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Foghorn
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March 8, 1982

Mr. B. Reeve,
Barrier Reef Resources Ltd.,
904 - 675 West Hastings Street,
Vancouver, B. C. V6B 1N2


Dear Bert:

Re: Massive Sulphide Target Areas
in the Joseph and Foggy Claim Areas

As a follow-up to our meeting on February 18, 1982,
enclosed herewith is a brief outline of priority massive sulphide
target areas within the Joseph and Foggy Claim areas.

Yours truly,

G. BELIK & ASSOCIATES LTD.,


Gary D. Belik, M. Sc.
Geologist.

GDB/bl

Enclosure

Summary of Priority Massive Sulphide
Target Areas Within the Joseph and
Foggy Claim Areas

AREA A

Area A is characterized by a series of weak to strong bedrock conductors which extend northerly across the eastern end of the Joseph claim block. Segments of several conductors are associated with soils weakly to strongly anomalous in zinc, lead and locally silver and copper. In the northern part of the area tabular magnetic highs coincide or occur in close proximity to many of the conductive zones.

General Geological Setting:

Area A is underlain by the middle member sequence of the Fennell Formation (Unit PF₃). This sequence includes pillowed and massive greenstones, cherty graphitic phyllite (termed 'tuffite' by Craigmont), conglomerate and limestone.

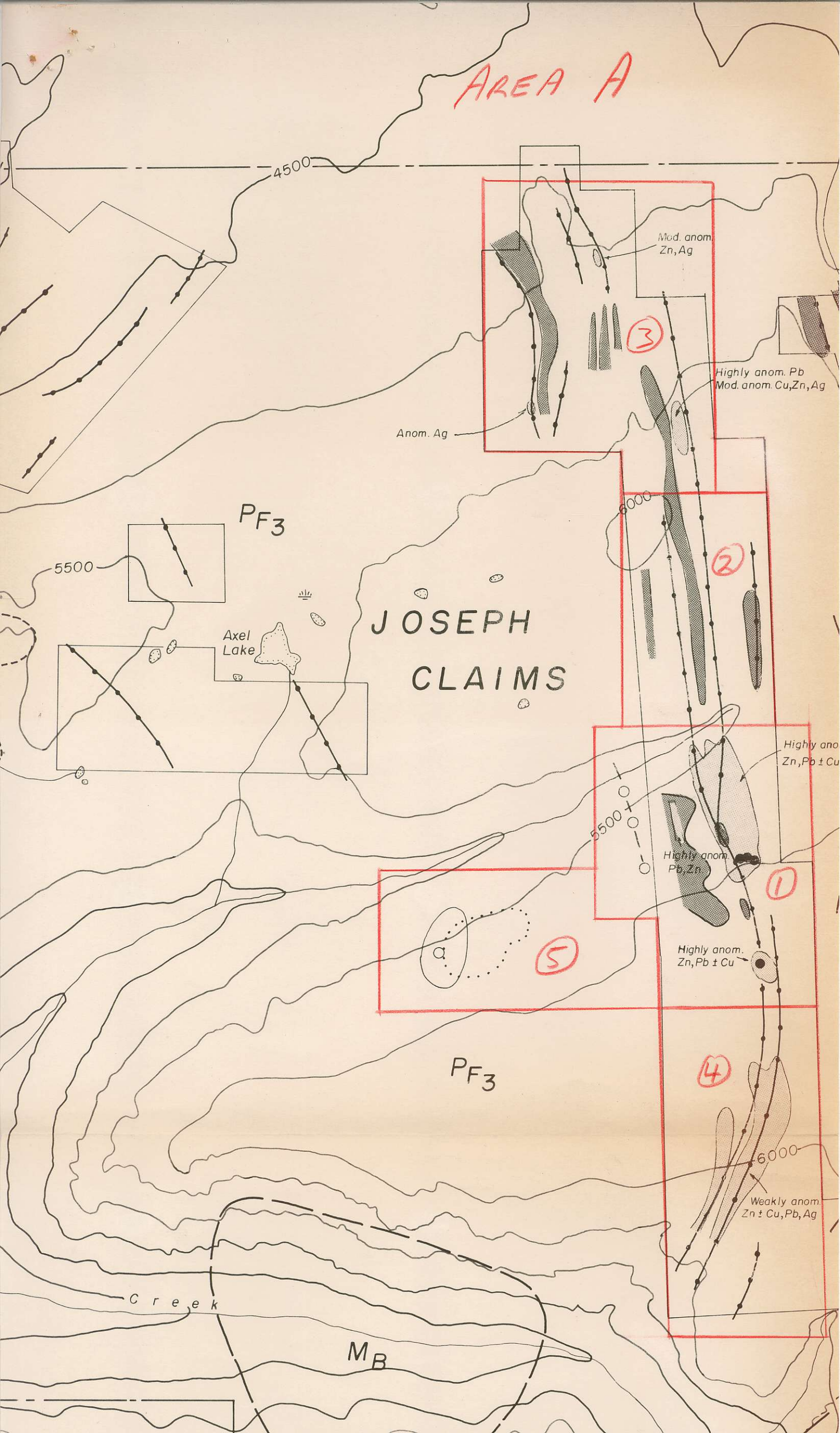
Massive Sulphide Potential:

