

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 94.11.01

ASSESSMENT REPORT 23263

MINING DIVISION: Skeena

PROPERTY: 4-J'S
LOCATION: LAT 56 19 00 LONG 130 06 00
UTM 09 6241654 431956
NTS 104B08E

CAMP: 050 Stewart Camp

CLAIM(S): John
OPERATOR(S): Teuton Res.
AUTHOR(S): Cremonese, D.M.
REPORT YEAR: 1994, 31 Pages

COMMODITIES

SEARCHED FOR: Gold, Silver, Lead, Zinc

KEYWORDS: Jurassic, Unuk River Formation, Andesites, Siltstones, Sphalerite
WORK

DONE: Prospecting
PROS 200.0 ha

RELATED

REPORTS: 19612
MINFILE: 104B 128

LOG NO:	FEB 14 1994	RD.
ACTION:		
FILE NO:		

ASSESSMENT REPORT
ON
GEOPHYSICAL, GEOCHEMICAL & PETROGRAPHIC WORK
ON THE FOLLOWING CLAIMS

JOHN 251069
JONAS 251070

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

Rec'd
JAN 31 1994

SUBJECT _____
FILE _____
VANCOUVER, B.C.

located

40 KM NORTH-NORTHWEST OF
STEWART, BRITISH COLUMBIA
SKEENA MINING DIVISION

56 degrees 19 minutes latitude
130 degrees 06 minutes longitude

N.T.S. 104B/8E

PROJECT PERIOD: Aug. 22 to Oct. 2, 1993

ON BEHALF OF
TEUTON RESOURCES CORP.
509-675 W. HASTINGS ST.
VANCOUVER, B.C.

FILMED

REPORT BY

D. Cremonese, P. Eng.
509-675 W. Hastings
Vancouver, B.C.

Date: January 28, 1994

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,263

TABLE OF CONTENTS

	Page
1. INTRODUCTION	1
A. Property, Location, Access and Physiography	1
B. Status of Property	1
C. History	2
D. References	3
E. Summary of Work Done	5
2. TECHNICAL DATA AND INTERPRETATION	6
A. Regional Geology	6
B. Property Geology	7
C. Beep Mat Survey	9
a. Introduction	9
b. Treatment of Data	10
c. Discussion	10
D. Petrographic Samples	11
E. Geochemistry -- Rock Samples	12
a. Introduction	12
b. Sample Descriptions	12
c. Discussion	12
F. Field Procedure and Laboratory Technique	13
G. Conclusions	13

APPENDICES

- I Work Cost Statement
- II Certificate
- III Assay Certificates
- IV Documentation -- Beep Mat

ILLUSTRATIONS

Fig. 1	Location Map	Report Body
Fig. 2	Claims Map	Report Body
Fig. 3	Regional Geology	Report Body
Fig. 4	Beep Mat Survey & Petrographic Sample Sites	Map Pocket
Fig. 5	Detail Map -- Banded Sulfide Zone	Report Body
Fig. 6	Detail Map -- Rock Geochem Samples	Report Body

1. INTRODUCTION

A. Property, Location, Access and Physiography

The John and Jonas claims are situated approximately 8km northwest of the airstrip at Tide Lake Flats (just north of the old Granduc Mine concentrator). Access from Stewart, 40 air-kilometers to the south, is by helicopter; alternative access is via the Granduc mining road to the previously mentioned airstrip and thence by helicopter. Access by foot is possible from the terminus of the Granduc road system near the old East Gold Mine but there is no trail in place at present.

The John and Jonas claims are part of the so-called 4-J's property, lying immediately south of the Frank Mackie Glacier. The Smalles icefield encroaches onto the west side of the claims, occupying the height of land. Elevations varies from about 600m in the valley of the Bowser River on the east side of the 4-J's to 2275m on the peaks to the west. Ongoing ablation throughout the Stewart region exposes about 50m per year of fresh outcrop. This is important, as many discoveries recently have been in these newly uncovered areas [the surface outcrop of the rich, gold-bearing Marc Zone at Lac's Red Mountain property lay in a snow gully that was probably only recently exposed].

Low lying regions on the property are vegetated by mature mountain hemlock and balsam. This changes to subalpine and alpine vegetation consisting of stunted shrubs and grasses. Outcrop is plentiful and, in those areas where the ice has receded, is virtually continuous except where covered by talus.

The exploration season is from late June to early October, with higher elevations having a shorter span. In general, winter months are severe with heavy snowfall.

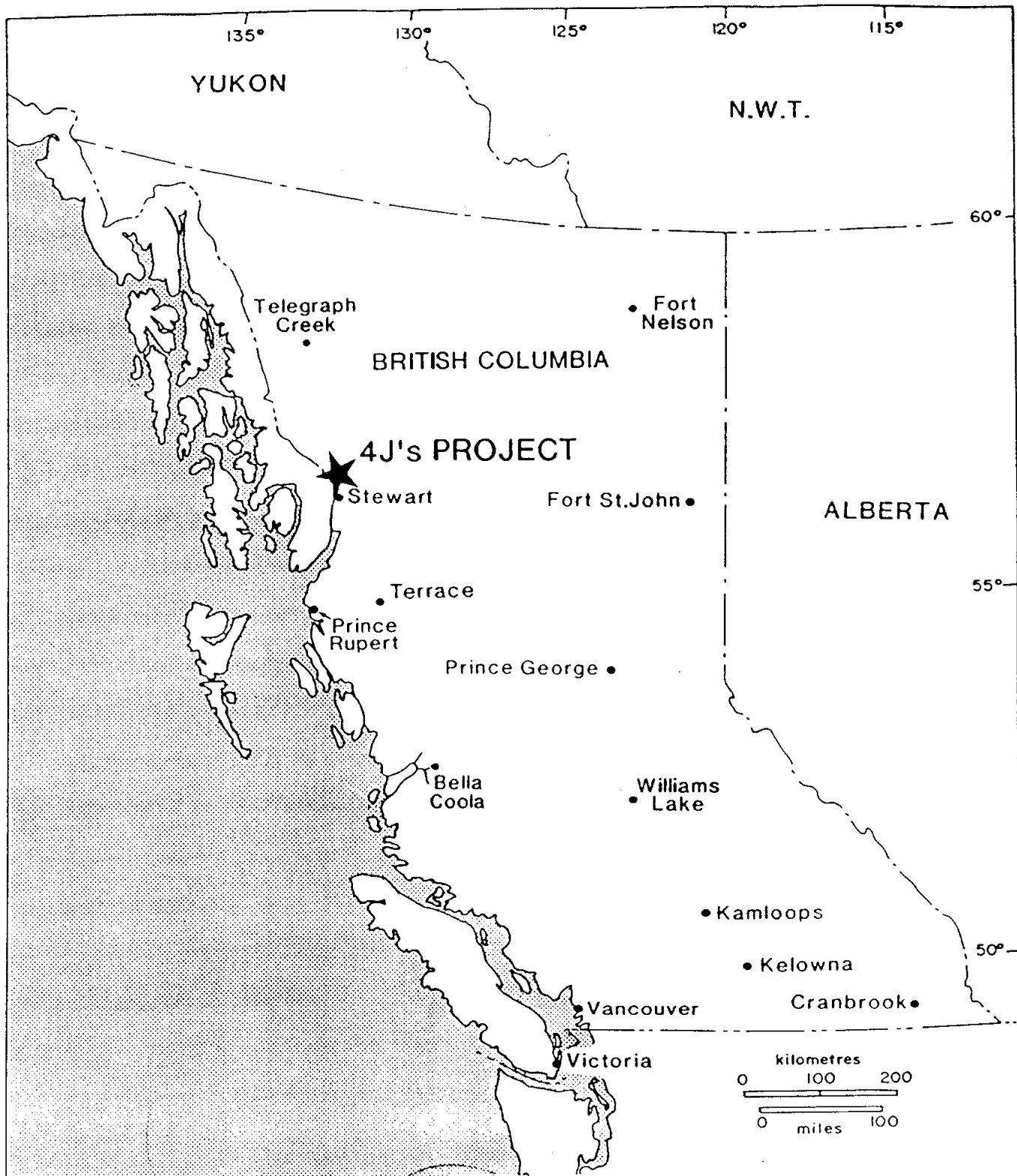
B. Status of Property

Relevant claim information is summarized below:

Name	Tenure No.	No. of Units	Expiry Date*
John	251069	18	Nov. 1, 1994
Jonas	251070	8	Nov. 1, 1994

Claim location is shown on Fig. 2 after government N.T.S. maps. The Jim and Jack are the other two claims making up the Four J's property. Teuton Resources Corp. of Vancouver, British Columbia owns the property.

