BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	2001/2002
REPORT #:	PAP 01-4
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GEOPHYSICAL REPORT

ON

MAGNETIC, VLF-EM, HLEM, AND SP SURVEYS

OVER THE

JASON CLAIM GROUP

COGBURN CREEK, HARRISON LAKE AREA

NEW WESTMINSTER MINING DIVISION, BRITISH COLUMBIA

PROPERTY LOCATION	:	Centre is located 29 km 15°E of village of Harrison Hot Springs, British Columbia N.T.S. – 92H/12E BCGS – 92H052
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DATED	:	December 29, 2001

GEOTRONICS

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SUMMARY

Ground magnetic, VLF-EM and horizontal loop EM surveys were carried out during July 2001 on part of the Jason Property found on the east side of Harrison Lake and 29 km northerly of the village of Harrison Hot Springs. The terrain is quite rough with steep slopes and cliffs occurring throughout the property.

The main purpose of the magnetic and electromagnetic surveys was to help in determining the causative sources of the previously done SP and soil geochemistry surveys. Exploration on the property is being carried out to locate mineralization similar to that of the now-defunct Giant Mascot nickel/copper mine, which is located 16 km to the southeast of the Jason property.

The magnetic and VLF-EM surveys were carried out with a combination proton precession magnetometer/VLF-EM receiver by taking readings every 12.5 m along the logging access road, which is also the claim line for the Jason 1 to 3 and 8 to 10 claims, and along one cross line. The readings were input into a computer with the magnetic readings being diurnally corrected and the VLF-EM readings being Fraser-filtered. They were then plotted and profiled along with the SP and copper/nickel soil geochemistry results using a horizontal scale of 1:5,000. The amount surveyed was 1,738 meters.

The horizontal loop electromagnetic (HLEM) survey was carried out with an Apex Parametrics MaxMin II electromagnetometer in the horizontal loop mode along the same logging access road. The coil spacing was 50 m; the reading interval, 12.5 m, and all five frequencies read, 222, 444, 888, 1777 and 3555 Hz. The HLEM readings were profiled onto the same figure as for the correlating geophysical and geochemical surveys. The amount surveyed was 1,250 meters.

CONCLUSIONS

1. The SP readings taken along the Jason 1-to-3 and 8-to-10 claim line, that is the logging access road labeled line 0N, have revealed two strong anomalies and therefore suggest that the causative source(s) is massive sulphides. In support of this is the fact that at least one of the anomalies occurs within a hornblendic pyroxenite that is disseminated with pyrite, pyrrhotite, chalcopyrite, and pentlandite.

2. The two SP anomalies are open-ended toward each other and thus could be actually one anomaly. If they are, then the causative source would be striking in a 70°E – 250°E direction with a minimum strike length of 225 m being open in both directions.

3. Soil geochemical analysis have revealed anomalous values in copper and nickel that are, at a minimum, adjacent to the two SP highs. (It cannot be shown they correlate since the soil geochemistry samples were taken on line 50S whereas the SP readings were taken on the logging road, which is up to 50 m north of line 50S.) This suggests that the causative source(s) of the SP anomalies contains nickel and copper sulphides.

4. The magnetic survey revealed magnetic highs correlating with the SP highs indicating that magnetite and/or pyrrhotite is associated with the SP causative source(s).

5. The magnetic survey also showed a strong magnetic signature correlating with the diorite and a weaker one correlating with the hornblendic pyroxenite and felsite. It also shows, with VLF-EM support, a possible fault occurring along the contact between the diorite and the hornblendic pyroxenite at East Creek.

6. The HLEM and VLF-EM surveys revealed anomalous readings (or conductors) correlating with the SP anomalies, which support that massive sulphides are the cause of the SP highs.

7. The VLF-EM survey revealed a relatively strong conductor 300 meters east of the Jason 1 and 8 initial claim post along the logging road that correlates with a magnetic low. There is no SP correlation and a slight HLEM correlation. Quite possibly, it is reflecting a shear or fault zone. (There was no soil geochemistry done in the area.)

RECOMMENDATIONS

The geophysical surveys and soil sampling done to date have only been carried out along singular lines for the main purpose of determining causative sources and what exploration tools are effective. Anomalies of strong exploration interest have been revealed, but there is little concept of size and strike direction. Therefore, further work should be done as follows:

1. Carry out short north-south lines of SP readings between the two SP highs in order to determine strike direction and secondarily whether the two anomalies have one causative source. If this proves inconclusive, then carry out one or two lines to the east and to the west of the two highs for the same purpose. If this proves inconclusive, as well, then run short east west lines on either side of the SP anomalies. The strike direction is important to determine not only for orienting the grid in the right direction but also for choosing the right VLF-EM transmitter station.

2. If the70°E strike direction, or one similar to it, is confirmed then put in a grid with north south lines no more than 50 meters apart and stations every 12.5 meters. If a northerly direction is determined, than extend the grid started by Haughton, which has east-west lines 50 meters apart, in all 4 directions, especially to the south and to the north, but putting in stations every 12.5 meters. The terrain, such as cliffs along Cogburn Creek, will limit the extent of the grid.

3. Once the grid is established, then run SP, VLF-EM, magnetic, and soil sampling surveys along all lines of the grid. For the geophysics, the readings should be taken every 12.5 meters. The soil samples should be picked up every 25 meters.

4. Geological mapping should also be done throughout the grid area as well as outside of it in order to aid in the geophysical and geochemical interpretation.

5. Depending on the results, at least one line of HLEM surveying may be recommended in order to aid in the locating of drill holes. The results from the above work would hopefully locate the causative source so that HLEM readings would be done along a line perpendicular to the strike direction.

Another geophysical method that may be beneficial is gravity. This method relies on a density difference between the exploration target and the surrounding material. For example, it may be beneficial to use gravity to locate intrusive pipes that may contain nickel-copper sulphides occurring within rocks of considerably less density such as the metasediments. Or, gravity could be used to locate massive sulphides directly since massive sulphides have a much greater density than any rock-type.

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INTRODUCTION

This report discusses the survey procedure, compilation of data, interpretation methods, and results of a magnetic survey, very low frequency electromagnetic (VLF-EM) survey land a horizontal loop electromagnetic (HLEM) survey carried out over a portion of the Jason Claims located 36 km north of the village of Harrison Hot Springs on the east side of the Harrison Lake.

The three surveys were carried out by the writer during the latter part of July,2001.

The number of meters of magnetic and VLF-EM surveys carried out were 1,738 m and HLEM, 1,250.

The purpose of the exploration work on the property is to locate nickel-copper mineralization similar to that of the now-defunct Giant Nickel mine located about 16 km to the southeast. Both the Giant Nickel mine and the Jason property are located in the same easterly-trending basic and ultra-basic intrusives. Work to date by David Haughton has located strong nickel and copper soil geochemistry anomalies as well as fairly strong self potential (SP) anomalies that are probably reflecting massive sulphides. The purpose, therefore, of the magnetic, VLF-EM, and HLEM surveys was to aid in the interpretation of the results of self potential survey readings as well as to determine the effectiveness of these three geophysical methods for exploration on the Jason property.

Much of the description of the property was taken from David Haughton's prospecting report for which this report is written to accompany.

PROPERTY AND OWNERSHIP

The following information was taken off of the ***mineral title database web site*** of the British Columbia Ministry of Energy and Mines.

The property consists of 13 contiguous 1–unit claims located within the New Westminster Mining Division, as described below and as shown on Map #2.

CLAIM NAME	TAG #	TENURE #	# OF UNITS	STAKING DATE	EXPIRY DATE
Jason #1	690480	370053	1	July 8, 1999	October 29,2005
Jason #2	690481	370054	1	July 8, 1999	October 29,2005
Jason #3	690482	370055	1	July 8, 1999	October 29,2005
Jason #5	690484	370208	1	July 11, 1999	October 29,2005
Jason #6	690485	370209	1	July 13, 1999	October 29,2005
Jason #7	690486	370210	1	July 14, 1999	October 29,2005
Jason #8	690487	370211	1	July 15, 1999	October 29,2005
Jason #9	690488	370212	1	July 15, 1999	October 29,2005
Jason #10	690489	370213	1	July 15, 1999	October 29,2005
Jason #11	690444	370440	1	July 24, 1999	October 29,2005
Jason #16	690450	381708	1	October 29, 2000	October 29,2005
Jason #17	690451	381709	1	October 29, 2000	October 29,2005
Jason #18	690452	381710	1	October 29, 2000	October 29,2005
TOTAL			**13**		

The expiry dates shown assume that the work under discussion within this report will be accepted for assessment credits.

The registered owner of the property is David R. Haughton of Victoria, B.C.

LOCATION AND ACCESS

The Jason property is located just east of Harrison Lake along Cogburn Creek and just west of Settler Creek. It is 29 km 15°E of the village of Harrison Hot Springs, which is 90 km due east of Vancouver, B.C.

The geographical coordinates for the center of the property are 49° 33.5' north latitude and 121° 41' west longitude. The NTS index is 92H/12E, and the BCGS index is 92H052.

Access is gained by traveling to Harrison Hot Springs and then 28 km along the east side of the lake on a mostly unpaved road to Lakeside Pacific's log sorting yard and administration office. This road in places is very winding and rough. From this yard, a road runs easterly along Cogburn Creek. Approximately 7.5 km from the yard, a deactivated access road branches off to the southeast and provides access to an old timber bridge crossing Cogburn Creek. The east side of the property and initial claim post for the Jason 1 and 8 claims is a further 450 meters from the bridge this part of which must be walked. The total road distance from Harrison Hot Springs is 36 km.

Access to the bridge, or close to it, can be gained by a 2-wheel drive vehicle, at least in dry weather. However, a 4-wheel drive vehicle would be preferable.

The above description provides access to the main area of exploration interest, which is on the south side of the property and south of Cogburn Creek. However, access to the north part of the property can be gained by the active Cogburn Creek logging road.

PHYSIOGRAPHY

The Jason property is situated within the Pacific Ranges, which is a physiographic unit of the Coast Mountains. Elevations vary from 300 meters along the western edge of the Jason 8 claim at Cogburn Creek to 1160 meters at the southern edge of the Jason 6 claim. Moderate to steep slopes with variable soil cover blanket much of the property. The exceptions would be the lower drainages of the creeks into Cogburn Creek, where alluvial fans occur.

The main water source is Cogburn Creek, which drains westerly through the center of the property into Harrison Lake. Other water sources are the smaller tributaries of Cogburn Creek, which drain northerly, and southerly into it.

The property falls within the Coastal Douglas Fir biogeoclimatic zone, which is characterized, by Douglas fir, hemlock and western red cedar. Logging throughout the property began early in the century and most of the present growth, at least on the lower slopes, is secondary. More recent clear-cut logging has been done on the Jason 5 and 7 claims. Timber on the rest of the property is quite dense.

Precipitation in the Harrison Lake area is moderate, averaging 2,000 millimeters per year, mostly as rain in the winter months.

PREVIOUS WORK

Exploration was carried out on the property in the years 1969 to 1975 by the Nickel Syndicate, which was a group, formed by the Giant Mascot Mine. They carried out an airborne magnetic survey in 1970 and a ground magnetic survey, soil geochemistry survey, and geological mapping in 1972. (The results were available to the writer.)

The present claims were staked in 1999 by David Haughton when he carried out prospecting and sampling. In the year 2000, Mr. Haughton prospected, sampled more rocks, and carried out SP surveying. In the year 2001, just prior to this survey work, he carried out SP surveying, soil sampling, and geological mapping.

A more detailed description of the property history is given in his report.

GEOLOGY (from Haughton's report)

The following is only a brief description of the geology for the purpose of understanding and aiding in the geophysical interpretation. A more detailed description is given in Haughton's report.

1) Regional

The Jason property occurs at the northwest end of a northwesterly-trending belt of basic and ultra basic intrusions. This belt is referred to as the Nickel Belt because of the location of the Giant Mascot Nickel Mine at the southeast end and a number of nickel occurrences throughout the belt. It extends from Zofka Ridge between Emory Creek and Stulkawhits Creek, which is 11 km 330°E of the town of Hope, to the confluence of Talc Creek with Cogburn Creek, which is just west of the Jason Claim. The length is about 19 km. These intrusive rocks are thought to be of Middle Cretaceous Age and consist of dunite, peridotite, pyroxenite, hornblendite, gabbro, diorite, altered pyroxenite, and peridotite.

These basic rock-types have intruded into metapelites, shale, slate, and pyrite-bearing metasediments. These are part of the metavolcanics and metasediments of the Slollicum Schist, the Settler Schist, and the Cogburn Group, which are the oldest rocks in the area ranging in age from Cretaceous to Carboniferous.

Other rocks that occur in the area are the diorites of the Spuzzum pluton, which are thought to be Cretaceous in age.

2) Property

David Haughton has done some geological mapping on the claims, which is mostly south of Cogburn Creek around the main area of the exploration.

On the west side of the grid area, and thus the property, occurs a hornblende diorite that is quite magnetic in nature. Abutting this on the east and within the center of the claims is a hornblendic pyroxenite. Both of these rocks are part of the basic to ultra basic intrusive belt within which the Giant Mascot deposit occurred. A group of the more acidic intrusive rocks are in contact with the hornblendic pyroxenite to the east and consist of quartz diorite and felsite. Also mapped within the grid area are occurrences of amphibolite, which are probably of the older metasediments and metavolcanics.

3) Giant Mascot Deposit

The prime metallic products from the Giant Mascot deposit were nickel grading at 0.77% and copper grading at 0.34%. Cobalt was a byproduct. Other metals present were chromium platinum, palladium, gold, and silver. The deposit is classified as a Ni-Cu magmatic deposit, which consisted of sulphides occurring within magmatic ultramafic intrusives. The deposits were crudely zoned, steeply dipping, which in some cases were concentric in cross section. The associated rock-types were peridotite, olivine pyroxenite, pyroxenite, hornblendic pyroxenite, hornblendite, and gabbro. The ore bodies were pipe like in form with an orientation of close to vertical and with diameters of 10 to 50 meters.

Faulting exhibits significant control of this type of deposit and our fault systems have been recognized as occurring on the property. Three are pre-deposit and one is post-deposit.

4) Mineralization

The Mineralization so far discovered on the property occurs as disseminated sulphides within the hornblendic pyroxenite that occurs within the grid area. The sulphides are pyrite, pyrrhotite, pentlandite, and chalcopyrite.

