The four drill holes sampled are shown on figure 1. Hole 10 is entirely within the potassic alteration zone. Holes 6 and 91 penetrated both the phyllic and potassic zones, and hole 50 is entirely within the phyllic zone.

This report consists of two parts. Part A is this printed report. Part B is an electronic version on a diskette that includes this text in ASCII format as well as the data from table 1 in a binary format and a program to convert these data into several different formats.

DESCRIPTION OF THE SAMPLES

Each sample was composited from typical material present in a 3-m run of core. The 3-m runs were spaced at irregular intervals along the length of each hole. Care was exercised to sample only the principal lithology in each sample interval. Thin cross-cutting bands of different rock types or highly mineralized veins or fractures were not included in the sample unless they were distributed through most of a given 3-m interval.

SAMPLE PREPARATION AND ANALYSIS

All samples were crushed in a steel jaw crusher and pulverized to a minus-100-mesh (0.15-mm) grain size in a vertical mill with ceramic plates. The samples from each hole were submitted to the analysts in a random sequence. Chemical analyses for 33 elements were determined in various laboratories of the U.S. Geological Survey in Denver, Colorado. The elements As, Bi, Cd, Sb, and Zn were determined using a hydrochloric acid-hydrogen peroxide digestion followed by atomic absorption specrometry (O'Leary and Viets, 1986). Gold, Te, and Tl were determined using flame or graphite-furnace atomic-absorption spectrophotometry (O'Leary and Chao, 1990). Colorimetry was used to determine tungsten (O'Leary and Welsch, 1990). The other 24 elements were determined using a six-step semiquantitative emission spectrographic technique (Adrian and others, 1990). Information concerning the quality of the analyses is given in Arbogast (1990) or in O'Leary and Viets (1986).

DESCRIPTION OF TABLE 1

Information about the samples is listed in table 1. Details concerning the column headings is given below.

