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Analyses and descriptions of geochemical samples, SHINING ROCK WILDERNESS Haywood County, North Carolina

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ABSTRACT

Semiquantitative spectrographic analyses for 31 elements and atomic absorption analyses for gold and zinc on 94 stream-sediment, 89 soil, and 120 rock samples from the Shining Rock Wilderness and vicinity, Haywood County, North Carolina, are reported here in detail. Localities for all samples are given in Universal Transverse Mercator (UTM) coordinates. Brief descriptions of rock samples are also included. Rocks analyzed include mica-garnet-sillimanite schist, mica-quartz-feldspar gneiss, vein quartz, migmatitic mica gneiss, and amphibolite. The data contain no obviously anomalous values that might be related to mineralize rock.

INTRODUCTION

The analyses reported in this report are on 94 stream-sediment, 89 soil, and 120 rock samples from the Shining Rock Wilderness, Haywood County, N. C., collected by F. G. Lesure, J. D. Bliss, and G. L. Shaffer in October, 1978. The rock samples analyzed are described briefly in a separate section. All but two are chip samples of representative material collected from outcrops or road cuts; the exceptions are a composite sample of chips from several boulders of float and one from several thin veins. Some of the rock is partly weathered, but generally the freshest material available was sampled. The soil samples are from the A_2 or upper B soil zones, just below the organic-rich surface soil (A_1 zone). Maps showing sample localities and discussion of the results of the analytical work are given by Lesure (1981).

ANALYTICAL TECHNIQUES

Rock samples were crushed to approximately 0.25 in. (6 mm) and pulverized to minus 140-mesh (0.105 mm) in a vertical grinder having ceramic plates. Stream sediments and soils were dried and sieved to minus 80-mesh (0.177 mm) and then pulverized.

Each sample was analyzed semiquantitatively for 31 elements by a six-step, D.C. (direct current) arc, optical emission spectrographic method (Grimes and Marranzino, 1968). In addition, each sample was analyzed by an atomic-absorption technique for gold (Ward and others, 1969, p. 33) and zinc (Ward and others, 1969, p. 20).

The semiquantitative spectrographic values are reported as six steps per order of magnitude (1, 0.7, 0.5, 0.3, 0.2, 0.15, or multiples of 10 times these numbers) and are approximate geometric midpoints of the concern tration ranges. The precision was shown to be within one adjoining reporting interval on each side of the reported value 83 percent of the time and within two adjoining intervals 96 percent of the time (Motooka and Grimes, 1976).

ROCK SAMPLE DESCRIPTIONS

Sample No.	Description
NCS 001	2 m, chip sample, biotite-garnet-sillimanite schist, minor iron sulfides and graphite.
NCS 004	1 m, chip sample, biotite-garnet-sillimanite schist.
NCS 006	1 m, chip sample, feldspar-quartz-biotite gneiss, minor iron sulfides; migmatitic.
NCS 007	2 m, chip sample, hornblende-feldspar-chlorite gneiss, fine-grained.
NCS 008	2 m, chip sample, biotite-quartz-feldspar gneiss, migmatitic.
NCS 010	1 m, chip sample, feldspar-quartz-biotite gneiss, fine-grained, migmatitic.
NCS 012	2 m, chip sample, feldspar-quartz-biotite schistose gneiss and migmatite.
NCS 015	0.6 m, chip sample, biotite-feldspar-quartz-garnet gneiss, fine-grained, migmatitic.
NCS 016	0.6 m, chip sample, quartz vein, minor iron hydroxides.
NCS 017	2 m, chip sample, biotite-feldspar-quartz schist, medium-grained, migmatitic.
NCS 018	1 m, chip sample, quartz-feldspar-biotite gneiss, fine-grained.
NCS 019	1 m, chip sample, quartz-feldspar-biotite gneiss, rare garnet, fine-grained.
NCS 020	2 m, chip sample, quartz-feldspar-biotite-garnet schist.
NCS 021	1 m, chip sample, quartz-feldspar-biotite gneiss, minor iron sulfides, fine-grained.
NCS 022	1 m, chip sample, quartz-feldspar-biotite-garnet gneiss, fine-grained.
NCS 023	1 m, chip sample, feldspar-quartz-biotite gneiss, migmatitic.
NCS 024	1 m, chip sample, feldspar-quartz-biotite gneiss, migmatitic, fine-grained.
NCS 025	1 m, chip sample, biotite-garnet-sillimanite schist.
NCS 026	2 m, chip sample, feldspar-quartz-mica-garnet schist.
NCS 027	1 m, chip sample, biotite-garnet-chlorite schist.
NCS 029	1 m, chip sample, vein quartz, granular. Part of "Shining Rock."
NCS 030	1 m, chip sample, vein quartz, granular. Part of "Shining Rock."
NCS 031	1 m, chip sample, feldspar-quartz-biotite-garnet gneiss, fine-grained, migmatitic.
NCS 032	1 m, chip sample, feldspar-quartz-biotite gneiss, fine-grained, migmatitic.

Sample No.	Description
NCS 033	1 m, chip sample, quartz-feldspar-biotite gneiss, minor iron sulfides.
NCS 034	1 m, chip sample, interlayered biotite-garnet schist and feldspar-quartz-biotite gneiss, fine-grained.
NCS 035	1 m, chip sample, interlayered quartz-biotite-feldspar gneiss, fine-grained, and biotite-quartz-feldspar schist.
NCS 036	0.6 m, chip sample, interlayered biotite-muscovite-quartz-feldspar-sillimanite schist, medium-grained, and quartz-feldspar-biotite gneiss, fine-grained.
NCS 037	1 m, chip sample, biotite-garnet-quartz schist and minor biotite-quartz gneiss.
NCS 038	1 m, chip sample, garnet-biotite-muscovite-sillimanite schist.
NCS 039	1 m, chip sample, mica-garnet schist, minor graphite.
NCS 040	0.6 m, chip sample, mica-garnet-sillimanite schist.
NCS 041	1 m, chip sample, quartz-biotite-feldspar gneiss, medium-grained.
NCS 043	1 m, chip sample, biotite-quartz-feldspar gneiss, fine-grained.
NCS 045	1 m, chip sample, biotite-quartz-feldspar gneiss, fine-grained.
NCS 047	1 m, chip sample, biotite-sillimanite-garnet schist, fine-grained.
NCS 049	1 m, chip sample, feldspar-quartz-biotite gneiss, fine-grained.
NCS 052	1 m, chip sample, feldspar-quartz-biotite granitic gneiss.
NCS 053	2 m, chip sample, quartz-biotite-feldspar gneiss, fine-grained, migmatitic.
NCS 054	2 m, chip sample, quartz-biotite-feldspar-garnet gneiss, fine-grained.
NCS 055	0.6 m, chip sample, quartz-feldspar-biotite gneiss, migmatitic.
NCS 056	1 m, chip sample, quartz-feldspar-biotite gneiss, fine-grained.
NCS 058	0.6 m, chip sample, trondhjemite dike, porphyritic, weathered.
NCS 059	1 m, chip sample, hornblende-biotite-feldspar gneiss, fine-grained.
NCS 060	1 m, chip sample, feldspar-quartz-biotite gneiss, fine-grained.
NCS 062	1 m, chip sample, quartz-feldspar-biotite gneiss, minor garnet, fine-grained.
NCS 063	3 m, chip sample, biotite-muscovite-garnet-sillimanite schist.
NCS 064	1 m, chip sample, biotite-quartz-feldspar gneiss, minor iron sulfides, fine-grained.
NCS 065	0.2 m, chip sample, vein quartz.
NCS 067	2 m, chip sample, biotite-muscovite-quartz-feldspar augen gneiss, fine-grained, migmatitic.

Sample No.	Description
NCS 068	1 m, chip sample, mica-garnet-sillimanite schist.
NCS 069	2 m, chip sample, feldspar-quartz-biotite-garnet schist, minor sillimanite and graphite.
NCS 072	3 m, chip sample, feldspar-quartz-biotite-muscovite gneiss, fine-grained, migmatitic.
NCS 073	1 m, chip sample, feldspar-quartz-biotite granite gneiss.
NCS 074	0.3 m, vein quartz.
NCS 075	3 m, chip sample, feldspar-quartz-biotite-muscovite pegmatite, fine-grained.
NCS 077	1 m, chip sample, mica-garnet-talc schist.
NCS 078	1 m, chip sample, biotite-muscovite-garnet-sillimanite schist.
NCS 080	1 m, chip sample, feldspar-quartz-biotite gneiss, migmatitic.
NCS 083	1 m, chip sample, biotite-quartz-feldspar schist.
NCS 084	2 m, chip sample, quartz-feldspar-mica-garnet gneiss, fine-grained.
NCS 087	0.6 m, chip sample, biotite-sillimanite-muscovite-garnet schist, medium-grained.
NCS 088	1 m, chip sample, interlayered quartz-feldspar-biotite-garnet gneiss, fine-grained, and feldspar-quartz-biotite-garnet schist, medium-grained.
NCS 092	1 m, chip sample, quartz-biotite-sillimanite-garnet schist, minor graphite and iron sulfides.
NCS 096	1 m, chip sample, muscovite-quartz-graphite schist, some layers garnet-rich.
NCS 098	2 m, chip sample, quartz-mica-sillimanite-garnet schist, fine-grained.
NCS 099	1 m, chip sample, quartz-biotite-muscovite-sillimanite schist, minor graphite.
NCS 100	1 m, chip sample, quartz-feldspar-biotite-muscovite gneiss.
NCS 101	0.5 m, chip sample, quartz-feldspar-biotite gneiss.
NCS 105	1 m, chip sample, feldspar-quartz-biotite gneiss, migmatitic.
NCS 110	0.5 m, chip sample, quartz core of zoned pegmatite.
NCS 111	1 m, chip sample, quartz-feldspar-biotite gneiss, minor iron sulfides.
NCS 114	1 m, chip sample, feldspar-quartz-biotite-muscovite granitic gneiss.
NCS 115	1 m, chip sample, quartz-feldspar-biotite-garnet gneiss, fine-grained.
NCS 116	1 m, chip sample, quartz-biotite-feldspar gneiss, fine-grained.
NCS 117	1 m, chip sample, quartz, granular, part of "Shining Rock."
NCS 123	Composite sample of float, feldspar-quartz-mica-garnet gneiss, migmatitic.
NCS 145	1 m, chip sample, quartz-biotite-garnet gneiss, minor iron sulfides, fine-grained.

