



*File ① Hilker  
② Charta Mines*

PHONE: OFFICE 687-8818  
HOME 684-1288  
AREA CODE 409

**R. G. HILKER**  
LIMITED  
CONSULTING GEOLOGIST . . . PROFESSIONAL ENGINEER  
P.O. Box 4008, WHITEHORSE  
YUKON TERRITORY, CANADA  
"LAND OF THE MIDNIGHT SUN"

013073

March 1, 1972

Mr. J.P. Sawyer  
Cyprus Exploration Limited  
1101 - 510 West Hastings Street  
Vancouver, B.C.

Dear Mr. Sawyer:

Re: Charta Mines Properties - Yukon Territory

Please be advised that I will be in Vancouver during the week of March 6th through March 12th. If it would be of benefit to you to discuss the Charta Mines properties and data, a meeting can be arranged during the forementioned week.

I can be reached at the Devonshire Hotel or by telephone message at the Charta Mines Office 682-7861, while in the city.

Perhaps we can meet for a luncheon or dinner during my visit to Vancouver?

Yours truly,

*R.G. Hilker*  
R.G. Hilker, P. Eng.  
Consultant Geologist

*In Room  
721  
Devonshire*

*OK*

RGH/mh

RECEIVED  
MAR 3 - 1972  
REGISTRY

*Feb*  
*pls. contact him*  
*at Devonshire next Tues AM.*  
*advise him out of town for week would like to*  
*get together with him when I get back. Not sure of*  
*date of return. If it's before 12th will contact*  
*him. If don't make it next week I will be*  
*Whosee April 5 - 8 / 72.*



RECEIVED  
JAN 13 1972  
R.G. HILKER  
LIMITED

**R. G. HILKER  
LIMITED**

CONSULTING GEOLOGIST . . . PROFESSIONAL ENGINEER

P.O. Box 4008, WHITEHORSE  
YUKON TERRITORY, CANADA  
"LAND OF THE MIDNIGHT SUN"

January 11, 1972

Mr. J.P Sawyer  
Cyprus Exploration Limited  
1101 - 510 West Hastings St  
Vancouver, B.C.

Dear Paul:

Good to see you briefly in Vancouver at the C.I.M. Convention and sorry I wasn't able to visit at your office. I expect to be in Vancouver in March and thought I would write to you concerning any possible work during the 1972 field season.

The 1972 exploration field season is approaching and it is the time of year for planning. My firm of R.G. Hilker Limited would be very pleased to conduct any exploration programmes for Cyprus Exploration in the Yukon in 1972. With my base of operations located in the Yukon, it is possible to supervise programmes and process data while the field crews are working on the job site. Preliminary progress plans and finalized plans with a report may be prepared in a minimum length of time upon completion of the field work with my available facilities.

It has been my practice in the past to have an exploration crew of 12-14 technicians during the summer months. The field crew, on any particular job, is supervised by a graduate geologist, Mr. G.G. Carlson and myself directing general supervision. We specialize in geological mapping, geochemical surveys, geophysical surveys consisting of magnetics and electro-magnetic E.M.16, diamond drill programmes, property management and claim staking. Any linecutting and staking is sub-contracted to Eastern Associates Regd of Val Dor Quebec, who are a group of excellent French Canadian linecutters. My firm has trained soil samplers, geophysical operators and geological mapping crews with a minimum of three years experience.

Past jobs have consisted of linegrid type of work on various size claim groups that combined geological, geochemical and geophysical surveys. The jobs have varied from 20 to 130 line-miles in extent and with my firm supplying all the necessary

.../2

equipment, camp facilities, vehicle transportation and radio contact. My firm has experience in regional geochemical surveys that included the geological concept and planning, management and work.

I have available considerable camp equipment, licensed single-side band radios, geophysical equipment, geochemistry field equipment and vehicles to mobilize rapidly to job sites. My office facilities consists of a print machine, duplicating machine, typing facilities and a full time draftsman. None of the field data goes out of the office during processing and report preparation so maximum security of data is maintained.

Usually geochemical samples are sent via airfreight to Chemex Labs Ltd. in Vancouver, B.C. for the specified determinations. Geochemical results and interpreted by basic statistical methods and if desired computer programmed.

I would be very pleased to discuss with you in Vancouver any surface exploration surveys or regional programmes that may be available during the summer of 1972. I have had a great deal of geological experience in the Yukon and can discuss with you the logistics and costs of any specific job. Exploration programmes may be conducted on a cost plus basis or a contract cost, depending on the company or the job to be done. If a job is large or a substantial sum of exploration funds are to be expended I prefer to bid on a contract basis. With my base of operations located in Whitehorse, I feel that it is possible for my firm to conduct exploration programmes in a competitive manner and to save exploration dollars for the company the work is to be done for. During the time period that a surface programme is being conducted, field data is processed and plotted. When the job is completed a minimum length of time is required to complete the final plans and report. The final reports are written in a technical manner that is suitable for filing with the Mining Recorder for assessment work. The reports are signed by myself, as a registered professional engineer and may be used for securities commission or assessment work purposes. In addition, Mr. G.G. Carlson has applied for registration in the Professional Engineers of the Yukon and should receive his registration in the near future.

