UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

ANALYTICAL DETERMINATIONS FROM SAMPLES TAKEN IN THE TEN MILE WEST ROADLESS AREA, BOISE AND ELMORE COUNTIES, IDAHO

by

Thor H. Kiilsgaard

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ABSTRACT

A total of 584 stream-sediment and rock samples were collected from within or near the Ten Mile West Roadless Area, Boise and Elmore Counties, Idaho, as part of a geologic study aimed at appraising the mineral resource potential of the area. Emphasis was placed on stream-sediment samples because stream sediments represent the erosional products of a drainage system and offer a rapid means of locating anomalous concentrations of ore-forming elements. An unusually high proportion of the stream-sediment samples contained concentrations of silver and molybdenum. Unaltered rocks of the area contain normal quantities of the common rock-forming elements. Some exposures of altered or mineralized rocks and some quartz veins contain significant quantities of gold and silver.

STUDIES RELATED TO WILDERNESS

The Wilderness Act (Public Law 88-577, September 3, 1964) and related acts require the U.S. Geological Survey and the U.S. Bureau of Mines to survey certain areas on Federal lands to determine their mineral resource potential. Results must be made available to the public and be submitted to the President and the Congress. This open-file report presents analytical determinations from stream-sediment and rock samples collected during the course of a geological study of the Ten Mile West Roadless Area in the Boise National Forest, Boise and Elmore Counties, Idaho. The Ten Mile West Roadless Area was classified as a further planning area or proposed wilderness during the Second Roadless Area Review and Evaluation (RARE II) by the U.S. Forest Service, January 1979.

INTRODUCTION

The Ten Mile West Roadless Area comprises 85,424 acres in the Boise National Forest, Boise and Elmore Counties, Idaho. The area adjoins the western side of the Sawtooth Wilderness. From Idaho City, the nearest town, the area may be reached by following State Highway 21 northeast for 16 miles to the junction of the graveled road leading east to Atlanta. This road is followed about 3 miles to the mouth of Banner Creek, from where an unimproved road follows that stream and Pikes Fork into the area, continuing to the vicinity of the air strip at Graham (fig. 1).

Field work in the area was done during the summer of 1979 and part of the summer of 1980. Able assistance in the work was given by Reed S. Lewis, Stephen T. Luthy, Donald W. Foster, and Michael A. Smith. Mr. Jean Brock, U.S. Forest Service, was helpful to the field party.

As a result of the field work, a geologic report has been prepared for publication (Kiilsgaard, MF-1500-A, 1983), as has a report that describes the geochemical findings (Kiilsgaard, MF-1500-B, 1983).

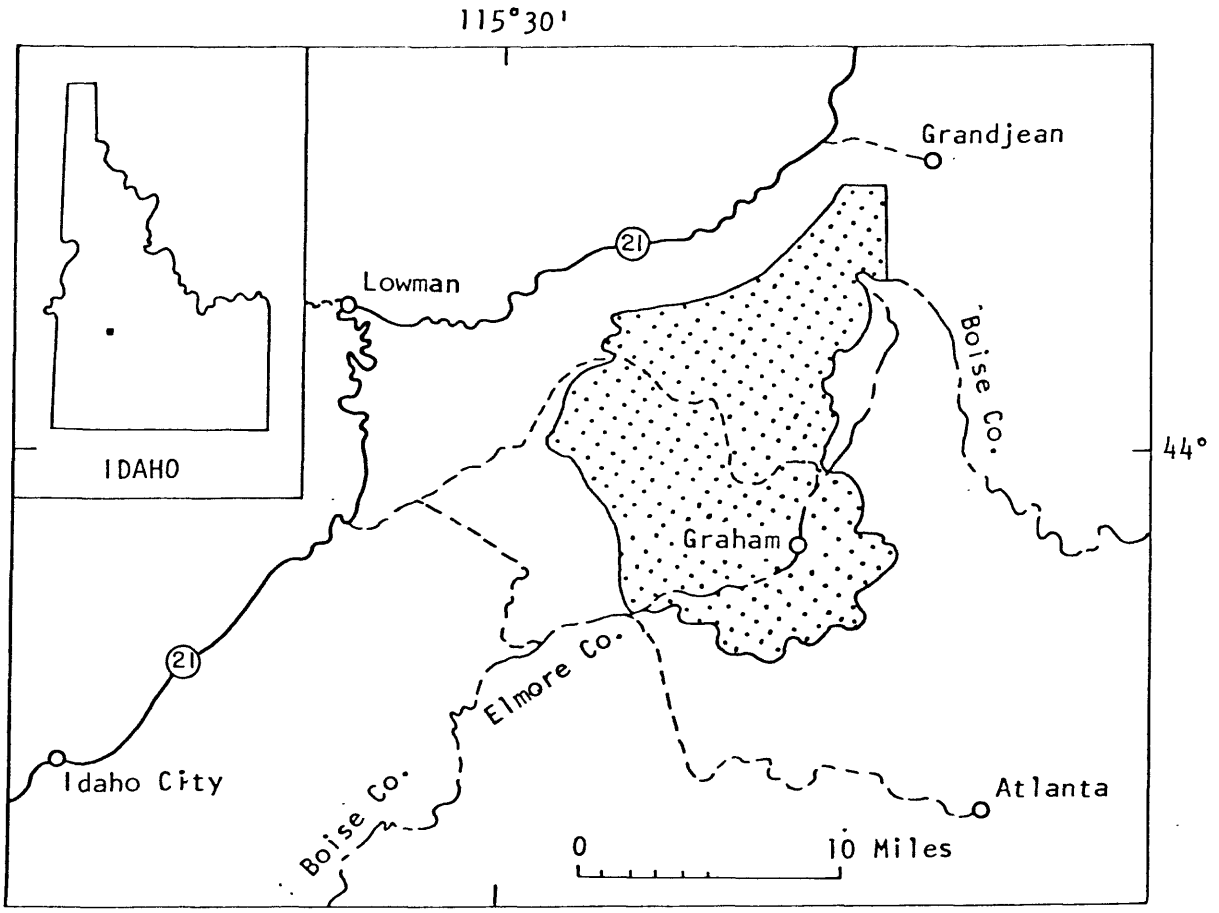

Figure 1. -- Index map showing location of Ten Mile West Roadless Area, Idaho

GEOCHEMICAL SAMPLING AND ANALYTICAL DETERMINATIONS

Rock and stream-sediment samples were collected in the Ten Mile West Roadless Area concurrent with geologic mapping (Kiilsgaard, MF-1500-A, 1983). The objective of the sampling program was to obtain basic information on the geochemistry of the area and to identify concentrations of elements that are associated with ore deposits. A total of 584 samples were collected and analyzed. Of these, 313 were stream-sediment samples, 181 were random rock samples and 90 were samples of altered or mineralized rock. Emphasis was placed on stream-sediment sampling because stream sediments represent the erosional products of a drainage system and offer a rapid means for locating anomalous concentrations of ore-forming elements. Location of the stream-sediment samples is shown on plate 1 and sample analyses are presented in table 1.

An unusually high proportion of stream-sediment samples contained concentrations of silver and molybdenum. Stream-sediment samples that contain detectable silver, 0.5 parts per million (ppm), by semiquantitative spectrographic analysis, commonly are considered anomalous; however, statistical study of the Ten Mile West samples indicates that only those containing 3 ppm silver or more should be considered as anomalous. These anomalous samples are chiefly from Grouse Creek, the vicinity of Bayhouse Pass, Big and Little Silver Creeks, and Spout Creek (pl. 1). Samples that contain 10 ppm molybdenum or more are considered anomalous and most of those samples are from drainage systems that also yielded high values in silver. Clusters of anomalous molybdenum values occur along the drainages of Big and Little Silver Creeks and in streams near the northwest border of the area, where Crooked River bends to the southwest.

Random samples of rock were taken to determine background values of elements in unaltered rocks, and the analytical determinations are presented in table 2. No significant variations in element concentrations were found. Leococratic monzogranite is slightly higher in silver than other rock types but the variation is not significant. The mafic rocks, particularly diabase, are higher in copper content as would be expected. In general, element values in the unaltered rocks are like those in the stream sediments that have been eroded from the rocks; therefore, it is reasonable to assume that anomalous quantities of ore-forming elements in the sediments have been eroded from mineralized outcrops.

Samples of hydrothermally altered rocks, mineralized shear zones and quartz veins were collected in order to compare the analytical results with those obtained from unaltered rocks and stream sediments. Sample locations of the altered and mineralized samples are shown on plate 2 and analytical determinations in tables 3 and 4. Two types of analytical determinations were made of the altered and mineralized samples: six-step semiquantitative spectrographic analyses were made to determine the possible presence of common ore-forming elements and atomic absorption analyses were made to check specific quantities of gold, silver, lead, zinc, copper and molybdenum in the samples. Quartz veins and altered rocks on the ridges adjacent to Big and Little Silver Creeks, and on the ridge between Johnson Creek and Black Warrior Creeks, contain significant quantities of gold and silver. Molybdenum also occurs in some of the veins and altered rocks, in amounts adequate to account for anomalous values in stream-sediment samples, although none of the rock samples contained ore-grade quantities of molybdenum.

REFERENCES CITED

Kiilsgaard, Thor H., 1983, Geologic map of the Ten Mile West Roadless Area, Boise and Elmore Counties, Idaho: U.S. Geological Survey Miscellaneous Field Studies Map MF-1500-A.

Kiilsgaard, Thor H., 1983, Geochemical map of the Ten Mile West Roadless Area, Boise and Elmore Counties, Idaho: U.S. Geological Survey Miscellaneous Field Studies Map MF-1500-B.

Table 1.—Analysis of stream-sediment samples from the Ten MileWest Roadless Area, Boise and Elmore Counties, Idaho

All samples were screened and the minus 80 mesh fraction analyzed by six-step semiquantitative spectrographic analysis, except U by fluorimetric analysis and F by specific ion electrode analysis. Numbers immediately below element headings show minimum limits of determination. The symbol – indicates the element was detected but below the determination limit or was looked for but not detected, except in the columns headed U and F where it indicates no analysis. Elements As (100), Au (10), Bi (10), Cd (20), Sb (100), Sn (10) and W (50) (minimum determination limits in ppm in parentheses) were looked for but either were below determination limits or not found, except samples 362 (50 ppm Sn), 845 (20 ppm Sn), and 757 (50 ppm Bi and 100 ppm W). Geographic sub-headings in the table identify the drainage area in which the samples were taken. Analysts: E.F. Cooley, F. Sanzolone and B. Arbogast.

Field No.	Lab No.	Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
		Percent				ppm																				
		.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
												Ten Mile Drainage														
19	LFA 012	2	.5	.5	.2	1500	1	70	1000	3	–	20	15	–	100	–	–	10	50	7	300	–	70	20	–	100
20	LFA 013	3	.7	.6	.2	5000	–	70	1000	3	10	30	20	–	50	–	–	20	50	10	200	–	100	20	–	100
21	LFA 014	3	.5	.5	.15	2000	–	50	1000	5	7	30	20	–	50	–	–	10	50	10	200	–	100	50	–	100
22	LFA 015	1.5	.15	.7	.07	500	2	70	1000	5	–	20	15	–	70	–	–	–	30	5	200	–	70	50	–	70
24	LFA 016	2	.5	.5	.2	1500	.7	50	1000	3	–	30	15	–	50	–	–	5	50	7	200	–	70	20	–	100
142	LFS 985	5	.7	.5	.5	300	–	50	500	2	20	50	50	–	50	–	30	30	70	15	200	–	100	20	–	200
143	LFS 986	1	.2	1	.2	200	–	20	500	2	10	20	15	–	50	–	20	–	50	7	500	–	50	10	–	100
154	LFS 992	5	.5	.7	.3	1500	–	20	700	2	–	10	5	–	100	–	50	5	100	7	1000	–	50	30	–	200
161	LFS 995	3	.5	.5	.3	3000	–	30	700	2	10	50	20	–	70	–	30	20	70	10	300	–	50	20	–	150
163	LFS 996	1	.15	.5	.1	1000	–	20	500	3	–	10	5	–	50	–	20	–	50	5	300	–	20	20	–	150
164	LFS 997	2	.2	.2	.15	1500	–	50	500	5	–	10	15	–	50	–	20	10	50	5	200	–	30	20	–	100
165	LFS 998	1	.15	.7	.15	1500	–	30	300	10	–	10	15	–	50	–	20	–	50	5	300	–	30	20	–	100
166	LFS 999	2	.3	.7	.3	200	–	30	500	5	10	20	15	–	100	–	–	10	50	7	300	–	50	50	–	100
167	LFV 001	1.5	.2	.7	.2	1000	–	30	500	3	–	10	10	–	50	–	30	5	50	5	300	–	30	30	–	150
168	LFV 010	2	.3	.7	.2	1000	–	10	500	2	–	20	10	–	70	–	20	–	50	5	500	–	50	20	–	150
293	LFS 035	2	.3	.5	.2	1500	–	50	1000	2	–	20	5	300	70	–	70	10	70	5	500	13	30	30	–	150
294	LFS 036	3	.5	.7	.3	2000	–	50	1500	2	10	30	10	300	70	–	100	10	70	7	700	14	50	30	–	200
295	LFS 037	.5	.1	.7	.03	1000	–	20	150	2	–	–	10	400	50	–	–	–	10	–	200	136	20	30	–	10
296	LFS 038	5	.5	.7	.5	5000	–	50	1500	3	–	15	5	400	50	–	50	10	100	10	700	3.7	50	20	–	200
297	LFS 039	1.5	.3	1	.15	2000	1.5	50	700	3	–	15	15	400	100	–	–	–	30	5	500	74	50	30	–	100
298	LFS 040	1.5	.2	.3	.15	700	–	30	700	2	–	15	5	200	70	–	20	20	20	5	200	12.8	20	20	–	150
299	LFS 041	2	.5	.5	.5	2000	–	50	1500	2	–	15	15	300	70	–	30	5	100	5	500	6.1	50	20	–	200
300	LFS 042	5	1	1	.7	2000	–	50	1500	2	10	100	20	300	150	–	100	10	100	15	700	17	100	50	–	300

