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Analyses and descriptions  
of  
geochemical samples,  
northwestern Moore County,  
North Carolina  
by  
Frank G. Lesure, Elmo F. Cooley, Jerry M. Motooka,  
Jim G. Frisken, and others

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Analyses and descriptions of geochemical samples,  
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by

F.G. Lesure, E.F. Cooley, J.M. Motooka,  
J.G. Frisken, and others

Abstract

Semiquantitative spectrographic analyses for 30 elements, atomic absorption analyses for copper, gold, lead, and zinc, and colorimetric analyses for molybdenum, all made on 244 rock samples from the gold-pyrophyllite belt of northwestern Moore County, N. C., are reported here in detail. Localities for all samples are given in Universal Transverse Mercator (UTM) coordinates. Brief descriptions of the rock samples are included. Rocks analyzed consist largely of sheared felsic tuff, sericite phyllite, sericite schist, mafic tuff, diabase, slate, and vein quartz. Some samples are fresh rock, but most are partly weathered rock or saprolite. Most of the samples are chip composites taken across the layering or structure of the rock over an interval of 0.3 to 3 m. A few samples are composites from dump material. Gold is present in at least detectable amounts in 190 samples; molybdenum is detectable in 145.

Introduction

Analyses reported here are on 244 rock samples collected by Lesure from gold and pyrophyllite mines and their vicinity in northwestern Moore County, N.C. in May 1968. The samples are described briefly on the following pages. About one-fourth of the samples are composites of chips taken from several veins in an outcrop or from several boulders of the same rock type in mine dumps; the rest of the samples are composites of chips taken across the layering or structure of the rock over a measured thickness, usually 0.3 to 3 m. A few samples are relatively fresh, some are partly weathered, and the rest are completely weathered to saprolite. Veins described as "discordant" crosscut foliation or layering in the country rock.

Conley (1962) has described the geology and mineral resources of Moore County. His geologic map (Conley, 1962, plate 1) was used in this study as a guide for sample collection. A sample locality map, sketches of some of the gold mines, and a discussion of the analytical results are given in Lesure, 1981.

Analytical Techniques

Rock samples were crushed to approximately 0.25-in. (6-mm) particle size and were pulverized to minus 140-mesh (0.004 in. or 0.105 mm) in a vertical grinder having ceramic plates. Each sample was analyzed semiquantitatively for 30 elements by a six-step, direct-current-arc, optical-emission spectrographic method by Elmo F. Cooley and Jerry M. Motooka. In addition, each sample was analyzed by means of an atomic absorption technique for copper and gold by Jim G. Frisken and John G. Viets, and for lead and zinc by Zelia C. Stephenson, Gregory F. Chlumsky and Bruce R. Bland. Sharon L. Noble analyzed all samples for molybdenum using a colorimetric method. 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 of these numbers) and are the approximate geometric midpoints of the concentration ranges.

Description of rock samples  
Description

Sample No.	Description
MNC 001	1-m chip sample, tuff, light-gray, dense, hard, felsic; weathers light tan.
MNC 002	Composite sample from large boulders of white vein quartz.
MNC 003	1-m chip sample, tuff saprolite, grayish-tan, clay-rich, felsic.
MNC 004	Composite sample from two white quartz veins, each about 0.6 m thick.
MNC 005	9-m chip sample, tuff, greenish-gray, mafic; and reddish-brown saprolite.
MNC 006	5-m chip sample, tuff, dark-green, mafic, weathered.
MNC 007	2-m chip sample, tuff, light-gray, hard, fine grained, felsic.
MNC 008	1-m chip sample, tuff saprolite, medium-greenish-gray, mafic, fragmental.
MNC 009	1-m chip sample, metashale, greenish-gray; contains 0.5- to 3-cm limonite pseudomorphs after pyrite.
MNC 010	Composite sample of limonite pseudomorphs from sample MNC 009.
MNC 011	0.6-m chip sample, tuff saprolite, light-gray to tan, felsic, may contain pyrite(?) where fresh.
MNC 012	Composite sample, two white quartz veins, 0.2 to 0.6 m thick.
MNC 013	6-m chip sample, tuff, light-gray, hard, very fine grained, slaty, felsic.
MNC 014	0.1-m chip sample, white vein quartz and silicified tuff containing epidote, from middle part of sample MNC 013.
MNC 015	15-m chip sample, crystal tuff, light-tan, contains feldspar crystals 1.5 mm across.
MNC 016	0.3-m chip sample, white vein quartz.
MNC 017	Composite sample, white quartz vein, large, massive.
MNC 018	1-m chip sample, tuff saprolite, light tan, clay-rich, felsic.
MNC 019	1-m chip sample, saprolite, orange, clay-rich.
MNC 020	2-m chip sample, quartz-sericite phyllite, contains pyrite.
MNC 021	1-m chip sample, saprolite, reddish-gray, clay-rich.
MNC 022	1-m chip sample, phyllite, greenish-gray, weathers reddish.
MNC 023	2-m chip sample, sericite schist, white to light-gray.
MNC 024	1-m chip sample, sericite phyllite, tan to reddish-gray; mostly saprolite.
MNC 025	3-m chip sample, sericite schist saprolite, tan to reddish; contains pyrite(?) where fresh.
MNC 026	1.6-m chip sample, sericite phyllite saprolite, yellow-tan to orange.
MNC 027	2-m chip sample, sericite phyllite saprolite, yellow.
MNC 028	Composite sample, three quartz stringers and veins, 0.01 to 0.6 m thick.
MNC 029	2-m chip sample, saprolite, yellow, clay-rich; encloses zone of quartz stringers in sample MNC 028.
MNC 030	1.3-m chip sample, saprolite, orange and red, layered, clay-rich; probably weathered tuff.
MNC 031	1.3-m chip sample, sericite phyllite saprolite, yellow-orange, clay-rich.
MNC 032	1.6-m chip sample, sericite phyllite saprolite, yellow-orange, very fine grained, contains minor pyrite(?) where fresh.
MNC 033	1-m chip sample, white, very fine-grained, sericite phyllite, partly weathered; may contain pyrophyllite(?).

MNC 034 1.3-m chip sample, sericite phyllite, white, partly weathered; similar to sample MNC 033.

MNC 035 1-m chip sample, sericite phyllite, very fine grained, white, weathered. Standard Mineral Company pyrophyllite mine.

MNC 036 1-m chip sample, saprolite, light-gray, very fine grained, clay-rich. Standard Mineral Company pyrophyllite mine.

MNC 037 Composite sample, two quartz stringers, 2 to 5 cm thick. Standard Mineral Company pyrophyllite mine.

MNC 038 1.3-m chip sample, saprolite, light-gray, clay-rich; from area of sample MNC 037. Standard Mineral Company pyrophyllite mine.

MNC 039 1-m chip sample, saprolite, reddish, clay-rich. Standard Mineral Company pyrophyllite mine.

MNC 040 1-m chip sample, phyllite saprolite, hematite-stained. Standard Mineral Company pyrophyllite mine.

MNC 041 1.3-m chip sample, sericite phyllite, white; at contact with sample MNC 040. Standard Mineral Company pyrophyllite mine.

MNC 042 1-m chip sample, white sericite phyllite; contains dense, hard lenses 1 to 2 cm thick. Standard Mineral Company pyrophyllite mine.

MNC 043 Composite sample, quartz lens, white, granular, 5 to 10 cm thick, 10 m long. Standard Mineral Company pyrophyllite mine.

MNC 044 1-m chip sample, phyllite saprolite, reddish, hematitic, clay-rich. Standard Mineral Company pyrophyllite mine.

MNC 045 1-m chip sample, sericite schist, white, partly weathered. Standard Mineral Company pyrophyllite mine.

MNC 046 1-m chip sample, phyllite, very fine grained, hard, silicified. Standard Mineral Company pyrophyllite mine.

MNC 047 0.6-m chip sample, phyllite saprolite, tan to red, clay-rich; contains limonite pseudomorphs after pyrite. Standard Mineral Company pyrophyllite mine.

MNC 048 1-m chip sample, sericite schist, white to cream, clay-rich, minor red stain. Standard Mineral Company pyrophyllite mine.

MNC 049 0.6-m chip sample, pyrophyllite-sericite schist, light-gray, Standard Mineral Company pyrophyllite mine.

MNC 050 0.6-m chip sample, similar to sample MNC 049. Standard Mineral Company pyrophyllite mine.

MNC 051 3-m chip sample, sericite schist, light-gray.

MNC 052 1.6-m chip sample, gray slate saprolite, footwall of quartz vein. Cagle Mine area.

MNC 053 Composite sample, three white quartz veins, 5 to 10 cm thick in 1.6-m zone of slate. Cagle Mine area.

MNC 054 1.6-m chip sample, gray slate from area of sample MNC 053.

MNC 055 Composite sample, three white quartz veins, minor iron stain; in zone 3 m wide, 3 m northwest of samples MNC 053 and 054.

MNC 056 Composite sample of slate, 10 cm from each wall of quartz veins in sample MNC 055.

MNC 057 0.3-m chip sample, silicified zone in slate, similar to sample MNC 046. Near trace of Cagle mine ore zone.

MNC 058 Composite sample, gray slate, partly weathered, from both sides of sample MNC 057. Along strike of Cagle mine ore zone.

MNC 059 0.6-m chip sample, gray phyllite saprolite. Cagle Mine area.

MNC 060 Composite sample, white quartz vein, 5 cm thick. Cagle Mine area.

MNC 061 1.3-m chip sample, phyllite saprolite, light-gray to orange, clay-rich; from both sides of vein of sample MNC 060. Cagle Mine area.

MNC 062 Composite sample, white quartz veins, 0.15 to 0.3 m thick, branching, discordant. Cagle Mine area.

MNC 063 1.3-m chip sample, saprolite, light-gray, clay-rich; from area of sample MNC 062.

MNC 064 Composite sample, two white quartz veins, 2 to 7 cm thick, discordant. Cagle Mine area.

MNC 065 0.6-m chip sample, saprolite, cream-colored, clay-rich; from area of sample MNC 064.

MNC 066 Composite sample from dump, slate and sericite phyllite, light-to yellowish-gray, fine grained, silicified; contains minor pyrite. Allen mine area.

MNC 067 0.3-m chip sample, sericite schist. Allen mine area.

MNC 068 3-m chip sample, felsic tuff, phyllitic; contains scattered fine-grained pyrite. Allen mine area.

MNC 069 1-m chip sample, weathered phyllite. Burns mine area.

MNC 070 Composite sample, three quartz lenses in area of sample MNC 069. Burns mine area.

MNC 071 1-m chip sample, pyrite-rich phyllite. Burns mine area.

MNC 072 1-m chip sample, phyllite, light-green, pyrite-rich. Burns mine area.

MNC 073 Composite sample, quartz vein, 1 to 30 cm thick, discordant, from area of samples MNC 071 and 072. Burns mine area.

MNC 074 1-m chip sample, felsic tuff, sheared; contains minor quartz seams. Burns mine area.

MNC 075 Composite sample of tuff, brecciated, cemented with hematite; from dump of small pit. Burns mine area.

MNC 076 1.3-m chip sample, tuff, sheared, chalky-weathering; contains minor pyrite. Burns mine area.

MNC 077 Composite sample, discordant quartz vein, 1 to 30 cm thick, cuts rock sampled for MNC 076. Burns mine area.

MNC 078 1-m chip sample, tuff, sheared, chalky-weathering; contains minor pyrite; similar to MNC 076. Burns mine area.

MNC 079 1.6-m chip sample, tuff, white, hard, fragmental. Burns mine area.