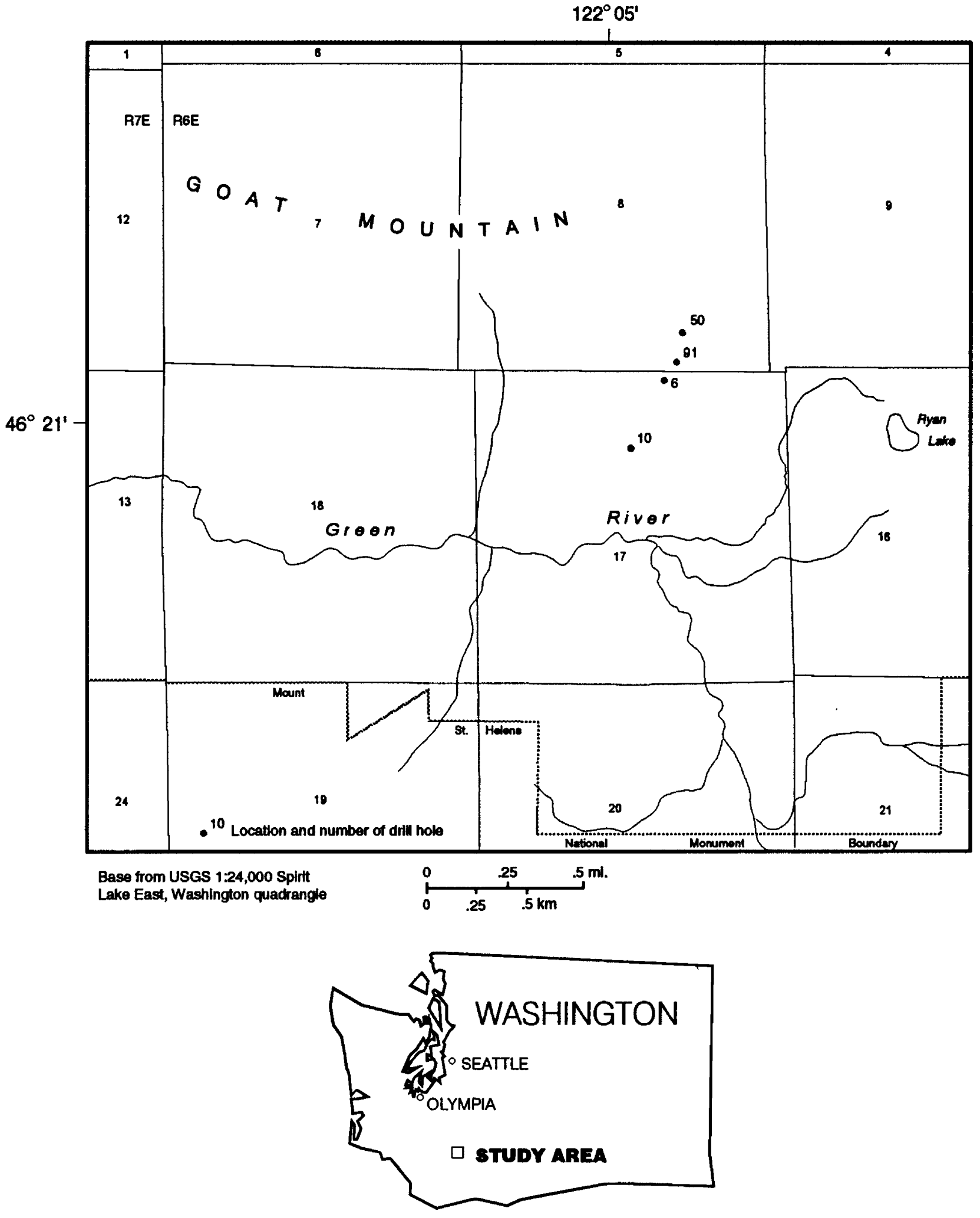

Figure 1. Map showing the location of the area of the Mount Margaret deposit and sites of the four drill holes sampled, Skamania County, Washington.

Sam. No.: For each sample number, the letter "W" indicates the project. The first two digits give the drill hole number and the last four digits the depth of the sample, in feet, below the collar.

Latitude and longitude: These data are given in degrees, minutes, and seconds.

Ag ppm through Zr ppm: These columns of analyses list the element symbol, whether the concentrations are in percent (%) or parts per million (ppm), and the analytical method. An "s" below the element symbol indicates that it was determined by semiquantitative emission spectroscopy; "aas" indicates atomic absorption analysis; and "cm" indicates colorimetric analysis. Within the data set, the values may be qualified with "N", "L", or "G". The meaning of these qualifiers is given on the first page of the table.

Rock descriptions and alteration zones: The rock type descriptions given in the table are taken from drill core logs in the archives of the Washington State Department of Natural Resources (Raymond Lasmanis, written commun., 1993). The alteration zone names are those used by Lowell and Guilbert (1970). Where the word "weathered" is not used in the description, the alteration is assumed to be predominantly hydrothermal in origin.

OTHER INFORMATION

The elements niobium and thorium, both analyzed using semiquantitative emission spectroscopy, are not shown in the table because in both cases all values were reported as "not detected" at their respective lower limits of determination of 20 ppm and 100 ppm.

Table 1 of this printed version of the report shows the correct number of significant digits for each variable. The data found in the binary files on the diskette may contain additional digits as a result of the method used to produce the files. These digits are not considered to be significant.

ACKNOWLEDGMENTS

I am indebted to Raymond Lasmanis, State Geologist and Division Manager of the Division of Geology and Earth Resources, Washington State Department of Natural Resources, for providing access to the sample material and for information on the geology and other aspects of the Mount Margaret deposit and to Roger Ashley, U.S. Geological Survey, Menlo Park, CA, for additional assistance. I am also grateful to many analysts in the U.S. Geological Survey for their help in providing the analyses shown in the tables. These analysts were R.T. Fairfield, R.H. Hill, D.L. Kelley, L.S. Laudon, T.A. Roemer, S.J. Sutley, and C.D. Taylor.

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Taylor, J.D., 1980, Margaret project status report: Duval Corporation, unpublished report, 22 p.

