

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Analytical results for 130 rock, 135 stream-sediment and soil,
and 110 panned-concentrate samples from the Rattlesnake
Wilderness study area, Missoula County, Montana

by

W. L. Campbell, S. K. McDaniel,
and R. T. Hopkins, Jr.

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This report is preliminary and has not been
reviewed for conformity with U.S. Geological Survey standards.

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INTRODUCTION

The geochemical sampling program in the Rattlesnake Wilderness study area (fig. 1) consisted of collecting and analyzing 130 rock, 135 stream-sediment and soil, and 110 panned-concentrate samples. Traverses to collect these samples were made along all the ridges and stream drainages of the area.

SAMPLE COLLECTION TECHNIQUES

The rock samples were taken mostly from outcrop, but mineralized float rock samples were taken when found, to evaluate any potential mineral deposits. The stream-sediment samples consisted of the minus-177 micrometer (80-mesh) fraction of drainage sediments, as this fraction is most apt to have metal adsorption on fine clay-size particles. The soils were air-dried and sieved to pass through a 177-micrometer (80-mesh) screen, to concentrate the metal-rich, fine, clay-fraction particles. The panned-concentrate samples were usually panned on-site to enhance the detection limit by a factor of 500 times, but in some instances, when no water was available, the sample was bagged and panned later. Sample localities are shown on plate 1. The samples in this study were collected as an extension of, and as a part of, the Butte 1° x 2° CUSMAP program by J. C. Antweiler, Zairah Antweiler, Brian Stephanek, James Ellerby, Gregory Lee, David Sawyer, Wesley L. Campbell, Phyllis Campbell, and Gregory Campbell.

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 assess their mineral resource potential. Results must be made available to the public and be submitted to the Administration and the Congress. This report presents the analytical results of a geochemical study of a geological and mineral survey of the Rattlesnake Wilderness study area, Missoula County, Montana.

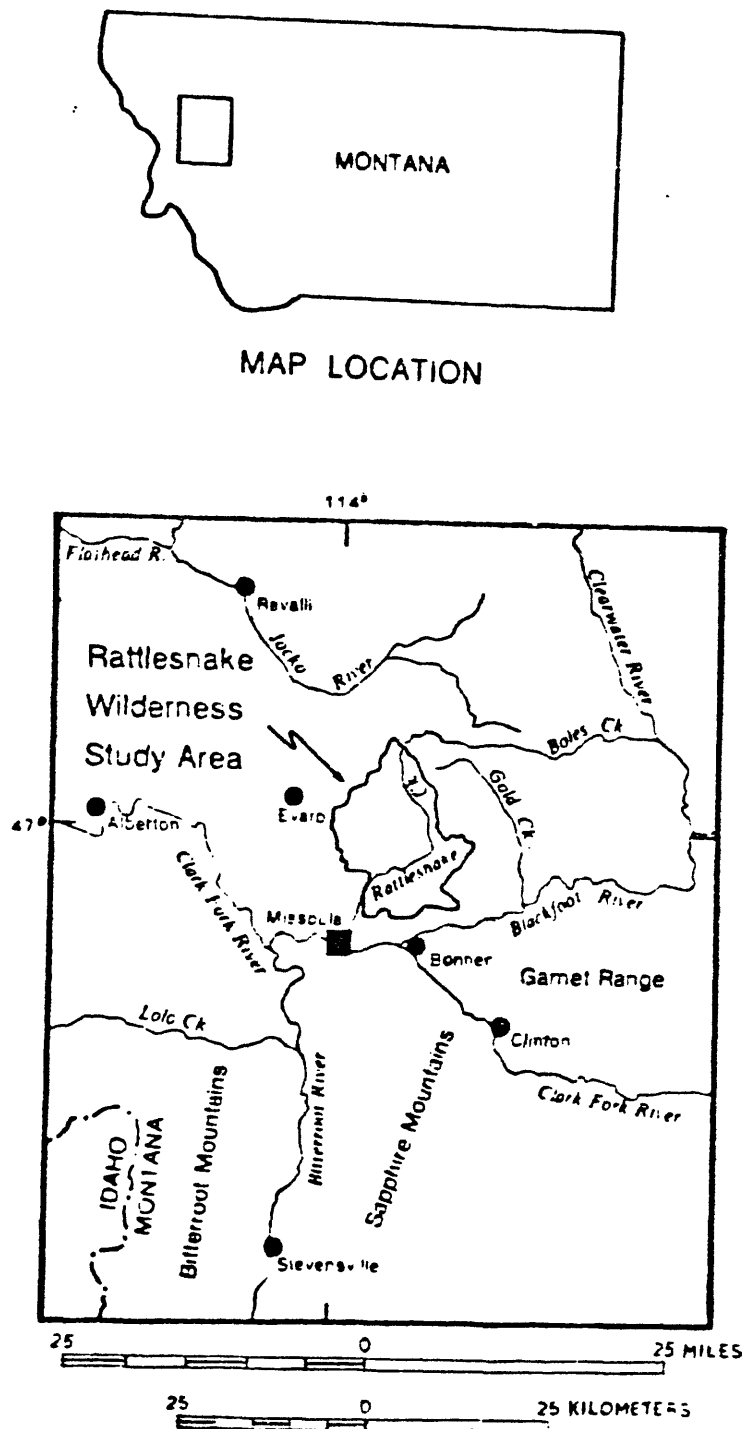


Figure 1.--Index map of the Rattlesnake Wilderness study area,

Missoula County, Montana

ANALYTICAL TECHNIQUES

All samples were analyzed for 31 elements by a six-step semiquantitative emission spectrographic method (Grimes and Marranzino, 1968). All panned concentrates and other selected samples were analyzed for gold by an atomic absorption procedure (Thompson and others, 1968). All of the rock and stream-sediment samples were also analyzed for Ag, Bi, Cd, Cu, Pb, Sb, and Zn by a partial digestion procedure (Viets and others, 1979). Sample analyses and locations are presented in this report.

RESULTS

The analytical data are shown in the accompanying tables. Rock samples, coded with suffix R on the sample locality plate, are in table 1.

Stream-sediment and soil samples, coded with suffix S, are in table 2.

Panned concentrates are in table 3.

EXPLANATION OF TABLES

Values shown are in parts per million except Fe, Mg, Ca, and Ti, which are in percent. Symbols used are >, greater than the sensitivity limit; N, not detected at lower limit of detection; <, an undetermined amount present below the lower limit of detection. Analyses for elements prefixed by S were made by the 6-step semiquantitative spectrographic method. These elements are reported to the nearest number in the series 1, 0.7, 0.5, 0.3, 0.2, 0.15, and 0.1, which represent approximate midpoints of group data on a geometric scale. Numbers in parentheses above the element symbols are the lower limits of detection by the analytical method used.

TABLE 1.--ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA

| Sample | LATITUDE | LONGITUDE | S-FEZ (.05) | S-MGX (.02) | S-CAZ (.05) | S-TXZ (.003) | S-MN (10) | S-AG (.5) | S-AS (200) | S-AU (10) | S-B (10) | S-BA (20) | (1) | (10) |
|----------|----------|-----------|----------------|----------------|----------------|-----------------|--------------|--------------|---------------|--------------|-------------|--------------|------|------|
| BLP0038R | 46 55 20 | 113 47 26 | .70 | .30 | <.05 | .150 | 150 | N | N | N | 50 | 150 | <1.0 | N |
| BLP0039R | 46 55 31 | 113 47 34 | 2.00 | .70 | <.05 | .150 | 100 | N | N | N | 70 | 200 | 1.5 | N |
| BLP0040R | 46 56 2 | 113 48 44 | 5.00 | 1.00 | .20 | .700 | 150 | N | N | N | 500 | 500 | 1.5 | N |
| BLP0041R | 46 56 14 | 113 48 47 | 3.00 | .70 | .20 | .700 | 200 | 3.0 | N | N | 200 | 200 | 1.5 | N |
| BLP0042R | 46 56 38 | 113 48 57 | 1.00 | .70 | <.05 | .200 | 100 | N | N | N | 100 | 150 | 2.0 | N |
| BLP0043R | 46 56 51 | 113 48 23 | .50 | .15 | <.05 | .030 | 50 | N | N | N | N | 1,000 | N | N |
| BLP0044R | 46 57 13 | 113 47 38 | .30 | .15 | <.05 | .050 | 100 | N | N | N | <10 | 1,500 | N | N |
| BLP0045R | 46 57 17 | 113 47 33 | 7.00 | .70 | <.05 | .150 | 500 | N | N | N | 20 | 700 | 1.0 | N |
| BLP0046R | 46 57 27 | 113 47 2 | 3.00 | 1.50 | .07 | .150 | 300 | N | N | N | 70 | 500 | 1.0 | N |
| BLP0047R | 46 57 47 | 113 46 33 | 3.00 | 2.00 | .15 | .500 | 500 | N | N | N | 100 | 700 | 2.0 | N |
| BLP0048R | 46 58 43 | 113 45 57 | .30 | .15 | <.05 | .030 | 100 | N | N | N | <10 | 300 | <1.0 | N |
| BLP0049R | 46 59 8 | 113 45 20 | .50 | .20 | <.05 | .050 | 70 | N | N | N | 10 | 300 | <1.0 | N |
| BLP0050R | 46 59 31 | 113 45 13 | .50 | .20 | <.05 | .030 | 100 | N | N | N | 100 | 150 | <1.0 | N |
| BLP0431R | 46 56 44 | 113 49 14 | .70 | .30 | <.05 | .150 | 70 | N | N | N | 30 | 200 | 1.0 | N |
| BLP0432R | 46 56 52 | 113 49 39 | 1.00 | .50 | <.05 | .150 | 70 | N | N | N | 50 | 200 | 1.0 | N |
| BLP0433R | 46 56 56 | 113 49 52 | .70 | .10 | <.05 | .150 | 20 | <.5 | N | N | 30 | 150 | <1.0 | N |
| BLP0434R | 46 56 58 | 113 50 10 | 1.00 | .50 | <.05 | .200 | 100 | N | N | N | 30 | 300 | 1.5 | N |
| BLP0436R | 46 56 58 | 113 50 58 | .50 | .10 | <.05 | .200 | 150 | N | N | N | 50 | 70 | <1.0 | N |
| BLP0437R | 46 57 4 | 113 51 6 | .20 | .07 | <.05 | .500 | 50 | N | N | N | 30 | 30 | N | N |
| BLP0438R | 46 57 4 | 113 51 6 | .50 | .03 | <.05 | .100 | 10 | N | N | N | 15 | 30 | N | N |
| BLP0439R | 46 57 6 | 113 51 6 | .30 | .07 | <.05 | 1.000 | 10 | N | N | N | 50 | 20 | N | N |
| BLP0442R | 46 55 59 | 113 51 46 | 5.00 | 1.50 | .30 | .300 | 300 | N | N | N | 100 | 1,000 | 2.0 | N |
| BLP0443R | 46 56 11 | 113 51 45 | .10 | .15 | .05 | .005 | 70 | N | N | N | 100 | 30 | N | N |
| BLP0444R | 46 56 19 | 113 51 34 | .10 | .20 | 15.00 | .003 | 200 | N | N | N | 100 | <20 | <1.0 | N |
| BLP0445R | 46 56 17 | 113 51 22 | <.05 | 10.00 | 15.00 | .003 | 100 | N | N | N | 15 | N | N | N |
| BLP0446R | 46 56 17 | 113 51 22 | <.05 | 10.00 | 20.00 | .003 | 70 | N | N | N | 15 | N | N | N |
| BLP0668R | 46 59 24 | 113 49 1 | 2.00 | 2.00 | .07 | .200 | 300 | N | N | N | 150 | 700 | 2.0 | N |
| BLP1954R | 46 55 22 | 113 49 35 | .30 | .03 | <.05 | .150 | 100 | N | N | N | 10 | 100 | N | N |
| BLP1955R | 46 55 15 | 113 48 46 | .70 | .02 | <.05 | .200 | 150 | N | N | N | 10 | 30 | N | N |
| BLP1956R | 46 54 58 | 113 46 36 | 1.00 | .50 | .05 | .070 | 50 | N | N | N | 30 | 500 | 1.0 | N |
| NEM0230R | 46 59 57 | 113 57 2 | 5.00 | 3.00 | .15 | .300 | 500 | N | N | N | 200 | 500 | 2.0 | N |
| NEM0233R | 46 58 36 | 113 55 21 | 5.00 | 2.00 | .07 | .200 | 300 | N | N | N | 150 | 300 | 2.0 | N |
| NEM0236R | 46 59 23 | 113 54 28 | 7.00 | 1.50 | .10 | .700 | 500 | N | N | N | 300 | 1,500 | 1.0 | N |
| NEM0412R | 46 57 7 | 113 54 41 | 1.00 | .30 | .05 | .150 | 200 | N | N | N | 50 | 500 | 1.5 | N |
| NEM0447R | 46 56 20 | 113 52 49 | 2.00 | 1.00 | .20 | .300 | 200 | N | N | N | 100 | 1,000 | 2.0 | N |
| NEM0448R | 46 56 17 | 113 54 9 | 3.00 | 1.50 | .10 | .300 | 700 | N | N | N | 200 | 700 | 1.5 | N |
| NEM0449R | 46 56 12 | 113 54 38 | 5.00 | .70 | .10 | .300 | 500 | N | N | N | 300 | 1,000 | 2.0 | N |
| NEM0611R | 46 57 26 | 113 55 18 | .30 | .30 | .10 | .020 | 50 | N | N | N | 10 | 50 | N | N |
| NEM0613R | 46 55 38 | 113 57 31 | 2.00 | 5.00 | 20.00 | .150 | 700 | N | N | N | 100 | 300 | 1.5 | N |
| NEM0650R | 46 59 53 | 113 54 21 | 1.00 | .30 | <.05 | .100 | 50 | N | N | N | 50 | 300 | 1.0 | N |
| NEM0651R | 46 59 48 | 113 53 58 | 3.00 | 1.00 | <.05 | .100 | 100 | N | N | N | 70 | 70 | 1.0 | N |
| NEM0652R | 46 59 50 | 113 54 16 | 1.00 | .50 | <.05 | .150 | 50 | N | N | N | 100 | 150 | 1.0 | N |
| NEM0654R | 47 1 0 | 113 55 18 | 3.00 | 1.50 | <.05 | .150 | 150 | N | N | N | 150 | 300 | 1.0 | N |
| NEM0655R | 46 58 3 | 113 56 24 | 3.00 | 3.00 | .30 | .500 | 300 | N | N | N | 300 | 200 | 1.5 | N |
| NEM0656R | 46 58 3 | 113 56 24 | 15.00 | 2.00 | 15.00 | >1.000 | 2,000 | N | N | N | <10 | 200 | N | N |

TABLE 1.—ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (20) S-CO | (5) S-CO | (10) S-CR | (5) S-CU | (20) S-LA | (5) S-MO | (20) S-NB | (5) S-NI | (10) S-PB | (100) S-SB | (5) S-SC | (10) S-SN | (100) S-SR | (10) S-V | (50) S-W | (10) S-Y | (200) S-ZN |
|----------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|---------------|-------------|--------------|---------------|-------------|-------------|-------------|---------------|
| BLP0038R | N | N | 10 | <5 | 30 | N | <20 | 5 | <10 | N | N | N | N | 20 | N | N | N |
| BLP0039R | N | <5 | 10 | <5 | 30 | N | <20 | 7 | 10 | N | 5 | N | N | 20 | N | <10 | N |
| BLP0040R | N | 15 | 200 | 20 | 100 | N | <20 | 70 | 20 | N | 20 | N | <100 | 100 | N | 50 | N |
| BLP0041R | N | 7 | 70 | 20 | 150 | N | <20 | 20 | 15 | N | 10 | N | <100 | 50 | N | 70 | N |
| BLP0042R | N | N | 15 | <5 | 50 | N | <20 | <5 | <10 | N | 5 | N | N | 30 | N | 10 | N |
| BLP0043R | N | N | <10 | <5 | 20 | N | <20 | <5 | <10 | N | N | N | N | 10 | N | 30 | N |
| BLP0044R | N | N | 10 | <5 | 20 | N | <20 | <5 | N | N | N | N | N | 10 | N | <10 | N |
| BLP0045R | N | 20 | 50 | 100 | 30 | N | <20 | 30 | 15 | N | 7 | N | N | 50 | N | 20 | N |
| BLP0046R | N | 7 | 50 | <5 | 30 | N | N | 10 | 15 | N | 5 | N | N | 50 | N | 30 | N |
| BLP0047R | N | 10 | 70 | 20 | 50 | N | <20 | 20 | 30 | N | 15 | N | <100 | 70 | N | 50 | N |
| BLP0048R | N | N | <10 | <5 | 20 | N | N | <5 | 10 | N | N | N | N | 10 | N | N | N |
| BLP0049R | N | N | 15 | <5 | 20 | N | N | <5 | 15 | N | N | N | <100 | 15 | N | 30 | N |
| BLP0050R | N | N | 15 | <5 | 30 | N | N | 5 | 10 | N | N | N | <100 | 15 | N | 100 | N |
| BLP0431R | N | 5 | <10 | <5 | 30 | N | <20 | <5 | <10 | N | 5 | N | N | 15 | N | 10 | N |
| BLP0432R | N | 5 | 15 | <5 | 30 | N | <20 | 5 | <10 | N | <5 | N | N | 20 | N | <10 | N |
| BLP0433R | N | <5 | 15 | N | 30 | N | N | <5 | <10 | N | N | N | N | 10 | N | N | N |
| BLP0434R | N | 5 | 15 | <5 | 50 | N | N | 7 | 10 | N | 5 | N | N | 30 | N | 10 | N |
| BLP0436R | N | 5 | 15 | 15 | 30 | N | N | 5 | <10 | N | N | N | N | 10 | N | <10 | N |
| BLP0437R | N | <5 | 20 | N | 20 | N | <20 | <5 | <10 | N | <5 | N | N | 20 | N | 10 | N |
| BLP0438R | N | N | 10 | N | 30 | N | N | <5 | <10 | N | N | N | N | 15 | N | <10 | N |
| BLP0439R | N | <5 | 30 | <5 | 30 | N | <20 | <5 | <10 | N | <5 | N | N | 20 | N | 10 | N |
| BLP0442R | N | 7 | 20 | <5 | 30 | N | <20 | 10 | 10 | N | 10 | N | <100 | 30 | N | 30 | N |
| BLP0443R | N | N | <10 | N | <20 | N | N | <5 | <10 | N | N | N | N | <10 | N | N | N |
| BLP0444R | N | N | N | <5 | 20 | N | N | N | 30 | N | N | N | <100 | <10 | N | <10 | N |
| BLP0445R | N | N | N | N | <20 | N | N | N | <10 | N | N | N | N | <10 | N | N | N |
| BLP0446R | N | N | N | <5 | <20 | N | N | N | N | N | N | N | N | <10 | N | N | N |
| BLP0668R | N | 7 | 30 | <5 | 30 | N | <20 | 10 | 15 | N | 5 | N | <100 | 30 | N | 30 | N |
| BLP1954R | N | N | 10 | <5 | 20 | N | N | 5 | <10 | N | <5 | N | N | 15 | N | N | N |
| BLP1955R | N | N | 20 | 7 | 20 | N | <20 | <5 | <10 | N | N | N | <100 | 15 | N | <10 | N |
| BLP1956R | N | N | 20 | 7 | 20 | N | N | 5 | <10 | N | N | N | <100 | 15 | N | <10 | N |
| NEM0230R | N | 10 | 70 | <5 | <20 | N | <20 | 20 | 15 | N | 15 | N | <100 | 70 | N | 30 | N |
| NEM0233R | N | 7 | 50 | N | 20 | N | N | 15 | 10 | N | 10 | N | N | 50 | N | 30 | N |
| NEM0236R | N | 20 | 200 | 20 | 100 | N | <20 | 70 | 30 | N | 20 | N | N | 100 | N | 50 | N |
| NEM0412R | N | <5 | 15 | 15 | 30 | N | N | <5 | 10 | N | <5 | N | N | 20 | N | 15 | N |
| NEM0447R | N | 5 | 15 | <5 | <20 | N | <20 | 5 | 10 | N | 7 | N | N | 30 | N | 50 | N |
| NEM0448R | N | 10 | 70 | <5 | 30 | N | <20 | 30 | 10 | N | 10 | N | N | 50 | N | 20 | N |
| NEM0449R | N | 7 | 50 | 7 | 50 | N | <20 | 20 | <10 | N | 15 | N | N | 50 | N | 30 | N |
| NEM0611R | N | N | <10 | N | 20 | N | N | 7 | <10 | N | N | N | N | <10 | N | 10 | N |
| NEM0613R | N | N | 30 | <5 | 30 | N | N | 10 | <10 | N | 10 | N | 150 | 30 | N | 30 | N |
| NEM0650R | N | 5 | 15 | N | 20 | N | <20 | 7 | 10 | N | <5 | N | <100 | 30 | N | 15 | N |
| NEM0651R | N | 5 | 15 | <5 | 20 | N | <20 | 15 | <10 | N | 5 | N | N | 30 | N | 30 | N |
| NEM0652R | N | <5 | 20 | <5 | 20 | N | N | 5 | 10 | N | <5 | N | <100 | 20 | N | 10 | N |
| NEM0654R | N | 7 | 10 | 5 | 20 | N | <20 | 15 | 10 | N | 5 | N | N | 50 | N | 30 | N |
| NEM0655R | N | 10 | 150 | <5 | 30 | N | <20 | 10 | 10 | N | 10 | N | <100 | 70 | N | 50 | N |
| NEM0656R | N | 50 | <10 | 100 | N | N | N | 30 | 30 | N | 50 | N | 700 | 500 | N | 70 | N |

