

MINNOVA Inc.

823000

Stewart Creek Property
Nelson Mining Division
1991 Work Proposal

Colin Burge

April 23, 1991

Target

Large tonnage, low grade gold deposit.

1991 Objective

Fully evaluate all gold anomalies by October 31.

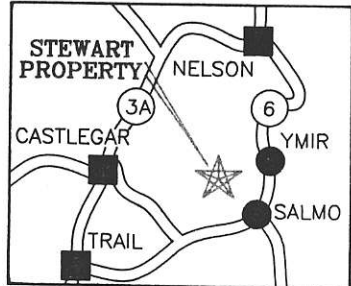
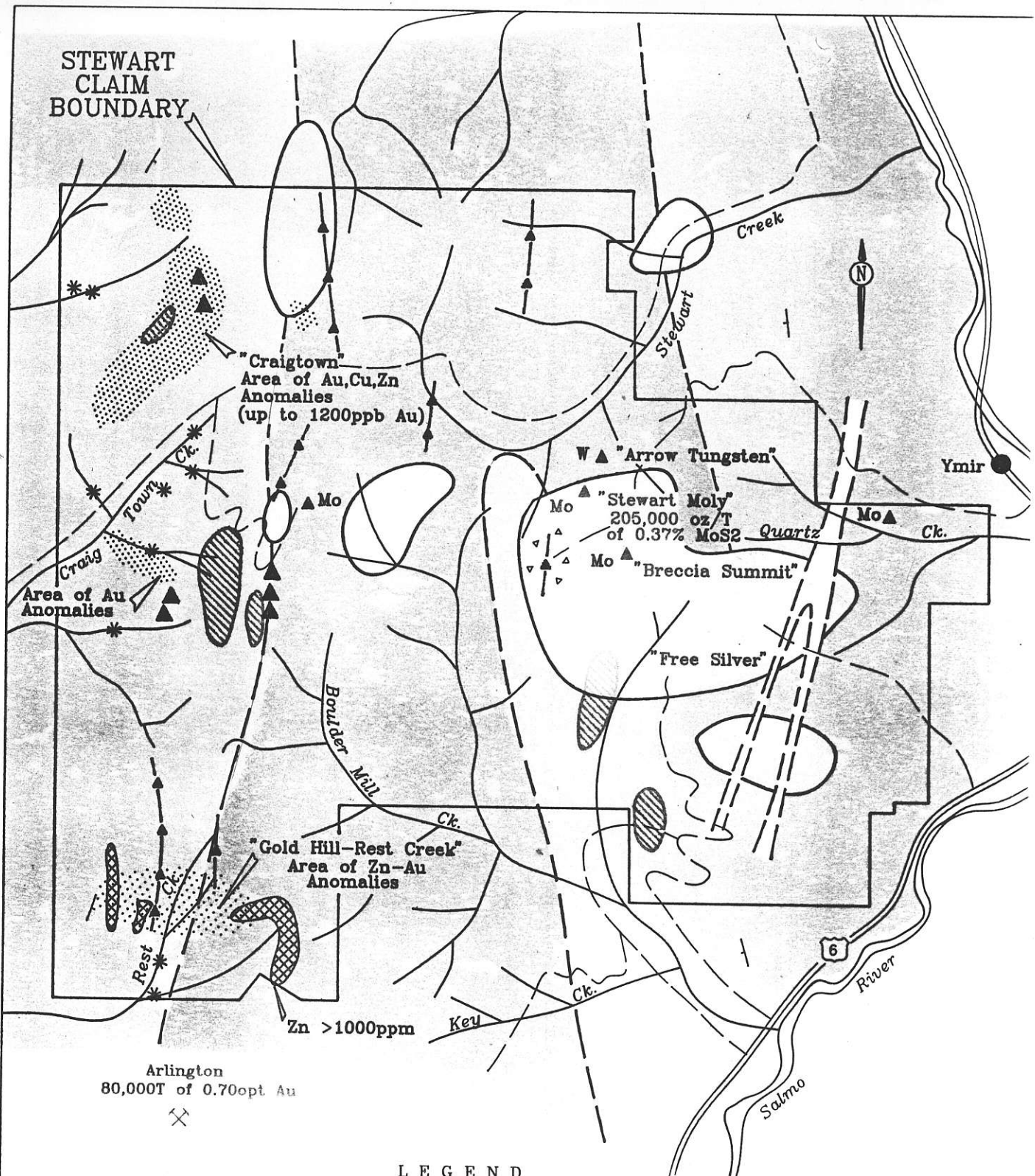
Geology and Mineralization