MNC 080 1.3-m chip sample, tuff, white, sheared. Burns mine area.

MNC 081 1.3-m chip sample, tuff, white, sheared. Burns mine area.

MNC 082 1.3-m chip sample, tuff, sheared, chalky-weathering. Part of zone mined in Burns mine.

MNC 083 1.3-m chip sample, tuff, barren-looking; part of zone mined in Burns mine.

MNC 084 1.3-m chip sample, tuff saprolite, chalky. Burns mine area.

MNC 085 1.3-m chip sample, tuff saprolite, chalky. Burns mine area.

MNC 086 1.6-m chip sample, tuff, light gray, chalky-weathering, hematite stain. Burns mine area.

MNC 087 0.6-m chip sample, felsic tuff, phyllitic. Allen mine area.

MNC 088 Composite sample, quartz vein, 0.3 m thick, minor iron stain. Allen mine area.

MNC 089 1.3-m chip sample, tuff saprolite, felsic, sheared. Red Hill mine area.

MNC 090 1.3-m chip sample, felsic tuff, sheared, minor hematite stain. Red Hill mine area.

MNC 091 1-m chip sample, felsic tuff, sheared, minor hematite stain. Red Hill mine area.

MNC 092 1-m chip sample, felsic tuff, light-gray to tan, sheared. Red Hill mine area.

MNC 093 0.6-m chip sample, tuff, light-gray, silicified(?), sheared, minor hematite stain. Red Hill mine area.

MNC 094 1-m chip sample, tuff, partly weathered, sheared. Red Hill mine area.

MNC 095 1.3-m chip sample, felsic tuff(?) saprolite, light-tan to orange, clay-rich. Red Hill mine area.

MNC 096 Composite sample, quartz vein, 1 to 15 cm thick. Red Hill mine area.

MNC 097 1-m chip sample, saprolite, light-tan to orange, clay-rich; below sample MNC 096. Red Hill mine area.

MNC 098 1-m chip sample, tuff saprolite, yellowish-white, sheared, minor quartz stringers. Allen mine area.

MNC 099 Composite sample, quartz vein, 0.3 m thick, minor sulfides. Allen mine area.

MNC 100 1.3-m chip sample, felsic tuff, light-gray, sheared; below sample MNC 099. Allen mine area.

MNC 101 0.6-m chip sample, felsic tuff saprolite, chalky, minor hematite stain. Allen mine area.

MNC 102 0.6 m chip sample, felsic tuff, sheared, chalky-weathering; minor hematite stain. Allen mine area.

MNC 103 3-m chip sample, felsic tuff, sheared. Allen mine area.

MNC 104 3-m chip sample, quartz vein, massive to layered.

MNC 105 1-m chip sample, clay-rich saprolite.

MNC 106 8-m chip sample, felsic tuff, yellowish-white, sheared.

MNC 107 1-m chip sample, felsic tuff, sheared, minor iron stain. Near Red Hill mine area.

MNC 108 0.6-m chip sample, felsic tuff, white, sheared, chalky-weathering, minor hematite stain. Cagle mine area.

MNC 109 1.3-m chip sample, felsic tuff, chalky-weathered, minor hematite stain. Hanging wall of mined zone, Cagle mine area.

MNC 110 1-m chip sample, felsic tuff saprolite, chalky-weathered, minor hematite stain. Mined zone, Cagle mine area.

MNC 111 0.6-m chip sample, chalky-weathered felsic tuff or sericite schist saprolite. Footwall of mined zone, Cagle mine area.

MNC 112 1-m chip sample, felsic tuff saprolite, chalky, minor very fine-grained pyrite(?) (now iron oxide) spots. Cagle mine area.

MNC 113 0.3-m chip sample, felsic tuff, sheared, silicified, minor pyrite. Footwall of a quartz vein and stoped area. Cagle mine.

MNC 114 0.6-m chip sample, felsic tuff, sheared, partly silicified; minor hematite stain. Hanging wall of quartz vein and stoped area. Cagle mine.

MNC 115 0.6-m chip sample, tuff, sheared, chalky; minor hematite stain. Cagle mine area.

MNC 116 1-m chip sample, tuff saprolite, sheared, fine-grained, sandy, silicified. Hanging wall of small open cut. Cagle mine area.

MNC 117 0.3-m chip sample, tuff, very fine-grained, silicified, hard, partly weathered; some limonite in seams and cavities. Footwall of small open cut. Cagle mine area.

MNC 118 1-m chip sample, felsic tuff saprolite, light-gray, soft. Footwall of inclined shaft(?). Cagle Mine area.

MNC 119 1.3-m chip sample, felsic tuff, yellowish white, silicified, similar to MNC 116. Hanging wall of inclined shaft(?). Cagle mine area.

MNC 120 0.6-m chip sample, felsic tuff, sheared, and quartz-sericite schist.

MNC 121 1.3-m chip sample, felsic tuff saprolite, light-gray, clay rich.

MNC 122 Composite sample, three discordant quartz veins, 2 to 15 cm thick. Ritter mine area.

MNC 123 1.3-m chip sample, tuff, fragmental, hard to partly weathered. From same area as sample MNC 122. Ritter mine area.

MNC 124 0.6-m chip sample, tuff, hard, fragmental. Upper part of zone mined in inclined shaft. Ritter mine area.

MNC 125 Composite sample, fragmental tuff containing very fine-grained pyrite. Ritter mine area dump.

MNC 126 Composite sample, tuff, dense, hard, medium-grained. Ritter mine area dump.

MNC 127 3-m chip sample, felsic tuff, light-gray, hard, sheared.

MNC 128 1.3-m chip sample, tuff similar to MNC 127.

MNC 129 1.3-m chip sample, saprolite, brown, clay-rich; sheared mafic tuff(?).

MNC 130 1-m chip sample, mafic tuff saprolite, tan, clay-rich.

MNC 131 1.3 m chip sample, felsic tuff, light-tan to light-gray, sheared, weathered.

MNC 132 1.3-m chip sample, felsic tuff, light-gray to light-tan, hard to partly weathered. Like sample MNC 126.

MNC 133 Composite sample, three quartz veins, 15 to 20 cm thick in zone 3 m wide.

MNC 134 3-m chip sample, felsic tuff, light-gray, weathered. Country rock from zone enclosing sample MNC 133.

MNC 135 1-m chip sample, tuff, spotted light-gray to brown, weathered.

MNC 136 1-m chip sample, felsic tuff, sheared. Cotton mine area.

MNC 137 0.6-m chip sample, lithic felsic tuff, medium-grained. Cotton mine area.

MNC 138 1.3-m chip sample, felsic tuff saprolite, medium-gray to brown, sheared. Cotton mine area.

MNC 139 0.6-m chip sample, sericite-pyrophyllite schist, white to light-gray; minor pyrite. Carolina Pyrophyllite Co.--Phillips mine.

MNC 140 1-m chip sample, sericite schist, dark-gray. Carolina Pyrophyllite Co.--Phillips mine.

MNC 141 1.3-m chip sample, sericite schist, dark-gray. Carolina Pyrophyllite Co.--Phillips mine.

MNC 142 1.3-m chip sample, sericite schist. Carolina Pyrophyllite Co.--Phillips mine.

MNC 143 1.3-m chip sample, mixed sericite schist and pyrophyllite schist. Carolina Pyrophyllite Co.--Phillips mine.

MNC 144 1-m chip sample, sericite and pyrophyllite schist. Carolina Pyrophyllite Co.--Phillips mine.

MNC 145 1.3-m chip sample, interlayered pyrophyllite and sericite schist. Carolina Pyrophyllite Co.--Phillips mine.

MNC 146 1.3-m chip sample, interlayered sericite and pyrophyllite schist. Carolina Pyrophyllite Co.--Phillips mine.

MNC 147 1.3-m chip sample, similar to MNC 146.

MNC 148 1.6-m chip sample, black slate. White mine.

MNC 149 1.3-m chip sample, slate, light-gray, clay-rich. White mine.

MNC 150 1.3-m chip sample, sericite schist, light-colored, granular. White mine.



MNC 151 1.3-m chip sample, sericite schist, white. White mine.  
MNC 152 1.3-m chip sample, slate, dark-gray, fine-grained. White mine.  
MNC 153 1-m chip sample, lithic tuff, light-gray, sheared.  
MNC 154 0.6-m chip sample, lithic tuff, gray, dense, hard, silicified;  
minor quartz veins.  
MNC 155 1.3-m chip sample, sericite schist, reddish-speckled. Womble  
mine.  
MNC 156 0.6-m chip sample, dark-gray slate. Womble mine.  
MNC 157 0.6-m chip sample, altered zone, green- and yellow-stained, in  
weathered sericite schist. Womble mine area.  
MNC 158 1.6-m chip sample, saprolite, reddish-brown, soft, granular,  
clay-rich. Womble mine area.  
MNC 159 0.3-m chip sample, slate, pyrite-rich. Phillips mine area.  
MNC 160 0.3-m chip sample, slate, pyrite-rich. Phillips mine area.  
MNC 161 0.6-m chip sample, slate, weathered and bleached; contains  
hematite stain. Phillips mine area.  
MNC 162 Composite sample, average rock from dump of copper prospect,  
includes vein quartz and copper sulfides.  
MNC 163 Composite sample, phyllite, hard, silicified; minor copper  
carbonate stain. Copper prospect dump.  
MNC 164 1-m chip sample, slate, thin-bedded, weathered.  
MNC 165 2-m chip sample, felsic tuff saprolite, light-gray to orange,  
sheared. Belle mine area.  
MNC 166 1.3-m chip sample, felsic tuff, light- to medium-gray, weathered.  
Hanging wall of cut. Belle mine area.  
MNC 167 1-m chip sample, felsic tuff, weathered and in part saprolite;  
from back of adit portal. Belle mine area.  
MNC 168 1.3-m chip sample, tuff, tan, sheared, coarse-grained, clay-rich,  
weathered; in footwall of cut. Belle mine area.  
MNC 169 1-m chip sample, tuff, felsic, sheared, weathered; mined(?) zone.  
Belle mine area.  
MNC 170 1-m chip sample, felsic tuff saprolite, yellowish-white, sheared,  
clay-rich. Belle mine area.  
MNC 171 1.3-m chip sample, saprolite, orange-tan, clay-rich. Belle mine  
area.  
MNC 172 1-m chip sample, saprolite, dark orange-brown, clay-rich. Belle  
mine area.  
MNC 173 Composite sample of greenstone schist from dump at Uwarra mine,  
Montgomery County.  
MNC 174 Composite sample, quartz vein, 0.3 m thick.  
MNC 175 1.3-m chip sample, felsic tuff saprolite.  
MNC 176 1.3-m chip sample, felsic tuff.  
MNC 177 Composite sample, quartz veins, 2 to 15 cm thick, discordant.  
MNC 178 2-m chip sample, felsic tuff in area of sample MNC 177.  
MNC 179 1-m chip sample, felsic tuff saprolite, light-gray, clay-rich.  
MNC 180 Composite sample of several quartz veins 2 to 10 cm thick in  
area of sample MNC 179.  
MNC 181 1.6-m chip sample, felsic tuff saprolite, very fine-grained,  
iron stained, clay-rich.  
MNC 182 1-m chip sample, tuff saprolite, tan, sheared, felsic to mafic.  
MNC 183 Composite sample, four quartz lenses, 2 to 15 cm thick.  
MNC 184 1.6-m chip sample, felsic tuff saprolite, gray to buff, clay-  
rich, sheared.  
MNC 185 5-m chip sample, slate saprolite, mixed gray, red, and brown,  
clay-rich.