Sample No.	Description
NCS 148	1 m, chip sample, talcose mica schist.
NCS 169	1 m, chip sample, biotite-quartz-feldspar schist, migmatitic.
NCS 177	1 m, chip sample, mica-quartz-feldspar-garnet schist.
NCS 181	1 m, chip sample, mica-quartz-feldspar schist, iron sulfides.
NCS 201	1 m, chip sample, feldspar-quartz-biotite-garnet gneiss, migmatitic.
NCS 203	1 m, chip sample, biotite-quartz-feldspar gneiss, fine-grained, migmatitic.
NCS 206	3 m, chip sample, interlayered quartz-feldspar-biotite-garnet gneiss, fine-grained and biotite-quartz-feldspar-garnet schist, medium-grained.
NCS 207	2 m, chip sample, quartz-biotite-garnet schist, migmatitic.
NCS 212	Composite of 4 quartz veins or stringers, less than 0.3 m in thickness.
NCS 214	2 m, chip sample, quartz-feldspar-biotite gneiss, fine-grained.
NCS 220	2 m, chip sample, biotite-quartz schist, fine-grained.
NCS 221	2 m, chip sample, quartz-feldspar-biotite-garnet schist, graphitic, migmatitic.
NCS 235	3 m, chip sample, quartz-feldspar-biotite gniess, minor iron sulfides.
NCS 246	2 m, chip sample, feldspar-quartz-biotite gneiss, coarse grained, migmatitic.
NCS 248	2 m, chip sample, biotite-muscovite-quartz-garnet schist, minor sillimanite and graphite, migmatitic.
NCS 252	2 m, chip sample, feldspar-quartz-biotite granitic gneiss.
NCS 253	2 m, chip sample, feldspar-quartz-biotite granitic gneiss.
NCS 254	0.2 m, chip sample, amphibolite and biotite gneiss.
NCS 255	1 m, chip sample, mica-sillimanite-garnet schist, graphitic.
NCS 256	2 m, chip sample, quartz-feldspar-biotite-garnet gneiss, fine-grained.
NCS 257	1 m, chip sample, mica-quartz-feldspar-garnet schist.
NCS 258	1 m, chip sample, quartz-feldspar-biotite-muscovite gneiss, fine-grained.
NCS 270	1 m, chip sample, vein quartz, minor mica schist inclusions.
NCS 272	2 m, chip sample, feldspar-quartz-biotite gneiss, minor garnet, fine-grained.
NCS 274	3 m, chip sample, interlayered quartz-feldspar-biotite gneiss, minor garnet, fine-grained, and biotite schist.
NCS 278	1 m, chip sample, feldspar-quartz-biotite-muscovite granitic gneiss.
NCS 280	1 m, chip sample, biotite-muscovite-garnet schist, migmatitic.
NCS 282	1 m, chip sample, biotite-quartz-feldspar-garnet schist, fine-grained.

Sample No.	Description
NCS 286	1 m, chip sample, garnet-mica schist.
NCS 287	2 m, chip sample, quartz-biotite-muscovite-garnet gneiss, fine-grained.
NCS 289	1 m, chip sample, feldspar-quartz-mica-garnet gneiss, fine-grained, minor iron sulfides, graphitic.
NCS 300	1 m, chip sample, interlayered feldspar-quartz-biotite gneiss, fine-grained in biotite-quartz-feldspar schist, migmatitic.
NCS 303	1 m, chip sample, quartz-feldspar-biotite-muscovite gneiss, fine-grained.
NCS 306	1 m, chip sample, quartz-biotite-feldspar-garnet gneiss, minor iron sulfides, graphitic, fine-grained.
NCS 312	1 m, chip sample, biotite-muscovite-garnet schist.
NCS 317	1 m, chip sample, biotite-garnet-quartz-feldspar schist medium-grained.
NCS 320	1 m, chip sample, biotite-sillimanite-garnet schist, medium-grained.
NCS 325	1 m, chip sample, trondhjemite dike.
NCS 327	1 m, chip sample, biotite-sillimanite-muscovite-garnet schist, minor graphite and iron sulfides, medium-grained.
NCS 329	1 m, chip sample, interlayered quartz-feldspar-biotite-garnet gneiss, fine-grained, and mica-garnet-sillimanite schist.
NCS 333	1 m, chip sample, quartz-feldspar-biotite-muscovite gneiss, medium-grained.
NCS 335	1 m, chip sample, quartz-sillimanite-mica-garnet schist, minor iron sulfides and graphite.

EXPLANATION OF TABLE

The table shows the results of geochemical analyses of stream-sediment, soil, and rock samples from the Shining Rock Wilderness and vicinity.

Sample locations are given in x and y coordinates that refer to the Universal Transverse Mercator (UTM) grid, zone 17. The x coordinate is the easting value in meters; the y is the northing value in meters.

Iron, magnesium, calcium, and titanium values are reported in percent (%), all others are in parts per million. Letters preceeding chemical symbols indicate the method of analyses: S, six-step semiquantitative-spectrographic method; AA, atomic absorption. Other symbols on the table are: N, not detected; --, not determined; <, amount detected is below the lowest limit of determination which is figure shown; >, amount detected is above the highest limit of determination, which is figure shown; P, partial digestion.

Elements looked for spectrographically but not found and their lower limits of determination (ppm) are Ag (0.5), As (200), Au (10), Bi (10), Cd (20), Mo (5), Sb (100); Sn (10), Th (100), W (50), and Zn (200). Exceptions are: stream-sediment sample NCS 241 reported as 5 Mo; soil samples NCS 095 and NCS 164 reported as 0.5 Ag, NCS 226 reported as <5 Mo, and NCS 302 reported as 10 Sn; rock samples NCS 075 reported as <0.5 Ag, NCS 272 reported as 1 Ag, NCS 033 reported as 10 Mo, NCS 047 and NCS 320 reported as 7 Mo.

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Table 1.--Geochemical analyses, Shining Rock, North Carolina

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
						Rocks					
NCS001	334,900	3,914,990	10.00	1.50	.30	.500	1,000	30	1,000	1.0	30
NCS004	331,480	3,917,770	10.00	2.00	.30	.500	1,500	15	1,000	<1.0	10
NCS006	331,220	3,917,980	1.50	.70	1.00	.200	500	<10	1,000	2.0	5
NCS007	331,430	3,919,600	7.00	3.00	5.00	.500	700	<10	500	2.0	20
NCS008	332,490	3,919,800	5.00	1.50	2.00	.500	700	<10	700	2.0	30
NCS010	332,030	3,919,600	2.00	.70	1.50	.300	300	<10	500	2.0	7
NCS012	332,810	3,918,300	3.00	1.00	1.50	.500	500	<10	1,000	2.0	10
NCS015	328,530	3,914,200	5.00	1.50	1.00	.500	700	10	1,000	1.0	10
NCS016	328,460	3,914,260	<.05	.05	<.05	.015	200	10	200	--	<5
NCS017	328,400	3,914,290	5.00	2.00	1.00	.500	1,000	<10	1,500	1.5	15
NCS018	328,620	3,914,100	7.00	1.50	1.00	.700	1,000	10	700	1.5	15
NCS019	328,630	3,914,010	5.00	1.50	1.50	.500	1,000	<10	700	1.0	10
NCS020	329,000	3,913,900	7.00	2.00	1.50	.700	1,500	10	1,000	1.0	15
NCS021	329,390	3,913,400	3.00	1.00	.70	.300	700	10	700	1.0	10
NCS022	330,340	3,913,560	5.00	1.00	1.50	.500	700	10	700	<1.0	10
NCS023	330,480	3,914,120	3.00	1.00	1.50	.500	300	<10	700	1.0	10
NCS024	330,110	3,914,680	3.00	1.00	1.50	.300	500	<10	1,000	2.0	7
NCS025	330,230	3,914,830	10.00	3.00	.15	.700	2,000	10	1,500	<1.0	20
NCS026	330,540	3,915,500	10.00	2.00	.70	.700	2,000	10	1,500	1.5	20
NCS027	330,170	3,916,230	10.00	2.00	.50	.700	2,000	15	1,500	1.0	20
NCS029	330,760	3,915,300	<.05	.02	N	<.002	30	10	70	--	N
NCS030	330,790	3,915,220	<.05	.02	N	<.002	30	10	100	--	N
NCS031	329,620	3,912,170	7.00	1.00	1.50	.700	500	<10	700	<1.0	7
NCS032	329,060	3,912,760	3.00	1.00	.50	.500	700	10	1,500	1.5	5
NCS033	329,020	3,912,940	5.00	1.00	1.00	.500	300	<10	1,000	<1.0	7
NCS034	328,440	3,913,190	7.00	2.00	.70	.700	1,500	10	1,500	1.0	15
NCS035	327,960	3,913,580	5.00	1.50	1.00	.500	700	<10	500	1.0	10
NCS036	327,680	3,913,800	5.00	1.50	.70	.500	700	10	700	1.5	10
NCS037	327,580	3,913,980	7.00	2.00	.30	.500	1,500	10	1,500	1.0	10
NCS038	327,350	3,914,360	10.00	2.00	.20	.700	200	10	1,000	1.0	20
NCS039	327,100	3,914,500	7.00	2.00	1.00	.500	300	10	1,000	1.0	10
NCS040	327,020	3,914,630	7.00	1.50	.50	.500	200	10	1,500	1.0	10
NCS041	326,960	3,914,750	5.00	1.00	.20	.300	500	<10	1,000	1.0	7
NCS043	326,660	3,915,050	7.00	2.00	.30	.700	1,000	10	1,000	1.0	10
NCS045	326,640	3,915,720	3.00	1.00	.20	.300	500	<10	1,000	1.0	7
NCS047	326,990	3,915,850	10.00	2.00	.50	.500	1,500	10	1,000	1.5	10
NCS049	330,300	3,914,310	7.00	1.00	1.00	.500	700	15	1,000	1.0	15
NCS052	329,490	3,914,010	7.00	1.00	.70	.500	500	10	1,000	1.0	10
NCS053	328,620	3,914,340	7.00	1.00	1.00	.500	700	10	700	1.0	10
NCS054	328,360	3,914,530	7.00	1.50	2.00	.500	1,000	10	700	1.0	10

