FROM: HARVEY, B.W., "THE MICROSCOPIC PETROGRAPHY OF THE BOY SCOUT- JONES MOLYBDENUM PROSPECT, HALIFAX CO., N.C." THESIS - NCSU. 14-(-1-VV) 45

Appendix A

Description of Core Samples

Drill Hole #5

Depth

Description

0'-45' Overburden

- 45'-58' Dark gray to dark green banded tuff, iron-stained along fractures, minor pyrite disseminated throughout, minor quartz veinlet appears barren.
- 58'-70' Dark gray to dark green banded tuff, minor brown layering, feldspathic in appearance, minor pyrite disseminated throughout, minor quartz veinlets show traces of pyrite and perhaps molybdenite.
- 70'-76' Dark gray to dark green banded tuff, minor pyrite disseminated throughout and along thin quartz veinlets, some chloritic alteration along open fractures.
- 76'-78' Light tan, fine-grained, banded tuff, thin bands of quartz and feldspar along minute fractures parallel to banding.
- 78'-91' Tan, fine-grained, banded tuff, chlorite-rich layers parallel to banding, minor quartz veinlets with traces of pyrite and molybdenite.
- 91'-93' Quartz vein, pyrite cubes developed, minor disseminated chalcopyrite and molybdenite.
- 93'-102' Dark red to dark brown, fine- to medium-grained granite, 1/2" to 2" wide quartz veinlets abundant, excellent molybdenite in granite along fracture surfaces, minor disseminated molybdenite in granite, granite lighter colored where slightly altered.
- 102'-104' Dark red to dark brown, medium-grained granite, minor pyrite disseminated throughout, granite light pink color where slightly altered.
- 104'-106' Quartz vein, pyrite and molybdenite scattered throughout.
- 106'-109' Dark red to dark brown, medium-grained granite, minor disseminated pyrite and molybdenite.
- 109'-119' Dark red, medium-grained, fresh granite, numerous 1/4" to 1/2" quartz veinlets, sericite or talc-like material in several fractures, quartz veinlets show slight discoloration due to disseminated molybdenite.

- **119'-128'** Red, medium-grained, fresh to slightly bleached granite, numerous 1/2" quartz veinlets throughout, abundant pyrite disseminated throughout granite, veinlets contain good amount of pyrite and molybdenite.
- 128'-137' Red, medium-grained granite, slightly bleached in places, abundance of 1/2" quartz veinlets, molybdenite as disseminated rosettes and fracture paint in the granite, disseminated pyrite and molybdenite in veinlets, with a trace of chalcopyrite present.
- 137'-147' Red, slightly bleached, medium-grained granite, minor disseminated pyrite and molybdenite throughout, light green sericitic or chloritic material on several exposed fractures in granite, several 1/2" and one 5" quartz vein containing excellent pyrite, chalcopyrite, and molybdenite.
- 147'-156' Alternating quartz veins and granite stringers, granite is bleached moderately altered, with silicified appearance and pitted surfaces, granite stringers contain quartz veinlets, larger quartz veins contain fair amount of disseminted pyrite and molybdenite.
- 156'-157' Quartz vein, trace amounts of pyrite and molybdenite.
- 157'-165' Red to brown, medium-grained, biotite granite, biotite shows slight lineation, numerous 1/2" to 1" quartz veinlets containing minor pyrite and molybdenite, minor disseminated pyrite in granite.
- 165'-175' Dark red to brown, medium-grained, biotite granite, slightly
 bleached in places, minor disseminated pyrite, numerous 1"
 to 4" quartz veins containing fair amount of molybdenite and
 traces of pyrite.
- 175'-184' Red to brown, medium-grained, fresh granite, minor disseminated pyrite in granite, several 1/4" to 1/2" quartz veins containing molybdenite with minor amounts of pyrite and chalcopyrite.
- 184'-194' Red to brown, medium-grained granite, generally fresh appearance but slightly bleached over last 4' of interval, granite contains disseminated pyrite and molybdenite with molybdenite paint on several fracture surfaces, numerous quartz veinlets containing minor amounts of pyrite, chalcopyrite, and molybdenite.
- 194'-203' Light red, medium-grained granite, slightly altered, minor disseminated pyrite and molybdenite, several 1" quartz veins with minor amounts of pyrite and chalcopyrite, and slightly higher amount of molybdenite.