Table 1.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			— Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
			Ten Mile Drainage—Continued																								
398	LFR	973	5	.5	1	.5	10000	—	100	1000	10	15	50	50	100	150	—	20	20	70	15	700	13	100	50	—	100
400	LFR	974	.5	.1	.7	.1	2000	—	20	300	5	—	10	20	—	50	—	—	—	30	5	150	—	50	20	—	20
451	LFS	043	5	.7	1	.3	2000	—	50	1000	3	10	70	15	400	150	—	20	10	70	10	700	5.7	70	30	—	200
452	LFS	044	7	.7	.7	.5	3000	—	20	1500	3	10	50	10	300	200	—	50	5	100	10	700	.9	50	30	—	200
453	LFS	045	1	.2	1	.2	1500	—	50	300	3	—	50	20	300	50	—	—	5	10	5	200	45	50	20	—	50
454	LFS	046	7	1	1	.5	2000	—	20	700	2	20	150	15	400	150	—	50	10	50	20	700	9.9	200	30	—	700
501	LFR	975	5	.3	.7	.3	10000	—	70	700	10	15	10	20	600	150	—	50	10	50	10	500	96	100	50	—	200
502	LFR	976	2	.3	.5	.3	1000	—	70	700	3	—	—	—	300	100	—	20	—	30	5	500	11	50	20	—	200
508	LFR	977	2	.3	1	.2	1500	—	50	700	3	—	50	15	300	150	—	20	10	50	5	700	37	50	30	—	150
509	LFR	978	2	.3	.7	.2	2000	—	50	700	5	—	20	10	200	100	—	50	10	70	5	700	9.3	50	50	—	200
510	LFR	979	2	.5	.7	.2	2000	—	50	1000	2	—	20	10	200	100	—	30	5	70	5	700	7.3	50	30	—	200
512	LFR	980	.5	.3	1.5	.15	2000	—	20	700	3	—	50	10	300	100	—	20	5	30	10	500	18	50	30	—	100
514	LFR	981	3	1	1	.5	3000	—	30	1500	3	—	50	10	200	100	—	50	10	100	10	1000	4.3	70	30	—	200
515	LFR	982	3	.5	.7	.5	3000	—	30	1000	3	10	50	15	200	150	—	50	10	100	10	700	1.3	50	30	—	200
516	LFR	983	2	.3	.5	.2	1500	1.5	50	700	3	10	50	10	300	70	—	20	20	50	5	500	12	50	30	—	100
517	LFR	984	3	.7	1	.5	2000	—	50	700	5	10	70	70	300	150	—	30	20	70	15	700	11	150	50	—	120
519	LFR	985	3	.7	1	.5	2000	—	30	1000	3	—	50	10	300	150	—	30	5	70	10	1000	7.2	70	30	—	200
604	LFS	082	3	.5	.7	.3	5000	.5	70	1500	5	—	30	10	600	150	—	50	5	150	10	500	8.5	70	50	—	200
606	LFS	083	2	.5	.5	.2	3000	—	50	1000	3	—	50	7	500	70	—	50	10	70	5	500	30	50	30	—	200
615	LFS	084	5	.5	.7	.3	5000	1	50	1500	3	10	50	20	300	150	—	70	10	70	10	700	1.2	100	50	—	300
627	LGJ	740	5	1	1	.5	100	1	20	1500	2	10	70	20	—	150	—	30	15	100	20	500	—		50	—	300
628	LGJ	741	2	.5	1	.2	1000	—	20	1000	3	5	50	15	—	70	—	20	10	70	5	500	—	70	30	—	150
629	LGJ	742	7	1.5	1	1	1000	—	20	700	2	20	100	20	—	100	—	20	15	100	20	500	—	150	50	—	300
283	LFS	029	1.5	.2	.3	.15	500	—	50	700	3	—	—	10	400	70	—	50	10	50	5	500	8.3	30	20	—	100
284	LFS	030	2	.2	.7	.2	2000	—	70	700	5	—	10	10	600	200	—	50	5	100	5	500	45	30	50	—	200

Table 1.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
											Johnson Creek Drainage																
261	LGJ	786	2	.5	2	.5	500	–	30	1500	2	5	30	5	200	150	–	20	–	70	10	700	2.9	70	30	–	300
262	LGJ	787	2	.5	2	.5	700	–	20	1500	2	5	20	5	200	150	–	20	–	70	10	700	9.9	50	30	–	300
265	LFS	017	2	.5	1	.3	2000	–	50	1500	3	–	30	15	200	100	–	50	10	70	7	700	13	100	20	–	200
266	LFS	018	5	.5	1	.3	2000	–	50	1500	2	–	20	5	200	150	–	20	5	70	7	700	5.3	50	30	–	200
267	LFS	019	3	.5	1	.3	2000	–	30	1500	2	–	30	7	200	150	–	20	5	70	7	700	24	70	30	–	150
268	LFS	020	2	.5	.7	.5	2000	–	50	1000	2	–	10	10	200	150	–	50	5	70	10	700	9.6	50	50	–	200
340	LFR	942	3	.5	.7	.3	1500	–	50	1000	2	10	50	10	200	100	–	20	15	70	10	700	13	50	20	–	200
341	LFR	943	2	.5	.7	.3	2000	–	30	1000	3	–	30	10	200	200	–	30	5	50	7	700	9.3	50	50	–	700
342	LFS	009	2	.5	.7	.3	2000	–	50	1000	3	–	20	10	200	150	–	20	10	70	5	700	3.7	50	30	–	200
360	LFR	952	3	.7	.7	.3	2000	–	50	1000	2	10	50	15	200	200	–	50	10	70	10	1000	23	70	100	–	150
382	LFR	968	3	.7	1	.5	3000	–	50	2000	2	–	20	10	100	200	–	20	5	70	10	1000	10	50	50	–	50
390	LFR	970	5	1	2	.5	2000	2	20	1000	3	10	70	100	300	150	20	20	15	150	10	700	5.1	100	30	–	200
419	LFS	091	5	.5	.7	.3	1500	.5	50	100	3	–	20	20	200	150	–	20	10	100	7	1000	8.8	70	20	–	200
420	LFS	092	5	.5	.7	.2	2000	1.5	100	700	3	–	20	10	400	150	–	20	10	70	10	500	26	70	50	–	200
424	LFS	093	7	.7	.7	.5	5000	5	150	1000	3	–	30	20	400	150	10	70	5	150	15	700	13	100	70	–	200
425	LFS	094	2	.5	.7	.2	3000	2	100	700	5	–	30	20	500	150	–	30	10	70	10	300	29	70	50	–	150
426	LFS	095	3	.5	.7	.3	3000	1	50	1000	2	–	30	20	300	150	–	20	10	100	10	500	8.5	70	50	–	200
427	LFS	097	3	.5	.5	.3	5000	–	150	700	2	–	30	20	300	150	–	30	10	100	10	300	4.3	70	30	–	200
428	LFS	098	3	.5	.7	.3	7000	–	70	1000	2	–	30	20	300	200	–	30	10	100	10	500	2	100	50	–	200
429	LFS	099	2	.3	.5	.2	1500	1	50	700	3	–	20	20	400	70	–	20	15	70	7	300	7.5	50	30	–	150
430	LFS	100	3	.5	.7	.3	5000	–	100	700	3	–	10	15	300	100	–	30	10	100	10	500	2.7	50	30	–	150
431	LFS	101	1.5	.3	.5	.2	1500	–	50	700	3	–	10	10	300	100	–	20	5	50	5	500	16	50	30	–	150
432	LFS	102	2	.3	.7	.15	1500	–	50	700	3	–	10	10	300	100	–	20	5	50	5	500	38	30	30	–	100
260	LFS	014	2	.5	.7	.3	5000	–	50	700	3	–	30	20	300	50	–	–	10	50	10	300	30	100	10	–	150

Table 1.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
Grouse Creek Drainage																											
385	LFR	969	2	.5	3	.2	5000	7	50	1000	3	—	50	20	200	100	—	20	—	500	10	500	4.9	100	50	—	100
153	LFS	110	5	.7	.7	.3	1500	—	70	1000	2	—	10	7	—	100	—	30	10	70	5	700	—	50	50	—	200
433	LFS	103	3	.5	.7	.2	2000	—	170	1000	3	—	50	10	300	100	10	20	5	100	10	1000	10	50	30	—	150
439	LFS	104	7	1	.7	.5	3000	.5	100	700	3	20	50	30	400	100	—	20	20	100	15	500	6	150	30	—	200
440	LFS	105	5	1	.7	.5	1500	—	100	700	2	10	50	20	300	100	—	20	20	70	15	300	57	150	30	—	200
441	LFS	106	5	1	.7	.5	7000	—	100	700	3	20	10	50	300	100	—	20	20	70	15	300	9.3	150	20	—	150
442	LFS	107	3	.5	.7	.3	1500	.5	50	1000	3	—	20	10	100	70	—	20	5	70	7	700	1.9	50	20	—	200
Cow Creek Drainage																											
361	LFR	953	5	.7	1	.5	2000	—	30	1000	2	10	50	20	200	100	—	50	15	100	10	1000	11	100	30	—	150
362	LFR	954	5	.7	1	.5	2000	—	50	1000	3	10	20	10	300	100	—	20	5	70	10	1000	15	100	30	—	300
363	LFR	955	2	.5	.7	.2	2000	—	50	700	5	10	30	20	300	100	—	20	10	50	10	500	9	100	30	—	150
364	LFR	956	3	1	.7	.3	2000	—	20	1000	2	10	50	20	200	50	—	20	15	100	10	500	2.6	100	20	—	150
365	LFR	957	2	.3	.5	.2	1000	—	30	700	3	—	20	15	300	50	—	20	10	50	5	300	13	50	30	—	150
366	LFR	958	1.5	.2	.5	.2	1000	—	50	700	3	—	5	10	200	70	—	30	5	50	5	500	27	30	30	—	200
367	LFR	959	3	.7	.7	.3	5000	—	50	1500	3	10	50	15	200	70	—	30	5	100	10	700	3.9	100	30	—	200
369	LFR	960	5	1	.5	.3	2000	2	50	1500	5	10	50	15	500	150	—	30	10	150	10	700	3.9	100	30	—	150
370	LFR	961	3	.5	.5	.3	1000	—	30	1000	3	—	20	10	300	70	—	50	10	70	7	500	15	50	30	—	150
371	LFR	962	5	.5	.7	.3	5000	.5	70	700	3	10	50	50	300	200	—	20	20	70	10	300	7.8	150	100	—	150
372	LFR	963	5	.7	.7	.5	3000	—	50	1500	2	10	30	30	300	150	5	30	7	70	10	500	8.5	100	50	—	200
373	LFR	964	2	.7	.5	.3	1500	—	50	1000	2	—	10	—	400	70	—	30	5	70	5	500	3.1	50	20	—	200
374	LFR	965	3	.5	.7	.3	2000	—	50	1000	3	—	10	15	400	150	—	20	5	70	10	700	20	100	30	—	200
375	LFR	966	5	.7	.7	.5	2000	.5	50	1000	2	10	100	50	100	150	—	50	10	100	15	700	12	100	30	—	200
376	LFR	967	3	.7	.7	.3	2000	1	50	700	3	10	50	50	100	100	—	20	15	150	10	500	7.2	100	30	—	—
764	LGJ	738	3	.5	1	.5	1000	—	20	1000	3	5	20	10	—	200	—	50	10	70	10	700	—	70	—	—	200
765	LGJ	739	3	1	1	.5	1000	—	30	1000	3	10	70	20	—	150	—	30	20	100	10	500	—	70	—	—	150
845	LGJ	743	2	.3	.7	.2	500	1	20	700	10	—	20	20	—	200	—	20	5	50	7	500	—	70	200	—	100

