

87-453 - 16342  
5/88

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

16,342

RECONNAISSANCE  
Geological, Geochemical, and Geophysical  
Assessment Report  
on the  
MASTER ACE I and II

New Westminster M.D., 92H/6E  
Lat.  $49^{\circ}17'16''$  N., Long.  $121^{\circ}08'07''$  W.

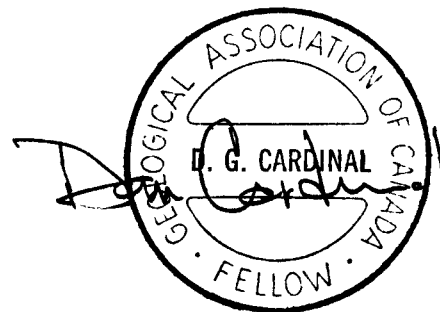
(Field work June 10th to September 30th, 1986)

FILMED

for

Owner: Carlac Minerals Inc.  
P. O. Box 855  
Hope, B. C.

Operator: Newjoy Resources Ltd.



Report by:

Mr. D. G. Cardinal, P. Geol.  
Cardinal Geoconsulting Ltd.  
Hope, B. C.  
August 28, 1987

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## A. INTRODUCTION

During the 1986 field season reconnaissance geological, geochemical and geophysical surveys were conducted on the Master property. The surveys outlined anomalous gold-silver zones associated with fault-shear structures. A crew of four conducted the work which included line cutting, gridline surveys, soil sampling, VLF-EM readings, and bedrock mapping.

The property is situated in a rugged region of the northern Cascade Mountains approximately 19 km southeast of Hope, B.C. During the 1920's prospectors explored the area and located a major shear zone carrying anomalous amounts of gold, silver and gold tellurides.

The writer was retained as a field supervisor and consultant and to document the data and results from the surveys. This assessment report is the outcome of the 1986 program and is filed for assessment work credits.

B. PROPERTY INFORMATION

The Master Ace I and II mineral claims consist of 40 contiguous units, covering some 2,500 acres. The claims are currently owned by a non-reporting company, CARLAC MINERALS, INC. of Hope, B.C. and under option to NEWJAY RESOURCES LTD. of Vancouver, B. C.

The property lies within the New Westminster Mining Division and the records can be examined at the Mining Recorder's office in New Westminster or at the Sub-recorder's office in Vancouver.

The pertinent data is as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Anniversary Date</u>
Master Ace I	2655	20	June 10, 1990
Master Ace II	2656	20	June 10, 1990

C. LOCATION AND ACCESS

The Master Ace Claim Group is located only some 13 air-miles southeast from the town of Hope, B.C. and is presently accessible by helicopter, about a 20 minute ride from Hope.

The Hope-Princeton Highway (Hwy. 3) runs some 2.5 miles south of the south boundary of the claim group. It should be noted that if any future development work were to be conducted on the property, a 3 mile access road can be easily constructed along 18 Mile Creek, at minimum cost.

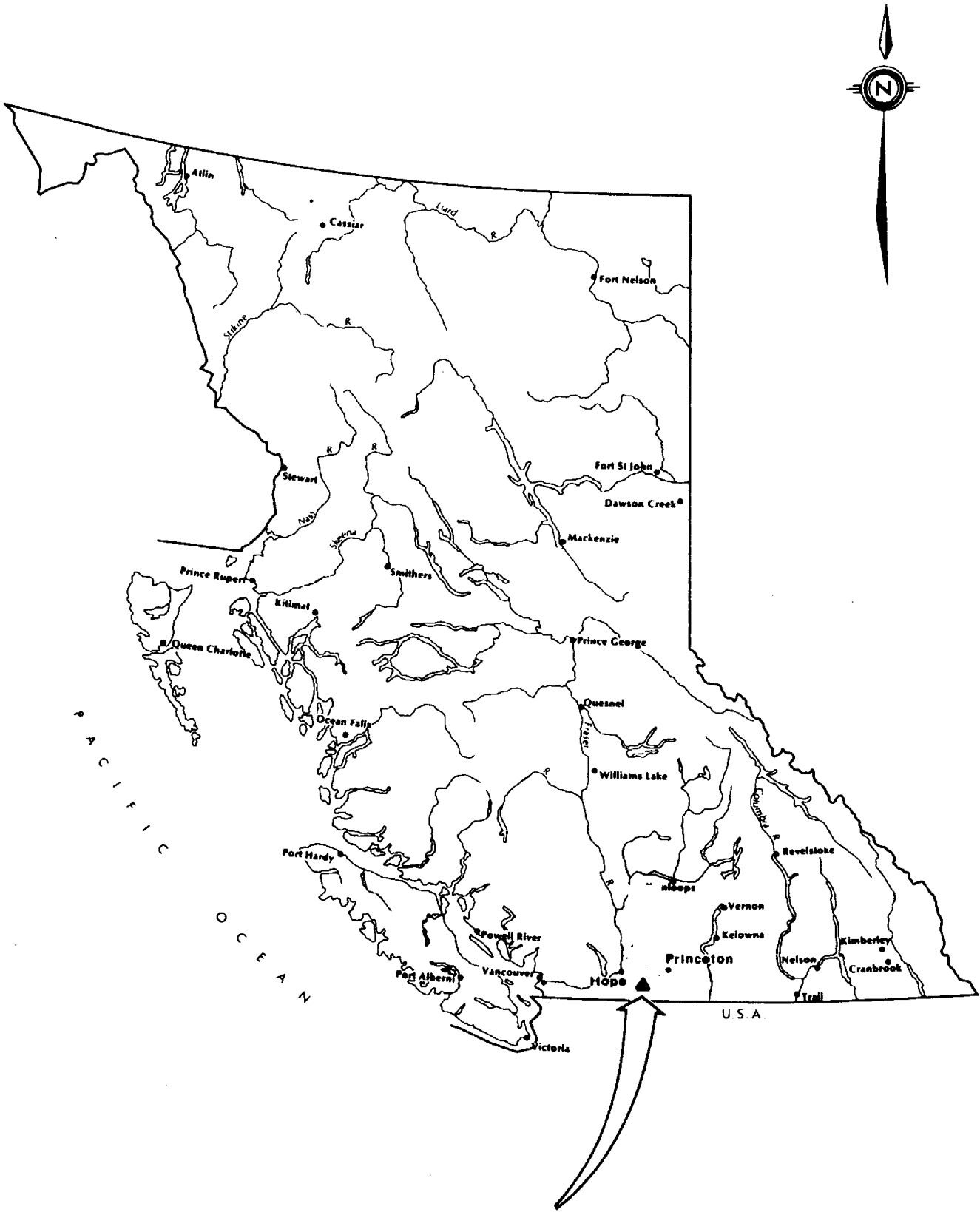
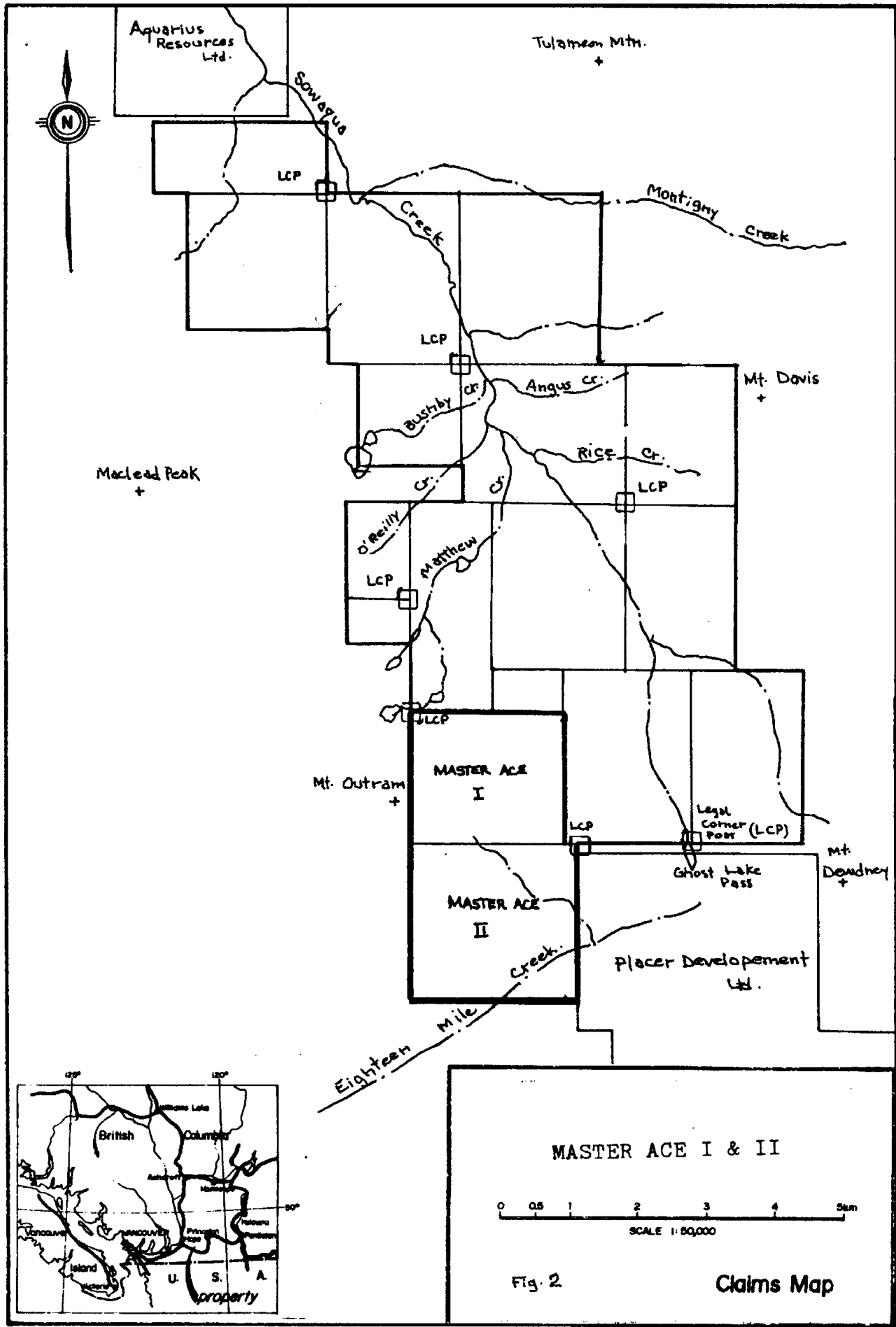


Figure 1  
 - Location map  
 MASTER ACE GOLD GROUP



Location and Access (Cont'd.)

Hope is located approximately 90 miles east of Vancouver, some two hours driving time on the Trans Canada Highway.

D. BACKGROUND AND HISTORY

Following the rediscovery and location of the old Master Ace gold showings, the ground was staked and subsequently acquired by Carlac Minerals, Inc., a private, non-reporting company. In the early 1920's, prospector/mine engineer, the late E. C. Rice and his associates from Coalmont, B.C., discovered gold on the ground now known as the Master Ace I and II. Between 1920-40, Rice and his group continued to explore and prospect the entire length of the Master Ace zone with a series of trenches, pits and short adits.

In 1932, Mining Engineer, P. B. Freeland in his report to the B. C. Minister of Mines stated his findings on the property. An excerpt is as follows:

"Along the southwest granite veins, another quartz vein, varying from 2 to 6 feet in width containing pyrite, arsenopyrite, and chalcopryite is traceable for several miles. Many samples were taken from the outcrop of these veins over 5 foot widths and the results varied from a trace in gold and silver to: Gold, 0.26 oz. per ton; silver, 5.52 oz. per ton. Picked samples assayed as high as \$14.00 in gold per ton."

In the late 1940's an independent mining consultant, W.S. Ford, also examined the property and in a private letter-report concludes:

Background and History Cont'd.

