

521674  
103H/12

**REPORT**  
  
**on the**  
  
**PITT PROPERTY**  
  
**PITT ISLAND**  
  
**SKEENA MINING DIVISION**  
  
**for**  
  
**PHARLAP RESOURCES LTD.**  
  
**by**  
  
**DISCOVERY CONSULTANTS**  
**BOX 933**  
**VERNON, BC V1T 6M8**

NTS: 103H/12W  
Latitude: 53° 42'N  
Longitude: 129° 52'W  
Owner: Atna Resources Ltd.  
Operator: Pharlap Resources Ltd.

Author: William R. Gilmour  
Date: August 19, 1996

## SUMMARY

The Pitt property is located in the Kitimat Range of the Coast Mountains of British Columbia. Highly metamorphosed Paleozoic/Mesozoic(?) layered rocks, likely of the Alexander Terrane, occur as pendants in Cretaceous(?) plutons of the Coast Plutonic Complex.

Exploration since 1980 has delineated a massive sulphide deposit, the Pyrite Creek prospect. The semi-massive to massive, tabular, steeply-dipping, concordant pyrite-chalcopyrite-sphalerite-pyrrhotite-barite-galena body averages about 1 to 1.5 m thick, and appears to extend along strike for at least 1800 m and at least 500 m down dip in places. Evidence to date suggests a possible Kuroko or Besshi type origin. Other similar types of mineralization, both along strike and parallel to the east, occur on the property.

Centred on the Pyrite Creek prospect there is about a 10 km long zone over which prospecting has discovered significant base metal values. Nine drill holes have encountered the massive sulphide zone on the Pyrite Creek prospect. The intersections grade about 1.1% Cu, 2.0% Zn and 0.5% Pb over an average core length of 1.8 m (true thickness between 1 and 1.5 m). Surface sampling indicates a possible increase in grade and thickness in the southern portion of the South Pyrite Creek showing.

The parallel B zone, 1.5 km to the east, has base metal enriched horizons associated with airborne and ground geophysical anomalies.

Since 1991 more than \$400,000 have been spent on mineral exploration on the Pitt property.

Based on a review of exploration methods to date, it is recommended that specific geochemical and geophysical techniques be used in geologically favourable settings to delineate drill targets. Drilling on the South Pyrite Creek showing is recommended. A second phase of drilling is recommended if initial results justify further exploration.

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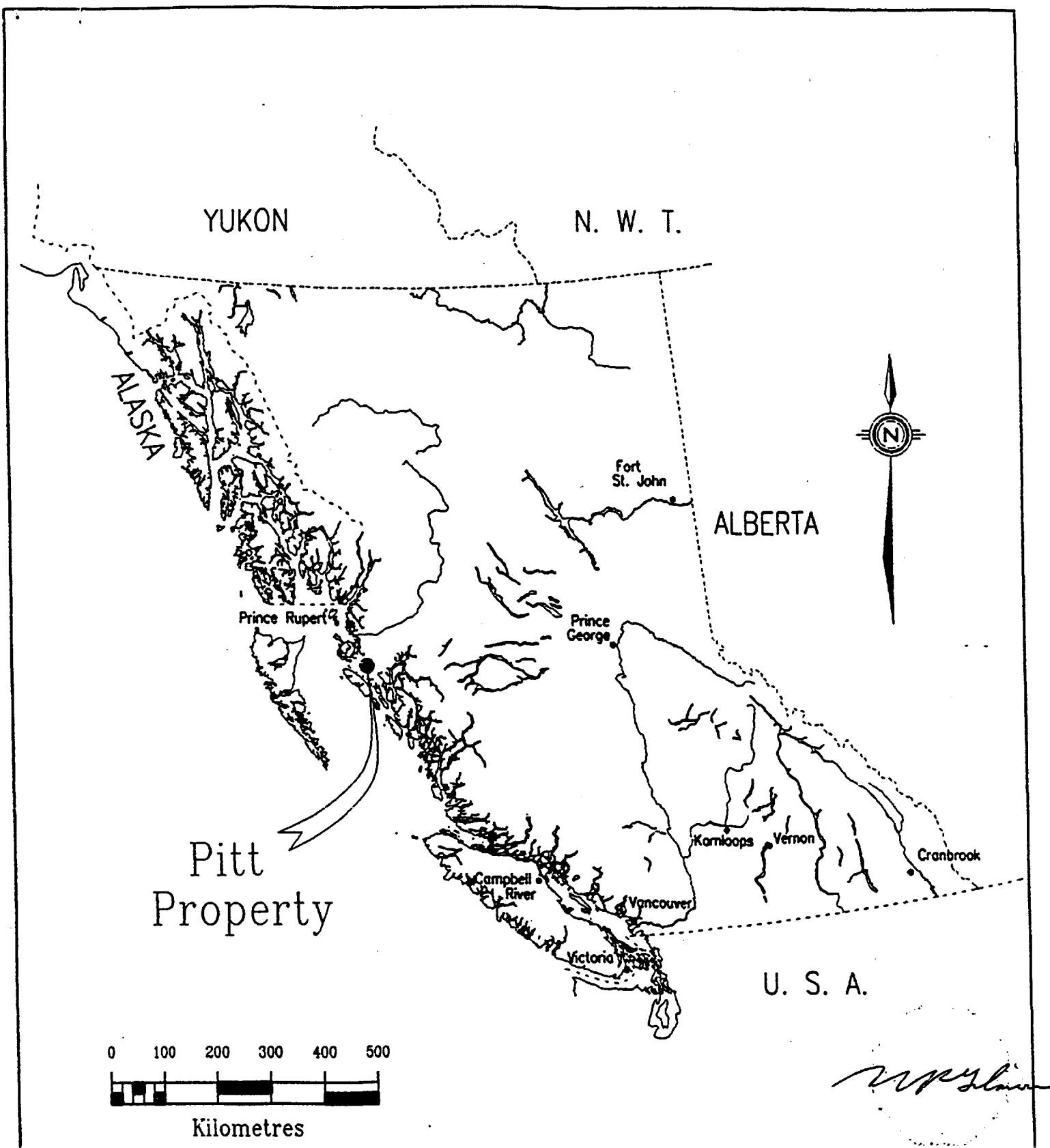
## INTRODUCTION

This report on the Pitt property has been prepared at the request of Mr. J. Lawrence, president of Pharlap Resources Ltd.

Discovery Consultants has been requested to compile and interpret the results of all previous exploration work and to make recommendations as to further exploration. The author has reviewed most of the available published and unpublished data, has examined rock and drill core samples at the offices of Atna Resources Ltd., and has had discussions with geologists who have previously explored the property.

The Pitt property is located in coastal British Columbia in the Alexander Terrane. Metamorphosed sedimentary and volcanic rocks host zinc-copper-lead massive sulphide mineralization in a geological setting similar to Kuroko or Besshi type deposits.