INSTRUMENTATION

1) Magnetic and VLF-EM Surveys

Both the magnetic survey and the VLF-EM survey were carried out with a Scintrex/EDA Omni-Plus unit, which consists of a proton precession magnetometer and a VLF-EM receiver. It is a memory system capable of storing up to 1,300 readings. This unit was used with a Scintrex/EDA Omni base station unit for the purpose of monitoring the diurnal variation of the magnetic field. The magnetometer part reads directly in nanoTeslas (nT) the Earth's total magnetic field to an accuracy of ±0.1 nT, over a range of 18,000 - 110,000 nT. The VLF-EM part can read up to three transmitters at the same time in the 15 to 30 kHz range. For each transmitter station, the readings consist of: (a) the in-phase, (b) the quadrature, (c) the tilt angle, and (d) the field strength. Also the instrument calculates both a 4-point and a 5-point Fraser- filter value automatically as the survey progresses. Operating temperature range is -40° to +55° C.

2) **Horizontal Loop Electromagnetic (HLEM) Survey**

A MaxMin II portable 2-man electromagnetometer, manufactured by Apex Parametrics Ltd. of Toronto, Ontario was used for the HLEM survey. This particular instrument has the advantage of flexibility over most other EM units in that it can operate with different modes and frequencies as well as having a variety of distances between transmitter and receiver. Five frequencies can be used (222, 444, 888, 1777 and 3555 Hertz), and six different coil separations (25, 50, 100, 150, 200 and 250 meters).

THEORY

1) **Magnetics**

Only two commonly occurring minerals are strongly magnetic, magnetite and pyrrhotite and therefore magnetic surveys are used to detect the presence of these minerals in varying concentrations, as follows:

- Magnetite and pyrrhotite may occur with economic mineralization on a specific property and therefore a magnetic survey may be used to locate this mineralization.
- Different rock types have different background amounts of magnetite (and pyrrhotite in some rare cases) and thus a magnetic survey can be used to map lithology. Generally, the more basic a rock-type, the more magnetite it may contain, though this is not always the case. In mapping lithology, not only is the amount of magnetite important, but also the way it may occur. For example, young basic rocks are often characterized by thumbprint-type magnetic highs and lows.
- Magnetic surveys can also be used in mapping geologic structure. For example, the action of faults and shear zones will often destroy magnetite and thus these will show up as lineal-shaped lows. Or, sometimes lineal-shaped highs or a lineation of highs will be reflecting a fault since a magnetite-containing magmatic fluid has intruded along a zone of weakness, being the fault.

2) **Electromagnetics**

In all electromagnetic prospecting, a transmitter induces an alternating magnetic field (called the primary field) by having a strong alternating current move through a coil of wire. This primary field travels through any medium and if a conductive mass such as a sulphide body is present, the primary field induces a secondary alternating current in the conductor, and this current in turn induces a secondary magnetic field. The receiver picks up the primary field and, if a conductor is present, the secondary field. The fields are expressed as a vector, which has two components, the "in-phase" (or real) component and the "out-of-phase" (or quadrature) component. For the MaxMin instrument, the results are expressed as the percent deviation of each component from what the values would be if no secondary field (and therefore no conductor) were present. For the VLF-EM receiver, the tilt angle in degrees of the distorted electromagnetic field with a conductor is measured from that which it would have been if the field were not distorted with no conductor.

Since the fields lose strength proportionally with the distance they travel, a distant conductor has less of an effect than a close conductor. Also, the lower the frequency of the primary field, the further the field can travel and therefore the greater the depth penetration.

The VLF-EM uses a frequency range from 13 to 30 kHz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can pick up bodies of a much lower conductivity and therefore is more susceptible to clay beds, electrolyte-filled fault or shear zones and porous horizons, graphite, carbonaceous sediments, lithological contacts as well as sulphide bodies of too low a conductivity for other EM methods to pick up. Consequently, the VLF-EM has additional uses in mapping structure and in picking up sulphide bodies of too low a conductivity for conventional EM methods and too small for induced polarization. (In places it can be used instead of IP). However, its susceptibility to lower conductive bodies results in a number of anomalies, many of them difficult to explain and, thus, VLF-EM preferably should not be interpreted without a good geological knowledge of the property and/or other geophysical and geochemical surveys.

The MaxMin II EM unit can vary the strength of the primary field and so use different separations between transmitter and receiver coils, change the frequency of the primary field for varying depth penetrations, and use three different ways of orienting the coils to duplicate the survey in three styles so that more accuracy is possible in the interpretation of the data.

The use of the MaxMin II electromagnetometer allows for better discrimination between low conductive structures such as clay beds and barren shear zones and more conductive bodies like massive sulphide mineralization. It also gives several different types of data over a given area so that statistical analysis can result in less error in the interpretation.

SURVEY PROCEDURE

1) Grid

A small grid has been placed on the property with the survey lines running in an east-west direction. Within this grid, an old overgrown logging access road runs in an easterly direction between lines 0N and 50S. Station markers, being blaze orange flagging, were surveyed in along this road every 25 meters by Mr. David Haughton beginning with the initial claim post for the Jason 1 and 8 claims and running east. The road was labeled line 0N and also approximates the claim line for the Jason 1to 3 and Jason 8 to 10 claims.

2) Magnetic survey

Readings of the earth's total magnetic field were taken every 12.5 meters along the road. In addition, readings were taken along line 1125E, north from the road to 175N.

The diurnal variation was monitored in the field by a base station, as mentioned above. The base station was placed about 30 meters west of station 0E on the logging access road at West Creek. At the beginning of the surveying, the surveying unit was initialized with the base station unit.

3) VLF-EM Survey

The readings of the electromagnetic field from the transmitter station, Cutler, Maine at 24.0 kHz, were also taken every 12.5 meters both along the road and on line 1125E. The preferred transmitter station would have been Seattle, otherwise known as Jim Creek, at 24.8 kHz because of its more optimum transmitter direction (The strike of the target was expected to be approximately north-south, with the direction to the Seattle transmitter being due south.). However, this transmitter was shut down for several months for maintenance purposes. A second choice was Hawaii at 23.4 kHz. These readings were taken but there was no signal from this transmitter either, or the signal was simply too weak because of the mountainous terrain. As a result, only the signal from the Cutler transmitter could be read.

4) HLEM Survey

The separation between the transmitter and receiver was 50 m. Readings were taken every 12.5 m but only along the road.

The receiver operator read and recorded the in-phase and out-of-phase responses for all five frequencies, being 222, 444, 888, 1777, and 3555 Hz. Also, calibration and phase mixing tests were conducted both prior and during the survey.

COMPILATION OF DATA

1) Magnetic Data

The data was dumped into a computer with the surveying unit interconnected with the base station unit thus enabling the magnetic data to be automatically corrected for diurnal variation. Then, using Geosoft software, the data were profiled along with the SP data at a horizontal scale of 1:5,000 (1 cm = 25 m). The vertical scale used for the magnetic profile was 1 cm = 100 nT and for the SP profile, 1 cm = 50 mv. The magnetic and SP values were also plotted on this map but with 57,000 nT subtracted from each magnetic value. The SP values were plotted directly.

2) VLF-EM Data

The VLF-EM data were also dumped into a computer. A profile map of both tilt angle and 4-point Fraser-filter data were profiled at the same horizontal scale of 1:5,000. The vertical scale used was 1 cm = 2.5°. The Fraser filter is a 4-point difference operator used for the purpose of turning conductor crossover-type data that can only be profiled into contourable data wherein the crossovers become highs. It is also used for reducing the noise and thus smoothing the data.

3) HLEM Data

The HLEM data were input into a computer. The in-phase and the out-of-phase (quadrature) data of one frequency, 888 Hz, were profiled. Only one frequency was profiled since the data from all the frequencies were very similar. The plotting point is taken at the mid-point between the transmitter and the receiver. The vertical scale used for both the in-phase and out-of-phase data was 1 cm = 5%.

4) Soil Geochemistry Data

The nickel and copper data from the soil geochemistry analysis along lines 50S and 1125E were also profiled using a vertical scale of 1 cm = 50 ppm. The data from line 50S were used since there were only sporadic data along either the road or line 0N.

DISCUSSION OF RESULTS

1) Magnetics

The magnetic readings, in a general sense, can be divided into two sets that are divided at station 762.5E on line 0N. The first set, which is west of 762.5E, has an average reading of about 325 nT and is largely reflective of the hornblende diorite. (The actual average is 57,325 nT but for ease of discussion, the posted values on Fig. GP-1 will be used, which is the actual reading minus 57,000 nT.) The second set, which is east of this point, has an average reading of –325 nT (56,675 nT) and is largely reflective of the hornblendic pyroxenite and the felsite. This agrees with the results of the airborne survey carried out in 1970 by Siegel Associates for the Nickel Syndicate, which shows a high magnetic field to the west and a lower magnetic field to the east. This magnetic boundary as defined by the ground readings appears to be at about the 2000-gamma (or nT) contour on the aeromagnetic map.

Within the higher magnetic field to the west of the magnetic boundary, there is a magnetic low centered at 525E. Correlating with geology as mapped by Haughton, this is reflecting a "window" of hornblendic pyroxenite occurring within the hornblende diorite.

Also in this area, a northerly-striking fault has been postulated to occur. The magnetic low centered at 800E and occurring to the immediate east of the magnetic boundary may be reflecting this fault. If this were the case, then the fault would actually be a fault/contact.

On the basis of the limited magnetic survey work done on the property there seems to be no discernable difference in the magnetic signatures of the felsite and of the hornblendic pyroxenite. A magnetic survey done over a wider area may prove this to be wrong.

There is also an interesting correlation with the SP results. The main SP high at 900E correlates directly with a magnetic high within the hornblendic pyroxenite that has a strength of about 200 nT. The other SP high, which is located at 1125E, also correlates with a magnetic high. However, this one has a lower strength of about 50 nT and occurs within the felsite, as per Haughton's mapping. This same correlation is also seen on the cross line, line 1125E, at 50N, which is the center of this second SP high. This suggests that either the SP is reflecting massive pyrrhotite, which is lightly magnetic, or it is reflecting magnetite associated with massive sulphides, or both.

There is also magnetic correlation with the copper/nickel soil geochemistry results, though it should be kept in mind that the soil samples were taken 0 to 50 meters south of the magnetic readings. Very anomalous copper/nickel results correlate directly with the magnetic low at 525E, which is a reflection of hornblendic pyroxenite within the hornblende diorite. Another copper/nickel anomaly correlates with the magnetic low at 800E, which, as mentioned above, may be reflecting a fault/contact between diorite and hornblendic pyroxenite. The third copper/nickel anomaly at 1025E occurs on the eastern edge of the magnetic high at 900E.

2) <u>VLF-EM Survey</u>

Though the direction to the transmitter at Cutler, Maine, is wrong for the line direction (The direction for both is east, whereas the directions should be perpendicular to each other.), there are interesting anomalous correlations. There are two small Fraser-filter anomalies that correlate directly with the two SP anomalies on the road, respectively. This again supports the probability that the SP anomalies are caused by massive sulphides.

In addition, there is a relatively strong VLF-EM anomaly located at 300E. It correlates with a magnetic low within the diorite and a very small HLEM conductor (or anomaly). No soil geochemistry was done in this area. The probable causative source is a fault or shear zone.

3) <u>HLEM Survey</u>

The HLEM survey results are somewhat flat west of 762.5E which is the area mainly underlain by the hornblende diorite. The one exception is the very small anomaly (or conductor) mentioned above in the previous paragraph that correlates with the VLF-EM conductor. East of this point within the hornblendic pyroxenite and the felsite, the HLEM results become quite anomalous along with the SP results. However, the results are somewhat unusual in that they are anomalous mostly in the positive rather that mostly in the negative, other than the one reading at 1137.5E, which is –16%. That is, running an HLEM traverse across a conductor should result in anomalous negative readings with positive shoulders on either side.

The cause of the positive highs is probably a geometric factor such as traversing the conductor(s) at an oblique angle or traversing near the conductor(s) rather than crossing it. In addition, the shape of the conductor(s), the topography, and a variable depth to the top of the conductor(s), may all be factors. Another well-known cause of an HLEM high is massive magnetite. However, the magnetic results do not support this interpretation.

Nevertheless, the HLEM results are anomalous in an area of SP, soil geochemistry, and VLF-EM anomalies. This suggests that the causative source(s) is massive sulphides that contain copper and nickel mineralization.

The fact that the HLEM response from each of the frequencies is quite similar indicates that the causative source is quite shallow since the lower frequencies read to greater depths than the higher frequencies do. Also, there is little quadrature, or out-of-phase, response indicating that the causative source is fairly conductive.

An HLEM high at 825E occurs on the western edge of the western SP high. Taking all the signatures of the various surveys into account, it is difficult to say what the interpretation is. It is quite probable that the cause of the HLEM high occurs off of the survey traverse. If the cause of the SP high is the same as that of the HLEM high, then the possibility that it occurs off of the survey traverse could explain the partial correlation between the SP results and the HLEM results.

The HLEM high at 1125E correlates directly with the SP high. However, this HLEM high occurs with the anomalous HLEM low of –16%. This suggests the possible interpretation of massive sulphides dipping at a shallow angle to the west or northwest with the top of the conductor being at 1125E to 1150E.

Each of the two above-mentioned HLEM highs, as well as a third one at 1000E, correlate directly with copper/nickel soil anomalies. This suggests the causative source(s) of the HLEM conductor(s), probably being massive sulphides, is mineralized with copper and nickel mineralization.

4) General

Disseminated sulphides have been noted throughout the hornblendic pyroxenite. This would not be the cause of the SP, HLEM, or VLF-EM anomalies. Rather, it is more likely that the disseminations are surrounding massive sulphides, which are the actual causative source(s). However, it is also a possibility that the causative source(s) is a zone of fracture-filling sulphides wherein the sulphides are connected enough to be conductive.

The profile along line 0N shows two SP anomalies that are separated by East Creek. An SP profile was done on a cross line across the western anomaly (the results are not shown in this report) and shows the peak to be at 25S. A second profile was done across the eastern anomaly, shown on fig. GP-2, and shows its peak to be at 60N. Thus if the anomalies have one causative source, the line extending from peak to peak suggests the causative source strikes in a direction of 70°E (N70°E). The two anomalies are open-ended toward each other and thus additional cross lines between the two would determine whether the anomalies actually join.

If the anomalies actually do not join, they still may have one causative source. Firstly, the water flowage within the alluvial fan associated with East Creek may reduce the SP anomalous readings within this area, that is, between the two highs. Another explanation could be the depth of the overburden being the gravels within the alluvial fan. Or it is possible that East Creek represents a post-mineralization fault that has cut through the mineralization. In partial support of this is the correlation of a small VLF-EM conductor with East Creek, the causative source of which may be a fault.

Respectively submitted,
GEOTRONICS SURVEYS LTD.

PROFESSIONAL
PROVINCE OF
D.G. MARK
BRITISH COLUMBIA
GEOSCIENTIST

David G. Mark, P.Geo.
Geophysicist

December 29th, 2001

SELECTED BIBLIOGRAPHY

Aho, A.E., 1952, Geology and Ore Deposits of Pacific Nickel Mines, Unpublished Report, 92 pp.