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZN
						Rocks					
NCS001	100	70	150	20	30	30	20	150	150	50	200
NCS004	150	30	150	<20	30	20	20	100	150	70	200
NCS006	10	10	100	<20	<5	50	5	300	50	15	N
NCS007	200	15	30	<20	70	15	20	500	150	20	N
NCS008	100	20	50	<20	30	15	10	200	100	20	N
NCS010	20	10	30	<20	20	30	7	300	70	15	N
NCS012	20	15	150	20	15	20	10	500	100	20	N
NCS015	70	7	50	20	20	20	10	150	100	30	N
NCS016	10	7	<20	<20	5	N	N	N	10	10	N
NCS017	100	15	30	20	30	30	15	200	150	30	<200
NCS018	50	N	50	20	30	20	15	200	100	50	<200
NCS019	50	20	100	<20	20	10	10	200	100	30	<200
NCS020	50	20	50	20	20	20	20	200	150	50	200
NCS021	30	30	50	<20	20	20	10	200	70	20	N
NCS022	50	15	70	20	20	15	10	200	70	30	N
NCS023	50	10	30	<20	15	10	5	200	70	10	N
NCS024	20	15	50	<20	10	20	5	300	70	20	N
NCS025	200	30	50	<20	30	30	20	100	150	50	200
NCS026	150	15	70	20	30	30	30	200	150	70	200
NCS027	100	15	150	20	30	20	20	150	150	70	200
NCS029	10	N	20	<20	7	N	N	N	<10	N	N
NCS030	10	N	<20	<20	5	N	N	N	<10	N	N
NCS031	50	15	50	<20	10	<10	10	200	70	20	N
NCS032	30	10	20	<20	10	15	10	100	70	20	N
NCS033	50	20	70	<20	15	10	7	200	70	15	N
NCS034	100	20	70	20	20	30	20	150	100	30	N
NCS035	50	7	50	20	20	20	10	200	100	30	N
NCS036	50	20	30	20	20	30	10	200	100	30	<200
NCS037	100	30	100	20	20	30	20	150	150	50	200
NCS038	150	50	100	30	20	20	30	100	150	70	200
NCS039	70	30	100	20	10	30	20	100	100	70	500
NCS040	100	50	<20	20	10	30	20	100	150	50	<200
NCS041	70	N	20	<20	15	15	7	100	70	15	N
NCS043	100	50	150	20	30	20	15	100	100	50	200
NCS045	50	N	30	20	15	20	10	150	70	20	N
NCS047	100	70	200	20	15	50	30	200	150	70	200
NCS049	100	N	30	20	30	20	10	200	100	30	N
NCS052	70	50	100	<20	20	20	10	150	100	20	N
NCS053	50	30	20	20	20	30	10	150	100	20	N
NCS054	100	20	50	20	20	20	15	200	100	30	N

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZN
						Rocks					
NCS055	50	20	50	<20	20	20	10	200	70	30	N
NCS056	50	20	50	<20	20	30	15	200	100	30	<200
NCS058	20	N	20	<20	5	15	<5	700	20	10	N
NCS059	30	50	100	20	20	20	20	500	300	50	200
NCS060	70	5	50	<20	20	15	10	200	100	20	<200
NCS062	100	20	50	20	20	10	15	100	100	30	<200
NCS063	100	30	70	20	30	20	20	150	150	70	200
NCS064	150	50	70	20	30	20	20	200	100	50	N
NCS065	10	N	<20	<20	5	N	N	N	15	N	N
NCS067	100	10	50	20	20	30	10	200	70	30	N
NCS068	100	70	150	<20	70	30	20	100	100	70	500
NCS069	150	30	150	20	15	50	20	100	100	70	500
NCS072	20	10	100	<20	15	30	5	200	30	20	N
NCS073	30	10	20	<20	<5	20	5	100	50	10	N
NCS074	10	N	30	<20	<5	N	N	N	<10	N	N
NCS075	10	N	70	<20	5	50	<5	300	30	10	N
NCS077	150	50	100	20	30	30	30	150	150	70	200
NCS078	100	30	150	20	30	50	20	150	150	70	200
NCS080	20	15	100	20	5	20	7	500	100	10	N
NCS083	30	10	70	20	30	20	30	500	200	70	200
NCS084	30	<5	100	<20	20	20	10	300	100	20	N
NCS087	100	30	150	20	30	20	20	100	150	70	N
NCS088	100	20	100	20	20	30	20	200	100	70	N
NCS092	100	20	150	20	20	50	20	200	150	70	N
NCS096	100	50	100	20	5	30	20	150	100	50	N
NCS098	150	20	100	20	20	15	30	150	100	50	200
NCS099	100	20	70	20	15	20	20	100	100	50	200
NCS100	70	N	50	<20	20	15	10	300	100	30	N
NCS101	70	7	30	<20	20	15	15	150	100	15	N
NCS105	10	10	20	<20	<5	20	<5	300	50	10	N
NCS110	10	N	20	<20	<5	N	N	N	<10	N	N
NCS111	50	20	50	<20	10	20	5	150	70	10	<200
NCS114	50	20	70	<20	30	30	10	200	100	20	N
NCS115	70	30	70	<20	15	30	15	200	100	30	200
NCS116	30	5	20	20	10	<10	10	100	70	15	<200
NCS117	15	N	20	<20	<5	N	N	N	<10	N	N
NCS123	50	5	100	20	30	20	10	300	100	15	<200
NCS145	30	20	100	20	15	30	10	200	70	50	<200
NCS148	150	20	70	20	15	50	20	200	100	70	500
NCS169	30	10	20	<20	20	15	10	150	70	20	N