*Assuming approval of assessment credits

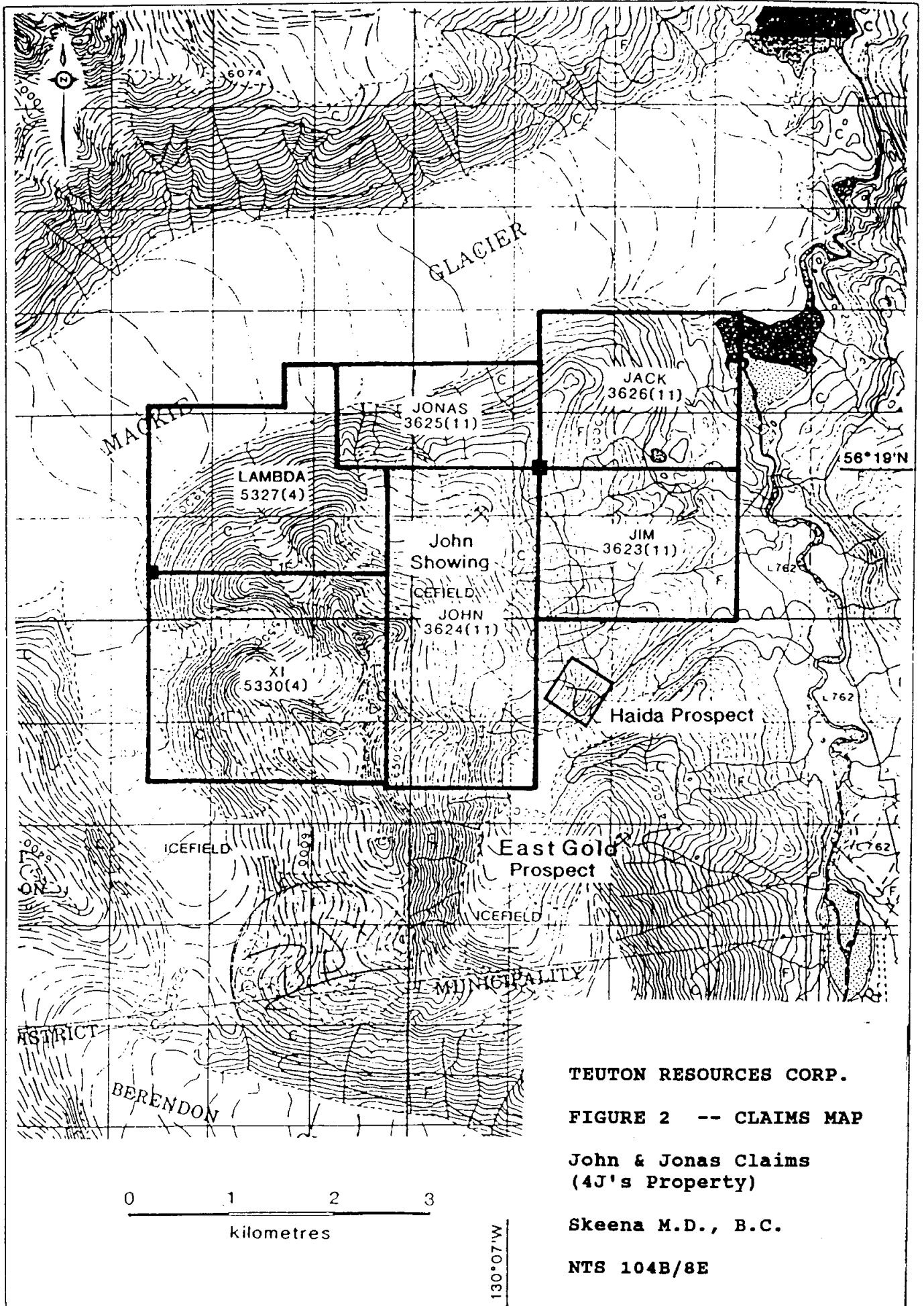


TEUTON RESOURCES CORP.

FIGURE 1 -- LOCATION MAP

**John & Jonas Claims (4J's Property)
Skeena Mining Division, B.C.**

NTS 104B/8E



C. History

Exploration in the immediate area of the property began roughly in 1926 when free gold was discovered on the East Gold property (about 2.5 km southeast). Thereafter, in the early 1930's, prospecting uncovered a series of auriferous, cross-cutting quartz-sulfide veins and shear zones on ground now controlled by the Haida claim (owned by Silver Standard Mines). This latter property, called the "Portland", originally consisted of 16 claims, and probably covered portions of the present day John and Jonas claims.

A buoyant market for precious metal prices revived interest in this part of the Stewart area in 1980. Many former prospects along with proximate zones of favourable geology were subjected to reconnaissance surveys by exploration companies. A summary of this recent activity is presented below.

- 1980-82** The Catspaw claim [adjoining due east of John claim] was staked by Elan Exploration Ltd. of Calgary and optioned to E & B Exploration. E & B undertook minor prospecting, sampling and geological mapping before returning the property to Elan. Several of the streams draining the Catspaw and Jim claims were noted to carry gold colours when panned by prospectors.
- 1983** The Catspaw claim was optioned to Teuton Resources Corp.; the property was enlarged by staking the Four-J's claims and the Gamma claim. A stratiform lead-zinc-antimony (gold-silver) occurrence and a boulder train of argentiferous quartz sulfide mineralization was discovered on the John claim. This latter work was undertaken by Billikin Resources under option (the option was relinquished the following year).
- 1984** The Four-J's claims were optioned by Teuton to Canadian United Minerals Inc. An airborne EM and Mag survey disclosed two EM anomalies under ice cover proximate to the stratiform mineralization noted on the John claim.
- 1985** Noranda Exploration Company re-optioned the Four-J's from Canadian United. Prospecting, sampling and geophysical surveys were carried out identifying several types of mineralization prior to returning the property to Teuton (A lingering snowpack prevented examination of the stratiform occurrence.)
- 1986** Work by Teuton prospectors on the Gamma claim [2.5 km north of Jonas claim] uncovered several argentiferous quartz sulfide veins and an auriferous, pyritic, quartz brecciated agglomerate. A small rock geochemical program on the Catspaw claim disclosed several gold anomalies.

- 1987** Property optioned by Teuton to Wedgewood Resources. Field program supervised by Kruchkowski Consultants of Calgary concentrated on prospecting, trenching, sampling and geochemical surveys on the Four-J's and surrounding claims.
- 1988** Wedgewood carried out further rock sampling and mapping on the Four J's, Catspaw and Gamma claims before discontinuing the option.
- 1989** Maple Resource Corporation Exploration entered into an agreement with Teuton to earn a 60% interest in the Four-J's claims. A field program was carried out by Maple concentrating on the Main, Centre, South and North Zones. The primary target areas were defined as: the sedimentary exhalative style lead-zinc-silver mineralization in the Main and North Zones and a zone of highly anomalous soil samples collected along contours northeast of the grid area.
- 1990** Maple drilled 334.06m to test a strong gold-in-soil geochem anomaly in the FM Zone. The first two holes intersected significant gold mineralization in an argillite/siltstone unit: Hole MA-90-1 returned 0.078 oz/ton gold over 9.84m and Hole MA-90-2 returned 0.069 oz/ton gold over 7.16m. Two gold-in-soil geochem anomalies were identified elsewhere on the property.
- 1991** Maple was unable to obtain financing for further work and dropped the option on the property.
- 1992** Teuton carried out a small program of sampling and trenching in the Main Zone area. This work defined additional small outcrops of laminated sulfides such as were originally discovered in 1983.

Although interest in the general Stewart region faded sharply in 1991 and 1992, there are signs that this may be turning around. Discovery of a large gold deposit by Lac Minerals at Red Mountain about 20 km east of Stewart is beginning to rekindle interest in the area. Positive production figures from the Snip Mine on the Iskut River, the completion of the access road into the rich Eskay Creek deposit and the current strength in the price of gold are other factors which have recently added to the viability of exploration in the Stewart region.

References

- ALLDRICK, D.J.
1983: Salmon River Project, Stewart, B.C.; in Geological Fieldwork, 1982, BCMEMPR, Paper 1983-1, p.183-195.

1984: Geological Setting of the Precious Metals Deposits in the Stewart Area, Paper 84-1, Geological Fieldwork 1983", BCMEMPR.

1985: Stratigraphy and Petrology of the Stewart Mining Camp (104B/1E), p. 316, Paper 85-1, Geological Fieldwork 1984, BCMEMPR.

1987: Geology and Mineral Deposits of the Salmon River Valley, Stewart Area, NTS 104A and 104B; BCMEMPR, Geological Survey Branch, Open File Map 1987-22.

1988: Detailed Stratigraphy of the Stewart Mining Camp; Paper Given at the Stewart Mineral Exploration Conference, 1990, Stewart, B.C. 14;.

1989: Volcanic Centres in the Stewart Complex in BCMEMPR Geological Fieldwork, 1988, Paper 1989-1.

BAERG, R. and BRADISH, L.

1986: Geological, Geochemical and Geophysical Report on the 4-J's Property for Noranda Exploration Company Ltd. Assessment Rept. #14386.

BURSON, M.J.

1988: 1988 Program on the Gamma-Four J's-Catspaw Claim Groups (Frank Mackie Property) for Wedgewood Resources Ltd., unpublished report.

CARTER, N.C.

1985: Geological Report on the 4-J's Property, Skeena Mining Division, B.C. for Canadian United Minerals Inc., unpublished report.

CHAPMAN, J., LEWIS, L., BAILLIE, S.

1991: Summary Report on Maple Resource Corporation's 4-J's Project, Iskut-Sulphurets Area, Skeena M.D., B.C.

DEWONCK, B. and BARNES, B.

1990: Report on the Maple Resource Corporation's 4-J's Project, Iskut-Sulphurets Area, Skeena M.D., B.C.; unpublished report.

GROVE, E.W.

1971: Geology and Mineral Deposits of the Stewart Area, B.C., BCMEMPR, Bulletin No. 58.

1982: Unuk River, Salmon River, Anyox Map Areas. Ministry of Energy, Mines and Petroleum Resources, B.C.

1983: Geological Report and Work Proposal on the Teuton Resources Corp. Catspaw Property in the Bowser River Area, Stewart District, Northwestern B.C., Skeena M.D., NTS 104A/5W.

1987: Geology and Mineral Deposits of the Unuk River-Salmon

River-Anyox Area, Bulletin 63, BCMEMPR.

GROVES, W.D.

1988: Geological Report on the Frank Mackie Property for Wedgewood Resources Ltd. in Prospectus Dated June 10, 1988.

GROVES, W.D. and R. SHELDRAKE

1984: Assessment Report on Geophysical Work on Five Areas in the Bowser River Area, B.C.; on file with BCMEMPR.

HALL, B.

1991: Trenching Summary -- 4J's Property; Handwritten Preliminary Report for Teuton Resources.

KRUCHKOWSKI, E.R.

1981: Exploration Summary - Catspaw Claim, for E & B Explorations Ltd.

1983: Report on the 4-J's Property, Bowser River Area, Stewart, B.C., NTS 104B/8E; private report for Billikin Resources.

KRUCHKOWSKI, E.R. & KONKIN, K.

1988: Assessment Report on the Catspaw Claim, Stewart, B.C., Skeena Mining Division, NTS 104B/8E; on file with BCMEMPR.

1988: Assessment Report on the Gamma Claim, Stewart, B.C., Skeena Mining Division, NTS 104B/8E; on file with BCMEMPR.

1988: Draft Report -- Catspaw-Gamma Claim Group, Stewart, B.C. Private

LOGAN, JAMES M.

1985: Preliminary Polished Section Report, 4-J's Property, for Canadian United Minerals Inc.

SHEARING, R.

1986: Field notes and maps, 1986 work program on the Gamma, John and Jonas claims.

SHELDRAKE, R.F.

1985: Letter Report on 4-Js Project, Stewart, B.C., Apex Airborne Surveys Ltd.

E. Summary of Work Done.

The 1993 work on the John and Jonas claims was part of a larger program covering several Stewart area properties spanning the period from Aug. 22 to Oct. 2. The field crew consisted of the author and an assistant, D. Shilling.

Access to the property was by helicopter from the Vancouver Island

base on the Bear River in Stewart. Because of the shortness of the program it was more economical to shuttle in and out of the property rather than set up a camp (recent government regulations requiring reclamation bonds for even the smallest of camps have changed the logistics of exploring in the Stewart area).

