

MINNOVA 825824

Property Submission -  
Grenville Property  
(Prince Rupert area)

→ IDP  
~~read property~~  
New File  
NTS  
103H/12W

COPY

Minnova Inc.  
Mining Innovation  
P.O. Box 91  
Commerce Court West  
Toronto, Ontario  
M5L 1C7

November 16, 1987

Mr. Barry D. Devlin  
P.O. Box 511  
Cassiar, B.C.  
VOC 1E0

Dear Barry:

Thank you for submitting the Grenville Property near Prince Rupert to Minnova. Although we are not presently active in the area, there is no doubt about its favourable potential for massive sulphides and therefore the possibility of our future involvement is good. I have forwarded your report to Alex Davidson who is our exploration manager in western Canada working out of Minnova's office in Vancouver. Alex will be in touch with you after having an opportunity to review the report or may be contacted directly at our Vancouver office, as follows:

Minnova Inc.  
4th floor  
311 Water Street  
Vancouver, B.C.  
V6B 1B8.  
(604) 681-3771



Yours truly,

MINNOVA INC.

David H. Watkins  
Vice-President, Operations

DHW:mlg

cc: Mr. A. Davidson

NOV 1 0 1987

Barry Devlin  
P.O. Box 511  
Cassiar, B.C. VOC 1E0  
November 1, 1987

Exploration Manager  
Minnova Inc.  
P.O. Box 91  
3970 Commerce Court W.,  
Toronto, Ontario M5L 1C7

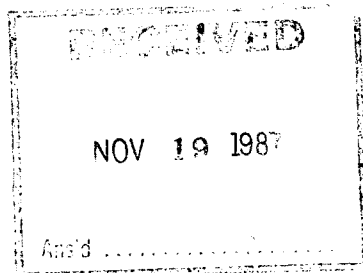
Dear Sir:

My reason for writing is that I am associated with two other geologists, Bruce McDonald and Richard Haslinger, and together we are holding onto a group of claims, known as the Grenville property, which I felt Minnova might be interested in. We previously optioned the claims to BP Minerals, but they discontinued the option in April of this year.

The property is located on Pitt Island, south of Prince Rupert, B.C., and is underlain by a significant massive sulphide/precious metal showing, bearing close resemblance to other massive sulphide deposits found in either the Adams Plateau region of British Columbia or in the Alexander Terrane of western Canada and Alaska.

I am enclosing copy of a recent property summary, and if you are interested in finding out more about the property, I will forward some more detailed reports. If you wish to contact me, I am presently working as the mine geologist at the Erickson Gold mine, near Cassiar, and you can either write to me at the above address or phone 233-3111 (work) or at 233-3210 (home).

In closing, I feel this property has considerable merit and I am hoping you will forward the information to your western Canada regional office. I look forward to hearing from you soon on the matter.



Yours Truly,

  
Barry D. Devlin

# **GRENVILLE PROPERTY**

## **(Zn, Cu, Pb, Ag, Au)**

### **Pitt Island, B.C.**

#### Location and Access

The Grenville property is located on the northeast side of Pitt Island adjacent to Grenville Channel and is centered on 53° 52' N latitude and 129° 52' W longitude (Fig. 1). Prince Rupert, B.C. is 90 km northwest and Kxngéal Inlet is 5 km northeast. Access is by helicopter or float plane chartered from Prince Rupert or Kitimat.

#### Property Ownership

The Grenville property comprises 10 mineral claims that encompass 2,315 ha. enclosing the principle showing as well as the significant strike extent of prominent regional linear structures associated with this showing and access to the nearest sea route, Grenville Channel, 2 km from the showing. Bruce W.R. McDonald and Richard J. Haslinger share title to the property.

#### History

In 1980, Ryan Exploration Co. Ltd. staked a mineral claim centered on an avalanche chute (Pyrite Creek) after finding massive sulphide boulders therein. During 1982 and 1983, Ryan Exploration Co. Ltd. performed geological mapping, geochemical sampling, a VLF-EM-16 geophysical survey and additional mineral claim staking at and around Pyrite Creek. In 1983, Bruce W.R. McDonald completed a B.Sc. thesis on the mineralization and geology at Pyrite Creek, and Lloyd Geophysics Ltd. of Vancouver performed an interpretation of the geophysical survey data. In August 1985, the claims at Pyrite creek lapsed.