Table 1.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
Big and Little Silver Creek																											
101	LFA	068	2	.3	.7	.15	500	.5	50	700	3	5	20	10	—	50	—	—	5	30	5	200	—	50	20	—	150
102	LFA	069	2	.5	.5	.15	700	.5	50	1000	3	5	20	7	—	50	—	—	7	30	5	200	—	50	20	—	100
103	LFA	070	3	.3	.5	.2	700	—	50	700	7	—	50	10	—	70	—	20	10	20	7	200	—	50	30	—	200
104	LFA	071	5	.5	.5	.15	1000	1	30	1000	5	—	30	10	—	100	—	—	10	50	5	300	—	50	20	—	100
105	LFA	072	2	.5	.5	.2	1000	—	70	500	5	—	50	15	—	50	—	—	10	20	5	200	—	50	20	—	100
106	LFA	073	2	.5	.1	.2	1000	5	50	1000	5	—	30	10	—	70	20	—	7	50	5	200	—	50	20	—	100
107	LFA	074	3	.5	.2	.2	1000	2	50	1000	5	—	20	10	—	100	20	20	5	50	5	300	—	50	30	—	200
108	LFA	075	3	5	.2	.15	1000	1	50	1000	7	—	20	10	—	70	—	20	7	50	5	300	—	50	30	—	200
136	LFA	094	.5	.1	.5	.07	200	—	30	300	3	—	20	5	—	50	—	—	—	20	5	—	—	30	10	—	50
28	LFA	017	1.5	.2	.5	.15	200	.5	50	1000	2	—	20	7	—	50	5	—	5	20	5	300	—	50	20	—	100
29	LFA	018	2	.5	.5	.2	700	1.5	50	1000	3	10	50	15	—	200	5	30	10	70	10	300	—	70	50	—	100
31	LFA	019	1.5	.3	.3	.1	700	1	50	1000	3	—	20	10	—	70	—	—	5	50	5	300	—	50	20	—	100
32	LFA	020	2	.5	.5	.1	1000	1.5	50	1000	3	—	20	10	—	70	5	20	5	50	5	300	—	50	20	—	100
34	LFA	021	1	.2	.2	.1	300	—	50	1000	3	—	—	5	—	50	—	—	—	20	5	300	—	30	15	—	100
35	LFA	022	1.5	.2	.3	.15	700	1	50	1000	5	—	20	7	—	100	5	—	5	30	5	200	—	50	20	—	150
36	LFA	023	2	.3	.3	.15	500	.5	50	1000	3	—	—	7	—	50	—	—	5	50	5	300	—	50	20	—	100
43	LFA	024	3	.5	.5	.2	1500	1	70	1000	5	10	50	20	—	50	10	20	15	100	10	200	—	100	20	700	200
44	LFA	025	2	.5	.7	.2	500	3	50	1000	5	-	20	10	—	70	5	—	10	70	7	500	—	50	20	--	100
45	LFA	026	1	.2	.5	.1	300	5	30	500	7	—	—	7	—	50	—	—	—	20	5	—	—	30	30	—	50
47	LFA	027	3	.5	.2	.2	700	3	50	1000	7	10	10	10	—	100	7	20	10	70	5	200	—	50	30	—	200
48	LFA	028	.7	.1	.5	.07	200	1	20	700	5	—	10	7	—	50	5	—	—	20	—	150	—	30	10	—	70
49	LFA	029	1	.2	.3	.1	300	5	50	700	7	—	10	7	—	200	5	20	—	20	—	300	—	30	100	—	50
50	LFA	030	2	.5	.5	.2	1000	5	50	1000	7	—	50	15	—	150	—	20	10	50	5	200	—	50	50	—	200
225	LFS	050	3	.5	1	.3	5000	—	70	700	3	10	50	50	200	50	—	20	20	100	15	300	1.5	150	30	—	150
558	LFS	007	2	.5	1	.5	700	.5	20	1000	5	10	50	10	300	150	5	20	10	50	15	700	11	100	50	—	200

Table 1.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
													Northwest Side of North Fork Boise River														
04	LFA	003	3	.5	1	.2	700	1	20	1000	2	–	20	10	–	50	–	–	10	50	5	500	–	50	20	–	100
07	LFA	005	–	.5	1	.2	1000	1	20	1000	3	–	20	10	–	100	–	–	10	50	7	500	–	50	30	–	100
12	LFA	009	3	.5	1	.2	700	–	20	1000	3	–	20	7	–	200	–	–	5	30	7	500	–	50	30	–	200
13	LFA	010	2	.2	1	.1	1000	–	20	1000	2	–	20	7	–	100	–	–	5	20	5	500	-	50	20	–	200
14	LFA	011	2	.3	1	.1	500	.5	50	1000	3	–	20	5	–	100	–	–	5	50	5	500	–	50	20	–	100
216	LFS	047	5	.7	.5	.2	3000	5	100	500	5	15	50	50	400	100	–	20	20	70	15	200	8.8	200	20	–	200
217	LFS	048	3	.5	.5	.2	2000	2	50	500	3	10	50	30	400	50	–	20	20	50	10	200	9.1	100	20	–	150
226	LFS	051	5	.5	1	.3	3000	–	50	1000	5	10	50	20	200	150	–	50	10	100	10	700	9.6	100	30	–	200
227	LFS	052	3	.3	.5	.2	1500	–	50	700	5	–	10	10	200	150	–	50	5	70	10	500	36	50	30	–	150
230	LFS	055	1	1	1	.3	3000	.5	50	1000	5	–	50	15	300	150	–	50	5	50	5	300	12	50	20	–	100
231	LFS	056	5	1	.5	.3	2000	–	50	1000	5	–	50	15	300	50	–	30	10	10	–	100	2.9	20	-	–	20
239	LFS	063	2	.3	1	.2	200	.5	50	1000	5	–	30	10	300	100	–	20	5	30	5	500	40	50	30	–	200
275	LFS	026	3	.5	.7	.3	1500	–	30	1000	2	–	10	10	200	200	–	70	10	100	5	1000	1.1	30	30	–	200
276	LFS	027	3	.5	.7	.2	1500	–	30	1000	2	–	10	7	200	100	–	30	10	100	5	700	1.3	20	20	–	150
277	LFS	028	3	.5	.7	.3	2000	–	30	1000	2	–	10	7	500	200	–	50	10	100	5	1000	2.8	30	30	–	200
351	LFR	949	2	.5	1	.2	2000	.5	30	1000	3	–	20	15	200	150	–	20	10	70	10	700	36	50	30	–	200
353	LFR	950	2	.5	1.5	.2	1000	–	20	1000	1	–	5	–	100	50	–	20	5	70	–	1000	1.2	30	–	–	150
228	LFS	053	3	.2	.5	.2	1500	–	50	700	3	–	–	10	300	100	5	30	5	70	5	500	9.2	50	30	–	150
229	LFS	054	5	1	.7	.2	2000	1	50	1000	3	–	30	20	300	150	10	50	5	100	10	500	18	70	50	–	200
													Taylor Creek														
09	LFA	006	2	.3	.7	.1	500	1.5	30	1000	2	5	20	7	–	50	10	–	5	100	5	500	–	30	10	–	100
64	LFA	035	2	.5	.5	.2	300	.5	70	700	5	–	50	15	–	50	–	–	10	50	7	250	–	70	20	–	300
66	LFA	036	2	.7	.3	.2	200	.5	100	500	3	–	70	20	–	50	–	–	20	20	10	150	–	70	20	–	100
67	LFA	037	1	.2	.3	.1	200	–	50	300	3	–	50	10	–	50	–	–	10	20	5	100	–	50	20	–	70
68	LFA	038	1.5	.5	.5	.15	300	–	50	500	3	10	30	7	–	70	–	–	5	20	5	200	–	50	20	–	70
69	LFA	039	3	.7	.5	.2	2000	1	100	700	5	–	50	20	–	70	–	20	20	70	7	200	–	70	30	–	150
71	LFA	040	1	.2	.5	.15	300	–	50	700	3	–	50	7	–	50	–	–	10	30	7	200	–	50	10	–	70
94	LFA	045	2	.5	.5	.2	500	.5	50	1000	3	–	20	10	–	100	5	20	10	30	7	300	–	50	50	–	150
95	LFA	046	2	.2	.5	.15	700	.5	20	1000	3	–	10	7	–	50	–	20	5	50	5	300	–	30	15	–	70
96	LFA	047	1.5	.2	.5	.1	500	2	20	700	5	–	20	7	–	50	–	–	5	50	5	300	–	50	10	–	100
97	LFA	048	1.5	.2	.7	.1	500	.5	20	700	3	–	50	5	–	70	–	–	7	30	5	300	–	50	20	–	100
98	LFA	049	2	.5	.5	.15	500	.5	20	700	3	–	50	10	–	50	–	–	10	30	5	300	–	50	20	–	100
99	LFA	050	1.5	.3	.7	.15	300	.5	30	700	3	–	50	10	–	50	–	–	10	20	5	300	–	50	20	–	70
100	LFA	051	2	.3	.7	.1	500	.5	50	500	5	–	50	10	–	70	–	–	10	50	5	200	–	70	30	–	70
219	LFS	049	5	1	1	.5	1500	–	70	700	3	10	50	50	300	50	–	20	20	100	15	300	5.7	150	30	–	200

Table 1.--Continued

Field No.	Lab No.	Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
		Percent				ppm																				
		.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
												Crooked River														
109	LFA 076	1	.1	.2	.07	200	–	20	300	5	–	30	7	–	50	–	–	–	20	–	–	–	50	15	–	200
110	LFA 096	3	.5	5	.2	700	1	50	1000	5	5	50	100	–	50	7	30	5	50	5	200	–	70	20	–	100
111	LFA 077	3	.5	.7	.2	1000	.7	20	700	5	5	50	10	–	50	20	20	10	20	7	300	–	50	20	–	100
112	LFA 078	5	1	.7	.5	700	.5	20	1000	3	10	70	20	–	70	10	20	20	30	10	500	–	70	20	–	150
113	LFA 079	.5	.1	.7	.07	500	.5	20	500	7	–	30	30	–	50	5	–	5	15	–	200	–	50	10	–	50
115	LFA 080	1	.2	.7	.1	300	.5	20	500	5	–	50	30	–	50	10	–	5	10	–	200	–	50	20	–	70
116	LFA 081	1.5	.3	.7	.15	500	.5	50	500	7	–	50	30	–	50	10	–	5	20	5	200	–	50	20	–	150
117	LFA 082	5	1	.5	.3	1000	.5	70	1000	7	5	50	50	–	70	20	20	20	50	20	200	–	70	30	–	150
118	LFA 083	2	.5	.7	.2	1000	–	50	1000	5	5	50	20	–	70	–	–	20	20	20	300	–	70	20	–	150
119	LFA 084	1	.3	7	.1	500	1	30	700	5	5	30	20	–	70	–	–	10	20	10	300	–	50	20	–	70
120	LFA 085	2	.7	.5	.2	700	1	30	1000	10	5	100	20	–	70	10	–	20	50	10	300	–	70	20	–	100
121	LFA 086	2	.7	.5	.2	700	1	30	1000	15	10	70	20	–	50	5	20	20	70	10	300	–	50	20	–	150
122	LFA 087	3	1	.7	.2	500	.7	30	1000	7	10	70	20	–	100	–	–	20	50	10	300	–	50	20	–	100
123	LFA 088	3	.5	.5	.2	500	1.5	30	1000	7	7	70	20	–	70	–	–	20	50	10	300	–	50	20	–	150
124	LFA 089	1.5	.2	.5	.15	500	1	30	700	5	5	50	7	–	70	–	20	–	20	7	300	–	50	30	–	100
125	LFA 090	.7	.1	.5	.1	500	.7	20	500	3	–	30	7	–	50	–	–	–	15	–	200	–	50	20	–	70
126	LFA 091	2	.5	.7	.2	700	.7	50	1000	5	–	50	7	–	50	–	–	10	50	7	300	–	50	20	200	200
127	LFA 092	2	.5	.7	.2	700	1	50	1000	3	5	50	10	–	70	–	100	20	70	10	300	–	50	20	200	200
128	LFA 093	3	.7	1	.2	1000	1	50	1000	3	–	70	10	–	50	–	–	10	30	7	500	–	50	20	–	100
59	LFA 031	2	.5	.5	.2	1000	–	30	300	7	–	10	5	–	70	–	20	–	70	5	150	–	20	15	–	300
60	LFA 032	.5	.15	1	.07	700	–	30	200	7	–	–	5	–	50	–	–	–	10	–	100	–	20	10	–	200
61	LFA 033	3	.3	.5	.2	1000	–	30	300	7	–	10	5	–	70	–	50	5	70	5	100	–	50	20	–	300
62	LFA 034	3	.5	.5	.2	700	–	30	1000	3	–	30	10	–	100	–	20	10	70	5	500	–	50	20	200	100
72	LFA 041	2	.5	.5	.2	2000	.7	100	500	10	–	50	20	–	100	–	–	15	50	7	200	–	70	50	–	100
74	LFA 042	1	.2	.5	.15	700	.5	50	300	10	–	50	7	–	50	–	20	5	20	5	–	–	50	30	–	70
75	LFA 043	.5	.1	.5	.05	500	–	20	150	5	–	50	5	–	50	–	–	–	10	–	–	–	20	30	–	30
307	LFA 095	3	.7	1	.5	700	2	50	1000	5	10	100	150	–	50	7	30	10	20	10	300	–	100	20	–	300
310	LFR 929	10	1.5	1	.7	2000	–	20	70	1.5	30	150	70	–	200	5	30	20	30	20	500	–	150	30	–	500
311	LFR 930	5	1	1	.5	1000	–	20	700	2	20	100	50	–	200	–	50	20	70	20	500	–	100	30	–	200
545	LFS 003	5	.7	.3	.5	2000	.5	20	700	3	20	50	20	400	70	–	30	20	100	15	200	1.9	100	30	–	200
547	LFS 004	1	.2	.5	.3	300	–	20	500	2	20	30	15	500	50	5	20	10	10	5	200	20	50	20	–	150
548	LFS 005	3	1	1	.5	2000	.5	100	1000	2	20	150	100	500	70	15	30	20	50	15	700	11	150	20	–	300
555	LFS 006	7	1	.7	.7	5000	10	50	1000	3	20	100	200	300	200	5	30	50	150	20	500	3.7	150	70	–	200
557	LGU 734	3	.5	1	.5	1000	3	20	1000	15	5	50	200	–	100	50	20	15	70	10	500	–	100	50	–	100
758	LGU 735	5	.7	1.5	.7	1000	2	20	1000	5	10	70	70	–	100	20	70	15	70	15	500	–	100	50	–	500
140	LFA 097	10	2	2	.5	1000	–	20	1000	2	20	150	100	–	100	5	30	10	20	20	500	–	150	30	–	1000