Table 1.--DATA FDR CDRE SAMPLES FRDM 4 DRILL HOLES, MOUNT MARGARET DEPDSIT, WASHINGTDN

[N=not detected at lower limit of determination shown preceding letter. L=detected but in a concentration less than value shown preceding letter. G=detected but in a concentration greater than value shown preceding letter]

Sam. No.	Latitude	Longitude	Ag ppm s	As ppm aas	Au ppm aas	B ppm s	Ba ppm s	Be ppm s	Bi ppm aas	Ca % s	Cd ppm aas	Co ppm s	Cr ppm s
W060040	46 21 22	122 04 50	2.0	10 N	0.100	300	100	1 L	1 N	0.30	1.7	10	10
W060075	46 21 22	122 04 50	2.0	10 N	0.06B	1500	100	1 L	1 N	0.50	0.3	20	20
W060105	46 21 22	122 04 50	2.0	40	0.100	200	150	1 L	1 N	1.00	0.4	7	20
W060135	46 21 22	122 04 50	0.5 L	40	0.026	150	150	1 L	1 N	1.00	0.1 N	15	10
W060175	46 21 22	122 04 50	0.7	10	0.064	200	100	1 L	1 N	1.00	0.2	15	20
W060225	46 21 22	122 04 50	0.5 N	10 N	0.150	20	50	1 L	1 N	1.00	0.1 N	10	15
W060275	46 21 22	122 04 50	3.0	10	0.150	100	70	1 L	1 N	0.70	0.4	15	20
W060325	46 21 22	122 04 50	1.0	10 N	0.100	100	70	1 L	1 N	0.70	0.4	10	30
W060375	46 21 22	122 04 50	1.0	10 N	0.086	70	50	1 L	1 N	0.70	0.5	15	20
W060425	46 21 22	122 04 50	1.5	10 N	0.100	15	50	1 L	1 N	0.70	0.2	7	20
W060475	46 21 22	122 04 50	2.0	10 N	0.250	10	70	1 L	1 N	1.00	0.1	15	20
W060525	46 21 22	122 04 50	0.7	10 N	0.150	100	100	1 L	1 N	0.70	0.1	10	20
W060575	46 21 22	122 04 50	0.7	10 N	0.150	10	50	1 L	1 N	0.70	0.1 N	10	15
W060625	46 21 22	122 04 50	0.7	10 N	0.07B	10	100	1 L	1 N	1.00	0.3	15	10
W060675	46 21 22	122 04 50	0.5	40	0.100	10	50	1 L	1 N	0.50	0.1 N	10	10
W060700	46 21 22	122 04 50	0.7	10 N	0.002	10	70	1 L	1 N	0.70	0.1 N	10	20
W100175	46 21 11	122 04 57	0.5	10 N	0.026	10	70	1 L	1 N	1.00	0.1 N	7	15
W100210	46 21 11	122 04 57	0.5	10	0.040	30	30	1 L	1 N	1.00	0.3	7	10
W100390	46 21 11	122 04 57	0.5 L	10 N	0.030	20	50	1 L	1 N	1.00	0.1 N	5 N	10
W100425	46 21 11	122 04 57	0.7	10 N	0.150	10	70	1 L	1 N	0.70	0.3	10	10
W100475	46 21 11	122 04 57	1.0	10 N	0.034	20	50	1 L	1 N	1.00	0.4	7	15
W100525	46 21 11	122 04 57	0.5	10 N	0.012	200	70	1 L	1 N	0.70	0.4	20	15
W100565	46 21 11	122 04 57	0.5	30	0.034	30	50	1 L	1 N	1.00	0.B	7	10
W100625	46 21 11	122 04 57	0.7	20	0.016	30	100	1 L	1	0.70	6.7	20	15
W100675	46 21 11	122 04 57	0.5	50	0.054	50	200	1 L	1 N	0.50	0.1	7	15
W100725	46 21 11	122 04 57	0.5	10 N	0.006	50	150	1 L	1 N	0.70	0.1 N	10	15
W100775	46 21 11	122 04 57	1.0	10	0.014	300	70	1 L	1 N	0.70	0.1 N	10	20
W100825	46 21 11	122 04 57	0.5 L	10 N	0.00B	30	70	1 L	1 N	1.00	0.1 N	7	15
W100875	46 21 11	122 04 57	0.5	10 N	0.100	20	200	1 L	1 N	0.70	0.1 N	15	15
W100925	46 21 11	122 04 57	0.5 L	10 N	0.058	15	70	1 L	1 N	1.00	0.1 N	7	10
W100975	46 21 11	122 04 57	0.5 N	10 N	0.008	20	70	1 L	1 N	0.70	0.1 N	10	10
W101025	46 21 11	122 04 57	0.5 L	10 N	0.008	50	70	1 L	1 N	1.00	0.1 N	10	10
W101075	46 21 11	122 04 57	0.5 N	10 N	0.002 N	20	70	1 L	1 N	1.00	0.1 N	7	10
W101125	46 21 11	122 04 57	0.5 L	100	0.014	30	50	1 L	1 N	0.70	0.1	5 L	15
W101160	46 21 11	122 04 57	0.5 N	10 N	0.006	10	50	1 L	1 N	0.70	0.1 N	7	10
W500025	46 21 29	122 04 43	0.7	10 N	0.032	30	200	1 L	1 N	0.05 L	0.1 N	7	10
W500075	46 21 29	122 04 43	1.5	10	0.060	70	200	1 L	1 N	0.05 L	0.1 N	15	20
W500175	46 21 29	122 04 43	1.0	10 N	0.150	20	300	1 L	1 N	0.50	0.1	30	15
W500225	46 21 29	122 04 43	0.5 L	10 N	0.070	30	200	1 L	1 N	0.05	0.1 N	50	15
W500275	46 21 29	122 04 43	0.5	10	0.064	30	200	1 L	1 N	1.00	0.1 N	20	10

