

MINNOVA INC.

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DATE: July 20, 1990

TO: IAN PIRIE

FROM: DAVE HEBERLEIN

MESSAGE: Here is the summary and evaluation of the Westech Resources NB 1-5 claims (Harper). I have a compilation map to go with this report. I shall bring it down to the office on my next trip.

*Dave*

Total No. Pages: 8 (incl. this page.)

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MINNOVA INC.

DATE: July 20, 1990  
TO: Ian Pirie and Alex Davidson  
COPIES TO: NTS File  
FROM: Dave Heberlein  
SUBJECT: HARPER/LUCKY BOY (NB 1-5 CLAIMS)  
EVALUATION

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GENERAL:

The Harper (Lucky Boy) occurrence (NB 1-5) is located between Vermelin and Harper Creeks on the Northwest shore of North Barriere Lake; approximately 32km ENE of Barriere. Access to the claims is by way of the North Barriere Lake Forest Service Road (Fig. 1) to a turn off 1200m east of the Harper Creek bridge. On the claims, numerous old exploration trails and logging roads provide ready access to most areas.

The property lies on a moderate, south facing slope between the elevations of 640m (at North Barriere Lake) to 1370m at the north property boundary. The area is variably forested with mature stands of fir and local concentrations of birch, lodge pole pine and red cedar. Much of the property is covered by 5-10m of glacial till (outwash sands towards the lake shore). Outcrop exposure averages less than 5%.

PROPERTY HISTORY:

The property area has had a long, albeit intermittent exploration history. The first recorded exploration activity was in 1927 when three short exploration adits were driven along a massive sulphide horizon. No results of this work are available.

In 1962, Barriere Lake Mines Ltd. commenced a three year exploration program that included extensive trenching, a magnetometer survey and 30 short diamond drill holes totalling 4500 feet. Records of this work are also unavailable.

Scurry Rainbow Oil Ltd. continued exploration of the property in 1966. They completed 12 diamond drill holes, for a total of 3780 feet. Two massive sulphide horizons were intersected over a strike length of almost 100m. Intersections of the lower zone ranged up to 26 feet, however grades were low (<0.84% Cu). Precious metals were not reported.

Barriere Lake Minerals Ltd. explored the property in 1970, and completed an additional five drill holes (648 feet) into the mineralized zones with similar results.

Craigmont Mines Ltd. conducted a surface exploration program over the property in 1972. Poor results of an IP and limited soil survey resulted in termination of their option.

A Crone PEM survey and a follow-up diamond drilling program (holes 71-1 to 76-3) was undertaken over the WahWah (adit location) horizons by Canadian Superior Explorations Ltd. in 1976. Again results were poor. Low grade massive sulphides were intersected in one hole (76-1, from 36 to 40 feet) and were found to contain anomalous Zn and Cu values (0.93% Zn, & 0.188% Cu). The claims were allowed to expire.

The present owners, Westech Resources Ltd., staked the NB 1-5 claims in 1983 after discovery of the Rea Gold deposits. A compilation of results to that time and further EM, Mag. and soil surveys were performed. Significant soil gold and arsenic (to 640/ppb and 225/ppm) anomalies were detected on the slope below the Lucky Boy showing. To date, these anomalies have not been followed up.

volcanic origin for these rocks.

Although extensively explored over the last 60 years by numerous companies (Northwestern Exploration Ltd., Mining Corporation of Canada, Ducanex Resources Ltd., Kennco Explorations, Cominco Ltd. and more recently Noranda and Falconbridge Ltd.), no ore has been discovered.

High grade mining operations in the late 1930's on the C-C and Copper Cliff represents the only recorded production from the area. A total of 234 tonnes of ore containing an estimated 6501kg of Au, 13,500kg of Ag, and 4800kg of Cu was shipped.

#### PROPERTY GEOLOGY:

The Claims are underlain by a gentle, SW dipping (20-30°) sequence of sericite and chlorite-sericite schists with local 'calc silicate' and 'marble' horizons. These rocks are thermally metamorphosed to biotite hornfels grade close to the Baldy batholith which underlies most of the NB-5 claim.

Two distinct massive sulphide bearing intervals are recognized in the stratigraphy, each containing multiple sulphide horizons. The upper zone (stratigraphically), known as the Lucky Boy, is exposed in road cuts and in a large trench 80m north and 1060m east of the NB-1 ICP. At this location three distinct massive sulphides beds are exposed. The uppermost can be traced on surface for a strike length of 40m, with an apparent thickness of almost 1.5m. Narrow massive sulphide lenses (50 & 15cm thick) are exposed in road cuts 5m and 20m below the main trench. At all three locations the dominant sulphide is pyrite with varying amounts of Po, & Cp. Samples taken from each location are summarized below:

PROPERTY OWNERSHIP AND STATUS:

The claims are owned by Westech Resources Ltd. of;  
Suite 903-805 Hornby St., Vancouver, B.C., V6Z 2G3.