Although most of the conductors within Area A appear to be related to graphitic tuffite horizons, sections of these horizons could contain massive sulphide deposits similar to Craigmont's CC deposit.

Features which suggest this potential include:

1. The CC deposit, although stratigraphically at a higher level than Area A, occurs within a similar sequence of Fennell rocks.
2. Graphitic tuffite, similar to that in Area A, occurs along the projected strike of the CC deposit.

AREA A



4500

Mod. anom.
Zn, Ag

3

Highly anom. Pb
Mod. anom. Cu, Zn, Ag

Anom. Ag

PF3

5500

Axel Lake

JOSEPH CLAIMS

6000

2

Highly anom.
Zn, Pb ± Cu

Highly anom.
Pb, Zn

1

Highly anom.
Zn, Pb ± Cu

5500

5

PF3

4

Weakly anom.
Zn ± Cu, Pb, Ag

6000

C r e e k

M B

3. Graphitic tuffite in Area A locally contains significant base and precious metals (eg. drill hole JC-2).
4. Pebbles and cobbles of massive sulphide occur within conglomerate lenses of the middle member sequence west of Axel Lake. These occurrences, which occur stratigraphically well below the CC deposit, indicate that similar deposits occur elsewhere in the middle member sequence and thus potentially within Area A.

Target 1

Priority: high

Features: Within Target Area 1 a large soil anomaly, with values up to 4100 ppm Zn, 2575 ppm Pb and 481 ppm Cu, is centered over a long, strong bedrock conductor. Near the center of the geochemical anomaly this conductor splays into 2 parallel conductors which continue north into Target Area 2. The junction of the 2 conductors coincides with a small mag high and with the strongest part of the anomalous zinc zone.

Immediately west of the main soil anomaly is a strong mag high. This magnetic feature, which locally correlates with soils highly anomalous in lead and zinc is flanked on the west by a weak bedrock conductor (indicated by Dighem survey). This conductor and the western half of the mag feature were not surveyed by Craigmont.

A small, highly anomalous lead and moderately anomalous zinc soil anomaly occurs about 400 meters south of the main soil anomaly. This anomaly, although centered on the same conductor associated with the main soil anomaly, may be related to a conductor situated about 100 meters to the east (up-slope).

Previous Work:

Work completed by Craigmont in this area consists of ground V.L.F - E.M./Mag., soil geochemistry and diamond drilling (5 holes totalling 467 meters). Three drill holes tested the main conductor along the south edge of the main soil anomaly and 2 holes tested the coincident E.M./soil anomaly south of the main soil anomaly.

Conductors within the areas tested by diamond drilling have been shown to be related to graphitic tuffite horizons. One 3.3 meter section of tuffite, which contained visible galena, assayed 0.27% Cu, 0.15% Zn, 3.06% Pb, 0.53 grammes per tonne gold and 58.0 grammes per tonne silver.

Conclusions:

Based on a favourable geological setting, on the presence of several geophysical and geochemical targets, only 2 of which have been partly tested by diamond drilling and on the confirmation of significant mineralization within a segment of the main conductor, Target Area 1 is given a high priority.