Table 1.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
BEAR RIVER																											
01	LFA	001	2	.5	1	.15	500	2	20	1000	3	–	50	15	–	70	–	–	10	50	10	500	–	50	30	–	100
03	LFA	002	3	.5	1	.2	700	.5	20	1000	2	–	20	10	–	50	–	–	7	50	7	500	–	50	20	–	200
255	LFS	010	2	.3	.7	.2	2000	–	50	1000	3	–	20	15	300	50	–	–	10	70	7	300	14	50	20	–	200
256	LFS	011	2	.3	.7	.2	2000	1	30	1000	3	–	200	15	300	100	–	20	5	70	5	300	10	50	20	–	150
257	LFA	012	5	.3	.5	.3	2000	–	30	700	3	–	50	15	200	100	–	50	10	100	10	300	–	50	30	–	300
258	LFS	013	3	.5	.5	.3	1500	.5	70	1000	5	–	30	15	300	100	7	50	10	150	10	500	30	50	30	–	200
315	LFR	931	2	.2	.5	.15	700	–	50	700	1.5	–	–	5	300	50	–	20	5	20	–	500	5.7	20	10	–	100
316	LFR	932	3	.5	.7	.3	2000	–	20	700	2	10	20	10	200	200	–	20	5	70	10	500	13	70	30	–	300
317	LFR	933	3	.5	.7	.3	2000	–	50	1000	2	10	10	10	200	200	–	30	5	50	10	1000	2.1	50	30	–	300
318	LFR	934	2	.5	.7	.2	1500	–	20	700	2	10	20	10	300	100	–	20	10	50	5	500	5.7	30	10	–	100
319	LFR	935	5	.7	1	.5	2000	–	30	700	2	10	20	20	300	200	5	30	20	70	10	700	26	100	50	–	300
322	LFR	936	5	.3	.7	.5	1500	–	30	500	5	10	50	15	300	500	–	50	–	50	10	500	36	150	50	–	700
323	LFR	937	5	.5	1	.5	2000	.5	30	700	5	10	20	15	600	300	–	50	5	150	15	500	26	70	30	–	200
329	LFR	938	2	.3	.5	.2	1500	–	20	500	3	–	10	10	200	150	–	30	5	100	5	200	5.7	50	20	–	100
330	LFR	939	5	1.5	1	.7	2000	–	30	1500	2	20	200	70	500	200	10	50	20	100	20	1000	8.5	200	30	–	500
522	LFR	986	3	.5	.7	.3	10000	–	50	500	5	10	50	50	200	100	–	–	10	70	10	300	3.5	150	30	–	100
523	LFR	987	3	.5	1	.5	3000	.5	50	700	5	–	50	30	200	100	–	20	10	70	15	500	25	50	50	–	150
525	LFR	988	3	.5	.7	.3	3000	–	70	700	5	–	50	30	200	50	–	–	20	50	10	300	14	100	30	–	150
526	LFR	989	3	.5	.7	.3	2000	.5	50	700	5	10	70	20	200	100	–	20	20	50	15	300	21	100	30	–	150
527	LFR	990	5	.7	1	.5	2000	.5	50	1000	5	10	70	20	200	100	–	30	20	70	15	700	16	100	30	–	200
528	LFR	991	1	.2	.7	.2	1500	–	30	500	3	6	50	15	200	100	–	–	5	50	5	500	25	50	30	–	150
532	LFR	992	3	.5	.3	.5	2000	–	30	500	5	–	50	10	300	100	–	30	10	70	10	300	18	50	30	–	200
533	LFR	993	3	.7	.7	.5	3000	1.5	50	1000	5	–	70	20	400	100	–	20	15	70	10	700	32	100	30	–	150
534	LFR	994	3	.7	1	.5	3000	.5	50	1000	3	10	100	20	200	100	10	50	20	100	10	700	21	100	30	–	200
BEAR CREEK																											
10	LFA	007	2	.5	.7	.2	700	.5	30	1000	2	–	30	10		70	–	20	15	30	7	500		50	20	–	100
11	LFA	008	2	.5	.7	.2	500	1	20	1000	2	–	30	7		100	–	20	10	50	5	500		50	20	–	100
535	LFR	995	3	.7	1	.5	2000	.5	50	1000	2	10	100	20	200	100	–	50	15	100	10	700	8	100	30	–	200
536	LFR	996	2	.5	.5	.3	1500	1	30	1000	2	–	50	10	200	70	–	20	10	50	5	700	10	50	20	–	100
537	LFR	997	3	.5	.7	.3	1000	–	30	700	2	10	70	20	400	70	–	20	15	50	10	700	14	100	20	–	150
538	LFR	998	2	.3	.7	.2	1000	1	50	700	3	10	30	15	300	70	–	20	10	50	5	700	40	50	20	–	150
539	LFR	999	5	.5	.7	.5	1000	–	30	700	2	15	70	20	200	70	–	30	20	50	15	500	9.6	100	20	–	150
540	LFS	001	2	.5	.7	.2	2000	2	20	700	3	–	50	20	400	70	–	–	10	70	5	500	13	50	20	–	150
543	LFS	002	.5	.15	.5	.05	100	–	100	150	5	–	10	20	300	50	–	–	–	20	–	100	13.3	30	20	–	10

Table 1.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
													Bow Creek														
242	LFS	064	2	.5	.7	.3	1500	1	50	1000	5	–	30	10	300	100	–	30	5	100	10	500	12	50	30	–	200
243	LFS	065	3	.7	.7	.3	5000	1	50	1000	5	–	30	50	300	150	–	20	10	100	10	500	2.8	100	50	–	200
244	LFS	066	3	.5	.5	.2	2000	.5	50	1000	3	–	10	10	200	100	–	50	–	100	10	500	18	50	20	–	200
245	LFS	067	5	.5	.7	.3	2000	.7	50	1000	3	–	20	20	300	200	–	30	5	100	10	700	2	70	30	–	300
246	LFS	068	.5	.1	.7	.05	1500	–	20	500	2	–	10	10	100	50	–	–	–	10	–	200	5.3	20	–	–	30
248	LFS	069	5	.5	.7	.5	1000	.5	50	1000	2	10	50	20	200	100	–	50	10	100	10	500	2.5	150	30	–	200
249	LFS	070	3	.5	.7	.3	2000	–	30	1000	3	10	50	15	100	100	–	20	10	100	10	700	3.5	70	30	–	300
356	LFR	951	3	.5	.7	.3	2000	–	20	1000	2	–	20	7	200	300	–	30	5	70	5	1000	6.2	50	70	–	300
403	LFS	071	5	.5	.7	.5	2000	.5	50	1500	2	10	50	15	200	150	10	20	10	150	10	700	5.3	70	50	–	200
406	LFS	072	3	.3	.5	.2	2000	.5	50	700	2	–	20	10	200	100	–	–	5	100	5	500	9.1	50	30	–	100
407	LFS	073	3	.5	.5	.2	2000	.5	50	1000	5	–	20	50	400	150	–	20	5	200	7	500	17	70	30	–	200
408	LFS	074	2	.3	.7	.2	2000	.5	50	1000	5	–	20	20	200	200	–	20	10	50	5	500	16	70	50	–	300
													Chapman Creek														
175	LFV	012	2	.3	.5	.2	1000	–	20	500	1	–	10	–	–	100	–	20	–	30	5	500	–	50	20	–	200
286	LFS	031	2	.5	.5	.3	5000	–	70	700	3	10	10	20	500	70	–	50	10	30	10	300	1.2	100	20	–	150
287	LFS	032	5	1	.5	.5	5000	–	70	1000	2	15	70	70	400	100	–	70	20	100	15	500	1.3	100	20	–	200
289	LFS	033	5	1	.7	.7	5000	–	70	1000	3	15	100	50	400	100	–	50	30	50	20	500	1.6	150	30	–	300
291	LFS	034	3	.5	1	.5	10000	–	70	1000	2	10	20	50	300	50	–	30	20	70	10	500	.7	150	20	–	150
449	LFS	078	3	.3	.5	.2	3000	–	50	700	5	–	20	20	500	70	–	30	5	70	5	500	169	100	30	–	200
580	LGJ	769	2	.2	2	.2	700	–	30	1000	2	5	10	10	–	100	–	50	–	50	5	500	–	50	30	–	200
581	LGJ	770	2	.3	1	.2	700	–	30	700	2	5	10	5	–	50	–	70	–	70	5	500	–	50	30	–	200
582	LGJ	771	3	.7	2	.3	1000	–	50	1000	2	5	–	10	–	150	–	30	–	70	10	700	–	70	30	–	200
600	LFS	079	2	.3	1	.2	2000	.5	70	700	7	–	20	15	500	70	–	50	5	70	7	500	358	70	50	–	150
601	LFS	080	5	.5	1	.5	5000	–	100	1000	5	–	30	15	600	100	5	100	5	150	10	700	37	100	50	–	300
602	LFS	081	5	.7	.7	.5	5000	–	70	1000	3	10	70	50	500	70	–	50	15	100	10	500	1.9	150	50	–	200

Table 1.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	05	10	10	200	10
Drainage on southeast side of North Fork Boise River																											
334	LFR	940	2	.2	.5	.2	1000	–	30	500	3	–	10	15	200	50	–	–	10	20	5	300	4.7	30	20	–	100
335	LFR	941	2	.3	.7	.2	1000	.7	30	1000	2	–	20	10	200	100	–	30	10	50	5	700	28	30	20	–	100
345	LFR	944	1	.3	.7	.2	1500	–	30	500	3	–	30	20	200	50	–	–	5	30	5	200	15	50	10	–	70
346	LFR	945	2	.5	.7	.3	1000	–	30	700	2	–	50	15	100	100	–	20	20	50	5	500	9.8	50	20	–	150
348	LFR	946	2	.5	1	.3	2000	.5	50	700	3	–	50	20	200	50	–	20	10	30	10	300	49	100	20	–	70
349	LFR	947	1	.2	.7	.2	1500	–	30	700	2	–	10	15	200	50	–	–	10	20	5	300	19	50	10	–	100
350	LFR	948	2	.5	.7	.2	1500	–	30	1000	2	–	50	10	200	100	–	20	15	50	5	500	20	50	30	–	150
232	LFS	057	3	.5	1	.2	1500	2	50	700	5	–	50	20	200	100	–	20	10	70	10	700	32	100	50	–	200
233	LFS	058	5	1	1	.5	5000	2	50	1000	5	–	50	50	300	150	–	20	10	100	15	1000	14	100	50	–	200
234	LFS	059	5	.5	.7	.3	1500	1	50	1000	5	–	30	10	300	200	–	30	10	70	10	700	13	100	50	–	200
235	LFS	060	3	.5	.7	.2	1000	–	50	1000	3	–	20	10	200	200	–	30	10	70	5	700	18	50	30	–	200
236	LFS	061	.3	.02	.3	.03	100	–	–	100	3	–	–	10	100	50	–	–	–	10	–	100	32	20	–	–	20
237	LFS	062	5	.5	.7	.5	2000	.5	70	1000	5	–	30	20	300	200	–	30	15	70	10	500	16	100	70	–	200
269	LFS	021	2	.5	1	.5	1500	–	50	1000	2	–	50	10	200	150	–	70	5	70	10	1000	11	50	30	–	200
270	LFS	022	2	.2	.7	.2	2000	–	50	700	2	–	10	10	200	100	–	50	5	50	5	700	13	30	30	–	150
271	LFS	023	1	.2	.5	.15	1500	–	50	700	3	–	10	10	200	100	–	50	5	50	5	500	45	30	20	–	100
272	LFS	024	5	.7	1	.5	3000	–	50	1500	2	10	70	15	300	150	–	50	15	50	10	700	5.1	70	30	–	200
273	LFS	025	2	.3	.7	.2	2000	–	50	1000	3	10	20	15	200	70	–	50	20	50	5	500	18	50	20	–	153
151	LFS	990	2	.5	.5	.2	1000	–	20	700	2	–	20	5	–	50	–	50	7	70	–	700	–	50	30	–	150
Southeast side of Payette River																											
157	LFS	993	2	.5	.5	.2	2000	–	30	5000	2	–	10	20	–	100	–	20	5	70	5	300	–	50	30	–	150
158	LFS	994	2	.5	.5	.3	2000	–	30	500	2	–	10	20	–	100	–	20	10	50	5	300	–	50	30	–	150
174	LFV	011	1	.2	.5	.1	700	–	10	500	3	–	20	10	–	50	–	20	–	30	5	300	–	30	20	–	100
394	LFR	971	5	1	3	.7	5000	–	50	1000	2	10	100	15	300	150	–	30	10	50	10	700	150	150	50	–	200
563	LFS	008	5	1	1	.7	2000	–	30	1000	2	20	100	70	300	150	10	20	30	50	15	700	7.2	150	30		200
571	LGJ	760	2	.5	1	.2	1000	–	20	1500	3	–	10	5	–	100	–	50	5	70	7	700	–	50	30	–	200
572	LGJ	761	2	.5	1	.3	700	–	50	1500	2	5	50	5	–	70	–	50	5	70	7	700	-	50	20	–	150
573	LGJ	762	2	.5	1	.3	700	–	20	1000	2	5	50	10	–	100	–	30	5	70	10	700	–	50	50	–	200
577	LGJ	766	3	1	2	.5	700	–	20	1000	1.5	7	70	15	–	150	–	30	5	50	10	700	–	70	30	–	200
578	LGJ	767	5	1	2	.5	1000	–	20	1000	2	10	100	15	–	150	–	50	7	70	15	700	–	100	30	–	200
579	LGJ	768	2	.7	2	.2	700	–	20	1000	2	5	70	15	–	100	–	50	5	70	10	700	–	50	30	–	200
616	LFS	085	2	.5	1	.2	10000	–	50	1000	2	–	50	20	200	50	–	20	–	50	5	200	.7	150	10	–	150
617	LFS	086	.5	.1	1	.1	1500	–	20	200	3	–	30	10	300	50	–	–	–	10	–	200	130	150	20	–	50
618	LFS	087	3	.5	1	.2	2000	–	20	1000	3	–	50	20	200	70	–	30	10	50	7	500	18	100	30	–	200
619	LFS	088	3	.5	.7	.2	1500	–	50	1500	3	–	50	70	300	70	–	50	10	100	5	700	16	50	30	–	150