Berg, N.W., 1972, Geological, Geochemical and Geophysical Assessment Report on the Ni Claim Groups, Harrison Lake area, B.C. Mineral Titles Branch, Assessment Report # 3615.

Betz, J.E., Consideration Behind the Design of a Well Rounded Electromagnetic Prospecting System (Review).

Ketala, M. & Puranen, M., 1967, Type Curve for the Interpretation of Slingham (Horizontal Loop) Anomalies over Tabular Bodies, Report #1, Geol. Survey of Finland.

Ketala, Matti, 1968, The Interpretation of Slingham (Horizontal Loop) Anomalies by Small-Scale Model Measurements, Report #2, Geol. Survey of Finland.

Christopher, P.A., 1975, Report on the Giant Mascot Ultrabasic Project; Unpublished Report, 22 pp

Christopher, P.A.; Robinson, J.W., 1975, Pride of Emory Mine; B.C. Ministry of Energy Mines and Petroleum Resources; Geology, Exploration and Mining in British Columbia, pp.105-113.

Clarke, W.E., 1969, Giant Mascot Mines Ltd.; Geology and Ore Controls; Western Miner, v.42, pp.40-46.

Clarke, W.E., 1971, Giant Mascot Mines Ltd.; Geology, Western Miner, v.44, pp.23-61.

Bastwood, G.E.P., 1972, Ni; B.C. Ministry of Energy, Mines and Petroleum Resources; Geology Exploration and Mining in British Columbia, pp.258-264.

Gabites, J.E., 1985, Geology and Geochronometry of the Cogburn Creek - Settler Creek Area, Northeast of Harrison Lake, B.C.; Unpublished M. Sc. Thesis; The University of British Columbia, 153 p.

Gonzalez, R.A., 1972, Geological, Geochemical & Geophysical Report on the 316 Group Harrison Lake Area, B.C., B.C. Mineral Titles Branch, Assessment Report #4071.

Gonzalez, R.A., 1974, Geological, Geochemical & Geophysical Report on the Giant Nickel Mine; Unpublished Report, 25 p.

Hancock, K.D., 1990, Ultramafic Associated Chromite and Nickel Occurrences in British Columbia; B.C. Ministry of Energy Mines and Petroleum Resources; Open File 1990-27.

Haughton, D.R., 1999, Assessment Report, Geological and Geochemical Report, Jason Claim Group, B.C. Mineral Titles Branch

Haughton, D.R. 2000, Assessment Report, Jason Claim Group, B.C. Mineral Titles Branch

Haughton, D.R., 2002, Prospecting Report, Jason Claims, Harrison Lake Nickel Belt, Submission to the Prospectors Assistance Program

Horwood, H.C., 1936, Geology and Mineral Deposits at the Mine of B.C. Nickel Mines, Limited; Yale District; B. C., Geological Survey of Canada, Memoir 190.

Lowe, B.E., 1972, Metamorphic Petrology and Structural Geology of the Area East of Harrison Lake, British Columbia; Unpublished Ph.D. Thesis; University of Washington, 162 pp.

McLeod, J.A., 1975, The Giant Mascot Ultramafics and Its Related Ores; Unpublished M. Sc. Thesis; The University of British Columbia, 88 p.

Monger, J.W.H., 1989,Geology, Hope, British Columbia; Geological Survey of Canada, Map 41-1989.

Muir, J.E., 1971, A Study of the Petrology and Ore Genesis of the Giant Nickel 4600 Orebody; Unpublished M. Sc. Thesis; University of Toronto, 125 p.

Naldrett, A.J.; Craig, J.R.; and Kullerud, G.; 1967, The Central Portion of the Fe-Ni-S System and its Bearing on Pentlandite Exsolution in Iron-Nickel Sulfide Ores; Economic Geology, V 62, pp.826-847.

Nixon, G.T., and Hammack, J.L.; 1991, Metallogeny of Ultramafic Rocks in British Columbia with Emphasis on the Platinum-Group Elements; Ministry of Energy Mines and Petroleum Resources; Paper 1991-4, pp.125-161.

Rublee, V.J., 1986, Occurrence and Distribution of Platinum-Group Elements in British Columbia; Ministry of Energy Mines and Petroleum Resources; Open File 1986-7.

Van Groos, A.F.K., 1967, The Origin of Sulfide Droplets: Petrographic Evidence for Liquid Immiscibility Between Silicate Magmas and Sulfide Melts; Economic Geology, V 62, pp.551-553.

GEOPHYSICIST'S CERTIFICATE

I, DAVID G. MARK, of the City of Surrey, in the Province of British Columbia, do hereby certify that:

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I am a Consulting Geophysicist of Geotronics Surveys Ltd., with offices at 6204 – 125th Street, Surrey, British Columbia.

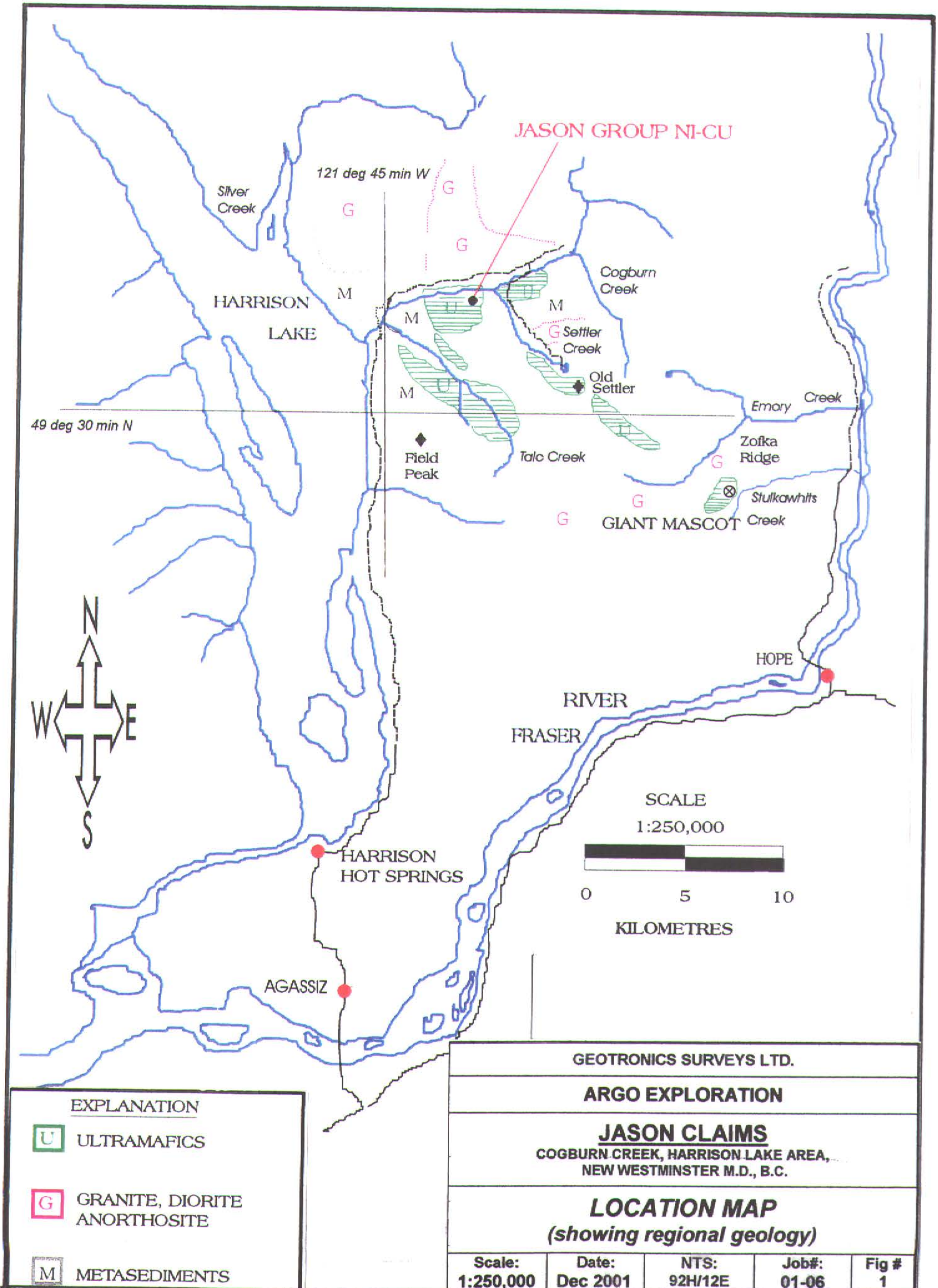
I further certify that:

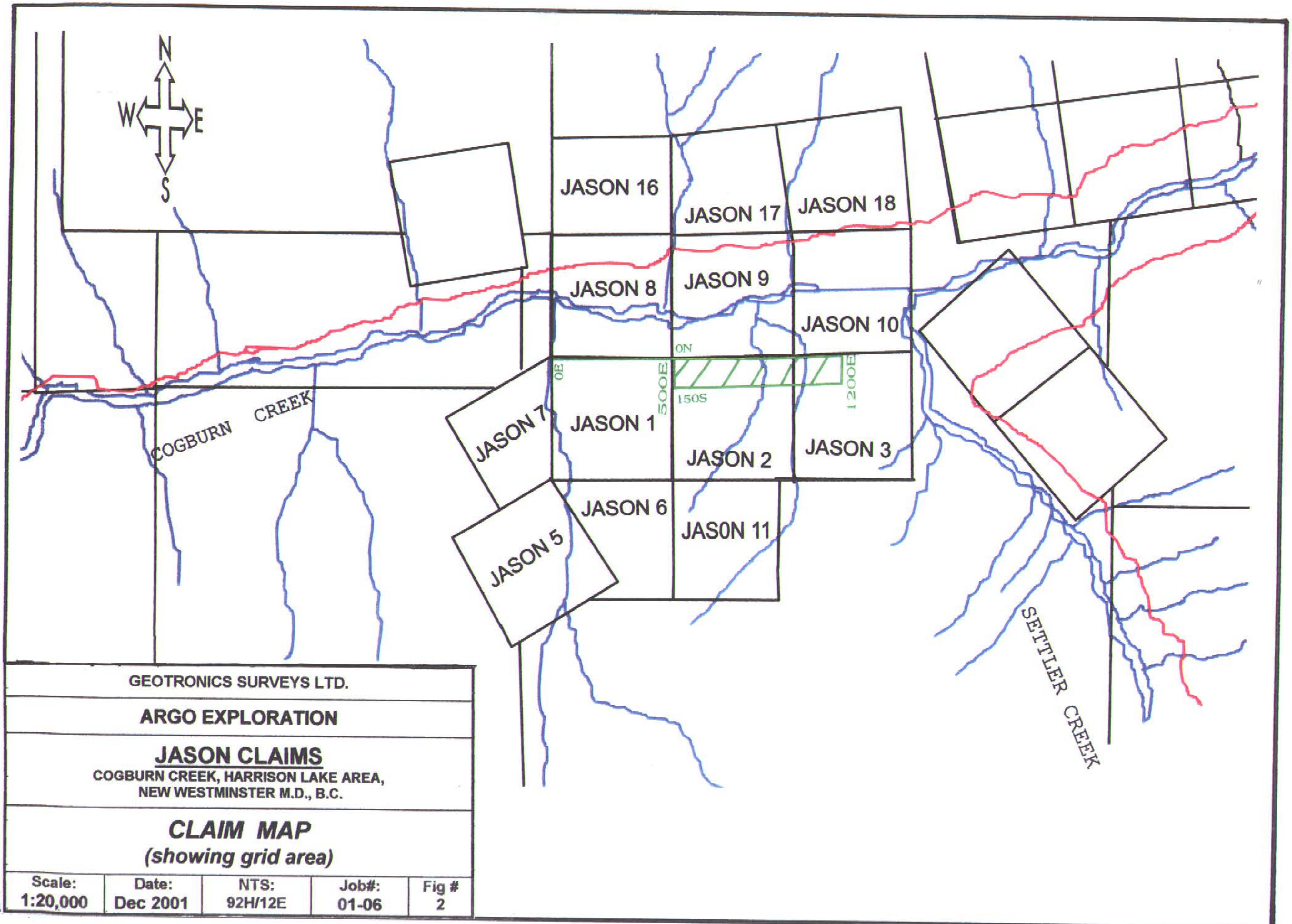
1. I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.
2. I have been practicing my profession for the past 33ears, and have been active in the mining industry for the past 36 years.
3. This report is compiled from data obtained from magnetic, VLF-EM, and HLEM surveys carried out over a portion of the Jason Claim Group from July 24th to 26th 2001, by myself, and from SP readings taken by David Haughton at various periods over the past year.
4. I do not hold any interest in the Jason Claim Group, nor in any other property held by David R. Haughton, P.Eng. of Victoria, British Columbia, nor do I expect to receive any.

PROFESSIONAL PROVINCE OF D.G. MARK BRITISH COLUMBIA GEOSCIENTIST

David G. Mark, P.Geo.
Geophysicist

December 29, 2001


JASON GROUP NI-CU
121 deg 45 min W
49 deg 30 min N
Silver Creek
HARRISON LAKE
Cogburn Creek
Settler Creek
Old Settler
Emory Creek
Field Peak
Talc Creek
Zofka Ridge
Stulkawhits Creek
GIANT MASCOT
HOPE
RIVER
FRASER
HARRISON HOT SPRINGS
AGASSIZ
N
S
W
E
SCALE
1:250,000
0
5
10
KILOMETRES
EXPLANATION
U ULTRAMAFICS
G GRANITE, DIORITE ANORTHOSITE
M METASEDIMENTS
GEOTRONICS SURVEYS LTD.
ARGO EXPLORATION
JASON CLAIMS
COGBURN CREEK, HARRISON LAKE AREA,
NEW WESTMINSTER M.D., B.C.
LOCATION MAP
(showing regional geology)
Scale: 1:250,000
Date: Dec 2001
NTS: 92H/12E
Job#: 01-06
Fig # 1



GEOTRONICS SURVEYS LTD.