The Stewart property is underlain by an assemblage of lower Jurassic mafic volcanics and sediments. These rocks are considered to be part of Quesnellia, a terrain which hosts a number of significant copper - gold deposits such as Galore Creek, Mt. Milligan, Afton and the Copper Mountain - Ingerbelle camp. The volcano - sedimentary sequence has been intruded by a variety of plutons but most importantly by a series of Tertiary age porphyritic quartz monzonite bodies. The stocks are mantled by wide zones of hornfelsed country rock and pyrite is ubiquitous within the hornfels.

The main Stewart stock contains a molybdenum reserve of 204K tons of .37% MoS₂ that remains to be drilled off. Sampling for gold within the Stewart Moly occurrence yielded erratic results with the best width being 7 meters of 3.84 g/t Au. The mineralization occurs on the north contact zone of the stock and may in some way be related to a tungsten rich garnet - diopside skarn developed 500 meters to the north (Arrow Adit). The best gold intercepts occur within sulphide rich hornfelsed volcanic fragments in a breccia otherwise dominated by intrusive fragments. Gold values up to 1010 ppb have been reported in soils in the Arrow Tungsten area (Lacana 1988).

A second stock located west of the main Stewart complex also contains molybdenum mineralization as well as gold anomalies in soils and streams. The porphyritic quartz monzonite stocks are oriented east to west across the property possibly reflecting an early structural trend.

The Rest Creek - Gold Hill area in southwest corner of the property has seen some minor gold production from narrow quartz veinlets developed along bedding planes within argillites. It is doubtful that any tonnage potential exists here.

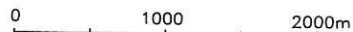


LEGEND

- Rhyolite Dykes
- Hall Sediments
- Elise Volcanics
- Monzonite
- Feldspar Porphyry
- Breccia
- Pan Concentrate Anomalies
- I.P. Chargeability
- Input Conductor Axis
- Mag Highs (>58,000 x)

MINNOVA Inc.

FILE: D:\DWG\STEWART



STEWART CLAIMS
1990 WORK SUMMARY

CMB/sg

JAN.1991

Potential

The best potential for large tonnage gold deposits on the property lies in two areas:

