

Box 11

WESFROB MINES LIMITED

REPORT

ON

TASU ACTIVITIES

QUEEN CHARLOTTE
ISLANDS, B.C.



FEBRUARY to MAY, 1956

~~MINING DIVISION~~

Jas. J. McDougall
Geologist

~~ENGINEER~~

103C

Lot. #1484

May 18th, 1956

Dr. Alex Smith,
Wesfrob Mines Limited,
401-5, 402 West Pender Street,
Vancouver 3, B. C.

Dear Sir:

Re: Tasu Activities, Queen
Charlotte Islands.

The following is a short account of
the work carried out in the Tasu Area during
the first quarter, by Pat Russell, Stan Bridcut,
Gerry Davis and myself.

This report should be used as a sup-
plement to my 1955 Tasu Report and filed with
it.

Respectfully submitted,

James J. McDougal

JJMcd/EPG.

WESTROB MINES LIMITED

TASU ACTIVITIES - QUEEN CHARLOTTE ISLANDS, B.C.

FEBRUARY to MAY, 1956

FEBRUARY:

During the latter part of February approximately 500 pounds of fresh chalcopyrite-bearing magnetite from the Tasu workings was shipped to the Lakefield Laboratories for metallurgical tests.

MARCH:

Two fractional claims were located north of the main workings after it was learned that Vancouver(?) interests had taken over the adjoining Ella and China Boy Crown-grants. One of these, the "Lakeshore Fr." has not as yet been accepted because of a sudden unwillingness, on the part of the Mines Department, to admit fractions except under a set of very limited conditions which they have not as yet published.

APRIL:

During the latter part of April a 12 man camp was set up at the Fee Beach and trails were cut to the main showings. H. Gleser, Engineer, and E. Hanson, Foreman, were shown around the property. The diamond drillers were given assistance in moving their drill from the beach to the location of the first hole, and tentative arrangements made for

successive drilling of both the iron and copper deposits.

Eight short preliminary diamond drill holes totaling 200 feet were completed, for sampling purposes, using our Pack Sack Drill. Limited prospecting showed the presence of several additional magnetite deposits not previously recorded. Eight claims were staked along strike to the south.

MAY:

On the completion of our drilling and staking program, we returned to Vancouver May 3rd.

RESULTS OF PRELIMINARY WORK ON TASU.

APRIL and MAY, 1956

Results of our short hole diamond drill sampling of various sections of the Lower and Upper T-Bone deposits are included in this report, as is a revised version of Map T2 showing locations of the holes plus recent discoveries. The object of this drilling was to obtain a truer average figure of the grade to be expected than was possible from surface sampling of leached rock. Several important features, previously held in doubt, have been clarified as follows:

(1) LOWER T-BONE DEPOSIT:

Pyrite is present in greater amounts than was formerly indicated. Five assays from 3 holes totaling 106 feet and averaging 62.5% Fe ranged from 0.28% to 2.69% sulfur giving a weighted average of 1.46%. A 60 foot chip sample taken by Gleser from an outcropping near and similar to those drilled assayed 67.7% Fe and 0.03% S, showing the marked effect of near surface pyrite leaching.

Although there are bands, possibly 30 feet in width, which may contain less than 1/2 of 1% S, it is doubtful if the overall grade of shipping ore can be brought below 1.4%.

Composite sampling of these five core samples returned (a) Copper 0.02%, (b) Phosphorus 0.024%, (c) Titania 0.02% and (d) Alumina 1.56%.

(2) Two holes in the Upper T-Bone, totaling 37 feet, showed an average iron assay of 62.5% and a sulphur content of 2.59%

(due to the presence of pyrrhotite and chalcopyrite). The average copper value is 0.4%. The core showed no copper within several feet of the surface, but like the pyrite in the Lower T-Bone it showed up at slight depth.

(3) The overall average of both deposits, from 140 feet of sampled core, is 62.5% Fe, 1.73% S, 0.07% Cu, 0.024% P, 0.02% TiO₂, and 1.56% Al₂O₃.

A large portion, possibly 1/3, of the magnetite zone as mapped, is composed of andesite and post mineral(?) basalt dyke rocks plus unmineralized country rock. The andesite and country rock occur as irregular bands within the magnetite zone but the relation of the basalt is not as clear. The latter, the surface of which resembles magnetite, occurs near and parallels the steep contacts of the higher grade magnetite bands although in several instances it appears flatlying and is often over and underlain by magnetite.