Exploration since 1980 has discovered the Pyrite Creek prospect, a massive sulphide deposit containing significant Cu-Zn-Pb+/-Ag+/-Au values. The purpose of this report is to recommend an exploration program that will search for new zones of higher economic potential; that is, better widths and higher grades.



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**PITT PROPERTY**  
British Columbia

**LOCATION MAP**

## LOCATION, ACCESS and TOPOGRAPHY

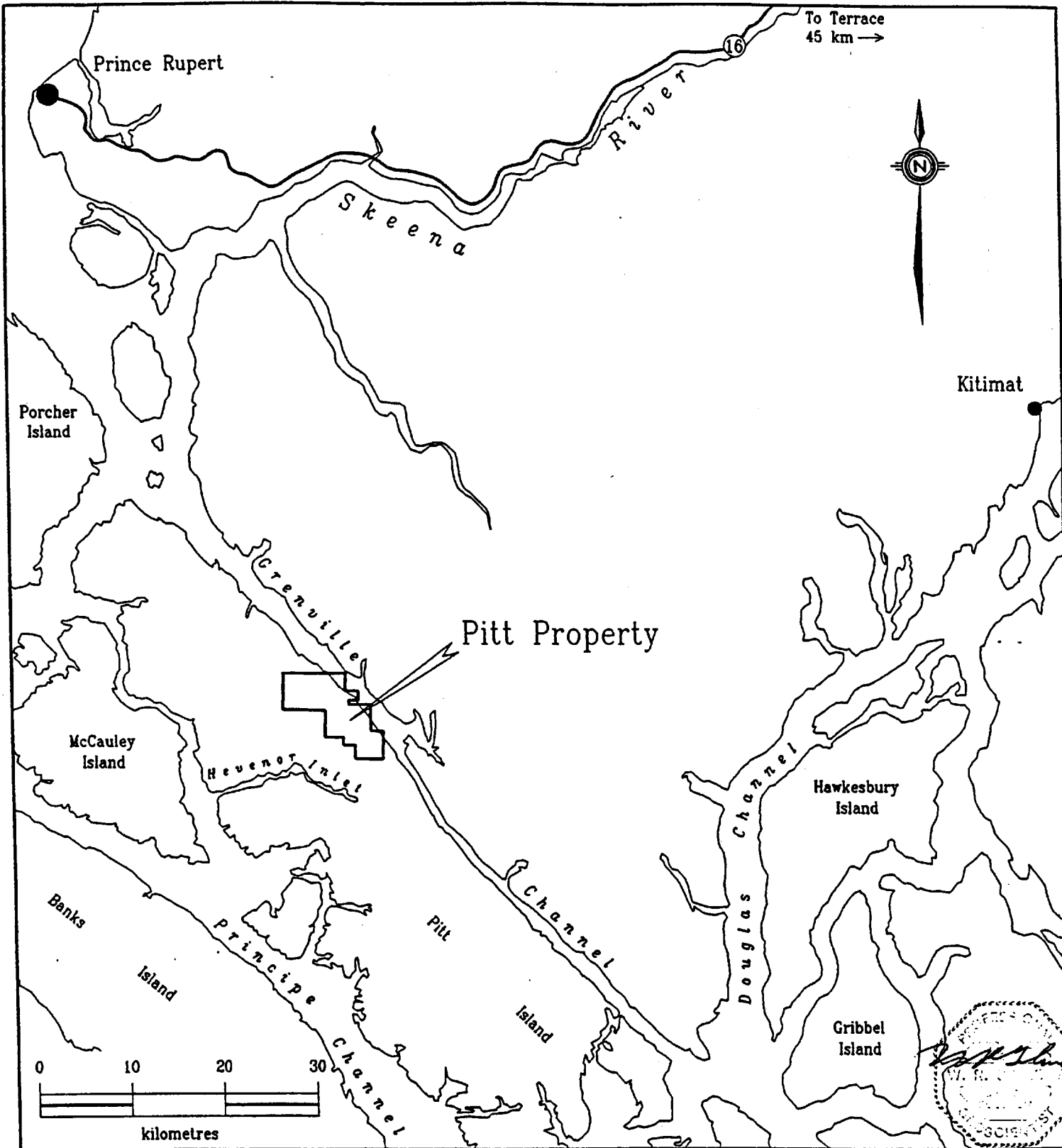
The Pitt property is on Pitt Island in the Kitimat Ranges of the Coast Mountains of western British Columbia (Figure 1) in the NTS 103H/12W map sheet. The property is 700 km northwest of Vancouver and 80 km south-southeast of Prince Rupert (Figure 2). The claims extend westward from Grenville Channel to near the topographic divide of Pitt Island. The claim block ranges from 53° 39.5' to 53° 44' North Latitude and 129° 47' to 129° 57' West Longitude. The corresponding UTM coordinates are 5,945,500N to 5,954,800N and 447,800E to 437,500E.

Access is by helicopter or boat from Prince Rupert. Grenville Channel is part of the Inside Passage along the B.C. coast.

The topography in the area of the property is rugged with steep cirque walls at the heads of easterly flowing creeks. Elevations range from sea level along Grenville Channel to 1060 m above sea level along the Pitt Island topographic divide. The creeks show step drainage patterns, alternating lakes and boggy areas with rugged canyons. The U-shaped main creek valleys deeply incise the topography; for example, the elevation of Tranquillity Creek is 200 m at a distance of 5 km from Grenville Channel.

The vegetation is typical for west coast temperate climate at this latitude. Heavy rainfall and coastal fog are common, with July and August being the driest months for work. Dense conifer forests are common below about 600 m elevation and thick underbrush (salmon berry and devils club) also occur below 600 m, more commonly in the main valley. Much of the land above 700 m is underlain by granitic rocks and is sparsely treed. Natural helicopter landing areas are generally on the uplands, along ridges and in boggy areas.