All for now Paul, I hope that the forementioned has not "bent your ear" to much. I certainly would like to do some work for you in 1972 and will look forward to hearing your comments.

Yours truly,

---

R.G. Hilker, P. Eng.  
Consultant Geologist

INTER OFFICE MEMO

CYPRUS EXPLORATION CORPORATION LTD.  
VANCOUVER OFFICE

Date: May 4, 1972

To: C. A. Mark

Ref. 1726-CVL

From: J.B.P. Sawyer

Subject: CHARTA MINES LTD. - KUSAWA LAKE PROSPECT

R. G. Hilker of Whitehorse is consultant for Charta Mines Ltd. (NPL) of Vancouver. Earlier this year as reported in my February Report, he submitted for our consideration four prospects in the Yukon on which some preliminary exploration work had been done. I have reviewed these submissions and one which is of some interest, is a potential porphyry situation located on the west side of Kusawa Lake approximately 60 miles southwest of Whitehorse and 20 miles east of the Haines Road.

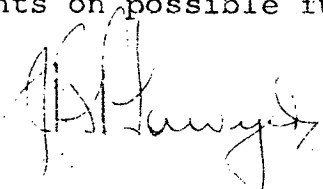
A fairly limited amount of work was done last season on these claims (Greeneagle and Jay) by Hilker. These indicated some rather interesting soil geochemical anomalies in copper and molybdenum which appear to be concentrated in an area of little outcrop. In the area as a whole, outcrop seems to be fairly good, the country rock being essentially Cretaceous intrusives. Hilker has reported verbally that there is good alteration in these intrusives, and on this evidence this appears to me to be an interesting prospect and possibly worth some further work. I think we could get a reasonable deal with Charta, hopefully with a minimum work commitment for this year. I would want to see the prospect on the ground before making any final recommendation and plan to do this as soon as possible. I enclose herewith a copy of Hilker's report on this prospect and would be interested to have your comments.

I bring it to your attention at this stage because of our present budgetary position. Unless additional funds are available from somewhere, it is doubtful that we have room in our own budget for this, however, it is perhaps the kind of thing we should have a crack at, while the deal is still reasonable. Another consideration I suppose, is whether or not Cyprus is really interested in porphyry coppers in the southern Yukon and to some extent perhaps the results of our continuing program at Mount Nansen may influence this. As far as location goes, it should present no serious problems, its relative proximity to the Haines Road being a favourable factor.

May I have your thoughts on possible further follow-up of this, please?

JBPS/jel

Encl.





**R. G. HILKER**  
LIMITED

CONSULTING GEOLOGIST . . . PROFESSIONAL ENGINEER

P.O. Box 4008, WHITEHORSE  
YUKON TERRITORY, CANADA  
"LAND OF THE MIDNIGHT SUN"

January 14, 1972

Mr. J.P. Sawyer  
Cyprus Exploration Limited  
1101 - 510 West Hastings Street  
Vancouver, B.C.

Gentlemen:

Re: Charta Mines Yukon Properties

The enclosed information pertains to four mining properties in the Yukon that are owned by Charta Mines Ltd (N.P.L.) of Vancouver B.C. Each of the properties have had considerable exploration work performed over a part of the claim group, to prove the initial worth of the gossan showings. The Charta Mines organization have spent company funds, on exploration of the properties, to remove the initial risk that is necessary to expend on any mining property. Charta Mines would now like to option the properties to a major company who are searching for mineral prospects in the Cordillera region of Western Canada.

The four properties, owned by Charta Mines, are as follows:

- |                 |  |
|-----------------|--|
| 1. Talbot Creek | A 1-101 claims<br>B 1-42 claims<br>K 1-16 claims |
| 2. Kusawa Lake  | Green Eagle 1-16 claims<br>Joy 1-12 claims       |
| 3. White Creek  | CPA 1-14 claims                                  |
| 4. Klaza River  | Chart 1-48 claims                                |

All of the forementioned Yukon Mineral Claims are recorded in the Whitehorse and Watson Lake Mining Recorders Office, have certificates of work registered and have anniversary dates ranging from 1973 to 1976. All claim groups are free of all liens, encumbrances or litigations.

During the summer field season of 1971 a combined geological, geophysical and geochemical surface exploration programme was conducted on the Kusawa Lake - Green Eagle Claims, the White Creek - CPA Claims and the Klaza River - Chart Claims. The exploration programme on each

of the claim groups cost \$12,500.00, for a total of \$37,500.00 on the three groups. The Talbot Creek property was staked in the spring of 1970 and \$15,000.00 was spent on reconnaissance exploration and staking costs. A major copper mining company optioned the property and spent approximately \$75,000.00 on surface exploration and diamond drilling. Further work on the Talbot Creek property may be warranted to prove a porphyry copper situation.