Recommendations:

Phase I:

- vertical - loop E.M.
- soil geochemistry and ground magnetics within areas of Target Area 1 not previously surveyed by Craigmont.
- detailed prospecting
- geological mapping

Phase II:

- trenching

Phase III:

-diamond drilling (contingent upon the results of Phases I and II)

Target 2

Priority: Moderate

Features: Target Area 2 contains the northerly extension of the 2 conductors which converge near the center of the main soil anomaly in Target Area 1. These conductors, which are parallel and about 200 meters apart, flank a narrow, tabular mag high. A third, weak (?) conductor, associated with another, parallel, mag high occurs about 300 meters to the east.

Previous Work:

Ground mag., V.L.F.-E.M. and soil geochemistry.

Conclusions:

Conductors within area A have not been adequately evaluated. These conductors correlate with mag highs and although there is no supportive geochemistry within the immediate target area, the central conductors are associated with strong soil anomalies in Target Areas 1 and 3.

Recommendations:

In order to evaluate Target Area 2, a three-phase program similar to that proposed for Area 1 is recommended. Phase I would consist of vertical - loop E.M., detailed prospecting and geological mapping. This would be followed by trenching (Phase II) and, if warranted, diamond drilling (Phase III).

Target 3

Priority: Moderate to High

Features: Target Area 3 is complex and contains multiple conductive zones which locally correlate with mag highs. A small but strong soil anomaly (Pb, Cu, Zn, Ag) is associated with one of the conductors (northerly extension of central conductor in Area 2).

Previous Work:

Ground mag., V.L.F.-E.M. and soil geochemistry.

Conclusions:

All of the conductors within Area 3 warrant further evaluation.

Recommendations:

A program similar to that proposed for Areas 1 and 2 is recommended.

Target 4

Priority: Low

Features: Target Area 4 covers the southerly extension of 2 parallel conductors evident in the southern part of Target Area 1. Soils weakly anomalous in zinc \pm Cu, Pb and Ag are associated with these conductors.

Previous Work:

Ground V.L.F.-E.M., mag and soil geochemistry.

Recommendations:

Detailed prospecting and geological mapping.

Target 5

Priority: Low

Features: Area 5 covers a weak Dighem conductor which occurs on the flank of a small mag high.

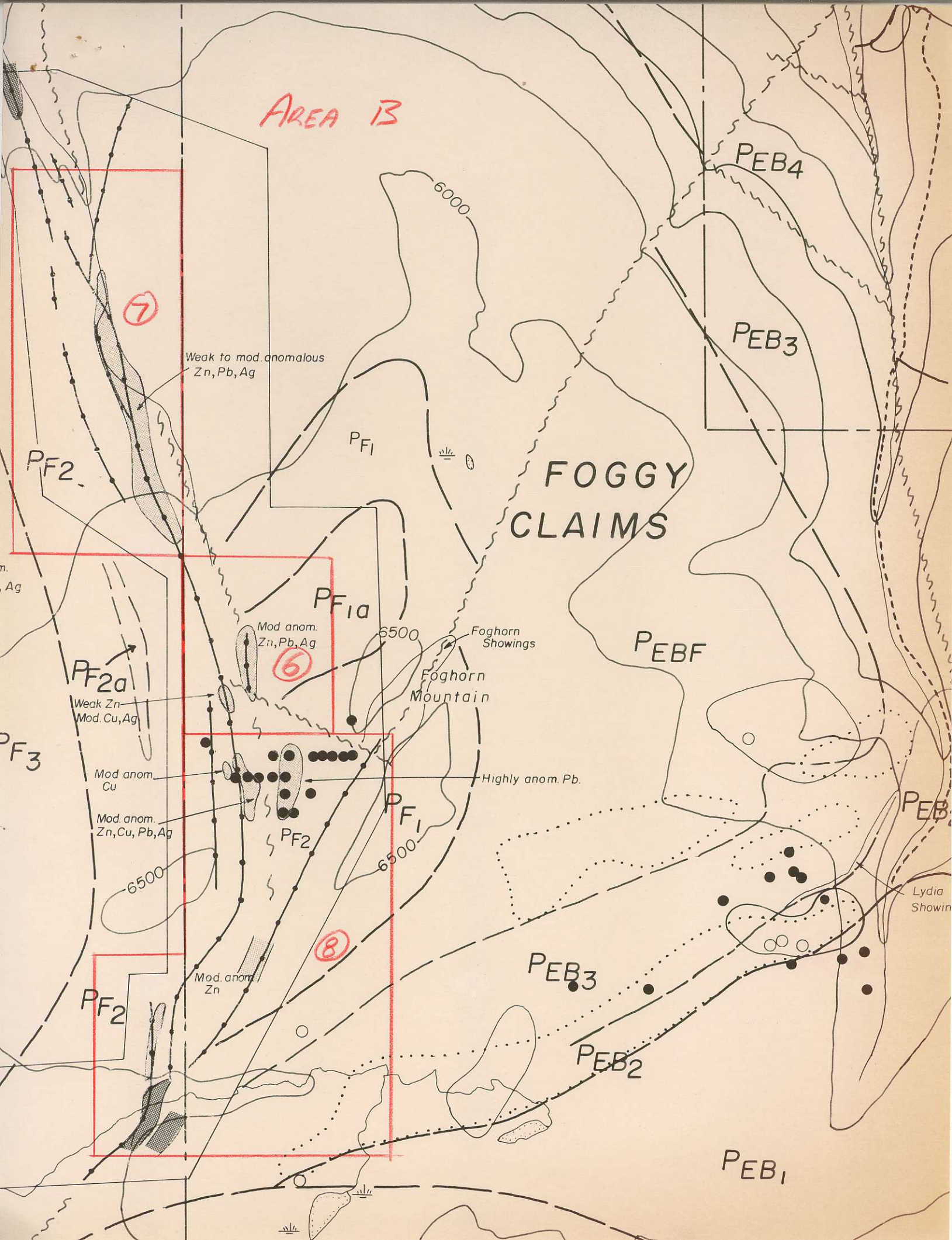
Previous Work:

None

Recommendations:

Detailed prospecting.

AREA 13



AREA B

Area B, which occurs about 1500 meters west of Area A, is characterized by a similar series of northerly-trending weak to strong bedrock conductors. Most of Craigmont's work was concentrated within the central part of the conductive zone in the immediate vicinity of a large transported gossan. In total 1635.8 meters, in 18 holes were drilled by Craigmont within this area. Most of these holes penetrated graphitic tuffite horizons which locally contain significant silver \pm minor base metals.

General Geological Setting:

Area B is underlain by the lower member sequence of the Fennell Formation (Units PF₁, PF_{1a}, PF₂ and PF_{2a}). This sequence includes felsic to basic volcanic, chert, black phyllite, volcanic wacke and limestone. Felsic volcanics consist of quartz-eye rhyolite, crystal and lapilli tuffs and, locally, agglomerate.

Massive Sulphide Potential:

Cupiferous pyritic deposits similar to the CC deposit (ie. massive sulphides associated with basic volcanics) or polymetallic, felsic-related massive sulphide deposits could occur within Area B. The latter potential is suggested by the strong felsic component of the volcanics (particularly the coarse pyroclastic members) within this area.

Although the results of the diamond drill programs are largely negative, only a small area has been tested. The northerly and southerly extensions of the conductive zone are complex with multiple short to long conductive horizons which locally correlate with soils weak to moderately anomalous in zinc, lead, silver and locally copper. These conductors have not been evaluated and although most probably are related to graphitic tuffite some may be related to massive sulphides.

Target 6

Priority: Moderate

Features: Target Area 6, which occurs immediately north of the area drilled by Craigmont, contains a segment of a strong bedrock conductor which can be traced throughout most of the length of conductive zone B. Near the center of the area this conductor is associated with a small soil anomaly (Zn, Cu, Ag).

About 300 meters east of the conductor noted above, near the center of the target area, soils moderately anomalous in zinc, lead and silver correlate with a short (\pm 350 meters) north-trending conductor. Coarse felsic fragmentals of Unit PF_{1a} occur immediately east of this zone.

Previous Work:

V.L.F.-E.M., Mag., soil geochemistry.

