



Preliminary Report ¹⁶
on the 7
Rams Horn Property ¹⁸
Lulu 1-16 Claim Group ²¹
(60° 134° SW) ¹³
Premier Mining Corporation Ltd., ³¹
Whitehorse Mining District, Y. T. ³²
W.S. Read, B.Sc., P.Eng., ²⁵
October 25, 1968 ¹⁴

This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:
[Signature]
RESIDENT GEOLOGIST

Approved as to cost in the amount
of: \$ *450.00*
[Signature]
CLERK

Accepted as registration work
under Section 53(4) Yukon Quartz
Mining Act.
[Signature]
COMMISSIONER OF YUKON

October 25, 1968

The Board of Directors,
Premier Mining Corporation Ltd.,
#818, 510 West Hastings Street,
Vancouver 2, B.C.

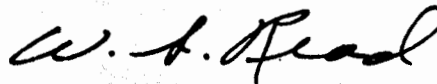
Gentlemen:

At your request, I have prepared a preliminary report on your Rams Horn property in the Whitehorse Mining District, Yukon Territory.

The property was visited on September 12, 1968, accompanied by Mr. Ralph Sostad and Mr. George Wing.

The report is herewith contained along with certain recommendations for the exploration of the property.

Yours very truly,



W.S. Read, P. Eng.

wsr/e

PRELIMINARY REPORT

on the

RAMS HORN PROPERTY

Lulu 1-16 Claim Group
(60° 134° S W)

