GEOLOGICAL REPORT

on the

4 J's PROPERTY

Skeena Mining Division
British Columbia

for

CANADIAN-UNITED MINERALS, INC.

by

N.C. CARTER, Ph.D. P.Eng.

Victoria, B.C. February 25,1985

TABLE OF CONTENTS

List of Figures

SUMMARY

Canadian-United Minerals,Inc. holds an option on the 4 J's silver-lead-zinc-antimony-gold prospect north of Stewart in the north coast region of British Columbia.

The property, which consists of 4 claims comprising 50 units, is situated marginal to a small icefield on an east-facing slope above Bowser River. Access is currently by air, but a road from Stewart extends to within 6 km of the property.

The claims are underlain by late Triassic-early Jurassic subaerial andesitic volcanic rocks and intercalated siltstones which are intruded by feldspar porphyry dykes of similar age. A regional zone of shearing, marked by sericite-pyrite alteration, extends northerly through the claims.

Work to date by Canadian-United Minerals,Inc., has included airborne and ground electromagnetic surveys and some geological mapping and sampling.

Two mineralized zones, 1300 metres apart, are exposed in salients on the east margin of the icefield. Three styles of mineralization are evident in the northern, or main zone. These include silver-lead-zinc mineralization with textures similar to stratiform deposits, quartz vein and breccia deposits containing coarse sulfides including tetrahedrite, and gold-antimony values in a major sericite-pyrite altered shear zone. Quartz-tetrahedrite float is also present.

The silver-lead-zinc mineralization has values of 9% zinc,

5% lead and 68.5 grams/tonne (2 oz/ton) silver, and may be a product of remobilization of sediment-hosted mineralization obscured by the icefield. Electromagnetic surveys indicate two conductive zones near the eastern margin of the icefield.

A limited drilling program is recommended to test these conductors. This should be coupled with additional geological mapping and sampling to assess other mineralization on the property. Estimated costs for the program are $150,000.00.

CANADIAN-UNITED MINERALS

PROPERTY LOCATION MAP

0 100 200 MILES
0 100 200 300 KILOMETRES

DRAWN	PROJECT	DATE	FIG.
			1

INTRODUCTION

Canadian United Minerals,Inc. holds an option on the 4 J's property, comprised of 4 mineral claims and situated north of Stewart, British Columbia.

This report, prepared at the request of Canadian-United Minerals,Inc., is based on a review of public and private reports and maps and discussions with officials and consultants of the company. The writer has not visited the property, but has a reasonable knowledge of the area based on past work in the north coast region of British Columbia.

