

JAN 4 1974

**KERR ADDISON MINES LIMITED**

(FOR INTER-OFFICE USE ONLY)

007648

To G. M. Hogg From W. M. Sirola  
 Subject PRISM RESOURCES LIMITED, GOLD STAR  
PROPERTY, CARMACKS AREA, Y. T. Date January 2, 1974

W.J. ✓  
 J.M.H. ✓  
 G.M.H. ✓  
 M.D.R. ✓  
 I.D.B.  
 R.D.S.  
 G.R.  
 T.W.B.  
 E.C.J. (circled)

During the past summer Prism Resources optioned this twenty-one claim property from P. F. Guder. The property is located on, and west of, Freegold Mountain at 62° 17' N, 137° 09' W. Access is by thirty-two air miles northwest of Carmacks or by forty-four miles of road. After optioning the group, twenty-four additional claims were staked by Prism Resources to cover the area between the Gold Star and the Ormsby Mines property to the southeast. Ormsby Mines was a gold producer in 1965-66 and is considered to have a reserve of 80,000 tons averaging 0.70 oz. Au.

Prism optioned the Gold Star group largely because of some spectacular free gold in skarns which was found on a dump near the Augusta shaft. Since the skarn was highly magnetic a magnetometer survey was run over part of the property. This survey revealed the presence of a zone of high magnetic intensity 3000 feet long and averaging 15 to 20 feet in width. Since this anomaly is covered with shallow overburden the actual cause of the anomaly is unknown but it is, in all probability, another skarn zone which may or may not contain gold values. On the assumption that gold values do exist within the zone we have attempted to calculate what sort of tonnage might be expected. The first problem was to determine what the vertical extent of the supposed skarn zone might be. We can only assume from the magnetic configuration that the zone is steep and dipolar. From this premise we have estimated the lower pole to be at a depth of 200 feet and we have used this figure in calculating possible tonnages. If we take only those parts of the anomaly that are greater than 5000 gammas, we have a total length of 1000 feet and the tonnage involved within the 5000 gamma contour would then be  $1000 \times 20 \times 200 \div 10 = 200,000$  tons. If of course the entire length of the anomaly happened to be auriferous, the total tonnage would be 600,000. The only purpose of this exercise is to establish some idea of the possibilities or limitations of the skarn zone.

I do not usually think of skarn zones as host rocks for good gold deposits. We have however in British Columbia two former gold producers at Hedley, B. C. which were in skarns. At one of these properties (Hedley Mascott) an important ingredient was the injection of later porphyry dykes and the best stopes in the mine were at the intersections of these dykes. It is possible that a similar geologic situation occurs on the Gold Star group in as much as some preliminary mapping done in 1969 on this property indicates younger dykes approaching the old workings at an acute angle. Similar dykes were also found on the Ormsby property east of the Gold star group.

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The overall geologic picture is that of a Mesozoic granodiorite intrusion cutting Precambrian or Cambrian rocks of the old Yukon group and the skarn zone has probably developed in limey rocks at the contact. Within the granodiorite and approximately 1200 feet south of the skarn zone there is a brecciated zone 1200 feet long by 300 feet wide surrounded by a halo of bleached rock which contains considerable amounts of pyrite, occasional tourmaline and minor MoS<sub>2</sub>. Since this part of the Yukon has not been glaciated, it is possible that the brecciated and bleached zones would have had some degree of leaching and could be underlain by a chalcocite zone but there is nothing in the surface samples we have seen to indicate that appreciable amounts of copper could be expected. This opinion however is based on fragmentary evidence and should not be considered to be gospel.

We have plotted the skarn zone on the Government - one mile magnetic sheet and from this it appears possible that yet another larger skarn zone might be expected on the Gold Star group 1000 feet or more north of the magnetic anomaly located by Prism Resources. Again this is speculative to some degree since the location of the airborne work may not be precise. The airborne map suggests that the Gold Star group is underlain by a basic intrusion with a less magnetic core. This core may be the brecciated bleached zone which could be much larger than indicated on Granger's geologic map. The aeromagnetic map also suggests that there is a pronounced magnetic high located three-quarters of a mile northwest of the peak of Freegold Mountain and this could be the other skarn zone we referred to earlier.

All of this material was presented by Angus MacDonald who is President of Prism Resources and Angus tells me that they have made a \$5000 down-payment to Mr. Guder and another \$6000 is due in June of 1974. If Prism makes this \$6000 payment they are then committed to a \$45,000 work program on the property. Angus feels that if we were considering optioning the property we would have to make the \$6000 payment and carry out the work commitment in return for a 70% interest. \$51,000

I have told Angus that we would not option the property without examination and that we would want to take soil samples across the magnetic anomaly to determine whether or not the gold content of the soils was anomalous. Angus agrees with these conditions and I think we should have John Graham, who is currently living in Whitehorse, do this soil sampling as soon as conditions permit.

