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## Depth Description

- 0'-58' Overburden.
- Dark green to dark gray, fine- to medium-grained, chlorite-biotite schist, fresh to slightly altered appearance throughout, iron-stained near surface, bedding or schistosity moderately distorted, slightly siliceous appearance throughout, numerous epidote stringers, generally parallel to bedding or schistosity, numerous 1/2" quartz veinlets throughout, generally barren or with only a trace of pyrite, pyrite disseminated throughout schist.
- 191'-196' Quartz vein, vuggy appearance, fractures coated with sericite, trace of pyrite and molybdenite.
- Dark green, fine-grained, biotite-chlorite schist, slightly siliceous appearance, good amount disseminated pyrite, minor disseminated fluorite, open fractures coated with chlorite, several 1/4" quartz veinlets, barren.
- 211'-228' Dark green to gray argillite, slightly banded, several chlorite schist stringers, slightly siliceous appearance, disseminated pyrite, more abundant in schist stringers.
- 228'-233' Dark green, fine-grained chlorite schist, numerous thin epidote stringers, minor disseminated pyrite, several 1/4" quartz stringers, barren.
- 233'-263' Quartz vein, discolored (dark gray), minor amounts of pyrite chalcopyrite, and molybdenite.
- 263'-265' Dark green, fine-grained, chlorite schist, minor disseminated pyrite and trace of fluorite.
- 265'-287' Quartz vein, several 1/2" stringers of light green, altered schist, vein contains minor pyrite, schist contains good amount disseminated pyrite.
- 287'-290' Dark green, silicified, chlorite schist, minor disseminated pyrite.
- 290'-332' Dark green to black, fine-grained, chlorite schist, numerous stringers of dark pink, medium-grained granite, minor disseminated pyrite in schist, trace of pyrite and chalcopyrite in granite.
- 332'-362' Black, slightly banded argillite, minor disseminated pyrite, numerous 1/4" to 1/2" quartz veinlets with minor pyrite and chalcopyrite.

- Dark red, fine-grained, silicified granite, excellent molybdenite paint on open fractures.
- 363'-369' Quartz vein, good amount of molybdenite and minor amounts of pyrite and chalcopyrite.
- Dark brown, fine-grained, fresh granite, minor disseminated pyrite, excellent disseminated molybdenite, several 1/2" quartz veinlets with minor pyrite.
- 378'-380' Quartz vein, minor pyrite, several 1/2" granite stringers.
- 380'-382' Dark red, fine-grained, fresh granite, trace of disseminated pyrite, several 1/4" quartz veinlets containing traces of pyrite.
- 382'-396' Quartz vein with abundant granite stringers, vein is barren, granite contains minor pyrite.
- 396'-418' Dark pink to red, fine- to medium-grained, fresh granite, trace disseminated pyrite, abundant 1/2" to 2" quartz veinlets with good amounts of pyrite, chalcopyrite, and molybdenite.
- 418'-422' Quartz vein, excellent pyrite with lesser amounts of chalcopyrite and molybdenite.
- 422'-433' Brown, medium-grained, fresh, biotite granite, trace disseminated pyrite, molybdenite paint on open fractures.
- 433'-434' Quartz vein, minor amount of pyrite.
- 434'-435' Brown, medium-grained, fresh, biotite granite, minor amount of disseminated pyrite.
- 435'-436' Quartz vein, minor pyrite.
- Brown, medium-grained, fresh, biotite granite, minor disseminated pyrite, several 1/4" quartz veinlets with traces of molybdenite, large phenocrysts of feldspar.
- 444'-448' Quartz vein, discolored (dark gray), good amount of pyrite, chalcopyrite, and molybdenite.
- Dark pink to brown, medium-grained, fresh granite, minor disseminated pyrite, several 1/2" to 1" quartz veinlets, barren.
- 471'-481' Dark pink, medium-grained, moderately altered granite, minor disseminated pyrite.