Table 1.--continued

Sam. No.	Cu ppm s	Fe % s	La ppm s	Mg % s	Mn ppm s	Mo ppm s	Ni ppm s	Pb ppm s	Sb ppm aas	Sc ppm s	Sn ppm s	Sr ppm s	Te ppm aas	Ti % s
W060040	2000	1.5	20 N	0.5	150	30	15	50	12	7	10 L	150	0.020	0.3
W060075	1500	2.0	20 N	1.0	200	100	20	70	2	7	10	100	0.015	0.3
W060105	2000	2.0	20	0.7	200	200	20	15	6	7	10 L	200	0.085	0.3
W060135	300	2.0	20 N	0.7	300	10	20	10	2 N	7	10 N	150	0.010	0.3
W060175	300	3.0	20 N	0.7	500	7	15	10	8	7	10 N	200	0.150	0.3
W060225	100	1.0	20 N	0.5	150	5	20	10 N	2 N	7	10 N	500	0.015	0.5
W060275	1500	2.0	20 N	0.7	200	50	20	30	4	7	10 N	100	0.100	0.3
W060325	2000	2.0	20 N	1.0	150	50	20	50	6	10	10 L	150	0.005 N	0.3
W060375	2000	2.0	20 N	1.0	150	70	30	100	2 N	10	10 N	150	0.005	0.5
W060425	1500	1.0	20 N	1.0	150	20	30	10	2 N	10	10 N	200	0.065	0.3
W060475	2000	2.0	20 N	1.0	150	100	20	15	2 N	10	10 N	300	0.005	0.5
W060525	1500	2.0	20 N	1.0	100	100	30	10 L	2 N	10	10 L	200	0.005 L	0.3
W060575	700	2.0	20 N	0.7	150	30	20	10	2 N	10	10 N	200	0.080	0.3
W060625	1500	2.0	20 N	1.0	150	10	20	10 L	2	10	10 N	300	0.005 L	0.5
W060675	500	2.0	20 N	0.5	200	10	20	10 L	4	7	10 N	200	0.110	0.3
W060700	1000	3.0	20 N	0.7	100	70	20	10 L	2	10	10 N	200	0.250	0.3
W100175	500	3.0	20 N	1.0	200	10	15	10	2 N	10	10 N	300	0.100	0.3
W100210	700	1.5	20 N	0.7	200	50	15	10 L	28	5	10 L	200	0.005 N	0.2
W100390	700	0.7	20 N	0.3	100	5	5	10 N	2 N	5	10 N	300	0.005 L	0.5
W100425	1000	2.0	20	0.7	150	30	15	10 N	2	7	10 L	500	0.005 N	0.3
W100475	1000	1.5	20	0.7	150	30	20	10 L	2 N	7	10 N	500	0.045	0.3
W100525	700	2.0	20 N	0.7	150	20	15	10 L	2	5	10 L	150	0.010	0.3
W100565	700	2.0	20 N	0.5	150	5	20	30	2 N	7	10 N	200	0.100	0.5
W100625	500	5.0	20 N	0.7	150	5 L	15	10	2	5	10 N	150	0.800	0.3
W100675	500	2.0	20 N	0.3	100	5 L	15	10 L	84	5	10 N	150	0.100	0.2
W100725	500	2.0	20 N	1.0	150	5 N	20	10 L	2 N	7	10	150	0.150	0.3
W100775	2000	1.5	20 N	0.5	200	70	20	10	2 N	10	10	100	0.015	0.5
W100825	500	1.0	20 N	0.7	150	100	20	10 L	2 N	7	10	200	0.005 L	0.3
W100875	500	2.0	20 N	0.7	200	200	20	10 N	2 N	7	10 L	300	0.030	0.3
W100925	200	1.0	20 N	0.7	100	5 L	20	10 N	2 N	7	10 N	500	0.005 N	0.2
W100975	100	1.5	20 N	0.7	100	50	20	10 N	2 N	7	10 L	200	0.005 L	0.3
W101025	150	2.0	20 N	0.7	200	5	15	10 L	2 N	7	10 N	200	0.005 L	0.3
W101075	100	1.5	20 N	0.7	100	7	15	10 N	2 N	7	10 N	200	0.005 L	0.3
W101125	300	1.0	20 N	0.5	150	5 N	20	10 N	2 N	7	10 N	300	0.005 N	0.3
W101160	100	0.7	20 N	0.5	150	5 L	15	10 N	2 N	5	10 N	300	0.015	0.3
W500025	200	3.0	20 N	0.1	50	5 N	5 L	10 N	2 N	10	10 N	100 N	0.100	0.3
W500075	500	5.0	20	0.2	50	5 L	5	10 N	2 N	7	10 L	100 N	0.100	0.3
W500175	2000	5.0	30	0.7	200	5	30	10 L	2 N	10	10	100 N	0.005	0.3
W500225	1000	2.0	20	0.5	150	5 N	15	10 N	2 N	7	10	100 N	0.005	0.3
W500275	500	3.0	20 N	0.7	500	5 N	15	10 N	2 N	10	10	100 N	0.030	0.3

