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SUMMARY REPORT

ON THE

NAKINILERAK LAKE PROPERTY

Babine Lake Area
Omineca Mining Division
British Columbia

Latitude 55°17' North
Longitude 126°14' West
NTS 93M/8E

by

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Introduction

The Nakinilerak Lake property includes at least two porphyry copper environments typical of the Babine Lake area of west-central British Columbia. Copper mineralization is associated with distinctive biotite (hornblende)-feldspar porphyries of Eocene age which are identical to the intrusions hosting mineralization at Bell Copper, Granisle and ten other known deposits and occurrences in the general area.

Previous work in the central part of the present property identified copper mineralization over a 1000 x 600 metre area near the western margin of a large intrusive stock. Copper grades encountered in limited drilling of this area ranged from 0.15 to 1.14%. Only a few analyses for gold were undertaken; assays for two samples yielded 0.01 and 0.02 oz/ton.

The Nakinilerak Lake property includes the most areally extensive hydrothermal alteration zone known in the Babine area. Geological, geophysical and geochemical signatures indicate at least three target areas peripheral to the central porphyry stock. Other targets within the large property area include strong IP reponse and copper mineralization in drill core near the northern boundary and anomalous copper values in soils in the southern claims area.

Location and Access

Nakinilerak Lake is 30 km north of Bell Copper mine on Babine Lake and 80 air km northeast of Smithers in west-central British Columbia.

Active logging roads along the east side of Babine Lake provide access to Morrison Lake from which a 15 km bulldozer road extends through the central part of the present property (Figure 1).

Mineral Property

The Nakinilerak Lake property presently consists of five 4-post mineral claims (93 units) in the Omineca Mining Division and recorded in the name of Lorne B. Warren of Smithers. The claims are shown on Figure 2 and partial details are as follows:

Claim Name	Units
NAK 1	20
NAK 2	20
NAK 3	20
NAK 4	15
NAK 5	18

Previous Work

Original claims were staked in the area by Noranda Exploration Company, Limited following the detection of anomalous copper values in stream sediments northeast of Nakinilerak Lake in 1964. Over the next six years, Noranda completed airborne and surface geophysical programs, soil geochemistry, geological mapping and alteration studies, limited bulldozer trenching and 6,020 feet (1835 metres) of diamond drilling in 28 holes. Geological, geochemical and geophysical surveys were completed by Noranda on the Sno claim group, southeast of the main property, in 1971. This area is included in the southern part of the present property.

The northern part of the present property includes most of the original Lynn property which was investigated by Ducanex Resources in the early 1970's. In addition to geochemical and geophysical surveys, 1,580 feet (480 metres) of diamond drilling was completed in eight holes.

Regional Geological Setting

The northern Babine Lake area is within the Intermontane tectonic belt and is underlain primarily by Mesozoic volcanic and sedimentary rocks of the Jurassic Hazelton Group. Younger sequences include sedimentary and lesser volcanic rocks ranging in age from late Jurassic to early Tertiary. The layered rocks are intruded by granitic rocks of several ages including Lower Jurassic Topley intrusions, Omineca intrusions of early Cretaceous age, late Cretaceous rhyolite and granodiorite porphyries (Bulkley intrusions) and Babine intrusions of early Tertiary (Eocene) age.

Porphyry copper mineralization in the Babine Lake area is well documented and is associated with three ages of intrusive activity (Figure 1). The most significant are the Eocene Babine intrusions which occur as small stocks and dyke swarms and host more than a dozen known porphyry copper deposits and occurrences including the former Granisle mine and Noranda's currently producing Bell Copper mine.

These deposits have a significant gold content in addition to copper grades in the 0.45 - 0.70% range. Production to date from the Granisle and Bell operations is as follows:

	Period	Tons Milled	Cu(tons)	Au(oz)	Ag(oz)
Granisle	1966-1982	57,498,131	236,225	148,000	1,906,000
Bell	1972-1991	83,816,398	329,150	405,100	1,244,232

Remaining reserves in the Bell open pit are reported to be 1.4 million tons grading 0.70% copper and 0.011 oz/ton gold. Not included are some 20 years of reserves grading close to 0.50% copper plus gold values immediately northeast of the present open pit. Reserves for the Morrison property, also owned by Noranda, have been variously reported as being 45 - 90 million tons grading 0.42% copper and 0.01 oz/ton gold.

Copper mineralization at these and other prospects is related to biotite-feldspar porphyry phases of the Babine intrusions. This distinctive rock type ranges in composition from quartz diorite to granodiorite and is a crowded porphyry with 2 to 3 mm phenocrysts of plagioclase and biotite. Multiple intrusion is a common feature with the earliest intrusive phase at some deposits and prospects represented by fine-grained, equigranular quartz diorite and/or quartz monzonite. Pre-, inter- and post-mineral biotite-feldspar porphyry phases and intrusive breccias have been recognized at many of the better mineralized properties.