Pyrite Creek was restaked in February, 1986 by Bruce W.R. McDonald and Richard J. Haslinger who then optioned the property to BP Minerals Ltd. in April 1986. During the summer of 1986, BP Minerals Ltd. staked additional mineral claims around Pyrite Creek, and carried out brief reconnaissance exploration in the area. Exploration carried out by BP Minerals Ltd. involved an eight day evaluation of the property including chip sampling at regular intervals across the mineralized horizon, prospecting and soil geochemistry along strike from the main showing as well as soil, stream and seepage geochemistry on a regional scale on the property.



BP Minerals Ltd. discontinued the option in April 1987 and returned title of the original Grenville Property mineral claims as well as all additional claims staked to Bruce W.R. McDonald and Richard J. Haslinger.

### Geology

Pitt Island is located on the western edge of the Coast Crystalline Complex, adjacent to the Insular Belt in rocks of Alexander Terrain. A 1 to 1.7 km wide screen of northwest striking metasediments along the northeast edge of Pitt Island hosts the massive sulphide horizon of the Grenville property. These metasediments, comprised of metashale, quartz-muscovite schist, quartz-biotite schist, quartzite, and paragneiss, are bounded and cored by gneissic plutonic rocks, and have been subjected to amphibolite facies metamorphism.

Mineralization on the property was originally considered to be stratiform in nature with a genesis in the style of the Besshi or Kuroko massive sulphide class of deposits (McDonald, 1983). BP Minerals Ltd. regard the property as a form of shear zone mineralization.

### Main Showing

The Grenville property main showing consists of a strongly deformed, massive sulphide horizon averaging about 1 m in width but locally up to 2 m exposed over a minimum strike length of 300 m with a vertical extent of 170 m. The massive sulphide horizon occurs as an apparently stratiform body associated with a strong shear zone bounded by a highly mineralized hangingwall micaceous quartzite and an equally mineralized footwall quartz-muscovite schist. Although the massive sulphide horizon is recessive and has been traced only 300 m it is not seen to pinch out, and mineralized quartz-muscovite schist is traceable 400 m further along strike to the north producing a zone of mineralization at least 700 m in length.

The massive sulphide horizon is coarse grained and fragmental in appearance containing up to 20 percent siliceous clasts set in a sulphide rich matrix. Sulphides comprise 40 to 80 percent of the mineralized horizon consisting of pyrite with subordinate chalcopyrite, sphalerite, galena, and trace pyrrhotite.

Ten continuous chip samples taken by BP Minerals Ltd. over the mineralized horizon over a strike length of 80 m, indicate an average grade of 2.32% Cu, 2.53% Zn, 0.57% Pb, 52.0 g Ag/t, and 0.48 g Au/t (Fig. 2). Gold assays of up to 1.70 g/t were returned. Chip samples collected by Ryan

Exploration Co. Ltd. have returned assays as high as 8.7% Zn, 7.8% Cu, 1.6% Pb, and 126g Ag/t. Two samples collected just outside of the massive sulphide horizon have returned assays of 8.8 and 6.8 g Au/t.

Results of geochemical sampling by BP Minerals showed the mineralized horizon to display a regionally distinctive signature. Sampling to the southeast of the Main showing failed to indicate an extent along strike, however, a multielement soil and humus anomaly prominent in Pb, Ag and Au was discovered slightly to the southwest indicating a mineralized source area exists upslope nearby the main showing. This has not been followed up. In addition, sampling on a property-wide scale has revealed a new area with a similar favourable geochemical signature to the southeast of the main showing which has also not been followed with prospecting.

Geophysics performed by Lloyds Geophysics of Vancouver displayed a prominent VLF-EM anomaly coincident with the mineralized horizon extending significantly further northwest along strike than the mineralized horizon has been traced to date. In addition a parallel EM anomaly was identified approximately 75 m to the east of the main showing.