Conclusions:

The short bedrock conductor, which has correlating geochemistry and is situated near a coarse felsic fragmental unit, is considered to be a good massive sulphide target. The main conductor, situated to the west, although stronger and with some correlating soil geochemistry is given a lower priority (the southerly extension of this zone has been drilled with negative results).

Recommendations:

Phase I:

-vertical - loop E.M., prospecting, geological mapping

Phase II:

-trenching

Phase III:

-diamond drilling (contingent on Phases I and II)

Target 7

Priority: Low

Features: Target Area 7 covers the northerly extension of conductive zone B. Based on the results of the Dighem survey and the ground V.L.F.--E.M., the area contains numerous, very strong, parallel to subparallel conductors. Most of these conductors, which occur along a major fault zone, probably represent faulted segments of one or more highly graphitic horizons.

Previous Work:

V.L.F.--E.M., Mag., soil geochemistry

Conclusions:

Although conductors within Target Area 7 probably are related to highly graphitic horizons the complex nature of these conductors and the presence of soil weak to moderately anomalous in zinc, lead and silver suggest that the area may have some potential.

Recommendations:

Detailed prospecting and geological mapping

Target 8

Priority: Low

Features: Target Area 8 covers the area drilled by Craigmont and the southerly extension of conductive zone B.

Previous Work:

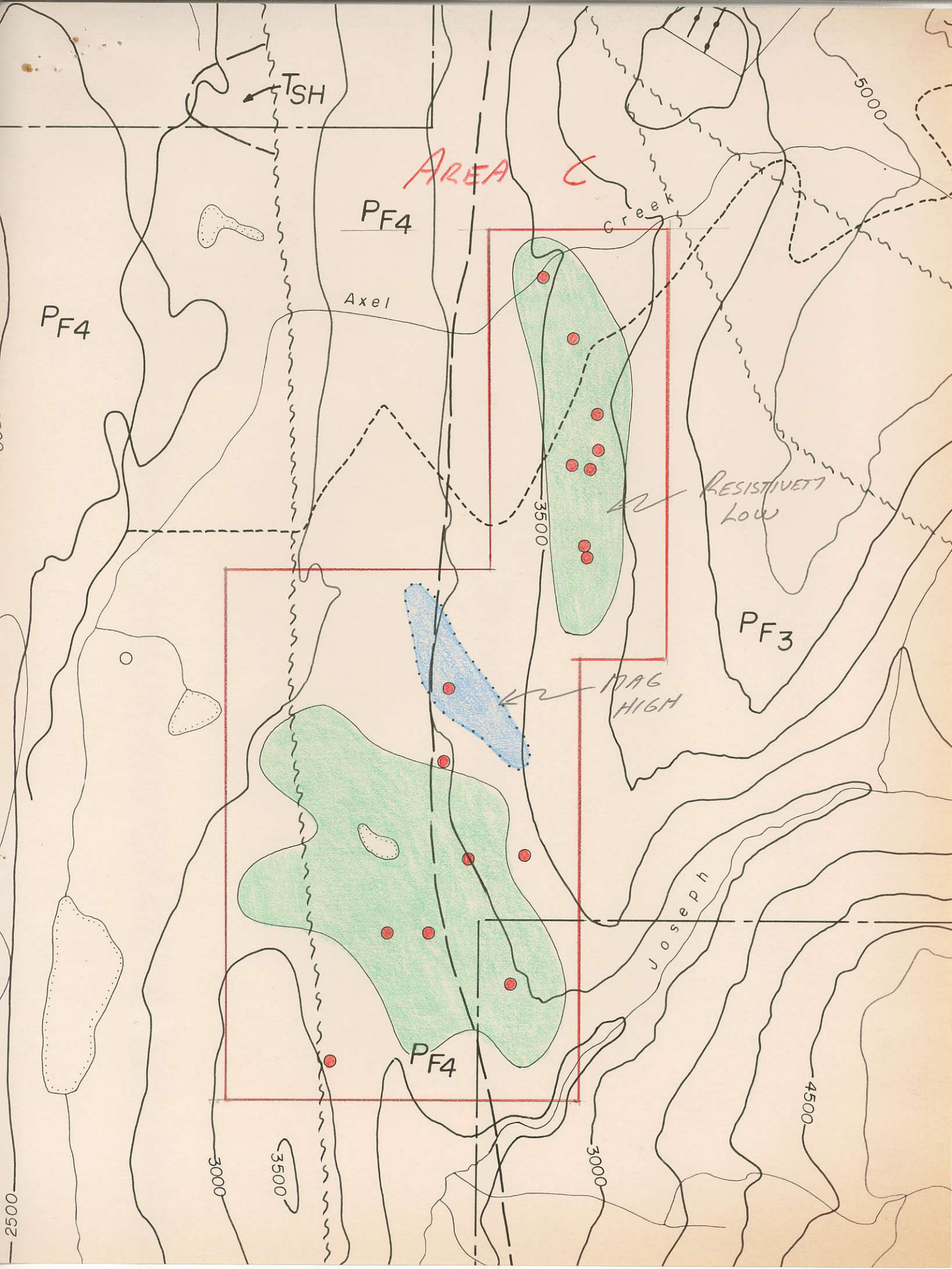
V.L.F.-E.M., Mag., soil geochemistry and diamond drilling (18 holes totalling 1635.8 meters).