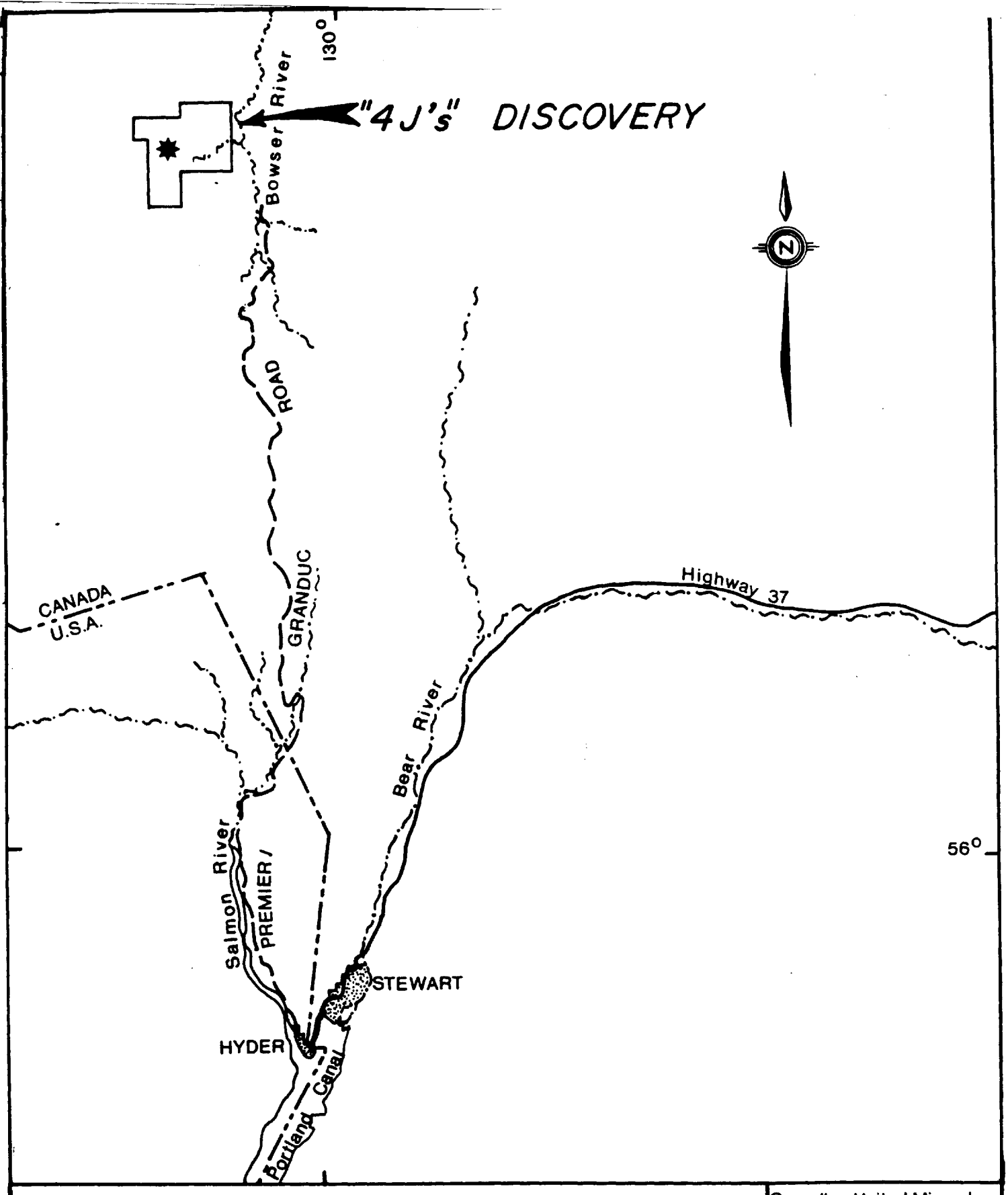
LOCATION AND ACCESS

The 4 J's property is situated 50 km north of Stewart in northwestern British Columbia (Figure 1).

Stewart is accessible by Highway 37 from Kitwanga on Highway 16, or by daily scheduled air service from Prince Rupert and Vancouver.

Access to the claims area is currently by helicopter; however, the road linking the former Granduc millsite and airstrip with Stewart terminates several km south of the property (Figure 2).

The geographic centre of the claims is at 56°18'North and 130°07'West in NTS Map-Area 104B.



0 5 10 15 20 25 Km

0 5 10 15 Miles

Canadian-United Minerals

4 J's Project

LOCATION MAP
STEWART AREA

FIG. 2

MINERAL PROPERTY

The 4 J's property includes 4 mineral claims comprising a total of 50 mineral claim units in the Skeena Mining Division (Figure 3).

Details of the claims are as follows:

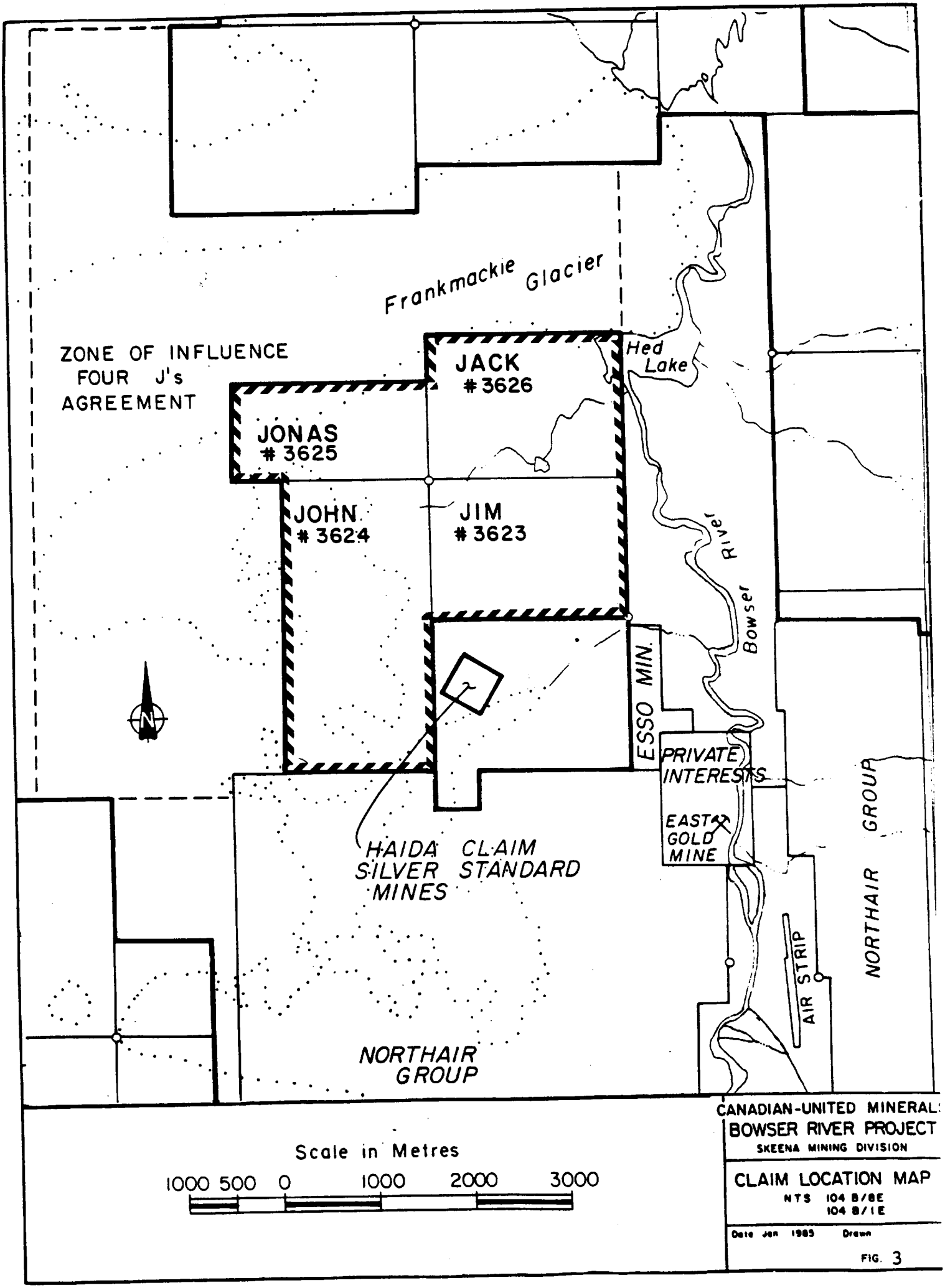
Name of Claim	Units	Record Number	Expiry Date
Jim	12	3623	Nov. 1,1986
John	18	3624	"
Jonas	8	3625	"
Jack	12	3626	"

PHYSICAL SETTING

The area of the claims is typical of the northern Coast Mountains area of British Columbia. Valley glaciers, including the Frank Mackie Glacier, extend outward from a central glacier area several km west of the Summit Lake-Bowser River valley.

Elevations rise abruptly from the broad valley floor of the Bowser River (Figure 3) at an elevation of 600 metres to more than 2000 metres near the west boundary of the claims. The claims are immediately south of Frank Mackie Glacier and only sparse alpine vegetation exists between 750 and 1000 metres elevation. The higher areas of the claims are occupied by a small icefield which shows evidence of recent recession.

Bedrock exposures are plentiful and virtually continuous exposure exists in higher areas where ice has receded.


Frankmackie Glacier
ZONE OF INFLUENCE
FOUR J's
AGREEMENT
JACK
#3626
JONAS
#3625
JOHN
#3624
JIM
#3623
Hed Lake
Bowser River
ESSO MIN.
PRIVATE INTERESTS
EAST GOLD MINE
HAIDA CLAIM
SILVER STANDARD
MINES
NORTHAIR GROUP
AIR STRIP
NORTHAIR GROUP
N
Scale in Metres
1000 500 0 1000 2000 3000
CANADIAN-UNITED MINERAL
BOWSER RIVER PROJECT
SKEENA MINING DIVISION
CLAIM LOCATION MAP
NTS 104 B/8E
104 B/1E
Date Jan 1985 Drawn
FIG. 3

HISTORY

Earliest prospecting in the Stewart area took place in 1898 when silver-gold prospects were located in the Bear River valley. Intermittent work continued to 1918 when the Premier mine was discovered.This mine, the third largest lode gold producer in the Province, operated for a period of 20 years and thereafter on a limited basis.

The second period of sustained activity followed the discovery of the Granduc copper deposit in 1951 and the initiation of production in the 1960's. This led to construction of a road into the Summit Lake area from Stewart and the erection of a millsite at Tide Lake, 7 km south of the 4 J's claims. The Granduc operation is now permanently closed, but the Scottie gold mine, on the northwest side of Summit Lake, is being maintained on a standby basis following three years of production.

The East gold (Pioneer) and Haida (Portland) gold prospects, immediately south of the 4 J's claims area, (Figure 3) were initially explored in the 1920's. Limited production from the East Gold property between 1949 and 1955 amounted to 30 tonnes yielding 31690 grams gold, 98587 grams silver, 2350 kg lead, 1027 kg zinc and 30 kg copper.