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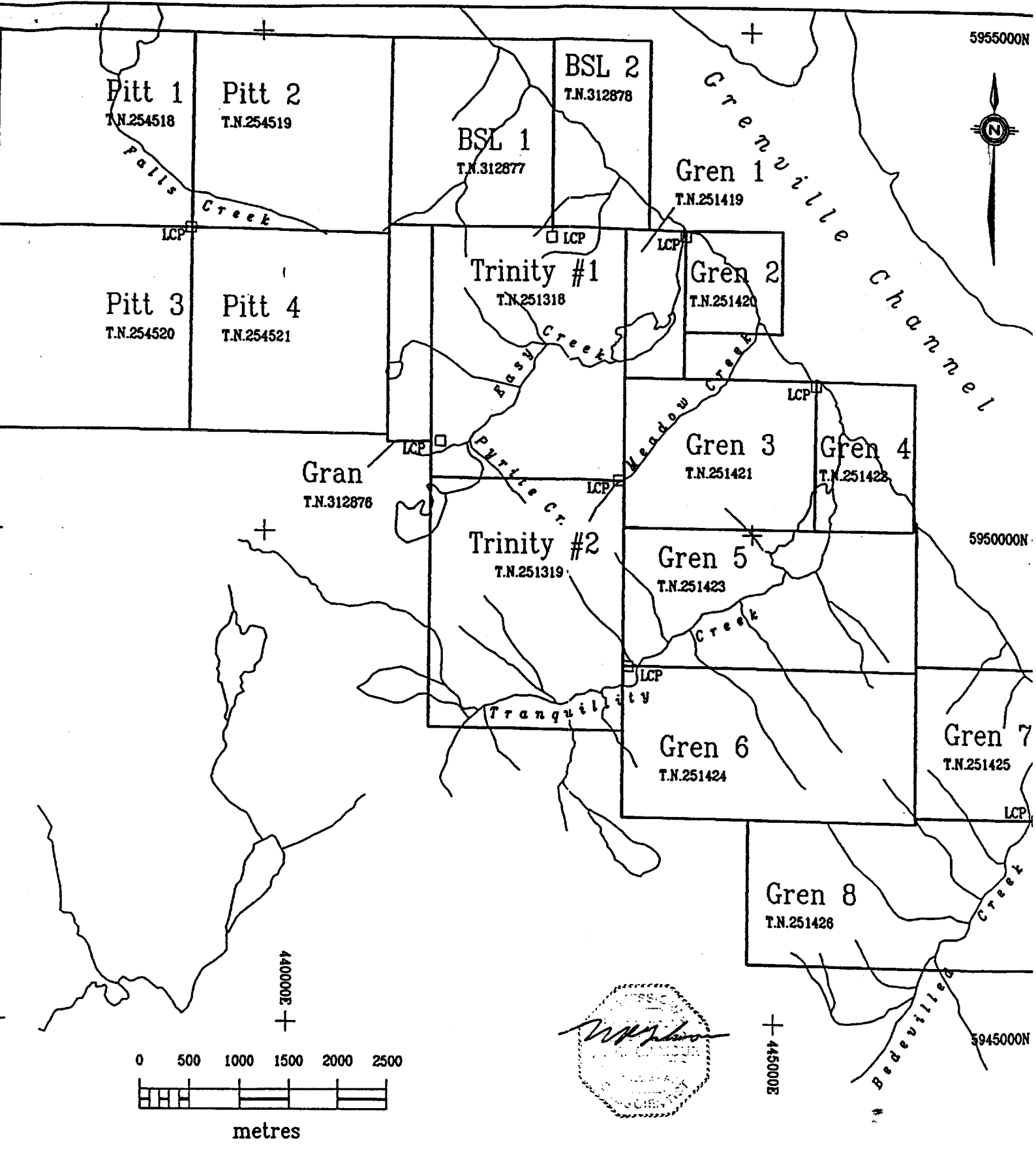
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ACCESS MAP

Forest cover maps (103H.061, 103H.071) show much of the property as having non-productive forests. Hemlock, cedar, balsam and spruce are the dominant trees in productive areas.

5955000N



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CLAIM LOCATION MAP

## PROPERTY

The Pitt property comprises the following mineral claims in the Skeena Mining Division, British Columbia (Figure 3).

<u>Claim Name</u>	<u>Tenure No.</u>	<u>Units</u>	<u>Expiry Date</u>
Trinity #1	251318	20	March 3, 2003
Trinity #2	251319	20	March 3, 2002
Gren 1	251419	6	April 11, 2003
Gren 2	251420	4	April 11, 2001
Gren 3	251421	12	April 11, 2002
Gren 4	251422	6	April 11, 2001
Gren 5	251423	18	April 11, 2001
Gren 6	251424	18	April 11, 2001
Gren 7	251425	9	April 11, 2000
Gren 8	251426	18	April 11, 2000
Pitt 1	254518	16	May 22, 1997
Pitt 2	254519	16	May 23, 1997
Pitt 3	254520	16	May 23, 1997
Pitt 4	254521	16	May 23, 1997
Gran	312876	5	September 3, 1997
BSL 1	312877	16	September 3, 1997
BSL 2	312878	<u>6</u>	September 2, 1997

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The registered owner of the above claims is P.R. Delancey, president of Atna Resources Ltd. All the claims are subject to an option agreement between Atna and Pharlap Resources Ltd., dated August 9, 1996. Pharlap can earn a 40% interest in the property subject to making exploration expenditures on the property of \$500,000 over 2 years and meeting other obligations as set out in the agreement. Pharlap can earn another 10% interest by incurring an addition \$250,000 in exploration expenditures within the 2 year period.\*

The above claims were grouped as the Grenville 1, Grenville 2, and the Grenville 3 groups on March 1, 1993.

## PREVIOUS MINERAL EXPLORATION

Texas Gulf Sulphur examined sulphide showings on the property in 1952 (Lo, 1992). Massive sulphides were discovered on Pyrite Creek in 1980 by Ryan Exploration Company Ltd., a subsidiary of US Borax. In 1982, geological mapping, detailed rock sampling and 17 line-km of VLF (EM16) surveying (by Lloyd Geophysics) were carried out by Ryan Exploration in the Pyrite Creek area (Rebagliati, 1989).

In 1986, BP Minerals Limited optioned the property from B. McDonald and R. Haslinger. The exploration program included stream sediment sampling of the major creeks, geological mapping and sampling of the Pyrite Creek showing, an orientation soil and humus survey, and prospecting along major ridges.

Fair Harbour Mining Corporation optioned the property in 1988 and carried out an IP survey (2.6 line-km) in the area of the Pyrite Creek showing. In 1989 the showing was tested over a 200 m strike length by 6 diamond drill holes totalling 494 metres.

In 1991 Atna Resources Ltd. staked the property for a 50-50 joint venture with Fair Harbour Mining Corporation. Inco Limited optioned the claims and in 1992 completed a helicopter-borne electromagnetic and magnetic survey (289 line-km), geological mapping, prospecting, rock and moss-mat sampling and, on the B zone, 8.9 line-km of horizontal-loop EM, magnetometer and VLF-EM surveying. Detailed exploration concentrated on the Pyrite Creek showing and its extensions and on following up geophysical anomalies on the B zone.

In 1993, Inco tested portions of the Pyrite Creek prospect by drilling 7 holes totalling 1764 m. During 1992-93 Inco spent more than \$400,000 exploring the property.