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
						Rocks					
NCS055	328,100	3,914,680	7.00	1.50	1.00	.500	700	10	1,500	1.0	10
NCS056	327,920	3,915,280	5.00	1.50	1.00	.500	1,000	10	1,000	1.0	10
NCS058	333,690	3,910,660	1.00	.50	2.00	.100	200	<10	500	1.5	5
NCS059	333,690	3,910,660	10.00	3.00	5.00	>1.000	1,500	<10	1,500	2.0	50
NCS060	333,930	3,911,770	5.00	1.00	.70	.500	700	<10	1,000	1.0	10
NCS062	334,390	3,912,720	7.00	1.50	.70	.700	700	20	1,000	1.0	10
NCS063	334,390	3,912,720	7.00	2.00	.50	.500	2,000	20	1,000	1.0	15
NCS064	334,450	3,913,070	5.00	2.00	2.00	.500	1,000	<10	700	2.0	15
NCS065	334,450	3,913,070	<.05	.05	N	.050	20	10	200	--	N
NCS067	334,880	3,913,600	5.00	1.50	1.00	.300	700	10	1,000	1.5	10
NCS068	335,080	3,913,950	10.00	2.00	.50	.500	1,500	10	1,000	1.0	30
NCS069	331,300	3,914,770	10.00	2.00	.70	.500	2,000	20	1,000	1.0	10
NCS072	331,850	3,914,520	2.00	.50	2.00	.200	500	<10	1,000	5.0	7
NCS073	332,180	3,914,260	3.00	.50	.10	.300	200	<10	1,500	1.0	N
NCS074	332,840	3,914,060	.07	.03	.05	.015	70	10	100	<1.0	N
NCS075	332,840	3,914,060	1.00	.50	1.00	.200	200	20	1,500	1.5	N
NCS077	332,940	3,914,160	15.00	3.00	.50	.500	2,000	10	1,500	1.0	20
NCS078	333,640	3,914,050	10.00	2.00	1.00	.500	2,000	10	700	1.5	15
NCS080	330,720	3,918,930	7.00	1.00	2.00	.500	500	<10	1,000	3.0	7
NCS083	331,090	3,919,530	7.00	2.00	3.00	.500	1,500	10	1,000	5.0	20
NCS084	330,150	3,920,100	5.00	1.00	1.50	.500	700	10	700	1.0	10
NCS087	331,010	3,919,960	10.00	1.50	.70	.500	1,500	<10	1,000	1.0	15
NCS088	331,320	3,919,880	10.00	2.00	1.00	.500	1,500	<10	1,500	1.0	10
NCS092	331,880	3,919,870	10.00	2.00	.70	.300	3,000	15	1,000	1.5	10
NCS096	333,300	3,919,510	10.00	1.50	.07	.300	3,000	15	1,000	1.5	10
NCS098	330,210	3,916,740	10.00	2.00	.70	.500	2,000	15	1,500	<1.0	20
NCS099	330,170	3,917,240	10.00	2.00	.50	.500	1,500	10	1,500	1.0	10
NCS100	334,880	3,914,940	5.00	.70	1.50	.500	700	10	1,000	2.0	10
NCS101	331,180	3,917,020	3.00	.70	.50	.300	500	20	1,000	1.5	10
NCS105	331,260	3,918,800	3.00	.50	.70	.300	300	<10	1,000	2.0	N
NCS110	328,500	3,914,070	.10	.03	.10	.002	150	10	150	1.0	N
NCS111	328,500	3,914,070	3.00	1.50	.70	.300	200	<10	300	1.5	7
NCS114	330,300	3,913,090	5.00	.70	.70	.300	500	10	700	1.5	10
NCS115	330,600	3,915,240	7.00	1.50	.70	.500	1,000	<10	700	2.0	10
NCS116	330,770	3,915,240	5.00	.70	.70	.500	700	<10	700	2.0	7
NCS117	330,790	3,915,250	<.05	.02	N	<.002	50	10	50	<1.0	N
NCS123	328,630	3,918,420	5.00	1.50	1.50	.500	500	<10	1,000	1.0	10
NCS145	333,280	3,920,640	5.00	1.00	1.00	.500	1,000	10	700	3.0	10
NCS148	332,910	3,920,660	7.00	2.00	.20	.500	3,000	15	1,000	2.0	10
NCS169	332,080	3,911,720	5.00	1.00	.50	.300	500	20	700	1.5	10

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
						Rocks					
NCS177	328,140	3,916,210	7.00	2.00	.15	.500	1,000	10	1,000	1.0	20
NCS181	325,700	3,923,060	7.00	1.50	1.00	.700	700	20	700	2.0	20
NCS201	331,230	3,917,230	5.00	1.50	1.50	.500	700	<10	700	3.0	10
NCS203	333,460	3,918,330	7.00	2.00	2.00	.700	1,000	<10	1,000	2.0	20
NCS206	329,170	3,913,700	5.00	1.50	1.50	.500	700	10	1,000	1.0	15
NCS207	330,570	3,915,340	2.00	1.50	1.00	.700	700	<10	700	--	10
NCS212	328,560	3,913,000	1.50	.50	.30	.020	700	10	100	1.0	N
NCS214	328,220	3,913,390	2.00	1.00	1.00	.500	700	<10	700	--	10
NCS220	327,490	3,914,960	1.00	1.50	.70	.500	1,000	<10	1,000	--	10
NCS221	327,430	3,915,420	1.00	1.50	1.00	.500	1,500	10	700	--	10
NCS235	337,740	3,911,760	1.00	.70	1.00	.300	300	10	1,000	--	7
NCS246	332,100	3,913,810	1.00	.50	.10	.200	200	10	2,000	--	N
NCS248	333,350	3,913,880	1.00	2.00	.50	.500	1,500	20	1,500	--	30
NCS252	330,670	3,918,740	1.50	1.00	3.00	.500	500	<10	1,500	--	10
NCS253	330,330	3,918,380	1.50	1.00	1.00	.500	700	<10	2,000	--	5
NCS254	329,820	3,918,060	2.00	2.00	2.00	.700	700	10	1,500	--	10
NCS255	329,390	3,917,680	<.05	2.00	.50	.500	2,000	10	1,000	--	10
NCS256	329,320	3,917,450	1.00	1.50	1.50	.500	2,000	10	700	--	10
NCS257	328,340	3,917,920	<.05	2.00	.50	.500	1,500	10	1,000	--	30
NCS258	327,860	3,917,090	<.05	1.50	.30	.500	1,000	10	1,000	--	10
NCS270	332,020	3,911,680	.50	.15	.07	.050	200	10	150	1.0	N
NCS272	333,250	3,911,390	<.05	1.00	1.00	.500	1,000	10	1,000	--	10
NCS274	333,600	3,911,960	1.00	1.50	1.50	.500	1,500	15	1,000	--	15
NCS278	331,500	3,913,040	1.00	.70	.70	.300	200	10	1,500	--	5
NCS280	328,280	3,916,690	1.00	2.00	.70	.500	1,000	<10	1,000	--	15
NCS282	329,420	3,918,940	7.00	1.50	.70	.500	700	10	1,000	1.0	20
NCS286	329,020	3,919,290	10.00	2.00	.10	.700	5,000	10	1,000	1.5	100
NCS287	328,570	3,918,530	5.00	.70	1.00	.500	500	<10	700	2.0	10
NCS289	325,640	3,922,860	7.00	1.50	1.00	.500	5,000	10	1,000	2.0	10
NCS300	330,320	3,917,710	5.00	1.00	2.00	.300	700	10	1,500	5.0	10
NCS303	332,860	3,919,060	5.00	1.00	1.00	.300	700	10	1,000	1.5	10
NCS306	332,420	3,918,920	10.00	2.00	1.00	.700	2,000	10	1,500	1.0	10
NCS312	331,640	3,915,530	7.00	1.50	.20	.500	1,000	70	1,500	1.0	10
NCS317	332,520	3,915,620	7.00	2.00	.20	.500	>5,000	30	1,000	1.0	30
NCS320	332,660	3,915,590	7.00	3.00	.05	.500	1,000	50	1,500	1.0	10
NCS325	333,670	3,914,820	2.00	.30	1.50	.100	150	<10	500	--	<5
NCS327	334,510	3,913,960	10.00	3.00	.30	.500	1,500	20	1,000	1.5	20
NCS329	327,950	3,915,790	5.00	1.50	1.50	.500	1,500	10	1,000	1.5	15
NCS333	330,150	3,918,910	3.00	1.00	2.00	.300	300	<10	700	2.0	7
NCS335	325,620	3,922,990	5.00	1.00	.70	.300	2,000	10	1,000	2.0	15

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZN
						Rocks					
NCS177	100	30	150	20	20	20	20	150	100	50	200
NCS181	100	30	150	20	30	20	20	200	100	30	500
NCS201	150	15	30	20	30	20	15	200	100	10	<200
NCS203	100	30	50	<20	30	20	20	500	150	30	<200
NCS206	70	10	50	20	20	30	20	200	100	30	<200
NCS207	50	30	70	20	15	20	15	200	100	30	<200
NCS212	20	<5	20	<20	<5	N	10	N	10	20	N
NCS214	30	7	30	<20	20	20	10	200	100	30	<200
NCS220	70	15	70	20	20	50	10	100	100	70	200
NCS221	70	30	50	<20	20	30	20	200	150	50	200
NCS235	70	30	20	<20	7	20	7	150	70	15	N
NCS246	20	5	30	<20	5	70	<5	200	30	<10	N
NCS248	150	70	200	20	50	30	20	150	150	100	200
NCS252	30	15	100	<20	10	15	10	700	100	20	N
NCS253	30	10	30	<20	10	50	10	300	70	30	N
NCS254	200	70	150	20	15	20	15	200	200	50	200
NCS255	150	20	100	<20	15	15	20	150	100	50	200
NCS256	100	30	70	20	20	10	15	200	100	50	<200
NCS257	150	30	100	<20	30	20	20	100	100	50	200
NCS258	50	10	<20	<20	20	10	10	100	100	20	<200
NCS270	10	<5	20	<20	<5	N	N	N	10	N	N
NCS272	50	30	50	<20	20	20	15	150	100	30	N
NCS274	100	20	30	20	30	30	20	200	150	50	N
NCS278	20	<5	30	<20	7	50	5	200	50	15	N
NCS280	70	20	70	<20	30	30	20	200	100	30	<200
NCS282	100	30	100	20	30	20	20	200	100	30	<200
NCS286	150	100	100	<20	50	20	30	150	150	70	200
NCS287	30	10	50	<20	15	20	10	300	70	30	N
NCS289	50	20	150	20	15	30	30	200	100	100	200
NCS300	20	10	70	<20	5	20	10	500	70	30	N
NCS303	50	N	100	<20	20	30	10	200	70	50	N
NCS306	100	10	200	20	10	30	20	200	100	50	200
NCS312	100	30	150	20	20	50	20	150	150	30	200
NCS317	100	20	150	20	30	70	20	100	100	50	N
NCS320	100	20	150	20	15	50	20	100	100	30	200
NCS325	10	<5	20	<20	5	15	<5	500	20	10	N
NCS327	100	70	200	20	20	50	20	100	100	70	200
NCS329	50	30	150	20	30	20	15	200	100	50	N
NCS333	20	5	70	<20	10	20	5	500	70	10	N
NCS335	100	50	150	<20	20	30	20	200	70	70	200