During the stay on the property a Beep-Mat survey of approximately 2.25 line-km was carried out, seven rock geochemical samples collected and two petrographic specimens taken. [Beep-Mat surveys have proven an efficient exploration tool in Ontario and Quebec over the last few years--it is just now beginning to be used in British Columbia.]

All rock samples were analyzed at the Pioneer Laboratories facility in New Westminster, B.C. The Beep-Mat was rented directly from the manufacturer, GDD Instrumentation Inc. of Ste-Foy, Quebec. Preliminary petrographic descriptions were prepared by Alex Walus, M.Sc. (Mr. Walus, geologist, was employed elsewhere in Stewart by Teuton during the project period; his academic training in Poland included several courses in petrography). Results of thin section and XRD analyses were not received in time for inclusion in this report.

2. TECHNICAL DATA AND INTERPRETATION

A. Regional Geology

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).

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

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.

Geology in relation to claim area is shown in Fig. 3.

B. Property Geology and Mineralization

The 1993 assessment work program covered parts of the Main, North and FM Zones. The Main Zone is the name now used to describe the laminar or stratiform lead-zinc-antimony mineralization originally discovered in 1983 by Billikin Resources. Location of the zones relative to claim boundaries and grid is shown on Fig. 3.

The Main Zone is bounded to the west by an alpine glacier and to the east by a blanket of talus debris. The westernmost unit exposed on the zone is a massive deformed black argillite containing <1% fine siltstone interbeds. The unit is exposed over 70m but may be as much as 200m thick.

Prolific quartz carbonate veinlets define foliation at 024/85 NW. Carbonatization is pervasive with local silicification and limonitization. Pyrite mineralization occurs as <1% finely disseminated, blebby and fracture controlled crystals. A localized zone of poddy white pyrite and purple sphalerite occurs adjacent to, and mostly covered by, the glacier. Pods are subparallel to foliation, up to 40cm in length and 5 to 10cm wide. They contain 10-20% fine sphalerite and 80-90% pyrite mineralization.

Adjacent to the argillite lies the southern extension of the felsic to intermediate crystal tuff, locally up to 80m wide. It is pervasively silicified and has local fracture controlled carbonization associated with <1% pyrite. Less than 1% fracture controlled galena and trace blebby sphalerite also occur.

The crystal tuff is intruded by a 25m wide concordant hornblende-feldspar porphyry in the northern section of the Main Zone. To the south the porphyry narrows to <10m wide and changes orientation as it intrudes the rock units lying to the southeast. Only traces of pyrite were noted.

To the east is an interbedded argillite/siltstone unit with a distinct banded appearance. Bedding and foliation are parallel at 025 to 030/85 to 35W in the north, but variable in the south.



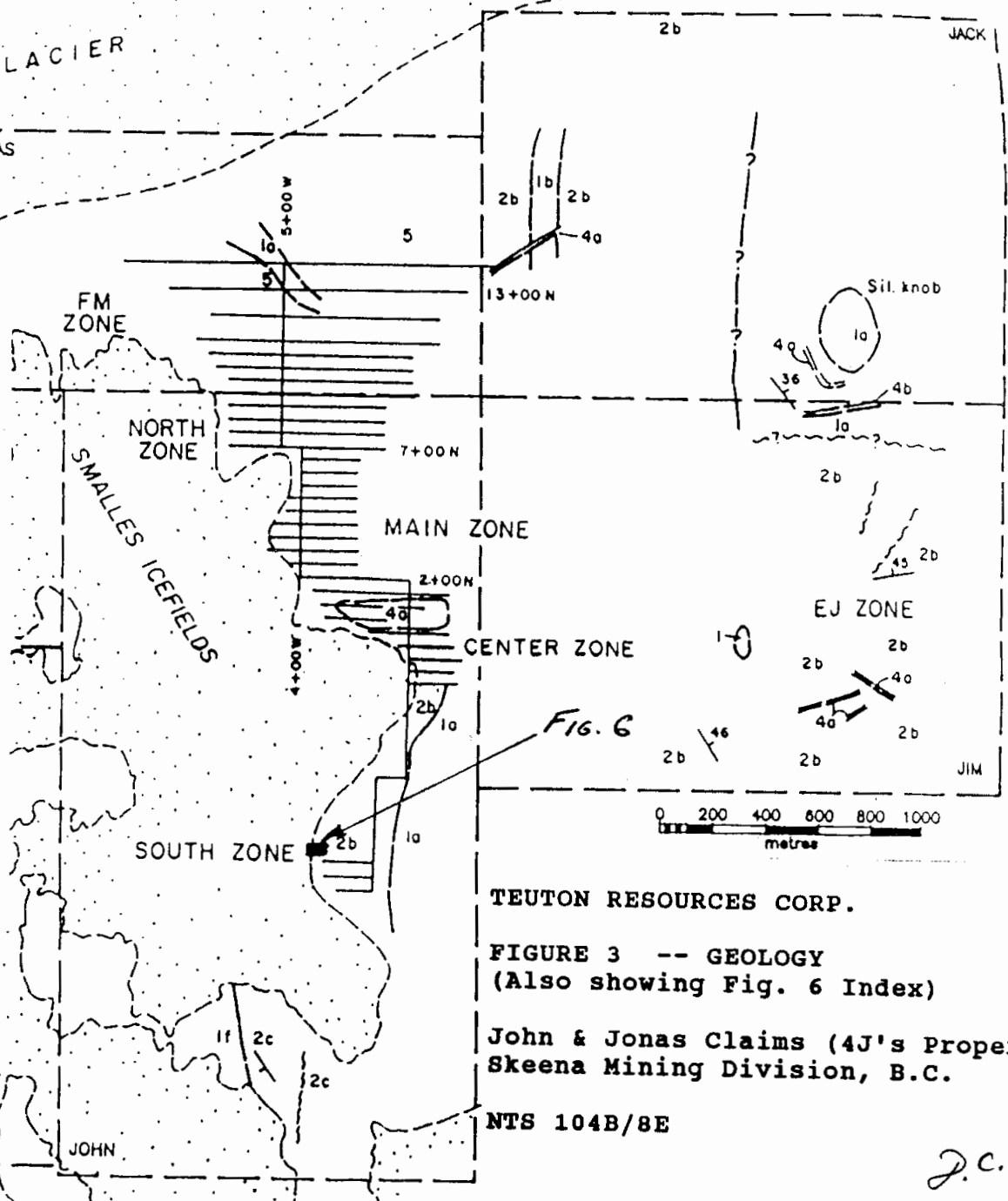
FRANK MACKIE GLACIER JONAS

LEGEND to accompany PROPERTY GEOLOGY AND INDEX MAP
4J's PROJECT

UNUK RIVER FORMATION
(LOWER & MIDDLE JURASSIC HAZELTON GROUP)

- 1 ANDESITIC VOLCANICS
 - a) INTERMEDIATE ASH TUFFS
 - b) MAFIC TO INTERMEDIATE FLOWS
 - c) INTERMEDIATE FLOWS AND CHERTY BANDS
 - d) INTERMEDIATE FLOWS AND CHERTY ARGILLITE BANDS
 - e) INTERMEDIATE TO FELSIC CRYSTAL TUFF
 - f) VOLCANIC BRECCIA
- 2 ARGILLITE SEDIMENTS
 - a) MASSIVE ARGILLITE
 - b) BANDED ARGILLITE & SILTSTONE
 - c) BANDED ARGILLITE & SILTSTONE & CHERTY ARGILLITE ± GREYWACKE
 - d) CHERTY SILTSTONE/SILTSTONE
 - e) FRAGMENTAL ARGILLITE
- 3 CHERT
- 5 BANDED SHALE
- 4 INTRUSIVE ROCKS
 - a) FELDSPAR PORPHYRY ± HORNBLLENDE
 - b) QUARTZ FELDSPAR PORPHYRY

CONTACT
FAULT



TEUTON RESOURCES CORP.

FIGURE 3 -- GEOLOGY
(Also showing Fig. 6 Index)

John & Jonas Claims (4J's Property)
Skeena Mining Division, B.C.

NTS 104B/8E

J.C.

Bedding is typically <5cm wide and consists of 70% argillite and 30% siltstone. The unit is moderately to strongly carbonatized and locally silicified, resulting in some cherty argillite development. Locally limonitic, it contains <1% blebby and fine grained disseminated pyrite.

The eastern third of the Main Zone contains intermediate volcanic flows intercalated with argillite and cherty argillite bands, typically less than 10cm wide. The flows are massive, bleached and locally silicified. Mesocratic siliceous bands and cherty argillite bands make up 35 to 40% of the rock and are oriented at 030/30NW in the north, but gradually shift to 004/82-75W in the south. Trace pyrite occurs throughout the unit, although scattered strongly limonitic and silicified zones occur which contain approximately 2% fracture controlled pyrite.

Seven distinctive geologic units, forming three broad genetic categories underlie the FM Zone: an andesitic volcanic sequence, a distal basin argillite sequence and a porphyritic intrusive. The zone is dominated by the andesitic volcanic complex which consists of intermediate ash tuffs to the southwest, a central belt of mafic to intermediate flows, and intermediate flows intercalated with cherty bands to the northeast. The ash tuff is bounded to the east by a strong but poorly mineralized graphitic fault oriented at 010 to -065/60 to 75W. To the north, talus cover becomes excessive and masks unit contacts. An alpine glacier cuts off exposure of the sequence to the west.

The volcanic sequence hosts at least four east-west striking, south dipping shear zones, and a series of north-south striking, west dipping faults in an area of sharp relief toward the north.

An aeriually restricted and irregular pocket of heterogeneous units including hornblende feldspar porphyry, banded argillite and felsic to intermediate crystal tuff occurs along the central portion of the western margin of the volcanics adjacent to the glacier.

The mafic to intermediate volcanic flows are grey green to dark green in colour and are massive and fine grained with local clusters of acicular black hornblende crystals. The contact between the flows and ash tuffs occupies a strong 080 trending shear zone. Discontinuous, strongly limonitic horizons are abundant immediately north of the contact shear. Zone orientations range from N-NE trending with a vertical dip, to SE trending with a moderate south dip.

East of the volcanics lies an argillite sequence consisting of massive deformed argillite with minor fine siltstone interbeds and a sequence of intercalated argillite, siltstone, chert and greywacke. Bedding and foliation are parallel to subparallel in the massive argillite and strike N-NE, dipping steeply to the west. In the interbedded facies, bedding strikes E-W and dips steeply to

the south. Thickness of the unit varies on surface from 100m to less than 20m.

Due to a shift in foliation and decreasing elevation northward, the surface trend of the sedimentary sequence wraps to the northwest around the volcanic sequence.