## REGIONAL GEOLOGY and MINERALIZATION

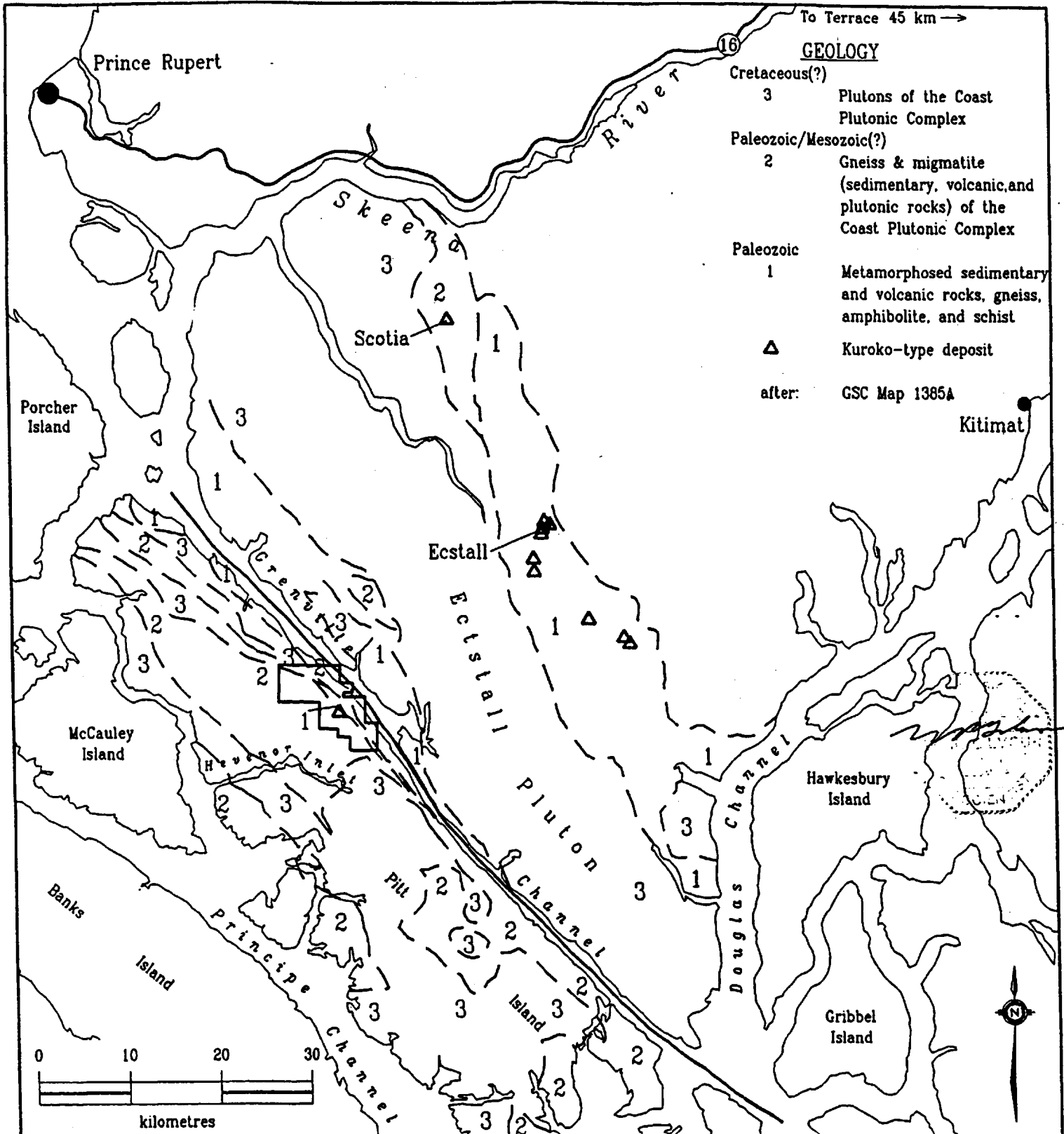
The metallogeny of the various terranes of the Canadian Cordillera has been well described by Dawson et al and their ideas, along with those of Roddick, and Thompson and Panteleyev, have been summarized in this section.

The Pitt property is within the Coast Belt of the Canadian Cordillera. Remnants of possible Alexander Terrane occur as pendants in Cretaceous(?) plutonic rocks of the Coast Plutonic Complex. Paleozoic plutonic rocks may also be present within Alexandria. Many of these rocks are highly metamorphosed and deformed, creating some uncertainties as to their affinity.

The age of the metamorphosed sedimentary and volcanic rocks on Pitt Island is unknown but regional mapping has placed the age in the Ordovician to Triassic range. A similar belt, located 25 km east of the property, has been assigned to the Nisling Terrane, possibly of lower Paleozoic age.

The pendants comprise schists (commonly composed of biotite, quartz, feldspar and/or chlorite), amphibolite, marble, pebble conglomerate, micaceous quartzite, phyllitic schist, gneiss and migmatite. The gneissic and migmatitic rocks may include pre-Alexandria igneous, sedimentary and/or volcanic rocks infolded within Alexandria units, or highly metamorphosed Alexandria volcanic, igneous and/or sedimentary rocks, or Coast Plutonic intrusive sill-like bodies.

The northwest trending Grenville Channel has been mapped as the



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REGIONAL GEOLOGY

locus of a major strike-slip fault (Grenville Channel Fault), but it does not seem to mark the boundaries of major geological terranes. Rock units and metamorphic fabric also have a northwest strike.

The Alexander Terrane hosts significant massive sulphide deposits, such as the Cu-Co-Au Windy Craggy and the Ag-Zn-Au-Pb-Cu Greens Creek (Alaska) deposits. The significant massive sulphide deposits in the Alexander Terrane are in Triassic rocks (Dawson et al). The Nisling and other terranes to the east host the Zn-Cu Ecstall, the Cu-Ag-Au Anyox and the Cu-Au-Ag Granduc deposits. These deposits have been classified as Kuroko, Cyprus or Besshi type volcanogenic massive sulphide deposits.

The Ecstall deposit is the largest of the group of Kuroko-type deposits (Figure 4) in lower Paleozoic(?) rocks of the Nisling Terrane.