TABLE 1.--ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (10) S-ZR | (10O) S-TH | (11) AA-CU | (11) AA-PB | (11) AA-ZN | (05) AA-AG | (05) AA-CD | (11) AA-BI | (11) AA-SB |
|----------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| BLP0038R | 150 | N | 1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0039R | 200 | N | 1 | 2 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0040R | 500 | N | 8 | 5 | 6 | <.05 | <.05 | 1 | <1 |
| BLP0041R | >1,000 | N | 6 | 3 | 6 | <.05 | <.05 | <1 | <1 |
| BLP0042R | 300 | N | 1 | 1 | 2 | <.05 | <.05 | <1 | <1 |
| BLP0043R | 200 | N | 1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0044R | 150 | N | <1 | <1 | <1 | <.05 | <.05 | <1 | <1 |
| BLP0045R | 300 | N | 68 | 7 | 13 | <.05 | <.05 | 1 | <1 |
| BLP0046R | 300 | N | 1 | 2 | 4 | <.05 | <.05 | <1 | <1 |
| BLP0047R | 200 | N | 10 | 9 | 8 | <.05 | <.05 | <1 | <1 |
| BLP0048R | 100 | N | <1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0049R | 70 | N | <1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0050R | 150 | N | <1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0431R | 700 | N | 3 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0432R | 200 | N | 2 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0433R | 150 | N | 1 | <1 | <1 | <.05 | <.05 | <1 | <1 |
| BLP0434R | 200 | N | 1 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0436R | 150 | N | 4 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0437R | 700 | N | 1 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0438R | 100 | N | 1 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0439R | 700 | N | <1 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0442R | 200 | N | <1 | 1 | 6 | <.05 | <.05 | <1 | <1 |
| BLP0443R | <10 | N | <1 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| BLP0444R | N | N | 1 | 20 | 11 | <.05 | <.22 | <1 | <1 |
| BLP0445R | N | N | <1 | 3 | 6 | <.05 | <.05 | <1 | <1 |
| BLP0446R | N | N | <1 | <1 | 4 | <.05 | <.05 | <1 | <1 |
| BLP066R | 300 | N | <1 | 2 | 4 | <.05 | <.05 | <1 | <1 |
| BLP1954R | 300 | N | 2 | 1 | 1 | <.05 | <.05 | <1 | 1 |
| BLP1955R | 300 | N | 2 | 1 | 1 | <.07 | <.05 | <1 | <1 |
| BLP1956R | 300 | N | 4 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| NEM0230R | 200 | N | <1 | 2 | 6 | <.05 | <.05 | 1 | <1 |
| NEM0233R | 150 | N | <1 | 2 | 5 | <.05 | <.07 | 1 | <1 |
| NEM0236R | 300 | N | 8 | 8 | 9 | <.05 | <.05 | 1 | <1 |
| NEM0412R | 150 | N | 10 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| NEM0447R | 300 | N | 1 | 2 | 3 | <.05 | <.05 | <1 | <1 |
| NEM0448R | 300 | N | <1 | 2 | 4 | <.05 | <.07 | <1 | <1 |
| NEM0449R | 200 | N | 1 | 2 | 6 | <.05 | <.05 | 1 | <1 |
| NEM0611R | 30 | N | <1 | 1 | <1 | <.05 | <.05 | <1 | <1 |
| NEM0613R | 70 | N | 160 | 2 | 13 | <.15 | <.13 | <1 | 2 |
| NEM0650R | 300 | N | <1 | 1 | 3 | <.05 | <.05 | <1 | <1 |
| NEM0651R | 300 | N | <1 | 1 | <1 | <.05 | <.05 | <1 | <1 |
| NEM0652R | 300 | N | <1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| NEM0654R | 300 | N | 1 | 1 | 3 | <.05 | <.05 | <1 | <1 |
| NEM0655R | >1,000 | N | <1 | 1 | 6 | <.05 | <.05 | <1 | <1 |
| NEM0656R | 100 | N | 91 | 11 | 12 | <.05 | <.08 | 1 | <1 |

TABLE 1. --ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | LATITUDE | LONGITUDE | (.05) S-FEX | (.02) S-MGX | (.05) S-CAZ | (.002) S-TIX | (10) S-MN | (.5) S-AG | (200) S-AS | (10) S-AU | (10) S-B | (20) S-BA | (1) S-BE | (10) S-BI |
|----------|----------|-----------|-------------|-------------|-------------|--------------|-----------|-----------|------------|-----------|----------|-----------|----------|-----------|
| NEM0659R | 46 59 10 | 113 54 52 | 5.00 | .50 | 2.00 | -.300 | 300 | N | N | N | 200 | 200 | 2.0 | N |
| NEM0660R | 47 0 0 | 113 54 50 | 1.50 | .20 | .50 | -.200 | 150 | N | N | N | 100 | 100 | 1.0 | N |
| NEM0661R | 46 59 2 | 113 54 33 | 7.00 | 1.00 | .50 | 1.000 | 100 | N | N | N | 300 | 500 | 2.0 | N |
| NEM0662R | 46 59 5 | 113 54 36 | 7.00 | 1.50 | -.05 | -.500 | 100 | N | N | N | 300 | 700 | 1.5 | N |
| NEM0663R | 46 58 42 | 113 54 38 | 2.00 | 1.00 | >20.00 | -.070 | 300 | N | N | N | N | 150 | N | N |
| NEM0664R | 46 59 23 | 113 52 57 | 7.00 | 1.50 | .30 | -.700 | 300 | N | N | N | 150 | 700 | 3.0 | N |
| NEM0667R | 46 58 2 | 113 52 52 | 1.50 | .30 | <.05 | -.100 | 50 | N | N | N | 100 | 200 | 1.0 | N |
| NEM0813R | 46 59 56 | 113 55 22 | 3.00 | 1.00 | <.05 | -.200 | 150 | N | N | N | 50 | 300 | 1.0 | N |
| NEM0814R | 46 59 39 | 113 56 3 | 3.00 | .50 | -.05 | -.150 | 300 | N | N | N | 20 | 200 | 1.0 | N |
| NEM0815R | 46 59 12 | 113 57 10 | .50 | .15 | <.05 | -.100 | 50 | N | N | N | 30 | 300 | <1.0 | N |
| NEM0816R | 46 59 29 | 113 56 34 | 2.00 | 1.50 | -.07 | -.150 | 300 | N | N | N | 50 | 300 | 1.5 | N |
| NEM0817R | 46 59 39 | 113 55 34 | 1.00 | .15 | <.05 | -.150 | 70 | N | N | N | 20 | 150 | <1.0 | N |
| NEM0818R | 46 59 9 | 113 55 48 | 2.00 | .70 | <.05 | -.150 | 100 | N | N | N | 50 | 150 | 1.0 | N |
| NEM0819R | 46 58 56 | 113 56 3 | .50 | .15 | <.05 | -.070 | 30 | N | N | N | 70 | 300 | <1.0 | N |
| STU0001R | 47 2 18 | 113 52 50 | 1.00 | .70 | .05 | -.100 | 150 | N | N | N | 100 | 200 | 1.5 | N |
| STU0007R | 47 2 27 | 113 59 11 | 3.00 | 1.50 | -.20 | -.300 | 150 | N | N | N | 50 | 700 | 2.0 | N |
| STU0010R | 47 0 55 | 113 59 51 | 10.00 | 3.00 | 7.00 | 1.000 | 1,500 | N | N | N | <10 | 150 | N | N |
| STU0016R | 47 5 56 | 113 55 7 | 3.00 | 2.00 | .20 | -.300 | 300 | 2.0 | N | N | 150 | 500 | 3.0 | N |
| STU0017R | 47 5 44 | 113 55 18 | 3.00 | 3.00 | -.20 | -.500 | 200 | N | N | N | 150 | 700 | 3.0 | N |
| STU0018R | 47 5 19 | 113 55 24 | 5.00 | 2.00 | .30 | -.500 | 500 | N | N | N | 200 | 500 | 2.0 | N |
| STU0019R | 47 5 17 | 113 55 23 | 2.00 | 7.00 | 10.00 | -.150 | >5,000 | 15.0 | N | N | 50 | 1,500 | 1.5 | 15 |
| STU0020R | 47 5 14 | 113 55 20 | 3.00 | 7.00 | 15.00 | -.300 | >5,000 | 15.0 | N | N | 50 | 2,000 | 1.5 | 10 |
| STU0021R | 47 5 8 | 113 55 37 | 3.00 | 7.00 | 15.00 | -.200 | 5,000 | N | N | N | 700 | 700 | 1.5 | N |
| STU0035R | 47 3 34 | 113 58 31 | 1.50 | 2.00 | -.05 | -.100 | 150 | N | N | N | 200 | 70 | 1.0 | N |
| STU0036R | 47 3 34 | 113 58 33 | 3.00 | 3.00 | .15 | -.300 | 200 | N | N | N | 200 | 300 | 1.5 | N |
| STU0037R | 47 3 34 | 113 58 33 | 5.00 | 5.00 | -.15 | -.300 | 200 | N | N | N | 500 | 200 | 2.0 | N |
| STU0280R | 47 5 45 | 113 52 53 | 3.00 | 1.00 | .07 | -.500 | 200 | N | N | N | 500 | 1,500 | 2.0 | N |
| STU0281R | 47 5 45 | 113 52 53 | 5.00 | 1.00 | .10 | -.500 | 200 | N | N | N | 300 | 700 | 2.0 | N |
| STU0282R | 47 5 51 | 113 53 38 | 3.00 | 1.00 | -.10 | -.500 | 300 | N | N | N | 300 | 700 | 2.0 | N |
| STU0283R | 47 5 51 | 113 53 38 | 15.00 | 3.00 | 7.00 | >1,000 | 1,500 | N | N | N | 10 | 700 | N | N |
| STU0284R | 47 6 20 | 113 54 25 | 5.00 | 1.00 | 1.00 | -.300 | 1,500 | N | N | N | 300 | 700 | 2.0 | 100 |
| STU0416R | 47 2 21 | 113 56 31 | 3.00 | .70 | .05 | -.300 | 300 | N | N | N | 30 | 500 | 1.5 | N |
| STU0600R | 47 2 27 | 113 52 51 | .70 | .30 | <.05 | -.100 | 50 | N | N | N | 150 | 500 | 1.0 | N |
| STU0601R | 47 0 4 | 113 59 55 | 3.00 | 5.00 | 7.00 | -.300 | 500 | N | N | N | 300 | 700 | 1.5 | N |
| STU0602R | 47 0 4 | 113 59 55 | .70 | .20 | .30 | -.070 | 200 | N | N | N | <10 | 30 | <1.0 | N |
| STU0604R | 47 2 26 | 113 59 15 | 3.00 | 2.00 | <.05 | -.300 | 100 | N | N | N | 300 | 150 | 1.5 | N |
| STU0636R | 47 0 24 | 113 55 10 | 1.50 | 1.00 | -.07 | -.150 | 70 | N | N | N | 70 | 150 | 1.0 | N |
| STU0637R | 47 0 24 | 113 55 10 | 2.00 | 1.00 | -.07 | -.200 | 150 | N | N | N | 150 | 150 | 1.5 | N |
| STU0638R | 47 0 43 | 113 55 24 | 3.00 | .20 | <.05 | -.150 | 30 | N | N | N | 150 | 150 | 1.0 | N |
| STU0639R | 47 0 53 | 113 55 38 | 2.00 | .50 | <.05 | -.020 | 150 | N | N | N | 10 | 30 | <1.0 | N |
| STU0640R | 47 1 11 | 113 55 49 | 3.00 | 1.00 | -.07 | -.700 | 300 | N | N | N | 200 | 300 | 2.0 | N |
| STU0641R | 47 1 30 | 113 56 0 | .30 | -.07 | <.05 | <.002 | 70 | N | N | N | 10 | 20 | <1.0 | N |
| STU0642R | 47 1 47 | 113 56 3 | 5.00 | .70 | <.05 | -.070 | 700 | N | N | N | 10 | 70 | <1.0 | N |
| STU0643R | 47 1 53 | 113 56 5 | 7.00 | .70 | -.07 | -.300 | 300 | N | N | N | 100 | 200 | 2.0 | N |
| STU0644R | 47 2 10 | 113 56 2 | 7.00 | 1.00 | .10 | -.700 | 300 | N | N | N | 300 | 300 | 2.0 | N |

TABLE 1.—ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (20) S-CO | (5) S-CO | (10) S-CR | (5) S-CU | (20) S-LA | (5) S-MO | (20) S-MB | (5) S-MI | (10) S-PB | (100) S-SB | (5) S-SC | (10) S-SN | (100) S-SR | (10) S-V | (50) S-W | (10) S-Y | (200) S-ZN |
|----------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|---------------|-------------|--------------|---------------|-------------|-------------|-------------|---------------|
| NEMO659R | N | 7 | 150 | 15 | 200 | N | <20 | 20 | 30 | N | 10 | N | 200 | 70 | N | 150 | N |
| NEMO660R | N | 7 | 30 | 7 | 30 | N | N | 10 | <10 | N | 5 | N | <100 | 50 | N | 30 | N |
| NEMO661R | N | 15 | 200 | 70 | 150 | N | <20 | 70 | 15 | N | 20 | N | <100 | 100 | N | 100 | N |
| NEMO662R | N | 15 | 300 | 30 | 70 | 7 | <20 | 70 | 15 | N | 30 | N | N | 100 | N | 30 | N |
| NEMO663R | N | <5 | 30 | <5 | <20 | N | N | 5 | 10 | N | N | N | 300 | 15 | N | N | N |
| NEMO664R | N | 15 | 100 | 20 | 70 | N | <20 | 30 | 20 | N | 15 | N | N | 100 | N | 70 | N |
| NEMO667R | N | <5 | 20 | 5 | 20 | N | N | 5 | <10 | N | <5 | N | <100 | 20 | N | <10 | N |
| NEMO813R | N | 7 | 50 | 30 | 20 | N | <20 | 30 | 10 | N | 5 | N | <100 | 30 | N | 30 | N |
| NEMO814R | N | 7 | 50 | 20 | 20 | N | <20 | 10 | 10 | N | 5 | N | <100 | 30 | N | 20 | N |
| NEMO815R | N | N | 15 | <5 | 20 | N | N | 5 | 10 | N | <5 | N | <100 | 15 | N | N | N |
| NEMO816R | N | 5 | 50 | 20 | 30 | N | <20 | 10 | 15 | N | 5 | N | <100 | 30 | N | 30 | N |
| NEMO817R | N | N | 20 | <5 | 20 | N | <20 | <5 | 10 | N | <5 | N | <100 | 20 | N | <10 | N |
| NEMO818R | N | N | 20 | 20 | 20 | N | <20 | 15 | 10 | N | <5 | N | N | 30 | N | 20 | N |
| NEMO819R | N | N | 20 | 20 | 20 | N | N | 7 | 15 | N | <5 | N | <100 | 15 | N | N | N |
| STU0001R | N | 7 | 15 | <5 | 20 | N | <20 | 7 | 15 | N | <5 | N | N | 30 | N | 15 | N |
| STU0007R | N | 10 | 70 | 15 | 20 | N | <20 | 30 | <10 | N | 10 | N | N | 50 | N | 30 | N |
| STU0010R | N | 50 | 100 | 200 | N | N | N | 70 | <10 | N | 30 | N | 150 | 300 | N | 30 | N |
| STU0016R | N | 10 | 70 | 100 | 50 | N | <20 | 20 | 15 | N | 15 | N | N | 100 | N | 30 | N |
| STU0017R | N | 10 | 100 | 70 | 70 | N | <20 | 30 | 10 | N | 15 | N | N | 100 | N | 70 | N |
| STU0018R | N | 10 | 100 | 15 | 100 | N | <20 | 30 | 20 | N | 15 | N | N | 100 | N | 70 | N |
| STU0019R | N | 7 | 70 | 5,000 | 30 | 15 | N | 10 | 20 | N | 5 | N | <100 | 30 | N | 50 | N |
| STU0020R | N | 7 | 70 | 5,000 | 100 | 10 | N | 20 | 15 | N | 10 | N | 100 | 30 | N | 70 | N |
| STU0021R | N | 7 | 70 | 5 | 70 | N | <20 | 15 | 15 | N | 15 | N | <100 | 70 | N | 50 | N |
| STU0035R | N | 7 | 20 | <5 | 20 | N | <20 | 15 | 15 | N | <5 | N | N | 30 | N | <10 | N |
| STU0036R | N | 10 | 70 | <5 | 30 | N | <20 | 30 | <10 | N | 15 | N | N | 70 | N | 30 | N |
| STU0037R | N | 10 | 70 | <5 | 70 | N | <20 | 30 | 15 | N | 15 | N | N | 100 | N | 50 | N |
| STU0280R | N | 7 | 70 | <5 | 50 | N | <20 | 15 | 15 | N | 15 | N | N | 100 | N | 30 | N |
| STU0281R | N | 7 | 50 | <5 | 50 | N | <20 | 15 | 15 | N | 15 | N | N | 70 | N | 50 | N |
| STU0282R | N | 7 | 50 | <5 | 50 | N | <20 | 20 | 15 | N | 15 | N | N | 50 | N | 50 | N |
| STU0283R | N | 50 | 10 | 300 | 30 | N | N | 50 | 15 | N | 30 | N | 300 | 300 | N | 50 | N |
| STU0284R | N | 7 | 70 | 5 | 50 | N | N | 30 | 10 | N | 10 | N | <100 | 70 | N | 50 | N |
| STU0416R | N | 7 | 50 | 5 | 30 | N | <20 | 20 | 15 | N | 10 | N | N | 30 | N | 30 | N |
| STU0600R | N | <5 | 15 | N | 20 | N | N | 7 | 15 | N | <5 | N | N | 30 | N | N | N |
| STU0601R | N | 7 | 50 | 5 | 70 | N | N | 15 | 10 | N | 10 | N | 100 | 50 | N | 50 | N |
| STU0602R | N | N | 10 | N | 20 | N | N | <5 | <10 | N | N | N | N | <10 | N | N | N |
| STU0604R | N | 5 | 70 | <5 | 30 | <5 | <20 | 10 | 10 | N | 10 | N | N | 70 | N | 30 | N |
| STU0636R | N | 7 | 15 | <5 | 30 | N | <20 | 20 | <10 | N | 7 | N | N | 30 | N | 15 | N |
| STU0637R | N | 10 | 15 | 5 | 30 | N | <20 | 20 | <10 | N | 7 | N | N | 20 | N | 30 | N |
| STU0638R | N | <5 | 20 | <5 | 50 | N | <20 | 7 | <10 | N | 7 | N | N | 50 | N | 20 | N |
| STU0639R | N | 5 | <10 | 20 | 20 | N | N | 10 | 15 | N | N | N | <100 | 15 | N | N | N |
| STU0640R | N | 7 | 100 | 5 | 50 | N | <20 | 30 | 30 | N | 15 | N | N | 150 | N | 30 | N |
| STU0641R | N | <5 | 10 | N | <20 | N | <20 | 7 | <10 | N | N | N | <100 | <10 | N | 15 | N |
| STU0642R | N | 10 | 20 | <5 | 30 | N | N | 30 | 15 | N | 5 | N | <100 | 30 | N | 15 | N |
| STU0643R | N | 15 | 70 | 5 | 30 | N | <20 | 30 | 10 | N | 10 | N | N | 100 | N | 300 | N |
| STU0644R | N | 15 | 150 | 10 | 70 | N | <20 | 50 | 15 | N | 20 | N | N | 150 | N | 50 | N |