MNC 186 Composite sample, four quartz veins in area of sample MNC 185.  
MNC 187 1-m chip sample, slate, reddish-gray, weathered.  
MNC 188 1-m chip sample, slate saprolite, light gray, clay-rich.  
MNC 189 Composite sample, four quartz veins in area of sample MNC 188.  
MNC 190 5-m chip sample, tuff, light-gray to orange, sheared weathered.  
MNC 191 Composite sample, two quartz veins 10 to 20 cm thick, discordant;  
in area of sample MNC 190.  
MNC 192 3-m chip sample, felsic tuff, white-weathering, minor hematite  
stain.  
MNC 193 Composite sample, three quartz veins, 5 to 10 cm thick, from  
area of sample MNC 192.  
MNC 194 7-m chip sample, felsic tuff, light-gray, sheared; minor limonite  
pseudomorphs after pyrite.  
MNC 195 Composite sample of two quartz veins 0.3 to 0.6 m thick.  
MNC 196 Composite sample of felsic tuff(?) saprolite, gray, clay-rich;  
on footwall and hanging wall of veins in sample MNC 195.  
MNC 197 1-m chip sample, felsic tuff, medium dark-gray, very hard,  
weathers to light-gray, soft, punky shale.  
MNC 198 1-m chip sample, diabase dike.  
MNC 199 Composite sample, quartz vein, 10 cm thick.  
MNC 200 1-m chip sample, felsic tuff(?) saprolite, light-gray, clay-rich.  
MNC 201 Composite sample, white quartz veins in old clay pit.  
MNC 202 1.3-m chip sample, slate(?) saprolite, white, clay-rich; minor  
purple stain. From area of sample MNC 201.  
MNC 203 1.6-m chip sample, siltstone and shale, interlayered, gray to  
tan.  
MNC 204 1 m-chip sample, siltstone saprolite, gray to reddish-brown,  
clay-rich; minor very fine-grained limonite pseudomorphs  
after pyrite.  
MNC 205 Composite sample, felsic tuff, sheared; from dump of Monroe mine.  
MNC 206 Composite sample, white vein quartz boulder, from dump of Monroe  
mine.  
MNC 207 Composite sample, quartz veins, discordant, 10 to 30 cm thick.  
MNC 208 Composite sample, felsic tuff, sheared, weathered; from hanging  
wall and footwall of veins in sample MNC 207.  
MNC 209 Composite sample, two quartz veins, 10 to 15 cm thick, discordant.  
MNC 210 1-m chip sample, felsic tuff(?) saprolite, light-gray, clay rich;  
from area of sample MNC 209.  
MNC 211 Composite sample, quartz veins, 5 to 20 cm thick, discordant.  
MNC 212 1.3-m chip sample, felsic tuff(?) saprolite, light-gray, clay-  
rich. Sample includes hanging wall and footwall of two veins  
in sample MNC 211.  
MNC 213 1-m chip sample, felsic tuff(?) saprolite, light-gray to reddish-  
gray, clay-rich.  
MNC 214 Composite sample, three quartz veins, 1 to 15 cm thick, discordant;  
from area of sample MNC 213.  
MNC 215 1.6-m chip sample, saprolite, white to orange-pink, clay-rich.  
MNC 216 1 m chip sample, phyllite, greenish-gray, silicified.  
MNC 217 Composite sample, numerous thin quartz veins in area of sample  
MNC 216.  
MNC 218 Composite sample, phyllite, silicified, greenish-gray; from between  
and under quartz veins of sample MNC 219.  
MNC 219 1.6-m chip sample, quartz vein.

MNC 220 Composite sample, vein quartz, iron-stained; from dump of south pit of Dry Creek mine.

MNC 221 1-m chip sample, tuff, sheared, felsic.

MNC 222 1-m chip sample, felsic tuff saprolite, gray.

MNC 223 1.3-m chip sample, saprolite, light-gray, clay-rich. Hanging wall of zone of numerous quartz veins.

MNC 224 Composite sample, numerous white quartz veins in a zone 12 m thick.

MNC 225A 1.3-m chip sample, saprolite, light-gray, clay-rich; in footwall of quartz zone.

MNC 225 1.3-m chip sample, felsic tuff(?) saprolite, light-gray, clay-rich, sheared.

MNC 226 1.3-m chip sample, felsic tuff(?) saprolite, light-gray to orange, clay-rich, sheared.

MNC 227 1.3-m chip sample, saprolite, orange to light-gray, clay-rich.

MNC 228 1.3-m chip sample, sericite schist, light- to dark-gray. Pyrophyllite(?) prospect.

MNC 229 1.3-m chip sample, sericite schist, medium-gray, medium-grained, speckled; weathers red. Pyrophyllite(?) prospect.

MNC 230 0.6-m chip sample, sericite schist, white and gray. Pyrophyllite(?) prospect.

MNC 231 0.6-m chip sample, sericite schist, white and gray. Pyrophyllite(?) prospect.

MNC 232 1.3-m chip sample, sericite schist, white; minor dark mineral grains. Pyrophyllite(?) prospect.

MNC 233 1.3-m chip sample, sericite schist saprolite, interlayered gray and maroon Pyrophyllite(?) prospect.

MNC 234 Composite sample, quartz vein 10 to 15 cm thick. Pyrophyllite(?) prospect.

MNC 235 Composite sample, limonite pseudomorphs after pyrite, some cubes and some pyritohedrons. Pyrophyllite(?) prospect.

MNC 236 Composite sample, vein quartz, pieces 5 to 10 cm thick, from dump. Brown mine area.

MNC 237 Composite sample, tuff, very hard, silicified; minor limonite and pyrite; from dump. Brown mine area.

MNC 238 1-m chip sample, felsic tuff, weathered, sheared. Brown mine area.

MNC 239 1-m chip sample, tuff, silicified. Brown mine area.

MNC 240 1-m chip sample, felsic tuff saprolite, light-gray, clay-rich, sheared. Brown mine area.

MNC 241 Composite sample, felsic tuff, very hard, from dump. Brown mine area.

MNC 242 2-m chip sample, tuff, light-gray, silicified, sheared, weathered. Brown mine area.

MNC 243 1.3-m chip sample, felsic tuff saprolite, gray, in hanging wall of cut. Brown mine area.

MNC 244 1-m chip sample, felsic tuff, hard, sheared, lithic. Brown mine area.

#### REFERENCES CITED

- Conley, J. F., 1962, Geology and mineral resources of Moore County, North Carolina: North Carolina Department of Conservation and Development, Division of Mineral Resources, Bulletin 76, 40 p.
- Lesure, F. G., 1981, Reconnaissance geochemistry in the gold-pyrophyllite belt of northwestern Moore County, North Carolina: U.S. Geological Survey Miscellaneous Field Studies Map MF-1301, (in press).

Table 1.--Analyses of geochemical samples

[The X and Y coordinates are Universal Transverse Mercator (UTM) grid, zone 17. The X coordinate is the easting value in meters; the Y is the northing value in meters. Concentrations of iron, magnesium, calcium, and titanium are reported in percent (%); concentrations of all other elements are in parts per million (ppm). Letters preceding element symbols indicate the method of analysis: S, six-step semiquantitative spectrographic method; AA, atomic absorption; CM, colorimetric. Other samples given in the table are: N, not detected; <, amount detected is below the lowest limit of determination, which is figure shown; P, partial digestion.

Elements looked for spectrographically but not found, and the lower limits of determination in ppm are: As(200); Au(10); Bi(10); Cd(20); Sb(100); Sn(10); and W(50)]

Table 1.--Analyses of geochemical samples

sample	X-COORD.	Y-COORD.	S-FEZ	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-BE
MNC001	617,030	3,914,680	1.50	.20	1.00	.100	500	<.5	<10	500	1.0
MNC002	617,030	3,914,680	.07	.02	N	.003	N	N	<10	20	N
MNC003	618,070	3,915,880	3.00	.50	.30	.500	300	N	<10	200	<1.0
MNC004	618,060	3,915,870	.10	.02	<.05	.003	10	N	<10	20	N
MNC005	617,890	3,916,350	3.00	1.00	<.05	.700	500	N	20	500	<1.0
MNC006	617,890	3,917,460	10.00	3.00	.50	1.000	5,000	N	10	300	N
MNC007	617,890	3,917,460	1.00	.20	1.50	.150	500	N	<10	50	<1.0
MNC008	617,980	3,917,410	3.00	1.00	1.00	.500	1,000	N	10	300	<1.0
MNC009	617,410	3,918,670	3.00	1.00	.05	1.000	700	N	50	500	1.5
MNC010	614,410	3,918,670	20.00	.07	<.05	.500	30	N	N	N	1.0
MNC011	618,530	3,915,980	1.00	.15	.10	.150	100	N	<10	500	<1.0
MNC012	618,530	3,915,980	.70	.05	<.05	.007	70	N	<10	20	N
MNC013	620,150	3,916,550	1.50	.50	.30	.200	700	N	<10	700	1.5
MNC014	620,150	3,916,650	1.00	.10	.70	.100	1,500	N	<10	300	<1.0
MNC015	620,180	3,916,620	1.00	.20	1.50	.100	200	N	10	300	1.0
MNC016	621,760	3,918,370	.10	<.02	<.05	.001	70	.7	<10	<20	N
MNC017	621,620	3,918,840	<.05	<.02	<.05	N	200	N	<10	20	N
MNC018	621,620	3,918,840	1.50	.15	<.05	.200	300	N	10	700	2.0
MNC019	621,620	3,918,840	1.50	.15	N	.150	50	N	10	500	1.5
MNC020	626,060	3,921,070	1.50	.10	<.05	.150	50	N	15	700	2.0
MNC021	626,060	3,921,070	1.00	.05	N	.100	70	N	10	300	1.5
MNC022	626,060	3,921,070	3.00	.50	N	.300	700	N	10	700	1.5
MNC023	626,080	3,921,020	.70	.15	.05	.100	150	N	10	300	1.0
MNC024	626,050	3,920,980	1.50	.10	N	.200	200	N	15	700	2.0
MNC025	626,060	3,920,970	1.50	.05	N	.200	100	N	10	500	1.5
MNC026	626,060	3,920,970	1.00	.05	<.05	.100	150	N	10	500	1.0
MNC027	626,060	3,920,960	1.00	.07	<.05	.150	1,000	N	10	500	2.0
MNC028	626,070	3,920,940	.20	.02	<.05	.030	500	N	<10	150	<1.0
MNC029	626,070	3,920,940	1.00	.07	N	.150	100	N	15	700	2.0
MNC030	626,080	3,920,930	1.00	.03	N	.100	70	N	10	500	1.5
MNC031	626,080	3,920,930	1.00	.03	N	.100	150	N	10	700	1.5
MNC032	626,080	3,920,910	1.00	.07	N	.150	200	N	10	500	1.5
MNC033	626,090	3,920,890	.70	.02	<.05	.070	30	N	20	700	1.5
MNC034	626,100	3,920,860	1.00	.07	<.05	.100	50	N	20	300	1.5
MNC035	625,680	3,919,870	1.00	.20	N	.100	500	N	10	500	1.5
MNC036	625,710	3,919,850	1.50	.15	N	.150	300	N	10	200	1.5
MNC037	625,730	3,919,810	.30	.03	<.05	.050	150	N	<10	100	<1.0
MNC038	625,730	3,919,810	1.50	.30	N	.150	200	N	20	700	2.0
MNC039	625,750	3,919,780	1.00	.10	N	.100	150	N	10	500	1.0
MNC040	625,760	3,919,770	7.00	<.02	<.05	.150	50	N	<10	200	2.0
MNC041	625,760	3,919,770	.05	<.02	N	.070	N	N	<10	100	N
MNC042	625,770	3,919,760	.10	<.02	N	.150	N	N	10	200	<1.0
MNC043	625,770	3,919,760	.20	<.02	<.05	.020	20	N	<10	100	<1.0
MNC044	625,770	3,919,760	2.00	.07	N	.100	50	N	10	1,000	1.5
MNC045	625,780	3,919,740	.50	<.02	N	.150	10	N	20	300	1.0