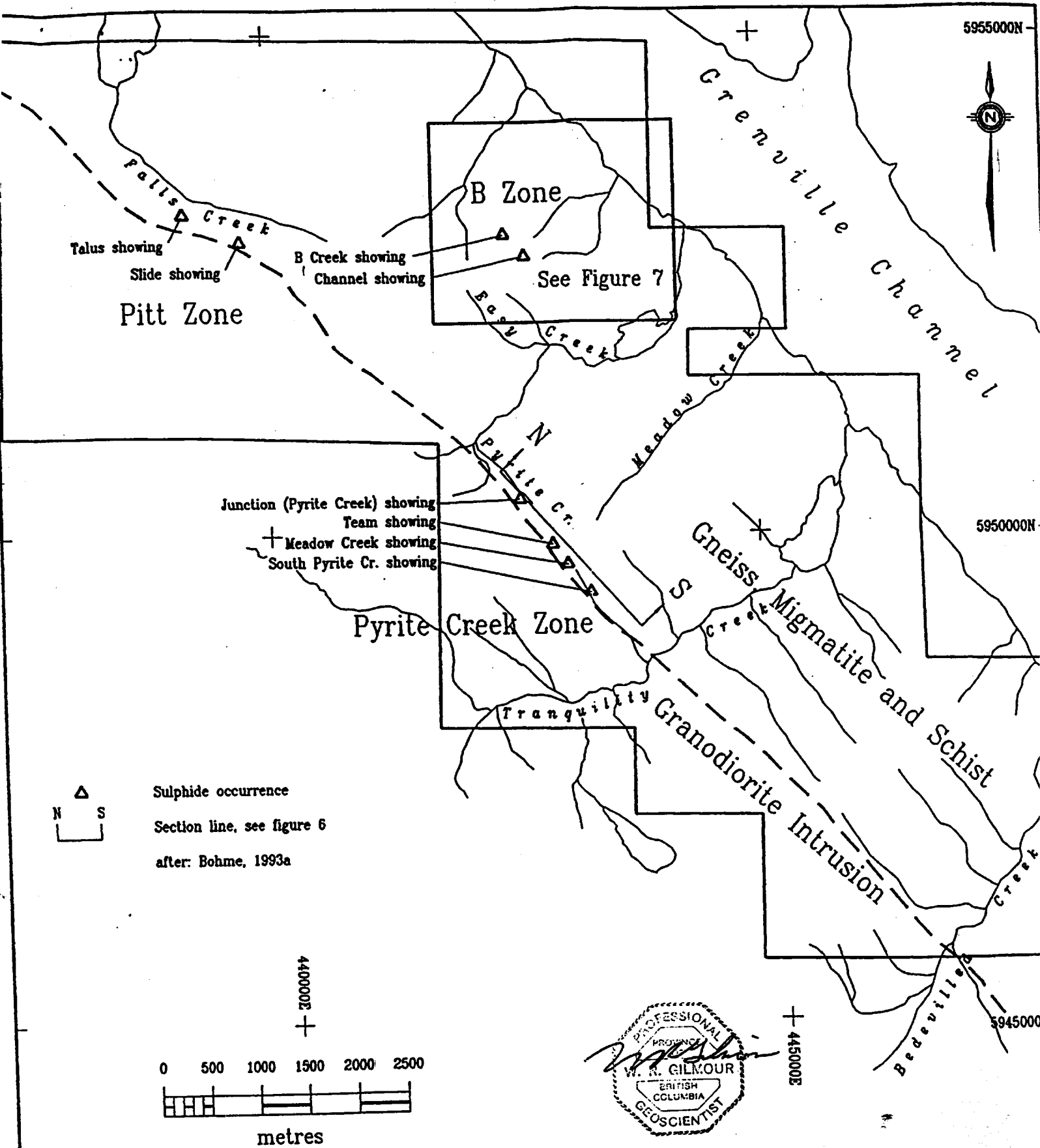
## PROPERTY GEOLOGY and MINERALIZATION

This section of the report is based upon reports by previous workers, most notably D.M. Bohme, W. Bradley, P.R. Delancey and C.M. Rebagliati.

The high-grade metamorphic nature of the rocks on the Pitt property has made the interpretation of the geology difficult. Foliated granitic to dioritic rocks, but generally a biotite granodiorite, appear as rounded, massive, grey-white outcrops, occurring west of the Pyribe Creek prospect. The rocks east of this contact do not form the same rounded outcrops, although much of the area has been mapped as being underlain by plutonic rocks. It is possible that some of the gneissic felsic rock is metamorphosed felsic volcanic rock; this would be expected in an area with Kuroko style mineralization. Detailed mapping in the area of the Ecstall deposit has revealed felsic volcanic rocks, although no volcanic rocks were noted in regional mapping. Also, the airborne magnetic survey reveals a lower magnetic signature for the foliated plutonic rocks to the southwest than gneissic rocks to the east. Some granodiorite dykes and/or sills occur in the nearby country rock.

The layered rocks dip steeply and strike northwesterly. The relative ages of the various stratigraphic units are unknown. The rock types have been described in detail by McDonald, Devlin, Bradley et al, and Bohme; the major units are summarized as follows:

- biotite-muscovite-garnet schist
  - commonly intercalated with carbonaceous phyllite
  - garnets and minor disseminated pyrite give the rock a spotted appearance



△ Sulphide occurrence  
 Section line, see figure 6  
 after: Bohme, 1993a

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PROPERTY GEOLOGY

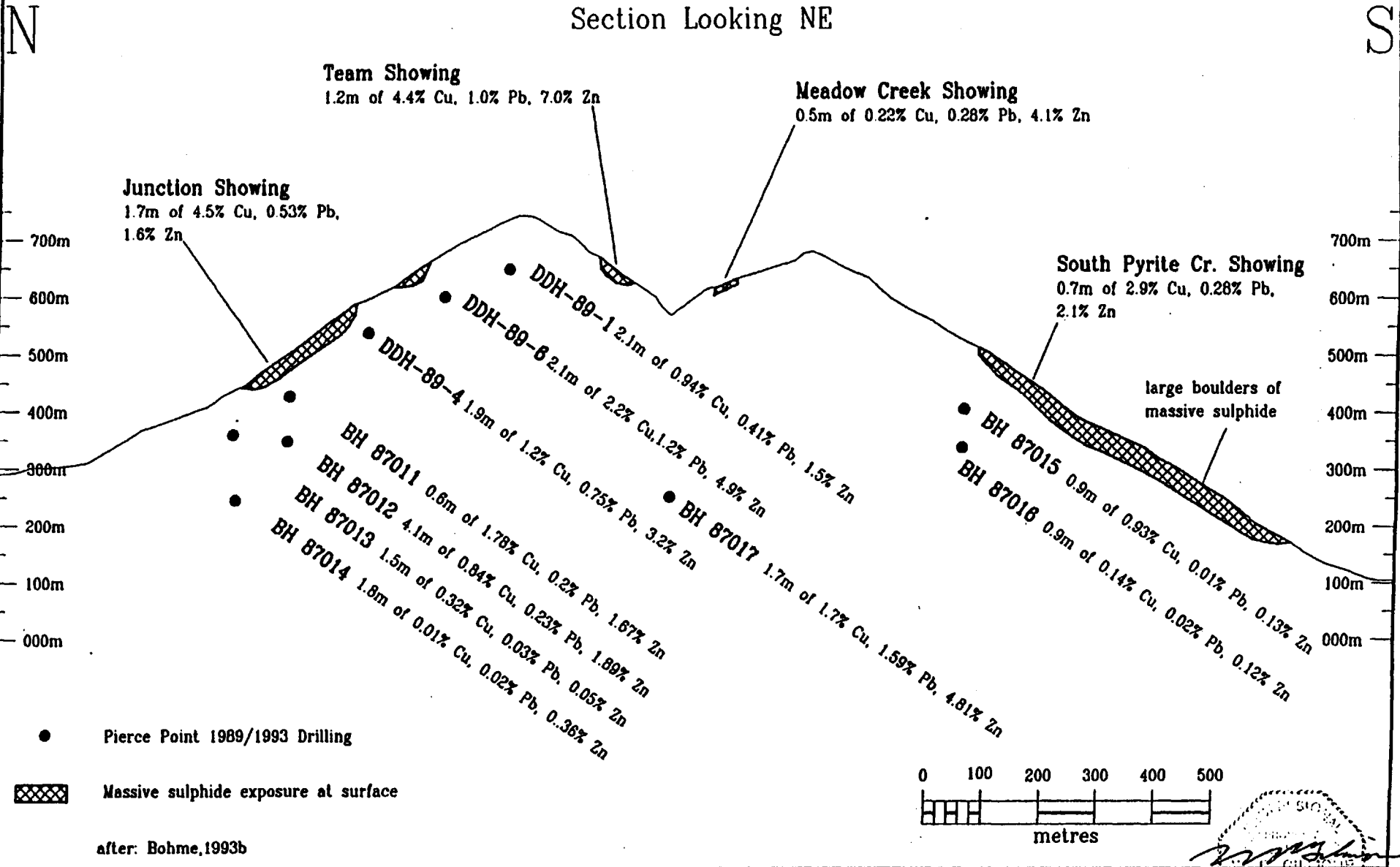
- pyritic biotite-quartz schist
  - prominent lithology in the B zone
- feldspar-biotite-quartz grit schist
  - prominent lithology in the central portion of the property
  - a gritty salt and pepper texture is apparent on fresh surfaces
- muscovite-quartz schist
  - generally associated with the granodiorite contact zone
- feldspar-quartz-biotite gneiss
  - may have plutonic, volcanic and/or sedimentary origins
  - tends to occur in bands up to 1 km wide, paralleling the schist units
- mafic schist/amphibolite
  - hornblende-rich flows, sills and/or dykes
  - ranging from a few metres to many metres thick (A zone)