TABLE 1.--ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (10) S-ZR | (11) S-TH | (1) AA-CU | (1) AA-PB | (1) AA-ZN | (OS) AA-AG | (OS) AA-CD | (1) AA-BI | (1) AA-SB |
|----------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|--------------|--------------|
| NEM0659R | 500 | N | 3 | 12 | 5 | <.05 | .06 | <1 | <1 |
| NEM0660R | 500 | N | 1 | 2 | 4 | <.05 | <.05 | <1 | <1 |
| NEM0661R | 700 | N | 19 | 3 | 10 | <.05 | <.05 | <1 | <1 |
| NEM0662R | 70 | N | 3 | 2 | 9 | <.05 | .05 | <1 | <1 |
| NEM0663R | 50 | N | 1 | 1 | 6 | <.05 | <.05 | <1 | 4 |
| NEM0664R | 500 | N | 5 | 3 | 13 | <.05 | <.05 | <1 | <1 |
| NEM0667R | 700 | N | <1 | 1 | 2 | <.05 | <.05 | <1 | <1 |
| NEM0813R | 500 | N | 3 | 1 | 3 | <.05 | <.05 | <1 | <1 |
| NEM0814R | 300 | N | 3 | 2 | 4 | <.05 | <.05 | 1 | <1 |
| NEM0815R | 100 | N | <1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| NEM0816R | 500 | N | 2 | 4 | 3 | <.05 | <.05 | <1 | <1 |
| NEM0817R | 300 | N | <1 | 1 | 3 | <.05 | <.05 | <1 | <1 |
| NEM0818R | 300 | N | 2 | 1 | 4 | <.05 | <.05 | <1 | <1 |
| NEM0819R | 100 | N | <1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| STU0001R | 300 | N | <1 | 2 | 2 | <.05 | <.05 | <1 | <1 |
| STU0007R | 200 | N | 10 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| STU0010R | 100 | N | 200 | 2 | 10 | <.05 | .06 | <1 | <1 |
| STU0016R | 300 | N | 140 | 4 | 6 | .91 | .09 | 1 | <1 |
| STU0017R | 200 | N | 66 | 2 | 8 | .05 | .07 | 1 | <1 |
| STU0018R | 1,000 | N | 1 | 5 | 14 | <.05 | .13 | <1 | <1 |
| STU0019R | 300 | N | 3,500 | 7 | 18 | 5.66 | .12 | 7 | <1 |
| STU0020R | 700 | N | 4,200 | 7 | 35 | 9.24 | .17 | 9 | <1 |
| STU0021R | 200 | N | 11 | 5 | 11 | <.05 | .10 | 1 | <1 |
| STU0035R | 100 | N | 1 | 3 | 2 | <.05 | <.05 | <1 | <1 |
| STU0036R | 300 | N | <1 | 1 | 3 | <.05 | <.05 | <1 | <1 |
| STU0037R | 500 | N | <1 | 4 | 3 | <.05 | .06 | <1 | <1 |
| STU0280R | 200 | N | 1 | 2 | 2 | <.05 | .07 | <1 | <1 |
| STU0281R | 500 | N | <1 | 2 | 2 | <.05 | .05 | <1 | <1 |
| STU0282R | 300 | N | <1 | 2 | 3 | <.05 | .05 | <1 | <1 |
| STU0283R | 150 | N | 132 | 4 | 27 | <.05 | .16 | <1 | <1 |
| STU0284R | 500 | N | 2 | 2 | 8 | <.05 | .12 | <1 | <1 |
| STU0416R | 200 | N | 4 | 3 | 5 | <.05 | <.05 | <1 | <1 |
| STU0600R | 200 | N | <1 | <1 | 1 | <.05 | <.05 | <1 | <1 |
| STU0601R | 200 | N | 2 | 4 | 36 | <.05 | .06 | 1 | 2 |
| STU0602R | 30 | N | 1 | 2 | 7 | <.05 | .05 | <1 | <1 |
| STU0604R | 500 | N | 1 | 1 | 3 | <.05 | <.05 | <1 | <1 |
| STU0636R | 300 | N | 1 | 1 | 5 | <.05 | .05 | <1 | <1 |
| STU0637R | 200 | N | 1 | 1 | 11 | <.05 | <.05 | <1 | <1 |
| STU0638R | 300 | N | 1 | 2 | 4 | <.05 | .06 | <1 | <1 |
| STU0639R | 10 | N | 4 | 7 | 6 | <.05 | <.05 | <1 | <1 |
| STU0640R | 300 | N | 1 | 10 | 10 | <.05 | <.05 | <1 | <1 |
| STU0641R | N | N | <1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| STU0642R | 100 | N | <1 | 5 | 11 | <.05 | <.05 | <1 | <1 |
| STU0643R | 300 | N | 1 | 3 | 7 | <.05 | <.05 | <1 | <1 |
| STU0644R | 300 | N | 2 | 4 | 12 | <.05 | .06 | 1 | <1 |

TABLE 1.--ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | LATITUDE | LONGITUDE | (.05) S-FEX | (.02) S-MGX | (.05) S-CAX | (.002) S-TIX | (10) S-MN | (.5) S-AG | (200) S-AS | (10) S-AU | (10) S-B | (20) S-BA | (1) S-BE | (10) S-BI |
|----------|----------|-----------|----------------|----------------|----------------|-----------------|--------------|--------------|---------------|--------------|-------------|--------------|-------------|--------------|
| STU0645R | 47 2 31 | 113 56 25 | 5.00 | .70 | .30 | .300 | 500 | N | N | N | 70 | 700 | 1.5 | N |
| STU0646R | 47 2 48 | 113 56 33 | 10.00 | 1.00 | .15 | .500 | 700 | N | N | N | 150 | 700 | 3.0 | N |
| STU0647R | 47 2 38 | 113 56 53 | 3.00 | 1.00 | .30 | .300 | 500 | N | N | N | 150 | 500 | 2.0 | N |
| STU0648R | 47 0 19 | 113 55 3 | 3.00 | 1.50 | .07 | .300 | 150 | N | N | N | 200 | 300 | 2.0 | N |
| STU0649R | 47 0 2 | 113 54 35 | 3.00 | 1.50 | <.05 | .200 | 150 | N | N | N | 200 | 300 | 1.5 | N |
| STU0653R | 47 0 15 | 113 54 55 | .70 | .50 | <.05 | .050 | 300 | N | N | N | 70 | 100 | 1.5 | N |
| STU0672R | 47 3 37 | 113 55 58 | 5.00 | 3.00 | 1.50 | .300 | 1,000 | N | N | N | 200 | 700 | 3.0 | N |
| STU0673R | 47 3 37 | 113 55 58 | 5.00 | 2.00 | .30 | .300 | 1,000 | N | N | N | 150 | 300 | 1.5 | N |
| STU0674R | 47 4 8 | 113 54 24 | .70 | .30 | <.05 | .050 | 20 | N | N | N | 150 | 300 | <1.0 | N |
| STU0675R | 47 5 13 | 113 53 54 | 5.00 | 1.50 | .10 | .500 | 500 | N | N | N | 200 | 700 | 2.0 | N |
| STU0676R | 47 2 29 | 113 54 54 | 5.00 | 1.50 | .30 | .500 | 500 | N | N | N | 150 | 300 | 2.0 | N |
| STU0677R | 47 3 11 | 113 58 5 | 3.00 | 1.50 | .30 | .500 | 300 | N | N | N | 200 | 700 | 1.5 | N |
| STU0678R | 47 1 57 | 113 58 42 | 3.00 | 1.50 | .15 | .300 | 300 | N | N | N | 200 | 700 | 3.0 | N |
| STU0679R | 47 0 58 | 113 56 46 | 5.00 | 1.00 | .15 | .700 | 500 | N | N | N | 70 | 700 | 2.0 | N |
| STU0680R | 47 1 32 | 113 53 41 | 3.00 | 1.00 | .07 | .500 | 300 | N | N | N | 100 | 700 | 1.5 | N |
| STU0682R | 47 6 16 | 113 54 49 | 3.00 | 1.50 | .10 | .500 | 500 | N | N | N | 150 | 1,000 | 3.0 | N |
| STU0800R | 47 3 25 | 113 58 26 | 1.00 | .30 | .05 | .300 | 70 | N | N | N | 100 | 300 | 1.0 | N |
| STU0801R | 47 3 28 | 113 57 56 | .70 | .70 | .05 | .150 | 300 | N | N | N | 70 | 100 | 1.0 | N |
| STU0802R | 47 3 32 | 113 57 26 | 2.00 | 1.50 | .05 | .200 | 300 | N | N | N | 100 | 300 | 3.0 | N |
| STU0803R | 47 3 54 | 113 56 54 | 5.00 | 1.50 | .15 | .300 | 500 | N | N | N | 100 | 500 | 2.0 | N |
| STU0804R | 47 4 35 | 113 56 54 | 3.00 | 1.50 | .10 | .300 | 200 | N | N | N | 150 | 300 | 2.0 | N |
| WLA0002R | 47 0 12 | 113 48 44 | .50 | .20 | <.05 | .070 | 70 | N | N | N | 20 | 700 | 1.0 | N |
| WLA0034R | 47 0 12 | 113 48 44 | .50 | .20 | .07 | .070 | 70 | N | N | N | 10 | 700 | 1.0 | N |
| WLA0377R | 47 4 57 | 113 51 35 | 3.00 | .70 | .07 | .300 | 150 | N | N | N | 150 | 700 | 2.0 | N |
| WLA0278R | 47 5 10 | 113 52 9 | 3.00 | 1.00 | .07 | .300 | 300 | N | N | N | 200 | 500 | 2.0 | N |
| WLA0379R | 47 5 32 | 113 52 29 | 3.00 | 1.00 | .50 | .500 | 500 | N | N | N | 150 | 500 | 1.5 | N |
| WLA0630R | 47 2 4 | 113 51 28 | 2.00 | 1.50 | .30 | .200 | 200 | N | N | N | 150 | 200 | 2.0 | N |
| WLA0631R | 47 2 4 | 113 51 28 | 1.00 | .70 | .07 | .100 | 70 | N | N | N | 100 | 200 | 1.5 | N |
| WLA0665R | 47 0 13 | 113 51 9 | 5.00 | 2.00 | .70 | .300 | 1,000 | N | N | N | 150 | 700 | 1.5 | N |
| WLA0666R | 47 0 13 | 113 51 6 | 2.00 | 1.00 | 1.50 | .150 | 700 | N | N | N | 50 | 300 | 1.0 | N |
| WLA0671R | 47 4 1 | 113 52 3 | 7.00 | 2.00 | .20 | .500 | 500 | N | N | N | 200 | 700 | 3.0 | N |
| WLA0681R | 47 1 21 | 113 52 15 | 3.00 | 1.50 | .50 | .500 | 1,000 | N | N | N | 150 | 700 | 10.0 | N |
| WLA0820R | 47 4 22 | 113 51 20 | 1.50 | .50 | .05 | .100 | 150 | N | N | N | 70 | 150 | <1.0 | N |
| WLA0821R | 47 4 1 | 113 50 42 | 2.00 | .50 | .10 | .200 | 150 | N | N | N | 100 | 300 | 2.0 | N |
| WLA0822R | 47 3 50 | 113 50 5 | 3.00 | 1.50 | .07 | .300 | 200 | N | N | N | 150 | 300 | 1.5 | N |
| WLA0823R | 47 3 8 | 113 49 41 | 3.00 | .70 | .10 | .200 | 300 | N | N | N | 100 | 700 | 2.0 | N |
| WLA0824R | 47 2 41 | 113 49 55 | 5.00 | 1.50 | .20 | .300 | 500 | N | N | N | 100 | 300 | 1.5 | N |
| WLA0825R | 47 2 29 | 113 50 22 | 3.00 | 7.00 | 15.00 | .150 | 1,000 | N | N | N | 100 | 3,000 | 1.5 | N |
| WLA0826R | 47 2 3 | 113 49 59 | 2.00 | 3.00 | 5.00 | .200 | 700 | N | N | N | 70 | 300 | 1.5 | N |
| WLA0827R | 47 1 43 | 113 49 54 | 1.50 | 2.00 | .07 | .200 | 100 | N | N | N | 70 | 150 | 1.0 | N |

TABLE 1.--ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (20) | (5) | (10) | (5) | (20) | (5) | (10) | (100) | (5) | (10) | (100) | (10) | (50) | (10) | (200) |
|----------|------|------|------|------|------|------|------|-------|------|------|-------|------|------|------|-------|
| | S-CD | S-CO | S-CR | S-CU | S-LA | S-MO | S-NB | S-NI | S-PB | S-SB | S-SC | S-SN | S-SR | S-V | S-ZN |
| STU0645R | N | 7 | 100 | <5 | 70 | N | <20 | 15 | 15 | N | 10 | N | <100 | 100 | N |
| STU0646R | N | 15 | 100 | <5 | 70 | N | <20 | 30 | 70 | N | 15 | N | <100 | 150 | N |
| STU0647R | N | 10 | 30 | <5 | 50 | N | <20 | 15 | 20 | N | 10 | N | <100 | 100 | N |
| STU0648R | N | 7 | 70 | 7 | 30 | N | <20 | 30 | 10 | N | 10 | N | <100 | 100 | N |
| STU0649R | N | 7 | 50 | 50 | 30 | N | <20 | 20 | 15 | N | 7 | N | <100 | 70 | N |
| STU0653R | N | 5 | <10 | 15 | 20 | N | N | 5 | 10 | N | <5 | N | N | 15 | N |
| STU0672R | N | 10 | 50 | <5 | 150 | N | <20 | 20 | 15 | N | 10 | N | N | 100 | N |
| STU0673R | N | 10 | 100 | <5 | 20 | N | <20 | 20 | 10 | N | 10 | N | N | 100 | N |
| STU0674R | N | <5 | 10 | <5 | 20 | N | N | 5 | 20 | N | N | N | N | 15 | N |
| STU0675R | N | 10 | 150 | 7 | 50 | N | <20 | 30 | 10 | N | 20 | N | N | 100 | N |
| STU0676R | N | 15 | 100 | 5 | 70 | N | <20 | 30 | 20 | N | 20 | N | <100 | 100 | N |
| STU0677R | N | 7 | 70 | <5 | 30 | N | <20 | 15 | 15 | N | 15 | N | N | 70 | N |
| STU0678R | N | 15 | 100 | <5 | 70 | N | <20 | 30 | 20 | N | 15 | N | <100 | 150 | N |
| STU0679R | N | 15 | 100 | 20 | 100 | N | <20 | 30 | 30 | N | 15 | N | 100 | 150 | N |
| STU0680R | N | 10 | 100 | 5 | 70 | N | <20 | 20 | 10 | N | 15 | N | <100 | 100 | N |
| STU0682R | N | 10 | 100 | <5 | 50 | <5 | <20 | 30 | <10 | N | 15 | N | N | 100 | N |
| STU0800R | N | <5 | 15 | <5 | 30 | N | <20 | 5 | 15 | N | <5 | N | N | 20 | N |
| STU0801R | N | N | 20 | <5 | 30 | N | <20 | 7 | 15 | N | <5 | N | <100 | 15 | N |
| STU0802R | N | 7 | 15 | N | 30 | N | <20 | 10 | 15 | N | 7 | N | N | 30 | N |
| STU0803R | N | 7 | 100 | 50 | 70 | N | <20 | 20 | 100 | N | 10 | N | 100 | 70 | N |
| STU0804R | N | 10 | 30 | <5 | 30 | N | <20 | 15 | 10 | N | 10 | N | N | 50 | N |
| WLA0002R | N | N | 10 | <5 | 30 | N | N | 5 | 15 | N | N | N | <100 | 15 | N |
| WLA0034R | N | <5 | 10 | <5 | 30 | N | <20 | <5 | 15 | N | N | N | N | 15 | N |
| WLA0277R | N | 7 | 50 | N | 30 | N | <20 | 20 | 10 | N | 10 | N | N | 50 | N |
| WLA0278R | N | 10 | 50 | <5 | 50 | N | <20 | 20 | 10 | N | 10 | N | N | 50 | N |
| WLA0279R | N | 10 | 70 | 7 | 30 | N | <20 | 20 | 15 | N | 10 | N | N | 50 | N |
| WLA0630R | N | 5 | 50 | <5 | 30 | N | N | 10 | 15 | N | 7 | N | N | 50 | N |
| WLA0631R | N | 5 | 15 | <5 | 20 | N | N | 10 | 15 | N | 5 | N | N | 30 | N |
| WLA0665R | N | 10 | 100 | 10 | <20 | N | <20 | 30 | 20 | N | 10 | N | <100 | 100 | N |
| WLA0666R | N | 5 | 20 | <5 | 20 | N | <20 | 10 | 10 | N | <5 | N | <100 | 30 | N |
| WLA0671R | N | 15 | 200 | 20 | 70 | N | <20 | 50 | 20 | N | 20 | N | <100 | 150 | N |
| WLA0681R | N | 7 | 70 | <5 | 70 | N | <20 | 20 | 30 | N | 10 | N | N | 100 | N |
| WLA0820R | N | <5 | 30 | <5 | 20 | N | <20 | 7 | <10 | N | 5 | N | <100 | 30 | N |
| WLA0821R | N | 7 | 50 | <5 | 30 | N | <20 | 15 | <10 | N | 7 | N | N | 50 | N |
| WLA0822R | N | 10 | 70 | <5 | 30 | N | <20 | 20 | 10 | N | 7 | N | N | 70 | N |
| WLA0823R | N | 7 | 100 | 20 | 30 | N | <20 | 20 | <10 | N | 7 | N | <100 | 70 | N |
| WLA0824R | N | 7 | 100 | 15 | 50 | N | <20 | 30 | 15 | N | 10 | N | N | 100 | N |
| WLA0825R | N | 10 | 50 | 7 | 30 | N | N | 20 | 15 | N | 7 | N | 300 | 50 | N |
| WLA0826R | N | 7 | 70 | 7 | 30 | N | <20 | 20 | 10 | N | 7 | N | 100 | 30 | N |
| WLA0827R | N | 7 | 50 | <5 | 50 | N | <20 | 7 | 10 | N | 5 | N | <100 | 30 | N |

TABLE 1.--ROCK SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (10) S-ZR | (100) S-TH | (1) AA-CU | (1) AA-PB | (1) AA-ZN | (05) AA-AG | (05) AA-CB | (1) AA-BI | (1) AA-SB |
|----------|--------------|---------------|--------------|--------------|--------------|---------------|---------------|--------------|--------------|
| STU0645R | 500 | N | 1 | 3 | 5 | <.05 | -.09 | <1 | <1 |
| STU0646R | 300 | N | 18 | 12 | 19 | <.05 | -.08 | 1 | <1 |
| STU0647R | 300 | N | 3 | 3 | 4 | <.05 | <.05 | <1 | <1 |
| STU0648R | 500 | N | <1 | 1 | 2 | <.05 | <.05 | <1 | <1 |
| STU0649R | 300 | N | 10 | 1 | 2 | <.05 | <.05 | <1 | <1 |
| STU0653R | 150 | N | 5 | 5 | 3 | <.05 | -.06 | 1 | <1 |
| STU0672R | 300 | N | 8 | 3 | 7 | <.05 | <.05 | <1 | <1 |
| STU0673R | 300 | N | 2 | 2 | 12 | <.05 | -.07 | 1 | <1 |
| STU0674R | 50 | N | <1 | 1 | <1 | <.05 | <.05 | <1 | <1 |
| STU0675R | 300 | N | 1 | 1 | 7 | <.05 | -.05 | <1 | <1 |
| STU0676R | 700 | N | <1 | 3 | 5 | <.05 | <.05 | <1 | <1 |
| STU0677R | 300 | N | <1 | 2 | 3 | <.05 | <.05 | <1 | <1 |
| STU0678R | 500 | N | <1 | 3 | 10 | <.05 | -.07 | <1 | <1 |
| STU0679R | 500 | N | 6 | 6 | 10 | <.05 | -.05 | <1 | <1 |
| STU0680R | 300 | N | 1 | 2 | 6 | <.05 | <.05 | <1 | <1 |
| STU0682R | 300 | N | 1 | 1 | 10 | <.05 | -.05 | <1 | <1 |
| STU0800R | 300 | N | <1 | 1 | 6 | <.05 | <.05 | <1 | <1 |
| STU0801R | 100 | N | <1 | 4 | 7 | <.05 | <.05 | <1 | <1 |
| STU0802R | 150 | N | <1 | 5 | 4 | <.05 | <.05 | <1 | <1 |
| STU0803R | 300 | N | 8 | 46 | 5 | <.05 | <.05 | <1 | <1 |
| STU0804R | 300 | N | <1 | 2 | 3 | <.05 | <.05 | <1 | <1 |
| WLA0002R | 50 | N | <1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| WLA0034R | 70 | N | 1 | 1 | 1 | <.05 | <.05 | <1 | <1 |
| WLA0277R | 300 | N | <1 | 2 | 1 | <.05 | -.05 | <1 | <1 |
| WLA0278R | 500 | N | <1 | 2 | 3 | <.05 | -.07 | <1 | <1 |
| WLA0279R | 500 | N | 1 | 1 | 3 | <.05 | -.09 | <1 | <1 |
| WLA0630R | 500 | N | 1 | 2 | 3 | <.05 | <.05 | <1 | <1 |
| WLA0631R | 150 | N | 1 | 3 | 2 | <.05 | <.05 | <1 | <1 |
| WLA0665R | 300 | N | 4 | 4 | 20 | <.05 | -.06 | <1 | <1 |
| WLA0666R | 100 | N | <1 | 2 | 5 | <.05 | <.05 | 1 | <1 |
| WLA0671R | 300 | N | 4 | 5 | 7 | <.05 | <.05 | 1 | 1 |
| WLA0681R | 300 | N | 1 | 10 | 13 | <.05 | -.12 | 1 | <1 |
| WLA0820R | 150 | N | <1 | 1 | 4 | <.05 | <.05 | <1 | <1 |
| WLA0821R | 200 | N | <1 | 1 | 3 | <.05 | <.05 | <1 | <1 |
| WLA0822R | 700 | N | <1 | 1 | 4 | <.05 | <.05 | <1 | <1 |
| WLA0823R | 300 | N | 3 | 2 | 10 | <.05 | <.05 | <1 | <1 |
| WLA0824R | 300 | N | 1 | 2 | 4 | <.05 | <.05 | <1 | <1 |
| WLA0825R | 70 | N | 1 | 2 | 11 | <.05 | <.05 | <1 | <1 |
| WLA0826R | 200 | N | 1 | 3 | 9 | <.05 | -.07 | <1 | <1 |
| WLA0827R | 300 | N | <1 | 1 | 2 | <.05 | <.05 | <1 | <1 |