The 4 J's property was staked in late 1982 and investigated by Billiken Resources Inc. in 1983. This work consisted of geological mapping, rock and stream sediment geochemistry, prospecting and trenching of mineralized showings.

Canadian-United Minerals,Inc. acquired an option on the property in September, 1984. Work in the past several months includes helicopter VLF electromagnetic surveys, ground Max Min and VLF electromagnetic surveys and limited geological mapping and sampling.

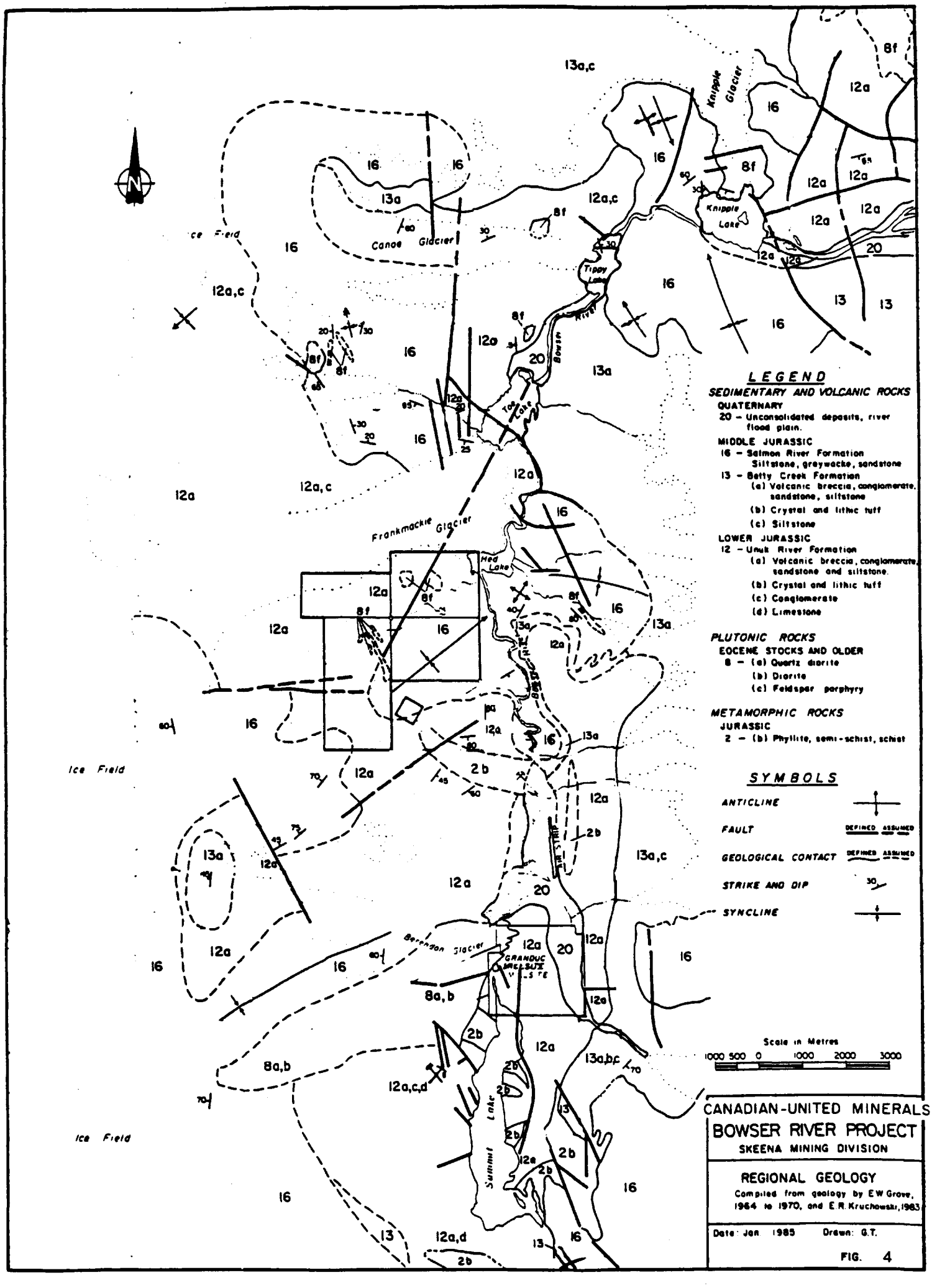
REGIONAL GEOLOGICAL SETTING

The Stewart area is adjacent to the east margin of the Coast Plutonic Complex. Mesozoic volcanic and sedimentary rocks are intruded by Coast granitic rocks ranging in age from early Jurassic to Tertiary and which take the form of large plutons and related dyke swarms.