Table 1.--continued

Sam. No.	Tl ppm aas	V ppm s	W ppm cm	Y ppm s	Zn ppm aas	Zr ppm s	Rock description	Alteration zone
W060040	0.15	50	8.0	10	170	150	Volcanic breccia	Phyllic
W060075	0.40	50	7.5	10 L	85	50	Volcanic breccia	Phyllic
W060105	0.15	50	9.0	10	60	70	Volcanic breccia	Phyllic
W060135	0.50	70	4.0	10	130	70	Volcanic breccia (post-ore)	Phyllic-argillic
W060175	0.20	70	4.5	10	130	70	Volcanic breccia (post-ore)	Phyllic-argillic
W060225	0.40	70	3.5	10 L	50	70	Volcanic breccia	Phyllic
W060275	0.40	70	8.0	10 L	90	50	Volcanic breccia	Phyllic
W060325	0.25	100	5.5	10	85	100	Volcanic breccia	Phyllic
W060375	0.20	100	5.5	10 L	90	50	Quartz diorite	Phyllic-potassic
W060425	0.05	100	6.0	10 L	60	70	Quartz diorite	Phyllic-potassic
W060475	0.30	100	4.5	10 L	50	30	Quartz diorite	Phyllic-potassic
W060525	0.25	100	3.0	10 L	35	50	Quartz diorite	Potassic
W060575	0.25	100	2.5	10 L	75	50	Quartz diorite	Potassic
W060625	0.10	100	4.5	10	75	50	Quartz diorite	Potassic
W060675	0.10	70	2.0	10 L	65	50	Quartz diorite	Potassic
W060700	0.15	100	7.0	10	70	50	Quartz diorite	Potassic
W100175	0.25	100	3.0	15	60	70	Quartz diorite	Potassic
W100210	0.20	50	4.0	10 L	60	100	Quartz diorite	Potassic
W100390	0.25	50	5.5	10 L	15	100	Quartz diorite	Potassic
W100425	0.05	50	4.0	10	45	100	Quartz diorite	Potassic
W100475	0.10	70	7.0	10	95	100	Quartz diorite	Potassic
W100525	0.40	50	13.0	10 L	80	50	Quartz diorite	Potassic
W100565	0.15	70	7.0	10	190	70	Quartz diorite	Potassic
W100625	0.20	50	8.5	10 L	1100	70	Quartz diorite	Potassic
W100675	0.20	50	11.0	10 L	35	70	Quartz diorite	Potassic
W100725	0.25	70	15.0	10	15	50	Quartz diorite	Potassic
W100775	0.05	70	5.5	10	60	50	Quartz diorite	Potassic
W100825	0.35	70	7.0	10	25	70	Quartz diorite	Potassic
W100875	0.05	70	4.5	10	40	100	Quartz diorite	Potassic
W100925	0.05 L	70	3.5	10 L	20	100	Quartz diorite	Potassic
W100975	0.30	50	10.0	10	50	70	Quartz diorite	Potassic
W101025	0.25	70	3.0	10 L	30	100	Quartz diorite	Potassic
W101075	0.15	50	8.0	10 L	20	100	Quartz diorite	Potassic
W101125	0.15	70	7.0	10 N	35	70	Quartz diorite	Potassic
W101160	0.05 N	50	5.0	10	65	70	Quartz diorite	Potassic
W500025	0.65	70	9.0	10	5 N	500	Quartz diorite	Phyllic (weathered)
W500075	0.65	70	13.0	10	5	200	Quartz diorite	Phyllic (weathered)
W500175	0.35	100	7.0	30	30	200	Quartz diorite	Phyllic
W500225	0.55	50	10.0	10	20	70	Quartz diorite	Phyllic
W500275	0.45	70	5.5	10	25	100	Quartz diorite	Phyllic