"From what the writer could observe over the length of the claims more work should prove a large tonnage operation."

During his visit to the property, Ford observed quartz veins containing chalcopyrite, copper carbonate and some float carrying visible gold and silver tellurides. Other vein systems were also observed to carry "ribbed" or "banded" arsenopyrite in quartz. He also noted that sperrylite (arsenide of platinum) was believed to have been detected in some of the specimens.

During the 1986 field season Newjay Resources conducted systematic geological, geochemical and geophysical surveys on the property. The compiled field data shows the property to host several interesting gold, silver, copper and arsenic anomalies. Follow-up work is planned for the 1987 field season.

E. REGIONAL GEOLOGY AND MINERALIZATION

Regionally, a major northwest-southeast trending fault-break known as the Coquihalla Serpentine Belt makes up the geological setting. The geological belt can be traced for some 60-65 miles along strike, extending well into the northern state of Washington: it is represented by a semi-continuous unit of serpentinized ultramafic rock. The fault bounded serpentinite divides two distinct rock types - the Hozameen Group on the west, consisting predominately of cherts, and cherty volcanics and sediments of Paleozoic age;



Regional Geology and Mineralization Cont'd.

and, on the east, by the Ladner Group composed of a clastic unit of argillite, siltstone, graywacke, and conglomerate of Jurassic age. Included in this unit is a narrow band of volcanic greenstone (Triassic?).

Associated with the serpentine fault-break is a precious metal bearing structure referred to as the Coquihalls Gold Belt. This belt can be traced for at least 25 miles along strike: some 23 reported gold occurrences and 5 former gold producers form the gold belt. Some of the previously producing mines include the Emancipation, Aurum, Idaho Zone, Pipestem, and the Ward. Approximately 20 miles southeast, and on the same mineral belt is a past producing precious and base metal camp which also has numerous mineral occurrences and at least two past producing mines - the AM and the old Silver Daisey Mine. Located between these two old mining camps is the Master Ace gold property.

The Coquihalla Gold Belt, in part, resembles the Mother Lode Gold Belt found in California. Both belts have similar geological features, structures, and mineral controls. Only recently has the southern extension of the Coquihalla experienced exploration activity - i.e., Placer Development Ltd. is conducting a systematic exploration program on their Ford claims, located immediately east of the Master Ace gold claims. Other junior resource companies are also exploring adjacent areas.

F. FIELD PROCEDURES AND METHODS

A baseline was established striking northerly along the major shear structure for 2 km. The baseline and crosslines were surveyed and measured using topoline and compass bearings. All lines were slope corrected and crosslines established every 50 m along the Newjay zone (0 + 00 to 5 + 00 S) and the Master Ace Zone (0 + 00 to 9 + 00 N) with stations at every 20 m intervals along the crosslines. Between the Newjay and the Master Ace Zones a grid-tieline was also established to connect both zones.

Geochemical and geophysical surveys were conducted over the grid, both soil samples and E.M. readings were obtained from every station where possible. Soils were collected from the 'B' horizon of the soil profile as much as possible, stored in standard sample bags and identified according to the station number. Rock samples were also collected from parts of the grid, particularly over old trenches and iron oxidized bedrock.

A total of some 213 soils were collected and analyzed for Au, Cu, Ag, Pb, As, Sb and Pt. Thirty-eight (38) rock samples and 11 percussion hole samples were also obtained and analyzed for the above elements. The percussion hole samples were collected by using a small pack sack type Atlas Copco percussion drill, drilling into bedrock and catching the fine, powder-like cuttings which were stored in standard soil sample bags. Each sample bag represented 1 to 1.5 metres of cuttings

Field Procedures and Methods Cont'd.

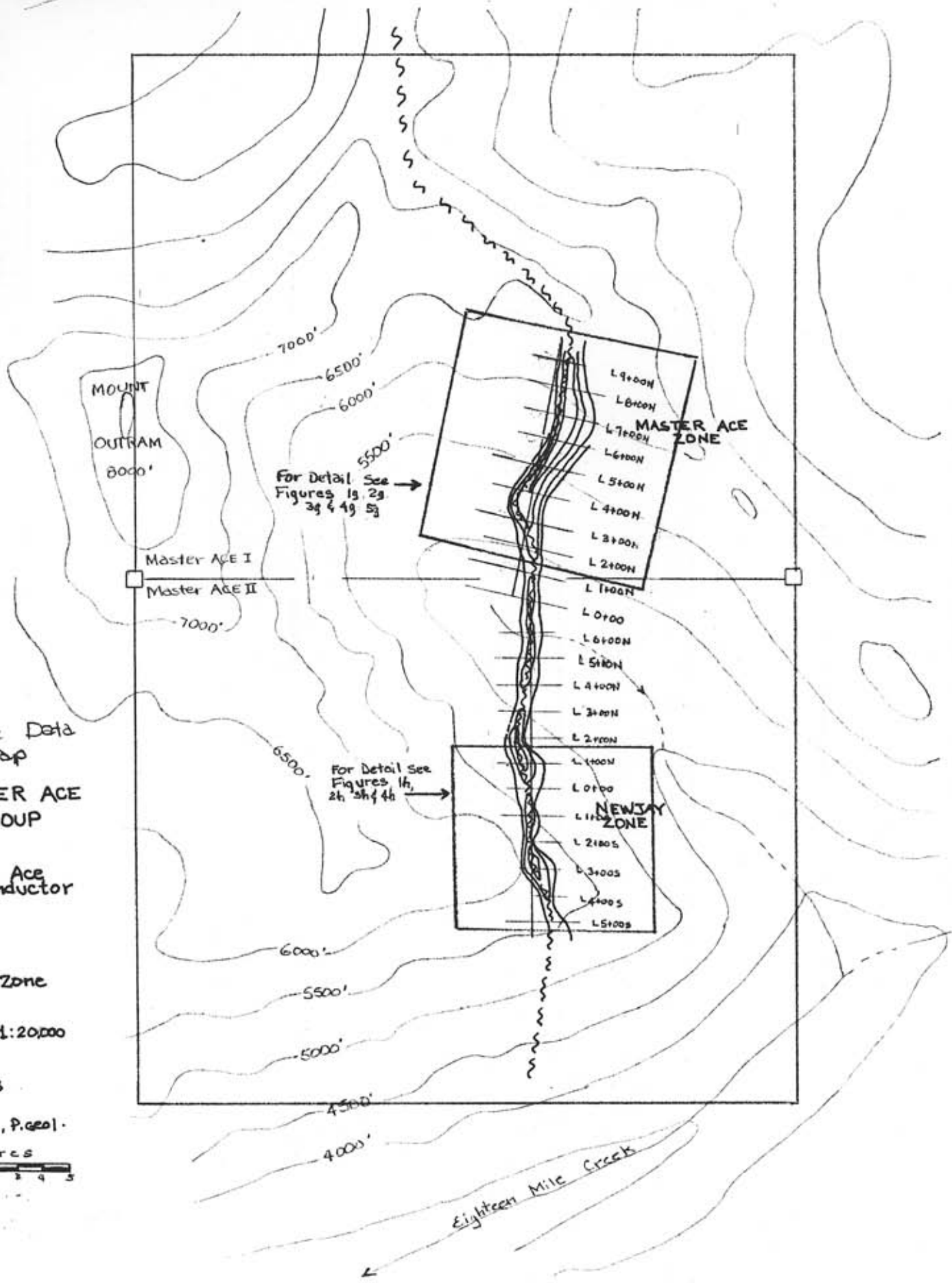
and marked according to hole number and depth.

All of the soils, percussion hole samples, and some of the rock were geochemically analyzed. The method for analysis included sieving the samples to -80 mesh, collecting a .500 gram representative from each sieved sample digested with 3 ml of 3-1-2, Hcl - HNO<sub>3</sub> - H<sub>2</sub>O at a temperature of 95°C for 1 hour and then diluted to 10 ml with water. The diluted product was then run through the AA. For Au, a 10 gram sample is analyzed by FA + AA.

The geophysical surveys carried out over the grid consisted of employing a Sabre Model 27 VLF-EM Receiver. The transmitting station used was Seattle, WA, at a frequency of 18.6 Khz. Readings were recorded at every 20 m interval station along each crossline. At each station both the station number, % Field strength and Dip Angle were recorded. The data was then tabulized and a filtering technique used to screen out background noise. The Fraser Filter Method was employed, and all filtered data was plotted onto grid-plan map and conductive areas defined by contours.

No geostatistical compilations were made to derive threshold values for the geochemical data but anything greater than 50 ppm Cu, 100 ppm As, 1.0 ppm Ag, and 20 ppb Au are considered to be anomalous. Other elements such as Pt and Sb were also geochemically analyzed but these were consistently low and were not plotted or contoured.

Change  
Figures



For Detail See  
Figures 19, 29,  
39 & 49

For Detail See  
Figures 1h,  
2h, 3h & 4h

Reference Data  
Map  
MASTER ACE  
GROUP

Master Ace  
EM Conductor

AU-Ag  
Shear Zone

Scale 1:20,000

Fig. 3

D.G.C. P. Geol.

metres  
0 1 2 3 4 5

Field Procedures and Methods Cont'd.

The highest geochem reading for the Master Ace grid is located at 9 + 70 N - 0 + 00 (B/L) for both the Au, Ag, Cu and As. Much of the grid shows sub-anomalous copper and arsenic with the gold and silver in the background range. Soils in this area are very poorly developed with no real 'B' horizon due to slide material and talus. The Newjay Zone on the other hand, shows some well developed 'B' soil and consequently the geochem data is more reliable. Both the Cu/As contours and the Au/Ag contours are coincidental indicating a geochemical anomaly which can be traced for at least 300 metres, from L 2 +00 S to L 5 + 00 S.

G. MASTER ACE ZONE

1g. Geology and Mineralization

The Master Ace Zone is a major fault/shear represented by an irregular belt of serpentized-ultramafic rock which can be traced on the property for some 3.2 km (2 mi.) along strike (fig. 1g). The belt varies in width ranging between 20 m (65 ft.) to 100 m (330 ft.) wide and strikes northerly with an average dip of 70° to the west. The west contact of the serpentine is faulted up against cherts and cherty argillites, both rock types appear to be mylonitic particularly near and along the fault zone. The fault consists of several paralleling intense, shear zones which is made up of, sub-paralleling quartz veins and serpentine that has been altered to talcose schist. The shear