Mineral deposits in the area are of several styles, and include quartz sulfide veins and replacement systems related principally to repeated Mesozoic volcanism and Tertiary granitic intrusions (Alldrick,1985).

The geology of the Summit Lake area is shown on Figure 4 and is based on work by Grove (1983) and Kruchkowski (1983). Revised interpretation of the stratigraphy has recently been published by Alldrick (1985).

Oldest rocks in the area are a late Triassic-early Jurassic subaerial andesitic volcanic sequence with intercalated siltstones, equivalent to Grove's Unuk River Fm. (Figure 4). These are overlain by epiclastic and felsic volcanic sequences (Betty Creek Fm.-Grove,1983) of early to middle Jurassic age, and by a sedimentary sequence (Salmon River Fm.-Grove,1983),


Knipple Glacier
Knipple Lake
Canoe Glacier
Tippy Lake
Bowser River
Toe Lake
Frankmackie Glacier
Med Lake
Ice Field
Ice Field
Ice Field
Bergeron Glacier
Summit Lake
GRANDUC MINE SITE
LEGEND
SEDIMENTARY AND VOLCANIC ROCKS
QUATERNARY
20 – Unconsolidated deposits, river flood plain.
MIDDLE JURASSIC
16 – Salmon River Formation
Siltstone, greywacke, sandstone
13 – Betty Creek Formation
(a) Volcanic breccia, conglomerate, sandstone, siltstone
(b) Crystal and lithic tuff
(c) Siltstone
LOWER JURASSIC
12 – Unuk River Formation
(a) Volcanic breccia, conglomerate, sandstone and siltstone.
(b) Crystal and lithic tuff
(c) Conglomerate
(d) Limestone
PLUTONIC ROCKS
EOCENE STOCKS AND OLDER
8 – (a) Quartz diorite
(b) Diorite
(c) Feldspar porphyry
METAMORPHIC ROCKS
JURASSIC
2 – (b) Phyllite, semi-schist, schist
SYMBOLS
ANTICLINE
FAULT DEFINED ASSUMED
GEOLOGICAL CONTACT DEFINED ASSUMED
STRIKE AND DIP
SYNCLINE
Scale in Metres
1000 500 0 1000 2000 3000
CANADIAN-UNITED MINERALS
BOWSER RIVER PROJECT
SKEENA MINING DIVISION
REGIONAL GEOLOGY
Compiled from geology by E.W. Grove, 1964 to 1970, and E.R. Kruchowski, 1983
Date: Jan. 1985 Drawn: G.T.
FIG. 4

part of the middle to late Jurassic Bowser assmblage.

These Mesozoic layered rocks are contained in a regional north-trending synclinal structure, modified by northeast and northwest faults.

Intrusive rocks, principally the Summit Lake granodiorite, (Alldrick,1985) are coeval with lower units of the andesitic volcanic sequence. Related to the main intrusion are feldspar porphyry dykes and sills.

Mineral deposits in the immediate vicinity of the 4 J's property include Scottie gold massive pyrrhotite veins in andesitic rocks adjacent to the Summit Lake granodiorite pluton and quartz-carbonate veins containing base and precious metal sulfides in schistose volcanic rocks at the East Gold and Haida (Portland) prospects.

PROPERTY GEOLOGY AND MINERALIZATION

The 4 J's claims cover the eastern margin of a small icefield and an east-facing 25° slope above Bowser River. The claims are underlain by the middle to upper part of Alldrick's (1985) Andesite Sequence (Grove's Unuk River Fm.) of late Triassic-early Jurassic age.Younger epiclastic rocks overlie the Andesite Sequence near Bowser River.

Principal units are black argillaceous siltstones (Alldrick's upper siltstone member) and intercatated thinly bedded andesite tuffs (Figure 5 -Kruchowski,1983). This layered sequence, which strikes northwesterly and dips steeply northeast, is cut