The black argillite is very finely interbedded with <10% siltstone. It shows strong irregular deformation and shearing defined by abundant discontinuous and boudinaged quartz carbonate veinlets. The unit is moderately to strongly silicified and carbonatized throughout and its weathered surface is commonly limonitic. Sulfide mineralization is very fine grained and consists of less than 1% blebby, fracture controlled and disseminated pyrite with metre scale zones containing up to 3%.

The heterogeneous banded argillite, siltstone, cherty argillite, greywacke facies consist of beds ranging from 1 to 11cm thick, with textures ranging from aphanitic to gritty and earthy. Bedding is typically 090 to 130/80S. Sulfide mineralization is sparse with <1% fine grained pyrite.

The eastern extents of the North and FM Zones are underlain by a fine to medium grained hornblende/feldspar porphyry. It is a light blue colour, massive and contains clusters of millimetre scale randomly oriented feldspar phenocrysts and < 1cm scale hornblende megacrysts in a fine grained groundmass. The concentration of hornblende decreases to the north.

C. Beep Mat Survey

a. Introduction

Approximately 2.25km of grid lines were surveyed with a Beep Mat, model BM-II. The grid lines were originally established by Orequest Consultants, contractor for Maple Resource Corporation (Dewonck & Barnes, 1990). Although the flags marking the various stations had to be rechecked in several instances it was still possible to follow the lines without incident. The principal object of the survey was to see whether the banded lead-zinc-antimony mineralization in the Main Zone or the massive vein type mineralization in the FM Zone area could be traced using the Beep Mat.

[Author's note: The Beep Mat is a miniaturized electromagnetic survey instrument that has been likened to a simplified version of the helicopter-borne uncoil. It consists of a uncoil operating at about 2.1 megaHertz inserted in a polyethylene shell with a separate readout module that allows the measurement of the relative value of the conductivity of 3 cubic metres or susceptibility (magnetite content) of 1 cubic metre of any material immediately

underlying the instrument (penetrating to a depth of about 1.5m). If conductive and magnetic materials are simultaneously present, it cannot independently measure both parameters, however a new version of the instrument available in 1994 will allow detection of conductors even when they occur in a highly magnetic background.

Documentation supplied by the manufacturer has been included for reference in Appendix IV. A cartoon shows the manner in which the instrument is used--it is simply dragged behind the prospector who also wears a readout module on his chest.

Although it proved of limited utility for the Four-J's property, the author was quite impressed with results obtained on other claims in the Stewart area. On one such property it quickly delineated strike extensions of massive sulfide mineralization concealed under a thin coat of soil and heather. Numerous test pits dug by old-timers, in some cases missing the zone by less than a metre, showed how frustrating it could be tracing mineralization without the assistance of modern technology.]

b. Treatment of data

Although the Beep Mat does provide quantitative readings of the relative content of conductors or magnetite at a rate of 10 readings per second, recording and plotting these in the manner of a standard geophysical survey would be missing the point. The Beep Mat is primarily a prospecting tool, allowing one to rapidly detect certain types of mineral occurrences. In the instant survey, the object was to detect anomalous conductors: the Beep Mat is designed to emit a sound alarm at about a delta of 100 hz. This beeping alarm intensifies in unison with higher readings. When an anomaly is detected one digs down to identify the source.

The area surveyed during the 1993 program has been stippled on Fig. 4, drawn at a scale of 1:2,500. Anomalous readings or "beeps" have been marked with an asterisk with the meter reading noted beside.

As the area did not respond with any magnetic anomalies these will not be dealt with.

c. Discussion

The area traversed with the Beep Mat, mostly underlain by sediments, proved to be quite unresponsive. A single, faintly beeping anomaly of 120 hz. (delta) was recorded just south of the western end of Line 3+50N. It came from a small exposure of quartz-sulfide mineralization protruding through glacial debris at the edge of the Smalles Icefield (a sample tag indicated the vein had been sampled by Orequest, running 0.112 oz/ton gold). The sulfide mineralization appeared to be predominantly arsenopyrite

and pyrite, and lensoidal in nature--the Beep Mat did not pick up any extensions beyond three m. Other similar small veins exposed in the vicinity did not respond to the Beep Mat.

[Author's Note: By way of reference, the Beep Mat was run over a large arsenopyrite bearing quartz vein exposed by stripping beside the Granduc mining road about 10 km southeast of the property. The vein, known to be auriferous, is about 2m wide in places and registers values between 25,000 to 124,000 hz (δ) when traversed.]

Time was also spent criss-crossing known outcrops of laminar lead-zinc-antimony mineralization in the Main Zone area (cf. Figs. 5, 6--"Banded" sample site). Because this type of mineralization is so difficult to detect in outcrop, it was hoped that it would respond to the Beep Mat so as to allow tracing through light snow and debris cover nearby. Unfortunately the Beep Mat did not respond in the slightest to this style of mineralization.

Similarly, the Beep Mat did not respond to small massive sulfide veins containing gold and silver values as high as 2.16 oz/ton over 14cm in the FM Zone area just east of Baseline between Lines 7+50 and 8+00N (cf. Fig. 4--"Massive Sulfide" Sample).

D. Petrographic Samples

As shown in Fig. 4 and mentioned in the previous section, petrographic samples were taken in 1993 from two sites marked "Banded" and "Massive Sulfide". These samples were sent to Poland (much less expensive) for thin section and XRD analysis but results have not yet been received.


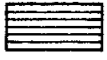
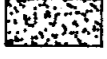


The "Banded" sample was taken from the north end of Trench 91-1, a detail map of which is shown in this report in Fig. 5. This mineralization continues to be intriguing because of speculation that it is sedimentary exhalative in origin. The very fine-grained nature of the sulfide mineralization is not ascertainable in outcrop, only becoming apparent after cutting to polished surface. Assays have typically returned values running to 50% combined lead-zinc.

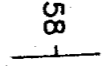



Perhaps the only method of tracing the zone(s) besides trenching and sampling is by visually following a faint yellowish stain on the surface of the small massive bands of sulfide mineralization. This is believed to be an arsenic or antimony oxide.

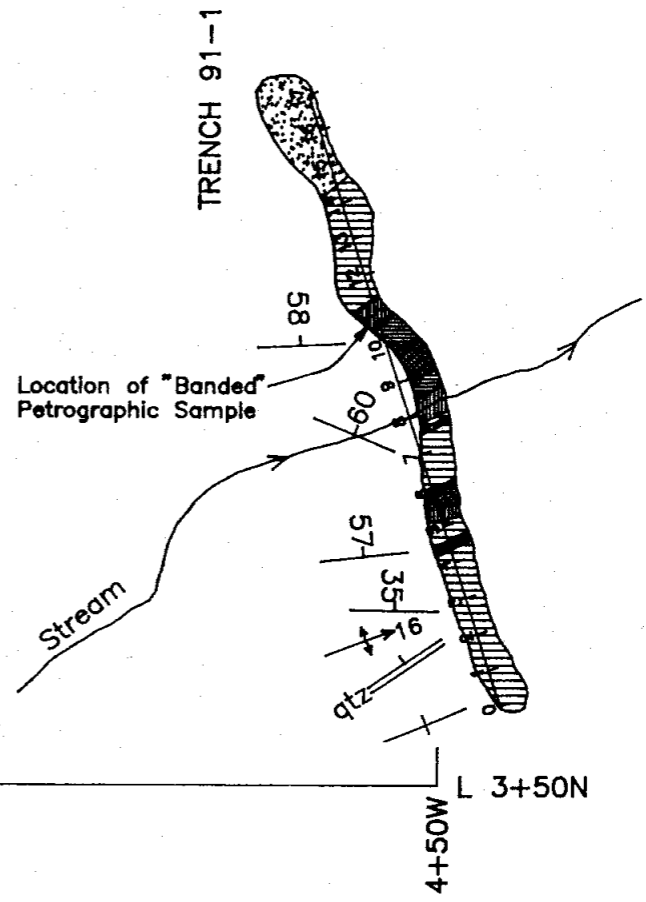
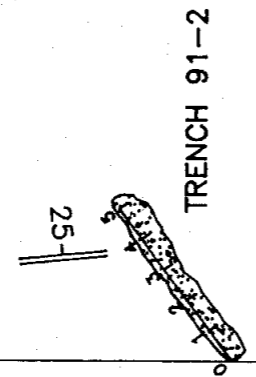
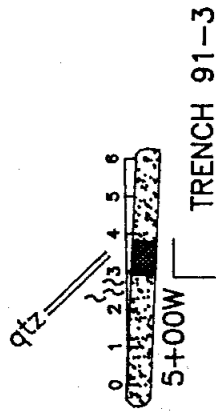
A preliminary petrographic description of the "Banded" sample by Alex Walus, M.Sc., follows:

"The sample is of finely banded silicified argillite with 70 to 80% very fine-grained sulfides representing two stages of

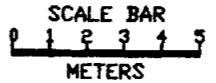
LEGEND

-  ARGILLITE, MINOR SANDSTONE BEDS
-  SILICIFIED ARGILLITE
-  SANDSTONE
-  QUARTZ VEIN
-  MASSIVE GALENA-SPHALERITE

-  58 - BEDDING (Foliation)
-  VEIN
-  16 - FOLD
-  FAULT GOUGE



Refer to Fig. 4 For Location Relative to Claim Boundary



TEUTON RESOURCES CORP.	
FIGURE 5 Skeena Mining Division 4J'S PROPERTY DETAIL MAP BANDED SULFIDE ZONE British Columbia NTS: 104B/8E	
January 1994	Drafting: RPM

DC

mineralization:

earlier stage--represented by massive dark yellow assemblage dominated by sphalerite which comprises 80 to 90% of total sulfide content.

later stage--represented by unknown steel grey sulfide(s) comprising fracture infillings in earlier assemblage and less frequently separate laminae up to 1mm thick.

It is not clear whether banding in argillite is a sedimentary structure or the result of later shearing."

Similarly Mr. Walus, M.Sc., describes the "Massive Sulfide" sample as follows:

"The sample consists of sub-rounded fragments of steel grey coloured sulfides one to three mm in size set in a ground mass of the same sulfides. Gouge minerals representing 10 to 15% include quartz and carbonate."

The "Massive Sulfide" sample was taken from 1989 sample site #9616 which ran 2.12 oz/ton gold over 0.14m.

Mr. Walus regretted that he could not say more about the samples without the thin section and XRD results awaited from Poland.