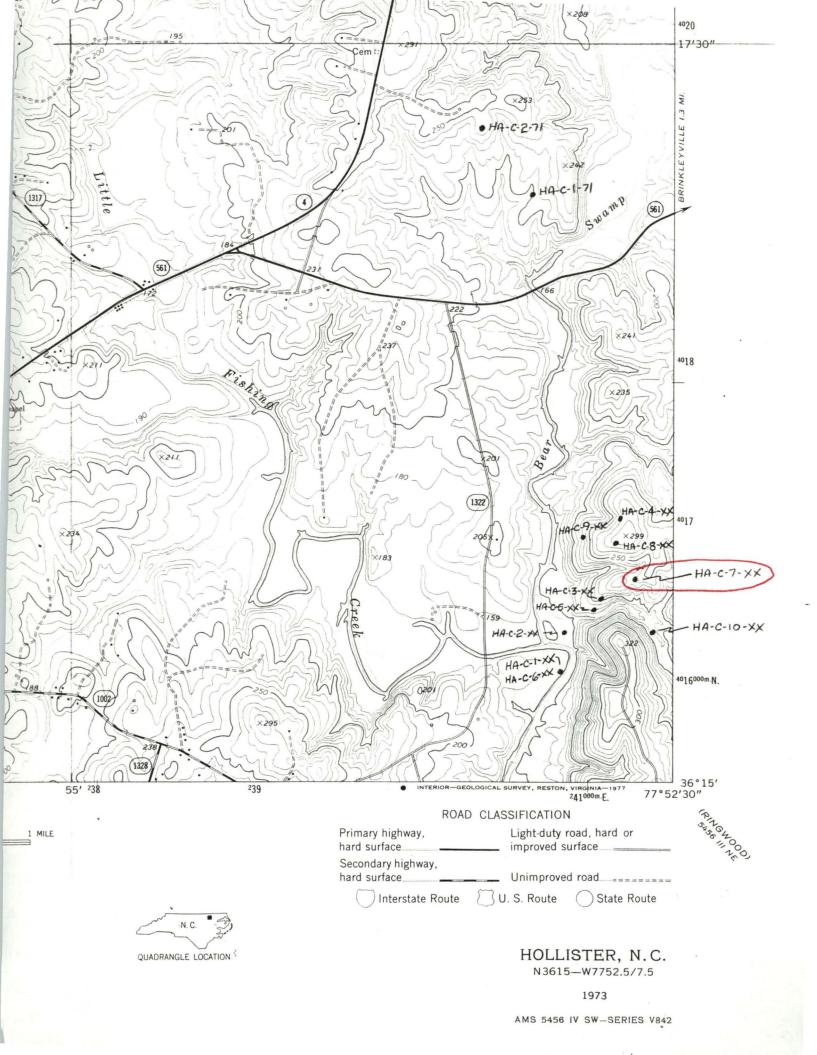
- Dark brown, fine-grained, fresh biotite granite, 10" quartz 481'-488' vein in last 1' of interval, minor disseminated pyrite. 488'-498' Dark pink, medium-grained, moderately altered granite, minor disseminated pyrite. 498'-507' Quartz vein, minor pyrite. 507'-516' Dark pink, medium-grained, moderately altered granite, minor disseminated pyrite, several 1/2" quartz veinlets, barren or with only a trace of pyrite. 516'-518' Quartz vein, discolored (dark gray), good amount of pyrite and molybdenite. 518'-537' Dark pink, medium-grained, moderately altered granite, minor disseminated pyrite, several 1/2" to 1" quartz veinlets with minor pyrite and molybdenite. 537'-558' Dark red, medium-grained, moderately to intensely altered granite, abundant 1/2" to 1" quartz veinlets with good molybdenite, minor disseminated pyrite. 558'-560' Quartz vein, discolored (dark gray), excellent pyrite and molybdenite. 560'-569' Dark red, medium-grained, moderately altered granite, minor disseminated pyrite and molybdenite, minor molybdenite paint on open fractures. 569'-573' Dark brown, medium-grained, moderately altered granite, good amount of disseminated pyrite and molybdenite, several 1/4" quartz veinlets, barren. Dark brown, medium-grained, intensely altered granite, minor 573'-578' disseminated pyrite and molybdenite, minor molybdenite paint on open fractures. 578'-601' Dark brown, medium-grained, moderately altered granite, very sparse 1/4" quartz veinlets, barren, granite has trace of disseminated pyrite and molybdenite.
- Dark red, medium-grained, fresh granite, minor disseminated pyrite and a trace of disseminated molybdenite.

Dark reddish-brown, medium-grained, fresh granite, minor

disseminated pyrite, several 1/4" quartz veinlets, barren.

639' Hole bottomed.

601'-636'



(Core logs and locations are available in a thesis by

B.W. Harvey, "The microscopic Petrography of the Boy Scout-Jones

Molybdenum Prospect, Halifax Co., N.C."

North Carolina State University, Raleigh, N.C.)

Diabase Granite Metasedimentary Rock Drill - Fault Hole 400 1:4,6c0 Scale in Feet

Figure 2. Geologic Map of the Boy Scout-Jones Molybdenum Prospect Showing Location of Drill Holes (from Bear Creek Mining Company).

FROM THESIS MENTIONED ON PREVIOUS PAGE

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H. Cannon Te.3423



## DEPARTMENT OF THE INTERIOR INFORMATION SERVICE

GEOLOGICAL SURVEY

For Immediate Release: July 5, 1943.

## MOLYBDENITE DEPOSITS NEAR HOLLISTER, NORTH CAROLINA

Molybdenite deposits about 5 miles east of Hollister, Halifax County, N. C., have recently been studied by A. H. Koschmann of the Geological Survey, United States Department of the Interior, in order to appraise their possible value as an emergency source of molybdenum for war purposes. The work was part of a general investigation of domestic resources of strategic minerals that is being carried on by the Survey.

Molybdenite, associated with pyrite, chalcopyrite, and sericite, occurs here in quartz veins as much as 11 feet wide in granite, schist, and slate. As outcrops and float of molybdenite-bearing quartz are found in an area at least 2 miles long, the veins probably have a wide distribution. One vein has a known length of 200 feet, but because of poor exposures the length of most of the veins is undetermined.

The molybdenite deposits have been prospected by several shallow pits and trenches and by one shaft 30 feet deep, but as yet there has been no production from them. Ten samples collected from the molybdenite—bearing quartz veins contain 0.20 to 1.15 percent of molybdenite. Because of insufficient data no estimates of tonnage have been made, but from the number of samples carrying more than 0.5 percent of molybdenite and from the wide distribution of molybdenite—bearing veins and float it is judged that additional prospecting is warranted.

A report on the Jones-Boy Scout and Moss-Dryden prospects, illustrated with maps that show the known veins, has been prepared. Copies of the report and maps may be inspected at the offices of the Geological Survey, Washington, D. C., and the North Carolina Department of Conservation and Development, Division of Mineral Resources, Raleigh, N. C. Photostat copies of the maps may be obtained by persons directly interested in the deposits upon application to the Director, Geological Survey, Washington, D. C.