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-ZR	AA-ZN-P	AA-AU-I	sample	S-ZR	AA-ZN-P	AA-AU-I	sample	S-ZR	AA-ZN-P	AA-AU-I
					Rocks						
NCS001	100	130	<.002	NCS055	200	85	<.002	NCS177	200	130	N
NCS004	150	120	N	NCS056	300	120	N	NCS181	200	100	<.002
NCS006	150	70	.002	NCS058	100	30	N	NCS201	300	90	N
NCS007	100	40	<.002	NCS059	200	110	N	NCS203	300	85	N
NCS008	150	100	<.002	NCS060	200	75	N	NCS206	200	80	N
NCS010	70	60	<.002	NCS062	500	100	N	NCS207	150	95	N
NCS012	300	110	N	NCS063	200	55	N	NCS212	500	5	N
NCS015	200	130	N	NCS064	200	110	N	NCS214	150	70	N
NCS016	N	N	N	NCS065	70	N	N	NCS220	200	100	N
NCS017	200	120	N	NCS067	150	70	N	NCS221	150	100	N
NCS018	500	95	N	NCS068	200	120	N	NCS235	300	65	N
NCS019	300	100	N	NCS069	150	60	N	NCS246	50	15	N
NCS020	300	120	N	NCS072	150	30	N	NCS248	300	100	N
NCS021	150	140	N	NCS073	300	25	N	NCS252	200	75	N
NCS022	500	100	N	NCS074	N	N	N	NCS253	70	70	N
NCS023	200	100	N	NCS075	10	15	N	NCS254	300	150	N
NCS024	50	100	N	NCS077	300	80	N	NCS255	100	65	N
NCS025	100	140	N	NCS078	200	35	N	NCS256	300	75	<.002
NCS026	300	170	N	NCS080	300	65	N	NCS257	150	100	N
NCS027	200	140	<.002	NCS083	150	140	N	NCS258	200	140	N
NCS029	N	N	N	NCS084	300	75	N	NCS270	N	N	N
NCS030	N	N	N	NCS087	300	95	N	NCS272	200	100	N
NCS031	500	80	N	NCS088	200	120	N	NCS274	300	120	N
NCS032	100	85	N	NCS092	200	120	<.002	NCS278	200	70	<.002
NCS033	300	70	N	NCS096	200	65	<.002	NCS280	200	110	<.002
NCS034	200	150	N	NCS098	200	120	<.002	NCS282	300	140	N
NCS035	300	110	N	NCS099	200	130	N	NCS286	200	130	<.002
NCS036	200	100	N	NCS100	200	85	N	NCS287	200	75	N
NCS037	150	120	N	NCS101	70	75	N	NCS289	100	110	.004
NCS038	300	100	N	NCS105	300	180	N	NCS300	70	75	N
NCS039	200	100	N	NCS110	N	N	N	NCS303	300	80	N
NCS040	300	140	N	NCS111	300	150	N	NCS306	500	150	<.002
NCS041	200	100	N	NCS114	500	100	.024	NCS312	200	130	N
NCS043	300	150	N	NCS115	150	140	N	NCS317	100	120	N
NCS045	200	85	N	NCS116	300	120	N	NCS320	150	140	<.002
NCS047	200	120	N	NCS117	N	N	N	NCS325	70	35	N
NCS049	200	110	N	NCS123	300	130	N	NCS327	150	85	N
NCS052	500	110	N	NCS145	200	120	N	NCS329	150	110	N
NCS053	300	100	N	NCS148	300	75	N	NCS333	150	80	N
NCS054	300	110	N	NCS169	200	65	N	NCS335	150	160	.002

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
					Soils						
NCS003	331,220	3,917,530	5.0	1.00	<.05	.5	1,500	10	700	2.0	30
NCS028	330,400	3,915,820	3.0	.30	.50	.5	1,000	30	500	1.5	7
NCS042	326,870	3,914,890	5.0	.50	.30	.5	700	15	700	3.0	15
NCS044	326,620	3,915,380	3.0	.50	.20	.5	700	20	700	1.5	7
NCS046	326,850	3,915,780	5.0	.50	.20	.5	500	20	700	1.5	7
NCS048	327,290	3,916,060	5.0	1.00	.30	.5	700	20	700	2.0	20
NCS050	329,980	3,913,980	3.0	.50	.20	.5	300	15	500	1.5	7
NCS051	329,550	3,914,180	3.0	.30	.10	.5	300	30	500	1.0	5
NCS081	330,990	3,919,130	5.0	.70	.70	.5	700	15	500	3.0	10
NCS082	331,040	3,919,440	3.0	.70	.70	.5	700	10	500	3.0	10
NCS085	330,230	3,920,060	1.5	.30	.30	.5	700	<10	300	1.5	5
NCS086	330,700	3,919,980	5.0	.50	.50	.5	1,000	30	700	1.0	10
NCS089	331,260	3,919,880	5.0	.20	.20	.5	300	20	500	1.0	5
NCS090	331,640	3,919,850	3.0	.20	.10	.5	500	<10	300	1.5	10
NCS091	331,880	3,919,870	2.0	.20	.20	.5	500	<10	300	2.0	5
NCS093	332,180	3,919,860	3.0	.20	.20	.5	1,000	20	300	2.0	5
NCS094	332,480	3,919,880	1.5	.15	.05	.2	1,000	<10	200	2.0	7
NCS095	333,080	3,919,740	3.0	.50	.10	.5	2,000	20	300	2.0	10
NCS097	333,110	3,919,130	5.0	.20	<.05	.5	700	50	300	1.5	20
NCS127	329,520	3,913,640	5.0	.50	.05	.5	500	20	500	2.0	7
NCS156	330,220	3,916,720	3.0	.50	.50	.5	1,500	15	500	1.0	7
NCS157	330,220	3,916,720	3.0	.30	.15	.5	1,000	15	300	2.0	10
NCS158	330,120	3,967,360	5.0	.20	.20	.5	500	20	700	1.5	<5
NCS159	330,210	3,917,520	3.0	.30	.20	.5	700	15	500	2.0	7
NCS160	330,460	3,917,900	5.0	.30	.70	.5	700	20	700	3.0	7
NCS161	330,560	3,918,280	7.0	.70	.70	.5	300	20	700	1.5	10
NCS162	330,995	3,918,460	5.0	.70	.50	.5	500	20	1,000	2.0	10
NCS163	331,360	3,918,340	5.0	1.00	.50	.7	700	30	1,000	2.0	20
NCS164	331,520	3,918,580	5.0	1.50	.70	.5	700	20	1,000	2.0	20
NCS165	331,790	3,918,830	3.0	.70	.50	.5	500	20	700	3.0	10
NCS166	331,970	3,918,600	5.0	1.00	.70	.5	700	20	1,000	2.0	15
NCS167	331,400	3,911,700	3.0	.30	.20	.7	500	70	700	1.0	N
NCS168	332,040	3,911,770	.7	.15	.30	.5	300	20	500	1.5	N
NCS170	332,990	3,911,370	5.0	.30	.20	.5	700	70	500	2.0	5
NCS173	332,300	3,913,030	1.5	.15	.20	.5	200	20	300	1.5	N
NCS174	331,100	3,913,080	7.0	.50	.15	.7	500	50	700	1.0	5
NCS208	330,680	3,915,440	3.0	.30	.50	.5	700	30	700	2.0	5
NCS209	329,440	3,912,350	5.0	.30	.50	.5	300	30	700	<1.0	<5
NCS210	329,280	3,912,600	7.0	1.00	.50	.7	1,000	50	1,000	<1.0	10
NCS211	328,700	3,912,970	5.0	.70	.30	.5	500	15	700	1.0	7