Hydrothermal alteration zones associated with Babine porphyries include a central potassic zone, represented by abundant secondary biotite, gradational outward to a quartz-sericite-pyrite zone which in turn is enveloped by a propylitic zone.

Copper mineralization consists of chalcopyrite and lesser bornite which occur primarily in northeast and northwest striking, vertically dipping, quartz-filled fractures which range in width from 1 to 5 mm. Better grades are developed at or near contacts between intrusive phases and marginal volcanic and sedimentary rocks. Pyrite haloes, with 5-10% pyrite, extend outward for at least 300 metres from zones of copper mineralization.

Property Geology, Geophysics, Geochemistry and Mineralization

Geology - The Nakinilerak Lake property is underlain by a northwest trending, east dipping sequence of andesite flows and fragmental rocks and argillaceous and cherty sediments which are part of the Hazelton Group of Jurassic age (Figure 3). Conglomerates bordering Nakinilerak Lake may be part of a younger sequence.

The volcanics and sediments are intruded by small monzonite - diorite stocks of probable early Cretaceous age and by stocks, sills and dykes of Babine porphyry of Eocene age. The largest of these is a 1500 x 1200 metre stock in the central property area (Figure 3) which is made up of several intrusive phases including fine-grained quartz diorite and quartz monzonite and several varieties of biotite (hornblende)-feldspar porphyry.

Intrusive contacts are not well defined and numerous dykes and sills cut layered rocks several hundred metres south and west of the main stock and near the property north boundary. Similar intrusive rocks underlie much of the ridge near the western claim boundary.

The central porphyry stock is situated near the intersection of northwest and northeast faults, a structural setting similar to other porphyry intrusions in the area.

Geophysics - Magnetite is a common constituent of the intrusive rocks and to a lesser extent, the volcanic sequences. Figure 4 shows airborne magnetic response over the property area -distinct highs are situated marginal to intrusions.

Surface surveys indicate three areas of high magnetic response (+1500 gammas) including an arcuate zone along the southeast margin of the central porphyry stock, a circular area coincident with known porphyry dykes along the property north boundary and a northwest trending linear zone in the southern property area which is probably a reflection of magnetite in volcanic rocks (Figure 5).

Areas of high or anomalous IP response are arranged in a subcircular pattern marginal to the central porphyry stock. These anomalous areas include chargeabilities of between 10 and 30 msec and resistivities of 150 ohm-ft. or less.

Geochemistry - Geochemical signatures for the property area are shown on Figure 6. Anomalous copper values in stream sediments extend to Nakinilirak Lake and a number of copper anomalies in soils are distributed throughout the property area. Relatively high background values of between 50 and 100 ppm copper are the norm and better values (up to 1000 ppm Cu) occur in the marginal areas of the central porphyry stock.

Overburden depths range from zero to as much as 50 metres within the area drilled. Average overburden depths in areas of anomalous soil geochemistry are 3 - 10 metres.

Mineralization - The principal copper showing is situated in the western part of the main stock (Figure 3). Chalcopyrite, pyrite and minor bornite occur as disseminations in bleached feldspar porphyry and in 2-4 mm northeast and northwest trending, vertical quartz veinlets in biotite (hornblende)-feldpsar porphyry and fine-grained quartz diorite. A grab sample assayed 0.35% copper.

Copper mineralization in fractures and quartz veinlets has also been noted along the ridge east of the stock and in areas marginal to the south and west stock contacts.

The property has been partially tested by 28 widely spaced drill holes (Figure 7) of which 12 were short X-Ray holes. Most of the 1800 metres of core recovered was from vertical holes. Hole sections grading more than 0.15% copper include the following:

Hole No.	Interval(ft)	Length(ft)	Cu(%)
1	0-20	20	0.42
2	20-136	116	0.23
3	20-70	50	0.20
7	240-350	110	0.20
8	80-100	20	0.26
12	70-120	50	0.15
13	150-200	50	0.15
14	200-310	110	0.22
15	210-270	60	0.57
18	320-400	80	0.20
19	120-130	10	0.96
20	160-170	10	1.14
	270-280	10	1.02
21	270-340	70	0.27
22	210-230	20	0.15
XR-6	13-38	25	0.18

Analyses for gold were carried out for the first six X-Ray holes only. These are mainly trace except for two 10 ft. sections in hole 2 including 70-80 - 0.01 oz/ton and 100-110 - 0.02 oz/ton.

Molybdenum values are low, generally in the 0.005% range.

Drill logs indicate that the better copper grades are hosted by sheared and brecciated biotite (hornblende)-feldspar porphyry with abundant sericite alteration. Multiple phases of intrusion are evident and intrusive breccias were noted in holes 15 and 19. A relatively fresh, leucocratic, possible post-mineral porphyry phase occupies the upper part of hole 15 which contains the best copper grades.