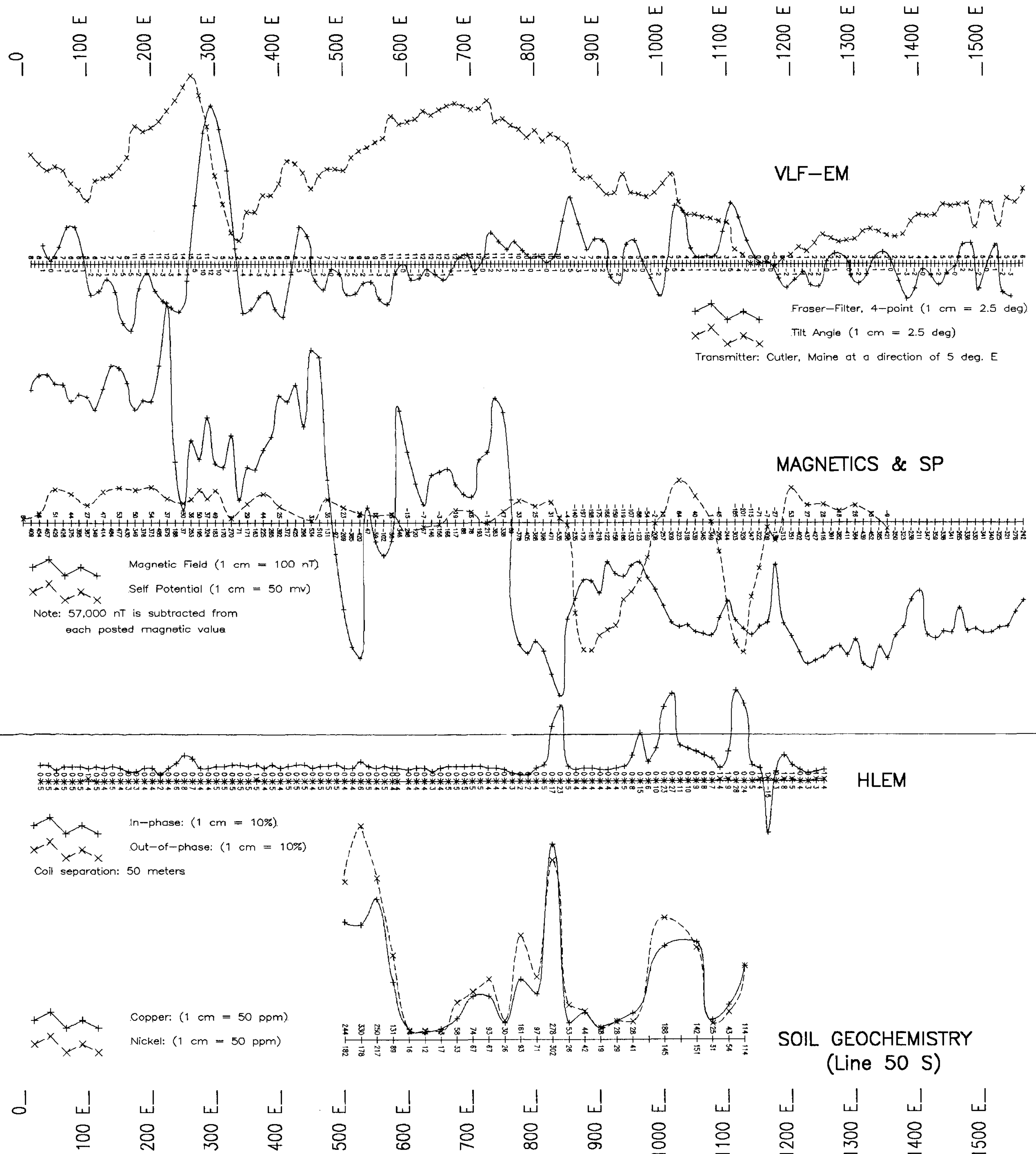
ARGO EXPLORATION

JASON CLAIMS

COGBURN CREEK, HARRISON LAKE AREA,
NEW WESTMINSTER M.D., B.C.

CLAIM MAP
(showing grid area)

Scale:	Date:	NTS:	Job#:	Fig #
1:20,000	Dec 2001	92H/12E	01-06	2



Scale 1:5000

250 0 250 500 750 1000 (feet)

50 0 50 100 150 200 250 (metres)

Geotronics

Surveyed July 2001 by:
GEOTRONICS SURVEYS LTD.
SURREY B.C.

INSTRUMENTATION:
HLEM: Apex Parametrics Model Max-Min II
Magnetics and VLF-EM: Scrintex/EDA Proton Precession Magnetometer/VLF-EM Unit, Model Omni-Plus
SP: High-Impedance Multimeter

GEOCHEMICAL ANALYSIS:
Acme Laboratories, Vancouver, B.C.

PROFESSIONAL GEOSCIENTIST — PROVINCE OF BRITISH COLUMBIA — D.G. MARK

GEOTRONICS SURVEYS LTD.

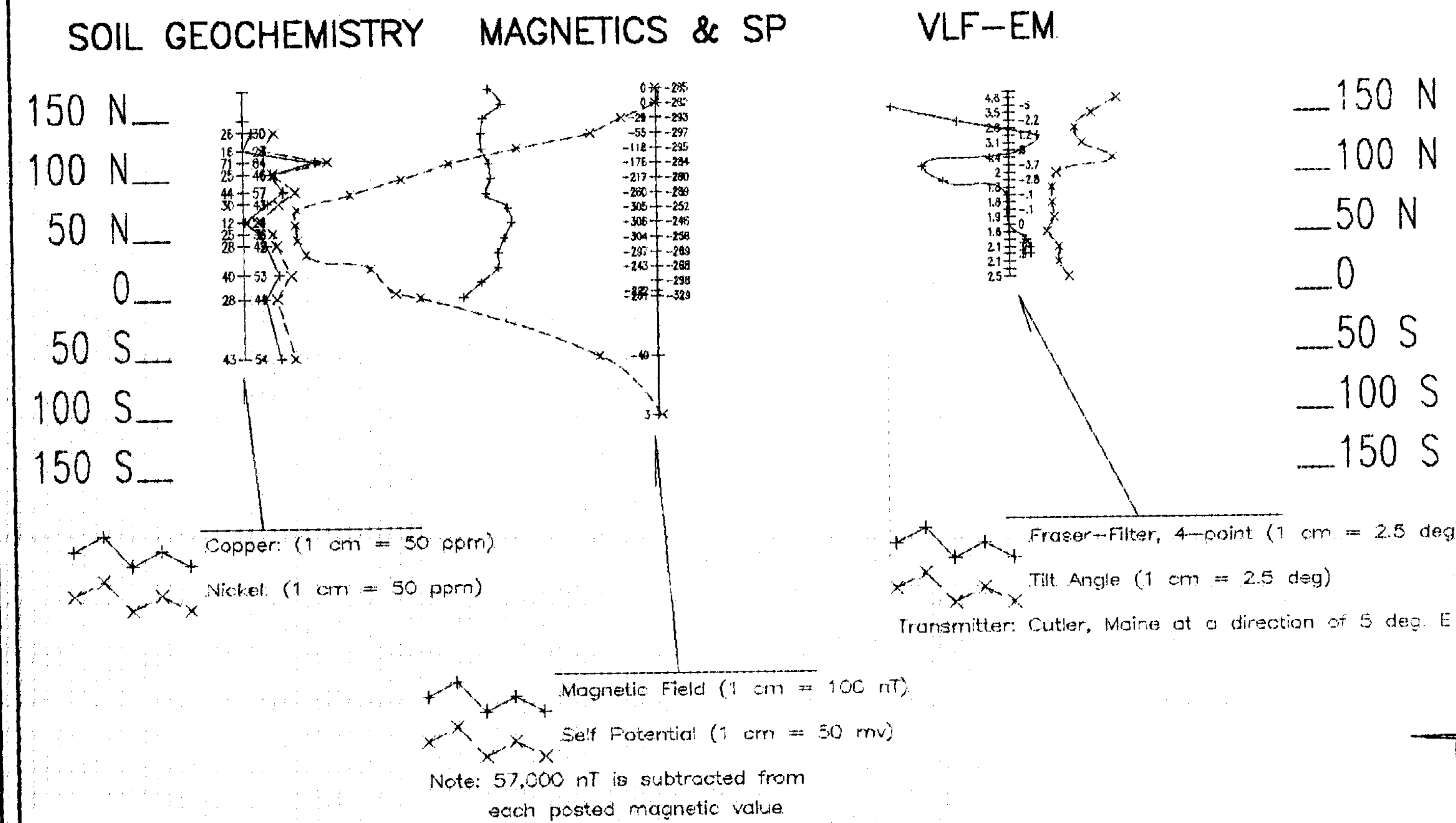
ARGO EXPLORATION

JASON CLAIMS
Cogburn Creek, Harrison Lake Area
New Westminster M.D., British Columbia

VLF-EM, MAGNETIC, SP, HLEM & SOIL GEOCHEM SURVEYS - LINE ON - PROFILES

Drawn by:	Job No.	NTS	Date	Fig No.
DGM	01-06	92H/12E	Dec 01	GP-1

01-04



Scale 1:5000

250 0 250 500 750 1000 (feet)

50 0 50 100 150 200 250 (metres)

Geotronics

Surveyed July 2001 by:
GEOTRONICS SURVEYS LTD.
VANCOUVER B.C.

INSTRUMENTATION:

Magnetics and VLF-EM:
Scrintex/EDA Proton Precession Magnetometer/VLF-EM Unit Model Omni-Plus

SP:
High-Impedance Multimeter

GEOCHEMICAL ANALYSIS:
Acme Laboratories, Vancouver, B.C.

PROFESSIONAL GEOSCIENTIST — PROVINCE OF BRITISH COLUMBIA — D.G. MARK

GEOTRONICS SURVEYS LTD.

ARGO EXPLORATION

JASON CLAIMS
Cogburn Creek, Harrison Lake Area
New Westminster M.D., British Columbia

MAGNETIC, SP, VLF-EM & SOIL GEOCHEM SURVEYS - LINE 1125E - PROFILES

Drawn by:	Job No.	NTS	Date	Fig No.
DGM	01-06	92H/12E	Dec 01	GP-2

01-04

Rec'd 1/15/02 GH

PROSPECTING REPORT
JASON CLAIMS
HARRISON LAKE NICKEL BELT

SUBMISSION TO THE PROSPECTORS ASSISTANCE PROGRAM

By:
David R. Haughton, P.Eng., Ph.D.

January 2002

CONTENTS

FIGURES

TABLES

D. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Regulations 15 to 17, pages 6 and 7.**

SUMMARY OF RESULTS

- This summary section must be filled out by all grantees, one for each project area

Name David R. Haughton Reference Number 2001/2002 P6

LOCATION/COMMODITIES

Project Area (as listed in Part A) JASON CLAIMS MINFILE No. if applicable 092HNW076

Location of Project Area NTS 92 H (West Half) Latitude: 49° 33' 20" Longitude: 121°42

Description of Location and Access New Westminster Mining Division, accessed by 36 km of mostly gravel road running north from Harrison Hot Springs along the east shore of Harrison Lake. Prospecting was done in areas accessed from Talc & Cogburn Creek logging roads.

Prospecting Assistants(s) - give name(s) and qualifications of assistant(s) (see Program Regulation 13, page 6)
No prospecting assistants however K. Haughton was hired to assist in camp operations safety & communications

Main Commodities Searched For Cu, Ni, Co, Cr, Au, Pt, Pd

Known Mineral Occurrences in Project Area Minfile #s: 092HNW039 (Victor Ni), 092HNW040 (Al), 092HNW045 (Settler Ck), 092HNW046 (Citation), 092HSW004 (Pride of Emory), 092HSW005 (BEA), 092HSW081 (Ni), 092HSW082 (Swede),092HSW093 (Star of Emory), 092HSW125 (CHOATE) – all Cu & Ni occurrences

WORK PERFORMED

1. Conventional Prospecting (area) Thirteen claims (two post), Jason Claims
2. Geological Mapping (hectares/scale) Detailed mapping three claims of the Jason Claim Group Scale max:1:3000
3. Geochemical (type and no. of samples)Overburden B1(77), Outcrop & Float (22), Stream Sed. (1)
4. Geophysical Magnetometer (1.7km), VLF (1.7km), Max-Min Electromagnetometer. (1.25km), SP (3km)
5. Physical Work (type and amount) chained & flagged 6 km, cleared & blazed 2 km
6. Drilling (no. holes, size, depth in m, total m)

FEEDBACK: comments and suggestions for Prospector Assistance Program

Regarding Travel Expenses: Allowance of 38 cents/km is unreasonable and inequitable .

In my case I only use my 4x4 pickup for prospecting on PAP projects. This requires that I do the following:

License truck: for use which extends over a period of more than 4 months as I must make widely spaced trips to the property.

Change Oil: because the truck is not used over winter it requires a change of oil & other lubricants each year .

Maintain & Repair : the truck is used off highway and can have significant damage after low mileage use.

Tow Charges: Membership in BCAA may be used by some and should be allowed. Do not force prospectors to reduce costs by not planning for damage or reducing their safety in the field (forcing them to rent or drive wrecks or unsafe vehicles.)

Rental charges for one month use of a 4x4 are approximately $1500

The rate of 38 cents per km is applicable only for travel on good roads and is not reasonable for road use over deactivated logging roads and cross country use. No government employee would use his own vehicle for 38 cents per km in extreme conditions that require use of a 4x4 vehicle.

I would suggest that the government set a maximum vehicle cost figure or actual vehicle expenses whichever is less but be reasonable and show some flexibility

PROSPECTING REPORT

JASON CLAIM GROUP
HARRISON LAKE NI BELT

INTRODUCTION

The following paragraphs describe the results of work that was done in 2001 on the Jason claim group. The claim group consists of thirteen two-post claims. The work includes detailed geology, multi-media geochemical sampling and analysis, and results from Magnetometer, Self Potential, Very Low Frequency Electromagnetometer (VLF-EM) and Max-Min Horizontal Loop Electromagnetometer (HLEM) surveys. The work this year was directed at confirming two self potential anomalies located on the claims in 2000 and determining the extent of the anomalies and their relationship to the geology of the area. Through a combination of geology, geochemical and geophysical studies the probable nature of the source of the anomalies has been deduced and preliminary drill targets established. Recommendations are presented for additional work to precisely define the location of drill targets.