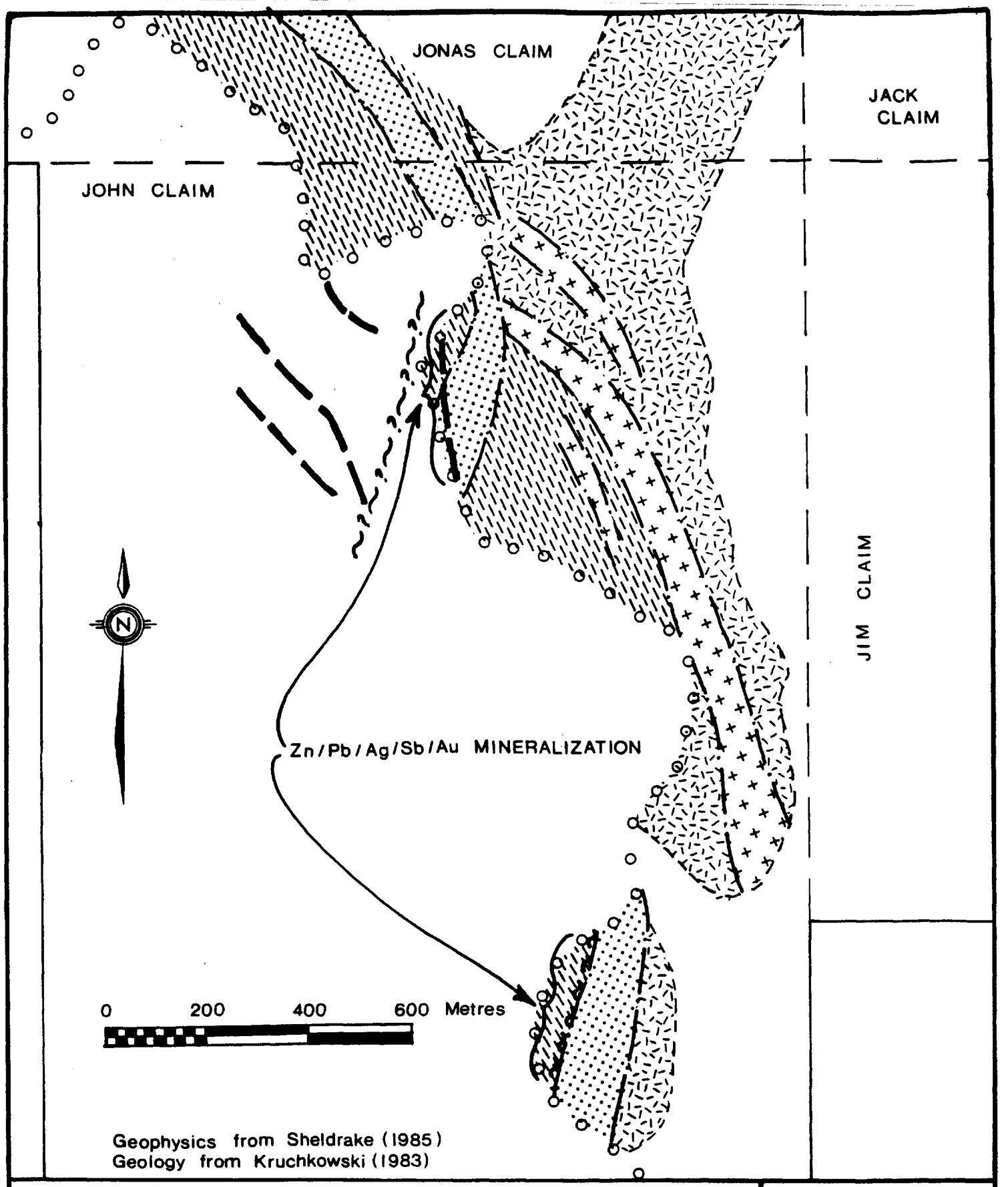
by 2 to 20 metre wide dykes and sills of feldspar porphyry. The porphyries, probably related to the Summit Lake granodiorite would be of similar age to the Premier porphyry dyke swarms 25 km south.

A northerly striking 10 to 50 metre wide shear zone, marked by abundant sericite-pyrite alteration, extends from the East Gold and Haida prospects through the John and Jonas claims (Figures 4 and 5) and is equivalent to the cataclasites of Grove (1983).

Two zones of lead-zinc-silver (gold-antimony) mineralization are known on the John claim (Figure 5). These are 1300 metres apart and are in salients of the small icefield within and adjacent to the sericite-pyrite altered shear zone.

The northernmost area has undergone the most work to date (Kruchowski,1983). A zone of mineralization consisting of quartz veins, stockworks and brecciated areas, is exposed over a 50 by 75 metre area and displays three styles of mineralization (N. Stacey,personal communication). These include banded galena and sphalerite, quartz vein-hosted coarsely crystalline galena, sphalerite, tetrahedrite and pyrite, and pyrite-antimony bearing quartz veins within the major shear zone. Quartz-tetrahedrite float has also been noted.