E. Geochemistry--Rock Samples

a. Introduction

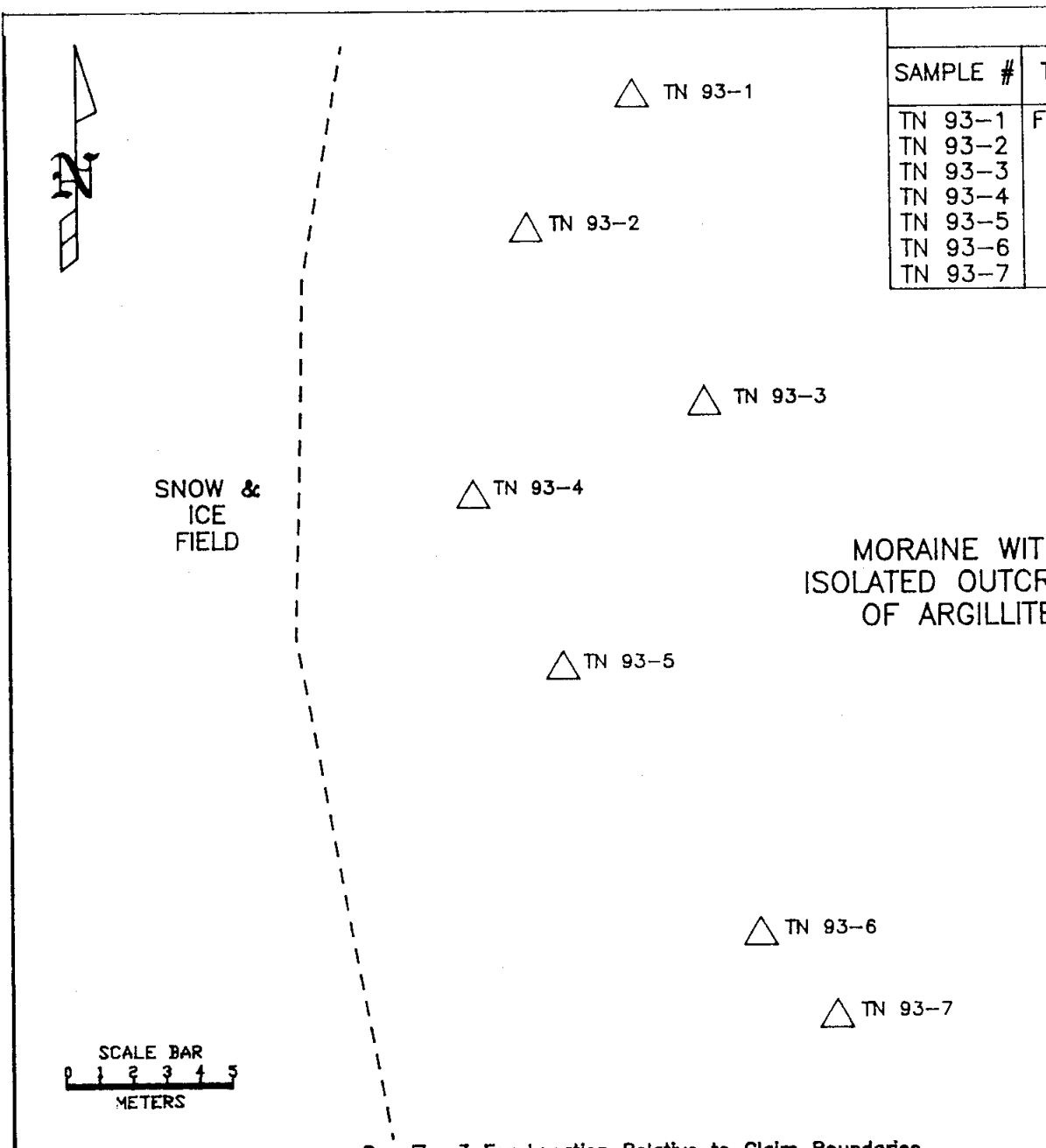
As an adjunct to the other work, seven rock geochem samples were taken by D. Shilling from small, angular float boulders noted in an area of moraine next to a retreating icefield in the vicinity of the South Zone (cf. Fig. 3 for location of South Zone and index for Fig. 6--Rock Geochem Samples, South Zone Area).

b. Sample Descriptions

The samples have been described as follows:

- TN-93-1 Angular small float boulder of argillite mineralized with massive fine to coarse grained pyrite, minor sphalerite, galena(?) and showing copper stain.
- TN-93-2 As above, lesser sulfides.
- TN-93-3 Argillite float boulder, angular, with 5 to 10% pyrite.
- TN-93-4 As above.

SAMPLE DATA							
SAMPLE #	TYPE	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
TN 93-1	FLOAT	2100	156.9	2863	7595	23270	370
TN 93-2	"	280	5.1	3502	1392	2226	144
TN 93-3	"	52	2.5	223	63	191	69
TN 93-4	"	360	2.2	2507	85	250	105
TN 93-5	"	1350	13.8	218	405	68	2766
TN 93-6	"	210	2.2	244	46	121	130
TN 93-7	"	1020	57.2	634	5687	2993	521



△ FLOAT SAMPLE LOCATION

TEUTON RESOURCES CORP.
 FIGURE 6
 Skeena Mining Division
 4J'S PROPERTY
 ROCK GEOCHEM SAMPLES
 SOUTH ZONE AREA
 British Columbia
 NTS: 104B/8E

See Fig. 3 For Location Relative to Claim Boundaries

January 1994

Drafting: RPM

TN-93-5 Massive, coarse grained pyrite, 30-40%, in small argillite float boulder, slight yellowish stain.

TN-93-6 As above.

Tn-93-7 As above.

c. Discussion

Gold values ranging from 52 to 2100 ppb and silver values from 2.2 to 156.9 ppm were obtained from the seven samples of float mineralization. Lead, zinc, copper, arsenic and antimony values are variously elevated in several of the samples.

Source for the float is probably nearby, under the ice or below glacial debris. These values are similar to those obtained at several sites elsewhere on the property.

F. Field Procedure and Laboratory Technique

Analysis of rock specimens collected during the 1992 program was carried out at the Pioneer Laboratories facility in New Westminster.

After standard rock sample preparation, the 30 element Inductively Coupled Argon Plasma analysis was initiated by digesting a 0.5 gm sub-sample from each field specimen with 3ml 3-1-2 HCl-HNO₃-H₂O at 95 deg. C for one hour, followed by dilution to 10 ml with water. The Atomic Absorption measurement for ppb tolerance gold was preceded by subjecting 10 gram samples to standard fire-assay preconcentration techniques to produce silver beads which were subsequently dissolved.

The preliminary petrographic analyses were done by cutting specimens to polished surface and examining under a binocular microscope.

Specifications and method of use for the Beep Map are included in this report in Appendix IV.

G. Conclusions

Regrettably, the Beep Mat did not respond well over the two most interesting forms of mineralization previously identified on the Four J's property. This could be because the geophysical characteristics of the mineralization are such that they are not detectable by the Beep Mat or because the mineralized occurrences are too small and discontinuous to elicit a response. [On another property, the Beep Map did not respond to a two metre thickness of

mineralization containing 20 to 50% galena.]

It appears that further trenching, sampling and geological mapping will be necessary to determine the extent of the banded lead-zinc-antimony sulfide mineralization in the Main Zone area. Awaited results from thin section and XRD analyses will help determine whether this is or is not an exhalative target, so that exploration plans can be properly prioritized thereafter.

A small follow-up program to trace the source of the anomalous float specimens located in the South Zone area is also warranted.

Respectfully submitted,



D. Cremonese, P.Eng.
Jan. 28, 1994

APPENDIX I -- WORK COST STATEMENT

Field Personnel--Period Aug. 22 to Oct. 2, 1993:	
D. Cremonese, P. Eng.	
1.5 days @ \$300/day	\$450
D. Shilling, Assistant	
1.5 days @ \$150/day	225
Helicopter -- VIH/Stewart Base	
Crew drop-offs/pick-up	
1.5 hrs @ \$755/hr.	1,132
Food -- 3 man-days @ \$30/man-day	90
Personnel: mob/demob (home base to Stewart, return)	
(prorated--5.36% of \$2,200)	118
Beep Mat Rental (GDD Instrumentation--Quebec)	
(prorated--10% of total charges of \$2,307.95)	231
Assay costs--Pioneer Labs	
Au geochem + 30 elem. ICP + rock sample prep	
7 @ \$14.25/sample	100
Report Costs	
Report and map preparation, compilation and research	
D. Cremonese, P.Eng., 2.5 days @ \$300/day	750
Draughting-- RPM Computer	180
Preliminary petrographic rock descriptions	60
Word Processor - 3 hrs. @ \$25/hr.	75
Copies, report, jackets, maps, etc.	35
	<u>3,446</u>
	TOTAL.....\$ 3,446

Amount Claimed Per Statement of Exploration: \$2,800

APPENDIX II - CERTIFICATE

I, Dino M. Cremonese, do hereby certify that:

1. I am a mineral property consultant with an office at Suite 509-675 W. Hastings, Vancouver, B.C.
2. I am a graduate of the University of British Columbia (B.A.Sc. in metallurgical engineering, 1972, and L.L.B., 1979).
3. I am a Professional Engineer registered with the Association of Professional Engineers of the Province of British Columbia as a resident member, #13876.
4. I have practiced my profession since 1979.
5. This report is based upon work carried out on the John and Jonas claims, Skeena Mining Division in August-October of 1993.
6. I am a principal of Teuton Resources Corp., owner of the John and Jonas claims: this report was prepared solely for satisfying assessment work requirements in accordance with government regulations.

Dated at Vancouver, B.C. this 28th day of January, 1994.



D. Cremonese, P.Eng.

APPENDIX III

ASSAY CERTIFICATES

GEOCHEMICAL ANALYSIS CERTIFICATE

TEUTON RESOURCES CORP.

Project:

Sample Type: Rocks

Multi-element ICP Analysis - .500 gram sample is digested with 3 ml of aqua regia, diluted to 10 ml with Water. This leach is partial for Mn, Fe, Ca, P, La, Cr, Mg, Ba, Ti, B, W and limited for Na, K and Al. Detection limit for Au is 3 ppm.
 *Au Analysis- 10 gram sample is digested with aqua regia, NIBK extracted, graphite furnace AA finished to 1 ppb detection.