Copper mineralization noted in drill core invariably is contained in quartz-filled fractures which are parallel to core surfaces. Late porphyry phases noted probably occur as steeply dipping dykes. All of this suggests that vertical holes in this environment do not provide a proper sample. It is significant that good copper grades in two holes (19,20) are related to 1- 2.5 cm wide chalcopyrite veins which are also probably vertical.

Drill holes and better copper grades are shown diagramatically on Figure 8. Better grades are apparently developed along the southwest margin of the main porphyry stock and are contained in s zone that is open to the south and west.

Hydrothermal alteration within the area drilled includes locally abundant secondary biotite within the porphyry. A peripheral quartz-sericite-pyrite zoneis represented by a pyrite halo which is well developed marginal to the central porphyry stock (Figure 3). Between 3 and 10% fracture filling and disseminated pyrite occurs in volcanic and sedimentary rocks both along the ridge east of the main stock and over a broad area to the south. Abundant pyrite has also been noted in intrusive rocks underlying the ridge near the western property boundary.

Property Potential

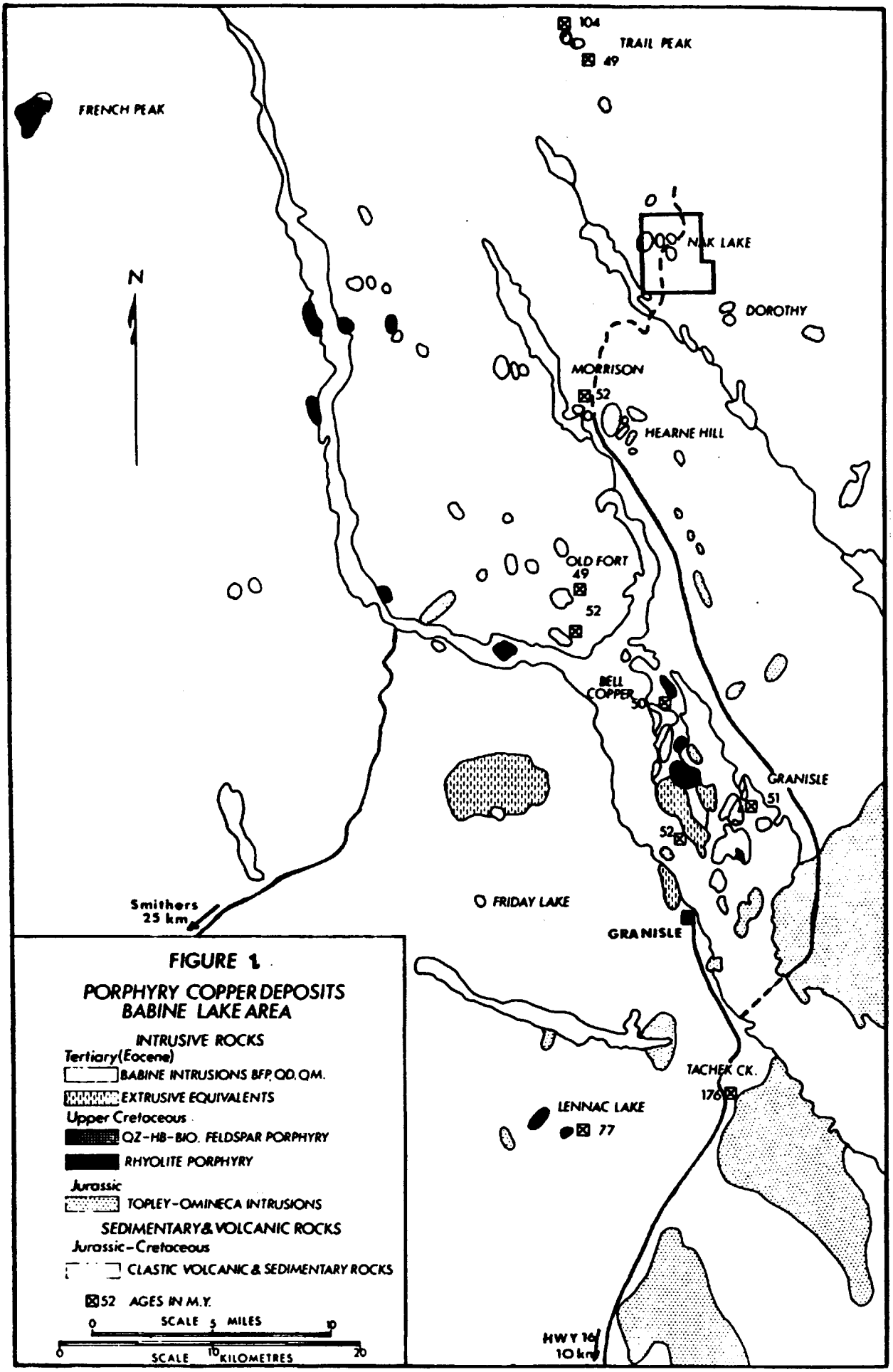
Previous exploratory work on the Nakinilerak Lake property has partially defined a potentially significant zone of copper (gold) mineralization which is contained within a large hydrothermal alteration system. The size of this system relative to other alteration zones in the Babine area is shown on Figure 9. As noted, the Nakinilerak zone could easily accomodate the Bell, Granisle and Morrison deposits.