Specimens of the first mineralization type seen by the writer were fine-grained laminar galena and sphalerite, with textures and structures similar to stratiform lead-zinc -silver deposits. Samples of this type reportedly average


JONAS CLAIM
JACK CLAIM
JOHN CLAIM
JIM CLAIM
N
Zn/Pb/Ag/Sb/Au MINERALIZATION
0 200 400 600 Metres
Geophysics from Sheldrake (1985)
Geology from Kruchkowski (1983)
Tuffs, Thinly bedded
Black Argillite
Feldspar Porphyry
Sericite Altered, Py Zone
Ice edge
Fault, mapped
Fault, inferred
E.M. Conductor
Outcrop
Contact
Canadian-United Minerals
4 J's Project
LOCAL GEOLOGY
FIG. 5

9% zinc, 5% lead and 68.5 grams/tonne (2 oz/ton) silver with some gold values.

Vein-hosted sulfides include locally abundant tetrahedrite, principally noted in angular float within the mineralized zone. Silver contents can be in the order of 1000 to 1400 grams/tonne (30 to 40 oz/ton) range. The pyrite-antimony mineralization within the sericite-altered shear zone (which crosscuts the principal mineralization) is reported to contain some significant gold values (N. Stacey,personal communication), and may be similar to that at the Haida and East Gold prospects.

The banded lead-zinc-silver mineralization within the main zone may be a remobilized product of primary mineralization which is not exposed.

Airborne and ground electromagnetic surveys in the vicinity of the main zone have indicated four conductors. Results and interpretation of these surveys are summarized by Ronald F. Sheldrake in a letter which is included as Appendix I in this report.

The main zone is reflected by a pronounced, northerly-trending VLF-EM conductor (Figure 5) which is 150 metres long and open to the northeast. Two sub-parallel conductors near the eastern margin of the icefield, and under the ice (thickness of 15-25 metres as estimated by Sheldrake) are 300 to 400 metres long. These trend northwesterly and the difference in orientation between these and conductor over the main zone may be due to movement along the regional shear zone.

Underlying bedrock south of the conductive zones is highly resistive. The geophysical coverage to date did not extend as far as the southern mineralized zone.(Figure 5)

CONCLUSIONS AND RECOMMENDATIONS

The 4 J's property includes three styles of mineralization with encouraging base and precious metal values.

The most significant type of mineralization noted is banded galena and sphalerite with textures characteristic of stratiform deposits. While this type is associated with quartz veins and brecciated zones within the main area, it may represent a remobilization of original sediment-hosted stratiform mineralization within the extensive siltstone unit mainly covered by the icefield in the western part of the claims area.

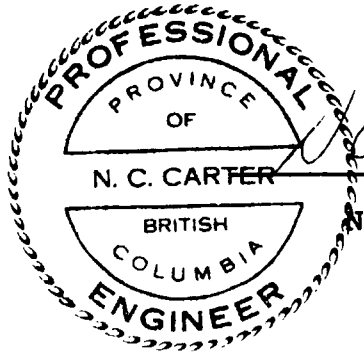
Electromagnetic surveys indicate conductive zones, similar to the conductor over the main zone, are present beneath the ice cover.

These conductive zones should be tested by drilling angle holes westward from the margin of the icefield. Two holes are recommended, and while helicopter support will be required, machinery and supplies can be trucked to the Granduc airstrip 6 km south of the claims.

Appreciable silver values in quartz-tetrahedrite float and gold-antimony values within the major shear zone are two targets warranting additional investigation.

COST ESTIMATE

1. Diamond drilling - two 500 metre holes @ $100/metre		$100,000.00
2. Geological mapping, sampling, supervision		$15,000.00
3. Camp costs, air support		$15,000.00
4. Contingencies		$20,000.00
	Total	$150,000.00



N.C. Carter, Ph.D. P.Eng.

REFERENCES

Alldrick, D.J.(1985): Stratigraphy and Petrology of the Stewart Mining Camp, B.C. Ministry of Energy Mines and Petroleum Resources Geological Fieldwork,1984, Paper 1985-1, pp. 316-342

Grove, E.W.(1983): Geology of the Unuk River-Salmon River-Anyox Map-area, B.C. Ministry of Energy Mines and Petroleum Resources, Miscellaneous map series (coloured maps to accompany Bull. 63,in progress)

Hanson, G.(1935): Portland Canal Area,British Columbia, Geological Survey of Canada,Memoir 175

Kruchkowski, E.R.(1983): Report on 4-J Property,Bowser River Area, Stewart District,British Columbia,NTS 104 B/8E, Private report for Billiken Resources Inc.

CERTIFICATE

I, NICHOLAS C. CARTER, do hereby certify that:

1. I am a Consulting Geologist resident at 1410 Wende Road, Victoria, British Columbia.

2. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S. (1962), and the University of British Columbia with Ph.D. (1974).