To offset the country rock and dyke content, our prospecting has increased the widths of the zones formerly mapped and added several new ones. The "total possible" ore zone, averaging 65 to 70% magnetite, is now in the order of 30,000 to 35,000 tons per vertical foot. It would be dangerous at this point to predict the depth expectancy of any one deposit as they may vary widely - a fact only to be shown by diamond drilling. However, there is no logical reason why several hundred feet should not be expected as a minimum. Several features reflecting on this are now evident. One of these is that the Lower T-Bone is controlled to a large de-

gree by a persistent breccia zone within the volcanic or Middle Group of rocks. While silicified or otherwise unfavorable portions of this breccia have been left as unmineralized remnants, which unfortunately lower the grade, the widespread and continuous nature of this horizon(s)? may be very important in reflecting depth persistency. This evidence is also substantiated by the recent discovery of near vertical fault control of an oreblock 100 by 150 feet occurring several hundred feet south of #1 DDH. The deposit, because of this structural control, can be partially removed from the "typical" contact metamorphic type.

There is no surface indication of the ore being cut off at shallow depth by granitic rocks.

On the Lower T-Bone extension (now being drilled) a body of magnetite, having a constant 60 to 80 foot width, can be traced along a ridge, which it forms, for about 700 feet horizontally and through a vertical range of about 250 feet. The upper commencement of this band is very weak and uncertain, being a series of unoriented(?) basalt, andesite and magnetite lenses, but within the first 50 feet the magnetite assumes its full width which it encouragingly retains until being lost under overburden 650 feet away. There is some indication that it may fork or horsetail at the lower elevation - this apparent condition could also be caused by paralleling magnetite bands. Several poorly defined contacts indicate a steep dip.

600 to 900 feet northwest of the T-Bone, and cut by the trail to Peo Beach, a persistent breccia zone with length

in excess of 500 ft. contains low grade magnetite (30 to 50%??) across widths of 50 to 100 feet. This area, which almost certainly includes a portion of the Ella Crown Grant, as well as our Blujay claim, has not been prospected. Dip needle readings, both over the poorly exposed outcroppings and a separate overburdened area several hundred feet to the south, are strong.

Folding and faulting can be expected to present problems of ore displacement, thus drill logs will have to be carefully studied. There appears to be a sudden change in attitude or grade which is related to small benches or "steps" on the hillside. These minor topographical expressions may represent structural or petrological features of importance.

CONCLUSIONS:

Although this new information on sulfur content is somewhat disappointing, this is overshadowed by the total amount of possible iron present. One gets the impression, while walking over the deposit, that the float alone would keep B. C. in iron for 10 years (as mentioned before, this may be misleading). It is my continued opinion that no previously described magnetite property in B. C. has the impressive surface showings of Yasu, although problems are rapidly developing.

The average sulfur content of the Texada deposits now being mined and sold to the Japanese is reported to be about 1.79% for a 61.7% product. The range is from 0.073% to 9.4% S. Between 0.25% and 0.75% copper is present, so is

about 0.021% phosphorous. The Lower T-Bone deposit contains no copper of importance, and should be able to meet the grade of the Texada ore in sulphur and phosphorous, both being within the Bessemer Limit. Other large(?) B. C. magnetite bodies, with the exception of Ford and Quinsam (now mined), contain sulphur in quantities exceeding 1%. Eastern deposits, such as those at Cornwall (2.5% S), and French Creek (3%) marketed a favorable product.

RECOMMENDATIONS:

If 1.5% sulphur is not objectionable in shipping ore averaging 62% iron, the present drilling program should be arranged so that the lower and more easily accessible T-Bone Extension copper-free deposits be thoroughly tested before moving to the upper copper-magnetite deposits. If the hole(s) now being drilled show favorable results at depth, the drilling tempo should be stepped up by putting on 2 shifts or a second drill.

The total iron content shown by our drilling is comparatively good but in order to recover more than 1/2 of the ore indicated and maintain this grade (or increase it) a coarse magnetic separating process is required. This would eliminate excessive sulphides associated with dykes and poorly mineralized inclusions.