<u>CLAIM</u>	<u>UNITS</u>	<u>REC #</u>	<u>EXPIRY DATE</u>
NB-1	9	3970	03-15-96
NB-2	6	4531	06-24-96
NB-3	1	5508	02-08-96
NB-4	1	5509	02-08-96
NB-5	<u>10</u>	5510	02-08-91*

Total 27 units.

Owner Westech Resources Ltd.

GEOLOGICAL SETTING:

The Harper/Lucky Boy showings are two of several stratabound massive sulphide occurrences that are hosted by unit EBA (Homestake equivalent) rocks in the Birk Creek area. The host rocks, consisting of sericite and chlorite sericite schists, are exposed in a triangular shaped belt bounded by the Barriere River fault to the south, the Birk Creek Thrust to the west and the Baldy Batholith to the North.

Several massive and semi-massive lenses are exposed in the Birk Creek area. They include; the Copper Cliff, Rainbow, C-C, Broken Ridge, and May occurrences. The mineralization at their occurrences consists of conformable, sometimes banded lenses and 'beds' of pyrite; chalcopyrite, sphalerite, galena, and pyrrhotite. Immediate host rocks are typical silvery-grey sericite and sericite chlorite schists, with narrow bands of pyritic, siliceous material, possibly of exhalative origin. Fragmental and 'Quartz eye' bearing units attest to a felsic

<u>Sample #</u>	<u>%Cu</u>	<u>g/t Au</u>	<u>g/t Ag</u>
OTREA012	0.306	0.20	3.1
OTREA013	0.527	1.88	3.8
OTREA014	0.226	0.01	2.7

No Pb or Zn was detected.

The lower zone, is exposed 900m to the northeast. Massive sulphides are reported to be present in three trenches to the northwest and north of the adit location. These occurrences were not found during the site visit. At the adit location, well bedded, semi-massive Py in a siliceous matrix is exposed in the portal. This mineralization grades into massive sulphide up hill to the NW where it is exposed in a long shallow trench.

From assessment records it appears that this area has been extensively drilled. At least 15 holes are recorded of which 13 hit massive sulphide mineralization. No ore grades were reported, however widths of mineralization exceeding 6m were obtained. From the drilling by Scurry Rainbow Oil Ltd. (1966) and Canadian Superior, at least 4 massive sulphide lenses are known to be present. They appear to lie on two horizons (two on each) that are separated by 50m of chlorite schist. The uppermost horizon is delineated by PEM (Crone) and IP anomalies (15% FE) and the lower by 200 gamma mag highs.

#### EXPLORATION POTENTIAL:

Although the NB property is a small land position, it does contain numerous, albeit low grade, massive sulphide occurrences. They are contained in two stratigraphic packages, each with multiple sulphide horizons. All occurrences have been explored quite thoroughly by trenching and drilling. Little potential for ore grade material remains in these areas.

Good potential, however exists elsewhere on the mineralized horizons. As they dip at a shallow angle to the southwest, large areas of the mineralized horizons are present within a drilling distance of the surface. There is no reason why higher grade mineralization is not present along these planes. The May and Broken Ridge occurrences on the west side of Harper Creek appear to be at a similar stratigraphic level to the Lucky Boy lenses. At the May occurrence, massive, blackjack sphalerite occurs as 10-15cm beds in a similar chlorite schist host. If this mineralization lies at the same time horizon as the Lucky Boy it would suggest that the mineralizing system was regionally extensive and perhaps zoned with respect to base metal content (ie. Cu-Zn rich closer to exhalative centres and base metal poor distally).