TABLE 2.--STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA

| Sample | Latitude | Longitude | (L05) | | (L02) | | (L05) | | (L0521) | | (S) | | (200) | | (10) | | (20) | | (10) | | (20) | |
|-----------|----------|-----------|-------|-------|-------|-------|-------|------|---------|------|-----|------|-------|------|------|-----|-------|-----|------|------|------|------|
| | | | S-FEX | S-MGX | S-CAZ | S-TIZ | S-MN | S-AG | S-AS | S-AU | S-B | S-BA | n | S-8E | S-8I | S-8 | S-8A | n | S-8E | S-8I | S-8 | S-8A |
| BLP00035 | 46 58 36 | 113 50 12 | 2.00 | .50 | -10 | -20 | 300 | M | N | N | N | N | N | N | N | 70 | 500 | 1.5 | N | N | N | |
| BLP00065 | 46 58 42 | 113 50 14 | 3.00 | -10 | -70 | -50 | 700 | N | N | N | N | N | N | N | N | 200 | 1,000 | 3.0 | N | N | N | |
| BLP02065 | 46 59 22 | 113 47 3 | 3.00 | -50 | -15 | -20 | 1,000 | N | N | N | N | N | N | N | N | 300 | 700 | 3.0 | N | N | N | |
| BLP02085 | 46 59 23 | 113 47 8 | 3.00 | -70 | -30 | -30 | 1,000 | N | N | N | N | N | N | N | N | 300 | 1,000 | 3.0 | N | N | N | |
| BLP02105 | 46 59 19 | 113 47 12 | 2.00 | .50 | -30 | -20 | 500 | N | N | N | N | N | N | N | N | 300 | 1,000 | 5.0 | N | N | N | |
| BLP02125 | 46 58 47 | 113 47 58 | 3.00 | .50 | -30 | -30 | 1,500 | M | N | N | N | N | N | N | N | 200 | 1,000 | 3.0 | N | N | N | |
| BLP02145 | 46 58 31 | 113 48 22 | 3.00 | -70 | -50 | -30 | 700 | N | N | N | N | N | N | N | N | 200 | 1,500 | 3.0 | N | N | N | |
| BLP02165 | 46 58 27 | 113 48 35 | 2.00 | -70 | -70 | -20 | 1,000 | N | N | N | N | N | N | N | N | 150 | 1,500 | 7.0 | N | N | N | |
| BLP02185 | 46 58 31 | 113 48 44 | 2.00 | -50 | -50 | -20 | 700 | N | N | N | N | N | N | N | N | 150 | 1,000 | 5.0 | N | N | N | |
| BLP02205 | 46 58 24 | 113 48 57 | 2.00 | .50 | -50 | -20 | 500 | N | N | N | N | N | N | N | N | 100 | 700 | 3.0 | N | N | N | |
| BLP02225 | 46 58 24 | 113 49 19 | 2.00 | .50 | -50 | -20 | 700 | N | N | N | N | N | N | N | N | 70 | 700 | 3.0 | N | N | N | |
| BLP04355 | 46 56 57 | 113 50 45 | 3.00 | .50 | -50 | -50 | 700 | 20.0 | N | N | N | N | N | N | N | 100 | 700 | 1.5 | N | N | N | |
| BLP04405 | 46 56 44 | 113 51 39 | 3.00 | .50 | -70 | -30 | 2,000 | M | N | N | N | N | N | N | N | 100 | 700 | 2.0 | N | N | N | |
| BLP04415 | 46 56 32 | 113 51 49 | 3.00 | -70 | -20 | -30 | 500 | M | N | N | N | N | N | N | N | 200 | 700 | 2.0 | N | N | N | |
| BLP05625 | 46 53 16 | 113 50 37 | 2.00 | .50 | -70 | -30 | 300 | <.5 | N | N | N | N | N | N | N | 100 | 1,500 | 3.0 | N | N | N | |
| BLP05655 | 46 53 19 | 113 50 27 | 3.00 | -70 | -50 | -30 | 300 | M | N | N | N | N | N | N | N | 150 | 1,000 | 3.0 | N | N | N | |
| BLP05675 | 46 53 30 | 113 49 49 | 3.00 | -70 | -30 | -30 | 500 | N | N | N | N | N | N | N | N | 70 | 700 | 3.0 | N | N | N | |
| BLP05695 | 46 54 1 | 113 47 48 | 3.00 | -70 | -70 | -30 | 300 | M | N | N | N | N | N | N | N | 100 | 700 | 3.0 | N | N | N | |
| BLP05715 | 46 54 19 | 113 45 4 | 3.00 | -70 | -70 | -50 | 300 | M | N | N | N | N | N | N | N | 150 | 1,000 | 3.0 | N | N | N | |
| BLP05795 | 46 52 36 | 113 52 10 | 3.00 | -70 | 1.50 | -70 | 700 | M | N | N | N | N | N | N | N | 70 | 700 | 2.0 | N | N | N | |
| BLP14895 | 46 55 52 | 113 45 17 | 2.00 | .50 | -20 | -50 | 300 | M | N | N | N | N | N | N | N | 150 | 500 | 3.0 | N | N | N | |
| BLP14915 | 46 55 54 | 113 45 15 | 1.50 | .50 | -20 | -30 | 300 | N | N | N | N | N | N | N | N | 100 | 1,500 | 3.0 | N | N | N | |
| BLP14935 | 46 56 26 | 113 45 55 | 2.00 | .50 | -30 | -50 | 500 | M | N | N | N | N | N | N | N | 100 | 1,000 | 3.0 | N | N | N | |
| BLP14955 | 46 56 30 | 113 46 33 | -70 | -30 | -30 | -15 | 500 | M | N | N | N | N | N | N | N | 50 | 500 | 5.0 | N | N | N | |
| BLP14975 | 46 56 30 | 113 46 33 | 1.00 | .30 | -30 | -30 | 500 | M | N | N | N | N | N | N | N | 50 | 1,000 | 5.0 | N | N | N | |
| BLP14995 | 46 57 28 | 113 45 23 | 2.00 | 1.00 | -50 | -30 | 1,000 | M | N | N | N | N | N | N | N | 200 | 2,000 | 7.0 | N | N | N | |
| BLP18615 | 46 59 38 | 113 50 4 | 3.00 | .50 | -50 | -30 | 500 | N | N | N | N | N | N | N | N | 100 | 1,500 | 3.0 | N | N | N | |
| BLP18625 | 46 59 35 | 113 50 22 | -70 | -30 | -30 | -15 | 500 | M | N | N | N | N | N | N | N | 50 | 700 | 5.0 | N | N | N | |
| BLP18645 | 46 58 35 | 113 50 6 | 1.50 | -30 | -30 | -15 | 500 | M | N | N | N | N | N | N | N | 70 | 700 | 3.0 | N | N | N | |
| BLP18665 | 46 58 52 | 113 50 8 | 2.00 | .70 | -50 | -30 | 300 | M | N | N | N | N | N | N | N | 70 | 700 | 3.0 | N | N | N | |
| BLP18675 | 46 58 59 | 113 50 11 | 1.50 | -30 | -70 | -15 | 500 | M | N | N | N | N | N | N | N | 30 | 700 | 5.0 | N | N | N | |
| BLP19425 | 46 58 2 | 113 51 53 | 3.00 | -70 | -30 | -30 | 500 | M | N | N | N | N | N | N | N | 100 | 700 | 2.0 | N | N | N | |
| BLP19445 | 46 57 59 | 113 51 48 | 2.00 | -70 | -20 | -30 | 500 | M | N | N | N | N | N | N | N | 150 | 700 | 3.0 | N | N | N | |
| BLP19455 | 46 57 43 | 113 52 18 | 2.00 | -70 | -50 | -30 | 200 | M | N | N | N | N | N | N | N | 100 | 1,500 | 2.0 | N | N | N | |
| BLP19475 | 46 58 7 | 113 52 0 | 3.00 | -70 | -30 | -30 | 500 | M | N | N | N | N | N | N | N | 150 | 1,000 | 3.0 | N | N | N | |
| BLP19485 | 46 58 30 | 113 50 44 | 5.00 | 1.00 | -50 | -50 | 700 | M | N | N | N | N | N | N | N | 150 | 1,000 | 3.0 | N | N | N | |
| BLP19505 | 46 55 39 | 113 50 39 | 3.00 | .50 | -30 | -30 | 500 | M | N | N | N | N | N | N | N | 200 | 1,000 | 3.0 | N | N | N | |
| BLP19525 | 46 55 37 | 113 50 38 | 3.00 | -70 | -70 | -30 | 700 | N | N | N | N | N | N | N | N | 300 | 1,000 | 3.0 | N | N | N | |
| BLP19535 | 46 55 36 | 113 50 43 | 3.00 | -70 | -70 | -30 | 700 | N | N | N | N | N | N | N | N | 300 | 700 | 2.0 | N | N | N | |
| BLP28085 | 46 52 55 | 113 50 38 | 2.00 | .30 | 1.00 | -20 | 300 | M | N | N | N | N | N | N | N | 70 | 1,000 | 3.0 | N | N | N | |
| BLP28105 | 46 53 5 | 113 47 57 | 2.00 | .70 | -50 | -30 | 300 | M | N | N | N | N | N | N | N | 200 | 1,000 | 3.0 | N | N | N | |
| BLP28125 | 46 53 5 | 113 48 5 | -70 | .30 | -70 | -20 | 500 | N | N | N | N | N | N | N | N | 100 | 1,000 | 7.0 | N | N | N | |
| BLP28145 | 46 53 15 | 113 46 52 | 2.00 | 1.00 | 1.00 | -50 | 500 | M | N | N | N | N | N | N | N | 150 | 1,000 | 7.0 | N | N | N | |
| BLP28165 | 46 53 44 | 113 46 12 | 1.50 | .50 | -50 | -30 | 500 | M | N | N | N | N | N | N | N | 150 | 2,000 | 7.0 | N | N | N | |
| BLP400145 | 46 55 20 | 113 54 1 | 3.00 | .50 | -50 | -30 | 500 | M | N | N | N | N | N | N | N | 300 | 1,000 | 2.0 | N | N | N | |

TABLE 2.--STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (5) S-CO | (10) S-CR | (5) S-CU | (20) S-LA | (5) S-MO | (20) S-MB | (5) S-NI | (10) S-PB | (100) S-SB | (5) S-SC | (10) S-SN | (100) S-SR | (10) S-SV | (50) S-SW | (10) S-V | (200) S-ZM | (10) S-ZR |
|----------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|---------------|-------------|--------------|---------------|--------------|--------------|-------------|---------------|--------------|
| BLP0003S | 5 | 20 | 7 | 20 | N | <20 | 7 | 20 | N | 5 | N | <100 | 50 | N | 20 | N | 100 |
| BLP0006S | 7 | 70 | 30 | 70 | N | <20 | 20 | 30 | N | 10 | N | <100 | 70 | N | 50 | N | 500 |
| BLP0206S | 20 | 50 | 20 | 30 | N | <20 | 10 | 30 | N | 7 | N | <100 | 70 | N | 20 | N | 200 |
| BLP0208S | 7 | 100 | 20 | 30 | N | <20 | 20 | 30 | N | 10 | N | 100 | 70 | N | 30 | N | 700 |
| BLP0210S | 7 | 50 | 15 | 30 | N | <20 | 15 | 30 | N | 7 | N | 100 | 50 | N | 30 | N | 500 |
| BLP0212S | 10 | 50 | 15 | 30 | N | <20 | 15 | 30 | N | 7 | N | 100 | 70 | N | 30 | N | 200 |
| BLP0214S | 7 | 70 | 20 | 30 | N | <20 | 15 | 30 | N | 10 | N | 100 | 70 | N | 50 | N | 200 |
| BLP0216S | 7 | 70 | 20 | 30 | N | <20 | 20 | 30 | N | 7 | N | 100 | 70 | N | 50 | N | 200 |
| BLP0218S | 5 | 50 | 20 | 30 | N | <20 | 10 | 30 | N | 7 | N | 100 | 50 | N | 70 | N | 150 |
| BLP0220S | 7 | 50 | 20 | 30 | N | <20 | 15 | 20 | N | 10 | N | <100 | 50 | N | 30 | N | 200 |
| BLP0222S | 7 | 50 | 15 | 30 | N | <20 | 10 | 30 | N | 10 | N | 100 | 70 | N | 50 | N | 150 |
| BLP0435S | 7 | 50 | 20 | 30 | N | <20 | 10 | 20 | N | 10 | N | 150 | 100 | N | 30 | N | 500 |
| BLP0440S | 7 | 70 | 30 | 30 | N | <20 | 15 | 70 | N | 10 | N | 150 | 100 | N | 20 | N | 300 |
| BLP0441S | <5 | 30 | 15 | 30 | N | <20 | 10 | 30 | N | 10 | N | 100 | 100 | N | 20 | N | 300 |
| BLP0562S | 7 | 30 | 30 | 70 | N | <20 | 50 | 30 | N | 10 | N | 100 | 30 | N | 100 | N | 150 |
| BLP0565S | 7 | 70 | 20 | 50 | 5 | <20 | 50 | 30 | N | 10 | N | <100 | 50 | N | 30 | N | 200 |
| BLP0567S | 10 | 50 | 20 | 50 | N | <20 | 30 | 30 | N | 15 | N | N | 50 | N | 50 | N | 200 |
| BLP0569S | 7 | 50 | 20 | 50 | 5 | <20 | 50 | 20 | N | 15 | N | <100 | 70 | N | 70 | N | 300 |
| BLP0571S | 7 | 70 | 20 | 50 | N | <20 | 20 | 20 | N | 10 | N | <100 | 70 | N | 50 | N | 150 |
| BLP0579S | 15 | 50 | 30 | 50 | <5 | <20 | 20 | 50 | N | 10 | 15 | 100 | 50 | N | 30 | N | 300 |
| BLP1489S | 5 | 100 | 15 | 50 | N | <20 | 20 | 20 | N | 7 | N | <100 | 50 | N | 70 | N | 300 |
| BLP1491S | 5 | 70 | 15 | 50 | N | <20 | 10 | 30 | N | 7 | N | <100 | 50 | N | 30 | N | 300 |
| BLP1493S | 5 | 70 | 20 | 50 | N | <20 | 15 | 30 | N | 5 | N | <100 | 50 | N | 30 | N | 300 |
| BLP1495S | 5 | 15 | 10 | 20 | N | N | 10 | 10 | N | 7 | N | <100 | 50 | N | 30 | N | 300 |
| BLP1497S | 7 | 30 | 10 | 20 | N | <20 | 10 | 15 | N | 7 | N | <100 | 30 | N | 30 | N | 300 |
| BLP1499S | 7 | 30 | 30 | 50 | N | <20 | 20 | 30 | N | 7 | N | <100 | 50 | N | 100 | N | 300 |
| BLP1861S | 7 | 30 | 20 | 30 | N | <20 | 15 | 30 | N | 10 | N | 150 | 50 | N | 20 | N | 150 |
| BLP1862S | <5 | 10 | 15 | 50 | N | N | 10 | 50 | N | 5 | N | N | 30 | N | 30 | N | 100 |
| BLP1864S | 7 | 20 | 20 | 30 | N | <20 | 15 | 30 | N | 5 | N | N | 30 | N | 30 | N | 100 |
| BLP1866S | 5 | 70 | 15 | 70 | N | <20 | 10 | 20 | N | 7 | N | <100 | 50 | N | 50 | N | 300 |
| BLP1867S | <5 | 30 | 15 | 30 | N | N | 5 | 30 | N | 7 | N | 100 | 50 | N | 30 | N | 150 |
| BLP1942S | 7 | 50 | 20 | 50 | N | <20 | 20 | 20 | N | 7 | N | <100 | 50 | N | 30 | N | 300 |
| BLP1944S | 7 | 20 | 20 | 30 | N | <20 | 15 | 20 | N | 7 | N | <100 | 50 | N | 30 | N | 300 |
| BLP1945S | 7 | 50 | 20 | 50 | N | <20 | 20 | 30 | N | 10 | N | 100 | 70 | N | 50 | N | 150 |
| BLP1947S | 7 | 50 | 20 | 50 | N | <20 | 30 | 20 | N | 10 | N | <100 | 70 | N | 50 | N | 300 |
| BLP1948S | 15 | 70 | 50 | 50 | N | 20 | 30 | 30 | N | 20 | N | 100 | 100 | N | 70 | N | 700 |
| BLP1950S | 7 | 70 | 20 | 100 | N | <20 | 50 | 20 | N | 10 | N | 100 | 70 | N | 30 | N | 700 |
| BLP1952S | 10 | 50 | 20 | 50 | <5 | <20 | 70 | 20 | N | 15 | N | <100 | 70 | N | 30 | N | 700 |
| BLP1953S | 10 | 50 | 20 | 50 | N | <20 | 50 | 30 | N | 10 | N | N | 70 | N | 30 | N | 200 |
| BLP2808S | <5 | 30 | 50 | 30 | N | <20 | 10 | 20 | N | 10 | N | <100 | 30 | N | 50 | N | 100 |
| BLP2810S | 7 | 20 | 20 | 30 | N | <20 | 15 | 20 | N | 5 | N | N | 50 | N | 30 | N | 300 |
| BLP2812S | N | 15 | 15 | 50 | N | N | 10 | 20 | N | 7 | N | <100 | 50 | N | 70 | N | 200 |
| BLP2814S | 7 | 100 | 10 | 30 | N | <20 | 20 | 30 | N | 7 | 20 | <100 | 70 | N | 50 | N | 500 |
| BLP2816S | 7 | 15 | 15 | 50 | N | <20 | 20 | 30 | N | 7 | N | <100 | 50 | N | 30 | N | 300 |
| MEM0014S | 7 | 50 | 30 | 50 | N | <20 | 30 | 20 | N | 10 | N | <100 | 50 | N | 50 | N | 700 |