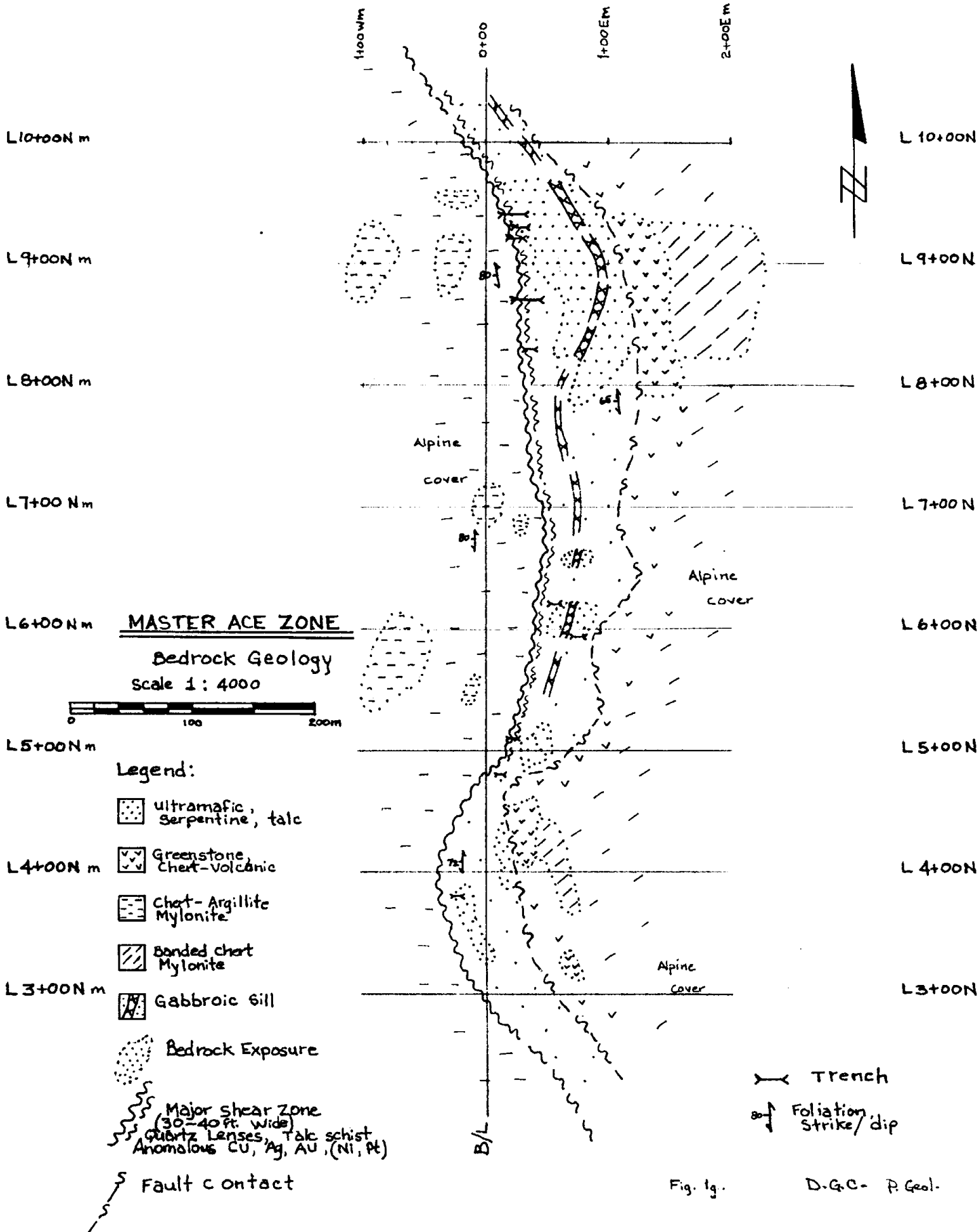
Master Ace Zone

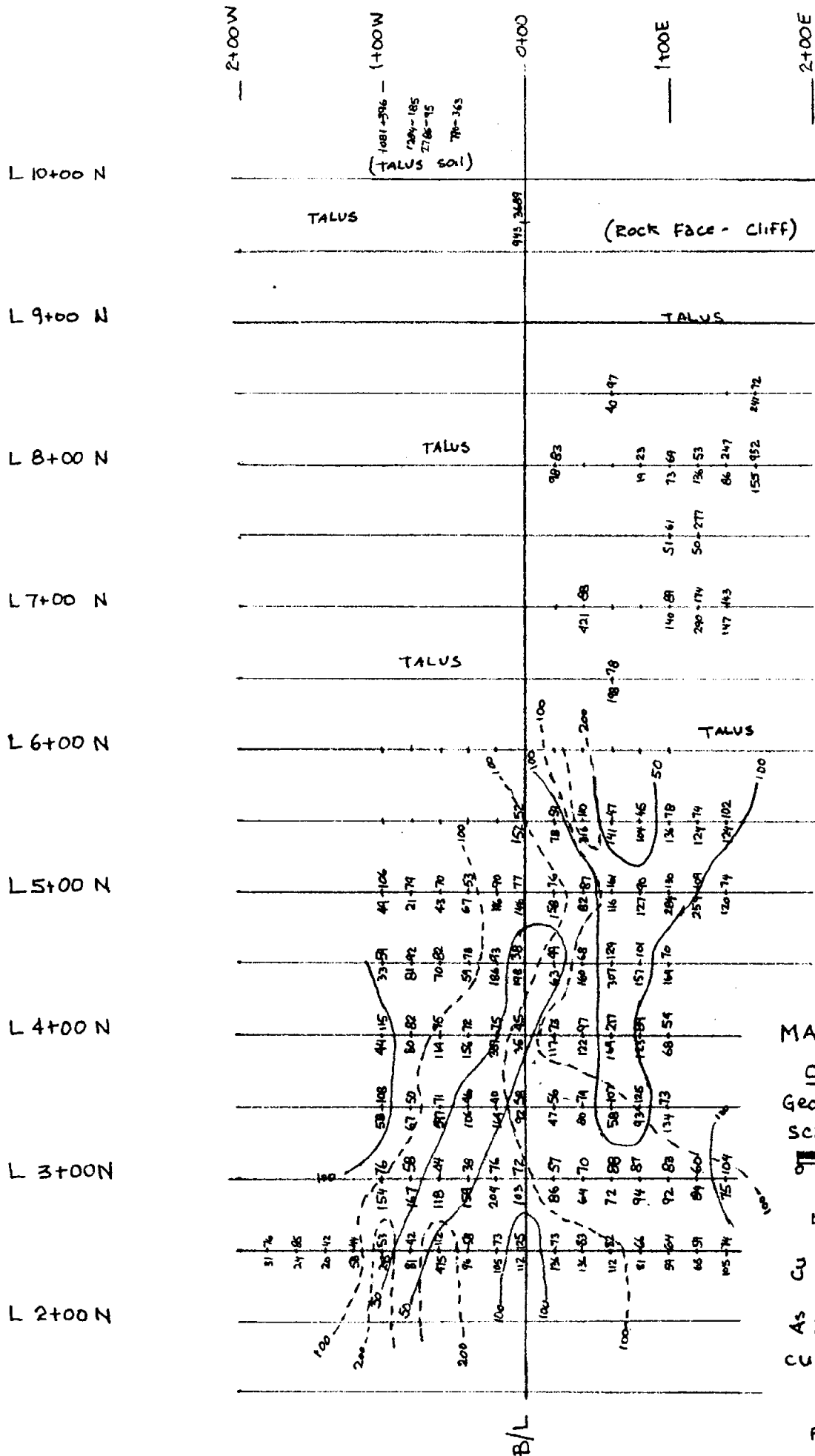
1g. Geology and Mineralization Cont'd.

zone where exposed is strongly weathered and oxidized with widths of 10 m - 20 m (30 - 50 Ft.). A gabbroic-diorite sill forms part of the ultramafic package and runs the length of the belt.

The east contact of the serpentine is also a fault contact but is not as intense or pronounced as the west (fig. 1g). The rocks in contact with the serpentine consist predominantly of cherty volcanics and banded cherts which appear to have undergone less shearing or mylonization than the cherty argillite on the west. Also, no quartz veining or strong alternation was evident along the contact.

The fault/shear zone along the west contact is the primary exploration target that makes up the main Master Ace zone. This zone, although having very limited bedrock exposure has a surface trough-like expression and, combined with geophysics and geochem. can be traced for at least some 760 m (2,500 ft.) along strike. The mineralization is hosted in sub-parallel quartz veins and stringers which are associated with the talcose schist. The sheared quartz veins consistently carry chalcopyrite with malachite-azurite staining and lesser arsenopyrite. Both sulphides are associated with high anomalous gold and silver. Another sulphide, only recently observed and identified in the analysis is Bismuth, also hosted in the quartz veins. Bismuth does not appear to be directly related to the chalcopyrite and arsenopyrite but does carry very high anomalous values of gold and





1081-396  
1284-185  
278-95  
78-363  
(TALUS soil)

MASTER ACE ZONE  
Copper & Arsenic  
Geochemical Anomaly  
Scale 1:4000



Legend:  
Cu ppm  
As ppm  
Cu 50-90  
As 154-76, 147-58, 118-44, 151-38

Fig. 23 D.G.C. P.Ged.



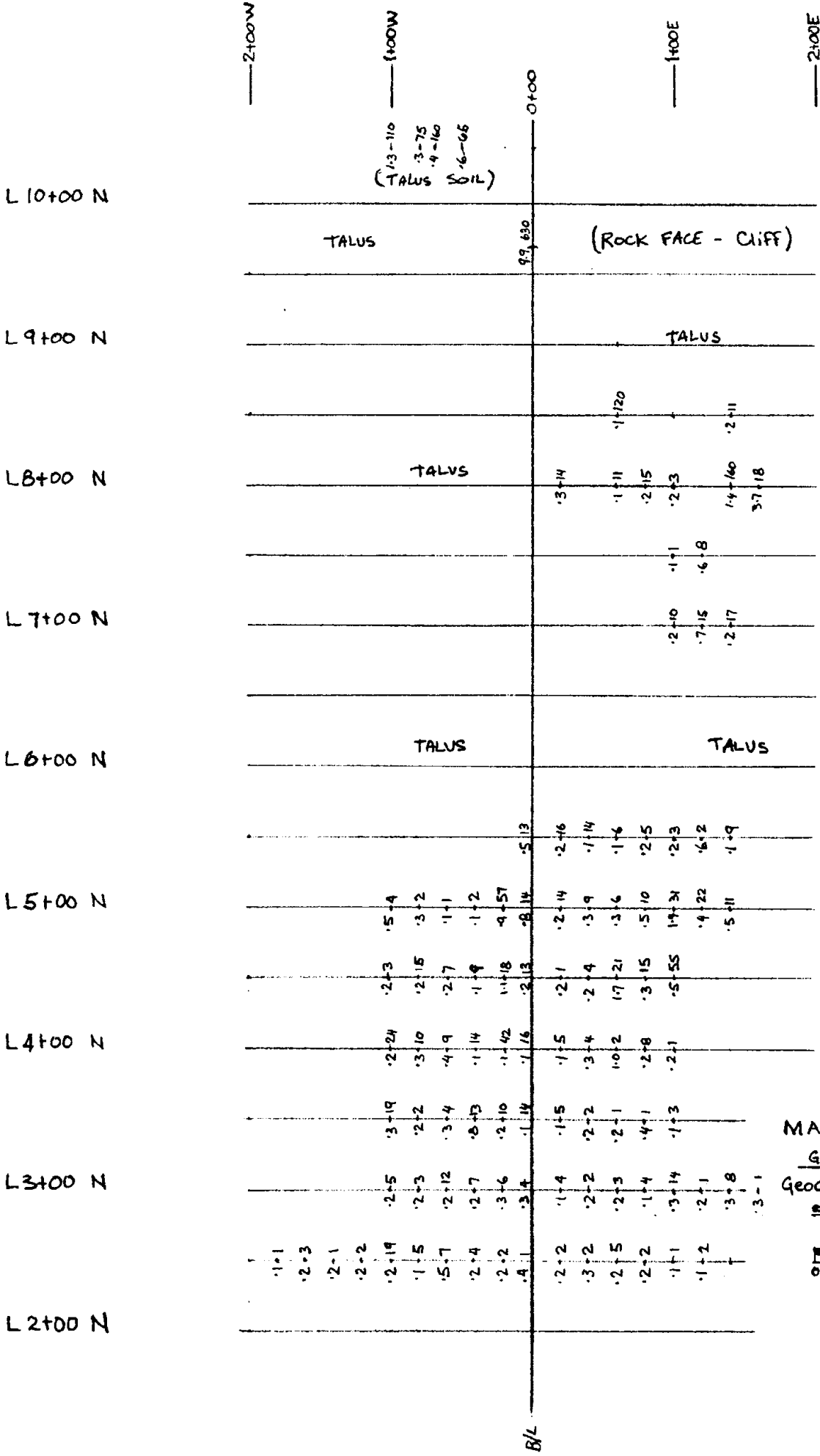


Fig. 39.