Table 1.--continued

Sam. No.	Latitude	Longitude	Ag ppm s	As ppm aas	Au ppm aas	B ppm s	Ba ppm s	Be ppm s	Bi ppm aas	Ca % s	Cd ppm aas	Co ppm s	Cr ppm s
W500325	46 21 29	122 04 43	0.5	10 L	0.100	50	200	1 L	1 N	0.10	0.1 N	20	10
W500375	46 21 29	122 04 43	0.5	10 N	0.002 N	150	500	1 L	1 N	0.30	0.1	30	10
W500425	46 21 29	122 04 43	1.0	20	0.100	50	150	1 L	1 N	0.70	0.1 N	30	10
W500525	46 21 29	122 04 43	0.5	10 N	0.052	50	150	1 L	1 N	0.50	0.1 N	20	15
W500575	46 21 29	122 04 43	0.5	10 N	0.050	70	150	1 L	1 N	0.70	0.1	20	10 L
W500625	46 21 29	122 04 43	0.7	10 N	0.062	20	70	1	1 N	0.50	0.1	15	15
W500675	46 21 29	122 04 43	0.7	10 N	0.002 N	70	150	1 L	1 N	0.70	0.1 N	30	20
W500720	46 21 29	122 04 43	1.0	50	0.054	50	100	1 L	1 N	0.50	0.1	20	20
W500745	46 21 29	122 04 43	0.5	10 N	0.044	30	70	1 L	1 N	0.70	0.1 N	30	20
W910025	46 21 25	122 04 46	3.0	10	0.150	1500	100	1 L	1 N	0.05	0.1 N	7	15
W910075	46 21 25	122 04 46	2.0	40	0.056	2000 G	100	1 L	1 N	0.05 L	0.1 N	5	15
W910125	46 21 25	122 04 46	1.0	50	0.064	700	70	1 L	1 N	0.50	0.4	15	10
W910175	46 21 25	122 04 46	2.0	20	0.350	2000	100	1 L	1 N	0.50	0.1 N	20	10
W910225	46 21 25	122 04 46	0.7	10 N	0.100	100	100	1 L	1 N	0.50	0.1 N	20	20
W910275	46 21 25	122 04 46	1.0	10	0.250	1500	70	1 L	1 N	0.70	0.1 N	15	15
W910325	46 21 25	122 04 46	0.5	10	0.150	100	100	1 L	1 N	1.00	0.1 N	20	30
W910385	46 21 25	122 04 46	2.0	10 N	0.500	30	70	1 L	1 N	1.00	0.1	30	15
W910425	46 21 25	122 04 46	1.0	10 N	0.500	30	50	1 L	4	0.70	0.1	10	20
W910475	46 21 25	122 04 46	2.0	10 N	0.600	200	70	1 L	1 N	0.70	0.3	15	10
W910525	46 21 25	122 04 46	5.0	10 N	2.400	30	70	1 L	80	0.70	0.1 N	15	30
W910575	46 21 25	122 04 46	3.0	10 N	1.000	20	100	1 L	8	0.70	0.1 N	10	10 N
W910625	46 21 25	122 04 46	5.0	10 N	0.500	30	70	1 L	1 N	0.70	0.7	10	20
W910675	46 21 25	122 04 46	1.0	10 N	0.084	30	70	1 L	1 N	0.70	0.2	7	15
W910725	46 21 25	122 04 46	1.0	10 N	0.048	50	70	1	1 N	0.70	0.2	7	20
W910765	46 21 25	122 04 46	0.7	10 N	0.034	20	100	1	1 N	1.00	0.1 N	15	20
W910800	46 21 25	122 04 46	0.5	10 N	0.010	70	100	1 L	1 N	1.00	0.1 N	30	10