LOCATION AND ACCESS

The Jason claim group is now composed of 13 contiguous claims:

Table 1: Jason Claims (2001)

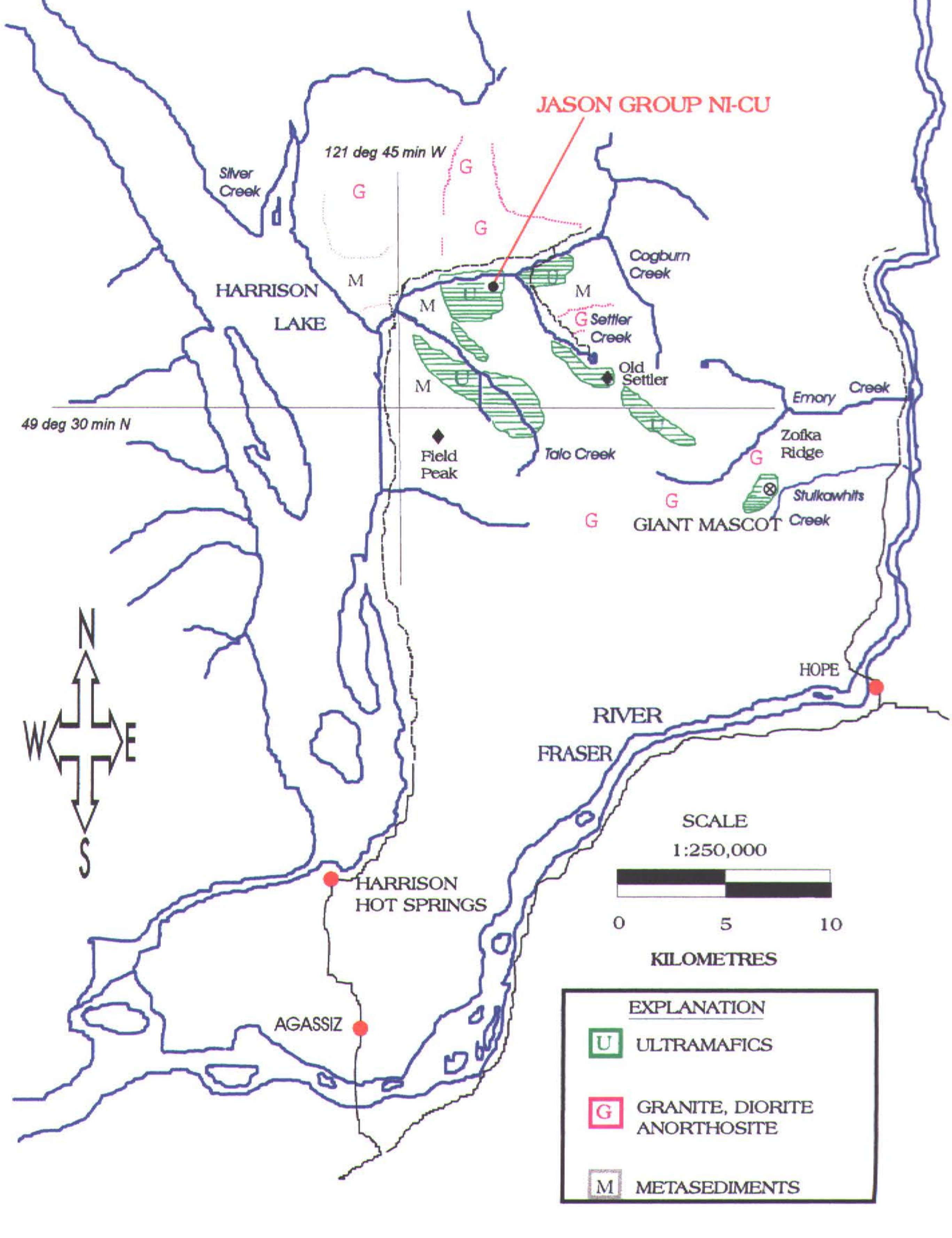
Claim Name	Tenure #	Tag #	Staking Date	Expiry Date
Jason1	370053	690480M	July 8, 1999	October 29, 2005
Jason2	370054	690481M	July 8, 1999	October 29, 2005
Jason3	370055	690482M	July 8, 1999	October 29, 2005
Jason5	370208	690484M	July 11,1999	October 29, 2005
Jason6	370209	690485M	July 13,1999	October 29, 2005
Jason7	370210	690486M	July 14,1999	October 29, 2005
Jason8	370211	690487M	July 15,1999	October 29, 2005
Jason9	370212	690488M	July 15,1999	October 29, 2005
Jason10	370213	690489M	July 15,1999	October 29, 2005
Jason11	370440	690444M	July 24,1999	October 29, 2005
Jason16	381708	690450M	October 29, 2000	October 29, 2005
Jason17	381709	690451M	October 29, 2000	October 29, 2005
Jason18	381710	690452M	October 29, 2000	October 29, 2005

They lie within the New Westminster mining division in the east half of NTS map sheet 92H (92H/12E) (BCGS index, 92H052). Figure 1 illustrates that the claims lie north-northeast of Harrison Hot Springs. Access to the claims is via 36 kilometres of winding, mainly unpaved road road from Harrison Hot Springs to the east shore of Harrison Lake to Lakeside Pacific's log sorting yard and administration office at Bear Creek camp. The yard lies on the east shore of Harrison Lake directly southwest of the Junction of Cogburn and Talc Creeks. From the yard, a logging road runs east along the length of Cogburn Creek. At a distance of approximately 7.5 kilometres from the yard, along the Cogburn Creek logging road, a section of deactivated logging road branches off to the southeast and provides access to an old timber bridge crossing Cogburn Creek. Although deactivated, this road is accessible by 4x4 vehicle to the bridge. It is about a 450 metre walk to the claims from the south side of the bridge.

Figure 1: Location map.

Topographic Features from NTSMap 92H
Scale 1:250,000
1 cm = 2,500 m = 2.5 km

LOCATION OF JASON GROUP & REGIONAL ULTRAMAFIC ROCKS



Three of the claims straddle Cogburn Creek and three lie on the north side of Cogburn Creek, but the remainder lie on the south side of the creek on the sloping valley wall. Timber on claims Jason 5 & 7 has been recently clearcut but second-growth timber is extensive and well established in the remainder of the claims. Property elevation ranges from approximately 200 metres at Cogburn Creek to 1100 metres at the southern extent of the claims. Access to the claims is possible by means of two trails (old logging roads) that may be traversed by walking. Because of the steep slopes and dense undergrowth, access to many of the claims is difficult.

EXPLORATION TARGETS

The prospecting targets are mineral deposits containing massive and disseminated nickel and copper bearing sulphides that have crystallized from a liquid Fe-S-O melt, immiscible with a host magmatic silicate liquid. These deposits are presumed similar to those found in the Giant Mascot Mine about 10 kilometres north of Hope at the eastern end of the Nickel Belt.

COMMODITIES

Geology studies in this report indicate that the prospect area and the Giant Mascot mine are in the same zone of ultramafic rocks. Therefore, ore values at the Giant Mascot are considered to indicate economic metal values to be found in the sulphide mineral deposits of the prospect area.

Nickel and copper were the prime metallic products at the Giant Mascot mine, with ore averages grading 0.77 per cent nickel and 0.34 per cent copper. Principal ore minerals, at the Giant Mascot, hosting nickel and copper were pyrrhotite, pentlandite, and chalcopyrite.

Literature review indicates that platinum and palladium associated with sulphide ore at the Giant Mascot have reported grades of approximately 3 to 4 grams per tonne of platinum and palladium and 1 to 8 grams per tonne of gold. Not only platinum, palladium and gold were present but also cobalt, chromium, and silver were present in the ore in economic quantities. In summary, exploration efforts using geology, geophysics and geochemical analysis can be directed to locate platinum, palladium, gold, silver, nickel, copper, cobalt and chromium as primary commodities.

DEPOSIT TYPE

The claims are included in the northwest extension of the ultramafic intrusive units that host the Giant Mascot mine. Table 2 lists the Minfile occurrences related to this zone of ultramafics and therefore to the Giant Mascot Mine. These occurrences are scattered along a zone extending from American Creek (north of Hope) to the junction of Cogburn and Talc Creeks on the east shore of Harrison Lake.

Table 2: Minfile Cu-Ni Occurrences Within the Hope to Harrison Lake Ni Belt (92HW).

MINFILE #	NAME	COMMODITIES	MINFILE CLASSIFICATION
092HNW039	VICTOR NI	Ni, Cu	Tholeiitic Intrusion –hosted
092HNW040	AL	Cu, Ni	Tholeiitic Intrusion –hosted
092HNW045	SETTLER CREEK	Ni, Cu	Tholeiitic Intrusion –hosted
092HNW046	CITATION	Ni, Cu, Zn	Tholeiitic Intrusion –hosted
092HSW004*	PRIDE OF EMORY*	Ni, Cu, Cr, Co, Au, Ag, Pt, Pd	Tholeiitic Intrusion –hosted
092HSW005	BEA	Ni, Cu	Tholeiitic Intrusion –hosted
092HSW081	NI	Ni, Cu	Tholeiitic Intrusion –hosted
092HSW082	SWEDE	Ni, Cu	Tholeiitic Intrusion –hosted
092HSW093*	STAR OF EMORY*	Ni, Cu, Cr, Co, Au, Ag, Pt, Pd	Tholeiitic Intrusion –hosted
092HSW125*	CHOATE*	Ni, Cu, Cr, Co, Au, Ag, Pt, Pd	Tholeiitic Intrusion –hosted

* These deposits form part of the Giant Mascot Mine

All of the Minfile occurrences listed are described by the provincial geological survey as tholeiitic intrusion-hosted Ni-Cu deposits, indicating the uniformity of mineralization associated with this zone of mafic intrusions. Three of these Minfile occurrences formed part of the Giant Mascot Mine.

GEOLOGY OF THE GIANT MASCOT DEPOSITS

The Giant Mascot deposits lie 9.6 km northwest of Hope, in Zofka Ridge, between Emory Creek on the north and Stulkawhits Creek on the south. The Giant Mascot mine lies within a northwest trending belt of basic to ultramafic intrusive rocks. This distinctive assemblage is hereafter referred to as the Hope to Harrison Lake Nickel Belt or simply the Nickel Belt. The mine has changed names during its evolution. Such names include: Pride of Emory, Giant Mascot, Giant Nickel, B.C. Nickel, Pacific Nickel, Western Nickel. The mine has the distinction of having been the only significant economic producer of Nickel within B.C.

From 1958 to 1974, approximately 4,315,296 tonnes of ore was mined from this property. Nickel and copper were the prime metallic products with the ore grading 0.77 per cent nickel and 0.34 per cent copper with cobalt as a byproduct. However, chromium oxide, platinum, palladium, gold and silver are also present (Minfile Assessment Report 16553). Higher grades of both Ni and Cu occur within ore zones at the mine. For example, in 1936, the Mines Branch took eighteen samples of ore from several different sulphide bodies. Analysis yielded an average of 18.38 per cent iron, 1.89 per cent nickel, 0.14 per cent cobalt, 0.31 per cent chromium, 10.87 per cent sulphur, 0.7 per cent copper and only a trace of arsenic (Minister of Mines Annual Report 1936, page F64). One 22.7 tonne bulk sample averaged 2.74 grams per tonne platinum and palladium and 0.68 grams per tonne gold. In 1937, B.C. Nickel Mines had developed 1.2 million tons of ore at 1.38 per cent nickel and 0.5 per cent copper (B.C.GEM, 1974, pg.105). Early records of samples of ore yielded 3.98 grams per tonne platinum and palladium and 7.89 grams per tonne gold. The chromium content of the ore averaged 0.2 to 0.4 per cent (Minfile report 092HSW004). Aho (1952) lists estimates of developed ore for the various orebodies in the mine. Percentage Cu ranged from 0.36 to 0.77. Percentage Ni ranged from 0.92 to 2.37. The mine closed in 1974 with reserves of 863,000 tonnes grading 0.75 per cent nickel, 0.3 per cent copper and 0.03 per cent cobalt. The cumulative nickel and copper production from the mine was 26.8 million kilograms of nickel and 14 million kilograms of copper (Nixon & Hammack, 1991) from 26 distinct orebodies.

Figure 2: Minfile occurrences related to the prospect area.

1) Victor Ni (092HNW039)
2) Al (092HNW040)
3) Settler Creek (092HNW045)
4) Citation (092HNW046)
5) Pride of Emory (092HSW004)*
6) BEA (092HSW005)
7) NI (092HSW081)
8) Swede (092HSW082)
9) Star of Emory (092HSW093)*
10) Choate (092HSW125)*
(All of the above are Cu-Ni deposits related to ultramafic intrusions.)
11) North Fork-Besshi massive sulphide Cu-Zn in Chilliwack metasediments (092HNW070)
12) Cogburn Creek – Kyanite and sillimanite in schists (092HNW073)
13) Ox – Cu-Au-Ag skarn deposit (092HNW041)

*** Note the Giant Mascot Mine is located on Zofka Ridge 9.6 Km northwest of Hope.**

Harrison Lake Nickel Belt

Mineral Inventory Layers

MINFILE number label
- Developed Prospect
- Past Producer
- Producer
- Prospect
- Showing
- All Others

Topographic Layers

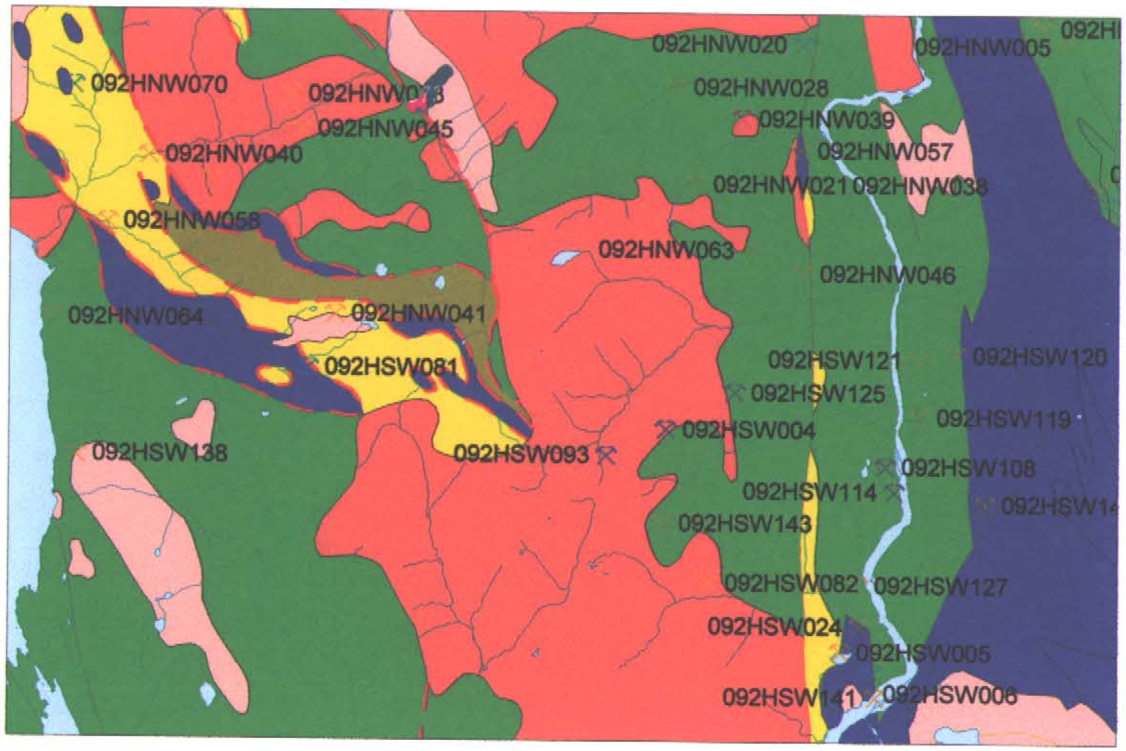
- Lakes 1:50K (<300K)
- Rivers 1:50K (<300K)
- Border line 1:250K (<2M)

Grid Layers

- Grid 1:250K maps - outline

BCGS Geology Layers

- Faults and contacts - GSB (<4M)
- Intrusive rocks by era (<4M)
  - Mesozoic Intrusives



SCALE 1 : 225,000

Knowledge of the origin of the deposit is embodied in its classification or type. A clear understanding of the origin of the targeted ultramafic deposits and their associated sulphides will greatly assist in the future location of these deposits. The target deposits are magmatic ultramafic intrusives containing sulphides which when emplaced had separated as an immiscible iron-sulphur-oxygen liquid from an ultrabasic silicate melt. This type of deposit is classified simply as a Ni-Cu magmatic deposit. The deposits at the Giant Mascot Mine are crudely zoned, steeply dipping, intrusions, which in some cases are roughly concentric in cross section. Petrologic descriptions of associated rock types include: peridotite, olivine pyroxenite, pyroxenite, hornblendic pyroxenite, hornblendite and gabbro. Crude zonation from a peridotite core to a hornblendite rim has been observed in some of the deposits. However, in some deposits reverse zonation also occurs. Therefore, the core of the orebody may be olivine barren or else olivine rich (Muir, 1971). The ore bodies are close to vertical in orientation, are pipelike in form and have diameters of approximately 10 to 50 meters.