of

PREMIER MINING CORPORATION LTD.,

in the

Whitehorse Mining District

YUKON TERRITORY, CANADA

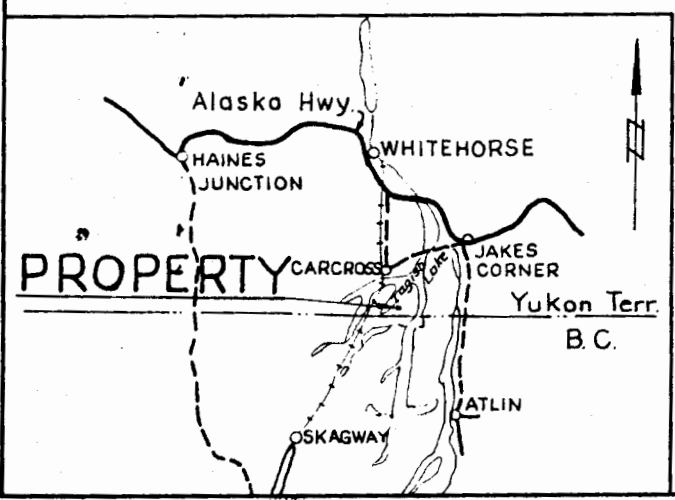
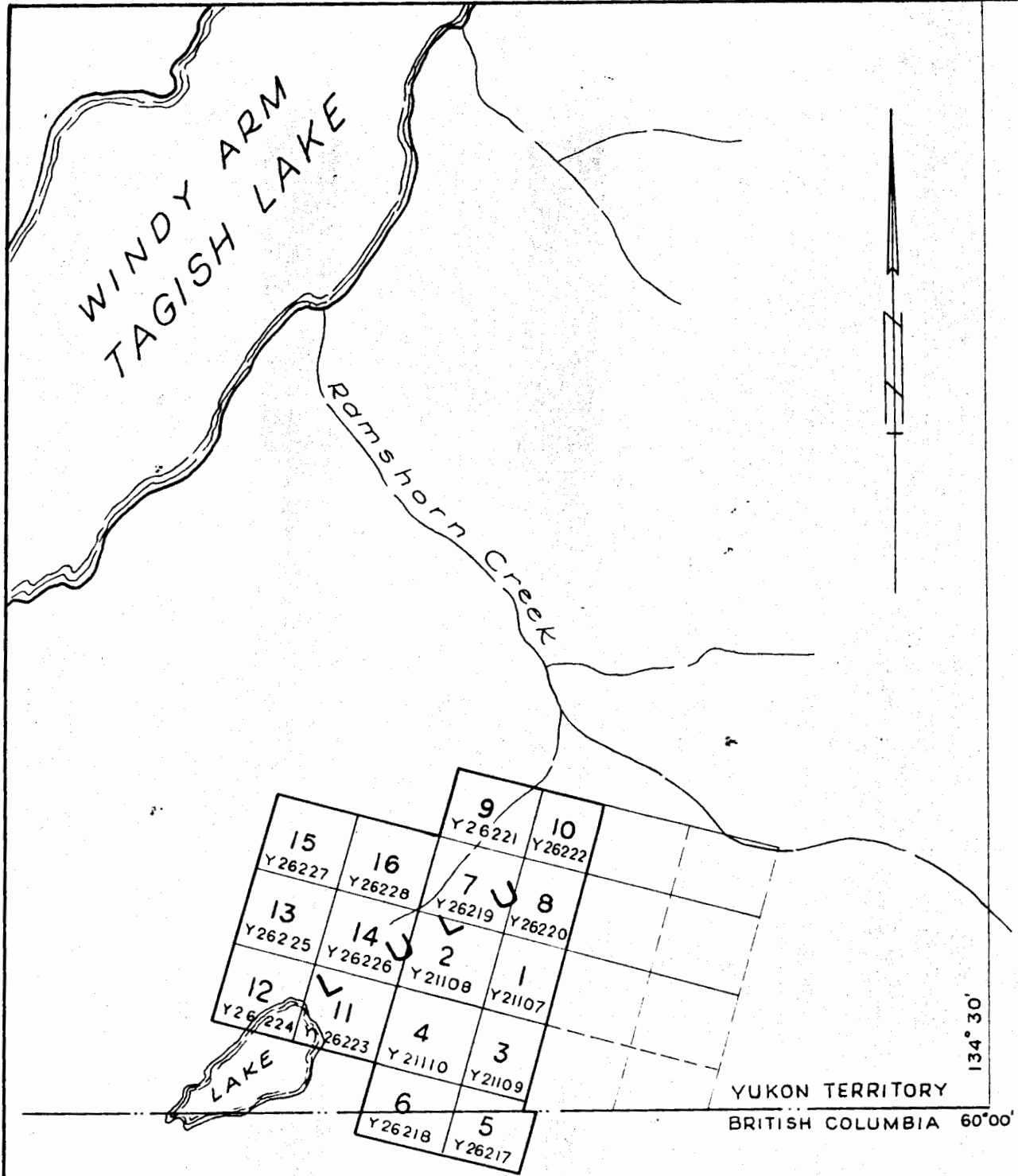
by

W.S. Read, B.Sc., P.Eng.,
860 Younette Drive,
West Vancouver, B.C.

October 25, 1968

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PREMIER MINING CORPORATION LTD.

LOCATION AND CLAIM MAP

SCALE :- 1 INCH = 1/2 MILE

0 1/4 1/2

WAYLAND S. READ P. ENG. OCT. 25, 1968
Consulting Geologist, West Vancouver, B.C.

LOCATION:

The property is located about 53 miles S.S.E. of Whitehorse, two miles southeast of Windy Arm, Tagish Lake, Yukon Territory, near the border with British Columbia. It is about north latitude $60^{\circ} 00.5'$ and west longitude $134^{\circ} 33'$, on map sheet 105 D/2 of the National Topographic System, in the Whitehorse Mining District. The main workings and showings visited were above the tree line at elevations of 4900 to 5150 feet and the old campsite at 4830 feet above mean sea level. Elevations were by altimeter. Tagish Lake has an elevation of 2152 feet.

ACCESS:

The capital city, Whitehorse, has the principal airport and is the distribution centre for the Yukon Territory. It is supplied by ship and rail from Vancouver via Skagway and by truck and air from Vancouver and Edmonton.

At present the property is most easily reached by helicopter from Whitehorse. A good gravel road extends as far south as Carcross on the White Pass and Yukon Railway and then four-wheel drive mine access road to the Venus property, almost directly across Windy Arm. It has been reported in the press that the Venus road is to be improved. The early development appears to have been serviced from the lake with pack horses used to supply the camp.