W910925	46 21 25	122 04 46	1.0	10 N	0.002 N	50	100	1 L	1 N	1.00	0.3	5	10

Table 1.--continued

Sam. No.	Cu ppm s	Fe % s	La ppm s	Mg % s	Mn ppm s	Mo ppm s	Ni ppm s	Pb ppm s	Sb ppm aas	Sc ppm s	Sn ppm s	Sr ppm s	Te ppm aas	Ti % s
W500325	1000	2.0	20 N	0.3	100	5 N	10	10 N	2 N	5	10 L	100 N	0.005 L	0.2
W500375	1000	3.0	30	0.5	100	5	20	10 N	2 N	7	10	100 N	0.005	0.3
W500425	1500	3.0	20	0.7	200	15	20	10	2	10	10 N	100	0.200	0.3
W500525	1000	3.0	20 N	0.5	150	7	15	10 N	2 N	10	10 L	100 N	0.250	0.3
W500575	1500	3.0	20 N	0.5	300	5 N	15	30	2 N	10	10 N	100	0.010	0.5
W500625	1000	1.0	20 N	0.5	150	5 L	15	10 N	2 N	10	10 L	100	0.005 L	0.3
W500675	500	3.0	20	0.7	200	20	20	10 L	2	10	10	100	0.100	0.3
W500720	2000	2.0	20 N	0.5	200	7	20	10 L	2	10	10 N	150	0.150	0.2
W500745	700	2.0	30	0.7	200	5 L	20	10 L	2 N	10	10 L	200	0.050	0.3
W910025	200	2.0	20 N	0.7	50	100	30	10	6	10	10	100 N	0.005 L	0.3
W910075	200	1.5	100	0.7	100	100	30	10	4	15	20	100 N	0.005 L	0.3
W910125	15000	2.0	70	0.7	150	100	20	20	6	10	10 L	100 N	0.005	0.5
W910175	3000	2.0	200	1.0	150	100	50	10 L	10	10	10	200	0.005 N	0.3
W910225	2000	2.0	70	1.0	200	70	30	10 L	2 N	10	10	100	0.005 L	0.3
W910275	3000	2.0	30	1.0	150	300	20	10 L	2	10	10	150	0.005 N	0.3
W910325	2000	2.0	20 N	1.0	300	100	70	10	2 N	7	10 N	100	0.010	0.5
W910385	3000	2.0	30	1.0	150	20	50	10 L	2 N	10	10 L	200	0.005	0.3
W910425	5000	2.0	20 N	1.0	200	50	30	10	2	10	10 L	100	0.005 N	0.3
W910475	5000	2.0	20	1.0	150	20	30	10 L	2 N	7	10 L	150	0.005 L	0.3
W910525	10000	2.0	50	0.7	150	300	30	10 L	2	10	10 N	200	0.150	0.5
W910575	10000	2.0	20 N	1.0	150	70	30	10 L	2 N	7	10 N	200	0.450	0.5
W910625	10000	1.5	50	0.5	200	5	20	20	4	7	10 L	200	0.120	0.2
W910675	1500	1.5	100	1.0	200	10	20	10 L	2	7	10 L	200	0.005 N	0.3
W910725	2000	1.0	70	0.5	200	300	20	15	2 N	10	10	200	0.005	0.3
W910765	1500	3.0	50	0.7	200	200	20	10 L	2 N	15	10 N	300	0.350	0.5
W910800	1000	3.0	20 N	1.0	200	5	20	10	2 N	10	10 N	200	0.600	0.5
W910925	1000	3.0	20	0.7	150	7	20	30	4	10	10 L	150	0.005 N	0.3