- 103'-213' Light red, medium-grained, slightly altered granite, minor disseminated pyrite and chalcopyrite, several 1/2" to 1" quartz veinlets containing much pyrite and traces of molybdenite.
- 213'-221' Quartz vein, bleached granite in stringers up to 4", vein contains excellent pyrite with lesser amounts of chalcopyrite and molybdenite, traces of fluorite in granite.
- 221'-222' Bleached, silicified, medium-grained granite, disseminated pyrite throughout.
- 222'-227' Quartz vein, abundance of pyrite and only traces of chalcopyrite and molybdenite.
- 227'-232' Dark red, medium-grained, fresh granite, numerous 1/4" quartz veinlets with only traces of pyrite and molybdenite.
- 232'-241' Dark red, medium-grained, fresh granite, molybdenite as fracture coatings, minor disseminated pyrite, several 1/2" to 1" quartz veinlets with minor amounts of pyrite and chalcopyrite.
- 241'-251' Dark red, medium-grained, fresh granite, minor disseminated molybdenite, granite slightly altered near contact with 9" quartz vein containing only traces of molybdenite.
- 251'-261' Dark red, medium-grained, fresh granite, slightly bleached first 2' and last 2', minor disseminated pyrite and chalcopyrite, numerous 1" to 2" quartz veins containing moderate amounts of molybdenite and traces of pyrite.
- 261'-263' Red, medium-grained, moderately altered granite, trace of disseminated pyrite.
- 263'-265' Quartz vein, molybdenite near both contacts of vein, trace of pyrite.
- 265'-267' Red, medium-grained, moderately altered granite, trace of disseminated pyrite.
- 267'-269' Quartz vein, trace of molybdenite and pyrite throughout.
- 269'-270' Red, fine-grained, moderately altered granite, several quartz veinlets containing good amount of pyrite and chalcopyrite.
- 270'-279' Red, fine-grained, slightly altered granite, high feldspar content, very few quartz veinlets, minor disseminated pyrite and chalcopyrite.

- 279'-283' Red, medium-grained, moderately altered granite, trace of disseminated molybdenite.
- 283'-285' Quartz vein, good amount of pyrite, chalcopyrite, and molybdenite.
- 285'-288' Red, medium-grained, moderately altered granite, quartz veinlet containing good chalcopyrite and trace of molybdenite.
- 288'-290' Red, fine-grained, moderately altered granite, quartz veinlet with minor amount of molybdenite.
- 290'-298' Red, medium-grained, moderately altered granite, good amount of disseminated pyrite, numerous quartz veinlets containing traces of molybdenite.
- 298'-301' Red, fine-grained, slightly altered granite, minor disseminated pyrite.
- 301'-307' Pink, medium-grained, slightly altered granite, trace of disseminated pyrite, one 6" quartz vein containing good amount of pyrite and chalcopyrite.
- 307'-315' Pink, medium-grained, moderately altered granite, good amount of pyrite, chalcopyrite, and molybdenite disseminated throughout.
- 315'-317' Tannish-pink, fine-grained, fresh granite, no mineralization.
- 317'-324' Tannish-pink, fine- to medium-grained, slightly altered granite, 1/2" to 4" quartz veins containing traces of pyrite and molybdenite.
- 324'-326' Quartz vein, trace of pyrite and molybdenite.
- 326'-335' Pink, medium-grained, fresh to slightly altered granite, numerous 1/4" to 1" quartz veinlets containing good amount of pyrite and molybdenite, minor disseminated pyrite in granite.
- 335'-345' Light pink, medium-grained, fresh to slightly altered granite, numerous 1/4" to 1/2" quartz veinlets with only a trace of molybdenite.
- 345'-346' Black, fine-grained, fresh diabase.

346' Hole bottomed.



AMS 5456 IV SW-SERIES V842

(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.)

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FROM THESIS MENTIONED ON PREVIOUS PAGE.

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