1. The west flank of the West Moly intrusive complex (Craigtown).
2. The Arrow Tungsten - Stewart Moly skarn system

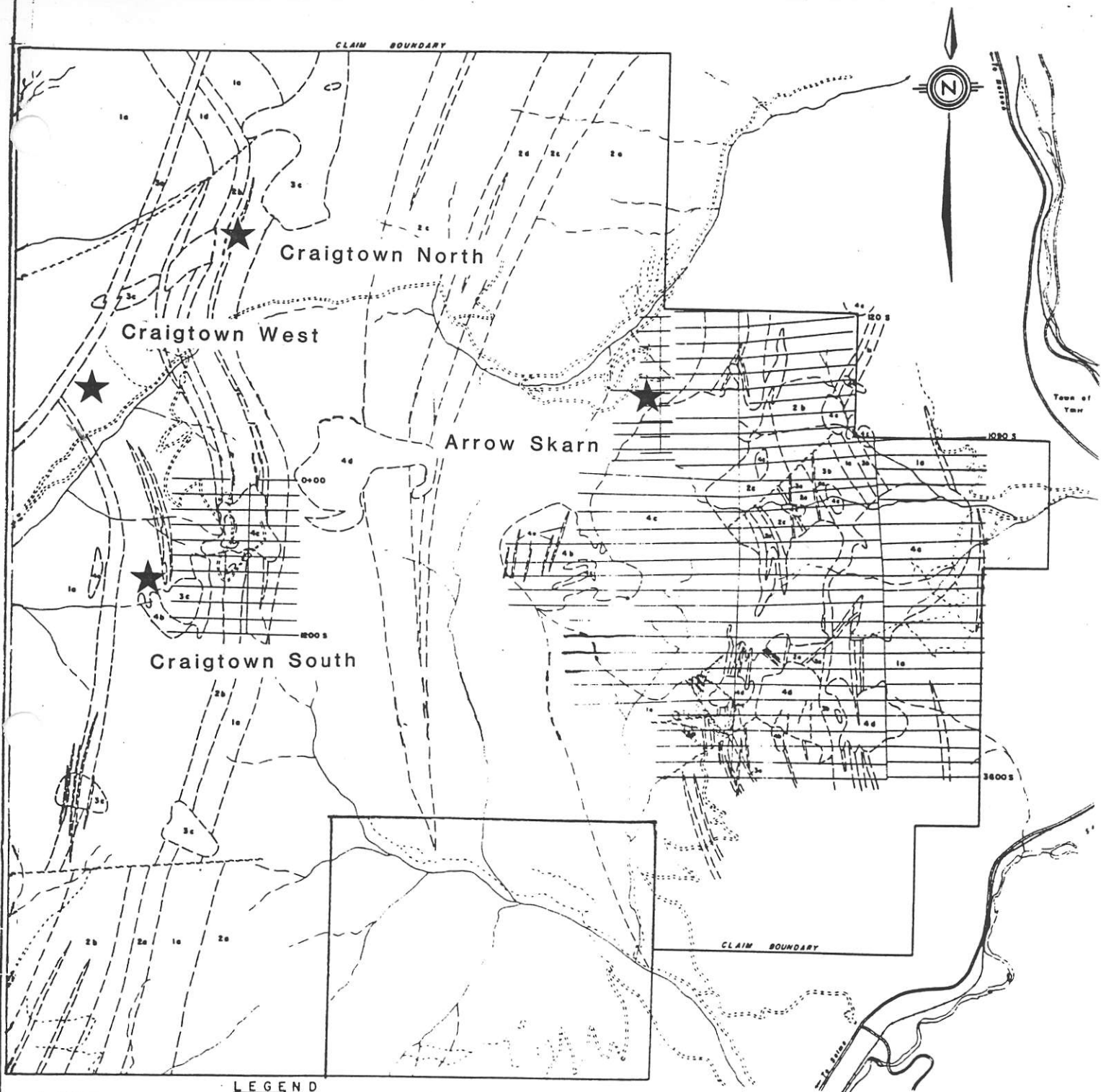
Craigtown Creek Anomalies

Craigtown North

Soil sampling in 1989/90 has delineated two main anomalies. The Craigtown North anomaly is defined by values up to 917 ppb Au obtained within a 1 km. by 150m long zone. The postulated source area for the soil anomaly provided IP chargeability highs over a 500m by 250m area and a few restricted mag anomalies. Over twenty rock samples were collected in this area and although exposure is good the best Au value received was 159 ppb Au. No base metal or moly values were anomalous in the rock samples despite the soil anomaly being multi- element. Soda values in this area range from 3.6% to 4.9% and K_2O from 1.0% to 5.4% thus supporting field evidence that no large potassium or sodium silicate alteration zones are present. The area of interest occurs at the top of the Craigtown ridge and access to this area is difficult.

Craigtown South

The second area of interest is a more restricted anomalous zone located 2 km. south and measuring 650m by 150m provided soil values up to 396 ppb Au. The Craigtown South anomaly occurs on the west flank of the West Moly intrusive complex. Pan concentrates collected in a creek draining the anomalous zone returned a 2650 ppb Au value. A broad mag high occurs in this area and several chargeability anomalies were recorded. Several litho samples taken of a nearby creek gossan returned values ranging from 205 to 375 ppm Cu and anomalous molybdenum.



LEGEND

TERTIARY

(Eocene or Later)

4 CORYELL INTRUSIVES

- a) Lamprophyre dikes, diabase dikes: various compositions
- b) Breccia pipe
- c) Porphyritic quartz monzonite
- d) Biotite - augite monzonite

CRETACEOUS

(Lower ?)

3 NELSON INTRUSIVES

- a) Lamprophyre and biotite, quartz, plagioclase porphyritic (Contains some oxidized host material)
- b) Rhyolite porphyrite
- c) Felspar porphyrite

JURASSIC

(Middle and Upper)

2 HALL SEDIMENTARY FORMATION

- a) Argillite
- b) Sandstone
- c) Sandstone / Argillite (intercalated)
- d) Quartz pebble conglomerate
- e) Moa Schist
- f) Garnet - diopside skarn
- g) Impure garnet skarn

(Lower Jurassic)

1 ELBE (ROSLAND) VOLCANICS

- a) Basalt / Andesite - flow
- b) Tuff
- c) Lapilli Tuff
- d) Agglomerate

* Geology from Shell Resource work. Pre 1982.

FIGURE IV
THE STEWART PROPERTY
YMIER, B.C.