Table 1.--Analyses of geochemical samples--Continued

sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NH	S-NI	S-PB	S-SC	S-SR	S-V
MNC001	N	<5	15	N	N	N	<5	20	5	150	<10
MNC002	N	<5	<5	N	N	N	<5	N	N	N	N
MNC003	<5	30	10	N	N	<10	5	N	15	100	100
MNC004	N	<5	<5	N	N	N	<5	N	N	N	<10
MNC005	15	30	20	N	N	N	20	N	30	N	300
MNC006	30	150	150	N	N	N	50	N	50	100	1,000
MNC007	N	<5	7	N	N	N	<5	N	5	300	10
MNC008	20	15	20	N	N	N	15	N	30	150	500
MNC009	10	30	20	N	N	N	20	N	30	150	300
MNC010	500	50	500	N	5	N	70	70	5	N	50
MNC011	N	<5	10	N	N	N	<5	N	5	N	10
MNC012	N	<5	<5	N	N	N	<5	N	N	N	<10
MNC013	N	<5	<5	20.0	N	N	<5	N	10	<100	20
MNC014	N	<5	15	N	N	N	<5	10	7	150	<10
MNC015	N	<5	5	N	N	N	<5	N	<5	200	10
MNC016	N	<5	5	N	N	N	<5	50	N	N	<10
MNC017	<5	5	<5	N	N	N	5	N	N	N	<10
MNC018	N	<5	7	50.0	N	N	<5	N	15	N	20
MNC019	N	<5	7	N	N	N	<5	20	15	N	20
MNC020	N	<5	20	N	N	N	<5	15	10	N	20
MNC021	N	<5	10	N	N	N	<5	10	10	N	10
MNC022	5	10	20	20.0	N	N	7	N	30	N	150
MNC023	<5	<5	5	30.0	N	N	5	N	7	N	<10
MNC024	<5	<5	7	N	N	<10	5	20	15	N	10
MNC025	N	<5	<5	N	N	N	<5	15	15	N	<10
MNC026	N	<5	<5	N	N	N	<5	15	10	N	<10
MNC027	15	<5	5	N	N	N	7	30	15	N	10
MNC028	<5	<5	<5	N	N	N	5	N	15	N	<10
MNC029	N	<5	5	N	10	N	5	N	15	N	<10
MNC030	N	<5	<5	N	N	N	<5	N	10	N	<10
MNC031	N	<5	5	N	N	N	<5	N	7	N	<10
MNC032	5	<5	<5	N	<5	N	<5	N	10	N	10
MNC033	N	<5	7	70.0	15	N	<5	50	15	100	<10
MNC034	N	<5	<5	20.0	30	N	<5	N	10	N	<10
MNC035	N	<5	7	N	N	N	<5	N	7	N	<10
MNC036	N	<5	5	N	N	N	<5	N	10	N	<10
MNC037	N	5	15	N	N	N	5	N	<5	N	<10
MNC038	N	<5	7	20.0	N	N	<5	N	15	N	10
MNC039	N	<5	<5	N	N	N	<5	<10	10	N	<10
MNC040	<5	10	5	50.0	10	10	<5	30	10	100	10
MNC041	N	<5	<5	N	N	N	<5	N	5	N	<10
MNC042	N	<5	5	N	10	N	<5	N	20	N	10
MNC043	N	<5	N	N	N	N	5	N	<5	N	<10
MNC044	N	<5	5	N	N	N	<5	N	15	N	N
MNC045	N	<5	7	50.0	5	N	5	<10	15	N	15

Table 1.--Analyses of geochemical samples--Continued

sample	S-Y	S-ZN	S-LR	AA-AU-P	AA-CU-P	AA-PB-P	AA-ZN-P	CM-MO
MNC001	30	N	200	.06	20	<25	44	N
MNC002	N	N	N	.06	20	N	<25	N
MNC003	20	N	200	.06	20	<25	<25	N
MNC004	N	N	N	.04	<10	N	<25	N
MNC005	30	N	150	.04	30	<25	52	4
MNC006	10	N	50	.02	70	<25	86	4
MNC007	20	N	200	<.02	10	<25	63	N
MNC008	30	N	70	.04	30	<25	82	N
MNC009	50	N	300	.02	30	<25	82	4
MNC010	70	N	150	.02	420	100	<25	8
MNC011	<10	N	150	.04	10	<25	<25	4
MNC012	N	N	N	<.02	<10	N	<25	N
MNC013	50	N	200	.02	<10	<25	<25	4
MNC014	20	N	150	.02	<10	<25	44	N
MNC015	10	N	100	<.02	<10	<25	<25	N
MNC016	N	N	N	<.02	10	110	<25	N
MNC017	N	N	N	.02	10	<25	<25	N
MNC018	70	N	300	.02	10	<25	<25	N
MNC019	15	N	200	.02	<10	<25	<25	N
MNC020	10	N	300	.02	20	<25	<25	N
MNC021	10	N	200	.02	<10	<25	<25	N
MNC022	30	N	300	.02	30	<25	74	N
MNC023	50	N	200	<.02	<10	<25	30	N
MNC024	15	N	500	.02	<10	35	<25	N
MNC025	<10	N	300	.04	10	25	<25	N
MNC026	10	N	300	<.02	10	65	<25	N
MNC027	10	N	300	.02	<10	65	30	N
MNC028	N	N	50	<.02	10	<25	<25	N
MNC029	30	N	300	<.02	10	<25	<25	4
MNC030	10	N	200	N	10	60	<25	N
MNC031	10	N	200	N	1,200	<25	<25	N
MNC032	50	N	500	<.02	<10	<25	<25	4
MNC033	50	N	150	.02	<10	<25	<25	4
MNC034	30	N	500	.08	20	<25	<25	10
MNC035	30	N	200	<.02	<10	<25	<25	N
MNC036	20	N	300	<.02	20	<25	<25	N
MNC037	<10	N	100	.08	<10	<25	<25	N
MNC038	50	N	300	.08	10	<25	<25	N
MNC039	<10	N	200	.22	<10	35	<25	N
MNC040	20	<200	200	.24	10	<25	<25	4
MNC041	10	N	150	.08	10	N	<25	N
MNC042	70	N	200	.68	<10	<25	<25	N
MNC043	<10	N	70	.04	<10	<25	<25	N
MNC044	10	N	200	.04	<10	<25	5	N
MNC045	70	N	700	.10	20	<25	<25	N

Table 1.--Analyse of geochemical samples--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-Ti%	S-MN	S-AG	S-B	S-BA	S-BE
MNC046	625,780	3,919,730	.10	<.02	<.05	.100	10	N	<10	20	N
MNC047	625,770	3,919,760	1.00	<.02	N	.100	10	N	10	150	<1.0
MNC048	625,780	3,919,700	.50	<.02	N	.150	N	N	10	150	<1.0
MNC049	625,780	3,919,710	.10	<.02	<.05	.150	N	N	10	150	<1.0
MNC050	625,780	3,919,720	.15	<.02	N	.150	N	N	<10	100	N
MNC051	626,300	3,920,680	1.00	.10	N	.100	70	N	10	500	1.0
MNC052	626,270	3,920,740	.70	.10	N	.070	150	N	10	500	1.0
MNC053	626,270	3,920,740	.50	.02	<.05	.030	30	N	<10	150	<1.0
MNC054	626,270	3,920,740	1.50	.20	N	.150	200	N	20	1,000	1.5
MNC055	626,270	3,920,740	.05	<.02	N	.001	10	N	<10	30	N
MNC056	626,270	3,920,740	1.50	.15	N	.150	100	N	10	700	1.5
MNC057	626,260	3,920,750	.70	.02	N	.020	30	<.5	<10	300	<1.0
MNC058	626,260	3,920,750	.70	.30	N	.100	50	<.5	20	1,000	1.5
MNC059	626,250	3,920,760	.50	.10	N	.100	100	N	15	150	1.5
MNC060	626,240	3,920,770	.70	.02	<.05	.030	50	N	<10	100	<1.0
MNC061	626,240	3,920,770	1.00	.10	N	.100	150	N	20	150	1.0
MNC062	626,240	3,920,770	.07	<.02	<.05	.003	100	N	<10	50	N
MNC063	626,240	3,920,770	.70	.07	N	.150	150	N	10	150	1.0
MNC064	626,220	3,920,780	.10	<.02	<.05	.005	20	N	<10	20	N
MNC065	626,220	3,920,750	.70	.03	N	.100	150	N	20	150	1.0
MNC066	625,600	3,920,750	.50	.05	N	.070	70	1.5	<10	200	1.0
MNC067	625,630	3,920,750	.50	.07	N	.070	150	N	<10	200	1.0
MNC068	625,660	3,920,740	.50	.05	N	.070	50	N	10	300	<1.0
MNC069	625,670	3,920,500	1.00	.05	N	.070	70	<.5	10	500	<1.0
MNC070	625,670	3,920,500	.50	.02	N	.070	50	N	<10	150	<1.0
MNC071	625,660	3,920,520	1.50	.07	N	.070	100	3.0	10	500	1.5
MNC072	625,660	3,920,520	2.00	.05	N	.070	70	3.0	10	300	1.0
MNC073	625,660	3,920,520	.30	<.02	<.05	.005	10	N	<10	50	N
MNC074	625,690	3,920,570	.30	.02	N	.070	70	N	10	200	<1.0
MNC075	625,630	3,920,480	3.00	.07	N	.070	200	N	10	500	1.0
MNC076	625,650	3,920,460	1.00	.07	N	.100	150	.5	10	500	1.5
MNC077	625,650	3,920,460	.30	.05	<.05	.070	100	N	<10	300	<1.0
MNC078	625,650	3,920,460	1.00	.05	N	.150	100	N	<10	300	1.0
MNC079	625,690	3,920,380	.70	.05	N	.070	50	<.5	15	200	<1.0
MNC080	625,690	3,920,380	.50	.07	N	.070	70	N	20	150	<1.0
MNC081	625,690	3,920,380	.70	.10	N	.100	100	N	15	300	1.0
MNC082	625,620	3,920,430	.70	.07	N	.100	150	N	10	300	1.0
MNC083	625,620	3,920,430	.50	.02	N	.070	150	<.5	<10	200	1.0
MNC084	625,620	3,920,430	.70	.10	N	.100	200	<.5	<10	300	<1.0
MNC085	625,620	3,920,430	.50	.10	N	.100	200	<.5	<10	500	1.5
MNC086	625,520	3,920,550	.70	.15	N	.070	150	N	15	1,000	2.0
MNC087	625,670	3,920,640	1.50	.07	N	.100	30	<.5	10	500	1.5
MNC088	625,670	3,920,640	.10	<.02	<.05	N	10	N	<10	20	N
MNC089	625,680	3,920,910	.70	.10	N	.070	50	<.5	10	700	1.0
MNC090	625,680	3,920,910	1.00	.15	N	.150	1,500	N	20	700	2.0