Analyst _____

Report No. 9320675

Date: September 08, 1993

ELEMENT SAMPLE	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
DEL 93-1	3	674	6653	6030	11.3	1	1	2819	9.96	43	12	ND	2	12	51.1	5	10	5	.07	.028	5	61	.03	140	.01	3	.22	.01	.22	11	480
DEL 93-2	9	329	16750	322	26.1	2	1	166	5.61	55	5	ND	2	21	.6	6	19	4	.02	.006	2	128	.01	321	.01	4	.08	.01	.04	40	1840
DEL 93-3	16	594	26538	3207	285.1	2	2	3609	15.39	152	14	3	2	29	17.8	11	590	11	.07	.031	7	55	.02	86	.01	5	.28	.01	.28	132	1810
DEL 93-SD38	40	780	27312	2115	293.5	2	1	617	11.91	108	5	5	2	60	10.1	2	594	4	.01	.014	3	89	.01	100	.01	4	.14	.01	.15	45	17800
DEL 93-GAL	7	358	31273	9011	111.3	2	2	101	3.00	53	5	ND	2	39	82.8	59	94	3	.03	.006	2	79	.01	13	.01	4	.08	.01	.05	31	3350
BR 93-1	3	376	77	18	3.5	11	60	40	16.38	99999	11	7	2	4	.2	355	70	25	.27	.039	2	39	.06	15	.02	3	.33	.01	.07	2	4050
BR 93-2	6	96	41	12	6.8	15	30	32	24.49	99999	23	20	3	1	.2	372	229	12	.01	.018	2	36	.02	10	.01	16	.12	.01	.06	12	12400
BR 93-3	6	375	22	102	19.1	11	101	12	16.35	99999	20	34	2	2	2.4	651	971	5	.09	.023	2	68	.01	13	.01	7	.05	.01	.04	5	28100
BR 93-4	7	2188	8	42	12.1	58	47	272	38.82	862	5	11	2	3	.6	15	108	31	.17	.029	2	6	.21	4	.03	6	.34	.01	.01	1	8600
BR 93-5	2	541	10	62	5.0	2	2	1350	.28	29	5	ND	2	245	.9	3	2	4	32.96	.008	3	3	.08	2	.01	3	.10	.01	.01	1	18
BR 93-6	2	358	22	41	2.2	67	49	111	11.97	272	5	ND	2	63	.4	2	4	11	1.28	.057	2	17	.08	11	.08	2	1.64	.45	.04	1	50
BR 93-7	2	1496	5	38	6.0	28	134	387	39.80	380	5	ND	2	3	.2	2	3	3	.77	.006	2	5	.04	3	.01	2	.09	.01	.01	1	180
BR 93-8	1	1266	15	42	4.4	26	118	424	39.19	24	5	ND	2	2	.5	2	8	7	.31	.013	2	22	.06	7	.01	2	.24	.01	.01	1	125
BR 93-9	2	949	12	44	2.5	27	106	191	25.03	82	5	3	2	46	.5	2	2	34	.88	.043	2	26	.04	19	.05	4	1.99	.30	.07	2	32
BR 93-10	1	16	23	13	.4	4	2	936	.48	29	5	ND	2	275	.2	2	2	3	40.28	.012	2	1	.13	9	.01	2	.31	.02	.01	1	
BR 93-11	5	135	143	53	1.8	16	7	405	2.32	107	5	ND	2	92	.5	2	3	120	2.18	.137	7	102	1.03	24	.17	2	3.49	.69	.31	1	22
TM 93-1	8	2863	7595	23270	156.9	32	18	1649	10.22	370	5	3	2	139	147.7	631	2	8	2.15	.052	3	31	.73	14	.01	3	.52	.01	.39	30	2100
TM 93-2	5	3502	1392	2226	5.1	4	10	523	6.70	144	5	ND	2	81	27.3	10	2	10	.93	.072	3	52	.13	22	.01	5	.40	.01	.34	1	280
TM 93-3	10	223	63	191	2.5	6	28	1455	6.03	69	5	ND	2	176	.3	41	2	11	2.50	.149	5	39	.52	28	.01	5	.35	.01	.33	1	52
TM 93-4	15	2507	85	250	2.2	5	10	396	5.84	105	5	ND	2	60	1.0	13	2	9	.83	.074	4	33	.11	18	.01	8	.49	.01	.44	1	360
TM 93-5	1	218	405	68	13.8	32	1	41	21.72	2766	5	ND	2	2	.2	128	2	2	.02	.007	2	33	.02	3	.01	5	.11	.01	.08	1	1350
TM 93-6	149	244	46	121	2.2	15	122	459	18.51	130	5	ND	2	34	.2	28	2	10	.75	.053	2	53	.18	8	.01	6	.24	.01	.22	1	210
TM 93-7	5	634	5687	2993	57.2	4	2	35	20.38	521	9	ND	2	23	11.7	354	2	5	.19	.018	2	66	.02	3	.01	7	.15	.01	.12	3	1020
TM 93-12	2	168	197	192	.8	71	30	2775	5.58	53	11	ND	2	195	.2	7	2	29	4.62	.112	3	44	1.59	92	.01	2	.52	.01	.29	1	80
GM 93-1	3	910	1073	235	16.6	3	3	176	13.09	1602	5	4	2	4	1.0	28	4	25	.07	.046	2	48	.38	12	.01	3	.90	.01	.44	1	2300
GM 93-2	1	2761	1030	3056	24.0	6	15	970	11.44	783	7	ND	2	6	31.6	7	13	50	.23	.047	4	47	.99	21	.01	2	2.17	.01	.09	1	790
GM 93-3	3	4129	393	3479	23.8	4	7	827	9.78	625	5	ND	2	7	35.7	2	5	46	.43	.040	4	60	.87	25	.01	2	1.89	.01	.11	1	650
GM FLT-1	2	2831	286	2932	16.5	6	13	1483	8.43	3309	5	3	2	8	18.8	7	40	86	.36	.060	3	46	1.39	60	.01	2	3.07	.01	.09	1	1060

APPENDIX IV

DOCUMENTATION REGARDING THE

"BEEP MAT"



GDD BEEP MAT, model BM-II-93

THE FACTS

Up to 1993, some 2500 conductive occurrences have been localized by BEEP MAT surveys, then sampled, often by blasting. When showings and/or EM conductors occur in areas of shallow overburden and till, a BEEP MAT crew can discover and sample one conductive occurrence or more for every day of work. The ratio rapidly falls to one occurrence every 10 days in areas of shallow overburden but where no airborne conductors are known. On the average, two-thirds of the occurrences are bedrock and one third boulders. Numerous descriptions of field surveys are available.

THE BEEP MAT - A COST EFFECTIVE INSTRUMENT

To express the same idea differently, a BEEP MAT survey of a 100-claim group in an area of shallow overburden will discover from 10 to 100 hidden gossans, which can all be examined, sampled and assayed for the all-inclusive cost of one drill hole on a geophysical anomaly ($\pm 50\ 000$ \$). In every area where outcrops are present, the BEEP MAT thus represents an extremely cost-efficient approach to exploration, which allows to explore and cream off a property for less than the cost of a grid of lines.

Out of the 2,000 occurrences sampled up to now, some 40 (or 2%) revealed ore-grade assays of copper, gold, zinc, lead, etc. Concretely, one open pit mine is now in operation near a test pit first sampled with a BEEP MAT, and a small copper ore shoot was drilled off after the discovery of an ore float. Other showings and floats found during BEEP MAT surveys are actively prospected, such as a bedrock occurrence of 22% copper in Lemieux Township in Gaspé, or a 10% zinc-3% copper float in Chibougamau, or four gold showings near the Eastmain river. The high proportion of ore-grade occurrences among BEEP MAT conductors reflect mostly the high geological potential of the mining properties so far surveyed but also the nature's process of concentrating ore material such as gold or base metals in sulfide veins and veinlets.

HOW THE BEEP MAT CAN MAKE YOU SAVE TIME AND MONEY

The BEEP MAT can directly discover ore shoots, occasionally of a size to be directly minable as suggested by the positive reaction of BEEP MATS over the original subcrops of 10 of today's mines. However, a careful examination by qualified geologists of the conductive occurrences discovered by a BEEP MAT survey can:

- 1) Eliminate by actual sampling many graphitic horizons which can give misleading but large geophysical targets;
- 2) Focus exploration by discovering veinlets in previously unknown exhalitic horizons, worthy of detailed geoscientific investigation.
- 3) Discover new types of mineralization not predicted by the general geology of the area.
- 4) Discover floats from deeply buried ore bodies.

BEEP MAT surveys with the BM-II have been accepted for assessment works for many years just as any other geophysical survey.

=====

MAIN FEATURES

- Rechargeable Gell Cell batteries (last 20 hours / rechargeable in 8 hours)
 - Coil frequency: 2 MH
 - Sensitivity: 10 Hertz
 - Weight: 4,3 kg Size: 90 cm x 30 cm
 - Digital display of the relative content of conductors or magnetite
 - Different sound alarm for conductors and magnetite
 - Waterproof
 - Continuous ground coverage (10 readings/second): detects even the smallest sulfide veinlets
 - One-year warranty on parts and labour (transportadon fees not included)
- =====



BEEP MAT

Model BM-II-93

PURCHASE / RENTAL PRICE LIST 1993

The **BEEP MAT** is a miniaturized electromagnetic survey instrument that is, in a way, the simplified version of the helicopter-borne uncoil. The **BM-II-93** model consists of a uncoil inserted in a polyethylene shell and a separate readout module that allows the measurement of the relative value of the conductivity or susceptibility (magnetite content) of the underlying surface. Magnetite or conductive materials each have a different audio signal and their relative value is displayed. The **BEEP MAT** efficiently and inexpensively detects conductive outcrops (*pyrite, pyrrhotine, pyrrhotite, chalcopyrite (Cu), graphite, pentlandite (Ni), galena (Pb), etc.*), magnetic outcrops or boulders hidden under up to 1.5 meters of overburden.

	<u>PURCHASE PRICE</u> (Can. \$)	<u>RENTAL PRICE</u> (Can. \$)
MODEL BM-II-93	7 900 \$*	70 \$ / day*
OPTION: Spare cable	400 \$*	included

* Shipping charges, customs fees, federal and/or provincial taxes are extra, if applicable.

PURCHASE OPTION:	80% of the rental fees of the last 4 months can be deducted from the purchase price of the rented instrument, if purchased.
RENTAL PERIOD:	Starts on the day the instrument leaves our office in Sainte-Foy to the day of its return to our office.
WARRANTY:	All instruments are guaranteed for one year. All repairs will be done free of charge at our office in Sainte-Foy (transportation fees excluded).
SERVICE:	After the warranty has expired, a yearly maintenance contract, including parts and labour, is available for 790 \$ per year and includes any technical updating which could be made to the instrument sold.

Prices are subject to modification without notice.