TABLE 2.--STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (100) | (110) | (110) | (110) | (110) | (105) | (105) | (105) | (105) | (110) | (11) |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | S-TM | AA-CU | AA-PB | AA-ZN | AA-AG | AA-CD | AA-CO | AA-BI | AA-SB | | |
| BLP00035 | N | <1.0 | <1.0 | <1.0 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP00065 | N | 1.3 | 1.7 | 1.2 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP02065 | N | 1.0 | 1.6 | 1.8 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP02085 | N | 1.0 | 1.0 | 1.5 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP02105 | N | <1.0 | 1.3 | <1.0 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP02125 | N | <1.0 | 1.4 | <1.0 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP02145 | N | <1.0 | 1.5 | 1.5 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP02165 | N | 1.2 | 2.5 | 2.0 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP02185 | N | 1.2 | 2.3 | 1.5 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP02205 | N | <1.0 | 1.3 | 1.4 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP02225 | N | 1.7 | 1.7 | 1.8 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP04355 | N | <1.0 | 1.1 | 1.4 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP04405 | N | 1.4 | 4.1 | 3.6 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP04415 | N | <1.0 | 1.9 | 1.5 | <.05 | <.05 | <.5 | -- | -- | <1 | |
| BLP05625 | N | 21.0 | 12.0 | 10.0 | .06 | .14 | -- | <1.0 | <1 | | |
| BLP05655 | N | 8.0 | 12.0 | 8.0 | <.05 | .07 | -- | 2.5 | <1 | | |
| BLP05675 | N | 10.0 | 15.0 | 6.0 | <.05 | .06 | -- | <1.0 | <1 | | |
| BLP05695 | N | 7.0 | 7.0 | 6.0 | .05 | .06 | -- | <1.0 | <1 | | |
| BLP05715 | N | 6.0 | 4.0 | 4.0 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP05795 | N | 2.8 | 2.5 | 3.5 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP14895 | N | 6.0 | 6.0 | 18.0 | <.05 | <.05 | -- | 1.0 | N | | |
| BLP14915 | N | 4.0 | 6.0 | 13.0 | <.05 | <.05 | -- | N | N | | |
| BLP14935 | N | 9.0 | 11.0 | 9.0 | .06 | .17 | -- | 1.0 | N | | |
| BLP14955 | N | -- | -- | -- | -- | -- | -- | -- | -- | | |
| BLP14975 | N | -- | -- | -- | -- | -- | -- | -- | -- | | |
| BLP14995 | N | 24.0 | 22.0 | 21.0 | .20 | .33 | -- | 1.0 | N | | |
| BLP18615 | N | 1.0 | 1.5 | 1.8 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP18625 | N | 1.8 | 7.0 | 3.5 | <.05 | .05 | -- | <1.0 | <1 | | |
| BLP18645 | N | 1.5 | 2.5 | 3.2 | <.05 | .05 | -- | <1.0 | <1 | | |
| BLP18665 | N | <1.0 | 1.6 | 1.0 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP18675 | N | 1.0 | 5.0 | 2.0 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP19425 | N | 1.2 | 1.0 | 1.3 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP19445 | N | <1.0 | <1.0 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP19455 | N | 1.5 | <1.0 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP19475 | N | 1.1 | <1.0 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP19485 | N | 3.0 | 2.3 | 1.7 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP19505 | N | <1.0 | <1.0 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP19525 | N | 1.1 | 1.2 | 1.2 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP19535 | N | 1.2 | 1.7 | 1.8 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP28085 | N | 8.9 | 2.6 | 2.5 | <.05 | <.05 | -- | <1.0 | <1 | | |
| BLP28115 | N | 18.0 | 7.0 | 6.0 | .08 | .30 | -- | N | N | | |
| BLP28125 | N | 26.0 | 14.0 | 13.0 | .20 | .51 | -- | N | N | | |
| BLP28145 | N | 21.0 | 14.0 | 7.0 | .07 | .20 | -- | N | N | | |
| BLP28165 | N | 7.0 | 7.0 | 7.0 | <.05 | .19 | -- | N | N | | |
| MEM00145 | N | 2.0 | 1.0 | 1.2 | <.05 | <.05 | <.5 | -- | -- | | |

TABLE 2. --STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | LATITUDE | LONGITUDE | (.05) S-FEZ | (.02) S-MGX | (.05) S-CAX | (.0021) S-TIX | (NO) S-MN | (.5) S-AG | (200) S-AS | (10) S-AU | (10) S-B | (20) S-BA | (1) S-SE | (10) S-BI | (20) S-CB |
|-----------|----------|-----------|----------------|----------------|----------------|------------------|--------------|--------------|---------------|--------------|-------------|--------------|-------------|--------------|--------------|
| NEM001S | 46 55 22 | 113 54 14 | 3.00 | 1.00 | 1.00 | .50 | 700 | N | N | N | 300 | 1,000 | 2.0 | N | N |
| NEM003S | 46 57 41 | 113 53 38 | 2.00 | .50 | .20 | .20 | 300 | N | N | N | 300 | 1,000 | 2.0 | N | N |
| NEM024S | 46 58 16 | 113 56 36 | 2.00 | .50 | .70 | .20 | 700 | <.5 | N | N | 100 | 1,000 | 3.0 | N | N |
| NEM0226S | 46 58 18 | 113 56 39 | 3.00 | .70 | .30 | .30 | 700 | N | N | N | 150 | 1,000 | 2.0 | N | N |
| NEM0227S | 46 59 44 | 113 57 19 | 3.00 | 1.00 | .50 | .30 | 700 | N | N | N | 200 | 2,000 | 2.0 | N | N |
| NEM0229S | 46 59 57 | 113 57 2 | 3.00 | .50 | .50 | .30 | 700 | N | N | N | 200 | 700 | 2.0 | N | N |
| NEM0232S | 46 58 42 | 113 55 20 | 2.00 | .50 | .20 | .30 | 700 | N | N | N | 70 | 500 | 2.0 | N | N |
| NEM0233S | 46 59 21 | 113 54 27 | 2.00 | .30 | .50 | .30 | 1,000 | N | N | N | 100 | 1,000 | 3.0 | N | N |
| NEM0402S | 46 54 54 | 113 56 3 | 3.00 | .70 | .70 | .50 | 1,000 | N | N | N | 200 | 1,000 | 2.0 | N | N |
| NEM0404S | 46 55 9 | 113 56 28 | 3.00 | .70 | .50 | .50 | 1,500 | N | N | N | 300 | 1,000 | 2.0 | N | N |
| NEM0406S | 46 55 52 | 113 56 43 | 5.00 | .70 | 1.00 | .30 | 700 | N | N | N | 300 | 1,500 | 2.0 | N | N |
| NEM0408S | 46 56 51 | 113 55 59 | 3.00 | .70 | .20 | .50 | 300 | N | N | N | 200 | 700 | 2.0 | N | N |
| NEM0410S | 46 57 23 | 113 55 10 | 2.00 | .30 | .50 | .20 | 500 | N | N | N | 150 | 1,000 | 3.0 | N | N |
| NEM0414S | 46 57 4 | 113 55 14 | 2.00 | .50 | 1.00 | .30 | 300 | N | N | N | 200 | 1,000 | 3.0 | N | N |
| NEM0415S | 46 57 4 | 113 55 14 | 3.00 | .70 | 1.00 | .30 | 500 | N | N | N | 200 | 1,000 | 3.0 | N | N |
| NEM0581S | 46 53 8 | 113 53 36 | 3.00 | 1.50 | 1.00 | .50 | 500 | N | N | N | 70 | 700 | 2.0 | N | N |
| NEM0583S | 46 53 31 | 113 55 27 | 2.00 | 1.00 | .50 | .50 | 700 | N | N | N | 300 | 1,000 | 3.0 | N | N |
| NEM0585S | 46 54 12 | 113 53 58 | 2.00 | .50 | 1.50 | .50 | 1,500 | N | N | N | 100 | 500 | 5.0 | N | N |
| NEM0587S | 46 56 9 | 113 58 50 | 3.00 | 1.00 | 10.00 | .30 | 500 | N | N | N | 70 | 700 | 2.0 | N | N |
| NEM0588S | 46 56 28 | 113 58 14 | 3.00 | 1.50 | .70 | .30 | 500 | N | N | N | 70 | 700 | 2.0 | N | N |
| NEM0590S | 46 56 27 | 113 58 5 | 3.00 | 1.00 | .50 | .50 | 500 | N | N | N | 200 | 1,000 | 2.0 | N | N |
| NEM0610S | 46 56 51 | 113 55 59 | 2.00 | .50 | .15 | .30 | 300 | N | N | N | 150 | 700 | 1.5 | N | N |
| NEM0808S | 46 57 56 | 113 57 21 | 3.00 | 1.00 | .50 | .70 | 1,000 | N | N | N | 150 | 1,000 | 1.5 | N | N |
| NEM0810S | 46 57 55 | 113 57 15 | 3.00 | .70 | .70 | .50 | 700 | N | N | N | 150 | 1,000 | 2.0 | N | N |
| NEM0811S | 46 59 58 | 113 57 4 | 2.00 | .30 | .70 | .20 | 500 | N | N | N | 70 | 1,000 | 5.0 | N | N |
| NEM1869S | 46 58 49 | 113 58 46 | 3.00 | .70 | .70 | .50 | 500 | N | N | N | 70 | 1,000 | 2.0 | N | N |
| NEM1871S | 46 58 44 | 113 58 47 | 3.00 | 1.00 | 1.00 | .30 | 300 | N | N | N | 100 | 700 | 2.0 | N | N |
| NEM1940S | 46 57 29 | 113 53 26 | 2.00 | .50 | .20 | .50 | 300 | N | N | N | 70 | 700 | 1.5 | N | N |
| STU00009S | 47 0 56 | 113 59 52 | 10.00 | 1.50 | 1.50 | >1.00 | 1,500 | N | N | N | 300 | 1,500 | 1.0 | N | N |
| STU00011S | 47 0 51 | 113 59 54 | 3.00 | .70 | 1.50 | .70 | 1,000 | <.5 | N | N | 200 | 1,000 | 1.5 | N | N |
| STU00022S | 47 5 2 | 113 55 24 | 5.00 | 1.00 | 1.00 | .70 | 700 | N | N | N | 150 | 1,000 | 2.0 | N | N |
| STU00023S | 47 4 51 | 113 55 24 | 3.00 | .50 | .50 | .50 | 500 | N | N | N | 100 | 1,000 | 3.0 | N | N |
| STU00024S | 47 4 55 | 113 55 38 | 3.00 | .70 | .10 | .50 | 150 | N | N | N | 200 | 700 | 1.5 | N | N |
| STU00025S | 47 4 52 | 113 55 47 | .15 | .07 | .50 | .07 | 300 | N | N | N | 20 | 300 | 2.0 | N | N |
| STU00026S | 47 4 43 | 113 54 28 | 2.00 | .30 | .50 | .30 | 500 | N | N | N | 30 | 500 | 3.0 | N | N |
| STU00027S | 47 4 46 | 113 54 0 | 3.00 | .70 | .70 | .50 | 1,000 | N | N | N | 200 | 1,000 | 3.0 | N | N |
| STU00028S | 47 4 11 | 113 53 17 | 3.00 | .70 | .70 | .30 | 500 | N | N | N | 300 | 1,500 | 3.0 | N | N |
| STU00029S | 47 4 14 | 113 53 10 | 3.00 | .70 | .50 | .50 | 700 | N | N | N | 300 | 1,000 | 2.0 | N | N |
| STU00030S | 47 4 11 | 113 53 17 | 3.00 | .70 | .50 | .50 | 300 | N | N | N | 200 | 1,000 | 3.0 | N | N |
| STU00020S | 47 2 43 | 113 52 48 | 3.00 | .70 | .50 | .70 | 700 | N | N | N | 200 | 1,000 | 2.0 | N | N |
| STU00204S | 47 2 45 | 113 52 47 | 3.00 | .70 | .20 | .20 | 500 | N | N | N | 200 | 700 | 1.0 | N | N |
| STU00242S | 47 2 43 | 113 59 59 | 2.00 | .30 | 1.50 | .20 | 700 | <.5 | N | N | 100 | 1,000 | 3.0 | N | N |
| STU00244S | 47 4 0 | 113 59 40 | 2.00 | .50 | .70 | .20 | 700 | N | N | N | 50 | 1,500 | 3.0 | N | N |
| STU00246S | 47 3 42 | 113 59 4 | .30 | .20 | .70 | .20 | 200 | <.5 | N | N | 20 | 700 | 2.0 | N | N |
| STU00248S | 47 4 47 | 113 57 44 | 1.00 | .30 | .50 | .15 | 500 | N | N | N | 50 | 1,500 | 5.0 | N | N |

TABLE 2.--STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (5) | (10) | (5) | (20) | (5) | (10) | (100) | (5) | (10) | (100) | (10) | (50) | (100) | (200) | (10) |
|-----------|------|------|------|------|------|------|-------|------|------|-------|------|------|-------|-------|------|
| | S-CO | S-CR | S-CU | S-LA | S-MO | S-NB | S-NI | S-PB | S-SB | S-SC | S-SN | S-SR | S-SV | S-Y | S-ZR |
| MEM00155 | 7 | 100 | 70 | 50 | N | <20 | 30 | 30 | N | 10 | N | 100 | 100 | N | 700 |
| MEM00335 | 5 | 50 | 15 | 30 | N | N | 15 | 20 | N | 7 | N | <100 | 50 | N | 300 |
| MEM02245 | <5 | 30 | 70 | 30 | N | <20 | 10 | 30 | N | 10 | N | 100 | 70 | N | 150 |
| MEM02245 | 7 | 50 | 30 | 30 | N | <20 | 15 | 30 | N | 10 | N | <100 | 70 | N | 300 |
| MEM02275 | 7 | 50 | 50 | 30 | N | <20 | 10 | 50 | N | 10 | N | <100 | 50 | N | 300 |
| MEM02295 | 7 | 50 | 20 | 30 | N | <20 | 15 | 20 | N | 10 | N | <100 | 70 | N | 300 |
| MEM02325 | 7 | 50 | 15 | 30 | N | <20 | 15 | 20 | N | 7 | N | <100 | 50 | N | 200 |
| MEM02355 | 7 | 50 | 20 | 30 | N | <20 | 10 | 30 | N | 7 | N | <100 | 50 | N | 300 |
| MEM04025 | 7 | 70 | 70 | 30 | N | <20 | 20 | 30 | N | 10 | N | <100 | 70 | N | 300 |
| MEM04045 | 10 | 70 | 30 | 30 | N | <20 | 20 | 30 | N | 15 | N | <100 | 70 | N | 300 |
| MEM04065 | 7 | 70 | 70 | 50 | N | <20 | 50 | 30 | N | 15 | <10 | 100 | 100 | N | 300 |
| MEM04085 | 5 | 50 | 15 | 30 | N | <20 | 15 | 20 | N | 7 | N | <100 | 70 | N | 300 |
| MEM04105 | 7 | 20 | 20 | 30 | N | <20 | 15 | 20 | N | 7 | N | N | 50 | N | 200 |
| MEM04145 | 7 | 30 | 30 | 30 | N | <20 | 15 | 20 | N | 10 | N | 100 | 50 | N | 200 |
| MEM04155 | 7 | 50 | 50 | 50 | N | <20 | 20 | 20 | N | 10 | N | 100 | 100 | N | 150 |
| MEM05815 | 10 | 100 | 70 | 50 | N | <20 | 30 | 20 | N | 15 | N | 100 | 70 | N | 300 |
| MEM05835 | 10 | 50 | 20 | 30 | N | <20 | 20 | 50 | N | 7 | N | <100 | 70 | N | 300 |
| MEM05855 | 10 | 15 | 70 | 30 | N | <20 | 20 | 20 | N | 10 | N | 100 | 100 | N | 200 |
| MEM05875 | 10 | 70 | 20 | 50 | N | <20 | 20 | 20 | N | 10 | N | <100 | 50 | N | 300 |
| MEM05885 | 10 | 50 | 20 | 50 | N | <20 | 15 | 20 | N | 10 | N | <100 | 50 | N | 200 |
| MEM05905 | 10 | 30 | 20 | 20 | N | <20 | 15 | 30 | N | 7 | N | N | 50 | N | 300 |
| MEM06105 | 5 | 50 | 15 | 30 | N | <20 | 10 | 10 | N | 7 | N | <100 | 70 | N | 300 |
| MEM08085 | 10 | 70 | 30 | 50 | N | <20 | 20 | 20 | N | 15 | N | <100 | 100 | N | 300 |
| MEM08105 | 7 | 50 | 20 | 50 | <5 | <20 | 15 | 20 | N | 10 | N | <100 | 100 | N | 300 |
| MEM08115 | 7 | 20 | 20 | 50 | N | <20 | 10 | 30 | N | 7 | N | <100 | 70 | N | 150 |
| MEM18495 | 7 | 50 | 30 | 70 | N | <20 | 15 | 15 | N | 10 | N | <100 | 50 | N | 300 |
| MEM18715 | 10 | 50 | 70 | 50 | N | <20 | 20 | 20 | N | 15 | N | <100 | 50 | N | 300 |
| MEM19405 | 7 | 50 | 15 | 50 | N | <20 | 15 | 20 | N | 7 | N | <100 | 50 | N | 300 |
| STU000095 | 30 | 100 | 100 | 50 | N | <20 | 50 | 30 | N | 20 | N | 100 | 200 | N | 700 |
| STU001115 | 7 | 70 | 70 | 30 | N | N | 20 | 50 | N | 10 | N | 100 | 100 | N | 500 |
| STU00225 | 7 | 100 | 100 | 30 | N | <20 | 20 | 70 | N | 10 | N | 150 | 100 | N | 500 |
| STU00235 | 5 | 70 | 30 | 30 | N | <20 | 15 | 50 | N | 10 | N | <100 | 100 | N | 200 |
| STU00245 | 5 | 70 | 10 | 30 | N | <20 | 10 | 30 | N | 7 | N | N | 100 | N | 300 |
| STU00255 | <5 | 10 | 10 | 20 | N | N | <5 | 20 | N | N | N | N | 20 | N | 70 |
| STU00265 | 5 | 20 | 15 | 30 | N | N | 5 | 30 | N | 5 | N | N | 50 | N | 200 |
| STU00275 | 10 | 50 | 30 | 30 | N | <20 | 20 | 30 | N | 10 | N | 100 | 70 | N | 200 |
| STU00285 | 7 | 70 | 50 | 30 | N | <20 | 20 | 20 | N | 10 | N | 100 | 70 | N | 300 |
| STU00295 | 7 | 50 | 20 | 30 | N | <20 | 20 | 30 | N | 10 | N | <100 | 70 | N | 300 |
| STU00305 | 7 | 50 | 100 | 30 | N | <20 | 15 | 150 | N | 10 | N | <100 | 100 | N | 200 |
| STU02025 | 7 | 30 | 20 | 50 | N | <20 | 10 | 20 | N | 10 | N | <100 | 150 | N | 300 |
| STU02045 | 7 | 50 | 15 | 30 | N | N | 15 | 30 | N | 7 | N | <100 | 50 | N | 200 |
| STU02425 | N | 50 | 20 | 30 | N | N | 7 | 30 | N | 10 | N | 100 | 50 | N | 150 |
| STU02445 | <5 | 50 | 50 | 30 | N | N | 7 | 30 | N | 7 | N | <100 | 30 | N | 200 |
| STU02465 | N | 15 | 15 | 30 | N | N | <5 | 20 | N | <5 | N | <100 | 30 | N | 100 |
| STU02485 | 5 | 15 | 15 | 30 | N | N | <5 | 30 | N | <5 | N | <100 | 30 | N | 100 |