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZR	AA-ZN-P
						Soils						
NCS003	100	15	150	20	100	50	20	<100	100	50	300	80
NCS028	50	15	70	20	15	10	10	100	100	30	200	55
NCS042	50	20	150	20	50	15	15	100	100	50	200	85
NCS044	70	15	70	20	20	10	10	100	100	50	200	80
NCS046	70	15	70	20	15	30	10	100	100	30	500	60
NCS048	100	20	100	20	30	50	15	100	100	50	300	120
NCS050	50	15	70	<20	15	30	10	100	100	30	500	100
NCS051	50	10	100	20	10	30	10	100	100	30	200	55
NCS081	50	20	100	20	15	20	15	150	100	30	300	90
NCS082	20	15	150	<20	20	20	15	200	70	30	150	120
NCS085	20	10	100	<20	10	15	7	100	70	20	200	85
NCS086	50	20	100	<20	20	30	10	150	100	20	200	90
NCS089	30	30	70	20	10	30	10	100	100	20	300	45
NCS090	30	15	100	<20	15	20	10	100	70	30	200	85
NCS091	20	15	100	<20	10	20	7	100	70	30	100	65
NCS093	30	10	100	<20	7	30	10	100	70	30	200	70
NCS094	20	10	100	<20	7	10	10	<100	70	30	70	140
NCS095	30	20	150	<20	20	50	10	100	70	50	200	90
NCS097	70	50	100	20	30	50	15	<100	100	30	300	50
NCS127	50	20	70	<20	20	70	10	<100	100	50	300	120
NCS156	50	15	50	<20	10	30	10	100	100	20	200	85
NCS157	30	20	100	<20	15	30	10	<100	100	30	150	110
NCS158	20	10	20	20	5	50	7	100	70	15	300	25
NCS159	20	10	100	20	10	60	5	100	70	15	200	70
NCS160	30	10	70	20	7	50	10	150	70	30	200	60
NCS161	70	15	100	20	10	30	10	100	100	30	200	120
NCS162	50	15	100	20	10	50	10	100	100	30	500	85
NCS163	100	20	200	20	30	50	20	150	100	50	500	95
NCS164	150	30	150	20	50	70	20	200	150	30	200	110
NCS165	70	20	200	<20	30	30	20	150	100	50	300	85
NCS166	150	20	200	20	50	50	20	200	100	30	500	110
NCS167	70	20	50	20	7	50	10	<100	100	20	200	25
NCS168	20	5	50	<20	N	30	7	100	70	20	700	25
NCS170	50	20	30	<20	10	50	10	100	100	20	200	45
NCS173	20	10	30	<20	5	20	10	100	70	20	150	40
NCS174	100	20	100	20	10	70	15	<100	150	30	300	30
NCS208	50	15	30	<20	7	50	10	100	100	20	500	30
NCS209	50	15	70	20	<5	50	10	100	100	20	700	20
NCS210	100	20	50	20	20	70	20	150	150	30	500	60
NCS211	100	30	70	<20	20	50	10	<100	100	20	300	75

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZR	AA-ZN-P
						Soils						
NCS213	70	20	50	<20	15	30	10	<100	100	15	150	80
NCS215	70	10	50	<20	15	20	15	<100	100	30	200	100
NCS216	70	10	50	<20	20	30	10	100	70	30	300	80
NCS217	100	15	100	20	30	70	15	100	100	100	500	95
NCS218	50	20	100	<20	15	30	10	100	70	70	200	110
NCS219	50	10	70	20	5	50	10	100	100	50	300	45
NCS224	30	10	20	<20	5	50	7	200	70	10	150	15
NCS225	100	20	50	<20	20	70	15	100	100	30	100	85
NCS226	70	20	50	20	10	70	10	100	100	20	300	30
NCS227	100	20	70	20	15	70	15	100	100	30	200	75
NCS228	100	30	30	20	7	50	20	200	150	20	300	35
NCS229	50	15	20	20	5	30	10	100	100	30	700	55
NCS230	70	15	20	20	5	50	15	150	150	20	500	25
NCS231	100	30	50	<20	20	70	15	100	100	30	500	90
NCS250	50	15	50	<20	15	30	15	200	100	30	500	130
NCS251	50	20	150	<20	15	50	10	200	100	30	500	100
NCS259	50	30	30	20	7	70	15	<100	150	20	700	30
NCS260	30	15	50	<20	<5	20	10	<100	100	30	500	50
NCS261	50	20	30	20	<5	50	10	100	100	50	500	30
NCS262	100	20	100	<20	30	50	15	<100	100	70	300	160
NCS263	70	15	100	<20	10	30	10	<100	70	30	300	115
NCS264	70	15	100	<20	20	30	15	100	100	50	300	130
NCS265	50	30	100	<20	20	30	10	<100	100	50	200	95
NCS266	100	30	100	<20	20	50	10	100	100	50	500	125
NCS267	50	15	100	<20	20	20	10	<100	100	50	500	200
NCS268	50	15	100	20	10	50	10	100	100	30	300	45
NCS269	50	15	100	<20	15	50	10	<100	100	20	150	90
NCS271	70	15	50	20	10	30	10	<100	100	20	300	90
NCS276	50	15	70	<20	7	30	10	100	100	20	500	55
NCS277	50	15	50	20	15	15	10	<100	70	20	300	50
NCS301	20	10	200	20	5	10	10	100	70	50	300	100
NCS302	30	20	300	30	7	50	20	150	70	50	500	100
NCS304	50	10	150	<20	10	20	10	<100	70	30	150	90
NCS305	200	20	200	20	30	50	20	<100	100	50	100	120
NCS309	150	20	150	<20	30	30	10	100	150	30	500	75
NCS310	50	15	50	<20	10	20	10	100	100	30	300	55
NCS311	70	20	50	20	15	70	10	100	150	30	500	65
NCS313	30	15	50	<20	5	50	7	100	100	20	500	50
NCS314	50	15	50	<20	10	20	10	100	100	30	500	50
NCS315	50	15	20	20	10	30	10	<100	100	20	300	55

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
						Soils					
NCS213	328,400	3,913,240	5.0	.30	.30	.5	500	20	700	1.5	10
NCS215	328,020	3,913,510	2.0	.50	.30	.3	700	10	500	3.0	7
NCS216	327,740	3,913,670	3.0	.50	.30	.5	700	15	700	2.0	10
NCS217	327,610	3,913,910	7.0	1.00	.50	1.0	700	30	1,000	2.0	15
NCS218	327,220	3,914,420	3.0	.50	.30	.3	1,000	20	700	3.0	10
NCS219	327,490	3,914,850	3.0	.50	.50	.5	500	15	700	1.5	5
NCS224	330,810	3,915,160	1.5	.20	.50	.3	100	50	500	1.0	5
NCS225	330,700	3,914,850	5.0	1.00	.50	.5	500	30	700	2.0	10
NCS226	330,580	3,914,430	5.0	.30	.15	.5	500	30	1,000	1.0	5
NCS227	330,580	3,914,030	5.0	.70	.15	.5	1,500	50	700	1.5	10
NCS228	330,640	3,914,580	5.0	.70	.30	.5	700	30	1,000	1.5	7
NCS229	330,580	3,913,270	5.0	.30	.20	.5	300	20	700	1.5	5
NCS230	330,660	3,913,020	5.0	.30	.70	.7	700	20	700	2.0	5
NCS231	330,350	3,912,780	7.0	.70	.30	.5	1,000	50	700	1.0	10
NCS250	330,720	3,918,870	3.0	1.00	.70	.5	1,000	10	700	2.0	10
NCS251	330,660	3,918,670	5.0	.70	1.00	.5	1,000	30	500	2.0	15
NCS259	330,220	3,912,460	5.0	.50	.20	.5	300	30	700	1.0	5
NCS260	330,220	3,912,160	3.0	.20	.30	.3	500	30	500	1.5	N
NCS261	330,070	3,911,840	3.0	.30	.50	.5	300	20	500	1.0	<5
NCS262	334,340	3,911,170	5.0	.50	.20	.5	700	20	500	2.0	15
NCS263	334,840	3,911,390	2.0	.30	.15	.3	1,000	10	500	1.5	10
NCS264	335,190	3,911,910	5.0	.70	.30	.5	500	15	700	2.0	10
NCS265	335,080	3,912,510	3.0	.70	.10	.3	1,000	20	500	2.0	15
NCS266	335,630	3,912,800	5.0	.50	.10	.5	2,000	20	500	2.0	15
NCS267	336,900	3,914,810	3.0	.50	.15	.3	1,500	30	500	2.0	10
NCS268	330,900	3,911,730	5.0	.20	.15	.5	500	30	700	1.0	<5
NCS269	331,820	3,911,760	3.0	.30	.10	.3	500	50	500	1.5	7
NCS271	332,570	3,911,470	5.0	.30	.15	.5	500	30	500	1.0	7
NCS276	332,670	3,913,070	3.0	.20	.30	.5	500	30	300	2.0	5
NCS277	331,880	3,913,040	3.0	.20	.10	.5	200	30	300	1.5	5
NCS301	330,970	3,918,100	2.0	.30	.30	.3	200	<10	700	5.0	7
NCS302	330,870	3,917,800	5.0	1.00	.50	.5	500	15	150	2.0	15
NCS304	332,080	3,918,870	3.0	.30	.05	.5	500	10	500	2.0	10
NCS305	332,290	3,918,780	5.0	2.00	.05	.5	700	10	500	3.0	20
NCS309	332,240	3,918,580	5.0	.50	.30	.5	500	30	700	2.0	15
NCS310	331,340	3,915,310	3.0	.30	.30	.5	700	20	500	1.5	7
NCS311	331,610	3,915,480	5.0	.50	.30	.5	1,000	30	500	2.0	10
NCS313	331,720	3,915,980	2.0	.15	.15	.3	700	20	300	1.5	5
NCS314	331,810	3,915,340	3.0	.30	.20	.3	500	20	500	2.0	5
NCS315	331,880	3,915,070	3.0	.30	.20	.3	300	15	500	2.0	5