The Northern Miner

CONTRACTORS OFFERING BEEP MAT SURVEYS

ADVERTISEMENT

G.L. Géoservice Inc.
Rouyn-Noranda, Qc
(819) 762-2223

Val d'Or Géophysique
Val d'Or, Qc
(819) 825-6529
PDA Booth #38



W.E. Holmstead & Ass.
Kingston, Ont.
(613) 384-8944
PDA Booth #114

Géosig Inc.
Ste-Foy, Qc
(418) 877-4249
PDA Booth #114

Jean Fortin, prospector
Côte-Nord/Gaspésie, Qc
(418) 566-6075

Follow The Leaders . . . Use BEEP MATS and get funding for your projects

11 Case histories: Some of the successful majors companies, juniors and prospectors allowed us to print the following case histories, but most requested not to be identified as some properties are being staked. We hope to organize a seminar on BEEP MAT prospecting as soon as companies accept to share their experience.

1 FINDING THE SOURCE OF A KNOWN FLOAT TRAIN

Geologists outlined a train of ore boulders in an area of a small recent forest fire. Detailed geology, soil geochemistry and VLF and MAG geophysics up-ice of the boulder train failed to result in any new targets. The following spring, in a single day, a 4-man BEEP MAT crew found several dozen new ore boulders, both in the area of the forest fire and on both sides of it. At the end of the day, a large conductor was signaled on a small hill one kilometer northeast of the boulder train. The next morning, blasting till from the beep signal area uncovered several copper showings of the same material as the boulder train, a few tens of meters from previous trenches which only showed barren rocks.

2 FOLLOW UP OF A GROUND EM SURVEY

Detailed geological and surface prospecting of a number of airborne EM anomalies followed by MaxMin surveys had failed to bring any encouragement even if the geology was similar to that of a former nearby zinc producer. Then, a single BEEP MAT was brought in and given to a second-year engineering student used to hard work on his father's farm.

In a month, working alone, Carl found, dug out and sampled 40 pits through up to 5 feet of till down to conductive sulfide-bearing bedrock. Several copper-zinc showings were uncovered, 10 D.D.H. were put down, a new airborne survey was flown and the project is still running strong.

3 FOLLOWING THE LEADER

A follower acquired a few hundred claims next to the above company, used the same technique, and apparently found similar zinc showings.

4 EXPLORING AROUND AN OLD SHOWING

A prospector, with government help, started by running I.P. and VLF surveys around an old drilled-off nickel showing. The I.P. outlined the serpentinite but did not give new targets. Then, he brought in a BEEP MAT and after several days of work discovered, only 300 meters away, a new nickel showing many times richer.

5 TRENCHING A KNOWN ORE BODY

A prospector was requested to open up trenches with a bulldozer across a high-grade graphitic ore body, using MaxMin maps as a guide, to get samples for pilot mill testing. After digging several trenches down for 15 or 20 feet without reaching bedrock, he used his own BEEP MAT that he had brought to outline the areas where graphite sub-outcropped within 5 or 7 feet from the surface. Trenching was much more effective thereafter.

6 BEEP MAT HELPS WITH GROUND FOLLOW-UP

HLEM surveying, geological mapping and geochemical sampling were done on grids covering AEM anomalies. Cu Zn sulphides were found associated with one such conductor but overburden cover obscured the geological picture. A BEEP MAT survey helped trace, in detail, conductor location between lines and was also used to position some trenches. After a large area was stripped, the BEEP MAT was useful in mapping the distribution of conductive sulphides because the host rocks were deeply oxidized.

7 PROSPECTING AROUND AN OLD MINE

A company had not found a smell of new ore in years next to their high-grade copper-zinc producer. A BEEP MAT was brought in and discovered an ore float among 50 barren ones in two months of work. Two years later, a second float was found. A drill hole spotted under a long-neglected VLF conductor 1000 feet north of the float discovered a marginal but well defined ore shoot, the only new one discovered around the mine.

8 FINDING SHOWINGS ON A GEOLOGICAL TARGET

A junior company had acquired a huge property on a geological hunch but no airborne or other targets were known. A crew of seven experienced line cutters were given BEEP MATs and bonuses for each conductor discovered. Twelve small bedrock conductors were thus discovered and sampled in a two week period and four of these new showings gave good gold and copper assays. For that junior company, it was the only property that they ever optioned to a major for further exploration.

9 USING BEEP MATS TO SELECT PROPERTIES

For a joint venture, 12 properties totalling 700 claims were chosen because of good outcrops and easy access. With a \$100,000 budget, 300-man days of BEEP MAT were run and 58 virgin bedrock conductors (and 6 old ones) were trenched, then sampled. Two assays returned gold values that will be followed up this summer.

10 FOLLOW UP OF AN AIRBORNE SURVEY

In 1992, an old airborne survey was followed up with a single BEEP MAT for a week. Dozens of virgin conductors were trenched, blasted and sampled. Even if this was only a technical success, it illustrates how effective BEEP MATs can be to sample the numerous targets which result from airborne surveys.

11 A FLOAT BECOMES A FLOAT TRAIN

One large high grade float was found under a swamp by a crew doing a BEEP MAT survey. The float was hidden under only two feet of overburden. Four of the samples assayed averaged: 2.87% Zn, 2.7% Cu, 30g/t Ag and 8 g/t Au.

Several other boulders containing the same mineralization were discovered near the first discovery while using the BEEP MAT.

BEEP MATS FOR DIAMONDS?

Of course not! But BEEP MATs can rapidly detect many magnetic boulders. Therefore, some geologists are considering using them to check tills around pinhole magnetic anomalies to determine if they are caused by gabbros or by more exotic intrusives of a type that warrant a drill hole.

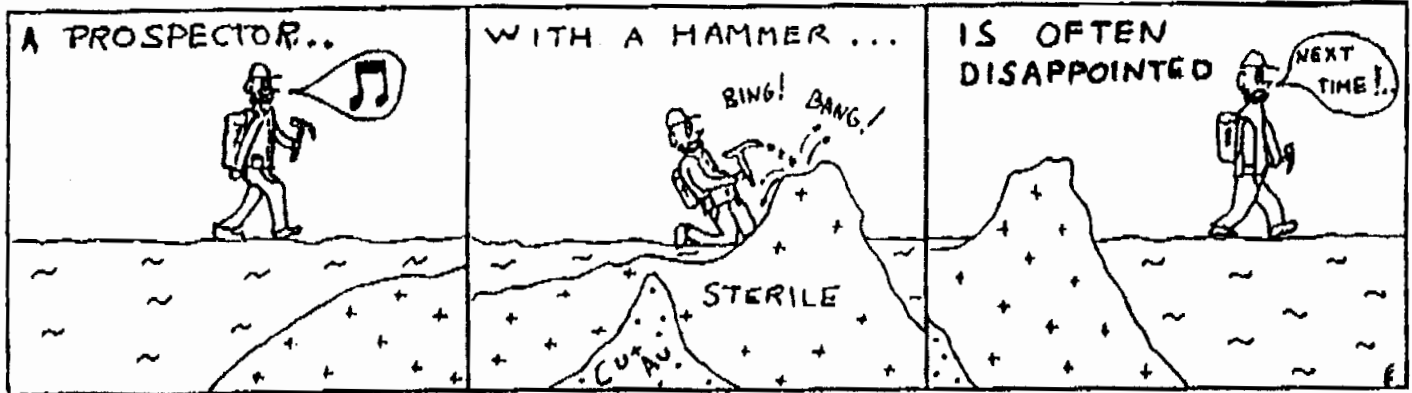
Rent or buy your BEEP MAT. Contact Pierre Gaucher, Eng., M.B.A.

INSTRUMENTATION GDD INC., 3700 Chaudière Blvd., Ste-Foy, Qc G1X 4B7 Tel.: (418) 877-4249 / Fax (418) 877-4054

PDA CONVENTION – Visit booths #38  and #114 GDD – Case histories available

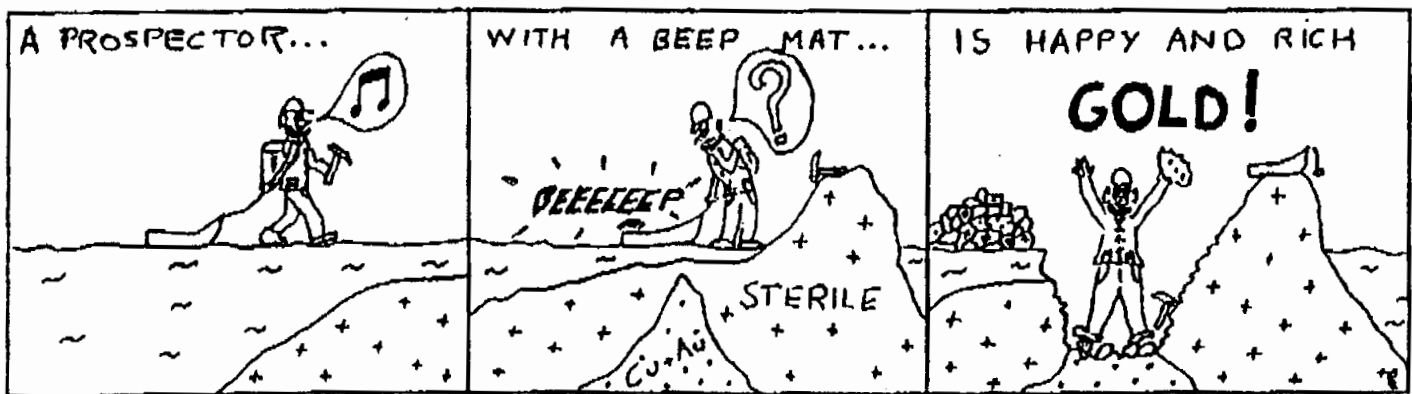
CAN YOU AFFORD TO MISS A MINE?

WHILE YOU HAD THE CLAIMS



AND LET OTHERS DETECT IT?