Table 1.--continued

Sam. No.	Tl ppm aas	V ppm s	W ppm cm	Y ppm s	Zn ppm aas	Zr ppm s	Rock description	Alteration zone
W500325	0.70	50	10.0	15	5	70	Quartz diorite	Phyllic
W500375	0.50	50	9.0	30	10	200	Quartz diorite	Phyllic
W500425	0.30	100	6.0	15	20	70	Quartz diorite	Phyllic
W500525	0.50	100	8.5	10	20	50	Quartz diorite	Phyllic
W500575	0.40	70	8.5	15	25	100	Quartz diorite	Phyllic
W500625	0.45	100	24.0	10	20	50	Quartz diorite	Phyllic
W500675	0.40	70	6.0	20	35	100	Quartz diorite	Phyllic
W500720	0.35	70	9.5	15	30	50	Quartz diorite	Phyllic
W500745	0.35	100	2.5	15	30	200	Quartz diorite	Phyllic
W910025	0.35	70	5.5	10 L	5	70	Quartz diorite	Phyllic (weathered)
W910075	0.15	100	8.0	10 L	10	100	Quartz diorite	Phyllic (weathered)
W910125	0.55	100	9.0	15	45	50	Quartz diorite	Phyllic-potassic
W910175	0.20	100	11.0	20	50	50	Quartz diorite	Phyllic-potassic
W910225	0.30	100	8.5	10 L	30	50	Quartz diorite	Phyllic-potassic
W910275	0.10	100	7.0	15	35	150	Quartz diorite	Phyllic-potassic
W910325	0.35	200	5.5	10 L	35	50	Quartz diorite	Phyllic-potassic
W910385	0.35	150	7.0	10	35	100	Quartz diorite	Phyllic-potassic
W910425	0.20	100	7.5	10	50	70	Quartz diorite	Potassic
W910475	0.10	70	7.5	10	55	100	Quartz diorite	Potassic
W910525	0.20	100	5.5	10	20	70	Quartz diorite	Potassic
W910575	0.10	100	5.0	15	30	70	Quartz diorite	Potassic
W910625	0.15	70	7.5	15	120	50	Quartz diorite	Potassic
W910675	0.20	50	9.0	20	60	50	Quartz diorite	Potassic
W910725	0.05	50	8.5	20	100	50	Quartz diorite	Potassic
W910765	0.10	100	10.0	20	70	200	Quartz diorite	Potassic
W910800	0.25	100	22.0	10	35	50	Quartz diorite	Potassic
W910925	0.20	70	7.0	15	60	50	Quartz diorite	Potassic