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
					Soils						
NCS316	332,280	3,915,480	3.0	.30	.15	.3	1,000	20	500	2.0	10
NCS318	332,610	3,915,660	3.0	.50	.15	.3	2,000	30	500	1.5	10
NCS319	332,940	3,915,870	5.0	.50	.20	.5	500	30	500	2.0	7
NCS321	332,830	3,915,410	5.0	.50	.20	.5	700	50	500	2.0	15
NCS322	333,100	3,915,160	7.0	.50	.30	.5	700	50	500	2.0	10
NCS323	333,330	3,915,020	5.0	.70	.20	.5	1,000	50	500	2.0	10
NCS324	333,530	3,914,880	7.0	.70	.20	.5	700	50	700	1.5	15
NCS326	333,910	3,914,610	5.0	.50	.30	.5	150	15	500	1.0	7
NCS330	329,620	3,918,800	7.0	1.00	.10	.7	500	20	500	2.0	20

SHINING ROCK, NORTH CAROLINA--continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZR	AA-ZN-P
						Soils						
NCS316	50	20	70	<20	15	50	10	<100	100	30	200	100
NCS318	50	30	100	20	15	50	10	<100	100	50	200	120
NCS319	70	20	100	20	20	70	10	100	100	50	300	90
NCS321	70	50	100	20	20	70	10	100	100	50	150	75
NCS322	100	30	100	20	20	70	10	<100	100	50	200	100
NCS323	70	30	150	<20	15	30	10	<100	100	100	300	130
NCS324	100	30	150	20	20	50	15	<100	150	70	300	120
NCS326	50	10	50	<20	10	30	7	100	100	100	700	55
NCS330	100	30	100	20	50	50	15	<100	100	70	500	100

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
					Stream Sediments						
NCS002	331,180	3,917,020	10	1.5	.70	.7	2,000	15	700	1.0	30
NCS005	331,220	3,917,980	5	1.0	1.50	.3	700	10	1,000	2.0	10
NCS011	332,760	3,918,340	5	1.0	1.00	.5	2,000	15	500	1.5	20
NCS013	333,130	3,918,460	5	1.0	.70	.5	3,000	20	500	2.0	20
NCS014	333,560	3,918,080	5	1.0	1.50	.5	700	<10	700	2.0	10
NCS057	333,640	3,910,590	7	1.0	1.00	.5	700	10	700	1.0	15
NCS061	333,930	3,911,730	7	1.0	1.00	.5	700	15	700	1.5	15
NCS066	334,930	3,913,620	5	1.0	1.50	.3	1,000	10	700	2.0	15
NCS070	331,510	3,914,730	7	.7	1.50	1.0	2,000	10	700	1.0	10
NCS071	331,660	3,914,530	7	1.5	1.50	.5	1,500	15	1,000	1.5	20
NCS076	332,910	3,914,230	7	1.0	.70	.5	1,500	10	700	1.5	20
NCS079	333,820	3,914,180	5	.7	.70	.5	2,000	20	700	2.0	15
NCS102	331,160	3,917,240	7	.7	.50	1.0	3,000	20	700	1.0	10
NCS103	331,400	3,917,760	5	1.0	1.00	.5	1,000	20	1,000	2.0	15
NCS104	331,220	3,918,080	3	.7	1.50	.3	700	15	1,000	2.0	10
NCS106	331,680	3,918,540	5	.7	1.50	.7	700	10	700	1.0	10
NCS107	332,080	3,917,860	5	1.0	1.50	.7	1,000	20	700	1.5	15
NCS108	332,260	3,918,100	5	.1	.70	.5	1,000	<10	500	1.5	15
NCS109	333,470	3,917,940	7	1.0	1.50	.7	1,000	10	1,000	1.0	20
NCS112	329,420	3,913,400	7	1.0	1.00	.5	1,500	10	700	1.5	20
NCS113	329,420	3,913,300	7	1.5	1.00	.5	1,500	10	1,000	1.0	20
NCS118	326,600	3,910,760	10	1.0	1.00	.7	2,000	200	1,000	1.0	20
NCS119	327,460	3,912,380	10	1.0	1.00	.7	2,000	15	1,000	1.5	20
NCS120	327,480	3,912,280	10	1.5	1.00	.5	2,000	300	700	1.5	30
NCS121	324,520	3,915,800	7	1.0	1.00	.7	1,500	10	700	1.0	15
NCS122	328,630	3,918,420	7	.7	1.50	1.0	2,000	<10	700	1.0	10
NCS124	328,700	3,918,520	7	1.0	.70	1.0	1,000	15	500	1.0	10
NCS125	328,550	3,918,380	7	.7	.70	1.0	2,000	10	500	1.0	10
NCS126	327,700	3,916,560	7	1.0	1.00	.7	1,500	<10	500	1.0	10
NCS128	328,640	3,914,340	10	.7	1.00	.7	2,000	10	700	1.0	10
NCS129	328,240	3,914,470	7	1.0	1.50	.7	1,500	10	500	1.0	10
NCS130	327,930	3,914,710	7	1.0	1.00	.5	1,500	10	700	1.0	15
NCS131	327,960	3,914,640	7	1.0	1.00	.7	2,000	10	700	1.0	10
NCS132	327,930	3,915,280	7	1.0	1.00	.7	2,000	<10	700	1.0	10
NCS133	330,520	3,909,770	10	1.5	1.00	.5	1,500	50	1,000	1.0	15
NCS134	330,960	3,910,120	7	1.0	.50	1.0	1,000	20	1,000	1.0	10
NCS135	336,580	3,914,950	7	1.0	1.00	.7	2,000	30	700	2.0	20
NCS136	335,360	3,915,000	7	.7	1.00	.7	2,000	10	700	1.0	10
NCS137	334,490	3,916,940	10	1.5	1.00	1.0	2,000	70	700	1.0	20
NCS138	334,490	3,916,990	10	.7	.70	1.0	1,500	100	1,000	1.5	15

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZR	AA-ZN-P
						Stream Sediments						
NCS002	150	30	100	20	50	30	20	200	100	70	300	100
NCS005	50	15	100	<20	20	30	10	300	100	20	100	50
NCS011	70	20	150	20	30	50	15	300	100	50	300	80
NCS013	70	30	150	20	50	50	10	200	100	50	300	95
NCS014	100	10	20	<20	20	30	15	200	100	30	150	35
NCS057	100	20	30	20	20	50	15	150	100	30	300	70
NCS061	100	20	70	20	30	50	15	150	100	30	150	95
NCS066	100	15	50	20	20	50	10	200	100	20	100	65
NCS070	70	15	200	20	20	30	20	100	100	70	1,000	80
NCS071	150	30	200	20	30	50	20	150	100	70	300	85
NCS076	70	20	70	20	30	70	10	150	100	30	200	130
NCS079	70	20	70	20	30	70	10	150	100	50	200	95
NCS102	70	20	200	20	15	30	20	150	70	70	1,000	100
NCS103	100	20	200	20	20	70	15	200	100	50	300	90
NCS104	50	10	70	<20	10	50	10	200	70	15	100	55
NCS106	30	5	100	20	7	30	20	300	70	30	500	55
NCS107	150	15	50	<20	20	30	15	200	100	20	100	85
NCS108	100	30	70	<20	20	50	20	200	150	50	200	95
NCS109	100	20	150	20	30	30	30	300	100	70	1,000	70
NCS112	100	20	100	20	30	70	20	200	100	70	200	110
NCS113	150	30	70	20	30	50	20	200	150	50	300	130
NCS118	150	30	100	<20	30	50	20	200	100	50	300	100
NCS119	150	50	100	<20	30	70	20	200	100	50	300	110
NCS120	150	30	100	<20	50	70	30	150	100	70	200	80
NCS121	100	30	70	<20	20	70	20	200	70	150	700	100
NCS122	100	20	200	20	20	50	20	200	70	100	500	85
NCS124	100	20	100	20	30	20	20	200	100	50	1,000	90
NCS125	100	30	100	20	20	50	15	200	70	50	500	90
NCS126	100	20	50	20	20	30	15	100	70	30	500	85
NCS128	70	20	70	20	20	70	20	100	70	70	700	110
NCS129	100	15	70	20	15	50	15	150	70	50	300	110
NCS130	100	20	70	<20	20	70	10	150	100	30	300	120
NCS131	100	20	70	<20	20	30	20	150	100	70	500	110
NCS132	70	30	70	<20	20	50	15	150	100	50	700	80
NCS133	150	30	150	<20	30	70	20	200	150	50	500	100
NCS134	100	20	100	20	30	30	20	100	100	70	700	100
NCS135	150	30	70	20	50	100	15	200	150	50	200	140
NCS136	100	15	500	<20	10	50	20	200	70	100	700	75
NCS137	150	30	100	30	70	70	30	200	100	70	500	90
NCS138	100	20	100	20	20	50	15	200	100	70	700	80