1g Geology and Mineralization Cont'd.

associated silver. As a result, the Master Ace shear zone appears to host at least two different types of sulphide assemblages, the chalcopyrite/arsenopyrite assemblage and the bismuth sulphide, with both types being highly anomalous in gold and silver. The talc schist and serpentine within the shear zone characteristically carry disseminated phrrhotite, chalcopyrite, magnetite and lesser pyrite along with detectable platinum.

2g Geochemical and Geophysical Surveys

Geochemical and geophysical surveys were conducted over an established grid which has crosslines spaced every 50 m (160 ft.) and stations at every 20 m (65 ft.) intervals. The grid on the Master Ace zone is approximately 750 m (2,500 ft.) long and combined 11 line-kilometres (7 mi.) of geophysics and geochem were run.

Soil samples were collected over the grid and analyzed for copper (Cu), arsenic (As), gold (Au), and silver (Ag). Cu-As elements were used as pathfinders for Au-Ag because of their close association and also to aid in outlining the shear zone. Both the copper and arsenic anomalies occur along the length of the grid as relatively long, narrow zones and having identical signatures, probably reflecting the underlying shear zone (figs. 2g and 3g). The gold and silver geochem values are relatively low - this is believed to be due to thicker overburden masking the shear zone combined with

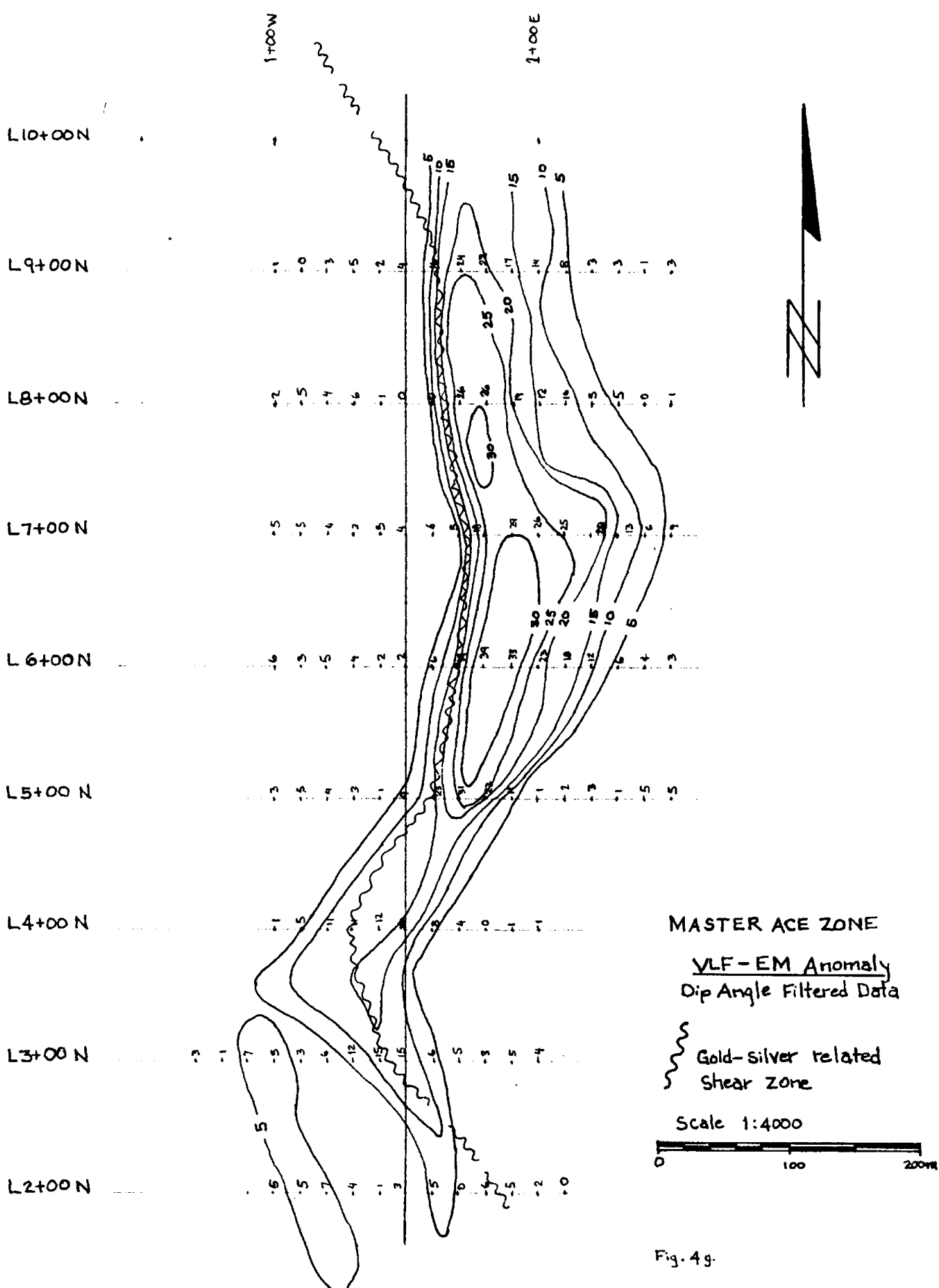


Fig. 4g.

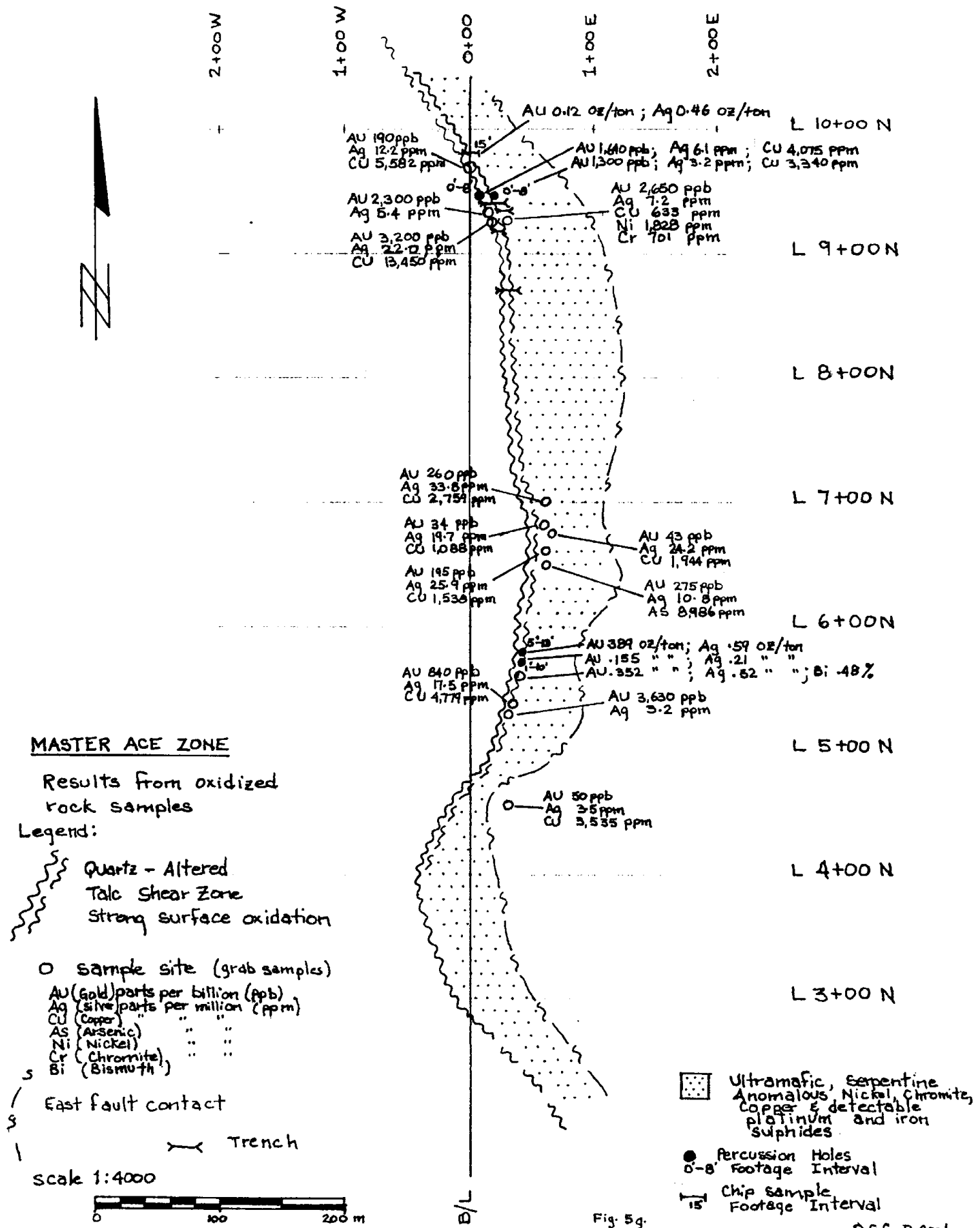
## 2g Geochemical and Geophysical Surveys Cont'd.

the very low mobility of the Au and Ag elements. In areas where the shear outcrops particularly north of L 9+00 N, both the Au and Ag are highly anomalous along with Cu and As.

A detail VLF-EM survey was carried out over the grid employing a Sabre model 27 EM unit. All the dip angle readings were filtered using the Fraser Filter Method, plotted and then contoured. The survey outlined a very strong EM conductor having a similar signature and following the same trend as the geochem data (fig. 4g). The conductor picked up by the EM survey is interpreted to be the shear zone which hosts the anomalous gold and silver. The EM anomaly can be traced for some 600 m (1,900 ft.) and appears to change or swing south-east, south of L 4 + 00 N, and also appears to be open to the north beyond L 9 + 00 N.

## 3g Summary of Results

Numerous samples were collected over various parts of the shear zone. Some are float material believed to have travelled a very short distance and close to being in-place; others are from sub-outcrop or near surface bedrock and some were obtained from exposed bedrock on a saddle-like ridge near L 9+00 N. Majority of the rock samples collected are highly weathered and oxidized and, partly leached as a result, may tend to be lower in gold and silver content.



**MASTER ACE ZONE**

Results from oxidized rock samples

Legend:

- Quartz - Altered
- Talc Shear Zone
- Strong surface oxidation

O Sample site (grab samples)

- AU (Gold) parts per billion (ppb)
- Ag (silver) parts per million (ppm)
- CU (Copper) " "
- AS (Arsenic) " "
- Ni (Nickel) " "
- Cr (Chromite) " "
- Bi (Bismuth) " "

East fault contact

Trench

scale 1:4000



Ultramafic, Serpentine Anomalous, Nickel, Chromite, Copper & detectable platinum and iron sulphides

Percussion Holes  
0-8' Footage Interval

15' Chip sample Footage Interval

Fig. 5g.

3g Summary of Results Cont'd.

Between lines L 9+00 N and L 10 +00 N on a ridge, at about elevation 1,980 m (6,500 ft.) and down steep, precipice face is a well-exposed but highly oxidized section of the shear zone discussed above. A number of random of rock samples collected from this area have returned values of up to 3,200 parts per billion (ppb) Au; 22.0 parts per million (ppm) Ag; and, 13,450 ppm Cu. Rock chips collected across 4.5 m (15 ft.) to test a portion of the 10 m - 12 m (30-40 ft.) wide shear zone assayed 0.12 oz/ton Au and, 0.46 oz/ton Ag. Nickel (Ni) and chromite (Cr) were also anomalous; platinum (Pt) within the detectable range, although low was found to be associated with the Ni and Cr.