TABLE 2.--STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (100) S-TM | (1.0) AA-CU | (1.0) AA-PB | (1.0) AA-ZN | (.05) AA-AG | (.05) AA-CD | (.5) AA-CO | (10) AA-BI | (1) AA-SB |
|----------|---------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|--------------|
| NEM00155 | N | 4.0 | 1.5 | 1.0 | <.05 | <.05 | -- | 1.0 | <1 |
| NEM00335 | N | <1.0 | <1.0 | .5 | <.05 | <.05 | -- | 1.0 | <1 |
| NEM02245 | N | 8.2 | 3.0 | 2.5 | .05 | <.05 | <.5 | -- | <1 |
| NEM02265 | N | 1.5 | 1.2 | 1.4 | <.05 | <.05 | <.5 | -- | <1 |
| NEM02275 | N | 2.0 | 2.5 | 1.7 | <.05 | <.05 | <.5 | -- | <1 |
| NEM02295 | N | 1.0 | 1.1 | 1.4 | <.05 | <.05 | <.5 | -- | <1 |
| NEM02325 | N | <1.0 | <1.0 | 1.2 | <.05 | <.05 | <.5 | -- | <1 |
| NEM02355 | N | <1.0 | 1.5 | 1.2 | <.05 | <.05 | <.5 | -- | <1 |
| NEM04025 | N | 5.8 | 1.5 | 1.7 | <.05 | <.05 | <.5 | -- | <1 |
| NEM04045 | N | 1.4 | 1.8 | 3.6 | <.05 | <.05 | <.5 | -- | <1 |
| NEM04065 | N | 3.5 | 1.0 | 1.4 | <.05 | <.05 | <.5 | -- | <1 |
| NEM04085 | N | <1.0 | <1.0 | 1.0 | <.05 | <.05 | <.5 | -- | <1 |
| NEM04105 | N | 1.7 | 1.5 | 1.8 | <.05 | .05 | <.5 | -- | <1 |
| NEM04145 | N | 3.2 | 1.2 | <1.0 | <.05 | <.05 | <.5 | -- | <1 |
| NEM04155 | N | 2.5 | <1.0 | <1.0 | <.05 | <.05 | <.5 | -- | <1 |
| NEM05815 | N | 6.3 | 1.5 | 1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM05835 | N | 11.0 | 20.0 | 44.0 | .05 | .09 | -- | N | N |
| NEM05855 | N | 41.0 | 12.0 | 19.0 | .12 | .21 | -- | N | N |
| NEM05875 | N | <1.0 | <1.0 | 1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM05885 | N | <1.0 | <1.0 | 1.4 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM05905 | N | 14.0 | 9.0 | 9.0 | .07 | .11 | -- | N | N |
| NEM06105 | N | <1.0 | <1.0 | 1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM08085 | N | 1.1 | <1.0 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM08105 | N | 2.0 | 1.5 | 1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM08115 | N | <1.0 | 1.5 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM18695 | N | 1.2 | <1.0 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM18715 | N | 6.7 | 1.5 | 1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| NEM19405 | N | <1.0 | 1.0 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| STU00095 | N | 5.0 | 2.0 | 5.4 | <.05 | <.05 | -- | <1.0 | <1 |
| STU00115 | N | 3.2 | 2.7 | 2.3 | <.05 | <.05 | -- | <1.0 | <1 |
| STU00225 | N | 7.0 | 3.0 | 1.0 | <.05 | <.05 | -- | .0 | <1 |
| STU00235 | N | <1.0 | 2.5 | 1.7 | <.05 | <.05 | -- | <1.0 | <1 |
| STU00245 | N | <1.0 | 1.0 | <1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| STU00255 | N | 1.1 | 4.2 | 1.8 | <.05 | .08 | -- | <1.0 | <1 |
| STU00265 | N | <1.0 | 1.5 | 2.4 | <.05 | .07 | -- | <1.0 | <1 |
| STU00275 | N | 2.0 | 1.8 | 1.9 | <.05 | <.05 | -- | <1.0 | <1 |
| STU00285 | N | 2.0 | 1.0 | 1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| STU00295 | N | 1.0 | <1.0 | 1.4 | <.05 | <.05 | -- | <1.0 | <1 |
| STU00305 | N | 10.0 | 11.5 | 1.0 | <.05 | <.05 | -- | <1.0 | <1 |
| STU02025 | N | 1.2 | 1.0 | 1.3 | <.05 | <.05 | <.5 | -- | <1 |
| STU02045 | N | <1.0 | <1.0 | 1.0 | <.05 | <.05 | <.5 | -- | <1 |
| STU02425 | N | 4.5 | 2.4 | 2.8 | <.05 | .08 | <.5 | -- | <1 |
| STU02445 | N | 4.7 | 2.7 | 2.0 | <.05 | .08 | <.5 | -- | <1 |
| STU02465 | N | 2.5 | 2.2 | 2.8 | <.05 | .10 | <.5 | -- | <1 |
| STU02485 | N | 2.5 | 3.5 | 5.0 | <.05 | .18 | <.5 | -- | <1 |

TABLE 2.--STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | LATITUDE | LONGITUDE | (.05) S-FEX | (.02) S-MGX | (.05) S-CAZ | (.02) S-TIX | (.05) S-MN | (.5) S-AG | (200) S-AU | (10) S-B | (20) S-BA | (1) S-BE | (10) S-BI | (20) S-CD |
|----------|----------|-----------|-------------|-------------|-------------|-------------|------------|-----------|------------|----------|-----------|----------|-----------|-----------|
| STU02505 | 47 5 4 | 113 56 53 | 1.00 | .20 | .50 | .15 | 1,500 | <.5 | N | 50 | 1,000 | 7.0 | N | N |
| STU02525 | 47 7 6 | 113 56 57 | 1.50 | .30 | .70 | .20 | 500 | N | N | 50 | 1,000 | 2.0 | N | N |
| STU02545 | 47 7 8 | 113 57 1 | 2.00 | .50 | .70 | .30 | 500 | N | N | 100 | 1,000 | 2.0 | N | N |
| STU02565 | 47 7 9 | 113 56 57 | 1.00 | .30 | 1.50 | .15 | 300 | N | N | 70 | 1,000 | 2.0 | N | N |
| STU02585 | 47 6 37 | 113 53 49 | 3.00 | 1.00 | .70 | .70 | 1,000 | <.5 | N | 300 | 1,000 | 2.0 | N | N |
| STU02605 | 47 6 16 | 113 52 44 | 3.00 | .70 | 1.00 | .30 | 700 | N | N | 150 | 700 | 1.5 | N | N |
| STU02645 | 47 0 17 | 113 53 23 | 3.00 | .70 | .30 | .30 | 2,000 | N | N | 100 | 500 | 5.0 | N | N |
| STU02665 | 47 0 20 | 113 53 38 | 3.00 | .50 | .30 | .30 | 500 | N | N | 100 | 500 | 3.0 | N | N |
| STU02685 | 47 0 32 | 113 53 10 | 3.00 | .50 | .20 | .30 | 1,000 | N | N | 100 | 500 | 2.0 | N | N |
| STU04185 | 47 2 22 | 113 57 17 | 3.00 | .50 | .70 | .30 | 700 | N | N | 150 | 1,000 | 3.0 | N | N |
| STU04205 | 47 2 17 | 113 57 17 | 3.00 | 1.00 | .50 | .30 | 700 | N | N | 200 | 1,000 | 3.0 | N | N |
| STU04225 | 47 2 12 | 113 57 17 | 3.00 | .50 | .70 | .30 | 2,000 | N | N | 150 | 1,000 | 5.0 | N | N |
| STU04245 | 47 2 2 | 113 57 7 | 3.00 | .70 | .70 | .30 | 700 | N | N | 200 | 1,000 | 3.0 | N | N |
| STU04265 | 47 1 28 | 113 57 13 | 5.00 | .70 | .70 | .50 | 1,000 | N | N | 300 | 1,000 | 5.0 | N | N |
| STU04285 | 47 1 18 | 113 57 47 | 3.00 | .70 | .30 | .30 | 700 | N | N | 200 | 1,000 | 2.0 | N | N |
| STU04305 | 47 1 3 | 113 58 16 | 1.50 | .50 | .70 | .20 | 1,000 | N | N | 100 | 1,000 | 5.0 | N | N |
| STU06155 | 47 2 4 | 113 54 11 | 5.00 | .70 | .30 | .50 | 1,000 | N | N | 100 | 1,000 | 2.0 | N | N |
| STU06175 | 47 1 59 | 113 54 12 | 3.00 | .70 | .20 | .50 | 1,500 | N | N | 150 | 700 | 3.0 | N | N |
| STU06195 | 47 3 21 | 113 54 38 | 5.00 | .70 | .30 | .50 | 1,500 | N | N | 150 | 1,000 | 3.0 | N | N |
| STU06215 | 47 3 23 | 113 54 42 | 3.00 | .50 | 1.00 | .50 | 700 | N | N | 100 | 1,500 | 5.0 | N | N |
| STU06235 | 47 3 28 | 113 54 41 | 3.00 | .50 | .30 | .30 | 1,500 | N | N | 300 | 1,000 | 5.0 | N | N |
| STU06255 | 47 2 28 | 113 52 33 | 5.00 | .50 | .50 | .50 | 1,500 | N | N | 200 | 1,500 | 3.0 | N | N |
| STU08065 | 47 4 19 | 113 56 14 | 3.00 | .50 | .70 | .30 | 1,500 | N | N | 100 | 1,000 | 5.0 | N | N |
| STU18735 | 47 0 7 | 113 58 54 | 2.00 | .70 | .50 | .30 | 300 | N | N | 70 | 700 | 7.0 | N | N |
| WLA02385 | 47 1 18 | 113 47 54 | 2.00 | .50 | .70 | .20 | 300 | N | N | 50 | 1,000 | 3.0 | N | N |
| WLA02405 | 47 1 16 | 113 47 54 | 3.00 | .50 | .70 | .30 | 300 | N | N | 100 | 1,000 | 2.0 | N | N |
| WLA02625 | 47 5 31 | 113 51 30 | 3.00 | .70 | .50 | .30 | 1,500 | N | N | 300 | 1,500 | 2.0 | N | N |
| WLA02705 | 47 0 34 | 113 51 49 | 3.00 | .50 | .20 | .30 | 700 | N | N | 150 | 500 | 2.0 | N | N |
| WLA02725 | 47 0 32 | 113 51 48 | 3.00 | .50 | .30 | .30 | 700 | N | N | 50 | 700 | 2.0 | N | N |
| WLA02745 | 47 0 18 | 113 51 13 | 2.00 | .30 | .70 | .20 | 1,000 | N | N | 70 | 500 | 3.0 | N | N |
| WLA02765 | 47 0 18 | 113 51 13 | 3.00 | .50 | .70 | .30 | 1,000 | N | N | 100 | 700 | 3.0 | N | N |
| WLA06275 | 47 2 37 | 113 52 3 | 3.00 | .70 | .70 | .30 | 500 | N | N | 200 | 1,000 | 2.0 | N | N |
| WLA06295 | 47 2 2 | 113 51 33 | 3.00 | .70 | .50 | .30 | 1,000 | N | N | 300 | 1,000 | 5.0 | N | N |
| WLA06335 | 47 1 59 | 113 51 6 | 3.00 | .70 | .70 | .30 | 1,500 | N | N | 200 | 1,000 | 3.0 | N | N |
| WLA06355 | 47 1 59 | 113 51 6 | 3.00 | .70 | .30 | .30 | 700 | N | N | 200 | 1,000 | 2.0 | N | N |
| WLA06585 | 47 2 31 | 113 47 47 | 3.00 | .30 | .15 | .30 | 300 | N | N | 300 | 700 | 1.5 | N | N |
| WLA06705 | 47 4 22 | 113 49 18 | 5.00 | .70 | .20 | .50 | 1,000 | N | N | 300 | 700 | 1.5 | N | N |
| WLA14795 | 47 1 59 | 113 51 6 | 3.00 | 1.00 | 1.00 | .50 | 500 | N | N | 200 | 2,000 | 3.0 | N | N |
| WLA18525 | 47 2 1 | 113 50 49 | 3.00 | .50 | .50 | .30 | 500 | <.5 | N | 50 | 500 | 1.5 | N | N |
| WLA18535 | 47 0 55 | 113 50 22 | 3.00 | 1.00 | .50 | .30 | 300 | N | N | 70 | 1,000 | 3.0 | N | N |
| WLA18545 | 47 0 22 | 113 50 17 | 3.00 | .70 | .30 | .20 | 700 | N | N | 100 | 1,000 | 3.0 | N | N |
| WLA18565 | 47 1 9 | 113 50 47 | 3.00 | .70 | .20 | .30 | 700 | N | N | 100 | 1,000 | 3.0 | N | N |
| WLA18585 | 47 0 1 | 113 50 22 | 2.00 | .50 | .30 | .20 | 500 | N | N | 70 | 700 | 2.0 | N | N |
| WLA18605 | 47 0 4 | 113 50 29 | 2.00 | .50 | .30 | .30 | 500 | N | N | 70 | 700 | 2.0 | N | N |

TABLE 2.--STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (5) S-CO | (10) S-CR | (5) S-CU | (20) S-LA | (5) S-MO | (20) S-NB | (5) S-NI | (10) S-EB | (100) S-SB | (5) S-SC | (10) S-SM | (100) S-SR | (10) S-V | (50) S-W | (NO) S-Y | (200) S-ZN | (NO) S-ZR |
|----------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|---------------|-------------|--------------|---------------|-------------|-------------|-------------|---------------|--------------|
| STU0250S | 5 | 15 | 20 | 30 | N | N | 5 | 70 | N | <5 | N | <100 | 30 | N | 30 | N | 150 |
| STU0252S | N | 50 | 20 | 30 | N | N | 5 | 30 | N | 5 | N | 100 | 50 | N | 20 | N | 150 |
| STU0254S | 7 | 70 | 30 | 30 | N | <20 | 10 | 30 | N | 7 | N | 100 | 50 | N | 30 | N | 700 |
| STU0256S | N | 30 | 50 | 30 | N | N | 5 | 30 | N | 5 | N | 100 | 30 | N | 30 | N | 150 |
| STU0258S | 7 | 70 | 70 | 30 | N | <20 | 20 | 30 | N | 10 | N | 100 | 100 | N | 50 | N | 300 |
| STU0260S | 7 | 50 | 20 | 30 | N | <20 | 10 | 30 | N | 10 | N | <100 | 70 | N | 50 | N | 200 |
| STU0264S | 20 | 70 | 20 | 50 | N | <20 | 20 | 50 | N | 15 | N | N | 70 | N | 50 | N | 200 |
| STU0266S | 7 | 70 | 20 | 30 | N | <20 | 20 | 30 | N | 15 | N | <100 | 50 | N | 50 | N | 200 |
| STU0268S | 7 | 50 | 15 | 50 | N | <20 | 15 | 20 | N | 10 | N | <100 | 50 | N | 30 | N | 200 |
| STU0418S | 7 | 30 | 20 | 50 | N | <20 | 15 | 70 | N | 10 | N | 100 | 70 | N | 50 | N | 200 |
| STU0420S | 7 | 30 | 20 | 30 | N | <20 | 15 | 50 | N | 10 | N | 100 | 70 | N | 50 | N | 200 |
| STU0422S | 7 | 30 | 20 | 30 | N | <20 | 15 | 50 | N | 10 | N | 100 | 70 | N | 50 | N | 200 |
| STU0424S | 7 | 50 | 20 | 50 | N | <20 | 15 | 30 | N | 10 | N | 100 | 100 | N | 50 | N | 300 |
| STU0426S | 10 | 70 | 20 | 70 | N | <20 | 30 | 50 | N | 15 | N | 100 | 100 | N | 70 | N | 300 |
| STU0428S | 7 | 50 | 20 | 30 | N | <20 | 15 | 30 | N | 10 | N | <100 | 100 | N | 50 | N | 300 |
| STU0430S | <5 | 30 | 20 | 20 | N | N | 7 | 50 | N | 7 | N | <100 | 70 | N | 30 | N | 150 |
| STU0615S | 7 | 50 | 20 | 50 | N | <20 | 15 | 30 | N | 10 | N | 100 | 70 | N | 50 | N | 500 |
| STU0617S | 15 | 70 | 20 | 50 | N | <20 | 20 | 20 | N | 10 | N | <100 | 70 | N | 50 | N | 500 |
| STU0619S | 15 | 50 | 20 | 50 | <5 | <20 | 20 | 50 | N | 10 | N | <100 | 70 | N | 50 | N | 300 |
| STU0621S | 5 | 30 | 30 | 30 | N | <20 | 5 | 50 | N | 7 | N | 100 | 70 | N | 50 | N | 200 |
| STU0623S | 7 | 30 | 15 | 30 | N | <20 | 7 | 30 | N | 7 | N | 100 | 70 | N | 30 | N | 300 |
| STU0625S | 7 | 70 | 30 | 30 | N | <20 | 15 | 30 | N | 7 | N | 100 | 70 | N | 50 | N | 500 |
| STU0806S | 7 | 20 | 50 | 30 | N | <20 | 10 | 70 | N | 10 | N | <100 | 100 | N | 70 | N | 150 |
| STU1873S | 7 | 50 | 20 | 30 | N | <20 | 10 | 30 | N | 7 | N | <100 | 30 | N | 50 | N | 200 |
| WLA0238S | <5 | 30 | 20 | 30 | N | N | 10 | 30 | N | 7 | N | <100 | 50 | N | 50 | N | 200 |
| WLA0240S | 5 | 50 | 20 | 30 | N | <20 | 15 | 30 | N | 7 | N | 100 | 50 | N | 30 | N | 200 |
| WLA0262S | 7 | 70 | 70 | 30 | N | <20 | 20 | 30 | N | 10 | N | <100 | 50 | N | 30 | N | 300 |
| WLA0270S | 7 | 50 | 15 | 50 | N | <20 | 15 | 20 | N | 10 | N | <100 | 50 | N | 30 | N | 200 |
| WLA0272S | 7 | 50 | 20 | 30 | <5 | <20 | 15 | 30 | N | 10 | N | 100 | 50 | N | 30 | N | 300 |
| WLA0274S | 7 | 50 | 20 | 30 | N | <20 | 15 | 30 | N | 7 | N | <100 | 50 | N | 50 | N | 300 |
| WLA0276S | 7 | 70 | 20 | 30 | N | <20 | 15 | 30 | N | 7 | N | <100 | 50 | N | 50 | N | 300 |
| WLA0627S | 7 | 70 | 20 | 30 | N | <20 | 20 | 30 | N | 10 | N | <100 | 100 | N | 50 | N | 500 |
| WLA0629S | 7 | 30 | 20 | 50 | N | <20 | 15 | 50 | N | 10 | N | <100 | 70 | N | 50 | N | 500 |
| WLA0633S | 15 | 70 | 20 | 30 | N | <20 | 30 | 20 | N | 10 | N | <100 | 70 | N | 50 | N | 300 |
| WLA0635S | 5 | 70 | 15 | 30 | N | <20 | 15 | 20 | N | 7 | N | <100 | 70 | N | 30 | N | 500 |
| WLA0658S | 5 | 50 | 15 | 30 | N | <20 | 7 | 10 | N | 7 | N | <100 | 70 | N | 50 | N | 700 |
| WLA0670S | 15 | 70 | 30 | 50 | N | <20 | 30 | 20 | N | 10 | N | <100 | 100 | N | 50 | N | 700 |
| WLA1479S | <5 | 20 | 20 | 30 | N | N | 15 | 30 | N | 5 | N | <100 | 50 | N | 50 | N | 200 |
| WLA1852S | 7 | 50 | 30 | 30 | N | <20 | 15 | 100 | N | 10 | N | 100 | 50 | N | 20 | N | 100 |
| WLA1853S | 10 | 70 | 20 | 30 | N | <20 | 20 | 15 | N | 15 | N | <100 | 50 | N | 50 | N | 150 |
| WLA1854S | 10 | 50 | 20 | 30 | N | <20 | 20 | 30 | N | 15 | N | <100 | 50 | N | 30 | N | 150 |
| WLA1856S | 10 | 50 | 20 | 50 | N | <20 | 20 | 30 | N | 10 | N | <100 | 50 | N | 50 | N | 150 |
| WLA1858S | 7 | 30 | 20 | 30 | N | <20 | 15 | 20 | N | 7 | N | N | 30 | N | 30 | N | 150 |
| WLA1860S | 7 | 30 | 20 | 50 | N | <20 | 15 | 20 | N | 7 | N | N | 50 | N | 30 | N | 200 |