Unlike Alaskan type intrusions, at the Giant Mascot, the orebodies contain abundant orthopyroxene in ultramafic rocks. Because of the orthopyroxene content, the gabbro present may be classified as norite as found in other Cu-Ni deposits such as the Sudbury or the Lynne Lake deposits. Because of the presence of Ca poor pyroxene and orthopyroxene in ultramafic rocks, the lack of podiform chromite deposits and the high content of nickel sulphide, the deposit is not classified either as an Alpine ultramafic or as an Alaskan ultramafic complex. However, because of the pipelike form, the deposits of the Giant Mascot are structurally similar to the Alaskan type deposits emplaced in an orogenic environment. Nixon and Hammack, 1991, describe the Giant Mascot as a synorogenic-synvolcanic Cu-Ni gabbroid associated deposit. They state that Rana (Norway) and Moxie (U.S.A) are deposits in this same classification.

Review of the literature indicates that faulting exhibits some significant control on this type of deposit. Also ore association with brecciation has been mentioned briefly in some reports. Four fault systems have been recognized (Clarke, 1971). One fault group striking N45°-5°W and dipping 50°-75°NE is concluded to be pre-ore in age, with minor post ore movement. The second group of faults (N15°-30°E, 70°SE-70°NW) are closely associated with tabular ore bodies. The faults of group three (N10°W-10°E, 55°E-55°W) are considered related to the second group and are common to all mineralized zones examined. The above three fault systems are all considered pre-ore and are postulated, by Clarke, to have established complicated zones of fracturing favourable to ore deposition. A fourth fault system (N30°W-N30°E, 20-30°E or W) is considered to be post ore. It has been reported that certain ore shoots have terminated against this fault type.

REGIONAL GEOLOGY

Figure 1 and Figure 3 illustrate the geology of the area. The regional geology is complex as the area contains unconsolidated surficial deposits and metasedimentary rocks, metavolcanic rocks, acid-igneous rocks and basic to ultrabasic intrusive rocks. The surficial deposits include alluvium, colluvium, glacial-fluvial and glacial deposits. Rock types are granodiorite, quartz diorite, diorite, gabbro, hornblendite, hornblendic pyroxenite, pyroxenite, peridotite, metavolcanics and metasediments.

Thick surficial deposits mantle more than sixty per cent of the bedrock to depths greater than 30 metres in the valley bottoms. Much thinner deposits occur on higher slopes where outcrop is more abundant.

Dioritic rocks of the Spuzzum pluton surround the mafic and ultramafic intrusive rocks of the prospect area. The mafic and ultramafic igneous rocks intrude metapelites, shale, slate and pyrite bearing metasediments. These metasedimentary rock types have been mapped in larger quantities south and north of the Nickel Belt. The Nickel Belt is truncated on the west by the right-lateral strike-slip Harrison Lake fault (Late Cretaceous to Tertiary) and on the east by the Fraser River fault (25 Ma).

The oldest rocks in the area are the metasediments and the metavolcanics. The metasediments occur in the Slollicum Schist, the Settler Schist and the Cogburn Group. These metasediments range in age from early Cretaceous to Carboniferrous. The specific age of the metavolcanics is unknown. However, Figure 3 illustrates that they have been included with the Baird Diorite of Settler Mountain This group may range in age from Paleozoic to Proterozoic. The Baird Diorite in the old Settler Mountain may be Precambrian (Monger, 1989). The age of the basic intrusive rocks which host the nickel and copper bearing sulphides was estimated by McLeod (1975) to be 119Ma (Middle Cretaceous). The age of the Spuzzum batholith was estimated as 89 Ma (McLeod, 1975). The former ultramafite was considered to represent the earliest phase of the predominately dioritic Spuzzum pluton (Monger, 1989). Within the Cogburn Creek to Talc Creek area, Lowes (1972) mapped the ultramafic rocks as being separated into subparallel segments by the Shuksan Fault Zone, shown in Figure 3. The age of this thrust fault was stated to be Albian (Gabites, 1985) (Middle Cretaceous, 97.5 to 113 Ma). There is some controversy by authors regarding whether the thrust fault is actually the Shuksan Thrust fault. Irregardless of its name, the age and structural implications have been clearly defined.

Figure 3: Geology Talc-Cogburn Creeks area.

EXPLANATION: GEOLOGY TALC-COGBURN CREEKS AREA

Recent and Quaternary Deposits

Alluvium or fluvial deposits, colluvium, glaciofluvial deposits, glacial till

Cenezoic: Tertiary (Oligocene)

G2

Granite, quartz diorite, granodiorite, diorite

Mesozoic: Middle to Late Cretaceous

G1

Quartz diorite and granodiorite (Settler Creek body of Spuzzum Pluton)

Mesozoic: Middle Cretaceous

U

Dunite, peridotite, pyroxenite, hornblendite, gabbro, diorite, altered pyroxenite & peridotite

Mesozoic: Early to Middle Cretaceous

SL

Shale, phyllite and schist with local metavolcanic and metadiorite (Slollicum Schist)

Mesozoic:Triassic

SS

Arenaceous metasediment, shale and schist with abundant pyrite (Settler Schist)

Paleozoic: Carboniferous

CG

Shale and schistose metasediment (Cogburn Group, tectonic melange)

Paleozoic and Proterozoic

M

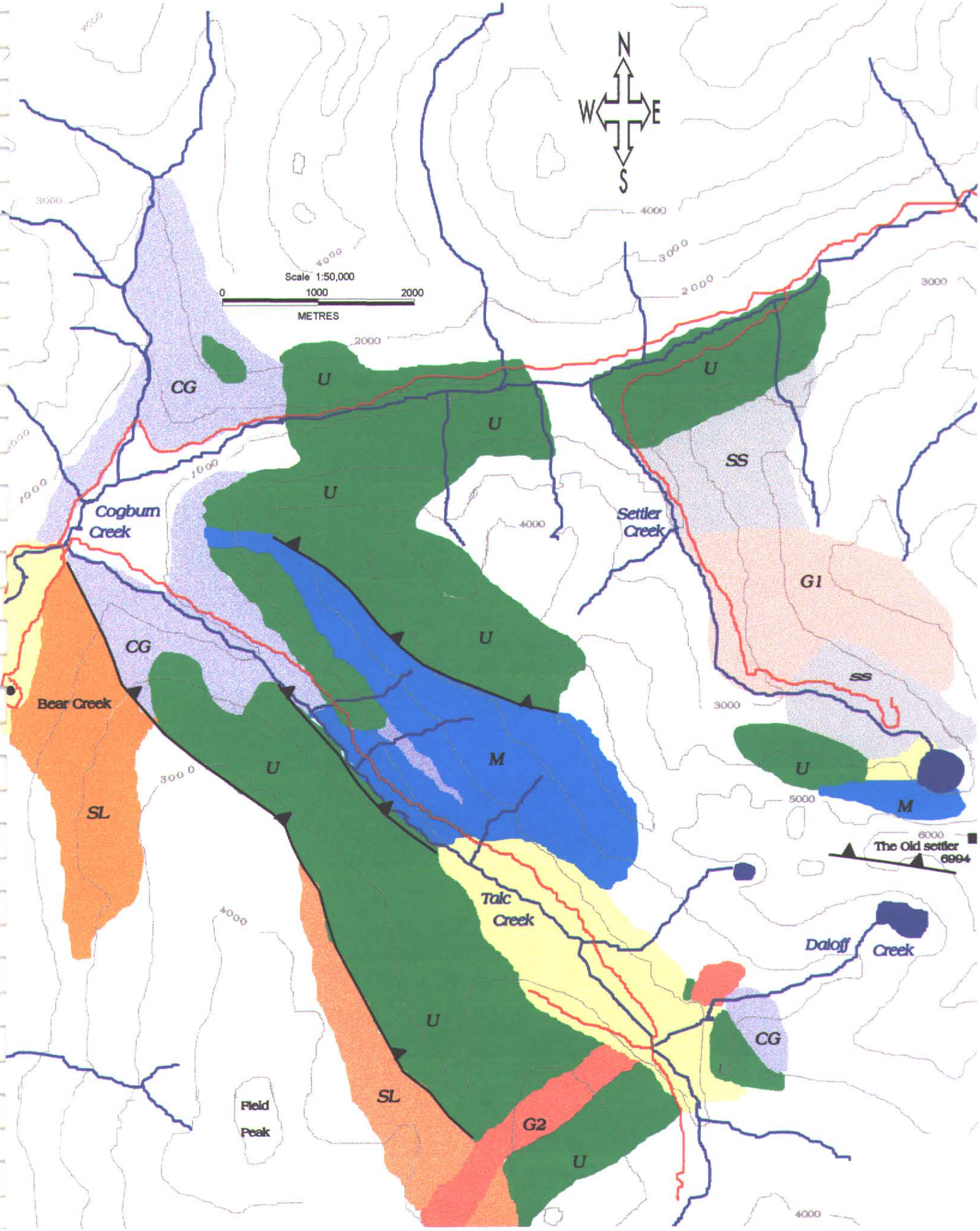
Metavolcanic and Metadiorite (includes Baird Diorite in Settler Mountain)

Symbol

Thrust Fault

Scale & Contour Interval

Scale: 1:50,000
1inch = 0.79 miles; 1centimetre = 0.5 kilometres   Contours and elevations in feet



N
W
E
S
Scale 1:50,000
0
1000
2000
METRES
4000
3000
2000
1000
CG
U
SS
Cogburn Creek
Settler Creek
G1
M
Bear Creek
SL
5000
6000
The Old settler
6994
Talc Creek
Daloff Creek
G2
Field Peak

PREVIOUS WORK

Exploration Prior to 1999

Previous work on the above Minfile Properties (Table 2), occurred primarily within the years from 1969 to 1975. Giant Mascot developed a Nickel Syndicate (Giant Explorations) and conducted the largest single exploration program in the area (Minfile: Settler Creek). The Nickel Syndicate operated from 1969 to 1975 in the hope of discovering additional ore to expand and prolong mine operations. Following claim staking in 1969, in the Talc and Cogburn Creeks area, the exploration program conducted an airborne magnetic survey (1970) which lead to the definition of significant magnetic anomalies. This lead to the definition (1971) of seven target areas. Detailed ground magnetic and Turam electromagnetic surveys were conducted on a sampling grid in conjunction with multi-media geochemical sampling (overburden, stream sediments, rock chips) and geological mapping (122 m (400 ft) separation on some lines). Two of the selected areas were diamond drilled. East of Settler Creek three diamond drill holes were emplaced to an aggregate length of 457 m (1500 ft). Southeast of Daioff Creek 17 holes were drilled to an aggregate length of over 1,219 m (4000 ft). At this site, Cu and Ni sulphides comprise weakly disseminated pyrrhotite and minor chalcopyrite. They were in part fracture controlled and hosted by pryroxenite and peridotite. Assays yielded 0.19 per cent nickel and trace copper. Drilling results did not indicate economic mineralization at either site. Therefore the program ceased in 1975.

High magnetic relief occurs to over 3,500 gammas throughout the area and over the Giant Mascot deposit. As mentioned above, this was determined from an airborne magnetometer survey, by Siegel Associates flown at 300 ft. (1970), for the Ni Syndicate, an exploration group formed by the Giant Mascot mine (1969-1974). Figure 4 illustrates the results of that survey over the Jason claims. The Jason Claims appear to occupy the marginal zone of a large concentric anomaly with magnetic values of over 3500 gammas. This zone lies over Hut Creek and is therefore referred to as the Hut Creek Batholith. The cause of the high magnetic relief is not known. However, the Ni Syndicate geologists observed magnetite in the peridotite. This is considered the probable cause of the high magnetic relief in peridotite throughout the area and hornblende diorite of the Hut Creek batholith. Metasediments and biotite phase diorite exhibit lower relief in the 1500 to 2000 gamma range.

In 1972 Giant Explorations Limited prepared a report dated March 20 and titled: *Geological, Geochemical and Geophysical Assessment Report on the Ni Claim Group (AR #3615)*. N.W. Berg authored the report. The area studied was referred to as Area Seven and was the last of the seven target areas selected by Giant Explorations in the Cogburn Creek and Talc Creek area east of Harrison Lake. The Jason claims lie within Area Seven. However, one half of the SP anomaly located in Jason2 and Jason9 lies between lines used by Giant Exploration for exploration. The other half of the anomalous zone detected lies outside of the grid area examined by the Ni Syndicate.