0 200 400 600 800 metres

SELCO INC.(E.W.C.) DATE: JUNE, 19

Craigtown West

A third zone of interest in the Craigtown Creek area is located near the western property boundary about 1 km. west of the Craigtown North anomaly and for convenience is called Craigtown West. A few isolated single station soil anomalies occur in an area where float samples up to 1.4 g/t Au have been picked up. Unfortunately recce geology was unable to locate the source of this float, however, outcrops in this area have a very high sulphide content (10 to 30%) and this is considered encouraging. Eight lithos collected last year ranged from 124 to 337 ppm Cu and 30 to 170 ppb Au and three contained anomalous molybdenum. Although these values can hardly be called significant it is important to note that a Cu-Au-Mo correlation has been established in this area.

The Craigtown West anomalous area occurs within a 900m by 600m magnetic low (AEM and Recce) and lies on the eastern flank of a strong regional mag high. Recce IP provided chargeability anomalies that roughly coincide with known sulphide occurrences. These geophysical anomalies may be related to chargeability highs due south located on the south side of the Stewart Creek logging road near Craigtown Creek.

Arrow Tungsten - Stewart Moly

Several holes drilled by Shell Resources in 1980-81 tested the molybdenum potential of a quartz-moly breccia zone. Some very impressive molybdenum mineralization was intersected: 80-3 hit 28m of .76% MoS₂ from the surface and 81-9 hit 70m of .46% MoS₂ at a 60 meters depth. The southeast extent of this mineralization has not been closed off. Lacana assayed most of the pulps from the split BQ size core for gold and silver and found that indeed gold does occur but that it is erratic and no continuous zones could be outlined. Some of the best gold values on the property occur here: 81-9 hit 7m of 3.84 g/t Au in a strongly hornfelsed volcanic. The mineralization does not occur within the stock (that concept was tested by BP without success) but in brecciated contact zones with hornfelsed/skarn altered country rock on the north and west boundaries of the main stock. The zone of hornfels (and some skarn) trends about 800m north and 700m west of the Moly occurrence and includes the Arrow Tungsten workings. The Shell drill program only tested a 250m strike extent with several parallel inclined boreholes. The moly occurrence shows up well as magnetic low feature that correlates well with surface moly showings. An intriguing positive mag anomaly occurs to the northwest of the

drillholes and encompasses the Arrow workings. The anomaly is about 800m long and trends northeast. The target in the this area would be a near surface gold bearing pyrite/pyrrhotite orebody associated with the skarn.

Conclusions

All previous work on the Stewart property has focused on the intrusive bodies to the exclusion of the well mineralized hornfelsed country rocks. It is important to note that most Cu-Au gold porphyry orebodies in B.C. occur in the country rocks on the margins of an intrusive complex. Galore Creek (125Mt of 1.% Cu, .012 opt Au) and the Copper Mtn.-Ingerbelle porphyry/skarn system (60Mt of .5% Cu) are the best examples of this relationship. Therefore the aim of the 1991 field program is to further develop and refine targets in the four areas that presently show the greatest promise and cultivate high priority drill targets to test in the late summer.

Recommendations

1. Map and sample Craigtown South and West anomalies.
2. Establish grid over Arrow Tungsten - Stewart Moly hornfels skarn zone.
3. Map, sample and VLF-Mag survey Arrow grid.
4. Examine all gold intercepts in Shell drill core and interpret.
5. Drill targets
6. Evaluate Gold Hill - Rest Creek Area
7. Evaluate Mag features on west side of Boulder Mill Creek.

Proposed 1991 Budget

Geology

Geologist	30 days	\$6,000
Assistant		\$3,000
Analyses		\$1,500
Truck		\$1,500
Room and Board		\$3,000
Trenching		\$5,000
	Total	\$20,000

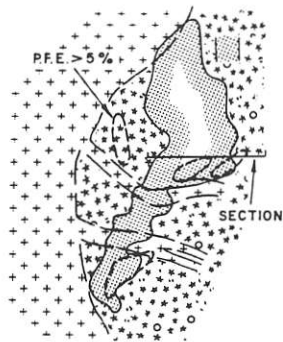
Geophysics

Arrow Area		
Linecutting	15 km. @ \$400	\$ 6,000
VLF-Mag		\$ 4,000
	Total	\$10,000