The extensive metamorphism and deformation have produced zones of migmatites, probably incorporating all of the above rock types.

Exploration since 1980 has delineated a massive sulphide deposit of uncertain origin, but likely Kuroko or Besshi volcanogenic type. The deposit includes the Pyrite Creek (Junction), Team, Meadow Creek and South Pyrite Creek showings (Figures 5 and 6). The semi-massive to massive, tabular, steeply-dipping, concordant pyrite-chalcopyrite-sphalerite-pyrrhotite-barite-galena body averages about 1 to 1.5 m thick, and appears to extend along strike for at least 1800 m and down-dip for at least 500 m. The Talus and Slide showings, 3 km to the northwest, appear to occur along strike with the Pyrite Creek prospect.

The mineralized horizon is marked by sub-rounded quartz-rich and granitic clasts, comprising between 5% to 25% of the rock. Clasts are up to 20 cm long, although they average less than 5 cm. This texture, possibly durchbewegung texture (Vokes, Delancey), is indicative of

# Section Looking NE



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LONGITUDINAL SECTION  
PYRITE CREEK PROSPECT

Date: JULY30/1996

Project: 574

Scale: 1:10000

N.T.S.: 103H/12W

Mining Div: SKEENA

Figure: 6

shear deformation of the sulphide zone. Pinching and swelling of the zone varies the thickness from 0.2 m to 2 m. The sulphides are commonly medium grained.

The sulphide zone occurs near the contact between a quartz-muscovite-biotite +/- chlorite schist to felsic gneiss unit and a more mafic biotite schist/amphibolite sequence (Bohme, 1993b).

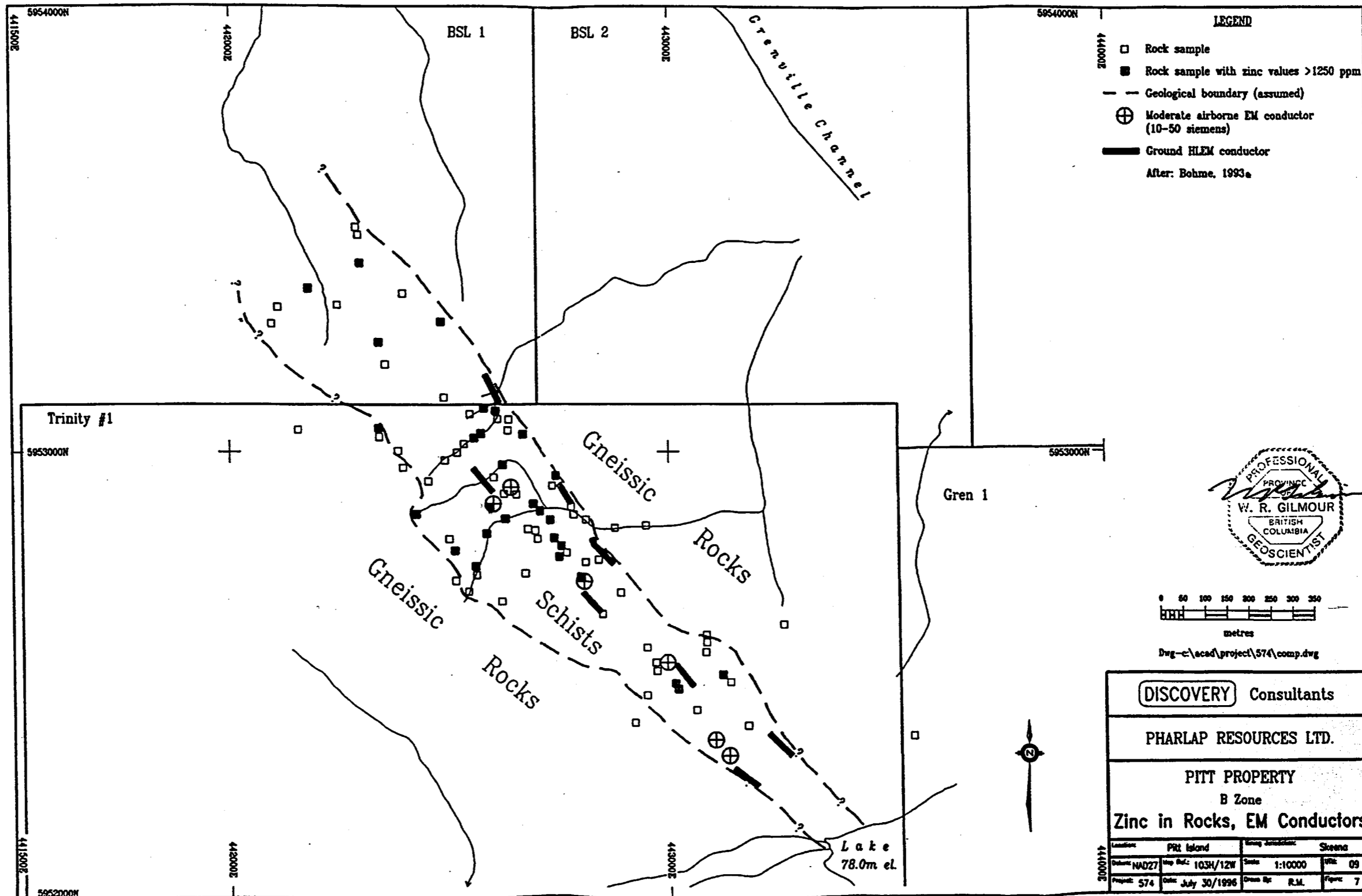
Nine drill holes have intersected the massive sulphide zone on the Pyrite Creek prospect (Figure 6). The intersections grade about 1.1% Cu, 2.0% Zn and 0.5% Pb over an average core length of 1.8 m (true thickness between 1 and 1.5 m). Barite content generally ranges from 1% to 2.5%. Gold values are usually less than 0.2 g/t and silver less than 10 g/t. The best intersection contains 0.6 g/t Au and 63 g/t Ag.