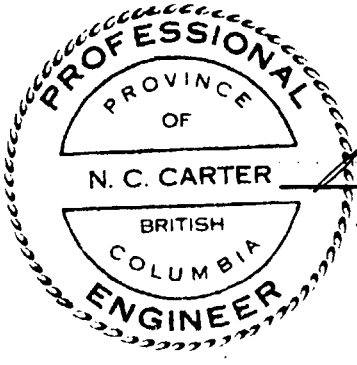
3. I am a registered Professional Engineer in the Association of Professional Engineers of British Columbia.

4. I have practised my profession in eastern and western Canada and in parts of the United States over the past 24 years.

5. This report is based on public and private reports pertaining to the 4 J's property and the Stewart area, and on my background in the north coast area of British Columbia.

6. I have no direct or indirect interest in the 4 J's mineral claims or in Canadian-United Minerals,Inc.

7. Permission is hereby granted to Canadian-United Minerals, Inc. to use this report in support of any Statement of Material Fact, Filing Statement or any other document to be submitted to the Office of the Superintendent of Brokers and the Vancouver Stock Exchange.



N.C. Carter, Ph.D.,P.Eng.

Victoria, B.C.
February 25,1985

APPENDIX I

Letter Report - Geophysical Surveys,

4 J's Property, by Ronald F. Sheldrake

APEX AIRBORNE SURVEYS LTD.

514 - 625 Howe St., Vancouver, B.C.
Canada V6C 2T6

Phone (604) 683-3934
Telex 04-51309

Mr. Leif Ostensoe
Canadian-United Minerals Inc.
#300 - 800 West Pender Street
Vancouver, B.C.
V6C 2V8

February 21, 1985

Dear Leif,

Letter Report on 4J Project, Stewart, B.C.

This letter discusses the results of the second ground VLF Electromagnetic Survey that was undertaken over the area of the airborne HEM anomaly that was flown September 19 and 20, 1984.

The first VLF Electromagnetic (and horizontal loop EM survey) was undertaken in October, to confirm the presence of the the airborne response and to estimate the thickness of the overlying glacier.

Those results are discussed in a report by Sheldrake (Dec 3, 1984).

In summary the October work confirmed a weak Max-Min(horizontal loop) response and a well defined VLF EM response on 2 traverses 25 meters apart over the HEM conductors and indicated that the depth to the ice was in the order of 15-25 meters.

The weak Max-Min response was thought to be due to the relatively low conductivity and the small coil spacings of the readings that were taken. Insufficient time was available to allow a more thorough testing with larger coil spacings. (The largest coil separation used on the confirmation survey gave the maximum response.) Larger coil separations may provide more detail in attitude, depth and conductivity-thickness estimates.

Following the confirmation survey (essentially a 2-dimensional process) the next step was to determine the areal extent of the conductor. At this time a "syngentic type" structure was postulated.

REMARK: Rock samples that were collected by Kruchkowski in a pit about 400 meters south east of the airborne anomaly(ies) have the appearance of syngentic mineralization. The syngentic hypothesis, although not yet confirmed, is supported by recent discussions with geologists Alldrick and Kruchkowski who have had experience in the area. The geophysical data to date do not assist in either confirming or denying that interpretation.

The purpose of the second VLF survey that was undertaken January 27-28, 1985 was to delimit the areal extent of the airborne anomaly. The data that are displayed on PLATE 1 are the Fraser Filtered VLF EM values which were collected using

Seattle(same as the confirmation survey) as a transmitter. Plate 2 displays the geophysical interpretation.

The data are interpreted as follows;

1. The data indicate that the 2 subparallel conductors that gave rise to the helicopter airborne anomalies are in the order of 300-400 meters long.

2. The zone of mineralization (Kruchkowski, 1983) gave rise to a pronounced VLF EM conductor("trench conductor"). This conductor is over 150 meters long and is open to the north-east. [The location of the VLF response with respect to the trenches was estimated from the available data and personal communication with Kruchkowski. This relationship is believed to be accurate but no surface expression of the trenches was seen through the snow during the VLF survey.]

3. The change of strike between the conductor on L 0 ("airborne conductor") and the conductor on L 200S ("trench conductor") may be accounted for by a fracture/shear system between them. This system may be the source of geothermal waters that accounts for the type of mineralization in the area of the "trench conductor".

4. The conductor centered on L 200 N may be due to a concentration of sulphide mineralization or a graphitic conductor.

5. The data indicate the rocks in the southern portion of the grid (L 300 to L 600 S) are highly resistive.

Respectfully submitted,

Ronald F. Sheldrake, B.Sc.
APEX AIRBORNE SURVEYS LTD.