Drilling

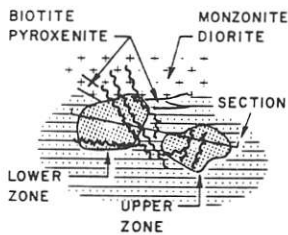
Salaries		\$ 6,000
Contract Payment	750m @ \$90/m	\$56,250
Analyses		\$ 2,250
	Total	\$64,500

Program Total \$94,500



GALORE CREEK

PUBLISHED RESERVES:
125,000,000 METRIC TONS, 1.06% Cu

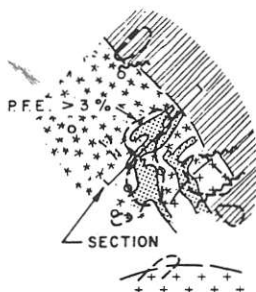


LORRAINE

INDICATED POTENTIAL:

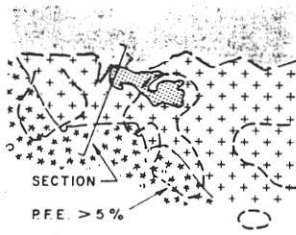
UPPER ZONE:
5,000,000 METRIC TONS, 0.75% Cu
LOWER ZONE:
5,000,000 METRIC TONS, 0.60% Cu

GEOLOGY AFTER J.A. GARNETT



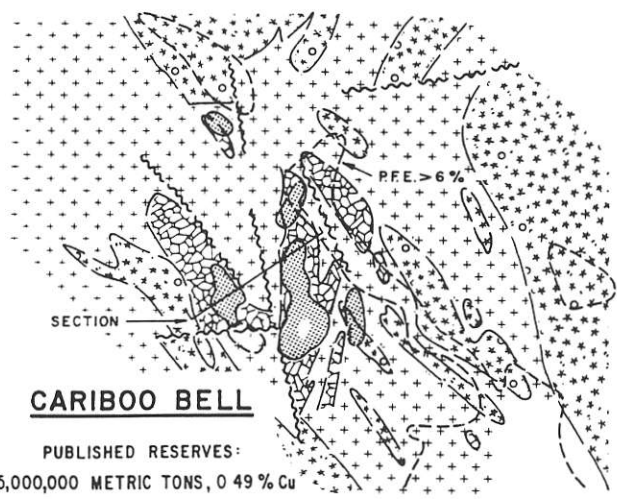
GNAT LAKE

PUBLISHED RESERVES:
25,000,000 METRIC TONS, 0.44% Cu



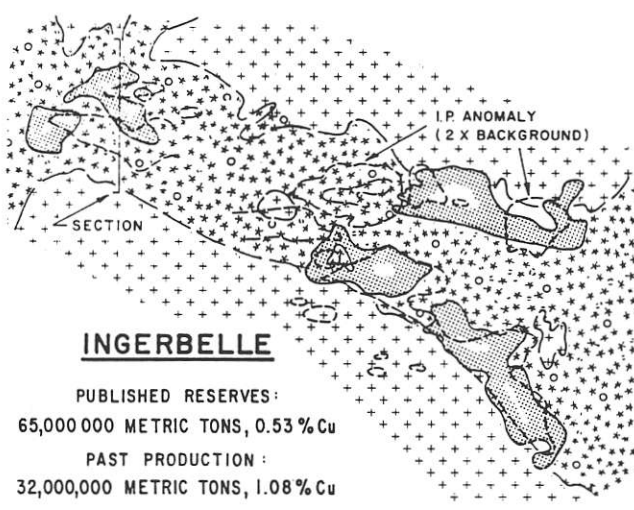
AFTON

PUBLISHED RESERVES:
31,000,000 METRIC TONS, 1.00% Cu



CARIBOO BELL

PUBLISHED RESERVES:
25,000,000 METRIC TONS, 0.49% Cu



INGERBELLE

PUBLISHED RESERVES:
65,000,000 METRIC TONS, 0.53% Cu
PAST PRODUCTION:
32,000,000 METRIC TONS, 1.08% Cu

LEGEND

- | | | | |
|--|-------------------|--|---------------------|
| | TERTIARY ROCKS | | SEDIMENTARY ROCKS |
| | INTRUSIVE ROCKS | | VOLCANIC ROCKS |
| | BRECCIA | | COPPER DEPOSIT |
| | SYENITE MIGMATITE | | SECTION, SEE FIG. 6 |

**GENERALIZED GEOLOGIC PLANS,
OUTLINE OF MINERAL DEPOSITS
AND INDUCED POLARIZATION ANOMALIES**

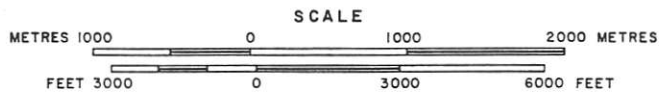


FIGURE 5

FIGURE 5—Generalized geologic plans, outline of mineral deposits and induced polarization anomalies.