If you concur with this thinking please let me know and we will arrange to have this work done.

*I have advised Bill Sirola to proceed with his proposed soil sampling cost. The property is an interesting and unusual one.*

WMS/rb

*Bill*  
W. M. Sirola

*OK for soil samples*  
*W.S.*

*Met. Jan 5/74.*

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Enclosures:

1. Prism Resources Annual Report.
2. Report on Gold Star Group by P. H. Sevensma, June 5, 1973.
3. Report on Magnetic Work by P. H. Sevensma, October 22, 1973.
4. Claim Map of Free Gold Mountain showing Prism holdings.
5. Print of 1 Mile Aeromagnetic Sheet showing Claim Block in relation to Magnetic Anomaly.
6. Description of Gold Star (Guder Property) from Yukon Minerals Inventory.
7. Isomagnetic Plan of Free Gold Mountain Project.

Property Name: Common GUDER Other

Location: Lat. 62°17' Long. 137°08' NTS 115I/6

Occurrence: Major Gold, iron Minor Copper, lead, zinc

Type of Mineral Deposit: Skarn and vein

History and Previous Work:

The original discovery in the Mt. Freegold area was made by P.F. Guder in 1930 on the Augusta cl followed by discoveries on the adjoining Peerless, Gold Star and Margarete cls. More than six showings have been explored by Guder or near the original claims by hand pitting, hand shafting, and bulldozer trenching from 1930 through 1969.

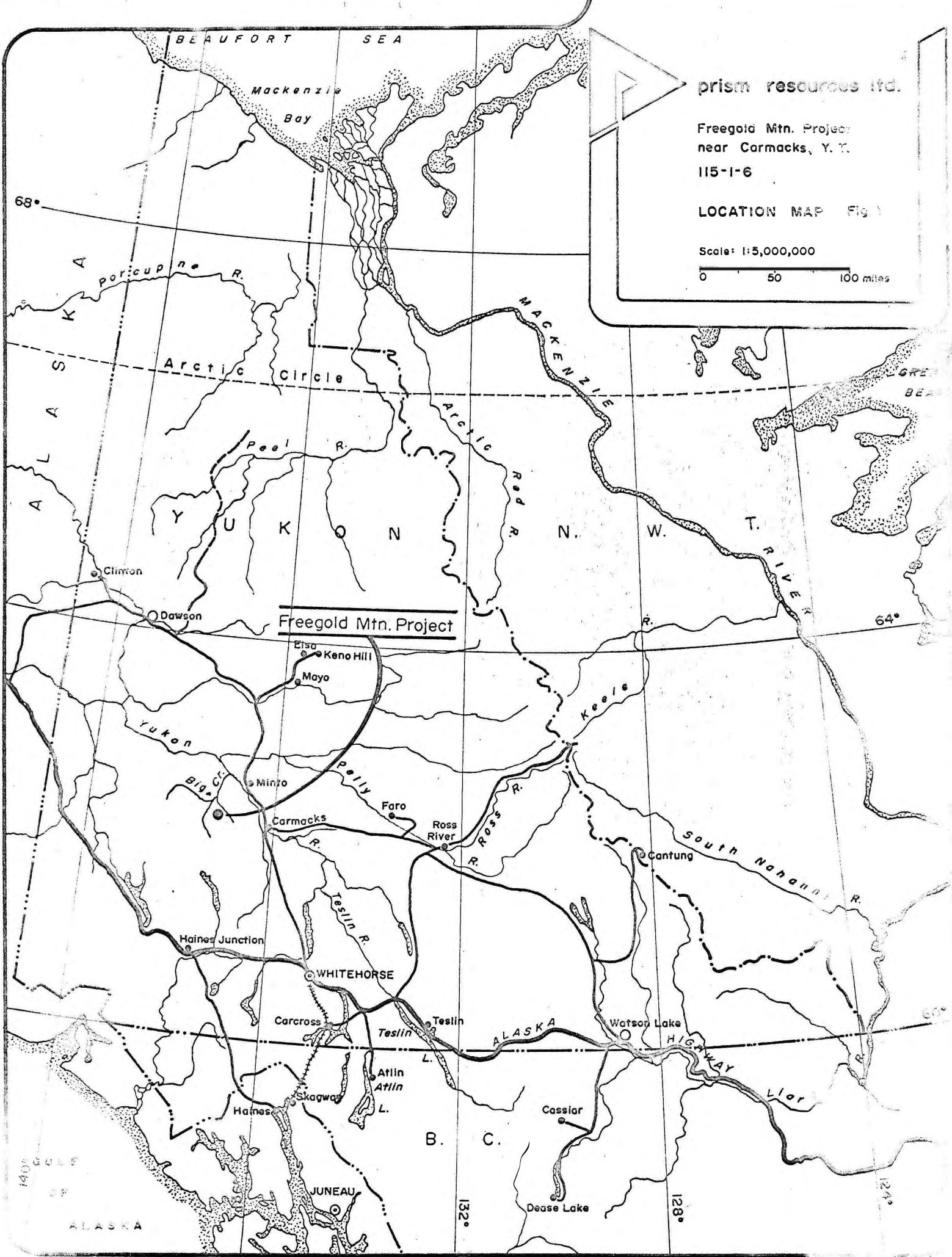
Description:

The Augusta showing is a skarn developed in metasediments near an intrusive contact. The skarn contain a lense of magnetite, hematite and limonite about 15 feet wide that has been traced for more than 300 ft. Quartz, pyrite and traces of chalcopyrite are also present. ✓ Gold occurs as fine disseminations in the limonite and quickly diminishes in quantity with depth. Abundant magnetite in the area indicates other unexplored skarns of similar nature.

At least 5 northwest trending quartz veins cutting either Yukon Group metasediments or intrusive rock have been explored in the immediate area. These contain small quantities of pyrite, arsenopyrite, chalcopyrite and occasionally galena and sphalerite. High gold assays have been reported from each vein but continuity of grade is very poor. ✓

*Surface enrichment??*

115 0  
715 J&K  
Snag



prism resources ltd.

Freegold Mtn. Project  
 near Carmacks, Y. T.  
 115-1-6

LOCATION MAP FIG. 1

Scale: 1:5,000,000

0 50 100 miles

**Freegold Mtn. Project**

68°

64°

60°

140°

132°

128°

124°

ALASKA

B. C.

ALASKA

HIGHWAY

JUNEAU

Dease Lake

Cassiar

Watson Lake

Atlin

Atlin

Haines

Skagway

Carcross

WHITEHORSE

Haines Junction

Cantung

South Nahanni R.

Carmacks

Faro

Minzo

Big

Yukon

Mayo

Etsa

Keno Hill

Dawson

Climon

Keela

Ross R.

Ross R.

Pelly R.

Arctic R.

Arctic R.

Pool R.