Table 1.--Analyses of geochemical samples--Continued

sample	S-CU	S-CR	S-CU	S-LA	S-MO	S-N3	S-NI	S-PB	S-SC	S-SR	S-V
MNC046	N	<5	N	N	N	N	5	N	<5	N	<10
MNC047	N	<5	5	20.0	N	N	5	N	10	N	<10
MNC048	N	<5	<5	N	15	N	<5	N	7	N	<10
MNC049	N	<5	5	30.0	N	N	<5	N	15	N	<10
MNC050	N	<5	<5	20.0	N	N	<5	N	10	N	10
MNC051	N	5	<5	N	20	N	<5	N	5	N	<10
MNC052	N	<5	10	N	N	N	<5	<10	7	N	N
MNC053	N	<5	<5	N	N	N	5	N	N	N	<10
MNC054	N	<5	7	N	15	N	<5	N	15	N	<10
MNC055	N	<5	7	N	N	N	<5	N	N	N	<10
MNC056	N	<5	<5	N	10	N	<5	N	10	N	<10
MNC057	N	<5	5	N	5	N	<5	N	<5	N	N
MNC058	N	<5	5	N	N	N	<5	N	10	N	N
MNC059	N	<5	5	50.0	N	N	<5	N	10	N	N
MNC060	N	<5	10	70.0	N	N	5	20	7	N	<10
MNC061	N	<5	7	50.0	<5	N	<5	<10	15	N	<10
MNC062	N	<5	<5	N	N	N	5	N	N	N	<10
MNC063	N	<5	7	70.0	N	N	<5	10	15	N	<10
MNC064	N	5	<5	50.0	N	N	5	N	N	N	<10
MNC065	N	<5	7	50.0	N	N	<5	10	10	N	<10
MNC066	N	<5	5	N	200	N	<5	10	5	N	<10
MNC067	N	<5	7	N	15	N	5	<10	5	N	<10
MNC068	N	<5	<5	N	N	N	5	N	5	N	<10
MNC069	N	<5	10	N	5	N	<5	N	5	N	20
MNC070	N	<5	5	N	N	N	<5	N	<5	N	<10
MNC071	N	<5	10	N	30	N	5	20	5	N	30
MNC072	N	<5	10	N	30	N	<5	10	5	N	30
MNC073	N	<5	<5	N	5	N	5	N	N	N	<10
MNC074	N	<5	<5	N	50	N	<5	N	5	N	<10
MNC075	N	10	7	N	N	N	<5	<10	20	N	200
MNC076	N	<5	<5	N	N	N	<5	20	5	N	10
MNC077	N	<5	5	N	N	N	5	10	<5	N	<10
MNC078	N	<5	5	N	N	N	<5	30	7	N	10
MNC079	N	<5	5	N	N	N	<5	N	<5	N	10
MNC080	N	<5	<5	N	N	N	<5	N	<5	N	<10
MNC081	N	<5	<5	N	N	N	<5	N	5	N	<10
MNC082	N	<5	7	N	N	N	5	150	5	N	10
MNC083	N	<5	5	N	5	N	<5	50	<5	N	<10
MNC084	N	<5	5	N	N	N	<5	N	<5	N	<10
MNC085	N	<5	5	N	N	N	<5	N	5	N	10
MNC086	N	<5	5	N	<5	N	<5	<10	7	N	<10
MNC087	N	<5	5	N	5	N	<5	<10	10	N	<10
MNC088	N	5	5	N	14	N	5	N	N	N	N
MNC089	N	<5	10	N	<5	N	<5	N	10	N	N
MNC090	5	<5	<5	N	N	N	5	<10	15	N	10

Table 1.--Analyses of geochemical samples--Continued

Sample	S-Y	S-Zn	S-Zr	AA-Au-P	AA-Cu-P	AA-Pb-P	AA-Zn-P	CM-MO
MNCU46	<10	N	300	.04	<10	<25	<25	N
MNCU47	70	N	200	.14	10	<25	<25	N
MNCU48	20	N	300	.04	10	<25	<25	8
MNCU49	30	N	300	.02	<10	<25	<25	N
MNCU50	30	N	500	.04	<10	<25	<25	N
MNCU51	20	N	200	.04	<10	<25	<25	N
MNCU52	10	N	150	.08	<10	<25	<25	N
MNCU53	N	N	30	.16	10	<25	<25	4
MNCU54	20	N	300	.10	<10	<25	<25	4
MNCU55	N	N	N	.04	<10	<25	<25	4
MNCU56	20	N	700	.12	20	<25	<25	4
MNCU57	<10	N	30	.46	10	<25	40	N
MNCU58	20	N	200	.18	20	<25	<25	N
MNCU59	20	N	300	.18	<10	<25	25	N
MNCU60	30	N	100	.12	20	25	<25	N
MNCU61	50	N	500	.24	10	<25	150	N
MNCU62	N	N	N	.06	<10	<25	<25	N
MNCU63	30	N	300	.30	<10	<25	<25	N
MNCU64	N	N	N	<.02	<10	<25	<25	N
MNCU65	30	N	300	.14	10	25	26	N
MNCU66	20	N	150	.66	10	<25	<25	180
MNCU67	15	N	150	.08	<10	<25	<25	N
MNCU68	10	N	150	.16	<10	<25	<25	N
MNCU69	15	N	100	.90	20	<25	50	N
MNCU70	10	N	50	.22	10	<25	<25	N
MNCU71	15	N	100	2.10	10	<25	<25	8
MNCU72	15	N	100	1.30	30	25	<25	25
MNCU73	<10	N	N	1.00	<10	35	<25	4
MNCU74	10	N	150	.06	<10	<25	<25	N
MNCU75	10	N	150	.42	20	<25	<25	15
MNCU76	20	N	150	1.60	<10	35	<25	N
MNCU77	10	N	100	.06	<10	<25	<25	N
MNCU78	15	N	100	.92	10	30	<25	N
MNCU79	15	N	100	.20	20	<25	<25	N
MNCU80	20	N	200	.10	20	<25	<25	N
MNCU81	30	N	150	.06	10	<25	<25	N
MNCU82	15	N	150	.28	10	170	<25	N
MNCU83	15	N	70	2.00	10	35	35	4
MNCU84	15	N	100	.20	30	N	<25	N
MNCU85	20	N	150	.12	<10	<25	<25	N
MNCU86	20	N	150	.04	70	<25	<25	N
MNCU87	15	N	200	.10	10	<25	26	N
MNCU88	N	N	N	N	10	N	<25	N
MNCU89	10	N	150	.06	<10	<25	<25	N
MNCU90	20	N	300	.06	1,400	<25	<25	N

Table 1.--Analyses of geochemical samples--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-Ti%	S-MN	S-AG	S-B	S-BA	S-BE
MNC091	625,820	3,920,910	1.00	.10	N	.100	500	N	10	700	1.5
MNC092	625,830	3,920,900	.30	.05	N	.070	30	N	15	500	1.0
MNC093	625,830	3,920,900	.30	.07	N	.070	20	N	10	500	1.0
MNC094	625,840	3,920,900	1.50	.07	N	.100	50	N	10	700	1.5
MNC095	625,840	3,920,890	1.00	.15	N	.100	50	.5	10	700	1.5
MNC096	625,840	3,920,890	.20	.02	<.05	.050	50	N	<10	200	<1.0
MNC097	625,840	3,920,890	1.00	.10	N	.100	70	N	10	700	1.5
MNC098	625,720	3,920,760	.70	.07	N	.100	50	N	10	300	1.0
MNC099	625,720	3,920,760	.20	.02	<.05	.070	30	N	<10	100	N
MNC100	625,720	3,920,760	1.00	.10	N	.100	50	N	10	500	1.0
MNC101	625,720	3,920,760	.70	.07	N	.070	50	<.5	10	300	<1.0
MNC102	625,690	3,920,700	1.00	.07	N	.070	100	<.5	10	300	1.5
MNC103	625,640	3,920,680	.70	.10	N	.070	100	N	10	500	1.0
MNC104	625,860	3,920,580	.15	.02	<.05	.010	20	N	<10	50	N
MNC105	625,840	3,920,660	1.00	.07	N	.150	50	N	20	700	2.0
MNC106	625,920	3,920,440	.70	.07	N	.100	50	N	10	500	1.0
MNC107	625,810	3,920,940	.50	.05	<.05	.030	50	N	<10	500	1.0
MNC108	626,350	3,921,020	1.50	.10	<.05	.100	70	N	10	500	1.0
MNC109	626,340	3,921,000	2.00	.20	<.05	.150	200	N	10	700	1.0
MNC110	626,340	3,921,000	2.00	.15	<.05	.100	200	N	10	500	1.0
MNC111	636,340	3,921,000	2.00	.15	<.05	.100	100	N	10	700	1.0
MNC112	626,340	3,921,000	1.50	.15	<.05	.100	300	N	10	700	1.0
MNC113	626,340	3,920,980	.50	.07	<.05	.050	50	N	<10	200	1.0
MNC114	626,340	3,920,980	.70	.05	<.05	.050	50	N	<10	500	1.0
MNC115	626,330	3,920,960	1.00	.10	<.05	.050	100	N	10	500	1.0
MNC116	626,190	3,920,630	.30	.02	<.05	.030	50	N	<10	300	<1.0
MNC117	626,190	3,920,630	1.00	.03	<.05	.007	50	N	<10	200	<1.0
MNC118	626,200	3,920,660	1.50	.07	<.05	.150	70	N	10	500	2.0
MNC119	626,200	3,920,660	1.00	.03	<.05	.050	70	N	10	300	1.0
MNC120	626,550	3,921,060	1.00	.10	<.05	.050	70	N	10	700	1.0
MNC121	626,540	3,921,340	2.00	.07	<.05	.150	70	N	10	500	1.0
MNC122	634,760	3,925,750	.20	.05	.10	.030	70	N	<10	1,000	N
MNC123	634,760	3,925,750	5.00	1.00	.07	.200	1,500	N	<10	500	1.0
MNC124	634,760	3,925,750	1.50	.15	.10	.150	300	N	<10	500	1.0
MNC125	634,760	3,925,750	5.00	1.00	1.00	.300	1,000	N	<10	700	<1.0
MNC126	634,760	3,925,750	2.00	.30	.30	.200	700	N	<10	700	<1.0
MNC127	634,780	3,925,850	5.00	.50	.70	.300	700	N	<10	700	1.0
MNC128	634,800	3,925,840	3.00	.50	.20	.200	1,000	N	<10	700	1.0
MNC129	634,820	3,925,830	10.00	1.50	.05	.500	1,500	N	10	700	1.0
MNC130	634,830	3,925,820	5.00	.70	<.05	.300	300	N	10	700	1.0
MNC131	634,830	3,925,820	2.00	.30	.07	.150	300	N	<10	500	<1.0
MNC132	634,830	3,925,820	2.00	.30	.07	.150	300	N	<10	700	<1.0
MNC133	634,830	3,925,820	2.00	.05	<.05	.030	2,000	N	<10	1,500	N
MNC134	634,830	3,925,820	2.00	.20	.07	.200	300	N	<10	700	<1.0
MNC135	634,840	3,925,810	5.00	.70	.07	.200	300	N	<10	700	1.0