Figure 10 shows three untested targets within and adjacent to the central porphyry stock. These have been selected on the basis of known copper mineralization, partially explored by previous drilling, and untested areas of coincident anomalous geophysical and geochemical response. Secondary targets include areas of anomalous soil geochemistry in the southern claims area and an area with known copper mineralization near the northern property boundary.

References

B.C. Minister of Mines Annual Report 1966, pp.95-97

Assessment Reports 1198, 3311, 3531

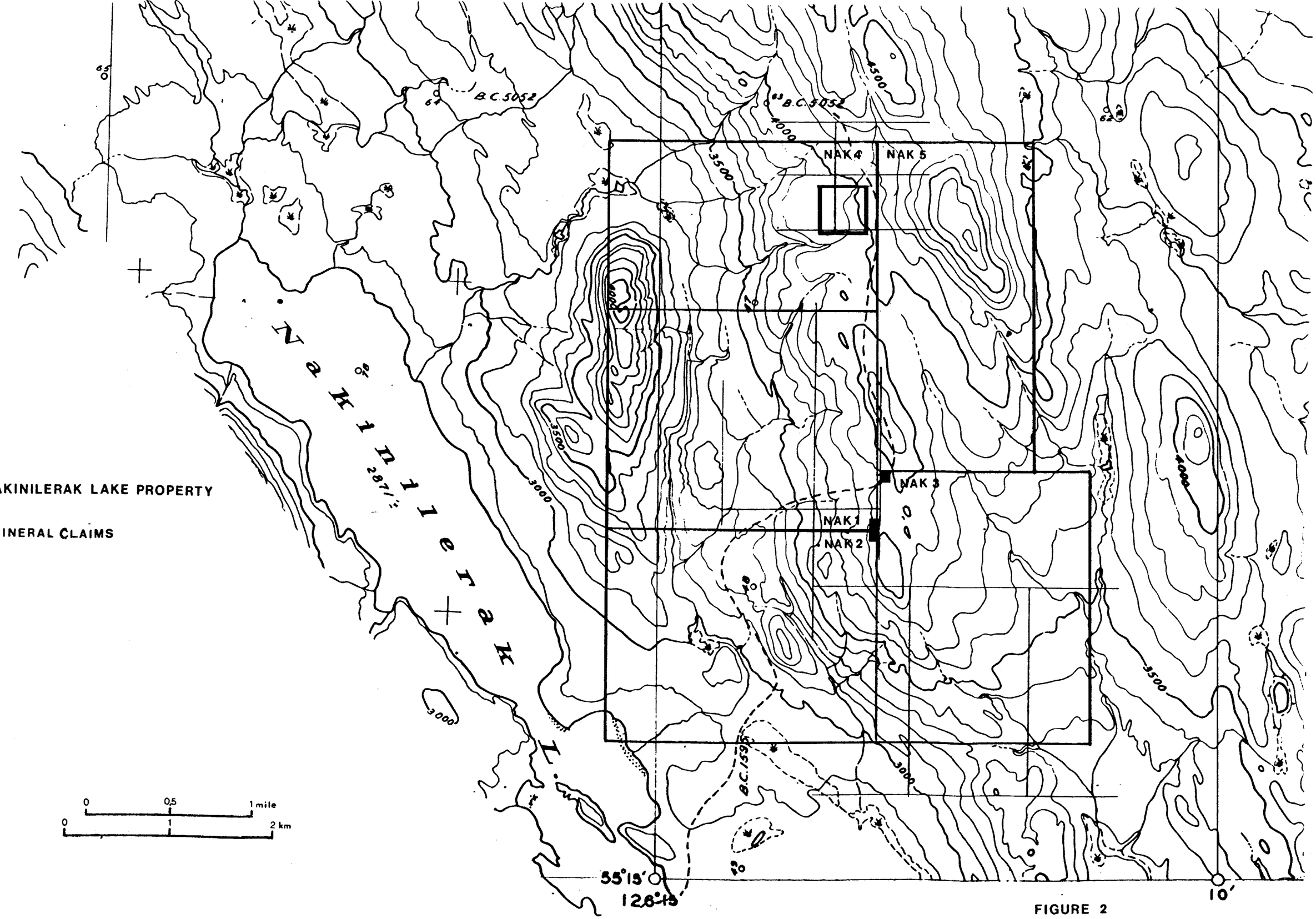

104
TRAIL PEAK
49
FRENCH PEAK
N
NAK LAKE
DOROTHY
MORRISON
52
HEARNE HILL
OLD FORT
49
52
BELL COPPER
50
GRANISLE
51
52
Smithers
25 km
FRIDAY LAKE
GRANISLE
TACHEK CK.
176
LENNAC LAKE
77
HWY 16
10 km
FIGURE 1
PORPHYRY COPPER DEPOSITS
BABINE LAKE AREA
INTRUSIVE ROCKS
Tertiary(Eocene)
BABINE INTRUSIONS BFP, QD, QM.
EXTRUSIVE EQUIVALENTS
Upper Cretaceous
QZ-HB-BIO. FELDSPAR PORPHYRY
RHYOLITE PORPHYRY
Jurassic
TOPLEY-OMINECA INTRUSIONS
SEDIMENTARY & VOLCANIC ROCKS
Jurassic-Cretaceous
CLASTIC VOLCANIC & SEDIMENTARY ROCKS
52 AGES IN M.Y.
0 SCALE 5 MILES 10
0 SCALE 10 KILOMETRES 20

ADDENDUM - STATUS OF MINERAL CLAIMS

Claim Name	Record Number	Units	Expiry Date
NAK 1	307617	20	February 10,1994
NAK 2	307618	20	February 7,1994
NAK 3	307619	20	February 11,1994
NAK 4	308552	14	April 9,1994
NAK 5	308553	20	April 9,1994
NAK 6	310214	18	June 12,1994
NAK 7	310215	18	June 12,1994