The old campsite would have present advantages due to its close proximity to the showings, good helicopter landing site and apparent availability of water, since an adequate domestic supply was running when visited on September 12, 1968.

CLAIMS HELD BY COMPANY:

The company has advised that they hold the claims listed hereunder. The transfer of the claims to the company has not been checked, as it is believed that the company has retained counsel to ensure itself of proper title to the ground.

The common corner for the Lulu 1, 2, 3 and 4 appeared to be adequately staked, although most of the writing was illegible due to weathering. The posts would need to be tagged prior to recording assessment work and I have been informed that this has been done since my visit to the property.

<u>Claim</u>	<u>Record No.</u>
Lulu 1 - 4	Y 21107 - Y 21110
Lulu 5 - 16	Y 26217 - Y 26228

HISTORY:

The two tunnels driven by hand steepling and some stripping attest to a fair amount of work by hand methods. The old bellows and other mining and camp equipment were left stored in the lower tunnel. After much searching of records and personal communications, the only mention seems to be in a report by Dr. D.D. Cairnes in 1908, G.S.C. Publication No. 982, now part of Memoir 284, p.255.

"Some work was done this summer on the Rams Horn on the east side of Windy Arm, and a very good looking quartz ore carrying galena, zinc blende, chalcopryrite and pyrite were seen there, but the veins examined were too narrow to be profitably worked".

The Lulu 1 - 4 claims were staked by George Wing of Whitehorse on September 7, 1967 and transferred to Premier Mining Corporation in October 1968. No other published data on the property could be found.

GEOLOGY:

The mineral occurrences are found in rocks mapped by J. O. Wheeler of the Geological Survey of Canada, Memoir 312, Whitehorse Map-Area Yukon Territory, as being composed of metamorphosed volcanic rocks, probably belonging to the Taku Group of Pennsylvanian (?) and Permian, age. The continuation of this group south into British Columbia has been mapped by R. L. Christie of the Geological Survey of Canada (Map, 19-1957) as Unit A composed of volcanic rocks of uncertain

age; dacite, andesite, basalt, flows, breccias, tuffs.

Wheeler describes the unit in part:

"Around Windy Arm, on Nares Mountain, and near Jubilee Mountain, a sheared and disrupted block of chert and dioritic rocks of heterogeneous texture and composition is associated with ultramafic rocks, ribbon chert and some slate and limestone.

In general, greenstone in the altered volcanic rocks is of two types: (1) A massive, non-fragmental rock ---- (2) a fragmental rock ---. Dioritic rocks of variable composition, ranging from augite rich clots to rocks composed mainly of plagioclase, are irregularly associated with greenstone. The texture of these varies from ophanitic to pegmatitic. The equigranular parts are a poorly foliated ophitic assemblage of about equal portions of mafic minerals and plagioclase. The mafic minerals consist of augite, partly altered to pale-yellow-green chlorite and carbonate or uralite, and locally to green hornblende. The original plagioclase, about oligoclase-andesine, is altered to a mottled aggregate of chlorite and clinozoisite(?)".

In the short time on the property, September 12, 1968, a quick examination was made of the two tunnels and mineral showings within the north facing cirque. The veins were in complex dioritic rock as described. The lower tunnel at elevation of about 4900 feet was driven S 40° W on weak mineralization terminating in an area of weak fractures. At about elevation 5,150 feet a zone of skarny rock was traced along the south cirque face. This vein was sampled about 200 feet northeast of the small water course. At this point channel chip sample number 6783 was cut across 6.4 feet of the vein zone which had a strike of N 45° E and appeared to dip at about 65° southeast or into the hill. The true altitude

of the vein is difficult to determine with certainty. This vein zone would attract a magnet and field examination showed magnetite, pyrrhotite and chalcopyrite. This channel chip sample number 6783 across 6.4 feet assayed: gold 0.005 oz/T., silver 0.36 oz/T., copper 0.80%, nickel 0.30%. At the upper tunnel elevation 5,150 feet about 300 - 350 feet northeast of the sample cut, a short tunnel had been driven N 78° E on a shear dipping 47° north. A channel chip sample, number 6784, across a quartz vein forming part of the zone assayed: gold 0.10 oz/T., silver 3.90 oz/T., nickel - trace. All assays were by the Whitehorse Assay Office.