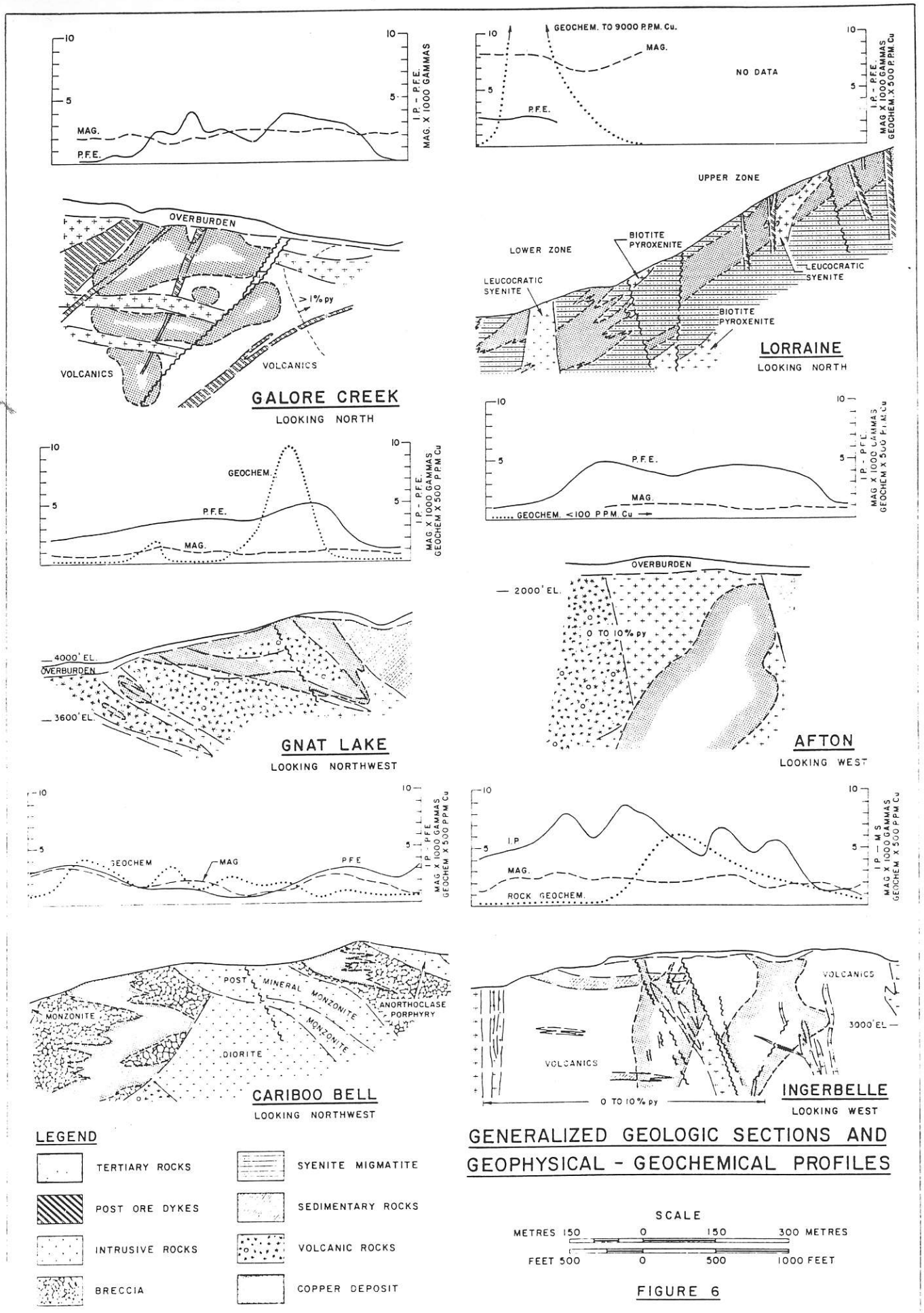


FIGURE 6—Generalized geologic sections and geophysical-geochemical profiles.