Table 1.Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	F	La	Mo	Nb	Ni	Pb	Sc	Sr	U	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	100	20	5	20	5	10	5	100	.05	10	10	200	10
													McDONALD CREEK														
409	LFS	075	3	.5	.5	.2	3000	.7	50	1000	3	–	20	20	200	100	–	20	10	150	7	500	2.5	100	20	–	200
410	LFS	076	3	.5	.7	.2	2000	–	30	1500	2	–	30	10	100	100	–	30	10	100	7	700	1.6	70	20	–	200
411	LFS	077	3	.5	.7	.2	2000	–	30	1500	3	–	30	10	200	100	–	50	7	150	7	700	3.2	70	30		200
													WAPITI CREEK														
176	LFV	002	2	.3	.3	.3	1000	–	20	500	1	–	–	5	–	50	–	20	5	50	5	500	–	30	20	–	150
177	LFV	003	5	.5	.7	.5	1500	–	30	700	2	10	10	15	–	150	–	50	–	70	10	700	–	100	50	–	300
178	LFV	004	5	.5	.7	.2	1500	–	30	700	2	10	15	10	–	50	–	20	10	70	10	700	–	70	30	–	100
179	LFV	005	2	.3	.7	.2	1000	–	30	500	3	–	15	10	–	200	–	20	–	70	7	500	–	50	30	–	300
180	LFV	006	3	.7	.7	.5	1500	–	50	500	3	15	20	20	–	150	–	30	5	70	15	700	–	100	50	–	200
181	LFV	007	3	.5	.7	.5	1500	–	50	500	2	10	20	15	–	70	–	20	–	50	10	700	–	100	30	–	200
	LFR	972	2	.5	1.5	2	2000	–	30	700	3	–	10	15	300	150	–	20	–	50	10	500	4	50	30	–	150
620	LFS	089	5	.5	1	.3		–	50	1000	2	–	30	10	500	100	–	30	10	70	10	1000	34	70	30	–	200
621	LFS	090	2	.3	.7	.2	3000	–	50	500	7	–	20	20	600	100	–	50	5	50	7	500	40	70	50	–	100
622	LFS	109	5	.7	1	.5	3000	–	70	1000	5	–	20	20	500	150	–	20	10	50	10	500	88	150	50	–	300
													PIKE'S FORK														
80	LFA	044	2	.3	.5	.2	500	.5	70	1000	3	–	50	15	–	70	–	–	10	50	7	300	–	50	20	300	100
225	LFA	052	2	.5	.5	.2	1000	1	50	1000	3	10	50	15	–	70	–	–	15	100	5	300	–	50	20	–	100
226	LFA	053	3	1	1	.2	1000	1	50	1000	3	10	50	10	–	70	–	20	15	50	10	300	–	70	20	–	100
227	LFA	054	2	.5	.5	.15	1500	1	50	1000	3	5	30	30	–	70	–	20	15	70	5	300	–	50	20	–	100
228	LFA	055	2	.5	.7	.2	700	1	50	1000	3	5	20	7	–	100	–	50	15	70	5	300	–	50	20	–	100
229	LFA	056	3	.5	1	.2	500	.5	30	1000	3	5	30	10	–	100	–	20	10	30	7	300	–	50	30	–	100
230	LFA	057	2	.5	1	.3	700	.7	30	700	3	5	20	20	–	100	–	20	15	50	5	300	–	50	20	–	100
231	LFA	058	3	.7	1	.2	500	1	30	700	3	5	50	20	–	100	–	20	15	30	7	300	–	50	30	–	100
232	LFA	059	3	.7	1	.2	500	1	30	700	3	5	50	15	–	70	–	–	15	50	5	300	–	50	20	–	150
233	LFA	060	2	.3	.5	.5	500	1	50	700	3	–	30	10	–	50	–	–	10	50	5	300	–	50	20	–	100
234	LFA	061	3	.7	1	.2	700	.5	50	1000	3	5	30	10	–	100	–	20	10	20	7	300	–	50	20	–	200
235	LFA	062	2	.5	.7	.2	700	.5	50	1000	3	5	30	10	–	50	–	–	15	50	7	300	–	50	20	–	70
236	LFA	063	2	.5	.7	.2	500	.5	30	1000	3	5	20	5	–	100	–	20	10	30	5	300	–	50	20	–	200
237	LFA	064	2	.3	.7	.1	500	1	50	1000	3	–	10	5	–	100	–	–	5	30	5	300	–	30	20	–	150
240	LFA	065	2	.3	.7	.15	500	1	100	1000	3	5	20	7	–	100	–	–	5	30	5	300	–	50	–	30	150
241	LFA	066	1.5	.3	.7	.15	500	–	70	1000	3	–	10	5	–	70	–	–	5	20	5	300	–	30	20	–	150
242	LFA	067	2	.3	.7	.15	500	–	70	1000	3	–	20	7	–	100	–	–	5	30	5	300	–	50	20	–	100

Table 2. Analyses of rock samples from the Ten Mile West Roadless Area, Boise and Elmore Counties, Idaho. All samples were analyzed by six-step semiquantitative spectrographic analyses. Numbers immediately below the element headings show minimum limits of determination. The symbol – indicates the element was detected but below the determination limit, or was looked for but not detected. The following elements and their minimum limits of determination, shown in ppm in parentheses, were searched for but determinable concentrations were not found: As (200), Au (10), Bi (10), Cd (20), Sb (100), Sn (10), W (50), and Zn (200). Exceptions were samples 238 and 766, which contained 500 and 2000 ppm Zn respectively. Analyzed by E.F. Cooley.

Table 2.--Continued

Field No.	Lab No.	Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zr
		Percent				ppm																	
		.05	.02	.05	.002	10	.5	10	10	1	5	10	5	20	5	20	5	10	5	100	10	10	10
BIOTITE GRANODIORITE OF THE IDAHO BATHOLITH																							
02	LFS 260	1.5	.1	1	.15	700	–	10	1000	–	–	–	15	30	–	–	–	50	–	700	20	–	150
05	LFS 261	1.5	.1	1	.15	700	–	10	1000	–	–	–	–	100	–	–	–	50	–	700	10	–	150
30	LFS 268	5	2	5	.70	3000	–	20	1000	–	30	200	70	100	–	30	30	50	–	1000	200	50	200
79	LFA 138	2	.2	.2	.2	300	–	20	2000	3	–	–	–	70	–	–	–	20	5	700	20	–	100
82	LFS 275	1	.1	1	.1	700	–	10	1000	2	–	–	–	50	–	20	–	70	–	700	30	–	100
797-15-A	LFS 285	5	1.5	2	.7	1000	–	10	700	1	20	–	–	100	–	20	–	30	15	1000	100	30	300
797-15-B	LFS 286	2	5	2	.5	700	–	10	1000	1	–	–	–	100	–	–	–	30	5	1000	70	–	200
797-16-F	LFS 283	1	.2	1	.1	700	–	10	1000	1	10	–	–	70	–	–	–	30	–	1000	10	–	100
336	LFS 118	3	.5	3	.03	1500	–	20	1500	2	–	–	–	70	–	20	–	70	–	2000	30	–	200
338	LFS 120	.7	.2	.5	.03	500	–	10	1000	1.5	–	–	–	30	–	–	–	50	–	1000	–	–	150
342	LFS 122	1	.1	.5	.05	1000	.5	10	700	2	–	–	–	20	–	–	–	100	–	300	–	10	50
343	LFS 123	1	.15	.5	.05	500	1.5	10	1000	2	–	–	–	–	–	–	–	70	–	700	–	–	100
347	LFS 127	2	.5	1.5	.2	1000	1	10	1500	2	–	–	–	70	–	–	–	70	5	2000	20	10	150
393	LFS 132	5	.7	5	.5	1500	1	10	1000	1	–	–	50	150	–	20	–	70	10	1500	100	30	300
503	LFS 134	5	1	3	.5	1500	10	10	1000	2	–	–	10	100	–	30	–	50	–	1500	100	–	200
542	LFS 146	1.5	.3	1.5	.2	700	–	10	1000	2	–	–	–	70	–	–	–	50	5	1500	20	–	150
546	LFS 147	2	.3	.2	.2	1500	7	20	1000	2	–	–	50	50	–	50	10	100	5	1000	30	–	200
814	LGK 248	3	.5	2	.2	1500	–	10	2000	2	–	–	–	100	–	50	–	100	7	1000	20	20	150
822	LGK 251	1	.2	1	.2	1000	–	20	2000	2	–	–	–	70	–	–	–	70	–	700	10	10	150
823	LGK 252	1.5	.2	1	.2	700	–	10	1000	2	–	–	–	50	–	50	–	50	5	700	20	30	150
824	LGK 253	.5	.1	1	.03	700	–	10	1500	1	–	–	–	–	–	–	–	100	–	1000	–	–	50
827	LGK 255	1	.2	1	.07	300	–	10	1000	2	–	–	–	150	–	–	–	50	–	700	10	–	100
836	LGK 259	2	.5	.7	.2	300	–	10	1000	2	–	–	5	100	70	–	–	50	–	500	30	–	100
841	LGK 260	1	.3	.1	.2	500	–	10	1000	2	–	–	–	50	–	–	–	70	5	500	30	20	100
843	LGK 262	2	.5	2	.2	200	–	10	3000	1.5	–	–	–	70	–	–	–	100	5	1500	20	10	100
846	LGK 263	2	.7	2	.7	500	–	10	2000	2	–	–	–	100	–	20	–	50	10	1000	50	20	200
854	LGK 271	2	.3	1	.15	700	–	10	2000	1.5	–	–	–	100	–	–	–	50	–	1000	20	–	100
855	LGK 272	2	.5	3	.2	700	–	10	1500	2	–	–	–	50	–	–	–	50	5	1000	20	–	150
857	LGK 273	2	.3	1	.2	500	–	10	2000	1	–	–	–	70	–	–	–	50	–	1000	10	–	150
862	LGK 278	1.5	.5	2	.2	700	–	10	1000	3	–	–	–	50	–	20	–	70	5	1000	20	10	150
172	LFS 255	1.5	.2	.7	.1	1000	–	10	1000	2	–	–	–	50	–	20	–	50	5	700	–	–	150
88	LFA 140	1.5	.2	1	.07	500	–	30	700	5	–	–	–	70	–	–	–	15	5	300	10	–	70
761	LGK 285	2	.7	2	.3	1000	–	10	700	2	–	–	–	50	–	–	–	20	5	1000	50	20	20
771	LGK 291	3	1.5	2	.5	1000	.5	10	1500	1.5	10	50	–	70	–	20	5	70	10	700	100	20	150
205	LFS 156	2	.3	1	.2	500	1.5	10	3000	2	–	–	200	100	–	20	–	–	–	–	–	–	–
853	LGK 270	2	.5	3	.15	1000	–	10	5000	1	–	–	–	50	–	–	–	50	5	2000	20	10	100
826	LGK 254	.5	.1	1	.03	700	–	10	1500	1	–	–	–	–	–	–	–	50	5	1000	10	–	100