Table 1.--Analyses of geochemical samples--Continued

sample	S-Cl	S-ClR	S-ClU	S-LA	S-MU	S-NJ	S-NI	S-PB	S-SC	S-SR	S-V
MNC091	5	<5	<5	N	N	N	<5	70	10	N	<10
MNC092	N	<5	7	N	N	N	5	10	5	N	<10
MNC093	N	<5	5	N	N	N	5	N	5	N	<10
MNC094	N	<5	7	N	N	N	<5	20	10	N	10
MNC095	N	<5	5	N	N	N	<5	N	10	N	10
MNC096	N	<5	5	N	N	N	<5	N	N	N	N
MNC097	N	<5	<5	N	N	N	<5	<10	10	N	<10
MNC098	N	<5	10	N	5	N	<5	N	7	N	<10
MNC099	N	5	5	N	N	N	5	N	N	N	N
MNC100	N	<5	<5	N	5	N	<5	<10	7	N	15
MNC101	N	<5	10	N	15	N	<5	N	5	N	<10
MNC102	N	<5	<5	N	10	N	5	<10	7	N	<10
MNC103	N	<5	7	N	20	N	5	N	<5	N	<10
MNC104	N	5	<5	N	N	N	5	N	N	N	N
MNC105	N	<5	5	N	N	N	<5	N	15	N	15
MNC106	<5	<5	<5	N	5	N	<5	N	7	N	10
MNC107	<5	20	<5	50.0	150	10	<5	15	<5	100	10
MNC108	<5	10	<5	50.0	5	10	<5	10	5	100	10
MNC109	<5	10	<5	50.0	20	10	<5	10	10	100	15
MNC110	<5	10	<5	50.0	5	10	<5	10	10	100	10
MNC111	<5	10	<5	50.0	30	10	<5	10	10	100	10
MNC112	<5	10	<5	50.0	<5	10	5	10	10	100	10
MNC113	<5	10	<5	50.0	5	10	5	10	<5	100	10
MNC114	<5	10	<5	50.0	15	10	5	10	5	100	10
MNC115	<5	10	<5	50.0	<5	10	5	20	5	100	10
MNC116	<5	10	<5	200.0	<5	10	5	<10	<5	150	10
MNC117	<5	10	<5	50.0	<5	10	5	10	<5	100	10
MNC118	<5	10	<5	100.0	<5	10	5	10	5	100	10
MNC119	<5	10	<5	70.0	<5	10	5	10	5	100	10
MNC120	<5	5	<5	50.0	<5	10	5	20	5	100	10
MNC121	<5	5	<5	50.0	<5	10	5	20	10	100	10
MNC122	<5	10	<5	50.0	<5	<10	5	<10	<5	100	10
MNC123	10	20	20	50.0	<5	10	10	20	20	100	100
MNC124	<5	5	<5	50.0	<5	10	5	15	5	100	20
MNC125	<5	15	50	50.0	<5	10	5	20	10	200	70
MNC126	<5	10	5	50.0	N	10	5	20	10	200	30
MNC127	<5	10	5	50.0	N	10	5	20	20	200	50
MNC128	10	5	5	50.0	N	10	5	50	20	200	30
MNC129	20	50	70	100.0	<5	10	20	20	30	150	150
MNC130	5	20	15	30.0	N	10	10	20	20	100	100
MNC131	5	15	10	50.0	N	10	7	20	10	100	70
MNC132	<5	10	5	50.0	N	10	5	20	10	150	30
MNC133	<5	70	20	50.0	20	<10	20	<10	<5	100	10
MNC134	<5	10	<5	50.0	<5	10	<5	20	10	150	20
MNC135	5	20	50	100.0	<5	10	5	20	20	200	100

Table 1.--Analyses of geochemical samples--Continued

sample	S-Y	S-Zn	S-Zr	AA-Au-P	AA-Cu-P	AA-Pb-P	AA-Zn-P	CM-MO
MNC091	15	N	150	.16	10	40	28	N
MNC092	15	N	200	.20	<10	<25	38	N
MNC093	10	N	100	.06	<10	<25	<25	N
MNC094	10	N	150	.30	<10	<25	41	N
MNC095	10	N	300	.64	<10	<25	24	N
MNC096	N	N	50	.10	10	<25	<25	N
MNC097	10	N	300	.48	10	30	<25	N
MNC098	15	N	150	.12	160	<25	<25	N
MNC099	N	N	10	.08	<10	<25	<25	N
MNC100	15	N	200	.16	<10	<25	<25	N
MNC101	20	N	100	.38	<10	<25	<25	4
MNC102	30	N	150	.04	<10	<25	<25	N
MNC103	10	N	50	.04	10	<25	<25	N
MNC104	N	N	15	N	<10	N	<25	N
MNC105	20	N	300	.04	<10	<25	<25	N
MNC106	30	N	200	.06	<10	<25	<25	N
MNC107	10	<200	50	.04	<10	<25	<25	120
MNC108	10	<200	150	.14	10	<25	<25	N
MNC109	20	<200	200	.18	20	<25	<25	15
MNC110	20	<200	200	1.10	10	<25	<25	N
MNC111	20	<200	150	2.30	10	<25	<25	15
MNC112	20	<200	150	1.10	10	<25	<25	N
MNC113	10	<200	50	.10	<10	<25	<25	8
MNC114	10	<200	50	.54	<10	<25	<25	15
MNC115	10	<200	100	.14	<10	<25	<25	N
MNC116	10	<200	30	.10	10	<25	<25	N
MNC117	<10	<200	<10	.66	10	<25	<25	N
MNC118	20	<200	150	.16	<10	<25	28	N
MNC119	20	<200	100	.30	<10	<25	<25	N
MNC120	10	<200	100	.04	<10	<25	<25	N
MNC121	20	<200	200	<.02	<10	<25	<25	N
MNC122	<10	<200	30	.06	<10	<25	<25	N
MNC123	20	<200	150	<.02	20	<25	74	N
MNC124	15	<200	150	.02	10	<25	32	N
MNC125	20	<200	150	.42	10	<25	76	N
MNC126	30	<200	200	.04	10	<25	38	N
MNC127	30	<200	200	<.02	1, 100	<25	32	N
MNC128	20	<200	200	<.02	10	40	36	N
MNC129	50	<200	200	<.02	30	<25	60	N
MNC130	20	<200	150	<.02	20	<25	36	N
MNC131	20	<200	150	<.02	20	<25	42	N
MNC132	30	<200	150	<.02	10	<25	50	N
MNC133	<10	<200	30	.04	30	<25	N	6
MNC134	30	<200	200	.02	10	<25	34	N
MNC135	50	<200	100	.02	30	<25	48	N

Table 1.--Analyses of geochemical samples--Continued

sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-Ti%	S-MN	S-AG	S-B	S-BA	S-BE
MNC136	635,000	3,925,470	2.00	.20	.70	.200	700	N	<10	700	1.0
MNC137	635,000	3,925,470	7.00	1.00	1.50	.300	3,000	N	<10	700	1.0
MNC138	642,460	3,925,470	7.00	2.00	1.50	.500	1,500	N	<10	500	<1.0
MNC139	642,460	3,929,660	.50	.02	.10	.200	50	N	<10	50	<1.0
MNC140	642,460	3,929,660	2.00	<.02	.10	.200	30	N	<10	30	<1.0
MNC141	642,460	3,929,660	5.00	<.02	.07	.300	20	N	<10	20	<1.0
MNC142	642,460	3,929,640	5.00	<.02	.10	.200	20	N	<10	20	N
MNC143	642,460	3,929,640	3.00	<.02	.07	.300	20	N	<10	20	N
MNC144	642,460	3,929,640	1.50	<.02	.10	.200	20	N	<10	20	N
MNC145	642,460	3,929,620	5.00	<.02	.20	.500	50	N	10	20	N
MNC146	642,460	3,929,620	5.00	<.02	.15	.300	20	N	<10	20	N
MNC147	642,460	3,929,620	10.00	<.02	.07	.300	20	N	<10	20	N
MNC148	643,500	3,930,100	15.00	.03	<.05	.300	30	N	20	700	<1.0
MNC149	643,500	3,930,100	2.00	.03	<.05	.500	70	N	20	500	<1.0
MNC150	643,500	3,930,100	.50	.02	.05	.500	30	N	10	300	<1.0
MNC151	643,500	3,930,100	.50	.02	.05	.300	20	N	20	300	<1.0
MNC152	643,500	3,930,100	15.00	.70	.07	.500	300	N	10	500	<1.0
MNC153	642,540	3,930,780	1.00	.10	1.50	.150	500	N	10	500	1.0
MNC154	642,540	3,930,780	1.00	.05	.15	.150	100	N	<10	1,000	<1.0
MNC155	642,750	3,929,740	5.00	.07	<.05	.300	200	N	10	50	N
MNC156	642,750	3,929,740	15.00	.02	<.05	.500	70	N	10	20	N
MNC157	642,640	3,929,760	1.00	<.02	<.05	.200	20	N	<10	500	N
MNC158	642,640	3,929,760	7.00	<.02	<.05	.300	30	N	20	500	<1.0
MNC159	642,560	3,929,710	7.00	.10	.30	.500	300	N	20	1,000	1.0
MNC160	642,560	3,929,710	5.00	.07	.15	.300	50	N	20	1,000	1.0
MNC161	642,560	3,929,710	3.00	.07	.20	.200	50	N	20	700	1.0
MNC162	644,450	3,929,900	10.00	3.00	7.00	.500	1,500	N	<10	50	<1.0
MNC163	644,450	3,929,900	5.00	.10	7.00	.300	700	N	<10	50	<1.0
MNC164	644,080	3,929,940	15.00	.15	<.05	.700	1,500	N	50	500	1.0
MNC165	639,780	3,922,660	7.00	.70	.07	.300	700	N	10	500	1.0
MNC166	639,760	3,922,680	5.00	.70	<.05	.200	700	<.5	10	500	1.0
MNC167	639,760	3,922,680	5.00	.70	<.05	.200	500	<.5	10	500	1.0
MNC168	639,760	3,922,650	5.00	.50	<.05	.200	500	N	10	500	1.0
MNC169	639,730	3,922,660	5.00	.70	.07	.200	1,000	N	10	500	1.0
MNC170	693,600	3,922,620	3.00	.30	<.05	.200	70	N	10	500	1.0
MNC171	639,600	3,922,620	3.00	.30	<.05	.200	70	N	10	500	1.0
MNC172	639,600	3,922,620	3.00	.30	<.05	.300	70	N	10	700	1.0
MNC173	610,820	3,907,920	15.00	3.00	5.00	.700	1,500	N	10	500	<1.0
MNC174	639,390	3,924,010	.20	.03	.05	.005	20	N	<10	100	N
MNC175	639,390	3,924,010	7.00	.50	.20	.300	200	N	10	700	1.0
MNC176	639,950	3,923,760	5.00	.50	3.00	.200	500	N	10	300	1.0
MNC177	639,970	3,923,760	.30	.05	.07	.020	70	N	<10	50	<1.0
MNC178	639,970	3,923,760	7.00	1.00	3.00	.300	1,000	N	10	500	1.0
MNC179	637,270	3,920,780	10.00	1.00	1.00	.500	300	N	10	1,000	1.0
MNC180	637,220	3,920,780	.20	.02	.05	.020	20	N	<10	200	<1.0