NAKINILERAK LAKE PROPERTY

MINERAL CLAIMS



0 0.5 1 mile

0 1 2 km

FIGURE 2

NAKINILERAK LAKE PROPERTY

GEOLOGY

Tertiary

Porphyry – BFP, QM, QD

Jurassic-Cretaceous

Diorite

Sediments

Volcanics

Fault

Inner Limits-Pyrite Halo

0 0.5 1 mile

0 1 2 km

FIGURE 3

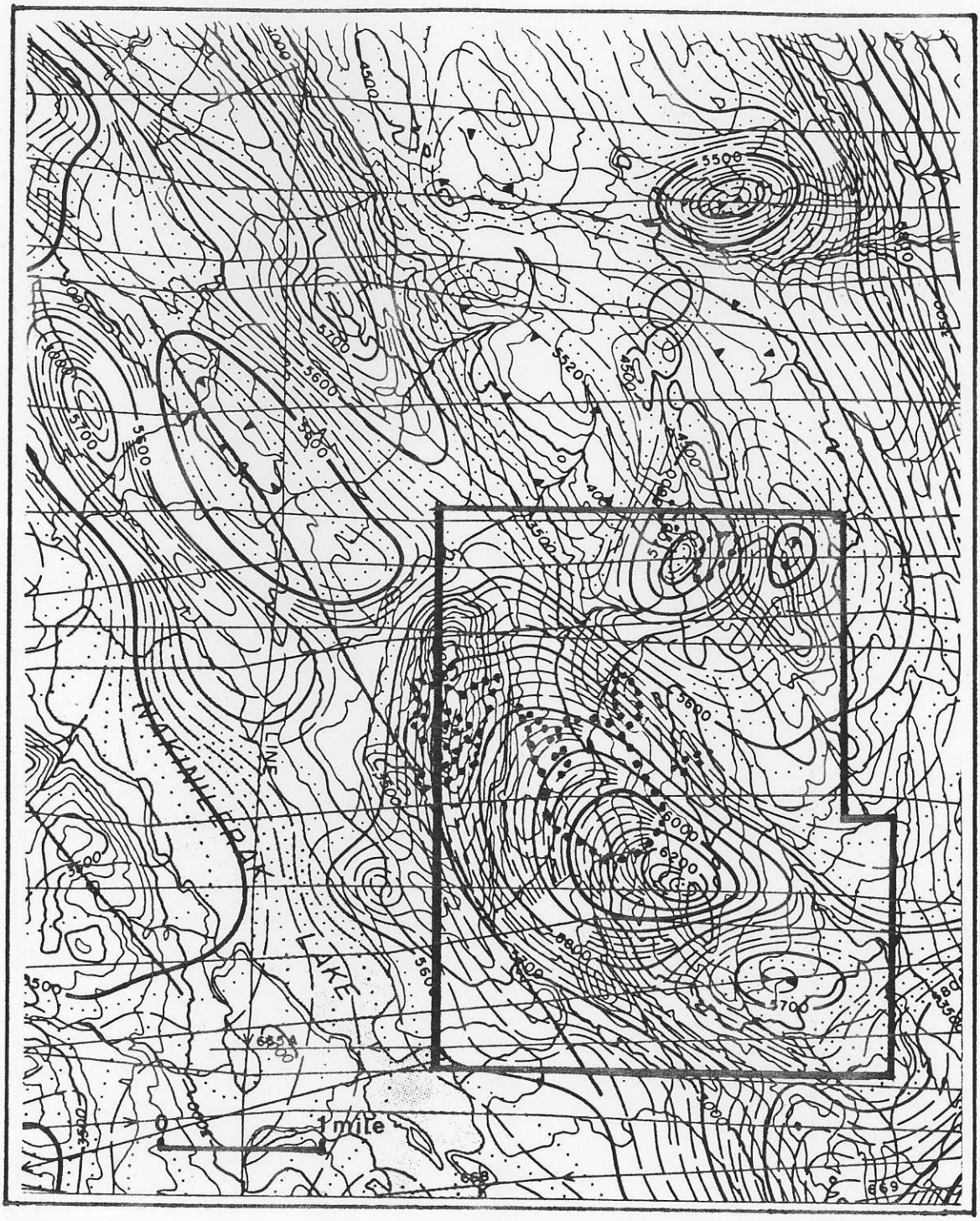


FIGURE 4 - AIRBORNE MAGNETICS

Intrusive Rocks

NAKINILERAK LAKE PROPERTY

GEOPHYSICS

High IP Response

Magnetic High

0 0.5 1 mile

0 1 2 km

B.C. 5052

B.C. 5052

B.C. 1595

Nakinilerak L.

4500

4000

3500

3000

3000

3500

3000

3500

4000

55°15'

126°15'

10'