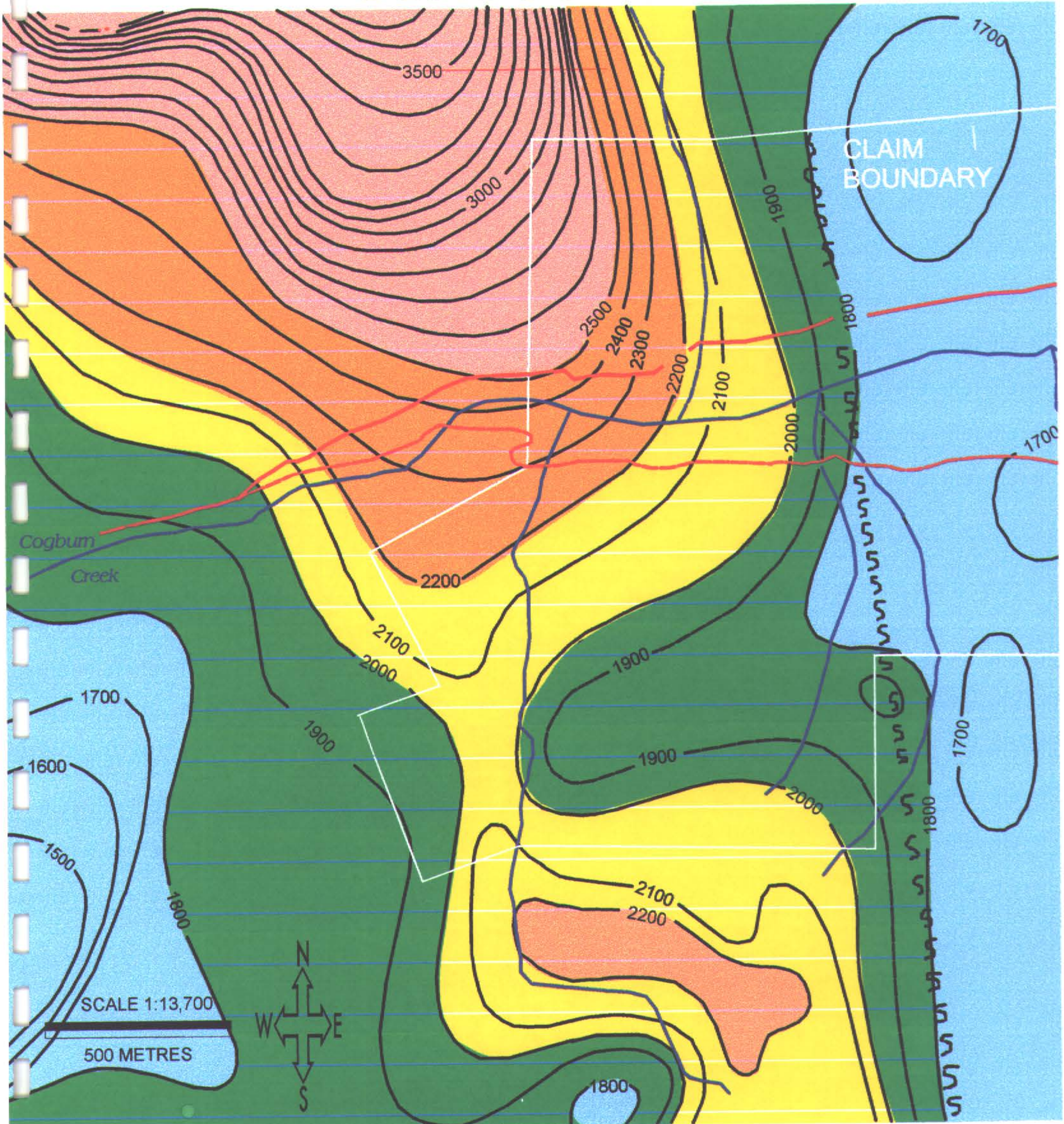
The author of this report, Berg writes: ***"The most interesting aspect of Area 7 is the numerous and widespread exposures of hornblendic pyroxenite, and the accompanying pyrrhotite and chalcopyrite mineralization. This rock type is found in both upper and lower areas, and disseminated and lacy pyrrhotite is generally present***
Based on the rock type and mineralization, this area represents one of the most exciting yet found, and it should be thoroughly examined."

Figure 4: Magnetic Contours over the Jason Claims.

Scale 1: 13,700 (approx.)

1cm = 137 metres

AIRBORNE MAGNETOMETER CONTOURS



Giant Explorations conducted additional studies on Area Seven and as a result assessment report #4071 was dated December 18, 1972. The author of this report is R.A. Gonzalez, who was employed by Giant Explorations Limited. Gonzalez writes regarding Area Seven: " ***Sulfides are commonly present only in the hornblende pyroxenites. Sulfide mineralization is impressive, both pyrrhotite and chalcopyrite are present. Pyrrhotite occurs as lacy interstitial material and as clusters, disseminated pyrrhotite is rare.*** " Geochemical, geophysical and geological surveys were undertaken.

Unfortunately, there is no detailed data listed or presented from the Turam survey mentioned in assessment report #4071. Gonzalez concluded (Pg. 8) " ***A ground Turam Survey over Area 7 outlined several anomalous areas. These anomalous areas also have coincident high geochemical values and high magnetometer response; they are also on or near geologically favourable ground. One such coincident anomaly was drilled with two short X-ray drill holes, and the results are favourable enough to warrant more drilling.*** "

The Giant Mascot Mine closed in 1974. Therefore, Giant Explorations Ltd. was terminated and in spite of the highly favourable recommendations presented in assessment reports #3615 and #4071 no assessment reports indicate further drilling was done on the property.

Prospecting 1999

In 1999 the author conducted a prospecting program to define target areas for more detailed work in the area drained by the Cogburn and Talc Creeks (Figure 1). As a result, 12 claims, the Jason claims were staked. Rock samples (float and outcrop) were so abundant that they were collected as the primary sample type throughout the area. Sample type, location and description were recorded on field cards. Samples from areas of favourable rock type (ultramafic rocks) and potential Ni-Cu mineralization were collected. From these samples a suite of samples from potential exploration targets were analyzed by ICP multi- element analysis. Polished thin sections were made of samples from a Ni-Cu mineral occurrence in ultramafic rocks on the Jason claims. An independent expert in the microscopic determination of ore minerals, Dr. J. Lusk, examined these sections. Examination of the polished thin sections indicated that the sulphides discovered were of magmatic origin. Twelve two-post claims, the Jason claims, were staked in the area where new sulphide mineralization had been discovered.

Polished Thin Section Examination:

Examination of polished thin sections of hornblendic pyroxenites, (D.R. Haughton, 1999 assessment report) shows evidence that sulphides from the Jason claims are magmatic in origin. The photomicrographs clearly show sharp grain boundaries between pyrite, pyrrhotite, chalcopyrite, and pentlandite. Pentlandite grains and exsolution textures showing flame texture where pentlandite has exsolved from pyrrhotite, are indicative that nickel is contained in sulphides rather than just in silicate minerals. Textures showing sulphides interstitial to silicate phases are clearly shown. In addition, in other samples, circular cross sections of sulphides show clearly that immiscible sulphide globules have been trapped during quenching from a sulphur-saturated melt. These textural relationships are similar to those seen at Sudbury where sulphides are magmatic in origin. Consequently, the mineralogy and textural relationships provide evidence that the sulphide phases are magmatic in origin.

Ore Dogs in Sulphide Exploration:

In 1962, Dr. A. Kahma of the Geological Survey of Finland initiated the use of dogs to detect weathered sulphide bearing boulders. Since that time, dogs were trained in Finland, Sweden and in Russia to detect sulphides during prospecting programs. Reports indicate that the governments of Finland and Sweden used dogs for about 20 years with great success.

As part of the preparation for prospecting the project area, the author trained an Alsatian dog as an "ore dog". After initial reconnaissance of the prospect area, and after target areas were defined for prospecting, the ore dog was brought into the area and used as part of the prospecting team. Subsequently, the dog Jason, played an important role in detecting mineralized boulders that lead to the staking of the Jason claims in 1999. Jason has since located many sulphide bearing samples located beneath unconsolidated deposits and forest vegetation.

Exploration 2000

In 2000 the author conducted a follow-up exploration program to evaluate targets defined in 1999 and to evaluate in more detail the Jason claims and a new discovery of magmatic Cu-Ni mineralization in ultramafic rocks. The source of sulphide mineralized boulders located in 1999 on claim Jason 5 was determined to be outcrop located in a zone of hornblendic pyroxenite. In this area four platinum-palladium and copper-nickel anomalous stream sediments were located. This location, which is a new mineral discovery and that at Discovery Creek (Jason 2) provide two distinct but widely separated outcrops of the same rock type. A ground based magnetic survey was done with a fluxgate magnetometer. This ground survey correlated with an airborne survey by Seigel Associates conducted for the Ni Syndicate in 1970. Contoured data from this survey produced an image that may represent the margin and core of the Hut Creek Batholith. Therefore, the sulphide zones in hornblendic pyroxenite may be products of a large intrusion. A single traverse with a self potential unit across the Ni-Cu mineralization in claim Jason2 located two significant anomalies, along an old logging road, each of magnitude –200mv. One of the anomalies begins in disseminated sulphide mineralization and progresses to the centre of the anomaly (–200mv) east of the sulphide mineralization. This direct association with disseminated sulphides led to the conclusion that the anomaly may result from magmatic sulphides. This last discovery warranted continued exploration in 2001.

In July 2000, claims Jason13, and Jason 14 were staked and in October 2000 Jason claims: Jason 15, Jason16, Jason17, Jason18 were staked.

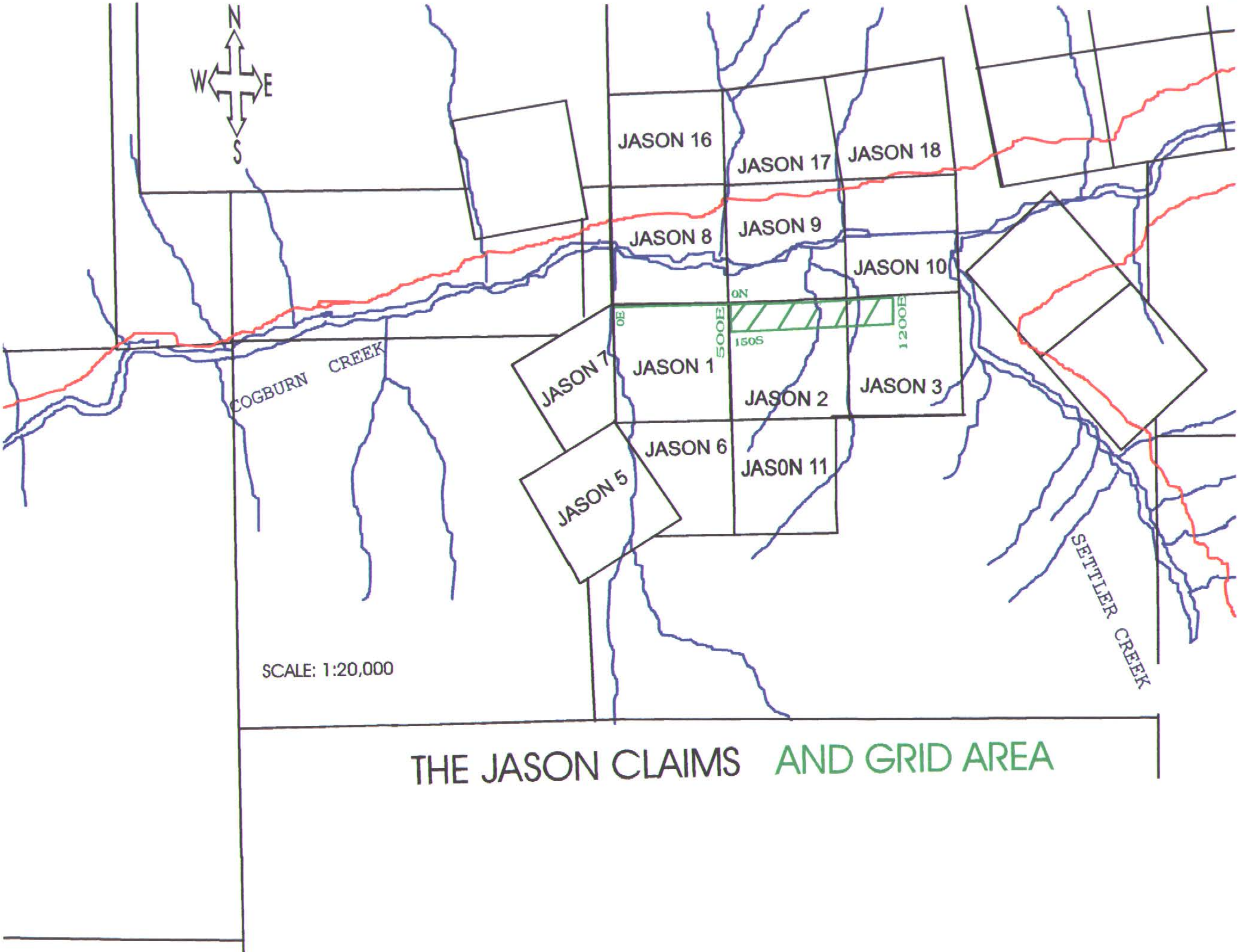
EXPLORATION RESULTS 2001

In 2001 several claims were dropped. The claims listed in Table 1 and portrayed in Figure 5 were retained.

Prospecting in 1999 had lead to the location of a large area of hornblendic pyroxenite containing Ni and Cu bearing disseminated sulphides (Jason2). A new discovery of sulphides in hornblendic pyroxenite was located in outcrop in 2000 (Jason7). The mineralization is believed to result from intrusion of ultramafics emplaced along marginal zones of the Hut Creek batholith. Such a geological model would predict that massive sulphides and ultramafic rock types might be concentrated along the margin of the batholith against the footwall of the intrusion. The footwall is a major lineament or structural feature, a crustal weakness, along which the sulphides may have been injected. In 2000, two self potential anomalies had been located. These anomalies are considered to

Figure 5: The Jason Claims in Dec. 2001

Scale: 1: 20,000
1cm = 200 metres



THE JASON CLAIMS AND GRID AREA

result from one zone of sulphide bearing rock extending from the magmatic Ni Cu sulphides in hornblendic pyroxenite outcrop in Jason2. Therefore, the main tasks in the exploration program of 2001were to confirm the self potential anomaly located in 2000 and to define the extent of this anomaly, its orientation and its relationship to the geology of the area. This would lead to the development of a drill target to evaluate the self potential anomalies.

In order to achieve these tasks the following work and surveys were undertaken:

1) Three lines (1250 m) were blazed and cleared south of and above the two anomalies located in 2000. The lines were 50 metres apart and flagged at 25 metre intervals.

2) Overburden samples were collected at 25 metre intervals along the lines. These samples were subjected to a 30 element ICP analysis to assist in estimation of the location of underlying pyroxenite rock type and anomalous areas with respect to Copper and Nickel.

3) Sulphide bearing outcrop and float samples were collected in the vicinity of the anomalies and where detected by a trained ore dog. These samples were analyzed for 30 elements by ICP analysis and also Au, Pt and Pd using aqua regia to dissolve the sample.

4) A detailed Self Potential survey was completed along the logging trail. At peak levels of the SP anomaly on this survey, SP data were collected perpendicular to the trail. Short SP surveys were taken along lines to define the anomaly limits.