The surface exploration on the four properties has delineated gossan zones, outlined alteration areas in granite host rock on the Talbot and Kusawa properties and discovered scattered sulphide mineralization occurrences.

The geological type of occurrences are described in the brief outline of the properties:

1. Talbot Creek - The property contains a granitic alteration zone within the Mesozoic (?) aged Nisling Range Alaskite host rock, with minor surface chalcopyrite and molybdenite mineralization. A large geochemical zone outlines the area of interest and contains high P.P.M. values of copper, molybdenum, tin, and tungsten. The area outlined suggests a greisen type of geology. The Alaskite host rock and several fluorite occurrences in the area is similar to the Ruby Creek geology of Adanac Mines in the Atlin, B.C. area. It is recommended that an induced polarization survey, rock type study of surface and diamond drill samples be made and detail geological surface mapping is warranted on the Talbot Creek property. The property is considered to be a porphyry copper - molybdenum type of occurrence.
2. Kusawa Lake - A large gossan zone occurs in a Cretaceous aged Coast Intrusive granite with pyrite, minor lead and molybdenite surface mineralization. The geological mapping suggests a porphyry copper - molybdenum type of occurrence. The geochemical survey outlined copper - molybdenum anomalies that are bounded by halo anomalies of lead, silver and zinc. The geochemistry results are a classical example of a zonal sequence of sulfide mineralization. Further surface exploration, induced polarization and diamond drilling is recommended on the Kusawa Lake claim group.
3. White Creek - The rocks over the area of the CPA claim group are a part of a series of altered pyroclastic volcanics, with meta-sedimentary rocks and bounded to the north by a hornblende syenite. The forementioned rock types are tentatively aged as Mississippian (?) or Earlier by the G.S.C. (Prelim. Map 7-1960). A large orange red gossan zone covers a large area of the claims and is caused by abundant hematite occurrences. In parts, lead mineralization occurs in quartz veins within the intrusive sequence of

rocks. The surface weathering suggest deep oxidation and complicates the interpretation of the geochemical results. The geochemical survey outlined five copper and lead zones. Copper mineralization may be masked due to surface leaching, as no surface copper mineralization was noted. In one area a small galena occurrence was found to occur upslope from a large lead anomaly. It was thought the galena occurrence was not extensive enough, to be the cause of the entire lead anomaly. The property is considered to have a copper and/or lead occurrence potential. Further surface exploration consisting of geological mapping and geochemical surveys are recommended for the property.

4. Klaza River Property - A gossan zone occurs near the contact between the Mount Nansen volcanic and sedimentary rocks and the granitic rocks of the Dawson Range Batholith. The Mount Nansen Group and Coastal Intrusives are Jurassic - Upper Cretaceous in age. The gossan zone contains abundant pyrite mineralization. The geochemical survey has indicated the presence of a 3000 feet long by 150-500 feet wide molybdenum - copper anomaly. A second molybdenum anomaly occurs south of forementioned zone. The property is considered to have a molybdenum potential. The completed 20 linemile surface programme, of geological and geochemical mapping, should be extended over the remainder of the claim group to fully evaluate the potential of the area.

Detail geological, geochemical and geophysical reports are available on the Kusawa Lake, White Creek and Klaza River properties. The data available on the Talbot Creek property consists of a surface geochemical reconnaissance and detail survey, geological mapping and diamond drill logs. A set of the forementioned reports and data is available for scrutinizing at the following offices of Charta Mines Ltd (N.P.L.)

Mr. R.P. Gibbons - Director  
Suite 230 - 890 West Pender  
Vancouver, B.C.  
Telephone 682-7861

or

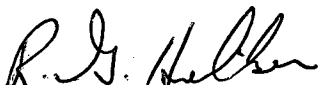
R.G. Hilker Limited  
Room #8 Northern Metallic Bldg  
Whitehorse, Y.T.  
Telephone 667-2819

I will be very willing to personally discuss the properties with any interested company in Vancouver or Calgary at the convenience of the individual involved. The firm of R.G. Hilker Limited of Whitehorse has conducted the majority of surface exploration programmes on the four properties, on behalf of Charta Mines Ltd (N.P.L.).

Charta Mines would be willing to option the property under a 70-30% retained interest, work commitment and a small cash payment type of agreement. The company would take the responsibility to supervise, conduct and manage all technical programmes, if desired by the optionor. Charta Mines, are organized to conduct work programmes on an economic bases throughout the Yukon and qualify for the Federal Government Mineral Exploration Assistance programme.

Thank you very much for your attention of the enclosed data in this letter. I would very much appreciate receiving your comments and decision concerning the proposal for participation in any or all of the four properties mentioned.

Yours truly,

  
R.G. Hilker, P. Eng.  
Consulting Geologist

encl:

RGH/mh