Table 2.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zr
			Percent													ppm								
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	20	5	20	5	10	5	100	10	10	10
													LEUCOCRATIC MONZOGRANITE											
15	LFS	263	1.5	.2	1	.15	1000	–	20	1000	2	–	–	–	70	–	20	–	100	–	1500	–	10	200
16	LFS	264	1	.15	.7	.07	1500	–	10	1000	2	–	–	–	20	–	20	–	100	–	500	–	10	100
17	LFS	265	1	.15	.7	.07	500	–	10	700	1.5	–	–	–	–	–	–	–	70	–	500	–	–	100
51	LFS	269	.5	.1	.2	.03	200	–	10	700	–	–	–	–	–	–	–	–	20	–	500	–	–	50
76	LFA	137	1	.05	.2	.05	200	–	10	500	2	–	–	–	50	–	–	–	20	–	200	–	–	50
337	LFS	119	.7	.12	.5	.2	500	–	10	200	1.5	–	–	–	–	–	–	–	70	–	100	–	–	50
358	LFS	128	2	.2	.5	.2	1000	.5	50	1000	2	–	–	–	–	–	–	–	100	5	500	20	–	200
359	LFS	129	1	.2	.5	.1	1000	–	10	700	2	–	–	–	–	–	–	–	70	–	500	–	–	100
414	LFS	171	.5	.05	.5	.05	200	–	10	1000	2	–	–	–	–	–	–	–	70	–	700	–	–	100
396	LFS	133	2	.3	1	.2	300	.5	10	1000	1.5	–	–	–	–	–	20	–	50	–	700	–	15	20
504	LFS	135	1	.1	1	.15	500	10	10	1500	2	–	–	–	50	–	20	–	50	–	1000	–	–	100
505	LFS	136	.7	.07	.2	.03	200	3	20	700	2	–	–	–	50	–	–	–	70	–	200	–	–	100
507	LFS	138	.7	.05	.5	.05	500	7	10	1000	2	–	–	–	20	–	–	–	50	–	1000	–	–	50
511	LFS	139	.7	.02	.7	.03	1000	–	10	300	3	–	–	–	50	–	–	–	50	–	200	–	–	150
518	LFS	140	1	.03	.5	.05	1000	–	10	700	2	–	–	–	–	–	–	–	70	–	300	–	–	100
800	LGK	237	.5	.2	.5	.03	200	–	10	700	1.5	–	–	–	–	–	–	–	70	–	200	–	–	50
809	LGK	246	1	.2	1	.1	500	–	10	1500	2	–	–	–	30	–	20	–	70	–	700	–	–	100
147	LFS	187	.5	.02	.5	.02	200	–	10	1000	2	–	–	–	–	–	–	–	50	–	500	–	–	50
444	LFS	180	1	–	.5	.02	700	–	10	150	2	–	–	–	–	–	20		50	–	–	–	20	50
524	LFS	143	7	1.5	.5	.7	5000	.5	10	700	1.5	20	100	–	70	–	30	20	20	20	500	100	–	200
278	LGK	304	2	.5	3	.5	700	–	10	1000	2	–	–	–	150		20		70	5	1000	70	30	500
281	LFS	182	1.5	1.5	.5	.07	700	–	10	700	3	–	–	–	–	–	20	–	70	–	200	–	10	100
129	LFA	142	.7	.1	.05	.05	200	1	10	700	2	–	–	20	50	–	–	–	10	–	300	–	–	100
135	LFA	143	1.5	.1	1	.07	500	–	20	1500	2	–	–	–	50	–	30	–	50	–	500	–	20	100
130	LFS	251	1.5	.1	.7	.1	1000	–	10	1500	1	–	–	–	50	–	20	–	70	–	700	–	–	100
211	LFS	160	1.5	.1	.7	.1	700	–	10	700	2	–	–	–	50	–	20	–	70	–	500	–	20	150
214	LFS	163	1	.2	.5	.1	700	–	10	1000	2	–	–	–	50	–	20	–	70	–	700	–	–	70
215	LFS	164	.7	.1	.1	.1	1500	–	10	700	1	–	–	–	–	–	–		70	–	200	–	–	50
412	LFS	178	1.5	.2	.7	.1	700	–	10	3000	2	–	–	–	50	–	–	–	50	–	1000		–	150
443	LFS	179	.2	.05	.5	.03	700	–	10	700	3	–	–	–	30	–	20	–	100	–	200	–	20	100
436	LFS	173	2	3	1	.2	1000	–	10	2000	1	–	–	–	50	–	50	–	50	5	1500	15	20	150 150
437	LFS	174	.7	.2	1	.15	1000	–	10	3000	1	–	–	–	50	–	–	–	50	–	2000	–	–	200
213	LFS	162	2	.3	.7	.2	1000	–	10	1500	2	–	–	–	50	–	30	–	70	–	1000	10	10	150
218	LFS	165	.7	.1	–	.02	700	–	20	500	3	–	–	–	–	20	50	–	70	–		–	20	150
244	LFS	170	2	.5	.1	.2	300	20	20	700	2	–	50	20	–	2000	20	–	200	5	–	50	–	150
830	LGK	258	2.7	.07	.5	.03	200	–	–	700	1.5	–	–	–	50	–	–	–	70	–	500	–	–	100
626	LGK	294	.5	.15	.05	.03	300	–	20	500	1.5	–	–	–	–	–	–	–	50	–	200	20	–	50
623	LGK	293	1	.3	.1	.1	500	–	10	50	1	–	50	–	–	–	–	20	50	–	200	20	–	50
625	LGK	296	.5	.1	.5	.02	1000	–	10	200	2	–	–	–	70	–	100	–	100	15	–	10		50
282	LFS	183	.7	.05	.3	.03	300	–	10	700	2	–	–	–		–	20	–	100	–	200	–	–	100
274	LFS	185	1.5	.15	.2	.1	700	–	10	1000	1.5	–	–	–	–	–	–	–	50	–	1000	–	–	70

Table 2.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zr
			Percent				ppm																	
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	20	5	20	5	10	5	100	10	10	10
BIOTITE– HORNBLENDE GRANODIORITE																								
306	LFS	280	2	2	2	.5	1500	–	10	1000	1	20	100	50	100	–	20	20	50	15	700	100	30	100
312	LFS	111	5	1.5	2	.7	1500	–	20	1000	1.5	20	100	10	150	–	50	30	50	20	1000	150	30	100
314	LFS	113	5	1.5	2	.5	1500	–	20	1000	1	20	150	–	100		20	20	50	15	700	150	20	100
550	LFS	149	5	1.5	1	.5	1500	–	20	1000	1	20	100	–	100	–	–	30	20	15	700	100	–	150
290	LFS	250	5	1	.3	.3	1000	–	20	1000	1	20	100	–	70	–	20	20	50	10	500	100	10	150
553	LFS	152	5	1.5	2	.5	1500	–	10	1000	1	20	100	–	200	–	20	20	30	15	1000	100	–	150
561	LFS	153	10	2	2	1	2000	1	10	1000	1	30	100	20	100	–	50	20	20	20	1000	150	–	200
564	LFS	284	5	2	3	.7	2000	–	30	1000	–	50	70	50	100	–	20	20	50	20	1000	150	50	200
806	LGK	243	7	2	5	.3	2000	–	10	2000	1	20	200	15	150	–	20	30	50	20	1000	100	50	200
807	LGK	244	7	2	5	1	3000	–	15	2000	1	30	50	5	200	–	20	5	30	30	3000	150	50	200
815	LGK	249	7	2	5	.7	2000	–	10	2000	2	20	200	50	70	–	30	20	50	30	1000	200	30	200
828	LGK	256	5	1.5	3	.5	1000	–	10	1500	1.5	10	100	20	100	–	20	20	50	20	1000	150	30	200
849	LGK	266	3	1.5	2	.3	1000	–	10	1000	1	15	70	10	100	–	20	10	20	15	700	100	20	100
850	LGK	267	3	2	1.5	.5	1000	3	1	1000	1	15	100	50	100	–	20	10	–	–	–	–	–	–
159	LFS	159	5	1.5	.5	.2	1000	–	10	1000	1	15	50	–	100	–	20	10	50	10	700	50	15	150
169	LFS	253	10	1.5	2	.5	2000	–	20	1000	1	30	50	20	150	–	20	10	50	20	1000	200	30	200
170	LFS	254	5	1.5	2	.5	1000	–	10	1000	1	20	100	–	150	–	20	15	50	15	1000	150	20	150
171	LFS	259	7	2	1	.5	1500	–	10	500	–	50	200	50	50	–	–	50	20	20	300	200	20	100
768	LGK	768	10	3	5	.1	2000	–	20	3000	1	30	150	100	200	–	20	50	50	50	1000	200	50	500
BIOTITE–HORNBLENDE QUARTZ MONZODIORITE																								
305	LFS	305	7	3	3	1	2000	10	15	1000	1	50	150	100	150	–	30	30	30	30	1000	200	50	150
313	LFS	112	10	2	3	1	2000	–	50	1000	1	50	100	70	150	–	30	50	50	30	1500	200	50	200
564	LFS	154	10	2	2	.7	1500	–	20	1000	1	30	70	50	100	–	20	20	20	20	1000	150	–	150
829	LGK	257	7	5	5	.7	1500	–	10	1000	1	30	500	10	100	–	20	50	50	30	1000	200	50	200
848	LGK	265	7	3	5	1	2000	–	10	2000	1	30	150	70	100	–	20	20	50	30	2000	200	50	150
206			5	1.5	2	.5	1500	–	20	1000	1	20	100	–	70	–	20	20	20	15	1000	150	20	150
551	LFS	150	10	2	5	1	5000	–	10	1500	–	30	70	20	150	–	50	5	50	30	1500	200	–	200
552	LFS	151	10	2	2	.7	3000	–	15	1000	–	30	20	20	150	–	20	5	50	20	1000	200	–	200
355	LFS	281	7	2	2	.5	1500	–	10	500	–	50	500	70	70	–	20	150	20	20	500	150	30	200
859	LGK	275	7	2	3	1	2000	–	10	1500	2	30	200	10	150	–	30	50	70	30	1000	200	30	300
808	LFS	245	10	2	5	1	2000	–	20	3000	–	30	20	50	200	–	20	–	50	30	3000	150	50	100
810	LGK	247	10	2	5	1	2000	–	15	3000	–	30	200	70	200	–	20	100	30	30	1000	200	30	300

Table 2.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zr
			Percent												ppm									
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	20	5	20	5	10	5	100	.05	10	10	10
															MONZOGRANITE OF THE SAWTOOTH BATHOLITH									
23	LFS	267	1.5	.3	3	.2	1000	–	10	1000	2	–	–	–	100	–	20	–	70	–	2000	50	20	150
57	LFS	270	1.5	.2	1	.2	1500	.7	10	500	5	–	–	–	100	–	30	–	100	5	200	50	20	200
73	LFS	272	1	.15	.5	.1	1500	–	10	150	5	–	–	–	50	–	30	–	100	–	–	–	10	200
77	LFS	273	1	.1	.5	.07	700	–	10	1000	1	–	–	10	–	–	20	–	30	–	500	–	–	100
302	LFS	277	1.5	.3	1	.2	1000	–	10	1000	3	–	–	–	100	–	20	–	70	5	500	50	30	150
320	LFS	114	2	.5	1	.3	1500	–	10	700	–	10	20	–	100	–	20	5	100	5	500	50	30	100
326	LFS	115	.2	.02	.05	.01	100	–	10	500	–	–	–	–	–	–	–	–	50	–	100	–	–	–
327	LFS	116	1	.3	.7	.2	1500	–	10	700	2	–	–	–	–	–	70	–	100	–	700	–	10	100
368	LFS	130	2	.2	.5	.15	1000	.5	–	1000	2	–	–	30	100	–	–	–	70	–	700	20	–	150
506	LFS	137	2	.3	.7	.15	1000	1.5	20	1000	3	–	–	–	50	–	30	–	50	–	1000	10	–	150
529	LFS	144	2	.3	.7	.3	700	20	10	700	2	–	–	15	100	–	30	50	70	5	500	50	–	200
541A	LFS	283	2	.7	.7	.2	1000	2	10	700	2	15	100	10	70	–	20	20	30	10	500	50	10	200
549	LFS	148	1	.2	.2	.1	200	1	10	200	3	–	–	10	30	–	50	–	100	5	200	20	20	100
801	LGK	238	2	.5	1.5	.3	700	–	10	1500	5	–	–	5	300	5	30	–	70	10	700	50	50	300
802	LGK	239	1.5	.3	1	.15	700	–	10	500	5	–	–	5	70	–	30	–	70	5	300	20	20	200
842	LGK	261	.7	.2	.5	.07	200	–	10	700	2	–	–	–	–	–	–	–	70	–	500	20	–	50
209	LFS	158	1.5	.2	.7	.15	1000	1	10	700	2	–	–	–	50	–	20	–	70	5	200	20	--	150
210	LFS	159	1.5	.2	.7	.15	1000	–	10	700	3	–	–	–	50	–	20	–	70	5	200	20	50	150
220	LFS	166	1.5	.2	.5	.15	700	–	10	700	5	–	–	–	50	–	20	–	50	–	300	10	10	100
221	LFS	167	1.5	.2	.7	.2	700	–	10	500	5	–	–	–	50	–	20	–	50	–	300	20	15	150
222	LFS	168	1.5	.3	.5	.15	700	–	10	700	3	–	–	–	50	–	–	–	50	–	300	20	10	100
760	LGK	284	2	.3	.3	.3	700	.5	20	1500	1	–	–	–	50	–	20	–	70	5	700	20	20	150
766	LGK	286	1.5	.3	.3	.2	1000	1	10	3000	1	–	–	–	50	–	–	–	1000	5	700	20	10	100
767	LGK	287	1	.1	.5	.1	700	–	10	1000	1.5	–	–	–	–	–	20	–	70	–	500	–	10	150
56	LFA	132	1	.1	.2	.07	150	–	10	1000	5	–	–	–	50	10	20	–	20	–	300	20	20	100