FIGURE 5

NAKINILERAK LAKE PROPERTY

GEOCHEMISTRY

Soils

+150,+300 ppm Cu

Silts

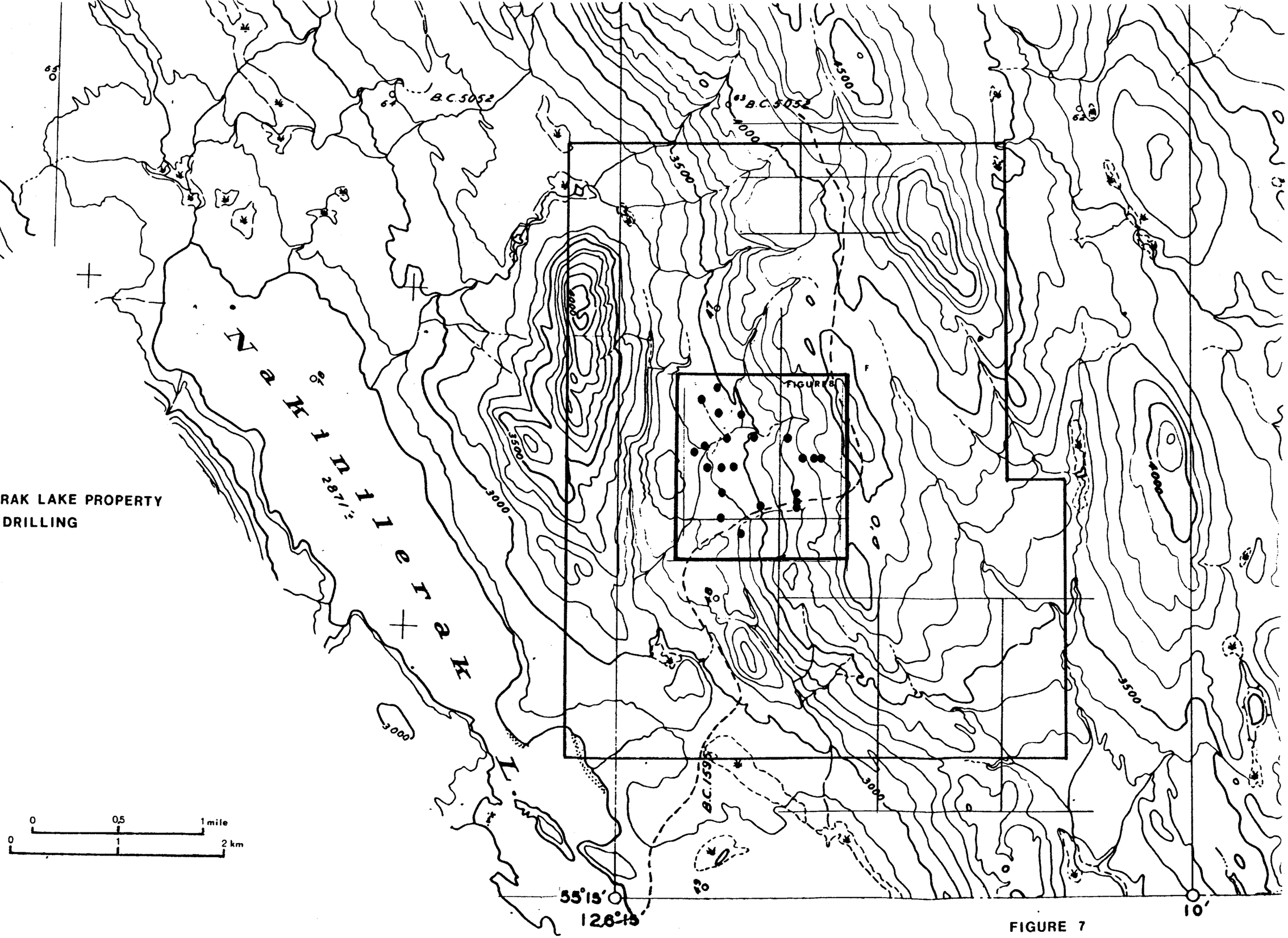
×320 ppm Cu

0 0.5 1 mile

0 1 2 km