Approximately 450 m (1,500 ft.) south between lines L 6 + 00 N and L 5 + 00 N and along strike with the shear zone are also other highly anomalous gold and silver values. The zone along this southern part is masked by overburden and alpine vegetation as a result, rock samples collected are from mineralized quartz float. The quartz float is believed to have transported for only a very short distance since it occurs adjacent to and over the shear itself. Two float grab samples assayed between .102 - .352 oz/ton Au and .10 - .52 oz/ton Ag. Other samples collected are also anomalous in Au, Ag, Cu, Arsenic (As) and including bismuth (Bi).

3g Summary of Results Cont'd.

Thirty (30) shallow percussion holes were drilled using an Atlas Copco portable drill in attempt to get through the oxidized zone and into fresh bedrock and to try to get through the overburden where the shear zone is masked by alpine vegetation and debris. Majority of the shallow (3 - 5 m) holes did not cut solid bedrock but in areas where bedrock was intersected, encouraging values of Au, Ag, and Cu were encountered. Two such holes occur near L 5+00 N (fig. 5g) where vertical sections of 2.4 m (8 ft.) and 2.7 m (9 ft.) intersected .389 oz/ton Au and .59 oz/ton Ag and .155 oz/ton Au and .21 oz/ton Ag respectively.

Five old trenches were re-opened by hand but only two were managed to be excavated down to bedrock which consisted of rusty talc shears and weathered quartz. Three other trenches were dug down to 2.4 m (8 ft.) without hitting any rock. The trenches are over half-a-century old and because of their location, along a steep slope following the shear zone, have all filled in by slide material and grown over by alpine vegetation. Machinery such as bulldozer or backhoe is required to properly excavate the zone which would mean constructing a road into the property.

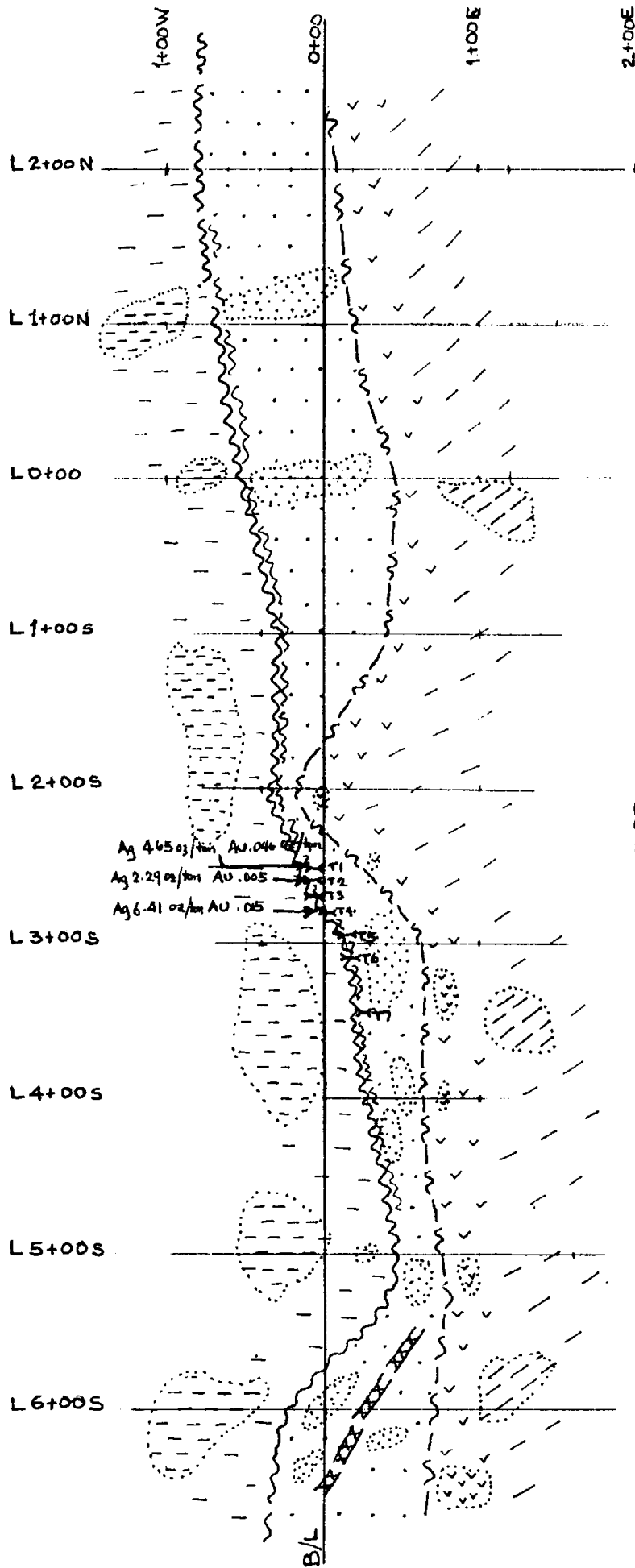
## H. NEWJAY ZONE

### 1h Geology and Mineralization

The bedrock geology on the Newjay Zone is very similar to the Master Ace zone including the structures and alteration features. Although the zones are at least 1 km apart and separated by a glacial scoured valley, both occur on strike and along the same serpentine-ultramafic fault zone.

The Newjay zone has very little (<20%) rock exposure and is located within a heavy forested area and masked by overburden. Geologically, the serpentine is bounded on the west by cherty argillites and on the east by greenstone, cherty volcanics and banded chert (fig. 1h). The west contact is the exploration target along which the Newjay zone occurs, associated with intense shearing which, in turn, hosts a bleached and oxidized zone of talc schist and mineralized quartz veins. During mapping survey, at least seven old trenches were found that follow the shear zone along strike for some distance of 100 m (300 ft.) Because of the steep slopes (30° - 40°) all the trenches are caved-in and mineralization trenched by the old timers is buried by slide material. Four (4) of the trenches were reopened and hand dug down to a depth of 2.4 m (8 ft.); two encountered bedrock exposing decomposed talc schist and heavily mineralized and oxidized quartz veins. The shear zone was partly exposed for about a 3 m (10 ft.) section hosting 1 m (3 ft.) wide quartz veins.





0 100 200 m.  
Scale 1: 4000

### NEWJAY ZONE

#### Bedrock Geology

#### Legend:












-  Serpentinized-ultramafic, Talc
-  Greenstone, Chert-Volcanic
-  Banded chert
-  Chert-Argillite Mylonite
-  Gabbroic sill
-  Rock Outcrop
-  old Trench
-  Shear zone
-  Quartz veins, Talc schist
-  Anomalous CU, Ag, AU (Ni, G, Pt)
-  Fault contact

Fig. 1h.

D.G.C., P. Geol.

1h Geology and Mineralization Cont'd.

The veins are well mineralized carrying, ribbons and bands of arsenopyrite, argentite (silver sulphide) and lesser sulphides of galena, sphalerite and chalcopyrite.

2h Geochemical and Geophysical Surveys

The soil profile on Newjay zone is much better developed and the overburden not as thick as a result, gold and silver geochem analyses tend to be higher and more readily detectable. The grid pattern established over the zone for surveying is the same as the Master Ace grid described in the preceding section.

The soil samples collected over the grid were analyzed for Cu, As, Ag and Au, with all four elements showing coincidental anomalies over the shear zone mentioned above. The Ag-Au anomalies (fig. 2h) compliment each other and tend to be more confined whereas the Cu-As anomalies (fig. 3h) show more of a dispersed pattern probably due to their more mobile nature. Each anomaly occurs along the same area reflecting the trend of the shear zone and its direct relationship with the above metals, more importantly with the gold and silver. All four geochem anomalies trend north-south and can be traced at least 500 m (1,600 ft.) along strike occurring between lines L 1+00 S and L 5+00 S.

A geophysical, VLF-EM survey conducted over the grid also outlined an EM anomaly coincident with the geochemical surveys. A main conductor extending for some 800 m (2,600 ft.)

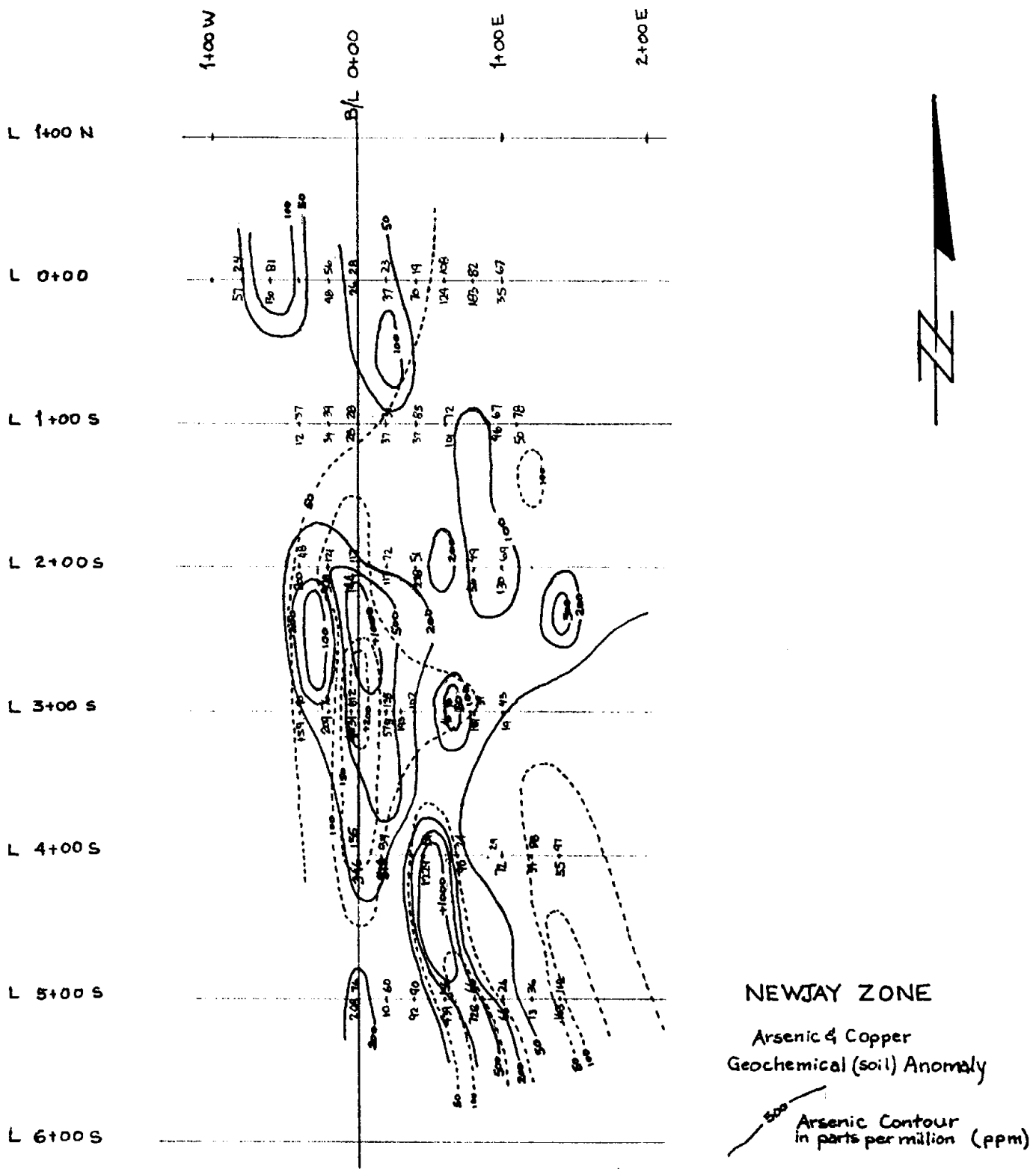
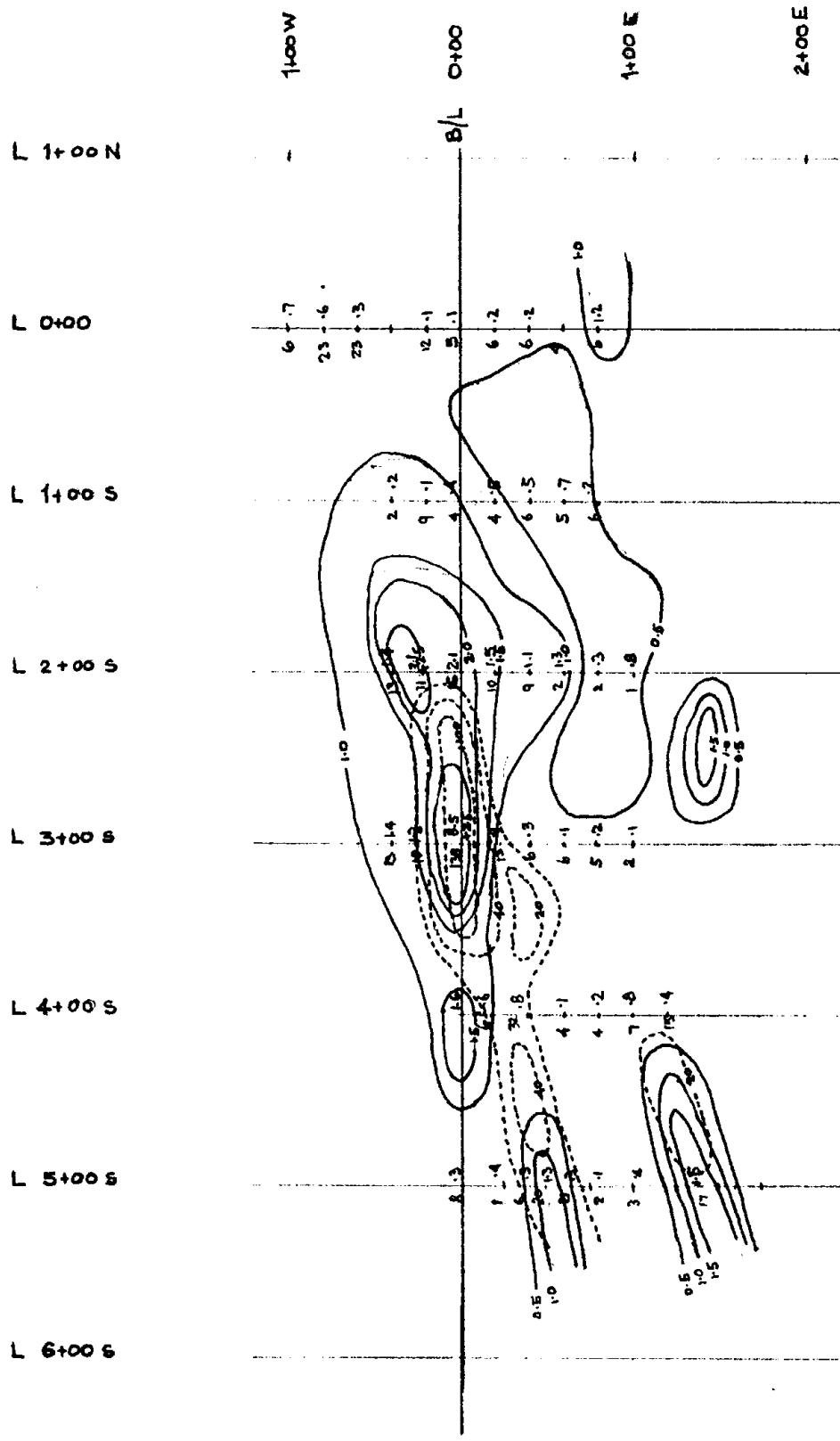