Table 1.--Analyses of Geochemical samples--Continued

sample	S-CU	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SC	S-SR	S-V
MNCT36	5	10	150	100.0	N	10	<5	20	10	200	20
MNCT37	10	20	1,000	100.0	N	10	10	50	20	300	150
MNCT38	15	30	150	70.0	N	10	10	20	30	200	150
MNCT39	<5	10	<5	50.0	<5	10	<5	10	10	100	50
MNCT40	<5	15	<5	50.0	<5	10	<5	10	10	100	50
MNCT41	<5	15	<5	70.0	5	10	<5	<10	10	100	100
MNCT42	<5	10	<5	50.0	5	10	<5	<10	15	100	100
MNCT43	<5	20	<5	70.0	5	10	<5	<10	20	100	100
MNCT44	<5	15	<5	70.0	<5	10	<5	<10	10	100	50
MNCT45	<5	20	<5	50.0	10	10	<5	<10	20	100	150
MNCT46	<5	20	7	50.0	5	10	<5	<10	15	100	70
MNCT47	<5	20	7	50.0	7	10	<5	10	15	100	150
MNCT48	<5	20	10	50.0	<5	10	<5	10	15	200	70
MNCT49	<5	15	<5	50.0	N	10	<5	30	20	200	70
MNCT50	<5	20	<5	100.0	<5	10	<5	20	10	300	70
MNCT51	<5	10	<5	50.0	<5	10	<5	20	20	200	70
MNCT52	20	20	30	50.0	5	10	30	20	30	200	200
MNCT53	<5	10	<5	50.0	N	10	5	20	5	500	20
MNCT54	<5	10	5	50.0	N	10	5	20	5	200	10
MNCT55	<5	20	<5	50.0	<5	10	5	<10	30	150	200
MNCT56	<5	10	<5	50.0	5	10	5	<10	20	100	500
MNCT57	5	10	1,500	50.0	2,000	10	10	20	5	200	200
MNCT58	<5	10	20	50.0	50	10	10	20	20	300	70
MNCT59	<5	10	20	50.0	15	10	5	20	20	300	100
MNCT60	<5	10	20	50.0	<5	10	5	20	20	300	70
MNCT61	<5	10	10	50.0	<5	10	5	10	15	300	50
MNCT62	20	200	<5	50.0	<5	10	150	10	30	1,000	100
MNCT63	<5	10	10,000	50.0	<5	10	20	10	20	2,000	150
MNCT64	20	70	70	50.0	5	10	70	20	30	100	150
MNCT65	10	5	50	50.0	<5	10	10	10	15	100	150
MNCT66	5	5	30	50.0	<5	10	10	10	10	100	70
MNCT67	5	5	70	50.0	N	10	5	10	10	100	100
MNCT68	5	5	20	50.0	N	10	10	10	10	100	70
MNCT69	10	5	<5	50.0	N	10	10	10	10	100	70
MNCT70	<5	5	<5	50.0	N	10	5	10	10	100	50
MNCT71	<5	5	<5	50.0	N	10	5	10	7	100	50
MNCT72	<5	5	<5	50.0	N	10	5	10	7	100	50
MNCT73	20	20	70	<20.0	<5	10	15	10	100	200	300
MNCT74	<5	10	<5	50.0	<5	<10	5	<10	<5	100	10
MNCT75	5	10	70	<20.0	<5	10	10	10	15	150	150
MNCT76	5	10	50	50.0	<5	10	10	20	15	300	100
MNCT77	<5	20	<5	50.0	<5	<10	5	<10	<5	100	10
MNCT78	7	10	50	70.0	<5	10	10	20	15	300	150
MNCT79	10	15	20	50.0	5	10	10	20	20	200	150
MNCT80	<5	5	<5	<20.0	<5	10	5	<10	<5	100	20

Table 1.--Analyses of geochemical samples--Continued

sample	S-Y	S-Zn	S-Zr	AA-Au-P	AA-Cu-P	AA-Pb-P	AA-Zn-P	CM-MO
MNC136	30	<200	150	<.02	120	<25	<25	N
MNC137	30	<200	70	.02	960	<25	70	N
MNC138	30	<200	70	.04	140	<25	74	N
MNC139	10	<200	150	.02	<10	<25	<25	4
MNC140	10	<200	150	.04	<10	N	<25	N
MNC141	10	<200	150	.04	<10	N	<25	N
MNC142	<10	<200	150	.04	<10	N	<25	N
MNC143	<10	<200	200	.02	<10	N	<25	N
MNC144	<10	<200	150	.02	<10	N	<25	N
MNC145	<10	<200	200	.02	<10	N	<25	N
MNC146	<10	<200	200	.02	<10	N	<25	N
MNC147	<10	<200	150	.02	<10	N	<25	N
MNC148	20	<200	150	.02	10	<25	<25	N
MNC149	20	<200	150	<.02	<10	N	200	N
MNC150	10	<200	300	.02	10	N	<25	N
MNC151	10	<200	200	.02	10	<25	<25	N
MNC152	50	200	150	.02	30	<25	260	N
MNC153	30	<200	150	.02	<10	<25	<25	N
MNC154	30	<200	150	.07	10	<25	<25	N
MNC155	50	<200	200	.02	<10	N	<25	N
MNC156	20	<200	100	.04	<10	<25	<25	N
MNC157	<10	<200	100	.04	1,100	<25	<25	500
MNC158	15	<200	150	.04	30	<25	<25	10
MNC159	20	<200	200	.04	30	<25	25	8
MNC160	10	<200	150	<.02	30	<25	<25	4
MNC161	10	<200	200	<.02	30	<25	<25	4
MNC162	20	<200	50	<.02	10	<25	60	N
MNC163	30	<200	150	.10	16,000	<25	<25	N
MNC164	30	<200	200	.02	70	<25	120	N
MNC165	10	<200	150	.16	40	<25	80	N
MNC166	10	<200	100	.78	30	<25	60	N
MNC167	10	<200	150	1.80	50	<25	50	N
MNC168	10	<200	100	.06	20	<25	35	N
MNC169	10	<200	150	.46	10	<25	54	N
MNC170	10	<200	200	.12	10	<25	<25	N
MNC171	10	<200	200	.04	10	<25	<25	N
MNC172	10	<200	200	.04	<10	<25	<25	N
MNC173	20	<200	70	.02	80	<25	96	N
MNC174	<10	<200	N	.02	<10	N	<25	N
MNC175	10	<200	70	.04	30	<25	38	N
MNC176	20	<200	70	.04	40	<25	50	N
MNC177	<10	<200	<10	<.02	10	N	<25	N
MNC178	30	<200	100	.02	40	<25	54	N
MNC179	10	<200	150	.02	10	<25	34	N
MNC180	<10	<200	<10	.02	<10	N	<25	N



Table 1.--Analyses of geochemical samples--Continued

Sample	X-COORD.	Y-COORD.	S-FE%	S-MO%	S-CA%	S-Ti%	S-MN	S-AG	S-B	S-BA	S-BE
MNC181	635,990	5,922,940	15.00	.70	.10	.700	500	N	20	500	1.0
MNC182	635,990	5,922,940	15.00	1.00	.50	1.000	2,000	N	10	500	1.0
MNC183	635,990	5,922,900	.30	.02	.20	.020	70	N	<10	100	<1.0
MNC184	635,990	5,922,900	10.00	.70	1.00	1.000	700	N	10	1,000	1.0
MNC185	628,120	5,922,550	10.00	1.50	<.05	.500	700	N	10	1,000	1.0
MNC186	628,120	5,922,550	.15	.10	.05	.020	70	N	<10	50	<1.0
MNC187	628,140	5,922,520	7.00	1.50	.50	.300	1,000	N	10	500	1.0
MNC188	627,250	5,923,720	7.00	1.50	.20	.300	500	N	10	700	1.0
MNC189	627,250	5,923,720	.15	.03	.05	.007	30	N	<10	100	<1.0
MNC190	625,960	5,921,310	1.50	.20	<.05	.070	500	N	10	700	1.0
MNC191	625,960	5,921,310	.10	<.02	.05	.007	30	N	<10	50	<1.0
MNC192	625,930	5,921,350	3.00	.15	<.05	.150	300	N	10	700	1.0
MNC193	625,930	5,921,350	2.00	<.02	.05	.005	20	N	<10	50	<1.0
MNC194	625,600	5,921,560	3.00	.05	<.05	.100	50	N	10	500	1.0
MNC195	624,170	5,921,910	.30	.05	.05	.050	70	N	<10	50	<1.0
MNC196	624,170	5,921,910	3.00	.30	.05	.200	300	N	10	500	1.0
MNC197	621,610	5,918,000	3.00	.20	.07	.300	700	N	<10	700	1.0
MNC198	621,710	5,918,350	15.00	7.00	10.00	.300	1,500	N	<10	150	<1.0
MNC199	621,590	5,917,120	.05	<.02	.05	<.002	30	N	<10	50	<1.0
MNC200	621,590	5,917,120	3.00	.50	.15	.300	300	N	<10	700	1.0
MNC201	620,690	5,910,830	.50	.02	.05	.030	30	N	<10	100	<1.0
MNC202	620,690	5,910,830	5.00	.07	<.05	1.000	70	N	20	700	1.0
MNC203	622,280	5,914,680	7.00	.70	<.05	.500	300	N	20	700	1.0
MNC204	621,960	5,915,220	7.00	.50	<.05	1.000	500	N	10	500	1.0
MNC205	619,680	5,917,010	2.00	.70	.70	.200	700	N	<10	500	1.0
MNC206	619,680	5,917,010	.05	.02	.05	.007	30	N	<10	100	<1.0
MNC207	626,700	5,918,110	.05	.02	.05	.007	20	N	<10	70	<1.0
MNC208	626,700	5,918,110	15.00	3.00	.70	1.000	500	N	<10	1,000	<1.0
MNC209	624,420	5,919,400	.30	<.02	<.05	.010	>5,000	N	<10	1,000	<1.0
MNC210	624,420	5,919,400	7.00	1.00	<.05	.300	500	N	10	700	1.0
MNC211	624,360	5,919,350	.10	.02	<.05	.005	1,500	N	<10	500	<1.0
MNC212	624,360	5,919,350	3.00	.70	<.05	.200	1,000	N	10	1,000	1.0
MNC213	624,260	5,919,210	3.00	.70	<.05	.300	300	N	10	1,000	1.0
MNC214	624,260	5,919,210	.30	.03	<.05	.050	300	N	<10	200	<1.0
MNC215	624,220	5,919,150	2.00	.30	<.05	.150	300	N	10	700	1.0
MNC216	624,220	5,919,150	5.00	1.50	<.05	.300	700	N	10	1,500	1.0
MNC217	624,220	5,919,150	.05	<.02	<.05	.005	100	N	<10	100	<1.0
MNC218	624,070	5,918,940	5.00	1.00	<.05	.200	500	N	10	2,000	1.0
MNC219	624,070	5,918,940	.10	<.02	<.05	.007	50	N	<10	100	<1.0
MNC220	624,500	5,918,060	2.00	<.02	.05	.030	50	N	<10	100	<1.0
MNC221	624,760	5,919,580	1.50	.30	1.00	.100	700	N	10	700	1.0
MNC222	624,880	5,919,610	2.00	.20	1.00	.150	700	N	10	700	1.0
MNC223	625,120	5,919,530	5.00	.50	<.05	.150	500	N	10	700	1.0
MNC224	625,120	5,919,530	.07	<.02	<.05	.007	30	N	<10	70	<1.0
MNC225	625,500	5,919,440	3.00	.30	<.05	.150	200	N	10	500	1.0