Arctic Circle

Arctic Circle

Arctic Circle

Arctic Circle

Arctic Circle

Arctic Circle

Arctic Circle

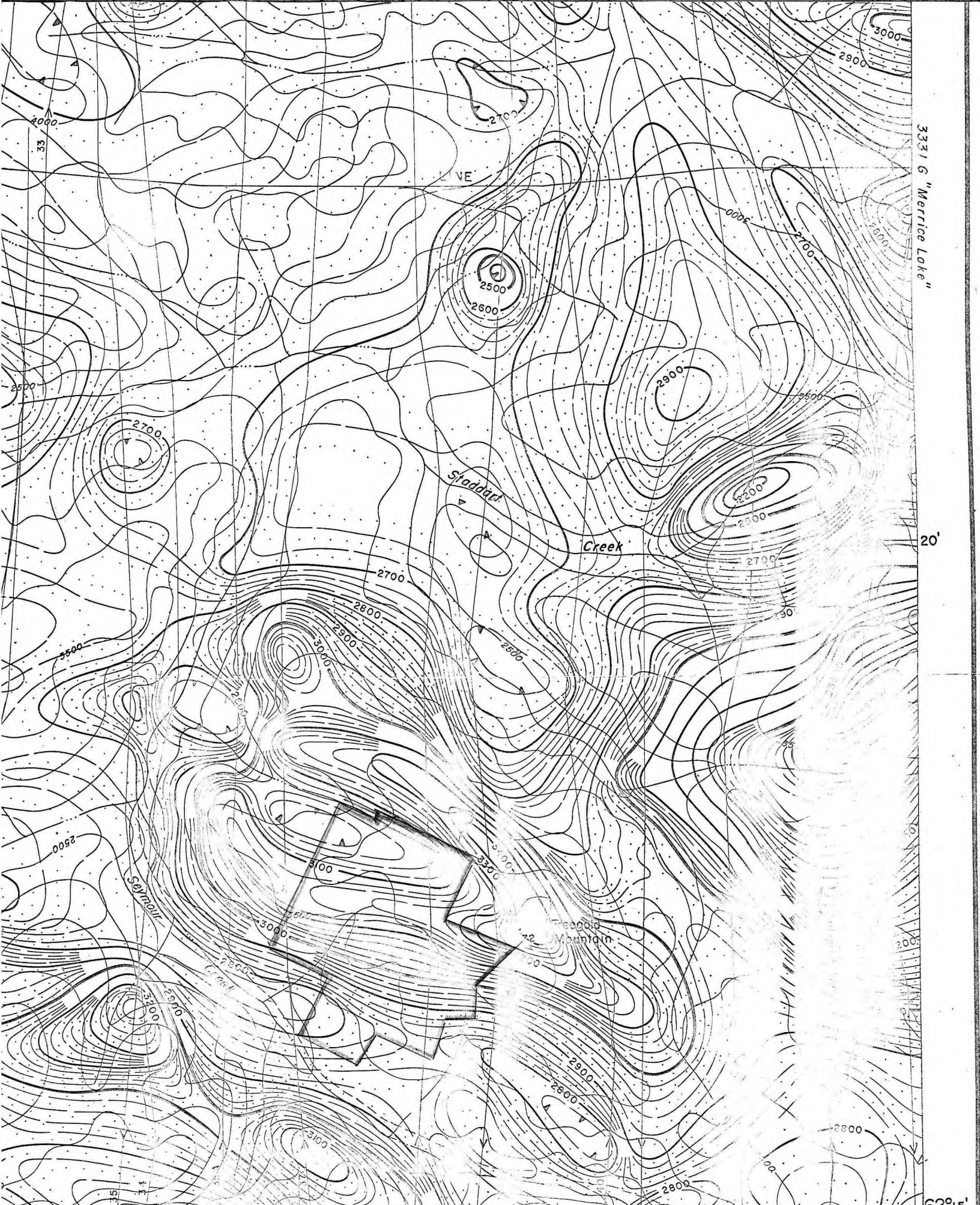
Arctic Circle

Arctic Circle

Arctic Circle

Arctic Circle

Arctic Circle



3331 G "Merrice Lake"

20'

62°15'

Mountain

claims staked by and optioned by Prism Resources.  
overlay on aeromagnetic map  
SCALE: 1/4" = 1 MILE

137°00'

10'



# PETER H. SEVENSMA CONSULTANTS LTD.

PETER H. SEVENSMA, PH.D., P.ENG.  
 Consulting Geologist • Exploration and Mining  
 715 - 850 WEST HASTINGS STREET VANCOUVER 1, B.C.

October 22nd 1973

Prism Resources Ltd.  
 c/o Mr. A.L.J. MacDonald  
 711-850 West Hastings.  
VANCOUVER, BC.

RECEIVED  
 DEC 27 1973

KEER ADDISON MINES LTD.

Dear Mr. MacDonald,

I have reviewed the preliminary magnetic map embodying the results of the survey conducted early October 1973 by D.R. Cochrane, P.Eng., on the Gold Star Group near Carmacks, Y.T.

The strength of the anomalies leaves little doubt that they reflect the presence of magnetite in large elongated pods and tabular masses.

As the only exposed magnetite is significantly auriferous, there is a high probability that part or all of the unexposed magnetite will be found to be gold-bearing as well.

This conclusion is strongly supported by the general en echelon disposition of both the magnetic anomalies and the younger dykes as mapped by R.A. Granger; both features showing a remarkable parallelism and a relationship to the syenite "nose" exposed East of the feature identified as "Augusta Shaft".

The Margarette Vein itself crosses a high magnetic anomaly East of the target area as well, both trends being about parallel.

The large medium-strength anomaly between 22W and 32W lies off the NW flank of the syenite "nose" and may reflect the presence of a sizable concentration of magnetite at depth.

A rough estimate of the tonnage involved in the magnetite-bearing formation indicates at least 5,000 to 10,000 tons per vertical foot, using a length of 1,000' and a width of 25'.

In a wider area, the presence of the breccia, of gold-bearing float and of a known gold ore-body only about 1½ mile to the SE, all indicate a most favorable geological setting suggesting a high probability for one or more economic discoveries.

I therefore recommend that the initially recommended program be expanded in scope, as follows:

Some 10 miles of linecutting and magnetic surveying, mostly outside the most recent grid, with additional soil sampling as the results of the initial survey may suggest.

Expanded geological mapping to a total of at least \$ 8,000.-


Additional bulldozer time for stripping and drill-moves.

An additional 4,000' of drilling in about 12 core-holes of about 300' plus some reserve footage, all drilling to be done on a continuous basis with a full-sized drill-crew and camp at an estimated overall cost of \$ 20.- per foot.

The total cost of a meaningful program of this scope is at present estimated at about \$ 150,000.-.

The details of this program may be worked out when all the results of the recent magnetic and geochemical surveying are available in their final form.

Respectfully submitted,

A handwritten signature in cursive script, reading "P.H. Sevensma", written over a horizontal line.

P.H. Sevensma, Ph.D., P.Eng.