Atna has reported massive sulphide boulders, more than 2 m thick and grading up to 5% Cu and 4% Zn, in the South Pyrite Creek showing.

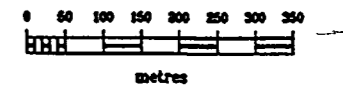
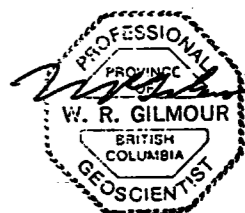
#### B Zone (Figure 7)

Semi-massive pyrrhotite-rich horizons containing Zn-Cu-Pb values seem to be associated with airborne and ground EM conductors within gritty pyritic biotite-quartz schist and intercalated zones of carbonaceous phyllite (Bohme, 1993a). Clast-rich sulphide horizons, similar to the Pyrite Creek prospect, are present.

A selected grab sample from the B Creek showing returned values of 1.5% Cu, 1.0% Pb, 0.7% Zn, 70 g/t Ag and 0.7 g/t Au. On the Channel showing Cu, Pb and Zn values are usually less than 0.5%. One narrow (1 m wide) low-grade base metal zone (0.1% Cu, 0.2% Pb, 0.1% Zn) analyzed 1.6 g/t Au and 41 g/t Ag.



Following Page 10



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<b>DISCOVERY</b> Consultants			
PHARLAP RESOURCES LTD.			
PITT PROPERTY B Zone Zinc in Rocks, EM Conductors			
Location:	Pitt Island	Using Jurisdiction:	Steno
Datum:	NAD27	Map Ref.:	103H/12W
Scale:	1:10000	Proj.:	09
Project:	574	Date:	July 30/1996
Drawn By:	R.M.	Figure:	7

## GEOCHEMISTRY

In 1986, silt sampling returned anomalous base metal results in the headwaters of Meadow Creek. (In 1993, the Pyrite Creek horizon was shown to extend through this area).

A few orientation soil samples were collected over the Pyrite Creek showing in 1986. The location of the massive sulphide body, in the bottom of a steep rocky creek, makes difficult the collection and interpretation of soil samples. Sampling to the south returned values anomalous in Zn, Cu, Pb, Ag and Au in both soil and humus (Bradley et al). These anomalous values are not along strike from the showing, indicating a possible offset of the massive sulphides to the southwest.

A few soil samples were collected from other areas on the property. They show anomalous base metal values north of Easy Creek, evidence that the massive sulphides continue to the northwest.

Moss-mat sampling, mainly on the B zone, returned 2 anomalous samples. Stream sediments 50 m downstream of the B Creek showing were strongly anomalous in Pb and less so in Cu, Zn and Ag (Bohme, 1993a).

Rock geochemistry, combined with petrographic studies, has been used to interpret rocks types and the geological setting of the sulphide mineralization (Burrows, Payne). The significant results of these studies are summarized below in Discussion and Conclusions.

## GEOPHYSICS

The VLF EM (EM16) survey conducted in 1982 discovered a 1300 m long anomaly, coinciding with the Pyrite Creek showing (Rebagliati, 1989). However, a 1992 airborne electromagnetic survey failed to detect this showing. This may be explained by the much higher frequency of the VLF and/or by the possible origin of the VLF anomaly being a fault zone near the sulphide horizon.

An induced polarization (IP) survey, conducted in 1988 over portions of the showing, extended the area of known sulphide mineralization to the south. The anomaly was interpreted as a narrow, essentially vertical, dyke-like, massive to semi-massive sulphide body with a disseminated sulphide halo (Wynne & Nielsen).

The 1992 airborne magnetic and DIGHEM<sup>v</sup> electromagnetic survey (Lo) detected previously unknown massive sulphide mineralization (South Pyrite Creek showing) along strike from the Pyrite Creek showing. [The showings in this area are collectively known as the Pyrite Creek prospect]. However, most of the mineralization in this prospect was not detected by the airborne EM survey.

A major conductive unit (A zone), between the Pyrite Creek prospect and the B zone, has been related to a mafic schist (volcanic flow or dyke/sill) unit; this unit appears as a resistivity low and does not have an associated magnetic high. The anomaly indicates a relatively undisturbed stratigraphy, although "some conductors have well defined dips which in some case change along strike indicating a degrees of folding and faulting" (Lo).



The B zone comprises an area underlain by schist and with moderate airborne EM conductors (Figure 7). This zone was followed up by ground horizontal-loop EM (HLEM), VLF and magnetic surveys, as recommended by Lo. Initial exploration seemed to indicate carbonaceous metasediments as the anomaly sources. However, further prospecting discovered sulphide mineralization at the B Creek and Channel showings (Figure 5). These showings were detected as weak VLF conductors (HLEM data were not collected over the B Creek showing due to rugged topography). Rock sampling has discovered anomalous metal values (mainly zinc but also some copper and lead) extending north and south from the above showings which appears to correspond to air and ground EM anomalies (Figure 7). Note that the airborne survey coverage does not continue north past the known airborne conductors. HLEM conductors and zinc enriched rocks also occur along the eastern contact between the metasediments and the gneissic rocks.

Lo also recommended ground follow up on a conductor (10060B to 10111C) on the Pitt 2 claim. Prospecting in the area has indicated a schist unit, locally pyrite and copper enriched (Bohme, 1993a). Its spacial relationship to the mafic schist unit makes it likely to be the stratigraphic continuation of B zone.

Contouring of the airborne magnetometer data reveals a northwest trend, similar to the stratigraphy, although the pattern is complex. The relief ranges from 55,240 nT (nanotesla) to 57,600 nT.