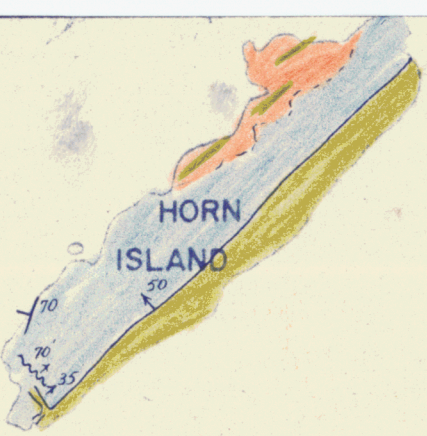
I would also recommend that immediate arrangements be made to obtain the services of a B. C. L. Surveyor to swing and straighten out the confused claim picture at Tasu before a "Yukon" staking spree occurs. If one could be ob-

tained before the end of the summer (they being very much in demand) he could spend a few days at Ikeda running boundaries on the Maple Crown Grant, (which may also contain important iron deposits) such being ordered by the Mines Department before issuing us a lease.

A bulldozer, although not an absolute necessity at Tasu, would, if any real interest is held towards developing the property, be a real asset. Bullwork, mainly backpacking of supplies up a 1200 ft. hillside, should have a reduced role in any enlarged program.

Vancouver, B. C.
May 18th, 1956

James J. McDougall
Geologist.



TASU SOUND



MAP T2
GENERAL GEOLOGY CLAIM MAP
TASU MINERAL CLAIMS
QUEEN CHARLOTTE ISLANDS, B.C.

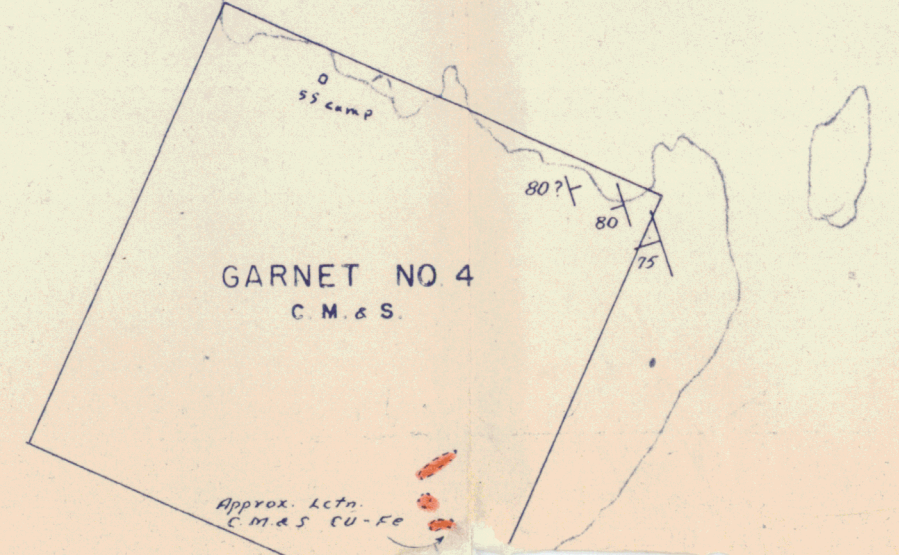
J. J. MC DOUGALL, ST. EUGENE MINING CORP.
DECEMBER, 1955

SCALE 600 FEET TO 1 INCH

- LEGEND
- MAGNETITE ZONE
 - GRANITIC ROCKS
 - VOLCANICS & RELATED DYKE ROCKS, MINOR INTERBEDDED SEDIMENTS & META SEDIMENTS
 - LIMESTONE OR MARBLE, MINOR DYKE ROCK & META SEDIMENTS
 - THIN-BEDDED SHALES, ARGILLITES
 - ATTITUDE (CONTACT, BEDDING)

NOTE
ALL LOTS ARE TRACED FROM A SURVEY PLOT WITHOUT GROUND IDENTIFICATION OR REFERENCE THEREFORE THE POSITION OF THE LOTS IS A BEST MEAN POSITION AND SHOULD BE USED WITH RESERVE

PHOTOGRAPHIC SURVEY CORPORATION LTD.
WESTERN DIVISION
AIR SURVEY ENGINEERS
VANCOUVER INTERNATIONAL AIRPORT, B.C.



NOTE: BOUNDARIES OF UNSURVEYED CLAIMS & FRACTIONS APPROXIMATE ONLY - MINOR ATTITUDE ERRORS POSSIBLE DUE TO MAGNETIC ATTRACTION

Revised May 1956 J. Mc