FIGURE 6

NAKINILERAK LAKE PROPERTY
DRILLING



0 0.5 1 mile
0 1 2 km

FIGURE 7

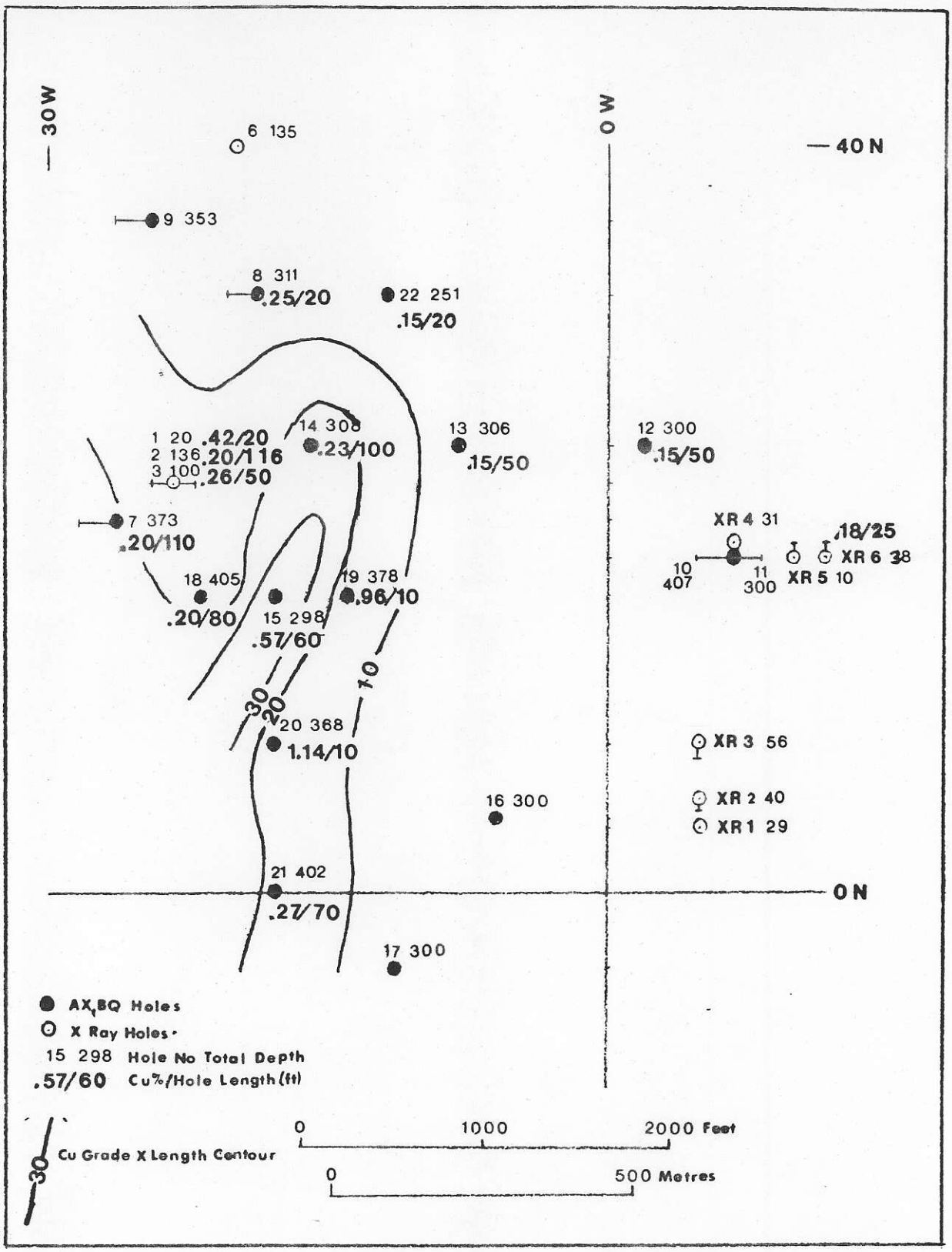
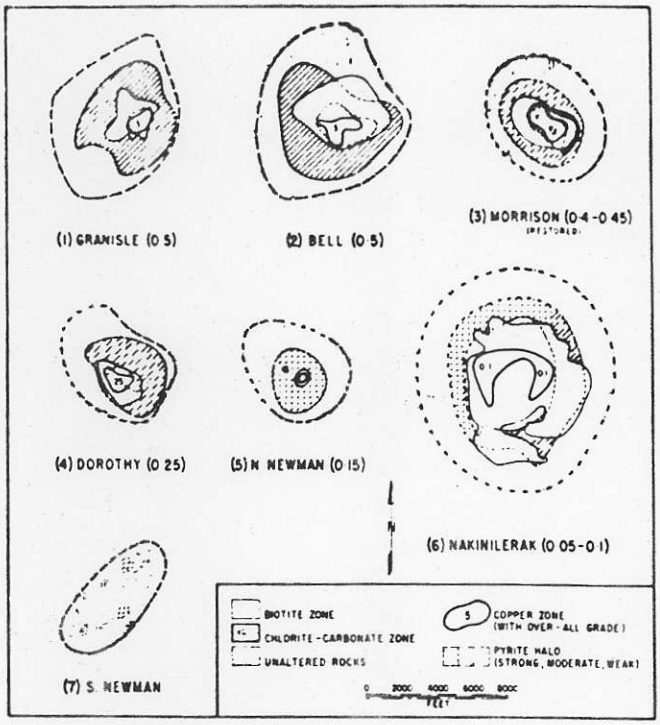