Table 2.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zr
			Percent				ppm																	
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	20	5	20	5	10	5	100	10	10	10
												RHYOLITE												
58	LFA	134	.7	.1	.05	.05	500	–	50	100	2	–	–	–	50	–	20	–	20	–	–	–	10	70
70	LFA	130	1.5	.5	.5	.15	500	1.5	10	1000	2	–	–	10	70	–	–	–	30	5	300	150	15	100
83	LFS	276	2	.5	1	.2	1000	–	10	1000	2	–	–	–	150	–	20	–	70	5	500	100	10	200
240	LFS	247	1	.1	.1	.03	300	–	10	1000	5	–	–	20	50	–	50	–	70	5	200	–	30	100
259	LFS	181	1	.2	–	.02	300	–	20	200	2	–	–	–	–	–	20	–	50	–	–	–	20	100
261	LFS	184	1.5	.15	.1	.1	700	–	10	500	2	–	–	–	50	–	20	–	50	–	200	10	30	150
333	LFS	117	1	.1	–	.2	500	–	50	200	2	–	–	–	–	–	70	–	50	–	–	–	50	100
339	LFS	121	1	.1	–	.1	200	–	20	500	2	–	–	–	30	–	20	–	50	–	100	–	10	100
344	LFS	124	1	.02	.05	.05	300	.5	20	100	2	–	–	–	–	–	50	–	70	–	50	–	–	200
357	LFS	127	1.5	.2	.15	.15	1000	2	20	700	3	–	–	–	50	–	20	–	100	5	500	20	30	100
401	LFS	175	1	.15	.2	.15	500	.7	10	700	2	–	–	–	50	–	50	–	–	–	–	–	–	–
405	LFS	177	1	.2	.1	.1	500	1	50	700	2	–	–	–	50	20	30	–	50	5	–	15	15	150
416	LFS	172	.5	.1	.3	.05	1000	–	10	300	5	–	–	–	50		50	–	100	10	1500	–	15	100
772	LGK	292	1	.7	1	.3	1000	.5	10	1500	2	–	15	10	50	–	–	–	300	10	1000	100	20	150
852	LGK	269	3	1.5	2	.5	1000	–	10	5000	1	–	–	–	100	–	–	–	30	15	1000	150	20	200
860	LGK	276	1	.15	.15	.05	5000	–	20	700	5	–	–	–	50	–	50	–	100	10	300	–	20	100
												QUARTZ LATITE PORPHYRY												
247	LFS	248	2	.5	.15	.2	700	–	10	1000	1	–	–	5	50	–	–	–	50	7	500	50	10	150
249	LFS	181	1	.2	–	.02	300	–	20	200	2	–	–	–	–	–	20	–	50	–	–	–	20	100
301	LFA	141	2	.5	1.5	.2	300	–	10	1500	2	–	–	–	100	–	30	–	20	5	500	50	20	200
303	LFS	279	2	1.5	1.5	.5	2000	–	10	1000	1	20	100	20	100	–	20	15	30	15	700	150	30	200
354	LFS	126	3	.5	1.5	.3	1500	1	10	1000	2	–	–	–	200	–	–	–	70	7	700	70	20	200
392	LFS	131	10	1.5	.7	.5	1500	–	–	1500	1	20	100	5	150	–	–	15	70	15	1000	150	30	200
541	LFS	145	1.5	.2	–	.15	700	1	10	200	2	–	–	–	70	–	–	–	70	5	500	20	–	200
851	LGK	268	1.5	.5	.7	.2	700	–	–	1000	2	–	20	10	100	–	20	–	50	5	500	50	20	200
863	LGK	279	1.5	.5	1	.2	700	–	10	100	2	–	–	–	50	–	–	–	70	5	700	50	20	100

Table 2.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zr
			Percent				ppm																	
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	20	5	20	5	10	5	100	10	10	10
												RHYODACITE												
238	LFS	246	2	.3	.1	.15	1000	1.5	20	1000	3	–	–	5	100	–	20	–	70	7	200	20	10	500
												ANDESITE												
53	LFA	129	7	2	2	.5	1000	–	20	1000	2	30	300	15	70	–	20	20	20	20	700	150	30	200
54	LFA	130	5	2	1	.5	1000	–	10	1000	2	20	300	15	70	–	20	50	20	15	500	100	20	200
55	LFA	131	7	2	2	.7	1000	–	20	1000	3	20	70	–	100	–	30	10	–	–	–	–	–	–
63	LFA	135	5	2	2	.5	1000	1	10	1000	2	–	–	–	50	–	–	–	20	20	700	100	30	200
84	LFA	139	5	2	1.5	.5	1000	–	10	1000	3	30	300	20	100	–	20	50	20	20	500	100	30	150
156	LFS	189	7	2	2	1	2000	–	20	1000	1.5	20	100	50	100	–	20	50	50	20	2000	150	30	200
304	LGK	327	2	.5	2	.3	700	–	10	700	1.5	–	–	–	150	–	–	–	50	10	700	50	15	200
519	LFS	141	1.5	.07	.5	.05	300	–	10	1000	3	–	–	–	–	–	20	–	50	–	700	–	–	100
521	LFS	142	10	1.5	3	1	5000	–	20	700	–	50	–	70	50	–	–	20	30	30	500	300	–	200
847	LGK	264	7	5	5	1	2000	–	10	5000	1	50	200	100	100	–	20	150	50	50	2000	200	50	200
869	LGK	280	5	1.5	3	1	1000	–	10	1000	1	20	70	30	200	–	50	30	50	20	1000	150	50	500

Table 2.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zr
			Percent				ppm																	
			.05	.02	.05	.002	10	.5	10	10	1	5	10	5	20	5	20	5	10	5	100	10	10	10
															DIKES (Continued)									
															DACITE									
81	LFS	274	5	1.5	1.5	.5	2000	–	10	1000	1	20	200	–	100	–	20	30	30	20	700	150	30	200
301	LFA	141	2	.5	1.5	.2	300	–	10	1500	2	–	–	–	100	–	30	–	20	5	500	50	20	200
770	LGK	290	2	.7	.5	.5	1000	–	20	1500	1.5	5	10	–	100	–	20	–	50	10	700	100	20	200
817	LGK	250	5	2	1	.5	2000	–	10	2000	2	20	150	–	70	–	20	20	70	20	500	150	20	150
861	LGK	277	5	1	3	1	1000	–	10	1500	2	20	20	100	150	–	20	10	50	20	200	200	30	300
															DIABASE									
06	LFS	262	10	1.5	3	1	3000	–	20	700	–	50	20	70	50	–	–	50	50	30	500	200	50	200
18	LFS	266	10	1.5	3	1	3000	–	20	700	–	50	–	100	50	–	–	30	30	30	300	200	50	150
65	LFS	271	10	3	7	1	2000	–	20	700	–	50	300	70	50	–	20	70	30	30	1000	200	30	200
155	LFS	188	10	1.5	2	1	2000	–	20	500	–	50	20	100	50	–	20	10	20	30	300	200	50	200
858	LGK	274	10	2	5	1	2000	–	20	1500	–	50	–	100	70	–	–	20	50	50	500	200	50	200
															PEGMATITE									
212	LFS	161	2	.3	.1	.2	1000	–	10	1000	2	–	–	–	50	–	20	–	30	–	500	10	–	70
223	LFS	169	.7	.1	.1	.03	300	–	10	1000	1	–	–	–	–	–	–	–	70	–	700	–	–	100

Table 3.– Semiquantitative spectrographic analyses (six-step method) of altered rock or mineralized samples, Ten Mile West Roadless Area, Boise and Elmore Counties, Idaho. Numbers immediately below element headings show minimum limits of determination. The symbol – indicates the element was detected but below the limit of determination, or was looked for but not detected. The following elements and their minimum limits of determination, shown in ppm in parentheses, were searched for but determinable concentrations were not found: As (200), Au (10), Cd (20), Sb (100), and W (50). Exceptions were sample 819, which contained 500 ppm As; samples 238 and 378, which contained 20 and 150 ppm Au respectively; samples 41, 42 and 388 all of which contained 150 ppm Cd; and samples 811 and 812, which contained 100 and 200 ppm W respectively. Analyzed by E. F. Cooley.

Table 3.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Bi	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sn	Sr	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	10	5	10	5	20	5	20	5	10	5	10	100	10	10	200	10
25	LFA	098	1	.1	.15	.07	200	20	20	500	2	15	–	–	200	50	100	–	–	100	–	–	–	–	–	–	50
26	LFA	099	.7	.15	–	.20	200	–	20	500	3	–	–	–	7	50	20	–	–	–	5	–	–	50	–	–	100
27	LFA	100	1.5	.20	.50	.07	500	3	50	1000	5	–	–	–	5	50	5	20	–	20	–	–	200	20	10	–	200
33	LFA	125	1.5	.15	.10	.05	200	7	30	1000	3	–	–	–	–	50	50	20	–	30	–	–	100	20	–	–	100
37	LFA	126	.7	.10	.10	.15	50	2	30	500	3	–	–	–	–	50	50	20	–	10	–	–	–	50	–	–	100
38	LFA	127	1.5	.10	.05	.05	200	5	10	700	2	–	–	–	–	50	15	–	–	70	–	–	200	10	–	–	100
39	LFA	101	7	.20	.05	.07	200	100	70	1500	2	200	–	–	200	50	50	–	–	15000	–	–	200	20	–	1000	100
40	LFA	102	3	.15	.05	.20	>2000	15	30	1500	3	–	–	–	30	50	20	20	–	200	5	–	300	–	10	1000	100
41	LFA	103	10	.20	.20	.10	>5000	15	20	1500	1.5	10	15	50	500	50	100	–	15	700	5	–	300	50	20	7000	70
42	LFA	104	15	.50	2	.07	5000	30	30	1000	1.5	50	10	70	500	50	100	20	20	700	10	–	500	70	20	5000	100
46	LFA	105	3	.50	.10	.20	1000	5	20	1500	5	–	5	–	15	50	5	20	–	50	5	–	300	50	10	200	150
52	LFA	106	2	.20	.05	.05	2000	–	50	1500	5	–	–	–	–	50	5	–	–	30	–	–	200	20	10	–	50
78	LFA	107	2	.20	.10	.10	700	–	30	700	3	–	–	–	–	70	10	–	–	50	–	–	–	10	–	–	100
85	LFA	128	5	.15	.20	.50	500	1	30	1000	3	–	15	70	10	100	5	30	15	15	–	–	200	100	20	–	150
86	LFA	108	2	.20	.50	.15	300	.5	50	700	5	–	–	20	5	50	15	–	–	15	5	–	–	70	–	–	100
87	LFA	109	1.5	.20	1	.10	200	5	50	1000	5	–	–	–	–	50	–	20	–	10	–	–	–	20	–	–	100
89	LFA	110	5	.20	–	.10	500	–	30	1000	5	–	–	–	–	50	20	20	–	30	–	–	–	20	–	–	700
90	LFA	111	3	.30	.20	.15	200	10	50	700	5	–	–	–	–	50	50	20	–	50	10	–	100	50	10	–	100
91	LFA	112	1	.10	–	.07	200	100	50	1000	2	–	–	–	5	50	500	–	–	70	–	–	100	20	–	–	100
92	LFA	113	1.5	.10	.05	.07	150	30	20	1000	2	–	–	–	–	50	500	–	–	50	–	–	–	20	–	–	100
93	LFA	114	2	.50	2	.20	200	1	20	150	3	–	–	–	5	50	20	–	–	20	5	–	200	50	20	–	100
114	LFA	120	3	1.50	.20	.50	500	–		1500	5	–	10	300	10	50	70	20	50	15	10	–	300	70	15	–	150
132	LFA	121	1	.30	.05	.05	200	1	50	700	5	–	–	–	5	50	7	–	–	20	–	–	–	10	–	–	100
133	LFA	122	.7	.10	.15	.05	150	–	20	700	1.5	–	–	–	–	50	–	–	–	–	–	–	100	20	–	–	30
134	LFA	123	2	.50	.15	.30	300	70	30	700	5	–	–	–	–	50	–	–	–	20	5	–	100	50	–	–	150
137	LFA	127	2	.20	.10	.30	100	7	20	1000	3	–	–	–	30	50	70	20	–	30	5	100	200	50	–	–	150
141	LFR	920	2	.20	.70	.15	150	–	10	2000	2	–	–	–	–	50	–	20	–	50	–		700	20	–	–	200
146	LFR	921	1	.15	.15	.15	150	3	10	500	1	–	–	10	20	50	50	–	–	20	–	–	–	50	–	–	100
162	LFR	922	.2	.05	–	.01	700	2	10	200	–	–	–	–	–	–	50	–	–	20	–	–	–	–	–	–	–
202	LFA	118	1	.10	.20	.20	300	1	10	300	5	–	–	–	–	50	–	30	–	70	5	–	100	10	20	–	70