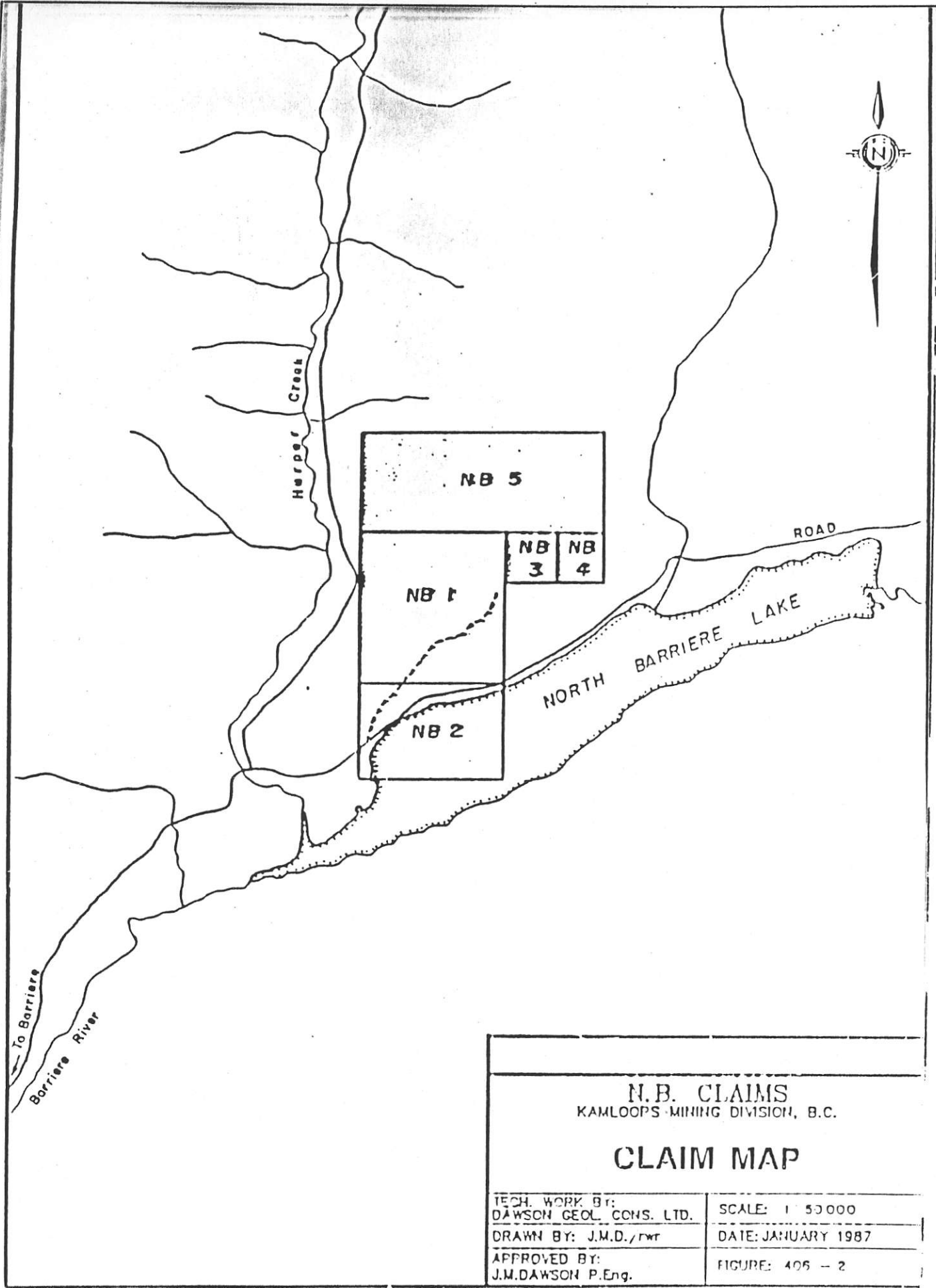
To test this supposition on the NB claims would be quite straight forward. If we assume a minimum target size of 1MT (a massive lens with an S.G. of 4.5 and dimensions of 400m x 160m x 5m), two drill sections spaced at 300m intervals with 100m spaced holes would be adequate to test the entire property. In order to penetrate both mineralized intervals, hole depths of 200m would be required. To aid in target definition a gravity survey may be appropriate to identify mass concentrations at depth. Topography and orientation of the units is amenable to this technique. The shallow dips would make traditional EM methods ineffective.

#### SUMMARY AND RECOMMENDATIONS:

Although this property is relatively small (27 units) it does cover a well mineralized part of the Unit EBA stratigraphy. Multiple massive sulphide horizons have been documented on the property by previous operators. Where exposed on surface, they have been extensively trenched and diamond drilled with no reported ore grade intersections. Nevertheless, good exploration

potential remains on the property. The shallow southwesterly dip to the stratigraphy keeps the mineralized horizons within a drillable distance from the surface, and presents a large surface area of each horizon that is still untested. The primary target would be a more proximal, base metal rich massive sulphide body and perhaps stringer zone, such as that seen in at the CC and Copper Cliff occurrences in Birk Creek. The entire property could be thoroughly tested to a depth of 200m at a cost of approximately \$400 K. This program would consist of twenty 200m diamond drill holes drilled at 100m intervals on two sections spaced 300m apart. It is recommended that we approach the owners with the intention of negotiating an option agreement.





N.B. CLAIMS  
 KAMLOOPS-MINING DIVISION, B.C.

**CLAIM MAP**

TECH. WORK BY:  
 DAWSON GEOL. CONS. LTD.

SCALE: 1 : 50 000

DRAWN BY: J.M.D./JMT

DATE: JANUARY 1987

APPROVED BY:  
 J.M.DAWSON P.Eng.

FIGURE: 405 - 2