Figure 8 Drilling Results



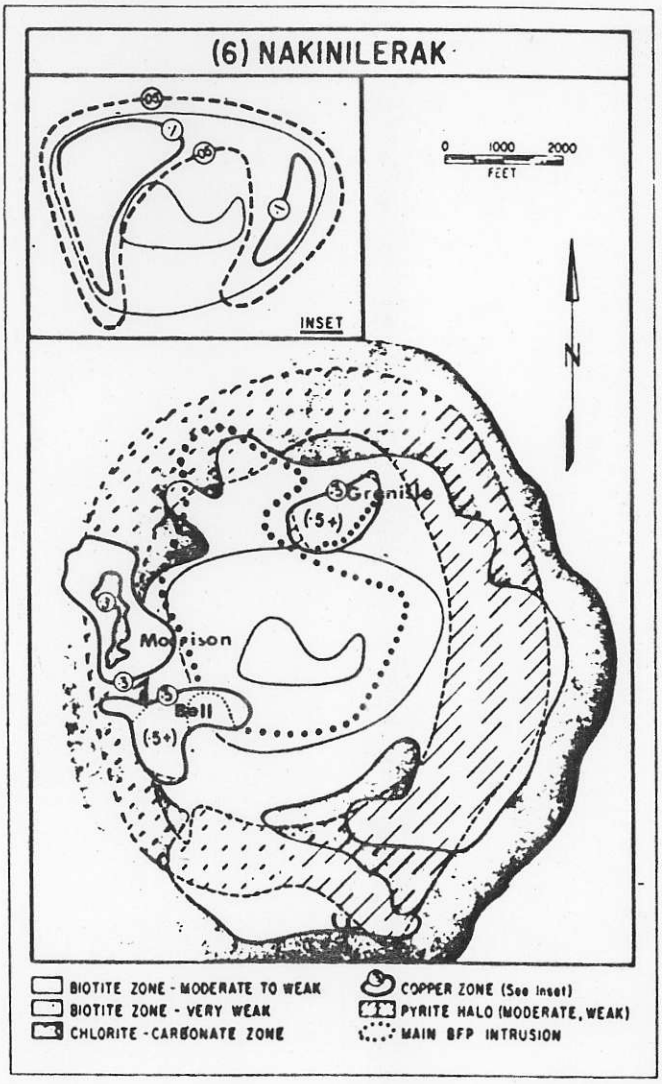


FIGURE 9 After Carson and Jambor (1974)

NAKINILERAK LAKE PROPERTY
COMPILATION

Soils

+150,+300 ppm Cu

Porphyry Intrusions

Pyrite Halo

Drill Holes 0.20% Cu

Target Areas

Bell Copper Ore Body
(to scale)

0 0.5 1 mile
0 1 2 km

B.C. 5052

B.C. 5052

B.C. 159

Nakinilerak L.

3500

3000

4000

150

320

92

84

55°15'

126°15'

10'

FIGURE 10