ONCE YOU DROPPED THE CLAIMS



"BEEP MAT IN EXPLORATION"
1993

INSTRUMENTATION GDD INC.
3700, boul. de la Chaudière
Sainte-Foy, Québec, Canada G1X 4B7
Tel.: 418-877-4249 Fax: 418-877-4054



JONAS
3625

JOHN
3624

6+50W

6+00W

5+50W

BL 5+00W

4+50W

4+00W

3+50W

3+00W

2+50W

2+00W

9+50N

9+00N

8+50N

8+00N

7+50N

7+00N

6+50N

6+00N

5+50N

5+00N

4+50N

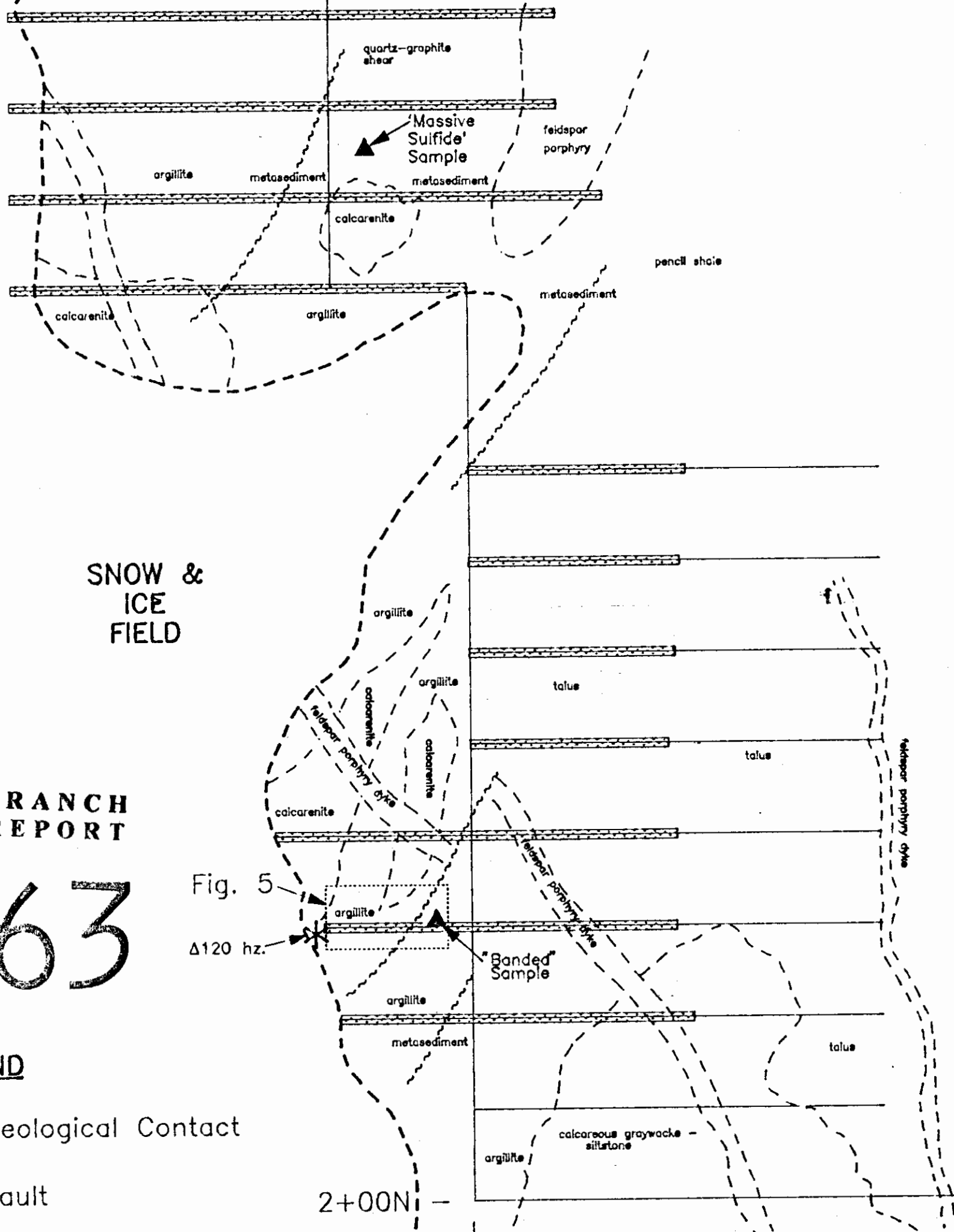
4+00N

3+50N

3+00N

2+50N

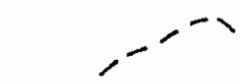



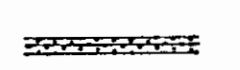

LCP APPROX. 760m EAST

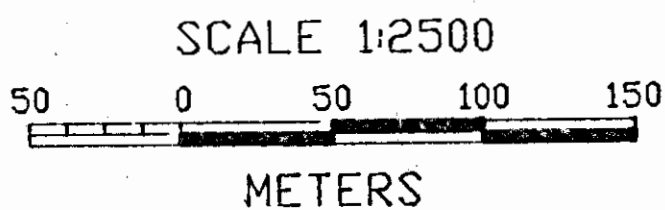


GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,263

LEGEND

-  Geological Contact
-  Fault
-  Ice Edge
-  Beep-Mat Anomaly
-  Lines Surveyed With Beep-Mat
-  Petrographic Sample Site



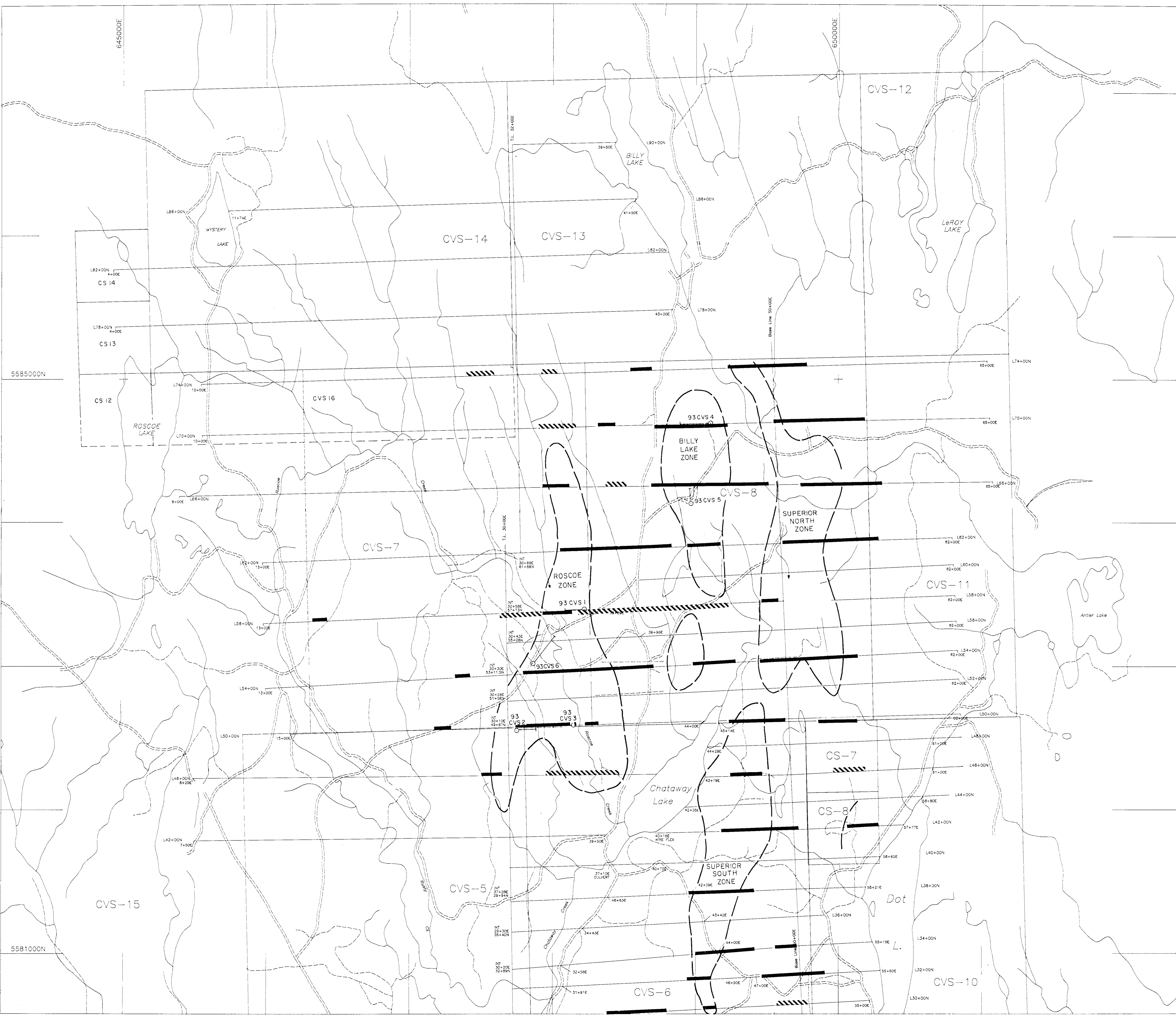
TEUTON RESOURCES CORP.

FIGURE 4
 Skeena Mining Division
4J'S PROPERTY
1993 ASSESSMENT PROGRAM
BEEP-MAT SURVEY &
PETROGRAPHIC ROCK SAMPLE SITE
 British Columbia
 NTS: 104B/8E

P.C.

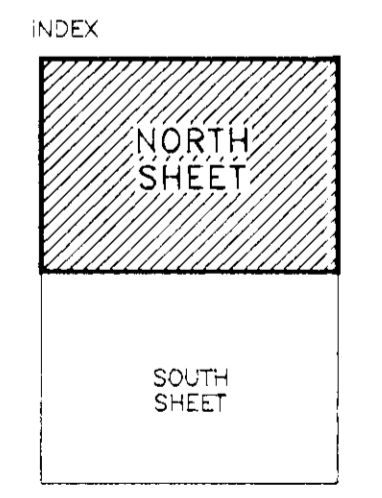
January 1994

Drafting: RPM



- LEGEND:**
- MODERATE CHARGEABILITY ANOMALY
 - WEAK " "
 - OUTLINE OF ANOMALOUS ZONE FROM N=3 CHARGEABILITY CONTOURS
 - DIAMOND DRILL LOCATION

Road access 4x4 or better
 Overgrown cat trails

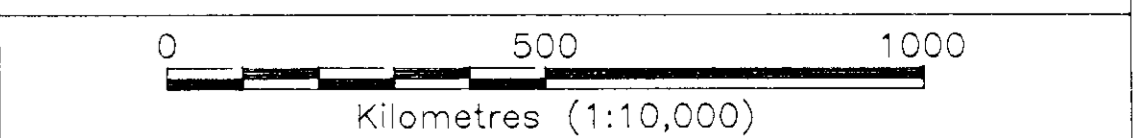


GEOLOGICAL BRANCH ASSESSMENT REPORT

23,260

HUDSON BAY EXPLORATION & DEVELOPMENT CO. LIMITED
 CVS PROPERTY
 KAMLOOPS & NICOLA MINING DIVISIONS, B.C. NTS: 92 1/7

DRILL HOLE LOCATION MAP



BY: P.E.W./r/wf
 DATE: FEB. 1994 FIGURE: 3