## DISCUSSION and CONCLUSIONS

- Based on host rock geochemistry and lithology and on deposit shape and mineralogy, the Pyrite Creek deposit could be readily classified as a Kuroko or Besshi type zinc-copper-lead volcanogenic massive sulphide deposit, except for its location within 20 to 30 m of a granodiorite batholith.
- Some previous workers have proposed shear zone hosted replacement mineralization, related to the Cretaceous(?) plutonism. However, the durchbewegung texture indicates that the sulphide body has undergone extensive deformation, more than the neighbouring granodiorite. Also, the massive sulphide horizon appears to be part of the stratigraphy which is more metamorphosed than the granodiorite.
- The apparent relationship of mineralization to stratigraphy is supported by similar Zn-Cu-Pb zones to the east (B Creek and Channel showings), which are not adjacent to plutonic rocks.
- It is common for deposits of this type to vary considerably in size within a camp and to occur both as separate deposits within the same stratigraphic unit, and as well as stacked in higher and lower beds.
- The base metal content of the mineralized zones drilled to date is not likely of sufficient grade to indicate economic viability, especially considering the less than 2 m thickness. Gold and silver values are generally low but are significantly elevated in some zones.

- The South Pyrite Creek showing shows increasing widths (greater than 2 m) to the south, with grades up to 5% Cu and 4% Zn (Figure 6). This area is about 400 m south of the nearest drill hole.
- Due in part to the rugged terrain and inhospitable vegetation cover, much of area along strike of the Pyrite Creek prospect has not been adequately evaluated. Rock sampling has demonstrated that favourable stratigraphy with strike lengths of 4 km north of Easy Creek and 4 km south of Tranquillity Creek are prospective for massive sulphide mineralization.
- There is no evidence for major folding of the property, which could significantly structurally thicken massive sulphide zones.
- Interpretation by Burrows of the rock geochemistry and petrography indicates a setting distal from a volcanic centre.
- Examination of the geochemistry shows a distinctive lithology, interpreted as distal exhalative horizons, widely spread over the property. These rocks are characterized by high silica, vanadium, molybdenum, bismuth and cadmium, and by low titanium and scandium. However, the Cu, Zn and Pb metal ratios and the presence of significant barium may indicate small discharge sites in an otherwise distal environment.
- Many of the quartz-sericite schists do not have diagnostic sodium-depletion signatures, as does the footwall at the Ecstall deposit. However, more sampling in appropriate locations is needed to determine sodium content in the rocks.
- Geochemistry indicates arenite to semipelite, and/or volcanoclastic equivalents, as the original sedimentary rocks.

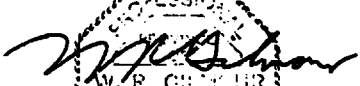
- Geochemistry also indicates the presence of intermediate to mafic volcanic rocks. At present there is no direct evidence for felsic volcanic rocks on the property.
- Geochemistry may be useful in distinguishing between sedimentary and volcanic/plutonic protoliths.
- Geochemistry of stream sediments shows that portions of the Pyrite Creek prospect were detectable by standard silt sampling.
- Geochemistry of stream sediments shows that the B Creek showing was detectable by moss-mat sampling.
- Soil and/or humus sampling appears to be useful in identifying massive sulphide showings.
- An airborne electromagnetic survey failed to detect most of the mineralization of the Pyrite Creek prospect, a 1 to 2 m wide semi-massive to massive sulphide deposit with a strike length of at least 1800 m and a down dip extension of 500 m. This is due "probably to the high sphalerite content and the fact that the sulphides may be electrically discontinuous" (Lo). However, a portion of the South Pyrite Creek showing was detected by the airborne EM.
- VLF EM may be more useful than airborne EM and ground HLEM methods in locating additional massive sulphide deposits.
- In general, there is a good correlation between the VLF and HLEM conductors. The HLEM response gives a better estimate of the conductance while the VLF data shows more resolution.
- The magnetic data may be useful in geological mapping.

## RECOMMENDATIONS

- The southern portion of the Pyrite Creek prospect, the South Pyrite Creek showing, should be evaluated by drilling.
- The geophysical response of the Pyrite Creek prospect should be re-evaluated. It may be possible to use VLF EM methods as a prospecting tool along selected favourable horizons.
- Stream sediments should be collected for heavy mineral preparation and analysis. Selected samples should first be used as an orientation survey to determine the more suitable size, specific gravity and magnetic susceptibility fraction(s) for analysis. The use of heavy minerals should increase the anomalous/background ratio, aiding in the selection of metal-rich stratigraphy.
- Soil and/or humus geochemistry should be used to detect base metal mineralization in favourable horizons.
- Exploration should concentrate on the Pyrite Creek prospect and the B zone showings, and their stratigraphic extensions.
- A study of rock geochemistry and metal ratios should be part of the exploration program as an aid in locating vent zones, possibly enriched in copper and gold. The high grade metamorphism of the rocks hinders the use of other geological criteria.

Respectfully submitted,

DISCOVERY CONSULTANTS

  
W.R. Gilmour, P. Geo.

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## PROPOSED BUDGET

### PHASE 1

Rock, soil and stream sediment geochemistry	\$ 25,000
Geological mapping, prospecting	15,000
Line cutting	20,000
Geophysics	20,000
Diamond drilling	
- including drill and helicopter pad construction	
- 600 m at \$ 100/m	60,000
Supervision, drill site geologist	15,000
Helicopter	100,000
Communications, shipping	5,000
Camp: accommodation and food	40,000
Field supplies	5,000
Reports, management	15,000
Contingencies	<u>30,000</u>
Total	\$ 350,000

### PHASE 2

Hand trenching, rock sampling	\$ 10,000
Diamond drilling	
- including drill and helicopter pad construction	
- 2000 m at \$100/m	200,000
Supervision, drill site geologist	25,000
Helicopter	80,000
Communications, shipping	5,000
Camp: accommodation and food	40,000
Field supplies	5,000
Reports, management	20,000
Contingencies	<u>35,000</u>
Total	\$ 420,000



## STATEMENT OF QUALIFICATIONS

I, WILLIAM R. GILMOUR, of Vernon, British Columbia, DO HEREBY CERTIFY THAT:

1. I am a Consulting Geologist in mineral exploration.
2. I have been practising my profession for twenty five years in Canada and the United States.
3. I am a graduate of the University of British Columbia, with a Bachelor of Science degree in Geology.
4. I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia, as a Professional Geologist with Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories, and a Fellow of the Geological Association of Canada and a member of the Association of Exploration Geochemists and the Society of Mining, Metallurgy and Exploration.
5. I am the author of this report which is based upon a study of the available published and unpublished reports and data on the Pitt property and surrounding areas.
6. I hold no interest, direct or indirect, in the Pitt property, nor do I expect to acquire any such interest.
7. Permission is hereby granted to Pharlap Resources Ltd. to use this report to satisfy the requirements of stock exchanges and regulatory authorities.

Dated at Vernon, B.C. this 19th day of August, 1996

  
W.R. Gilmour, P. Geo.