Other skarny patches and vein zones were observed as well as sulphide float in the talus. The various vein strikes and dips and skarny patches give the impression of a stockworklike structure. With the magnetic minerals present in the vein zones, a larger buried body should be ~~able to be detected~~ ^{detectable} with a magnetometer.

This area is at the edge of map 1313 G (105 D/2) covered by airborne magnetic survey in 1961, which shows no magnetic anomaly in this location. However, it would appear that the flightlines were over one-half mile away from the known mineral occurrence. There is no coverage for the adjoining map area in British Columbia.

The property is of exploration interest because of the nickel content in the veins along with varying amounts of silver, copper and gold. It is also in an area receiving renewed mining interest, in particular

Arctic Gold and Silver and Venus Mines, to the northwest across Windy Arm.

CONCLUSIONS:

The property is of exploration interest because of nickel content in the veins along with varying amounts of silver, copper and gold. Due to vein association with magnetic minerals, a magnetometer survey combined with geological mapping and sampling should be a relatively thorough and most reasonable method of determining a possible drill target. This could be completed by a small crew within one summer.

RECOMMENDATIONS:

It is recommended that geological mapping and sampling be conducted over the areas of known mineralization. Due to differences in elevation of showings, topography should be plotted in key areas. The perimeter should be prospected where outcrops exist. The claim group should be covered by a magnetometer survey with 400 foot line spacings marked at 100 foot line intervals. The readings would be at 100 foot intervals with fill in as required. This would require about 16 miles of line and baseline.

With favourable results preliminary test drilling should be conducted towards the end of the programme, while technical staff is on the property to direct drilling and correlate results.

ESTIMATE OF COST:

Air Photo study and preliminary work	\$ 500.00
Mobilization crew and equipment	1,500.00
Radio rental and communications	500.00
Line cutting	2,500.00
Chaining and survey	1,500.00
Magnetometer survey	2,500.00
Geological mapping and sampling	2,000.00
Camp and supplies	1,500.00
Assaying - allow	500.00
Helicopter servicing - 18 hours @ \$225.00 per hr.	4,050.00
Demobilization crew and equipment	1,000.00
Consulting	1,500.00
Diamond drilling - allow 1000 ft. @ \$15.00	15,000.00
Supervision and servicing drilling - allow \$5.00 ft.	5,000.00
	<hr/>
	\$ 39,550.00
Contingencies 15% say	5,450.00
	<hr/>
Total	<u><u>\$ 45,000.00</u></u>

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The Mineral Industry of Yukon Territory and Southwestern District of Mackenzie, 1960-1966. Geological Survey of Canada.

Wheeler, J.O., Whitehorse Map-Area, Yukon Territory (105 D) Memoir 312 Geological Survey of Canada 1961.

CERTIFICATE OF QUALIFICATIONS

I, Wayland Stuart Read of 860 Younette Drive, West Vancouver, B.C., do hereby certify that:

1. I am a practising mining geologist and my address is 860 Younette Drive, West Vancouver, B.C.
2. I am a graduate in geology from Acadia University, Wolfville, Nova Scotia, and have been granted the degree of Bachelor of Science in Geology and have engaged in practising my profession for the past ten years.
3. I am a member of the Association of Professional Engineers of British Columbia and the Yukon Territory, a Fellow of the Geological Association of Canada, and a Junior Member of the Canadian Institute of Mining and Metallurgy.
4. I have no interest in the securities of Premier Mining Corporation Ltd. nor in the property held by them and discussed in this report.
5. The property was briefly visited on September 12, 1968 accompanied by Mr. Ralph Sostad and Mr. George Wing.

Respectfully submitted,

W. S. Read

Wayland S. Read, B.Sc., P.Eng.,
Consulting Geologist.

860 Younette Drive,
West Vancouver, B.C.

October 25, 1968