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
					Stream Sediments						
NCS139	334,040	3,918,720	7	.7	.70	.7	2,000	15	500	1.0	20
NCS140	334,500	3,914,700	5	.5	1.00	.3	2,000	10	500	1.5	15
NCS141	334,500	3,914,560	7	.7	.70	.7	2,000	50	500	1.5	20
NCS142	333,480	3,922,320	7	.7	.15	.5	1,500	15	700	1.0	30
NCS143	333,720	3,920,820	7	.7	1.00	.3	5,000	15	700	1.5	20
NCS144	333,310	3,920,600	7	.7	.70	.5	5,000	20	700	2.0	30
NCS146	333,020	3,920,560	5	.7	.50	.3	3,000	20	700	2.0	30
NCS147	332,910	3,920,660	5	.5	.50	.3	2,000	20	500	2.0	20
NCS149	333,740	3,920,910	7	.5	.50	.5	1,500	10	700	1.5	15
NCS150	332,800	3,917,430	10	1.0	.70	.5	3,000	20	700	1.5	20
NCS151	332,700	3,917,400	7	1.0	1.50	.7	1,500	10	1,000	1.0	20
NCS152	332,700	3,917,340	7	1.0	1.50	.5	1,500	20	1,000	1.5	15
NCS153	334,250	3,920,980	10	.7	.50	.5	3,000	20	700	1.5	20
NCS154	334,890	3,915,190	10	1.0	1.00	.5	2,000	50	700	1.5	20
NCS155	334,460	3,916,770	7	1.0	1.50	.7	2,000	10	1,000	1.5	15
NCS172	332,830	3,912,270	10	1.5	1.00	1.0	3,000	150	1,000	1.0	20
NCS175	327,820	3,916,520	5	.7	.50	.5	700	<10	700	1.0	10
NCS176	328,280	3,916,230	7	.5	.70	.7	1,500	10	500	1.0	7
NCS178	327,650	3,917,240	10	1.5	.70	1.0	2,000	15	1,000	1.0	20
NCS179	330,110	3,918,810	5	.7	2.00	.7	1,500	10	700	1.5	7
NCS180	329,830	3,918,680	5	1.0	3.00	.7	1,000	<10	1,000	1.5	10
NCS200	331,240	3,917,000	7	.7	1.00	.7	1,500	50	700	1.5	15
NCS202	331,960	3,918,000	7	1.5	1.00	.5	700	15	700	1.5	20
NCS204	328,840	3,913,890	5	.7	1.00	.5	2,000	<10	700	1.5	10
NCS205	329,160	3,915,800	5	1.0	1.00	.7	1,000	10	500	1.5	15
NCS222	327,760	3,915,600	3	.7	.70	.5	1,500	10	700	1.0	10
NCS223	328,090	3,915,430	5	.7	.70	.5	1,000	10	700	1.5	10
NCS232	333,530	3,910,670	7	1.0	1.00	.7	2,000	100	700	1.0	10
NCS233	333,880	3,911,820	7	1.0	1.00	.7	2,000	100	1,000	1.0	15
NCS234	334,380	3,911,680	7	1.0	1.00	.7	2,000	100	700	1.0	20
NCS236	334,250	3,912,740	3	1.0	1.00	.3	1,000	50	700	1.5	10
NCS237	334,340	3,913,140	5	1.5	1.50	.5	700	10	700	2.0	15
NCS238	334,760	3,913,160	5	1.0	1.00	.5	1,500	15	1,000	1.0	10
NCS239	334,600	3,913,650	7	1.0	1.00	.5	2,000	15	700	1.0	10
NCS240	355,220	3,914,170	5	1.0	1.00	.5	2,000	20	700	1.0	10
NCS241	330,640	3,914,620	5	1.5	.70	.5	2,000	20	1,000	1.0	30
NCS242	331,530	3,914,780	5	.7	1.00	.3	1,000	15	700	1.5	10
NCS243	332,220	3,914,230	7	.7	1.00	.7	3,000	20	700	1.5	10
NCS244	332,180	3,913,780	5	1.0	1.00	.5	1,500	20	1,000	1.5	10
NCS245	332,100	3,913,810	5	1.0	.70	.5	1,500	20	1,000	2.0	15

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZR	AA-ZN-P
						Stream Sediments						
NCS139	100	30	500	<20	50	50	15	200	70	70	500	110
NCS140	50	20	70	<20	30	70	10	150	70	50	300	120
NCS141	100	30	100	20	50	50	15	100	100	70	500	140
NCS142	150	30	100	20	50	100	15	100	100	70	500	120
NCS143	70	30	200	<20	30	50	30	150	100	100	300	85
NCS144	70	20	200	20	30	70	20	150	100	70	500	80
NCS146	50	30	150	<20	30	50	10	150	70	70	200	130
NCS147	50	30	150	<20	20	50	10	100	70	50	150	110
NCS149	50	20	100	<20	20	30	15	150	70	50	500	130
NCS150	100	20	70	20	30	50	20	150	100	50	500	120
NCS151	100	20	150	<20	30	30	20	200	100	70	1,000	90
NCS152	70	20	100	<20	30	30	20	200	100	50	500	100
NCS153	70	30	150	20	30	50	15	150	70	70	500	100
NCS154	100	30	100	<20	30	50	20	150	100	50	300	120
NCS155	150	20	150	<20	20	30	20	200	100	70	300	100
NCS172	200	50	200	<20	50	30	30	100	70	100	1,000	110
NCS175	70	20	30	<20	15	20	10	100	70	20	150	80
NCS176	50	15	300	<20	10	20	15	150	70	70	300	70
NCS178	150	50	70	20	20	50	20	150	100	50	500	120
NCS179	30	15	200	<20	10	50	20	300	70	50	1,000	80
NCS180	70	15	300	<20	15	30	30	300	100	70	700	80
NCS200	100	20	100	<20	20	30	15	100	70	30	300	90
NCS202	150	20	100	<20	30	50	15	150	100	30	100	95
NCS204	100	20	70	<20	20	30	20	150	70	50	300	100
NCS205	100	30	100	<20	30	50	15	100	100	30	300	130
NCS222	100	20	50	<20	20	50	10	150	70	50	300	100
NCS223	100	20	70	<20	20	30	10	150	70	30	300	100
NCS232	70	30	100	<20	30	50	20	100	100	100	500	140
NCS233	150	30	500	<20	30	70	30	100	100	100	1,000	100
NCS234	150	50	70	<20	50	50	20	100	150	70	500	150
NCS236	100	20	70	<20	20	70	15	150	100	30	200	110
NCS237	100	20	50	<20	30	50	20	200	150	20	70	120
NCS238	100	15	100	<20	30	50	15	150	100	50	700	85
NCS239	100	20	70	<20	30	50	20	100	100	50	700	100
NCS240	100	20	70	<20	20	50	20	100	70	50	500	110
NCS241	200	30	100	<20	30	70	20	100	100	70	300	140
NCS242	70	20	50	<20	20	50	10	150	100	30	300	85
NCS243	100	15	700	<20	20	30	20	100	70	150	700	95
NCS244	70	20	70	<20	20	50	15	150	100	30	500	100
NCS245	100	20	70	<20	30	50	15	150	100	30	200	90

Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-B	S-BA	S-BE	S-CO
					Stream Sediments						
NCS247	333,350	3,913,880	7	1.5	1.50	.5	1,500	20	1,000	1.5	15
NCS273	333,600	3,912,000	5	1.0	1.50	.7	1,000	20	1,000	1.5	10
NCS275	332,860	3,912,340	7	.7	1.00	1.0	2,000	20	1,000	1.0	10
NCS279	328,000	3,916,700	5	1.0	.70	.5	1,500	20	700	1.0	10
NCS283	329,460	3,919,250	5	.7	.70	1.0	2,000	15	700	1.0	7
NCS284	329,380	3,919,490	5	.7	1.00	1.0	2,000	20	700	1.0	10
NCS285	329,420	3,919,430	5	.7	.50	.7	700	<10	500	1.0	10
NCS288	327,540	3,919,160	7	1.5	1.50	1.0	1,000	10	700	1.0	20
NCS307	332,540	3,919,300	5	.7	.50	.3	5,000	30	700	2.0	30
NCS308	332,340	3,919,220	5	.7	.70	.5	5,000	20	500	1.5	15
NCS328	328,120	3,915,980	5	.5	.20	.7	500	15	500	<1.0	10
NCS331	329,840	3,918,860	5	.7	.70	.5	1,500	15	700	2.0	10
NCS332	330,100	3,918,860	7	1.0	1.00	.7	1,000	15	700	1.5	10
NCS334	329,540	3,918,470	5	1.0	1.50	.5	700	10	1,000	2.0	10

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Table 1.--Geochemical analyses, Shining Rock, North Carolina--Continued

sample	S-CR	S-CU	S-LA	S-NB	S-NI	S-PB	S-SC	S-SR	S-V	S-Y	S-ZR	AA-ZN-P
						Stream Sediments						
NCS247	100	20	50	<20	30	50	20	150	150	50	500	100
NCS273	100	20	100	<20	30	50	15	150	100	30	200	80
NCS275	100	10	300	<20	20	50	20	150	50	100	700	65
NCS279	100	20	50	<20	20	30	15	150	70	30	200	80
NCS283	70	15	50	<20	20	20	10	150	50	30	500	75
NCS284	100	20	300	20	20	50	15	150	70	50	700	100
NCS285	50	20	50	20	20	20	7	150	70	30	300	100
NCS288	150	30	100	<20	30	50	20	200	100	50	300	120
NCS307	70	15	100	20	30	70	15	150	100	70	200	75
NCS308	70	15	150	<20	20	30	15	200	70	70	200	60
NCS328	50	15	150	20	20	20	10	<100	70	50	500	100
NCS331	100	20	100	20	20	50	10	200	100	50	300	100
NCS332	70	20	100	20	30	30	15	200	100	50	500	90
NCS334	70	10	100	20	10	50	10	100	100	30	150	80