TABLE 2.--STREAM-SEDIMENT SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (100) | (10) | (1.0) | (1.0) | (1.0) | (0.5) | (0.5) | (.5) | (10) | (1) |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | S-TM | AA-CU | AA-PB | AA-ZN | AA-AG | AA-CD | AA-CD | AA-CD | AA-BI | AA-SB |
| STU0250S | N | 2.4 | 8.6 | 6.0 | .05 | .17 | <.5 | <.5 | -- | <1 |
| STU0252S | N | 3.7 | 3.0 | 3.5 | <.05 | .06 | <.5 | <.5 | -- | <1 |
| STU0254S | N | 3.2 | 2.3 | 3.0 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0256S | N | 7.5 | 2.2 | 2.5 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0258S | N | 3.5 | 2.0 | 3.2 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0260S | N | 1.8 | 2.1 | 3.4 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0264S | N | 2.2 | 3.0 | 4.5 | <.05 | .06 | <.5 | <.5 | -- | <1 |
| STU0266S | N | 1.6 | 1.5 | 2.2 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0268S | N | <1.0 | 1.0 | 1.6 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0418S | N | 1.0 | 1.8 | 1.2 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0420S | N | 1.2 | 2.5 | 2.2 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0422S | N | 2.5 | 4.8 | 5.8 | <.05 | .05 | <.5 | <.5 | -- | <1 |
| STU0424S | N | 1.0 | 1.9 | 1.5 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0426S | N | 1.5 | 2.4 | 2.1 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0428S | N | 1.2 | 2.4 | 1.4 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| STU0430S | N | 2.7 | 3.9 | 3.3 | <.05 | .06 | <.5 | <.5 | -- | <1 |
| STU0615S | N | <1.0 | 1.2 | 3.0 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| STU0617S | N | 1.5 | 1.4 | 3.7 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| STU0619S | N | 1.4 | 2.0 | 3.0 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| STU0621S | N | 1.8 | 1.4 | 1.5 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| STU0623S | N | <1.0 | 1.5 | 1.2 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| STU0625S | N | 1.4 | 1.7 | 4.0 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| STU0806S | N | 1.8 | 2.5 | 1.4 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| STU1873S | N | 1.2 | 2.0 | 1.4 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA0238S | N | 1.3 | 1.2 | 1.6 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| WLA0240S | N | <1.0 | 1.0 | <1.0 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| WLA0262S | N | 4.4 | 2.6 | 3.7 | <.05 | .08 | <.5 | <.5 | -- | <1 |
| WLA0270S | N | <1.0 | 1.0 | 1.5 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| WLA0272S | N | 2.3 | 2.2 | 1.5 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| WLA0274S | N | 1.2 | 1.6 | 1.8 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| WLA0276S | N | 1.1 | 1.5 | 1.5 | <.05 | <.05 | <.5 | <.5 | -- | <1 |
| WLA0627S | N | 1.4 | 1.3 | 1.8 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA0629S | N | 1.2 | 1.3 | 2.2 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA0633S | N | 1.3 | <1.0 | 1.7 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA0635S | N | 1.2 | <1.0 | 2.2 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA0638S | N | <1.0 | <1.0 | <1.0 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA0670S | N | <1.0 | <1.0 | 2.0 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA1479S | N | 17.0 | 12.0 | 5.0 | .06 | .18 | -- | -- | <1.0 | N |
| WLA1832S | N | 3.5 | 17.0 | 7.5 | .05 | .08 | -- | -- | <1.0 | <1 |
| WLA1853S | N | 1.4 | 1.2 | <1.0 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA1854S | N | 1.4 | 2.0 | 1.7 | <.05 | .05 | -- | -- | <1.0 | <1 |
| WLA1856S | N | 1.3 | 1.5 | 3.7 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA1858S | N | 1.1 | <1.0 | 1.0 | <.05 | <.05 | -- | -- | <1.0 | <1 |
| WLA1860S | N | <1.0 | <1.0 | 1.4 | <.05 | <.05 | -- | -- | <1.0 | <1 |

TABLE 3. --PANNEED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA

[illegible]

TABLE 3.--PANED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | S-CO | (5) | (10) | S-CR | (5) | (20) | S-LA | (5) | (20) | S-MO | (5) | (20) | S-NB | (5) | (10) | S-PB | (10) | (100) | S-SR | (10) | (50) | S-V | (10) | (200) | (10) | S-ZM | (10) |
|----------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|------|-------|------|------|------|-----|------|-------|------|------|------|
| BLP0003P | 10 | | 30 | N | 200 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| BLP0005P | 10 | | 30 | 15 | 70 | N | | | | | | | | | <20 | | | <200 | | | | | | | | | |
| BLP0205P | 15 | | 20 | <10 | 70 | <10 | | | | | | | | | <20 | | | N | | | | | | | | | |
| BLP0207P | 10 | | 70 | <10 | 70 | N | | | | | | | | | <20 | | | N | | | | | | | | | |
| BLP0209P | 15 | | 70 | <10 | 70 | <10 | | | | | | | | | 20 | | | <200 | | | | | | | | | |
| BLP0211P | <10 | | 20 | N | 50 | N | | | | | | | | | <20 | | | N | | | | | | | | | |
| BLP0213P | 15 | | 30 | <10 | 50 | N | | | | | | | | | 30 | | | N | | | | | | | | | |
| BLP0215P | 20 | | 500 | 10 | 50 | N | | | | | | | | | <20 | | | 300 | | | | | | | | | |
| BLP0217P | N | | 20 | <10 | 50 | N | | | | | | | | | 15 | | | N | | | | | | | | | |
| BLP0219P | 10 | | 30 | <10 | 50 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| BLP0221P | <10 | | 30 | <10 | 50 | <10 | | | | | | | | | 20 | | | N | | | | | | | | | |
| BLP0564P | 10 | | 100 | <10 | 70 | N | | | | | | | | | 30 | | | N | | | | | | | | | |
| BLP0566P | 10 | | 50 | 10 | 70 | N | | | | | | | | | 100 | | | N | | | | | | | | | |
| BLP0568P | 10 | | 100 | 10 | 70 | N | | | | | | | | | 30 | | | <200 | | | | | | | | | |
| BLP0570P | 15 | | 70 | 20 | 70 | N | | | | | | | | | 20 | | | <200 | | | | | | | | | |
| BLP0578P | 20 | | 150 | 50 | 70 | N | | | | | | | | | 30 | | | <200 | | | | | | | | | |
| BLP1488P | 10 | | 20 | <10 | 50 | N | | | | | | | | | 15 | | | N | | | | | | | | | |
| BLP1490P | <10 | | 20 | <10 | 50 | N | | | | | | | | | 10 | | | N | | | | | | | | | |
| BLP1492P | 30 | | 30 | 15 | 100 | N | | | | | | | | | 15 | | | N | | | | | | | | | |
| BLP1494P | <10 | | 30 | <10 | 50 | N | | | | | | | | | 10 | | | N | | | | | | | | | |
| BLP1496P | <10 | | 20 | <10 | 50 | N | | | | | | | | | 10 | | | N | | | | | | | | | |
| BLP1498P | 10 | | 150 | 30 | 50 | N | | | | | | | | | 30 | | | N | | | | | | | | | |
| BLP1863P | 10 | | 70 | <10 | 70 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| BLP1865P | 10 | | 50 | 10 | 70 | N | | | | | | | | | 30 | | | <200 | | | | | | | | | |
| BLP1941P | 10 | | 150 | 20 | 70 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| BLP1943P | 15 | | 70 | 15 | 70 | N | | | | | | | | | 15 | | | N | | | | | | | | | |
| BLP1946P | 15 | | 100 | 10 | 50 | N | | | | | | | | | 100 | | | N | | | | | | | | | |
| BLP1949P | 10 | | 100 | <10 | 50 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| BLP1951P | 20 | | 200 | 20 | 70 | N | | | | | | | | | 70 | | | N | | | | | | | | | |
| BLP2809P | <10 | | 50 | <10 | 50 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| BLP2811P | 10 | | 100 | 10 | 70 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| BLP2813P | 20 | | 70 | 20 | 100 | N | | | | | | | | | 30 | | | N | | | | | | | | | |
| BLP2815P | 10 | | 70 | <10 | 100 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| NEM0013P | 15 | | 50 | 30 | 50 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| NEM0032P | N | | 30 | <10 | 50 | N | | | | | | | | | 50 | | | <200 | | | | | | | | | |
| NEM0223P | 15 | | 50 | 50 | 70 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| NEM0225P | 15 | | 30 | 50 | 70 | N | | | | | | | | | 30 | | | <200 | | | | | | | | | |
| NEM0228P | 15 | | 50 | 10 | 70 | N | | | | | | | | | 30 | | | N | | | | | | | | | |
| NEM0231P | 10 | | 30 | <10 | 70 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| NEM0234P | 10 | | 30 | <10 | 70 | N | | | | | | | | | 10 | | | N | | | | | | | | | |
| NEM0401P | 10 | | 50 | <10 | 70 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| NEM0403P | 30 | | 50 | 15 | 70 | N | | | | | | | | | 30 | | | N | | | | | | | | | |
| NEM0405P | 15 | | 30 | <10 | 70 | N | | | | | | | | | 30 | | | N | | | | | | | | | |
| NEM0407P | 15 | | 50 | 30 | 50 | N | | | | | | | | | 20 | | | N | | | | | | | | | |
| NEM0409P | <10 | | 30 | <10 | 50 | N | | | | | | | | | 10 | | | N | | | | | | | | | |

TABLE 3. --PINNED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (100) | (Q2) |
|----------|-------|------|
| BLP0003P | -- | <.02 |
| BLP0005P | -- | <.02 |
| BLP0205P | -- | .08 |
| BLP0207P | -- | <.02 |
| BLP0209P | -- | <.02 |
| BLP0211P | -- | <.02 |
| BLP0213P | -- | <.02 |
| BLP0215P | -- | <.02 |
| BLP0217P | -- | <.02 |
| BLP0219P | -- | <.02 |
| BLP0221P | -- | <.02 |
| BLP0564P | N | <.02 |
| BLP0566P | N | <.02 |
| BLP0568P | N | .03 |
| BLP0570P | N | <.02 |
| BLP0578P | N | <.02 |
| BLP1488P | N | <.02 |
| BLP1490P | N | <.02 |
| BLP1492P | N | <.02 |
| BLP1494P | N | <.02 |
| BLP1496P | N | <.02 |
| BLP1498P | N | <.02 |
| BLP1863P | N | <.02 |
| BLP1865P | N | <.02 |
| BLP1941P | N | <.02 |
| BLP1943P | N | .05 |
| BLP1946P | N | <.02 |
| BLP1949P | N | .02 |
| BLP1951P | N | <.02 |
| BLP2809P | N | <.02 |
| BLP2811P | N | <.02 |
| BLP2813P | N | <.02 |
| BLP2815P | N | <.02 |
| MEM0013P | -- | <.02 |
| MEM0032P | -- | <.02 |
| MEM0223P | -- | <.02 |
| MEM0225P | -- | <.02 |
| MEM0228P | -- | <.02 |
| MEM0231P | -- | <.02 |
| MEM0234P | -- | <.02 |
| MEM0401P | -- | <.02 |
| MEM0403P | -- | <.02 |
| MEM0405P | -- | <.02 |
| MEM0407P | -- | <.02 |
| MEM0409P | -- | <.02 |

TABLE 3.--PANED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | LATITUDE | LONGITUDE | (.05) S-FEZ | (.02) S-MGZ | (.05) S-CAZ | (.002) S-TIZ | (10) S-MN | (.5) S-AG | (200) S-AS | (10) S-AU | (10) S-B | (20) S-BA | (1) S-BE | (10) S-BI | (20) S-CD |
|----------|----------|------------|----------------|----------------|----------------|-----------------|--------------|--------------|---------------|--------------|-------------|--------------|-------------|--------------|--------------|
| NEM0411P | 46 57 10 | 113 54 42 | 3.0 | 1.50 | .15 | .30 | 700 | N | N | N | 500 | 700 | 7 | N | N |
| NEM0413P | 46 57 4 | 113 53 14 | 3.0 | 1.00 | .30 | .70 | 500 | N | N | N | 300 | 700 | 3 | N | N |
| NEM0580P | 46 53 8 | 113 53 36 | 7.0 | 1.50 | 1.00 | 2.00 | 1,000 | N | N | N | 700 | 700 | 2 | N | N |
| NEM0582P | 46 53 31 | 113 55 27 | 5.0 | 1.00 | .30 | 1.50 | 1,000 | N | N | N | 300 | 1,000 | 2 | N | N |
| NEM0584P | 46 54 12 | 113 53 58 | 30.0 | 1.50 | 3.00 | >2.00 | 5,000 | N | N | N | 70 | 300 | N | N | N |
| NEM0586P | 46 56 9 | 113 58 50 | 2.0 | .70 | 7.00 | .50 | 500 | N | N | N | 200 | 500 | 3 | N | N |
| NEM0589P | 46 56 27 | 113 58 5 | 15.0 | 1.00 | .70 | >2.00 | 3,000 | N | N | N | 300 | 500 | <2 | N | N |
| NEM0609P | 46 56 51 | 113 55 59 | 7.0 | .70 | .15 | 1.00 | 700 | N | N | N | 150 | 500 | 2 | N | N |
| NEM0607P | 46 57 56 | 113 57 21 | 15.0 | 1.50 | 1.00 | >2.00 | 2,000 | N | N | N | 500 | 1,000 | 2 | N | N |
| NEM0809P | 46 57 55 | 113 57 15 | 7.0 | 1.50 | .50 | .70 | 1,000 | N | N | N | 300 | 700 | 5 | N | N |
| NEM0812P | 46 59 58 | 113 57 4 | 5.0 | .70 | .15 | .50 | 700 | N | N | N | 200 | 1,000 | 3 | N | N |
| NEM1868P | 46 58 49 | 113 58 46 | 15.0 | 1.50 | 1.00 | >2.00 | 3,000 | N | N | N | 300 | 700 | <2 | N | N |
| NEM1870P | 46 58 44 | 113 58 47 | 7.0 | 1.50 | .50 | 1.50 | 700 | N | N | N | 500 | 1,000 | 3 | N | N |
| NEM1939P | 46 57 29 | 113 53 26 | 3.0 | 1.00 | .15 | 1.50 | 300 | N | N | N | 200 | 700 | 2 | N | N |
| STU0008P | 47 0 56 | 113 59 52 | 30.0 | .70 | 1.00 | >2.00 | 5,000 | N | N | N | N | 500 | N | N | N |
| STU0030P | 47 4 11 | 113 53 17 | 5.0 | .15 | .15 | .70 | 700 | N | N | N | 200 | 1,000 | 3 | N | N |
| STU0031P | 47 4 14 | 113 53 10 | 7.0 | 1.00 | .20 | .70 | 700 | N | N | N | 150 | 700 | 3 | N | N |
| STU0200P | 47 2 43 | 113 52 48 | 7.0 | 1.00 | .50 | >2.00 | 1,000 | N | N | N | 200 | 500 | <2 | N | N |
| STU0201P | 47 2 43 | 113 52 48 | 7.0 | 1.00 | .50 | 2.00 | 1,000 | N | N | N | 100 | 300 | 2 | N | N |
| STU0203P | 47 2 45 | 113 52 47 | 5.0 | 1.00 | .15 | .50 | 300 | N | N | N | 150 | 500 | 2 | N | N |
| STU0241P | 47 2 43 | 113 59 59 | 10.0 | 3.00 | 2.00 | .70 | 1,000 | N | N | N | 150 | 500 | 2 | N | N |
| STU0243P | 47 4 0 | 113 59 40 | 5.0 | 2.00 | .15 | .30 | 500 | N | N | N | 200 | 1,000 | 3 | N | N |
| STU0245P | 47 3 42 | 113 59 4 | 5.0 | 1.50 | .10 | .50 | 300 | N | N | N | 200 | 500 | 3 | N | N |
| STU0247P | 47 4 47 | 113 57 44 | 3.0 | .00 | <.10 | .70 | 300 | N | N | N | 200 | 300 | 3 | N | N |
| STU0249P | 47 5 4 | 113 56 53 | 5.0 | 1.00 | .15 | .30 | 1,000 | N | N | N | 300 | 1,000 | 5 | N | N |
| STU0251P | 47 7 6 | 113 56 57# | 5.0 | 1.00 | .15 | .50 | 700 | N | N | N | 300 | 700 | 5 | N | N |
| STU0253P | 47 7 8 | 113 57 1 | 5.0 | 1.00 | .15 | .50 | 700 | N | N | N | 300 | 700 | 5 | N | N |
| STU0255P | 47 7 9 | 113 56 57 | 5.0 | 1.00 | .15 | .50 | 700 | N | N | N | 300 | 700 | 5 | N | N |
| STU0257P | 47 6 37 | 113 53 49 | 15.0 | 1.50 | 2.00 | >2.0 | 3,000 | N | N | N | 500 | 1,000 | <2 | N | N |
| STU0259P | 47 6 16 | 113 52 44 | 7.0 | 1.50 | 1.00 | 1.00 | 700 | N | N | N | 200 | 1,000 | 3 | N | N |
| STU0263P | 47 0 17 | 113 53 23 | 7.0 | 1.00 | .20 | .70 | 1,000 | N | N | N | 200 | 1,000 | 5 | N | N |
| STU0265P | 47 0 20 | 113 53 38 | 5.0 | 1.00 | .15 | .70 | 500 | N | N | N | 200 | 1,000 | 5 | N | N |
| STU0267P | 47 0 32 | 113 53 10 | 5.0 | .70 | .15 | .50 | 500 | 7 | N | N | 150 | 500 | 3 | N | N |
| STU0417P | 47 2 22 | 113 57 17 | 5.0 | 1.00 | .30 | .70 | 700 | N | N | N | 200 | 1,000 | 5 | N | N |
| STU0419P | 47 2 17 | 113 57 17 | 5.0 | 2.00 | .15 | .50 | 700 | N | N | N | 200 | 700 | 5 | N | N |
| STU0421P | 47 2 12 | 113 57 17 | 3.0 | 1.00 | <.10 | .30 | 700 | N | N | N | 500 | 300 | 3 | N | N |
| STU0423P | 47 2 2 | 113 57 7 | 3.0 | .70 | .10 | .50 | 700 | N | N | N | 70 | 700 | 3 | N | N |
| STU0425P | 47 1 28 | 113 57 13 | 7.0 | 1.00 | .20 | .70 | 700 | N | N | N | 150 | 1,000 | 3 | N | N |
| STU0427P | 47 1 18 | 113 57 47 | 5.0 | 1.00 | .15 | .50 | 500 | N | N | N | 150 | 1,000 | 3 | N | N |
| STU0429P | 47 1 8 | 113 58 16 | 3.0 | 1.50 | .10 | .50 | 300 | N | N | N | 300 | 500 | 3 | N | N |
| STU0614P | 47 2 4 | 113 54 11 | 3.0 | 1.00 | .10 | .50 | 700 | N | N | N | 100 | 700 | 3 | N | N |
| STU0616P | 47 1 59 | 113 54 12 | 5.0 | 1.00 | .10 | .50 | 700 | N | N | N | 150 | 700 | 3 | N | N |
| STU0618P | 47 3 21 | 113 54 38 | 7.0 | 1.50 | .50 | 1.00 | 1,000 | N | N | N | 200 | 700 | 3 | N | N |
| STU0620P | 47 3 23 | 113 54 42 | 7.0 | 1.50 | .50 | 1.50 | 700 | N | N | N | 150 | 500 | 3 | N | N |
| STU0622P | 47 3 28 | 113 54 41 | 7.0 | .70 | <.10 | .30 | 200 | N | N | N | 300 | 300 | 3 | N | N |

