MAGNETOMETER SURVEY

QUEBEC METALLURGICAL INDUSTRIES LTD.

WEDEENE IRON PROJECT, KITIMAT, B. C.

February 27, 1962 D. J. Salt

MAGNETOMETER SURVEY

QUEBEC METALLURGICAL INDUSTRIES LIMITED,
WEDEENE IRON PROJECT,
KITIMAT, B.C.

SUMMARY:

There are 4 small magnetite zones which show promise of being ore bodies. These should be tested by drilling and stripping.

INTRODUCTION:

A magnetometer survey was conducted on the remainder of the Wedeene River Project to outline any other bodies of magnetite that may exist and to fill in areas that were not completed in sufficient detail the previous year.

A comparison of the magnetometer results and drilling over the "A" zone makes possible an evaluation of the other zones.

LOCATION AND ACCESS:

The property is located at Mile Post 30 on the railroad from Kitimat to Terrace, see Fig.1. It is approximately nine miles from Kitimat.

SURVEY PROCEDURE:

The field work was conducted by H.S. Lasenby using a Sharpe A-3 magnetometer. The magnetometer has a magnetic needle floating in gimbal bearings encased in a damping fluid. Reading of the instrument is accomplished by adjusting a compensating magnet until the indicating needle reads zero and then reading the adjustment which has been required by the magnetometer.

GEOPHYSICAL INTERPRETATION:

General:

These magnetite zones are generally tabular and dip from vertical to 60° . From geological considerations they probably pinch and swell their depth extent will have to be tested by drilling.

The magnetite zones follow a linear pattern with offsets which seem to be produced by faulting. The location of these faults is interpreted in Figures 2A, B and C.

The magnetite bands are grouped close together in the centre of the anomaly area, but the concentration of the bands and the grade of the bands decrease outside the central anomaly areas.

For the most part any ore zones that may be developed will probably be confined to the central areas. These have been outlined approximately on Figures 2A, B and C. If these areas prove to be ore it is possible that their boundaries may be extended back to take in some of the more marginal material near the edges, especially if the property develops as an open pit operation.

Area A:

This has been fairly well outlined by drilling. The contact of what might eventually be the ore zone is somewhat east of that which would be interpreted from magnetics, but this is caused by the presence of a valley to the east of the body causing negative readings from the magnetite bands.

Further drilling towards the north end of the zone might outline a narrow extension, as indicated on the map Fig. 2A.

Area B:

There appears to be a narrow zone of high grade magnetite which should be evaluated by drilling. The intense negatives to the west of Zone B suggest that the zone may be wider than that shown and several cross sections should extend this for to check the possibility.

If there is iron associated with the intense lows, then Zone B could be widened out to include this, as several other narrow probably low grade bands lie between Zone B and the negative area.

Summit Area C:

Several sections have been drilled across this zone which suggest that the area could constitute an ore body.

Further drilling on this area is warranted as it could be similar to Zone A.

Summit Area D:

Some drilling on this area shows the zone to be of economic interest. There is a suggestion from the drilling that magnetite occurs to the west of this zone in the magnetic low. This low could be caused by the topography, plus the presence of magnetite. This possibility should be tested by extending several recommended cross sections.

CONCLUSIONS AND RECOMMENDATIONS:

The magnetite zones occur as irregular bodies general tabular in nature, varying in dip from vertical to 60°.

The best possibilities for outlining an ore body are outlined in areas A, B, C and D. If the overall grade of these zones prove to be high enough it may be possible to incorporate some of the nearby lower grade bands. Until a possibility of production is established the exploration should be confined to the Zones A, B, C and D, as outlined by drilling and magnetics.

As it is understood that some consideration is being given to an underground operation in order to mine the summit zone, some deep drill tests should be made on the summit zones.

The geophysical data suggests the bodies could be of considerable vertical extent and a deep drill test would be in order.

To evaluate the property it is recommended that cross section drilling be carried out on the north extension of zone A, all of zone B, and the areas of the summit zones not yet drilled. Possibly deeper cross sections should also be drilled depending on results of near surface cross sections.

The purpose of the cross sections is to prove up the tonnage and grade of the most favourable looking magnetite areas.

Some stripping of these areas might be of more value than the cross sectional drilling and this should be carried out where possible.

Four deep vertical holes have been spotted on each of the summit zones C and D to test the depth extension of the zones. The depth to which these should go will depend on geological and mining considerations.

Respectfully submitted,

D. J. Salt

DJS/jl
February 27th, 1962.

LEGEND

- Magnetite Bearing Zone
- Possible Ore Outline
- Recommended Drill Holes
- Recommended Drill Cross Sections
- Interpreted Faults
- Ore Outline from Drilling

ZONE A

ZONE B

1500 N

2000 N

2500 N

3000 N

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50 0 50 100 150 200 250
FEET

FIG. 2A

LEGEND

- Magnetite Bearing Zone
- Possible Ore Outline
- Recommended Drill Holes
- Recommended Drill Cross Sections
- Interpreted Faults
- Ore Outline from Drilling

ZONE B

3000 N

3500 N

4000 N

4500 N

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FIG. 2B

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LEGEND

- Magnetite Bearing Zone
- Possible Ore Outline
- Recommended Drill Holes
- Recommended Drill Cross Sections
- Interpreted Faults
- Ore Outline from Drilling

SUMMIT ZONE C

SUMMIT ZONE D

4500 N

5000N

5500N

6000 N

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FIG. 2C
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