Conclusions:

Although the area evaluated by diamond drilling has been adequately tested, a complete geological picture of this area and the area to the south is lacking.

Recommendations:

Prospecting, geological mapping and re-logging of diamond drill core.



AREA C

PF4

PF4

Axel

creek

RESISTIVITY Low

PF3

MAG HIGH

PF4

Joseph

3000

3500

3000

4500

5000

2500

AREA C

Area C covers two, large, broad resistivity lows which contain numerous, scattered weak to moderate bedrock (?) conductors. Between the two lows occurs a single-line, 11 mho conductor which is centered on a small 300 gamma mag high. A second, single-line conductor (20 mhos) is situated on the flank of a subtle mag high (± 100 gammas) about 500 meters west of the south end of the southerly resistivity low.

General Geological Setting:

Conductors within Area C occur near the contact between the middle and upper members of the Fennell Formation. Craigmont's CC deposit, which is situated about 14 kms to the south, occurs approximately at the same stratigraphic level.

Previous Work:

Reconnaissance prospecting and mapping

Conclusions:

Based on the possible presence of numerous bedrock conductors (some of which correlate with mag highs), on the occurrence of these conductors within approximately the same stratigraphic interval as the CC deposit and on the absence of significant ground follow-up work, Area C is given a high priority.

Recommendations:

Area C should be staked as soon as possible (2 claims, totalling 40 units would cover the area). Once this ground has been acquired a 3-phase exploration program similar to that proposed for Target Areas 1, 2, 3 and 6 is recommended.

TARGET D

Target D is the Foggy 11 massive sulphide showing.

Features:

The discovery area contains one small outcrop and abundant angular float of semi-massive to massive pyrite with minor sphalerite, galena and chalcopyrite. A few samples containing thin, sphalerite/galena-rich laminations were noted. Selected samples of this material assayed up to 6% combined lead and zinc.

The massive sulphide mineralization is hosted by lustrous quartz-sericite and quartz-sericite-chlorite schists of the Eagle Bay Formation. All units are isoclinally folded and display a penetrative, crenulation foliation which strikes east-northeast with a gentle to moderate dip to the northwest.

An Induced Polarization and Resistivity survey was carried out on four lines in the immediate vicinity of the massive sulphide showing. This survey partly delineated a definitely anomalous zone, coincident with the showing, striking towards the west-southwest. The anomaly, which is open to the northeast, is about 300 meters long.

Previous Work:

V.L.F. - E.M., Mag., I.P., geological mapping and soil geochemistry.

Conclusions:

Semi-massive to massive pyrite lenses and beds are relatively common within the Eagle Bay succession. However, to the writer's knowledge, the Foggy 11 occurrence is the only deposit of this type which carries significant base metals. Although only a few, well-mineralized samples have been discovered to date only a very small part of a potentially very large massive sulphide horizon is exposed. It is conceivable that segments of this horizon could contain sizable ore-grade lenses.

Recommendations:

A diamond drill test of the Foggy 11 massive sulphide occurrence is warranted (4 short holes, totalling about 200 meters, should be adequate). Prior to drilling, however, further I.P. should be carried out in order to delineate the easterly extent of the sulphide horizon.