Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

Box 1720, Iqaluit, NU X0A 0H0 phone:(867) 979-7279 fax: (867) 979-7109 e-mail: slcnri@nunanet.com

July 08, 2004

Hamish Sandeman Canada-Nunavut Geoscience Office, 626 Tumiit Building, Box 2319 Iqaluit, Nunavut X0A 0H0 Canada

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Thank-you in advance for assisting in the promotion and development of a scientific research community and database within Nunavut. The reports and information you provide are utilized to prepare an annual research compendium, which is distributed to communities and organizations in Nunavut as well as to researchers across Canada.

Please accept our best wishes for success in your research project.

Sincerely,

u Mary Ellen Thomas

Manager, Research Liaison

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SCIENTIFIC RESEARCH LICENCE

LICENCE # 0400804N-M

ISSUED TO: Hamish Sandeman

Canada-Nunavut Geoscience Office 626 Tumiit Building, Box 2319

Iqaluit, Nunavut X0A 0H0 Canada 1-600-700-6088

TEAM MEMBERS: H.Sandelman, M.Scultz, C.Oyzer, K.Rubingh, N.Trenholm, J.Martel,

A.Shiroki, J.Walsh, J.Boles, S.Bew

AFFILIATION:

TITLE: Boothia Mainland Project: Economic Potential Through New Bedrock Mapping and Surficial

Geosciece Upgrading.

OBJECTIVES OF RESEARCH:

This project is designed to evaluate economic potential of the Boothia Mainland area immediately south of Taloyoak through framework bedrock gelogical mapping and upgrading of the superficial geoscience information. Archean volcanic and sedimentary rocks of the Prince Albert group exposed in the region are thought to have a high potential for Au, Ni, Zn, diamond group elements. Similarily, the potential for dicovery of bedrock geology of the area is complex and poorly understood, development of the regional bedrock geoscience knowledge base is a prerequisite to efficient mineral exploration in the region. Presently, little is known about the distribution of economic minerals within the study area, and only a rare mineral showings have been identified in supracrustal rocks of the regioin. A flurry of recent diamond exploration activity and the acquisition of extensive prospecting permits in the region indicates that the area also has the potential to host diamond-bearing kimberlites. The proposed regional bedrock mapping, along with a drift prospecting survey and accompanying serficial geoscience activities, have the capability to identify new sources of AU, ZN, and PGE's associated with supracrustal rocks, as well as kimberlite indicator-mineral trails. This information will be obtained through characterization of regional geology and collection of drift samples and determination of background metal values and evaluation of regional-scale ice dynamics. Therefore, geochemical and heavy mineral sruveys undertaken as part of this project will add significantly to the genreal geoscience knowledge of this area. Project outputs will:1) contribute to digital northern geoscheince data resources, 2) incorporate remotely sensed dta and contribute to new multi-thematic models, 3) help to assess mineral potential increased community particiation in explration activites and geoscience resource development.

TERMS & CONDITIONS:

The holder of the licence will be bound by the terms and consitions of the Nunavut Impact Review Board Screening Decision Report and the Department of Culture, Language, Elders and Youth archeological sites terms and conditions. These terms and conditions will form part of this licence.

DATA COLLECTION IN NU:

DATES: July 01, 2004-August 25, 2004

LOCATION: Boothia Mainland

Scientific Research Licence 0400804N-M expires on December 31, 2004

Issued at Iqaluit, NU on July 08, 2004

Earle Baddaloo Science Advisor



Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

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July 08, 2004

NOTIFICATION OF RESEARCH

PLEASE BE ADVISED THAT SCIENCE RESEARCH LICENCE No. 0400804N-M HAS BEEN ISSUED TO:

Hamish Sandeman Canada-Nunavut Geoscience Office 626 Tumiit Building, Box 2319 Iqaluit, Nunavut X0A 0H0 Canada 1-600-700-6088

TO CONDUCT THE FOLLOWING STUDY:

Boothia Mainland Project: Economic Potential Through New Bedrock Mapping and Surficial Geosciece Upgrading.

SUMMARY OF RESEARCH:

This project is designed to evaluate economic potential of the Boothia Mainland area immediately south of Taloyoak through framework bedrock gelogical mapping and upgrading of the superficial geoscience information. Archean volcanic and sedimentary rocks of the Prince Albert group exposed in the region are thought to have a high potential for Au, Ni, Zn, diamond group elements. Similarily, the potential for dicovery of bedrock geology of the area is complex and poorly understood, development of the regional bedrock geoscience knowledge base is a prerequisite to efficient mineral exploration in the region. Presently, little is known about the distribution of economic minerals within the study area, and only a rare mineral showings have been identified in supracrustal rocks of the regioin. A flurry of recent diamond exploration activity and the acquisition of extensive prospecting permits in the region indicates that the area also has the potential to host diamond-bearing kimberlites. The proposed regional bedrock mapping, along with a drift prospecting survey and accompanying serficial geoscience activities, have the capability to identify new sources of AU, ZN, and PGE's associated with supracrustal rocks, as well as kimberlite indicator-mineral trails. This information will be obtained through characterization of regional geology and collection of drift samples and determination of background metal values and evaluation of regional-scale ice dynamics. Therefore, geochemical and heavy mineral sruveys undertaken as part of this project will add significantly to the genreal geoscience knowledge of this area. Project outputs will:1) contribute to digital northern geoscheince data resources, 2) incorporate remotely sensed dta and contribute to new multithematic models, 3) help to assess mineral potential increased community particiation in NAL

explration activites and geoscience resource development.

THE STUDY WILL BE CONDUCTED AT: Boothia Mainland

BETWEEN: July 01, 2004 - August 25, 2004

Tiener Malion

Mary Ellen Thomas

Manager, Research Liaison

Nunavut Water Board JUL 2 1 2004

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