Fig. 2h.



**NEWJAY ZONE**  
**Silver & Gold**  
**Geochemical (soil) Anomaly**

— 20 — Silver Contour  
 in parts per million

- - - 40 - - - Gold Contour  
 in parts per billion

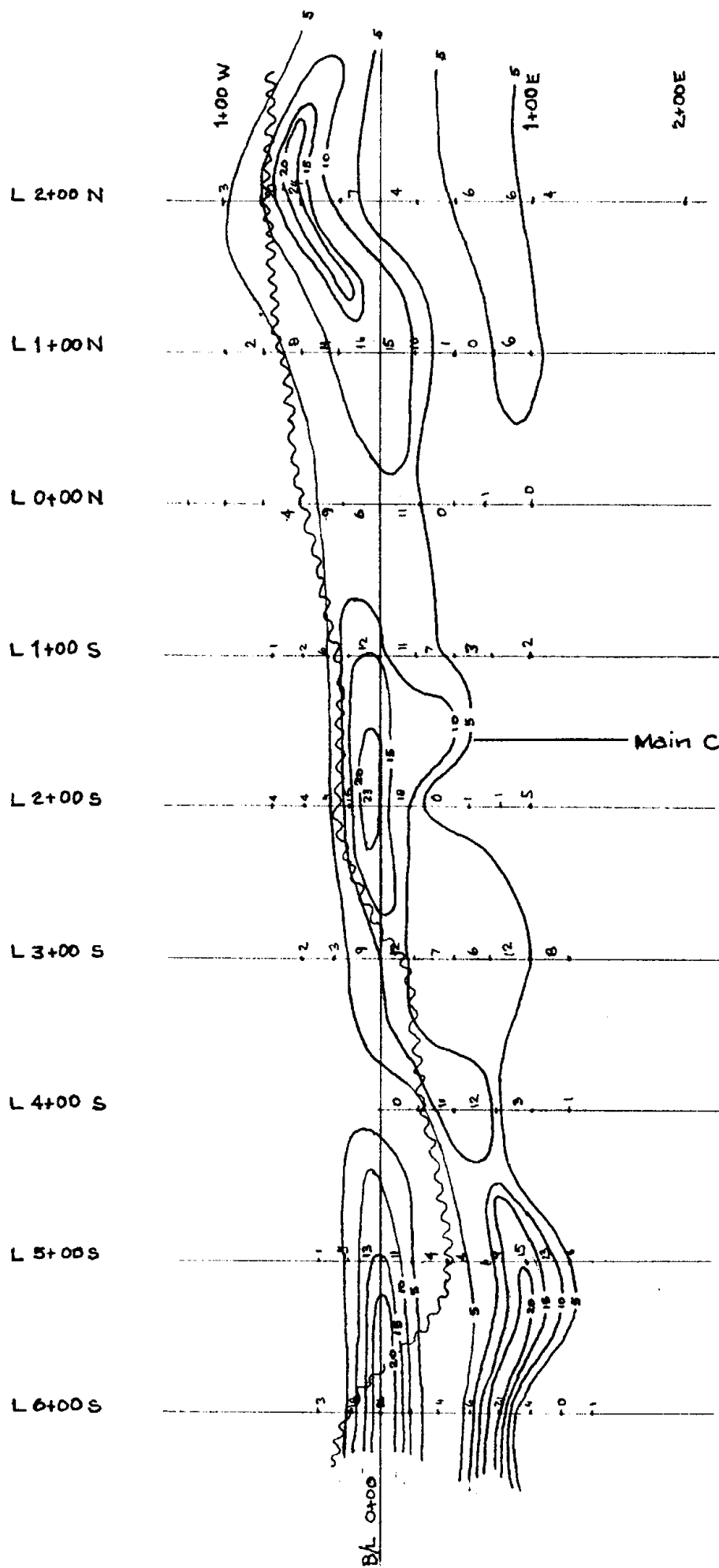
AU	Ag
15	1.4
10	1.2
5	0.5



Scale 1: 4000

Fig. 3th

D.G.C., P.Geol.



NEWJAY ZONE  
VLF-EM Anomaly  
 (Dip Angle Filtered Data)

~ Silver/Gold Anomalous  
 Shear Zone

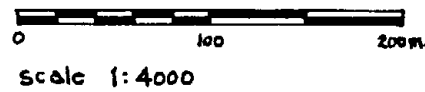


Fig. 4h.

D.G.C., P. Geol.

2h Geochemical and Geophysical Surveys (Cont'd.)

was traced within which three (3) sub-conductors have been identified (fig. 4h), striking approximately north-south. At L 6+00 S a second strong anomaly was also picked up adjacent to and paralleling the main conductor - anomaly. The geophysical anomaly obviously reflects the shear zone identified in the old trenches and that the zone in part, is highly anomalous in silver and associated gold along with related base metals (Cu, Pb, Zn, and As), as shown by the geochemical surveys. The EM anomaly is open and appears to continue to the south.

A number of rusty and weathered samples were collected from the old trenches with more of the encouraging results assaying up to 6.41 oz/ton Ag and .046 oz/ton Au across 1.2 m (4 ft.) of mineralized quartz. Samples obtained from decomposed, rusty talc schist had geochemical results as high as 447 ppm Cu, 3,111 ppm As, 4,971 ppm Pb, 451 ppm Zn, 152.3 ppm Ag, and 585 ppb Au across 3 m (10 ft.) Unfortunately, as mentioned previously, fresh or unweathered samples are difficult to collect because of the relatively thick oxidized zone. It is quite evident that the associated base metals, especially arsenic, is a good pathfinder for the Au and Ag. And from the geochemical surveys both As and Cu are strongly anomalous, extending the potential for Ag and/or Au along strike and at depth.

I. CONCLUSION

The object of the reconnaissance program was to attempt to outline or define potential anomalous areas on the Master Ace property. The combined geological, geophysical, and geochemical surveys indicate this area to contain potentially economic values of precious metals and associated sulphides.

Geological mapping shows a major north-northwest striking fault-shear zone occurring at the contact between altered serpentine and cherty argillites. The fault hosts several sub-parallel, mineralized quartz veins and talc schist that are anomalous in gold and silver and associated copper and arsenic. Coincidental geophysical and geochemical anomalies have further defined the fault structure. With the geophysics, strong EM conductors were outlined. Geochemical surveys also reflected the fault structure as indicated by the anomalous zones. The objective was achieved in that encouraging results were obtained from the surveys and follow-up work is planned for the 1987 field season.

J. COST BREAKDOWN

Personnel:

	<u>Cost</u>
Consulting Geologist - Supervisor 50 days at \$300/d (June 10th - Sept. 30th, 1986)	\$15,000.00
Geophysical/Technician, 60 days at \$175/d (June 10th - Sept. 30th, 1986)	10,500.00

Cost Breakdown (Cont'd.)

	<u>Cost</u>
Prospector/Sampler, 75 days at \$150/d (June 10th - Sept. 30th, 1986)	\$11,250.00
Field Assistant, 75 days at \$120/d	9,000.00

Mobilization:

Helicopter, Jet Ranger 206, \$450./hr. at 12 hours	5,400.00
----------------------------------------------------	----------

Camp:

Groceries, fuel, field gear (axes, flagging, sample bags, etc.)	3,500.00
--------------------------------------------------------------------	----------

Field Equipment:

VLF-EM Rental, 60 days at \$15/d	900.00
----------------------------------	--------

Analysis:

Assay - Rock (Au, Ag, Cu, As, Pt) 38 samples at \$20/sample	760.00
----------------------------------------------------------------	--------


Geochem - Soil (Au, Ag, Cu, As, Pt, Sb) 213 samples at \$10/sample	2,130.00
-----------------------------------------------------------------------	----------

Office:

Report writing, typing, drafting, xerox	<u>2,000.00</u>
-----------------------------------------	-----------------

TOTAL	<u>\$60,440.00</u>
-------	--------------------

Respectfully submitted,

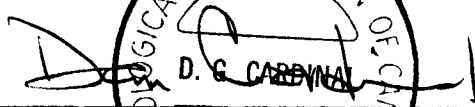
  
Mr. D. G. Cardinal, Geol.