TABLE 3.--PANED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | S-CO | (5) | (10) | S-CR | (5) | (20) | S-MO | (5) | S-MB | (20) | (5) | S-NI | (5) | (10) | S-PB | (10) | S-SB | (100) | (5) | S-SC | (5) | (10) | S-SN | (10) | (100) | S-SR | (10) | (50) | S-Y | (10) | (200) | S-ZN | (10) |
|----------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|-----|------|------|------|------|-------|-----|------|-----|------|------|------|-------|------|-------|------|-----|------|-------|------|------|
| NEM0411P | 10 | 20 | 10 | 70 | 70 | 70 | N | <50 | N | <50 | 20 | 20 | 30 | <20 | 30 | N | 10 | N | 70 | N | 10 | N | N | N | N | N | N | N | 50 | 30 | N | 300 | |
| NEM0413P | 10 | 30 | 10 | 50 | 50 | 50 | N | <50 | N | <50 | 20 | 20 | <20 | 30 | <20 | N | N | <200 | N | 100 | 15 | N | N | 100 | N | 100 | N | 30 | 30 | N | 300 | | |
| NEM0580P | 20 | 150 | 30 | 70 | 70 | 70 | N | <50 | N | <50 | 50 | 50 | 30 | 30 | 30 | N | N | <200 | N | 200 | 15 | N | N | 200 | N | 200 | N | 50 | 50 | N | 500 | | |
| NEM0582P | 15 | 150 | 10 | 70 | 70 | 70 | N | <50 | N | <50 | 20 | 20 | 30 | 30 | 30 | N | N | 150 | N | 150 | 10 | N | N | 150 | N | 150 | N | 50 | 50 | N | 500 | | |
| NEM0584P | 50 | 150 | 150 | <50 | <50 | <50 | N | <50 | N | <50 | 20 | 20 | 20 | 20 | 20 | N | N | <200 | N | 700 | 30 | N | N | <200 | N | 700 | N | 50 | 50 | N | 700 | | |
| NEM0586P | 10 | 50 | 15 | 50 | 50 | 50 | N | <50 | N | <50 | 20 | 20 | 30 | 30 | 30 | N | N | 70 | N | 70 | 10 | N | N | N | N | N | 30 | 30 | N | 500 | | | |
| NEM0589P | 15 | 50 | 30 | 50 | 50 | 50 | N | <50 | N | <50 | 20 | 20 | 20 | 20 | 20 | N | N | 500 | N | 500 | 15 | N | N | 500 | N | 500 | N | 50 | 50 | N | 700 | | |
| NEM0609P | 15 | 50 | 10 | 70 | 70 | 70 | N | <50 | N | <50 | 10 | <20 | <20 | <20 | <20 | N | N | 200 | N | 200 | 15 | N | N | 200 | N | 200 | N | 500 | 500 | N | 700 | | |
| NEM0807P | 15 | 50 | 50 | 70 | 70 | 70 | N | <50 | N | <50 | 20 | 20 | 30 | 30 | 30 | N | N | 300 | N | 300 | 15 | N | N | 300 | N | 300 | N | 50 | 50 | N | 500 | | |
| NEM0809P | 15 | 50 | 30 | 70 | 70 | 70 | 7 | <50 | N | <50 | 30 | 30 | 30 | 30 | 30 | N | N | 200 | N | 200 | 15 | N | N | 200 | N | 200 | N | 50 | 50 | N | 300 | | |
| NEM0812P | 15 | 30 | 10 | 70 | 70 | 70 | 5 | <50 | N | <50 | 20 | 20 | 30 | 30 | 30 | N | N | 70 | N | 70 | 15 | N | N | <200 | N | <200 | N | 50 | 50 | N | 300 | | |
| NEM1868P | 50 | 70 | 70 | 70 | 70 | 70 | N | <50 | N | <50 | 50 | 50 | 20 | 20 | 20 | N | N | 500 | N | 500 | 20 | N | N | <200 | N | 500 | N | 100 | 100 | N | 500 | | |
| NEM1870P | 20 | 50 | 20 | 70 | 70 | 70 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 300 | N | 300 | 15 | N | N | 300 | N | 300 | N | 50 | 50 | N | 700 | | |
| NEM1939P | <10 | 100 | 10 | 50 | 50 | 50 | N | <50 | N | <50 | 10 | 10 | 20 | 20 | 20 | N | N | <200 | N | 150 | 15 | N | N | <200 | N | 150 | N | 50 | 50 | N | 500 | | |
| STU0008P | 70 | 50 | 150 | <50 | <50 | <50 | N | N | N | N | 30 | 30 | 30 | N | N | N | N | 700 | N | 700 | 20 | N | N | N | 700 | N | 1,000 | 20 | 20 | N | 1,000 | | |
| STU0030P | <10 | 100 | 15 | 50 | 50 | 50 | N | N | N | N | 15 | 15 | 20 | 20 | 20 | N | N | 100 | N | 100 | 15 | N | N | 100 | N | 100 | N | 50 | 50 | N | 500 | | |
| STU0031P | 15 | 50 | 20 | 70 | 70 | 70 | N | <50 | N | <50 | 20 | 20 | <20 | <20 | <20 | N | N | <200 | N | 100 | 15 | N | N | <200 | N | 100 | N | 30 | 30 | N | 700 | | |
| STU0200P | 15 | 30 | 50 | 100 | 100 | 100 | N | <50 | N | <50 | 10 | 10 | 20 | 20 | 20 | N | N | 300 | N | 300 | 15 | N | N | <200 | N | 300 | N | 50 | 50 | N | 700 | | |
| STU0201P | 15 | 30 | 30 | 100 | 100 | 100 | N | <50 | N | <50 | 10 | 10 | <20 | <20 | <20 | N | N | 150 | N | 150 | 15 | N | N | <200 | N | 150 | N | 50 | 50 | N | 200 | | |
| STU0203P | N | 30 | <10 | 70 | 70 | 70 | N | <50 | N | <50 | 15 | 15 | <20 | <20 | <20 | N | N | 70 | N | 70 | 15 | N | N | <200 | N | 70 | N | 70 | 70 | N | 500 | | |
| STU0241P | 50 | 50 | 50 | 50 | 50 | 50 | N | N | N | N | 50 | 50 | 20 | 20 | 20 | N | N | 200 | N | 200 | 30 | N | N | N | N | 200 | N | 70 | 70 | N | 200 | | |
| STU0243P | 15 | 50 | <10 | 70 | 70 | 70 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 100 | N | 100 | 15 | N | N | 100 | N | 100 | N | 70 | 70 | N | 300 | | |
| STU0245P | 15 | 50 | 10 | 70 | 70 | 70 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 100 | N | 100 | 15 | N | N | 100 | N | 100 | N | 50 | 50 | N | 300 | | |
| STU0247P | 15 | 30 | <10 | 70 | 70 | 70 | N | <50 | N | <50 | 10 | 10 | <20 | <20 | <20 | N | N | 50 | N | 50 | 15 | N | N | 50 | N | 50 | N | 50 | 50 | N | 500 | | |
| STU0249P | 15 | 30 | <10 | 70 | 70 | 70 | N | <50 | N | <50 | 20 | 20 | 20 | 30 | 30 | N | N | 100 | N | 100 | 15 | N | N | 100 | N | 100 | N | 50 | 50 | N | 300 | | |
| STU0251P | 15 | 50 | 15 | 70 | 70 | 70 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 100 | N | 100 | 15 | N | N | 100 | N | 100 | N | 70 | 70 | N | 500 | | |
| STU0253P | 10 | 50 | 10 | 70 | 70 | 70 | N | <50 | N | <50 | 30 | 30 | 30 | 30 | 30 | N | N | 100 | N | 100 | 15 | N | N | 100 | N | 100 | N | 100 | 100 | N | 500 | | |
| STU0255P | 15 | 50 | 10 | 70 | <10 | <10 | N | <50 | N | <50 | 30 | 30 | <20 | <20 | <20 | N | N | 100 | N | 100 | 15 | N | N | <200 | N | 100 | N | 50 | 50 | N | 500 | | |
| STU0257P | 50 | 30 | 150 | 100 | 100 | 100 | N | 50 | 50 | 50 | 50 | 50 | 20 | 20 | 20 | N | N | 500 | N | 500 | 20 | N | N | <200 | N | 500 | N | 70 | 70 | N | 500 | | |
| STU0259P | 15 | 50 | 30 | 70 | 70 | 70 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 200 | N | 200 | 15 | N | N | <200 | N | 200 | N | 50 | 50 | N | 700 | | |
| STU0263P | 15 | 150 | 30 | 100 | 100 | 100 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 150 | N | 150 | 20 | N | N | N | N | 150 | N | 70 | 70 | N | 500 | | |
| STU0265P | 15 | 100 | <10 | 100 | 100 | 100 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 150 | N | 150 | 20 | N | N | N | N | 150 | N | 70 | 70 | N | 500 | | |
| STU0267P | 10 | 50 | <10 | 70 | <10 | <10 | N | <50 | N | <50 | 20 | 20 | 20 | 20 | 20 | N | N | 100 | N | 100 | 15 | N | N | <200 | N | 100 | N | 50 | 50 | N | 200 | | |
| STU0417P | 10 | 30 | <10 | 70 | 70 | 70 | N | <50 | N | <50 | 20 | 20 | 30 | 30 | 30 | N | N | 100 | N | 100 | 15 | N | N | 100 | N | 100 | N | 70 | 70 | N | 700 | | |
| STU0419P | 10 | 50 | 10 | 70 | 70 | 70 | 5 | <50 | N | <50 | 20 | 20 | 20 | 30 | 30 | N | N | 100 | N | 100 | 15 | N | N | 100 | N | 100 | N | 50 | 50 | N | 200 | | |
| STU0421P | <10 | 30 | <10 | 50 | 50 | 50 | N | <50 | N | <50 | 20 | 20 | 20 | 20 | 20 | N | N | 70 | N | 70 | 10 | N | N | N | N | 70 | N | 20 | 20 | N | 300 | | |
| STU0423P | 15 | 30 | 30 | 50 | 50 | 50 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 70 | N | 70 | 10 | N | N | N | N | 70 | N | 20 | 20 | N | 200 | | |
| STU0425P | 15 | 100 | 20 | 70 | 70 | 70 | N | <50 | N | <50 | 30 | 30 | 30 | 30 | 30 | N | N | 100 | N | 100 | 15 | N | N | <200 | N | 100 | N | 70 | 70 | N | 300 | | |
| STU0427P | 20 | 50 | 10 | 70 | 70 | 70 | N | <50 | N | <50 | 20 | 20 | 30 | 30 | 30 | N | N | 70 | N | 70 | 15 | N | N | <200 | N | 70 | N | 70 | 70 | N | 300 | | |
| STU0429P | 15 | 100 | <10 | 70 | 70 | 70 | N | <50 | N | <50 | 30 | 30 | 20 | 20 | 20 | N | N | 70 | N | 70 | 15 | N | N | N | 70 | 70 | N | 50 | 50 | N | 300 | | |
| STU0614P | 10 | 30 | <10 | 70 | 70 | 70 | N | <50 | N | <50 | 10 | 10 | 20 | 20 | 20 | N | N | 70 | N | 70 | 15 | N | N | N | N | 70 | N | 50 | 50 | N | 200 | | |
| STU0616P | 100 | 70 | 20 | 70 | 70 | 70 | N | <50 | N | <50 | 20 | 20 | 20 | 20 | 20 | N | N | 100 | N | 100 | 15 | N | N | N | N | 100 | N | 50 | 50 | N | 200 | | |
| STU0618P | 15 | 50 | 30 | 100 | 100 | 100 | N | <50 | N | <50 | 20 | 20 | 30 | 30 | 30 | N | N | 100 | N | 100 | 15 | N | N | N | N | 100 | N | 50 | 50 | N | 500 | | |
| STU0620P | 10 | 20 | 10 | 100 | 100 | 100 | N | <50 | N | <50 | 10 | 10 | 20 | 20 | 20 | N | N | 100 | N | 100 | 15 | N | N | N | N | 100 | N | 50 | 50 | N | 500 | | |
| STU0622P | N | 30 | <10 | 70 | 70 | 70 | N | <50 | N | <50 | <10 | <10 | <20 | <20 | <20 | N | N | 70 | N | 70 | 15 | N | N | N | N | 70 | N | 50 | 50 | N | 500 | | |

TABLE 3. --PANED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (100) | | (02) | |
|----------|-------|-------|------|-------|
| | S-TH | AA-AU | S-TH | AA-AU |
| MEM0411P | -- | <.02 | | |
| MEM0413P | -- | <.02 | | |
| MEM0580P | N | <.02 | | |
| MEM0582P | N | .72 | | |
| MEM0584P | N | .02 | | |
| MEM0586P | N | <.02 | | |
| MEM0589P | N | <.02 | | |
| MEM0609P | -- | <.02 | | |
| MEM0807P | -- | <.02 | | |
| MEM0809P | -- | <.02 | | |
| MEM0812P | -- | <.02 | | |
| MEM1868P | N | <.02 | | |
| MEM1870P | N | <.02 | | |
| MEM1939P | N | <.02 | | |
| STU0008P | -- | <.02 | | |
| STU0010P | N | <.02 | | |
| STU0031P | -- | <.02 | | |
| STU0200P | -- | .45 | | |
| STU0201P | -- | <.02 | | |
| STU0203P | -- | <.02 | | |
| STU0241P | -- | <.02 | | |
| STU0243P | -- | <.02 | | |
| STU0245P | -- | <.02 | | |
| STU0247P | -- | <.02 | | |
| STU0249P | -- | <.02 | | |
| STU0251P | -- | <.02 | | |
| STU0253P | -- | <.02 | | |
| STU0255P | -- | <.02 | | |
| STU0257P | -- | <.02 | | |
| STU0259P | -- | <.02 | | |
| STU0263P | -- | <.02 | | |
| STU0265P | -- | <.02 | | |
| STU0267P | -- | <.02 | | |
| STU0417P | -- | <.02 | | |
| STU0419P | -- | <.02 | | |
| STU0421P | -- | <.02 | | |
| STU0423P | -- | <.02 | | |
| STU0425P | -- | <.02 | | |
| STU0427P | -- | <.02 | | |
| STU0429P | -- | <.02 | | |
| STU0614P | -- | <.02 | | |
| STU0616P | -- | <.02 | | |
| STU0618P | -- | <.02 | | |
| STU0620P | -- | <.02 | | |
| STU0622P | -- | <.02 | | |

TABLE 3.--PANED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | LATITUDE | LONGITUDE | (.05) S-FEX | (.02) S-MGX | (.05) S-CAX | (.002) S-TIX | (NO) S-MN | (.5) S-AG | (200) S-AS | (10) S-AU | (10) S-B | (20) S-BA | (1) S-BE | (10) S-BI | (20) S-CB |
|----------|----------|-----------|-------------|-------------|-------------|--------------|-----------|-----------|------------|-----------|----------|-----------|----------|-----------|-----------|
| STU0624P | 47 2 28 | 113 52 33 | 5.0 | 1.00 | .10 | .30 | 500 | N | N | N | 150 | 500 | 3 | N | N |
| STU0805P | 47 4 19 | 113 56 14 | 10.0 | 2.00 | 1.00 | >2.00 | 1,500 | N | N | N | 200 | 1,000 | 2 | N | N |
| STU1872P | 47 0 7 | 113 58 54 | 5.0 | 1.50 | .30 | 1.00 | 700 | N | N | N | 300 | 700 | 2 | N | N |
| WLA0237P | 47 1 18 | 113 47 54 | 3.0 | 1.50 | .10 | .30 | 150 | N | N | N | 100 | 500 | <2 | N | N |
| WLA0239P | 47 1 16 | 113 47 54 | 3.0 | 1.00 | .15 | .70 | 300 | N | N | N | 150 | 500 | 3 | N | N |
| WLA0261P | 47 5 31 | 113 51 30 | 7.0 | 1.50 | .15 | .50 | 700 | N | N | N | 500 | 1,000 | 3 | N | N |
| WLA 269P | 47 0 34 | 113 51 49 | 5.0 | .70 | .15 | .50 | 700 | N | N | N | 100 | 700 | 3 | N | N |
| WLA0271P | 47 0 32 | 113 51 48 | 5.0 | .70 | .20 | .50 | 1,000 | N | N | N | 200 | 1,000 | 3 | N | N |
| WLA0273P | 47 0 18 | 113 51 13 | 5.0 | 1.00 | .20 | .50 | 700 | N | N | N | 100 | 700 | 3 | N | N |
| WLA0275P | 47 0 18 | 113 51 13 | 5.0 | 1.00 | .30 | .50 | 700 | N | N | N | 100 | 700 | 3 | N | N |
| WLA0626P | 47 2 37 | 113 52 3 | 3.0 | 1.00 | .10 | .30 | 500 | N | N | N | 300 | 500 | 3 | N | N |
| WLA0628P | 47 2 2 | 113 51 33 | 5.0 | 1.00 | .15 | .50 | 700 | N | N | N | 150 | 700 | 3 | N | N |
| WLA0632P | 47 1 59 | 113 51 6 | 3.0 | .70 | <.10 | .50 | 300 | N | N | N | 100 | 300 | 3 | N | N |
| WLA0634P | 47 1 59 | 113 51 6 | 3.0 | 1.00 | <.10 | .30 | 300 | N | N | N | 200 | 300 | 3 | N | N |
| WLA0657P | 47 2 31 | 113 47 47 | 3.0 | .70 | <.10 | .30 | 300 | N | N | N | 100 | 500 | 2 | N | N |
| WLA0669P | 47 4 22 | 113 49 18 | 5.0 | 1.00 | .10 | .50 | 500 | N | N | N | 300 | 500 | 3 | N | N |
| WLA1478P | 47 1 59 | 113 51 6 | 5.0 | 1.50 | .30 | 1.00 | 300 | N | N | N | 300 | 700 | 3 | N | N |
| WLA1855P | 47 1 9 | 113 50 47 | 3.0 | 1.00 | .10 | .70 | 700 | N | N | N | 300 | 700 | 5 | N | N |
| WLA1857P | 47 0 1 | 113 50 22 | 3.0 | 1.50 | .20 | .70 | 500 | N | N | N | 300 | 700 | 3 | N | N |
| WLA1859P | 47 0 4 | 113 50 29 | 5.0 | 1.00 | .30 | .70 | 300 | N | N | N | 150 | 700 | 2 | N | N |

TABLE 3. --PANED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (5) S-CO | (10) S-CR | (5) S-CU | (20) S-LA | (5) S-MO | (20) S-NB | (5) S-NI | (10) S-PB | (100) S-SB | (5) S-SC | (10) S-SN | (100) S-SR | (10) S-V | (50) S-W | (10) S-Y | (200) S-ZN | (10) S-ZR |
|----------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|---------------|-------------|--------------|---------------|-------------|-------------|-------------|---------------|--------------|
| STU0624P | 10 | 30 | 15 | 70 | N | <50 | 15 | 20 | N | 15 | N | N | 70 | N | 70 | N | 300 |
| STU0805P | 15 | 50 | 50 | 100 | N | <50 | 30 | 50 | N | 20 | N | <200 | 500 | N | 70 | N | 500 |
| STU1872P | 15 | 100 | 15 | 70 | N | <50 | 20 | 20 | N | 15 | N | <200 | 150 | N | 70 | N | 500 |
| WLA0237P | 10 | 30 | <10 | 70 | N | N | 20 | <20 | N | 15 | N | N | 70 | N | 20 | N | 150 |
| WLA0239P | <10 | 30 | <10 | 70 | N | <50 | 20 | <20 | N | 10 | N | N | 70 | N | 30 | N | 300 |
| WLA0261P | 15 | 100 | 30 | 70 | N | <50 | 30 | 20 | N | 20 | N | <200 | 150 | N | 50 | N | 700 |
| WLA0269P | 10 | 50 | <10 | 70 | N | <50 | 20 | 20 | N | 10 | N | N | 100 | N | 50 | N | 700 |
| WLA0271P | 15 | 50 | <10 | 70 | N | <50 | 20 | 30 | N | 10 | N | N | 100 | N | 50 | N | 500 |
| WLA0273P | 15 | 50 | <10 | 70 | N | N | 50 | 20 | N | 10 | N | N | 100 | N | 30 | N | 300 |
| WLA0275P | 10 | 50 | <10 | 70 | N | <50 | 30 | 20 | N | 10 | N | N | 100 | N | 50 | N | 700 |
| WLA0626P | 10 | 50 | 10 | 70 | N | <50 | 20 | 20 | N | 15 | N | N | 70 | N | 30 | N | 300 |
| WLA0628P | 10 | 30 | 10 | 70 | N | N | 20 | 30 | N | 15 | N | <200 | 100 | N | 50 | N | 300 |
| WLA0632P | 15 | 30 | <10 | 70 | N | <50 | 20 | <20 | N | 15 | N | N | 70 | N | 200 | N | 300 |
| WLA0634P | 15 | 30 | <10 | 70 | 10 | <50 | 20 | <20 | N | 10 | N | N | 70 | N | 50 | N | 300 |
| WLA0657P | 10 | 30 | <10 | 70 | N | <50 | 15 | 20 | N | 10 | N | N | 70 | N | 50 | N | 700 |
| WLA0669P | 15 | 50 | 15 | 70 | N | <50 | 30 | 20 | N | 15 | N | N | 70 | N | 50 | N | 500 |
| WLA1478P | 15 | 70 | 10 | 50 | N | <50 | 20 | 30 | N | 10 | N | N | 100 | N | 50 | N | 500 |
| WLA1855P | 10 | 30 | 10 | 70 | N | <50 | 20 | 20 | N | 10 | N | N | 150 | N | 30 | N | 1,500 |
| WLA1857P | 10 | 100 | 15 | 70 | N | <50 | 30 | 20 | N | 10 | N | N | 150 | N | 50 | N | 700 |
| WLA1859P | 10 | 200 | 15 | 70 | N | <50 | 30 | 20 | N | 10 | N | <200 | 150 | N | 70 | N | 1,500 |

TABLE 3.--PANED-CONCENTRATE SAMPLE LOCALITY AND ANALYSES FROM THE RATTLESNAKE WILDERNESS STUDY AREA, MISSOULA COUNTY, MONTANA (CONTINUED)

| Sample | (100) S-TM | (02) AA-AU |
|----------|---------------|---------------|
| STU0624P | -- | <.02 |
| STU0805P | -- | <.02 |
| STU1872P | N | <.02 |
| WLA0237P | -- | <.02 |
| WLA0239P | -- | <.02 |
| WLA0261P | -- | <.02 |
| WLA0269P | -- | <.02 |
| WLA0271P | -- | <.02 |
| WLA0273P | -- | <.02 |
| WLA0275P | -- | <.02 |
| WLA0626P | -- | <.02 |
| WLA0628P | -- | <.02 |
| WLA0632P | -- | <.02 |
| WLA0634P | -- | .04 |
| WLA0657P | -- | <.02 |
| WLA0669P | -- | <.02 |
| WLA1478P | N | <.02 |
| WLA1855P | N | <.02 |
| WLA1857P | N | <.02 |
| WLA1859P | N | <.02 |

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