# GRENVILLE CHANNEL, B.C.

## Chip Sample Results

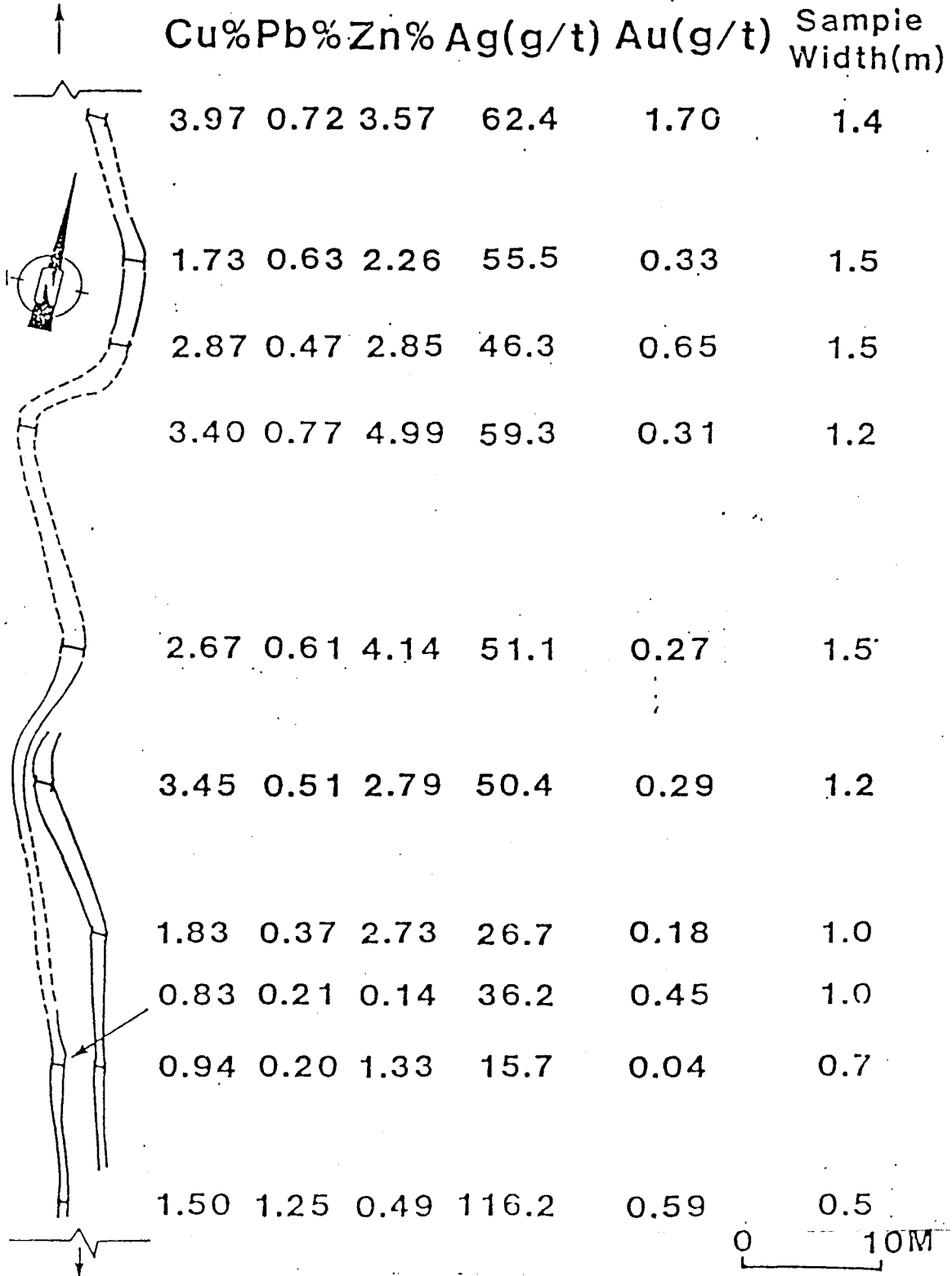


FIGURE 6: Summary of Main Showing Sulphide Lithogeochemistry.