CERTIFICATE

I, Daniel G. Cardinal of the Municipality of Hope,  
British Columbia, do hereby certify that:

1. I am a professional geologist residing in Hope, B.C.  
Mailing address, P. O. Box 594, Hope, B.C., VOX 1L0.
2. I am a graduate of the University of Alberta (1975)  
and hold a B.Sc. degree in Geology.
3. I am registered as a Fellow of the Geological  
Association of Canada, (F.G.A.C.) and a member in  
good standing with the Association of Professional  
Engineers, Geologists and Geophysicists of Alberta.  
(P. Geol.)
4. I have been practising my profession for the past  
eleven years.
5. The findings in this report are from data acknowledged  
and from a personal property examination of the  
Master Ace Claim Group between June 10th and Sept-  
ember 31st, 1986.

  
\_\_\_\_\_  
Mr. D.G. Cardinal, P. Geol.



August 28, 1987  
Hope, B. C.

REFERENCES

- Cairnes, C. E. (1920): Coquihalla Area, British Columbia, Geol. Surv., Canada, Summ. Rept., 1920.
- .....(1929): The Serpentine Belt of Coquihalla Region, Yale District, British Columbia, Geol. Surv., Summ. Rept., 1929.
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- Monger, J. W. H. (1970): Hope Map area, West Half (92H W $\frac{1}{2}$ ), British Columbia, Geol. Surv., Canada, Paper 69-47
- Ray, G. E. (1984): Coquihalla Gold Belt Project, B. C. Ministry of Energy, Mines & Pet. Resources., Geological Fieldwork, 1983, Paper 1984 - 1.
- Ford, W. S. (1940): A Brief Report on the Master Ace Groups of M.C.'S (unpub. consultant letter - report)
- Freeland, P. B. (1932): Peers Creek Section - Master Ace B. C. Minister of Mines Annual Report.

III

ANALYTICAL DATA

ACME ANALYTICAL LABORATORIES LTD.  
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
 PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 11 1986

DATE REPORT MAILED: *Aug 20/86*

**GEOCHEMICAL ICP ANALYSIS**

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN, FE, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: P1-3 SOILS P4 SILTS #80 MESH AU\* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER.

CARDINAL GEOCONSULTING

FILE # 86-1977

PAGE 1

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
M/T-1	179	.2	624	90
L4+75N 0+05E	90	1.3	440	18
L11+30N 1+00W	171	.1	158	16
L10+40N 1+00W	369	1.3	1081	110
L10+40N 0+80W	185	.3	1284	75
L10+40N 0+70W	95	.4	2786	160
L10+40N 0+50W	363	.6	790	65
L9+70N 0+00W	3689	9.9	943	630
L8+50N 0+60E	97	.1	40	120
L8+50N 1+40E	72	.2	241	11
L8+00N 0+20E	83	.3	98	14
L8+00N 0+60E	23	.1	19	11
L8+00N 0+80E	69	.2	73	15
L8+00N 1+00E	53	.2	136	3
L8+00N 1+40E	247	1.4	86	160
L8+00N 1+60E	952	3.7	155	18
L7+50N 1+00E	61	.1	51	1
L7+50N 1+20E	277	.6	50	18
L7+00N 1+00E	89	.2	140	10
L7+00N 1+20E	174	.7	290	15
L7+00N 1+40E	143	.2	147	17
L5+50N 0+00	52	.5	152	13
L5+50N 0+20E	59	.2	78	16
L5+50N 0+40E	110	.1	316	14
L5+50N 0+60E	47	.1	141	6
L5+50N 0+80E	45	.2	104	5
L5+50N 1+00E	78	.2	136	3
L5+50N 1+20E	74	.6	124	2
L5+50N 1+40E	102	.1	124	9
L5+00N 1+00W	106	.5	49	4
L5+00N 0+80W	79	.3	21	2
L5+00N 0+60W	70	.1	43	1
L5+00N 0+40W	53	.1	67	2
L5+00N 0+20W	90	.9	196	57
L5+00N 0+00	77	.8	146	14
L5+00N 0+20E	76	.2	158	14
STD C/AU-0.5	61	7.1	37	480

*High Ni values.*

*Master Acc*

*Zone*

## CARDINAL GEOCONSULTING

FILE # 86-1977

PAGE 2 ✓

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
L5+00N 0+40E	87	.3	82	9
L5+00N 0+60E	161	.3	116	6
L5+00N 0+80E	90	.5	127	10
L5+00N 1+00E	130	1.4	284	31
L5+00N 1+20E	109	.4	259	22
L5+00N 1+40E	74	.5	120	11
L4+50N 1+00W	59	.2	33	3
L4+50N 0+80W	92	.2	81	15
L4+50N 0+60W	82	.2	70	7
L4+50N 0+40W	78	.1	59	9
L4+50N 0+20W	93	1.1	186	18
L4+50N 0+00	38	.2	198	13
L4+50N 0+20E	49	.2	63	1
L4+50N 0+40E	68	.2	160	4
L4+50N 0+60E	129	1.7	307	21
L4+50N 0+80E	101	.3	157	15
L4+50N 1+00E	70	.5	164	55
L4+00N 1+00W	115	.2	44	24
L4+00N 0+80W	82	.3	80	10
L4+00N 0+60W	75	.4	114	9
L4+00N 0+40W	72	.1	156	14
L4+00N 0+20W	75	.1	351	42
L4+00N 0+00	45	.1	35	16
L4+00N 0+20E	73	.1	117	5
L4+00N 0+40E	97	.3	122	4
L4+00N 0+60E	217	1.0	169	2
L4+00N 0+80E	89	.2	123	8
L4+00N 1+00E	54	.2	68	1
L3+50N 1+00W	108	.3	58	19
L3+50N 0+80W	50	.2	67	2
L3+50N 0+60W	71	.3	597	4
L3+50N 0+40W	46	.8	106	13
L3+50N 0+20W	40	.2	164	10
L3+50N 0+00	58	.1	92	14
L3+50N 0+20E	56	.1	47	5
L3+50N 0+40E	74	.2	80	2
STD C/AU 0.5	62	7.2	44	495

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
L3+50N 0+60E	107	.2	58	1
L3+50N 0+80E	125	.4	93	1
L3+50N 1+00E	73	.1	134	3
L3+00N 1+00W	76	.2	154	5
L3+00N 0+80W	58	.2	167	3
L3+00N 0+60W	44	.2	118	12
L3+00N 0+40W	38	.2	159	7
L3+00N 0+20W	76	.3	204	6
L3+00N 0+00	72	.3	103	4
L3+00N 0+20E	57	.1	86	4
L3+00N 0+40E	70	.2	64	2
L3+00N 0+60E	88	.2	72	3
L3+00N 0+80E	87	.1	94	4
L3+00N 1+00E	83	.3	92	14
L3+00N 1+20E	60	.2	84	1
L3+00N 1+40E	104	.3	75	8
L3+00N 1+60E	45	.3	82	1
L3+00N 1+80E	70	.3	91	4
L3+00N 2+00E	57	.3	33	2
L2+50N 1+80W	76	.1	31	1
L2+50N 1+60W	85	.2	24	3
L2+50N 1+40W	42	.2	20	1
L2+50N 1+20W	44	.2	58	2
L2+50N 1+00W	53	.2	243	19
L2+50N 0+80W	42	.1	81	5
L2+50N 0+60W	112	.5	475	7
L2+50N 0+40W	58	.2	96	4
L2+50N 0+20W	73	.2	105	2
L2+50N 0+00	125	.4	112	1
L2+50N 0+20E	73	.2	136	2
L2+50N 0+40E	83	.3	136	2
L2+50N 0+60E	82	.2	112	5
L2+50N 0+80E	66	.2	81	2
L2+50N 1+00E	64	.1	59	1
L2+50N 1+20E	59	.1	65	2
L2+50N 1+40E	74	.3	105	3
STD C/AU-0.5	61	7.0	40	510

CARDINAL GEOCONSULTING

FILE # 86-1977

PAGE 4 ✓

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
L7+00N 0+40E	88	.7	421	29
L6+50N 0+60E	78	.2	198	19
L5+50N 0+60E	132	.2	388	20
L2+50N 0+36E	80	.4	121	4

MASTER ACE

CME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 11 1986

DATE REPORT MAILED: Aug 15/86

### GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: ROCK CHIPS AU\* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: D. J. Jeff. DEAN TOYE. CERTIFIED B.C. ASSAYER.

CARDINAL GEOCONSULTING

FILE # 86-1976

PAGE 1

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
R.L.11+30N 1+00W	194	.3	85	51
L10+40N 0+50W	40	.3	48	8
L9+75N 0+00	573	1.0	27	33
L9+70N 0+00	5582*	12.2*	77	190*
L7+00N 0+60E	2759*	33.8*	49	260*
L7+00N 0+60E A	136	7.3	1702	75
L6+80N 0+60E	1088	19.7	28	34
L6+75N 0+65E	1944	24.2	32	43
L6+60N 0+60E	1538*	25.9*	24	195*
L6+50N 0+60E	99	10.8	898*	275*
L5+35N 0+35E	4779*	17.5*	114	840*
L5+30N 0+30E	17	3.2	66	3630*
L4+55N 0+30E	3535*	3.5*	267	50
B/L 4+75	27	1.4	109	85
STD C/AU 0.5	63	7.2	43	500

Master Ace  
Rock - GRAB  
SAMPLES

*Leung*



ROME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: SEPT 10 1986

DATE REPORT MAILED: *Sept. 19/86*

### GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: CUTTING AU\* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toy* DEAN TOYE. CERTIFIED B.C. ASSAYER.

CARDINAL GEOCONSULTING

PROJECT-MASTER ACE FILE# 86-2558

PAGE 1

*Master  
Ace  
zone*

*Shallow  
Percussion  
holes*

SAMPLE#	Cu PPM	Ag PPM	Au* PPB
T1-PC1 2-5	1060	1.9	350
T1-PC1 5-8	888	1.1	160
T1-PC2 0-8	3340	3.2	1300
T1-PC3 0-5	843	1.8	280
T1-PC3 5-8	712	1.4	130
T1-PC4/5 0-8	3818	2.9	680
T1-PC6 0-8	281	.4	28
T1-PC7/8 0-8	4075	6.1	1640
T1-PC9 0-8	832	1.4	210
T1-PC10 0-8	3070	3.2	340
T3-PC1	909	1.0	60

SAMPLE#	Cu PPM	Ag PPM	Ni PPM	As PPM	Cr PPM	Au** PPB	Pt** PPB	Pd** PPB
B/L 9+50N <A>	3025	15.8	315	177	321	4047	2	2
B/L 9+50N <B>	362	.7	964	38	252	68	2	4
9+50N 0+20E	90	.2	1884	56	825	28	6	7
9+45N 0+20E <A>	65	.1	1841	41	769	20	9	9
9+45N 0+20E <B>	104	.8	72	3	35	2400	2	2
9+40N 0+05E	2482	2.7	90	22	88	1270	2	3
9+40N 0+10E	2016	3.8	43	5	14	75	2	2
9+40N 0+20E <A>	338	.9	37	3	20	617	2	2
9+40N 0+20E <B>	41	.1	1874	28	645	33	8	10
STD C/FA-5X	59	7.2	72	39	58	103	103	101

2007 - Grab Samples  
Float & TALUS

Master Acc 301e

CARDINAL GEOCONSULTING PROJECT-MASTER ACE FILE# 86-2558

PAGE 2

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Pt** PPB	Pd** PPB
5+75N 0+40E (C)	1	70	65	3	17.8	16	1	48	.54	18	5	12	1	1	1	3	4760	1	.01	.001	2	8	.07	1	.01	2	.01	.01	.01	2	2	2

*Handwritten notes:*  
 Mo 11  
 Cu 70  
 Pb 65  
 Zn 3  
 Ag 17.8  
 Ni 16  
 Co 1  
 Mn 48  
 Fe .54  
 As 18  
 U 5  
 Au 12  
 Th 1  
 Sr 1  
 Cd 1  
 Sb 3  
 Bi 4760  
 V 1  
 Ca .01  
 P .001  
 La 2  
 Cr 8  
 Mg .07  
 Ba 1  
 Ti .01  
 B 2  
 Al .01  
 Na .01  
 K .01  
 W 2  
 Pt 2  
 Pd 2

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED SEPT 10 1986  
DATE REPORTS MAILED *Sept 19/86*

### ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PULVERIZED TO -100 MESH.  
AG\*\* AND AU\*\* BY FIRE ASSAY

ASSAYER *D. Toye* DEAN TOYE . CERTIFIED B.C. ASSAYER

CARDINAL GEOCONSULTING PROJECT MASTER ACE FILE# 86-2558A PAGE# 1

SAMPLE	Ag** oz/t	Au** oz/t
5+75N 0+40E <A>	.59	.389
5+75N 0+40E <B>	.21	.155

*Master Ace*  
*Rock - Grab*  
*Samples - Float*  
*(talus)*

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN, FE, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: ROCK CHIPS H6 ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: JUNE 23 1986 DATE REPORT MAILED: *July 2/86* ASSAYER: *D. Payne* DEAN TOYE, CERTIFIED B.C. ASSAYER.