Table 3.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Bi	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sn	Sr	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	10	5	10	5	20	5	20	5	10	5	10	100	10	10	200	10
204	LFA	119	5	1	.20	.50	500	3	10	2000	3	–	5	50	20	100	–	20	15	30	10	–	500	70	20	–	150
238	LFA	116	2	.20	–	.07	150	20	70	700	3	–	–	–	5	50	10	–	–	20	5	–	–	20	–	–	70
304	LFA	115	5	2	.70	.50	2000	.5	50	1500	5	–	–	–	–	100	–	30	50	100	20	–	300	100	30	500	150
328	LFS	335	.5	.10	.05	.03	150	7	50	150	5	–	–	–	–	–	–	10	–	–	–	–	–	–	–	–	50
332	LFR	901	1.5	.20	.20	.10	500	–	50	1000	2	–	–	–	–	50	–	–	5	20	–	–	300	10	–	–	200
352	LFR	902	1	.10	1	.05	50	–	20	700	1	–	–	–	–	20	–	–	–	–	–	–	–	–	–	–	–
377	LFR	903	7	.20	–	.10	100	20	150	1000	2	50	–	–	100	50	5	20	–	1000	–	–	200	20	–	200	100
378	LFR	904	10	.20	–	.10	50	300	200	700	3	100	–	–	150	50	30	20	–	1000	–	–	–	20	–	2000	100
379	LFR	905	1	.20	.70	.15	700	1	200	1000	5	–	–	–	5	50	–	–	–	50	–	–	200	10	–	–	150
384	LFR	906	1	.07	–	.05	100	7	100	300	2	–	–	–	5	30	–	–	–	100	–	–	–	–	–	–	50
386	LFR	907	1.5	.30	–	.15	700	15	50	1000	1	–	–	–	150	50	5	20	–	1500	–	–	100	20	–	200	150
387	LFR	908	3	.05	.05	.07	200	70	20	100	1	–	–	100	200	50	30	–	–	300	–	–	–	30	–	300	20
388	LFR	909	15	.30	.70	.03	1500	200	20	500	2	150	30	–	2000	–	150	–	–	2000	–	–	200	30	–	7000	100
389	LFR	910	10	.15	.05	.15	500	10	20	1000	2	–	–	–	1000	–	100	20	–	500	–	–	500	70	–	–	200
391	LFR	919	3	.30	.30	.30	1000	–	150	2000	2	–	–	–	–	100	–	20	–	300	–	–	700	50	20	–	300
397	LFR	911	1	.02	.05	.03	200	.5	10	500	2	–	–	–	5	30	–	20	–	10	–	–	–	10	–	–	100
422	LFR	923	1	.30	.5	.15	500	7	30	700	2	–	–	–	–	50	–	20	–	10	–	–	–	30	15	–	100
423	LFR	924	1	.30	.10	.20	500	20	50	700	3	–	–	–	20	150	100	30	–	50	5	–	–	70	20	–	200
434	LFR	925	1	.20	.10	.15	300	–	20	1000	2	–	–	–	–	50	–	20	–	50	–	–	200	20	–	–	200
445	LFR	339	.7	.10	.10	.02	200	–	50	700	2	–	–	–	15	50	–	20	–	30	–	–	200	–	20	–	200
447	LFR	926	.3	.05	–	.02	100	200	50	300	2	150	–	–	–	50	50	–	–	300	–	–	–	–	–	–	20
520	LFA	912	2	.10	.30	.10	500	–	10	1000	1.5	–	–	–	–	30	–	20	–	30	–	–	700	10	–	–	100
530	LFR	913	1	.20	.10	.15	500	.5	70	200	3	–	–	–	–	30	–	30	–	50	–	–	–	20	–	–	100
531	LFR	914	3	.20	.30	.50	1000	–	50	200	2	–	20	70	10	50		20	50	10	15	–	200	70	20	–	200
544	LFS	336	5	1.50	.50	.50	5000	10	10	700	3	20	15	150	5	50	–	30	50	300	15	–	300	100	20	1000	200
553	LFS	337	5	1.50	1	.30	100	–	10	100	–	–	–	–	20	50	–	20	–	20	15	–	500	100	20	–	200
554	LFR	915	10	1.50	.30	.70	1000	5	20	1000	3	–	20	70	300	50	20	50	5	100	20	50	700	150	50	–	200
556	LFR	916	5	.20	.30	.50	1500	.5	30	1000	2	–	20	20	70	70	15	30	5	20	15	–	300	150	20	–	200
557	LFR	917	7	1	.20	.50	500	–	10	700	1	–	20	20	20	50	–	20	5	20	15	–	300	100	10	–	150
559	LFR	918	1.5	.20	.05	.15	300	–	20	1000	5	–	–	–	–	50	5	30	–	10	15	–	300	100	10	–	150
608	LFS	340	10	.70	–	.07	500	500	100	1000	10	300	–	–	200	–	100	30	–	2000	5	50	–	50	–	700	50
609	LFR	927	5	.05	10	.02	100	50	10	150	1	500	–	–	200	–	10	–	–	500	–	–	–	–	30	300	–
610	LFR	928	10	1	.07	.30	700	70	100	1000	20	50	–	–	200	–	30	50	–	10000	10	70	–	100	–	700	200
811	LGD	814	2	1	–	.50	150	100	20	1000	100	70	–	20	70	50	70	30	–	300	10	100	200	100	10	–	200
812	LGD	815	3	1	–	.50	150	200	20	500	10	200	–	100	700	50	50	30	10	2000	15	100	–	100	–	–	200
813	LGD	816	1	.15	–	.05	150	20	20	200	3	–	–	–	5	30	300	20	5	200	–	–	–	20	–	–	50
816	LGD	817	2	.50	.07	.20	500	5	20	700	3	–	10	50	7	50	50	20	10	50	10	–	–	100	–	–	150

Table 3.--Continued

Field No.	Lab No.		Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Bi	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sn	Sr	V	Y	Zn	Zr
			Percent				ppm																				
			.05	.02	.05	.002	10	.5	10	10	1	10	5	10	5	20	5	20	5	10	5	10	100	10	10	200	10
818	LGD	818	1	.20	–	.05	200	100	20	700	3	–	–	–	–	50	100	20	–	70	–	–	–	50	–	–	150
819	LGD	819	2	.15	–	.03	100	50	30	500	3	–	–	20	–	30	50	20	–	2000	–	–	–	10	–	–	50
820	LGD	820	1	.20	.10	.10	300	1	10	1000	2	–	–	–	–	20		20	5	50	–	–	200	20	–	–	150
821	LGD	821	7	.30	–	.15	300	50	50	1000	3	30	–	–	50	20	200	20	–	1000	5	–	–	20	–	200	150
825	LGD	822	1	.10	.20	.03	100	7	10	1000	2	–	–	–	10	20	150	20	–	20	–	–	–	15	–	–	150
831	LGD	823	1	.15	.50	.10	300	.5	10	1000	2	–	–	–	10	20	30	20	–	50	–	–	200	10	–	–	100
832	LGD	824	2	.20	–	.15	300	2	10	700	2	–	–	–	10	20	30	30	–	70	7	–	100	20	–	–	150
833	LGD	825	2	.20	.30	.20	700	7	10	700	2	20	–	–	10	20	70	50	–	500	7	–	100	50	15	–	100
834	LGD	826	1.5	.20	.30	.15	200	.5	10	1000	3	–	–	–	7	20	30	20	–	20	5	–	200	50	10	–	100
835	LGD	827	2	.20	.70	.20	150	15	10	1500	2	–	–	–	7	70	1500	20	–	100	5	–	500	20	15	–	150
837	LGD	828	1	.20	–	.10	100	5	20	700	2	–	–	–	7	50	50	20	–	20	–	–	–	20	10	–	100
838	LGD	829	10	.20	–	.15	1500	2	50	500	2	–	–	30	15	50	500	–	10	50	5	–	–	50	10	–	100
839	LGD	830	1.5	.30	.10	.15	300	5	30	1000	3	–	–	–	–	50	100	20	–	30	–	–	–	50	10	–	100
840	LGD	831	1.5	.50	.70	.30	500	2	20	1000	2	–	–	–	10	50	20	20	–	70	5	–	700	50	10	–	150
844	LGD	832	1.5	.20	.20	.20	700	–	30	1000	5	–	–	–	10	50	5	30	–	20	–	–	200	30	20	–	150
856	LGD	833	1.5	.15	–	.20	700	1.5	50	1000	3	–	–	–	5	50	10	50	–	50	5	–	200	30	10	–	150
864	LGD	834	1	.15	.70	.02	1000	15	20	1000	5	–	–	–	5	50	5	–	–	30	–	–	300	20	15	–	20
865	LGD	835	1	.20	.20	.20	1000	–	20	3000	3	–	–	–	–	50	–	20	–	50	–	–	700	30	10	–	150
866	LGD	836	1.5	.15	–	.05	300	200	30	500	5	–	–	–	–	30	1000	20	–	500	–	–	–	50	–	–	70
867	LGD	837	1.5	.50	1	.20	1000	–	10	2000	2	–	–	–	5	50	–	20	–	70	5	–	1000	20	–	–	150
868	LGD	838	1.5	.50	1	.20	700	–	10	1000	2	–	–	–	–	150	–	20	–	70	7	–	500	50	20	–	150
870	LGD	839	2	1	1	.70	1000	.5	10	500	2	–	10	100	70	50	–	20	–	50	10	–	200	100	10	–	150

Table 4.--Atomic absorption analyses of altered rock or mineralized samples, Ten Mile West Roadless Area, Boise and Elmore Counties, Idaho. Numbers immediately below element headings show minimum limits of determination. The symbol N indicates that values were not detected at the limit of detection. The symbol - indicates the element was not analyzed. Analysts: B. Arbogast, J. G. Viets, C. Eason, B. Vaughn and S. Royse.

Table 4.--Continued

Sample No.	Ag	Au	Cu	Pb	Zn	Mo	Remarks
	ppm						
	.05	.05	5	5	5	1	
25	15	N	250	170	50	–	Quartz vein
26	.50	N	10	15	5	–	Quartz vein
27	.65	N	N	15	10	–	Quartz vein
33	2	N	10	25	15	–	Massive quartz vein
37	.55	N	N	15	15	–	Massive quartz vein
38	.80	N	N	45	75	–	Dump fragments
39	48	N	85	5,200	490	–	Dump fragments
40	3.5	N	35	150	910	–	Dump fragments
41	5	N	190	160	5,100	–	Dump fragments
42	12	N	160	130	2,600	–	Quartz vein
46	1.5	N	10	30	85	–	Dump fragments
52	.1	N	N	20	30	–	Wall of prospect pit
78	.15	N	N	30	25	–	Quartz vein
85	.15	N	5	20	55	–	Quartz vein
86	.30	N	N	20	25	–	Quartz vein
87	3.5	.10	N	10	10	–	Quartz vein
89	.05	N	N	20	55	–	Quartz vein
90	2.5	N	N	20	15	–	Quartz vein
91	50	N	N	70	10	–	Quartz vein
92	27	N	N	45	5	–	Dump fragments
93	.50	N	N	15	30	–	Dump fragments
114	N	N	5	15	40	–	Quartz vein
132	.10	N	N	15	10	–	Quartz vein
133	N	N	N	N	5	–	Silicified dike
134	40	N	N	30	15	–	Altered monzogranite
137	3.5	N	15	30	15	–	Quartz vein
141	.10	N	N	10	10	N	Altered granodiorite
146	.80	N	15	15	10	22	Altered granodiorite
162	1.9	N	N	50	30	4	Quartz vein
202	.25	N	N	30	25	–	Altered granodiorite
204	.50	N	10	20	40	–	Altered rhyolite dike
238	8.5	5.6	N	25	5	–	Altered rhyolite dike
304	.15	N	N	25	5	–	Altered andesite dike
328	4.3	.05	N	10	10	1	Brecciated quartz vein
332	N	N	N	5	25	N	Fragments from prospect pit
352	.20	.10	N	20	20	4	Quartz vein

Table 4.--Continued

Sample No.	Ag	Au	Cu	Pb	Zn	Mo	Remarks
	ppm						
	.05	.05	5	5	5	1	
377	14	18	70	310	310	3	Altered monogranite
378	89	110	70	550	820	14	Fragments from prospect pit
379	.20	.15	N	20	35	1	Dump fragments
384	7.6	2.5	5	150	55	1	Dump fragments
386	2.4	N	90	480	130	4	Altered monzogranite
387	16	N	210	350	230	25	Dump fragments
388	128	N	780	1600	3700	80	Dump fragments
389	2.4	N	470	15	30	45	Chip Sample at gossan
391	.05	N	N	45	120	N	Altered monzogranite
397	.10	N	N	N	10	1	Quartz vein
422	6.6	N	N	15	N	3	Altered rhyolite dike
423	8.3	N	10	20	15	29	Quartz vein in rhyolite dike
434	N	N	N	5	20	N	Chip sample in prospect pit
445	N	N	N	15	N	N	Altered monzogranite
447	112	1.5	N	140	10	27	Chip sample from prospect pit
520	N	N	N	5	20	N	Altered monzogranite
530	.20	N	N	20	10	3	Gossan – quartz vein
531	.05	N	5	10	110	1	Altered monzogranite
544	1.7	N	N	150	230	N	Altered rhyodacite dike
553	N	N	10	N	25	N	Altered quartz monzodiorite
554	.80	N	210	25	80	8	Silicified biotite granodiorite
556	.20	N	10	10	45	6	Silicified gossan
557	.05	N	10	N	70	N	Silicified gossan
559	.20	N	N	15	25	4	Altered biotite granodiorite
608	137	N	110	660	340	43	Brecciated quartz vein
609	26	N	80	310	200	12	Brecciated quartz vein
610	8.9	N	70	920	290	9	Altered monzogranite
811	65	N	90	155	20	23	Fragments from prospect pit
812	130	N	930	1550	40	19	Fragments from prospect pit
813	170	.10	5	140	35	170	Quartz vein
816	2.8	N	5	25	25	25	Quartz vein in andesite dike
818	30	.05	5	25	10	65	Quartz vein
819	45	43	30	3400	115	25	Iron-stained quartz vein
820	1.1	.05	10	15	25	1	Quartz veins
821	15	5.5	40	580	100	90	Iron-stained quartz vein

Table 4.--Continued

Sample No.	Ag	Au	Cu	Pb	Zn	Mo	Remarks
			ppm				
	.05	.05	5	5	5	1	
825	2.6	.05	N	5	15	60	Silicified altered zone
831	.35	.05	10	10	25	5.5	Quartz stringers in altered rock
832	.85	.05	10	20	40	8.5	Quartz stringers in altered rock
833	3.8	N	10	300	40	24	Brecciated and altered zone
834	.30	N	5	5	25	13	Iron-stained altered zone
835	4.1	N	5	70	45	600	Quartz vein
837	2.9	N	5	5	N	23	Chips across vein
838	1	.10	5	20	35	95	Mineralized shear zone
839	1.1	N	5	10	30	55	Quartz stringers in andesite dike
840	.55	N	5	5	30	7.5	Altered biotite granodiorite
844	.30	N	N	5	25	N	Iron-stained quartz vein
856	.90	N	N	10	10	40	Iron-stained rhyolite dike
864	6.2	.05	5	15	25	4	Iron-stained quartz vein
865	N	N	N	5	30	N	Altered biotite granodiorite
866	120	.10	10	426	70	400	Quartz vein
867	.35	N	5	5	50	N	Altered monzogranite
868	.15	.05	N	5	55	1	Altered, iron-stained zone
870	2.5	N	75	30	40	N	Brecciated quartz vein