Table 1.--Analyses of geochemical samples--Continued

sample	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SC	S-SR	S-V
MNC181	<5	20	30	50.0	5	10	10	20	30	200	150
MNC182	15	10	7	150.0	<5	10	5	15	30	200	100
MNC183	<5	50	<5	<20.0	<5	10	5	<10	<5	100	15
MNC184	5	10	7	100.0	<5	10	<5	15	30	200	100
MNC185	10	15	5	70.0	<5	10	10	20	20	150	70
MNC186	<5	<5	<5	50.0	<5	10	<5	<10	<5	100	10
MNC187	10	10	<5	50.0	<5	10	10	10	15	150	70
MNC188	10	15	10	100.0	<5	10	10	20	20	150	100
MNC189	<5	<5	<5	50.0	<5	10	<5	<10	<5	100	10
MNC190	<5	5	<5	50.0	<5	10	10	10	5	100	10
MNC191	<5	<5	<5	<20.0	<5	10	5	<10	<5	100	10
MNC192	<5	5	<5	50.0	20	10	5	10	10	100	10
MNC193	<5	<5	<5	50.0	<5	10	5	<10	<5	100	10
MNC194	<5	5	<5	50.0	<5	10	5	10	10	100	10
MNC195	<5	<5	<5	<20.0	<5	10	5	<10	<5	100	10
MNC196	<5	5	<5	150.0	<5	10	<5	20	15	100	30
MNC197	<5	5	<5	50.0	<5	10	<5	20	10	100	10
MNC198	30	1,500	100	<20.0	5	10	500	<10	50	100	150
MNC199	<5	<5	<5	<20.0	<5	10	5	<10	<5	100	10
MNC200	<5	5	<5	50.0	<5	10	5	20	10	100	15
MNC201	<5	<5	5	50.0	<5	10	5	<10	<5	100	10
MNC202	<5	20	70	50.0	<5	10	5	50	30	100	150
MNC203	15	20	30	50.0	<5	10	30	20	20	200	70
MNC204	10	30	50	50.0	<5	10	50	10	30	100	150
MNC205	<5	5	<5	50.0	<5	10	10	10	10	200	20
MNC206	<5	<5	<5	50.0	<5	10	5	<10	<5	100	10
MNC207	<5	<5	<5	50.0	<5	10	5	<10	<5	100	10
MNC208	15	15	50	<20.0	<5	10	10	20	30	100	200
MNC209	10	<5	50	50.0	N	<10	<5	70	5	100	10
MNC210	5	10	<5	<20.0	<5	10	15	10	20	<100	50
MNC211	5	<5	<5	50.0	N	<10	<5	15	<5	100	<10
MNC212	<5	5	<5	50.0	<5	10	<5	20	15	<100	20
MNC213	<5	5	5	<20.0	<5	10	<5	20	15	<100	30
MNC214	5	<5	<5	50.0	N	<10	10	10	<5	100	<10
MNC215	<5	5	7	200.0	<5	10	<5	30	15	100	20
MNC216	5	5	<5	<20.0	<5	10	<5	70	20	100	50
MNC217	5	<5	5	50.0	N	<10	10	<10	<5	100	<10
MNC218	<5	<5	<5	<20.0	<5	10	<5	20	15	100	30
MNC219	<5	<5	<5	50.0	N	<10	5	<10	<5	100	<10
MNC220	<5	5	<5	50.0	5	<10	5	<10	<5	100	<10
MNC221	<5	<5	<5	50.0	<5	10	<5	30	15	200	10
MNC222	<5	<5	<5	50.0	<5	10	<5	30	15	500	10
MNC223	<5	5	<5	50.0	<5	10	5	<10	15	<100	20
MNC224	<5	5	10	50.0	N	<10	<5	<10	<5	100	<10
MNC225	<5	5	<5	50.0	<5	10	5	<10	10	<100	20

Table 1.--Analyses of geochemical samples--Continued

sample	S-Y	S-Zn	S-Zr	AA-Au-P	AA-Cu-P	AA-Pb-P	AA-Zn-P	CM-MO
MNC181	20	<200	150	.04	900	<25	80	N
MNC182	200	<200	150	.02	10	<25	110	N
MNC183	<10	<200	<10	.02	<10	N	<25	N
MNC184	100	<200	150	.04	10	<25	110	N
MNC185	30	<200	150	.02	<10	<25	34	N
MNC186	<10	<200	<10	.02	<10	<25	30	N
MNC187	20	<200	100	.02	<10	<25	40	N
MNC188	70	<200	150	<.02	10	<25	52	N
MNC189	<10	<200	<10	<.02	<10	N	<25	N
MNC190	10	<200	50	.04	10	<25	<25	N
MNC191	<10	<200	<10	.06	<10	<25	<25	N
MNC192	20	<200	150	.06	<10	<25	<25	30
MNC193	<10	<200	<10	2.40	10	28	26	N
MNC194	50	<200	150	.04	<10	<25	<25	N
MNC195	10	<200	70	.02	<10	<25	<25	N
MNC196	100	<200	200	.02	<10	<25	32	N
MNC197	20	<200	200	.02	<10	<25	46	N
MNC198	20	<200	50	.02	110	<25	52	N
MNC199	<10	<200	<10	.02	<10	<25	<25	N
MNC200	20	<200	200	.02	<10	<25	<25	N
MNC201	<10	<200	<10	.02	10	<25	<25	N
MNC202	20	<200	150	<.02	70	<25	<25	4
MNC203	30	<200	150	.02	20	<25	78	N
MNC204	30	<200	200	.04	40	<25	100	N
MNC205	20	<200	100	.10	20	<25	28	N
MNC206	<10	<200	<10	.02	<10	<25	<25	N
MNC207	<10	<200	<10	.02	<10	N	<25	N
MNC208	20	<200	100	<.02	30	<25	46	N
MNC209	<10	<200	<10	<.02	60	52	54	N
MNC210	<10	<200	200	<.02	20	<25	<25	N
MNC211	<10	<200	N	<.02	<10	44	<25	N
MNC212	<10	<200	200	<.02	10	<25	<25	N
MNC213	10	<200	150	N	20	<25	<25	4
MNC214	<10	<200	<10	.02	<10	28	<25	N
MNC215	20	<200	150	<.02	10	<25	<25	N
MNC216	50	<200	300	<.02	10	28	<25	N
MNC217	<10	<200	N	<.02	<10	<25	<25	N
MNC218	30	<200	200	N	<10	<25	<25	N
MNC219	<10	<200	N	.02	<10	N	<25	N
MNC220	<10	<200	<10	.08	<10	<25	60	4
MNC221	30	<200	150	<.02	<10	<25	<25	N
MNC222	30	<200	200	<.02	<10	<25	<25	4
MNC223	20	<200	200	.04	<10	<25	<25	N
MNC224	<10	<200	<10	<.02	<10	<25	<25	N
MNC225	10	<200	150	.04	<10	<25	<25	N

Table 1.--Analyses of geochemical samples--Continued

sample	X-COORD.	Y-COORD.	S-FEX	S-MGX	S-CAZ	S-TIX	S-MN	S-AG	S-B	S-BA	S-BE
MNC225A	625,120	3,919,530	5.00	.70	.07	.300	300	N	10	700	1.5
MNC226	625,510	3,919,430	3.00	.20	<.05	.150	200	N	10	200	1.0
MNC227	625,530	3,919,420	3.00	.15	<.05	.150	200	N	10	200	1.0
MNC228	635,370	3,920,190	7.00	.02	<.05	.300	20	N	10	700	1.0
MNC229	635,370	3,920,190	7.00	.02	<.05	.200	100	N	10	200	1.0
MNC230	635,380	3,920,170	2.00	.02	<.05	.300	70	N	10	200	1.0
MNC231	635,380	3,920,170	.30	<.02	<.05	.300	20	N	<10	20	<1.0
MNC232	635,380	3,920,170	.20	<.02	<.05	.300	20	N	<10	50	<1.0
MNC233	635,390	3,920,160	7.00	.02	<.05	.150	20	N	<10	150	<1.0
MNC234	635,390	3,920,160	.30	<.02	<.05	.010	30	N	<10	70	<1.0
MNC235	635,380	3,920,150	>20.00	<.02	<.05	.100	100	N	70	100	1.0
MNC236	625,060	3,920,600	.15	<.02	<.05	.150	500	N	<10	200	<1.0
MNC237	625,060	3,920,600	1.50	.07	<.05	.150	300	N	<10	700	1.0
MNC238	625,070	3,920,580	1.50	.07	<.05	.100	300	N	<10	500	1.0
MNC239	625,050	3,920,550	1.00	.07	<.05	.100	300	N	<10	500	1.0
MNC240	625,070	3,920,550	1.00	.07	<.05	.100	300	N	<10	500	1.0
MNC241	625,020	3,920,530	1.00	.03	<.05	.070	70	N	<10	500	<1.0
MNC242	625,070	3,920,510	2.00	.10	.05	.100	100	N	<10	500	1.0
MNC243	625,070	3,920,510	1.50	.10	.05	.010	300	N	<10	500	1.0
MNC244	625,120	3,920,540	2.00	.30	<.05	.150	500	N	<10	500	1.0

MOORE COUNTY, N.C.--continued

sample	S-CO	S-CH	S-CU	S-LA	S-MO	S-NU	S-NI	S-PB	S-SC	S-SR	S-V
MNC225A	N	5	<5	<20.0	N	10	<5	10	30	<100	10
MNC226	<5	10	<5	50.0	<5	10	<5	10	10	<100	20
MNC227	<5	10	<5	50.0	<5	10	<5	<10	10	<100	20
MNC228	<5	10	<5	50.0	<5	10	10	20	20	200	20
MNC229	<5	10	<5	50.0	<5	10	5	15	10	200	20
MNC230	<5	5	<5	100.0	<5	10	10	15	15	200	20
MNC231	N	<5	<5	50.0	<5	10	5	<10	7	100	10
MNC232	N	<5	<5	100.0	<5	10	5	<10	10	100	20
MNC233	N	<5	<5	50.0	10	10	5	10	10	150	20
MNC234	<5	5	5	50.0	10	<10	<5	<10	<5	100	<10
MNC235	10	100	150	<20.0	70	10	50	<10	50	100	70
MNC236	<5	<5	<5	50.0	<5	10	<5	<10	5	100	<10
MNC237	N	10	<5	50.0	N	10	<5	20	7	150	<10
MNC238	N	<5	<5	50.0	N	<10	<5	20	5	100	<10
MNC239	N	<5	<5	50.0	N	<10	5	10	5	150	<10
MNC240	N	<5	<5	50.0	N	<10	5	10	5	100	<10
MNC241	N	<5	<5	50.0	N	<10	5	10	5	100	<10
MNC242	N	<5	<5	50.0	N	10	5	<10	10	100	<10
MNC243	N	<5	<5	50.0	N	<10	5	<10	10	<100	<10
MNC244	<5	<5	5	50.0	<5	10	5	10	20	<100	30

Table 1.--Analyses of geochemical samples--Continued

sample	S-Y	S-ZN	S-ZR	AA-AU-P	AA-CU-P	AA-PB-P	AA-ZN-P	CM-MO
MNC225A	30	<200	200	<.02	<10	<25	<25	N
MNC226	10	<200	>1,000	.06	<10	<25	<25	N
MNC227	10	<200	300	.08	<10	<25	<25	N
MNC228	30	200	200	<.02	<10	<25	<25	N
MNC229	100	<200	200	<.02	<10	<25	<25	N
MNC230	20	<200	200	.04	<10	<25	<25	N
MNC231	10	<200	150	.02	10	<25	<25	N
MNC232	10	<200	200	.02	<10	<25	<25	N
MNC233	15	<200	150	<.02	10	<25	<25	4
MNC234	<10	<200	<10	<.02	<10	<25	<25	8
MNC235	20	500	100	.06	150	<25	140	15
MNC236	<10	N	30	<.02	10	<25	32	N
MNC237	20	<200	150	.04	<10	<25	<25	N
MNC238	10	<200	150	.06	<10	<25	34	N
MNC239	20	<200	200	.40	<10	<25	<25	N
MNC240	10	<200	200	.22	<10	<25	<25	N
MNC241	10	<200	100	.04	<10	<25	30	N
MNC242	20	<200	200	.18	<10	<25	40	N
MNC243	20	<200	150	<.02	<10	<25	38	N
MNC244	20	N	100	<.02	10	<25	60	N