CARDINAL GEOCONSULTING FILE # B6-1119

PAGE 1

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	Hg
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
T-1	2	<u>92</u>	<u>4971</u>	1	<u>152.3</u>	15	6	50	6.04	<u>64884</u>	5	ND	1	3	4	36	<u>385</u>	1	.03	.01	2	25	.04	2	.01	7	.03	.01	.01	<u>1721</u>	70
T-3	2	74	<u>1267</u>	<u>451</u>	7.6	<u>247</u>	26	716	4.59	<u>29877</u>	5	ND	1	14	86	9	7	39	.23	.04	5	<u>156</u>	3.22	52	.02	9	1.99	.02	.14	10	10
STD C	21	59	36	132	7.0	68	29	1181	3.95	40	17	7	32	47	17	15	20	60	.48	.10	38	58	.88	177	.08	37	1.73	.07	.11	13	1300

Assay required for correct result

*Verify sample*

*3x 12  
11 p.c. notes*

ACME ANALYTICAL LABORATORIES LTD.  
452 E. HASTINGS, VANCOUVER B.C.  
FH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED JUNE 23 1986  
DATE REPORTS MAILED *July 2/86*

### ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PULVERIZED TO -100 MESH.  
AG\*\* AU\*\* & PT\*\* BY FIRE ASSAY

ASSAYER *D. Toye* DEAN TOYE . CERTIFIED B.C. ASSAYER

CARDINAL GEOCONSUTING FILE# 86-1119

PAGE# 1

SAMPLE	As %	Ag** oz/t	Au** oz/t	Pt** oz/t
T-1	7.19	4.65	.010	.001
T-2	3.35	2.29	.005	.001
T-3	3.29	.22	.001	.001

*Very fine  
sample for analysis*

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JULY 21 1986

DATE REPORT MAILED: *July 25/86*.....

### GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: SOIL -80 MESH AU: ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toy* DEAN TOYE. CERTIFIED B.C. ASSAYER.

CARDINAL GEOCONSULTING PROJECT - MASTER ACE FILE # 86-1573 PAGE 1

SAMPLE#	Ag PPM	As PPM	W PPM	Au* PPB
TS-1A	.2	4252	35	85
#5340	14.5	1189	1	205
0+00-1+00E	1.9	99	2	2

*Neway Zone*

*Back grab  
samples*

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED JULY 21 1986

DATE REPORTS MAILED

*July 25/86*

### ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PULVERIZED TO -100 MESH.

ASSAYER *D. Toye* DEAN TOYE , CERTIFIED B.C. ASSAYER

CARDINAL GEOCONSULTING PROJECT MASTER ACE FILE# 86-1573A PAGE# 1

SAMPLE	Ag oz/t	Au oz/t	W %
TR-1	<u>.51</u>	<u>.046</u>	.01
TR-2	.14	.001	.01
TR-3	<u>.50</u>	.011	.01
TR-4	<u>6.41</u>	.015	.01
DC-1	.02	.001	-

*NEVADA ZONE  
Traceable to 1986*



ACME ANALYTICAL LABORATORIES LTD.  
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
 F NE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JULY 3 1986

DATE REPORT MAILED: *July 10/86...*

**GEOCHEMICAL ICP ANALYSIS**

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: SOILS -80 MESH AU\*\* ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE. *P = Pulverized*  
*p4 - ROCKS*

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

CARDINAL GEOCONSULTING PROJECT - MASTER ACE FILE # 86-1294 PAGE 1

SAMPLE#	Cu PPM	Pb PPM	Ag PPM	As PPM	Sb PPM	Au** PPB	Pt** PPB
L0+00 1+00W P	24	33	.7	57	2	6	2
L0+00 0+80W P	81	19	.6	130	6	23	2
L0+00 0+60W P	41	28	.3	147	7	23	2
L0+00 0+20W	56	11	.1	48	2	12	2
L0+00 0+00W	28	16	.1	26	6	5	2
L0+00 0+20E	23	17	.1	37	2	6	2
L0+00 0+40E	19	19	.2	70	2	6	2
L0+00 0+60E	108	35	.2	124	2	4	2
L0+00 0+80E	82	22	1.2	183	4	6	2
L0+50S 1+00W	67	16	.3	35	2	29	2
L0+50S 0+80W	67	18	.7	43	6	6	2
L0+50S 0+60W	57	19	.6	26	3	4	2
L0+50S 0+40W	36	13	.4	20	2	5	2
L0+50S 0+20W	25	14	.4	29	2	1	2
L0+50S 0+00W	48	36	.5	51	2	4	2
L0+50S 0+20E	43	49	.5	121	6	3	2
L0+50S 0+40E	32	19	.7	94	2	5	2
L0+50S 0+60E	53	18	.9	83	3	6	2
L0+50S 0+80E	67	19	.4	52	2	4	2
L1+00S 0+40W	37	14	.2	12	10	2	2
L1+00S 0+20W	39	30	.1	34	4	9	2
L1+00S 0+00W	28	18	.4	28	7	4	2
L1+00S 0+20E	31	18	.5	37	4	4	2
L1+00S 0+40E	85	20	.5	37	2	6	2
L1+00S 0+60E	72	26	.7	101	3	6	2
L1+00S 0+80E	67	13	.2	46	10	5	2
L1+00S 1+00E	78	20	.3	50	2	6	2
L1+50S 0+60W	52	16	.4	77	2	10	2
L1+50S 0+00W	75	27	1.4	90	2	7	2
L1+50S 0+20E	87	30	.3	93	2	11	2
L1+50S 0+40E	90	31	.3	91	7	15	2
L1+50S 0+60E	94	31	.8	129	3	15	2
L1+50S 0+80E	86	23	.9	87	10	10	2
L1+50S 1+00E	107	22	.9	101	3	8	2
L2+00S 0+40W	98	42	1.4	200	9	13	2
L2+00S 0+20W	121	35	3.1	308	2	11	2
STD C/FA-AU	62	37	6.9	38	15	50	-

*Newjay  
Zone*

SAMPLE#	Cu PPM	Pb PPM	Ag PPM	As PPM	Sb PPM	Au** PPB	Pt** PPB
L2+00S 0+00W	117	29	2.1	144	2	15	2
L2+00S 0+20E	72	11	1.5	117	2	10	2
L2+00S 0+40E	51	24	1.1	238	7	9	2
L2+00S 0+60E	49	19	1.3	56	3	2	2
L2+00S 0+80E	69	24	.3	90	2	2	2
L2+00S 1+00E	50	50	.8	130	2	1	2
L2+50S 0+40W	53	28	1.3	186	2	9	2
L2+50S 0+20W	49	22	.9	63	5	3	2
L2+50S 0+00W	119	81	2.3	3090	2	177	4
L2+50S 0+20E	41	37	.3	613	2	10	2
L2+50S 0+40E	61	31	.6	736	2	6	2
L2+50S 0+60E	57	20	.9	168	2	3	2
L2+50S 0+80E	61	30	.9	155	2	8	2
L2+50S 1+00E	37	29	.2	112	2	10	2
L2+50S 1+20E	65	27	1.8	800	2	6	2
L2+50S 1+40E	36	40	.5	172	2	2	2
L3+00S 0+40W	90	42	1.4	159	2	13	2
L3+00S 0+20W	76	40	1.2	209	7	10	2
L3+00S 0+00W	612	913	8.5	4031	4	138	4
L3+00S 0+20E	102	39	.9	573	2	13	2
L3+00S 0+40E	135	17	.3	192	2	6	5
L3+00S 0+60E	16	14	.1	46	2	6	2
L3+00S 0+80E	39	40	.2	189	3	5	2
L3+00S 1+00E	43	6	.1	19	2	2	2
L3+50S 0+00W	175	15	1.2	360	2	43	8
L3+50S 0+20E	97	25	.4	576	4	49	3
L3+50S 0+40E	37	16	.3	105	2	6	2
L3+50S 0+60E	46	13	.2	110	2	37	6
L3+50S 0+80E	82	14	.4	51	2	2	2
L3+50S 1+00E	58	13	.1	27	2	3	2
L3+50S 1+20E	85	24	.7	56	2	4	2
L4+00S 0+00W	155	17	1.6	305	2	10	4
L4+00S 0+20E	37	20	.6	137	2	6	2
L4+00S 0+40E	51	22	.8	1229	6	32	2
L4+00S 0+60E	24	8	.1	90	9	4	3
L4+00S 0+80E	29	10	.2	72	2	4	3
STD C/FA-AU	61	39	7.1	36	17	53	-

SAMPLE#	Cu PPM	Pb PPM	Ag PPM	As PPM	Sb PPM	Au** PPB	Pt** PPB
L4+00S 1+00E	88	14	.8	34	2	7	2
L4+00S 1+20E	97	14	.4	55	4	15	2
L4+50S 0+00W	102	17	.3	146	3	34	2
L4+50S 0+20E	71	15	.4	110	5	10	2
L4+50S 0+40E	73	17	.7	1372	2	40	3
L4+50S 0+60E	43	9	.2	118	3	7	3
L4+50S 0+80E	33	14	.1	144	2	6	2
L4+50S 1+00E	54	14	.4	63	2	3	2
L4+50S 1+20E	107	31	1.8	119	2	27	2
L4+50S 1+40E	81	16	1.1	46	2	5	2
L5+00S 0+00W	76	18	.3	208	2	8	2
L5+00S 0+20E	60	4	.1	10	2	1	2
L5+00S 0+40E	90	13	.3	92	2	6	2
L5+00S 0+60E	136	9	1.3	439	2	20	2
L5+00S 0+80E	66	12	.3	728	2	21	3
L5+00S 1+00E	26	12	.1	66	2	2	3
L5+00S 1+20E	36	12	.4	13	2	3	2
L5+00S 1+40E	112	112	1.5	163	4	17	2
TS-1	158	103	2.5	4485	3	167	4
TS-2	273	376	2.9	4052	10	138	7
TS-3	447	72	2.1	3104	5	300	6
TS-4	394	117	1.8	3111	2	585	6
TS-5	359	247	4.0	2386	4	428	2
STD C/FA-AU	62	36	7.1	42	16	52	-

SAMPLE#	Cu PPM	Pb PPM	Ag PPM	As PPM	Sb PPM	Au** PPB	Pt** PPB
M/A 1	12	52	.5	181	3	19	2
M/A 2	37	7	.9	21	2	6	2
M/A 3	104	1962	22.7	585	15	74	2
TR-3	2229	149	15.2	990	11	282	2
W-5280	82	8	.5	76	3	8	2
STD C/FA-AU	62	36	7.1	42	16	52	-