5) An HLEM, VLF and magnetometer survey by D. Mark P.Geo. along 1250 metres of old logging trail, across the SP anomaly, was undertaken for the following reasons:

   i. To determine if the SP survey could be correlated with readings from other geophysical instrumentation,
   ii. To evaluate if the sulphides causing the anomaly were massive, connected and conductive and
   iii. To provide data that might be familiar to those who have no knowledge of Self Potential surveys.

6) Detailed geological mapping was done along the lines to aid in definition of the surface extent of the hornblendic pyroxenite associated with Cu & Ni bearing sulphides and to define structural aspects of the area.

Sample Locations and Descriptions

Figure 6 illustrates the location of overburden and selected outcrop and float samples. The location of a number of the outcrop and float samples are listed in Table 3. This table also describes all float and rock samples. Table 4 describes all overburden samples. One stream sediment silt sample, number 4 was collected.

Figure 6: Sample locations, Jason Claims.

Scale: 1: 3650
1 cm = 36.5 m

No. 1 post Jason2 is located at station : 0N, 500E

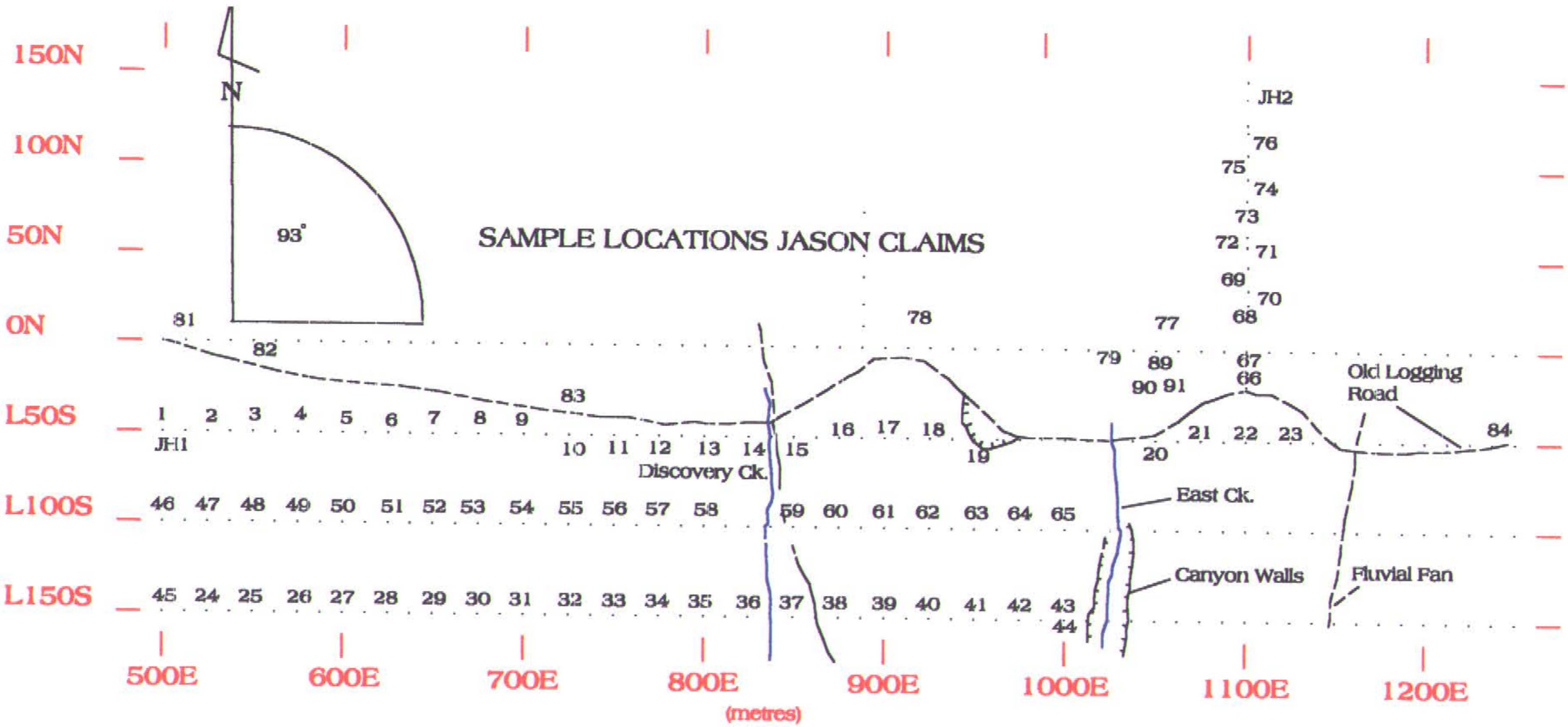

SAMPLE LOCATIONS JASON CLAIMS
150N
100N
50N
0N
L50S
L100S
L150S
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)
N
93°
JH1
JH2
Discovery Ck.
East Ck.
Canyon Walls
Old Logging Road
Fluvial Fan
1 2 3 4 5 6 7 8 9
10 11 12 13 14 15 16 17 18 19 20 21 22 23
46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65
45 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44
66 67 68 69 70 71 72 73 74 75 76 77 78 79 81 82 83 84 89 90 91

TABLE 3 - OUTCROP AND FLOAT SAMPLES COLLECTED IN 2001, JASON CLAIMS

NO.	OC/ FT	GRAIN SIZE	COLOUR	ROCK NAME	DESCRIPTORS	MINERALS	REMARKS
DH42	oc	medium	rusty brown white	felsite	altrd feld. hrnbl		Line 150S, 960E,West bank of East Ck.
DH44	oc	medium	dark grey	pyroxenite	massive & fresh		possible paragneiss
DH77	ft	coarse	med. dark green	pyroxenite	structural deform	ch po pn py	west of maximum anomaly 1125E
DH78	ft	medium	medium grey	hornbl., qtz, po		po	east of anomaly at 888E
DH79	ft	coarse	dark green	pyroxenite	structural deform	ch po pn py	west of maximum anomaly 1125E
DH80	oc	medium	dark black & white	diorite	massive & fresh	none	Log.Rd., 210E-275E, black hornbl.& feldspar
DH81	oc	coarse	dark grey black	hornblendic pyrox.		ch po pn py	Log.Rd.,490E-510E, sulphides, sheared
DH82	oc	medium	dark black & white	diorite	massive & fresh		Log.Rd., 550E,diorite in hrnbld.pyroxenite
DH83	oc	coarse	black	hornblendic pyrox.	pegmatitic	ch po pn py	Log.Rd., 720E-765E, Disc. Ck @834E
DH84	oc	medium	black & white	diorite	some alteration		Log.Rd., 888E-1250, rust stains on surface
DH89	ft	coarse	dark brown	hornblendic pyrox.	altered gossanous	ch po pn py	anomay #2 in this area sulphides sparse
DH90	ft	fine	medium grey	metapelite	sheared deformed	garnets, py ch	from dry ck bed north of East Creek
DH91	ft	medium	medium brown	quartzite	granular	pyrite	near anomaly at 1125E
JH1	oc	coarse	dark brown	hornblendic pyrox.	pegmatitic altered	ch po pn py	on base line 500E, 50S
JH2	ft	medium	dark brown	quartzite	altered gossanous	py	1125E, 138N, north of anomaly 2
JH3	ft	medium	dark brown		altered gossanous	py	sample collected by Jason,anom. 2
JH4	ft	medium	dark brown		altered gossanous	py pn	sample collected by Jason,anom. 2
JH5	ft	medium	dark brown		altered gossanous	py	sample collected by Jason,anom. 2
JH6	ft	coarse	black	hornblendite	gossanous	py	sample collected by Jason,anom. 2
JH7	ft	medium	brown black	feldspathic hornbl.	gossanous	py	sample collected by Jason,anom. 2
JH8	ft	medium	brown black	diorite	gossanous	py	sample collected by Jason,anom. 2
JH9	ft	coarse	black & white	hornblendite	highly altered	py	sample collected by Jason,anom. 1

Note: ft = float, oc = outcrop, py = pyrite, po = pyrrhotite, ch = chalcopyrite, pn = pentlandite

TABLE 4: OVERBURDEN SAMPLES COLLECTED IN 2001, JASON CLAIMS

NO.	COMPOSITION	GRAIN SIZE	COLOUR	SORTING	CLASS.	COORD.	REMARKS
1	B1, 10%gravel, 80% sand, 10% silt	med-fine	dark yellow brown	poor	till	500E,50S	till and colluvium.
2	B1, 10% gravel, 80% sand, 10% silt	med	dark brown	poor	till	525E,50S	till and colluvium.
3	B1, 10% gravel, 80% sand, 10% silt	med	med brown yellow	poor	till	550E,50S	till and colluvium.
5	B1,10% gravel, 70% sand, 20%silt	all grain sizes	dark yellow brown	poor	till	600E,50S	till and colluvium.
6	B1, 20% gravel, 70% sand, 10% silt	all grain sizes	dark yellow brown	poor	till	625E,50S	till and colluvium.
7	B1, 20% gravel, 70% sand, 10% silt	all grain sizes	dark yellow brown	poor	till	650E,50S	till and colluvium.
8	B1, 10% gravel, 80% sand, 10% silt	med-fine	med brown yellow	poor	till	675E,50S	till and colluvium, shallow over bedrock
9	B1, 20% gravel, 60% sand, 20% silt	med-fine	med brown yellow	poor	till	700E,50S	till and colluvium.
10	B1, 30% gravel,50% sand,20% silt	all grain sizes	dark brown yellow	poor	till	725E,50S	till and colluvium
11	B1, 40% gravel, 30% sand, 30% silt	all grain sizes	dark brown yellow	poor	till	750E,50S	till and colluvium
12	B1, 20% gravel, 50% sand, 30% silt	all grain sizes	med brown yellow	poor	till	775E,50S	till and colluvium
13	B1, 20% gravel, 50% sand, 30% silt	all grain sizes	med brown yellow	poor	till	800E,50S	till and colluvium
14	B1, 30% gravel,50% sand,20% silt	all grain sizes	dark brown	poor	till	825E,50S	top of west bank of Discovery Creek
15	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	850E,50S	top of east bank of Discovery Creek
16	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till, fl,co	875E,50S	till, fluvial material and colluvium
17	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till, fl,co	900E,50S	till, fluvial material and colluvium
18	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till, fl,co	925E,50S	till, fluvial material and colluvium
19	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till, fl,co	944E,50S	break in line 50S above slump bottom at 975E
20	B1, 10% gravel, 80% sand, 10% silt	medium	dark red brown	poor	till, fl,co	1050E,50S	east side of East Creek
21	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	drk red, brn, yell	poor	till, fl,co	1075E,50S	till, fluvial material and colluvium
22	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	dark red brown	poor	till, fl,co	1100E,50S	till, fluvial material and colluvium
23	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med red brn yell	poor	till, fl,co	1125E,50S	last sample on fluvial fan east of East Creek
24	B1, 30% gravel,50% sand,20% silt	all grain sizes	med brown yellow	poor	till	525E,150S	till and colluvium
25	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	550E,150S	till and colluvium
26	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	575E,150S	till and colluvium
27	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	dark brown yellow	poor	till	600E,150S	small outcrop of diorite with mafic bands
28	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	625E,150S	till and colluvium
29	A-B1, 20% gravel 60% sand, 20% silt	all grain sizes	pale brown grey	poor	till	650E,150S	diorite outcrop
30	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	675E,150S	till and colluvium
31	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	700E,150S	hornblendic pyroxenite at 710E showing gossan
32	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	drk brown black	poor	till	725E,150S	hornblendic pyroxenite outcrop
33	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	750E,150S	area with abundant hornblendic pyroxenite float
34	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	775E,150S	till and colluvium
35	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	800E,150S	till and colluvium
36	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med-drk brown	poor	till	825E,150S	on east side of hornblendic diorite & small stream
37	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	850E,150S	on east side of Discovery Creek
38	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	dark brown yellow	poor	till	875E,150S	till, fluvial material and colluvium
39	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	md drk brn yellow	poor	till	900E,150S	till, fluvial material and colluvium
40	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	925E,150S	till, fluvial material and colluvium
41	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	950E,150S	till, fluvial material and colluvium
43	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	975E,150S	west side of East Creek
45	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	500E,150S	till and colluvium
46	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	500E, 100S	abundant hornblenic pyroxenite float
47	B1, 10% gravel, 80% sand, 10% silt	medium	dark brown	poor	till	525E, 100S	till and colluvium
48	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	dark brown	poor	till	550E, 100S	stream over diorite outcrop
49	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	dark brown yellow	poor	till	575E, 100S	till and colluvium
50	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	dark brown yellow	poor	till	600E, 100S	till and colluvium
51	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	dark brown yellow	poor	till	625E, 100S	till and colluvium

TABLE 4: OVERBURDEN SAMPLES COLLECTED IN 2001, JASON CLAIMS

NO.	COMPOSITION	GRAIN SIZE	COLOUR	SORTING	CLASS.	COORD.	REMARKS
52	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	650E, 100S	at 640E diorite outcrop
53	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	675E, 100S	till and colluvium
54	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	700E, 100S	till and colluvium
55	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	725E, 100S	till showing abundant hornbendic pyroxenite float
56	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	750E, 100S	till showing abundant hornbendic pyroxenite float
57	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	775E, 100S	till and colluvium
58	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	800E, 100S	till and colluvium
59	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	850E, 100S	No sample at 825 centre of Discovery Creek
60	B1, 10% gravel, 80% sand, 10% silt	all grain sizes	med brown yellow	poor	till	875E, 100S	East side of Discovery Creek
61	B1, 10% gravel, 70% sand, 20% silt	medium	med brown yellow	poor	till	900E, 100S	till, fluvial material and colluvium
62	B1, 30% gravel, 40% sand, 30% silt	all grain sizes	med brown yellow	poor	till	925E, 100S	till, fluvial material and colluvium
63	B1, 10% gravel, 80% sand, 10% silt	medium	med brown yellow	poor	till	950E, 100S	till, fluvial material and colluvium
64	B1, 10% gravel, 80% sand, 10% silt	medium	med brown yellow	poor	till	975E, 100S	till, fluvial material and colluvium
65	B1, 20% gravel, 60% sand, 20% silt	all grain sizes	med brown yellow	poor	till	1000E, 100S	till, fluvial material and colluvium
66	B1, 10% gravel, 70% sand, 20% silt	med-fine	drk red, brn, yell	poor	till, fl,co	1125E, 4N	till, possible fluvial material
67	B1, 10% gravel, 70% sand, 20% silt	medium	drk red, brn, yell	well	till, fl,co	1125E, 16N	till, possible fluvial material
68	B1, 10% gravel, 60% sand, 30% silt	med-fine	drk red, brn, yell	poor	till, fl,co	1125E, 32N	abundant mafic boulders Jason detecting sulfides
69	B1, 10% gravel, 80% sand, 10% silt	med-fine	drk red, brn, yell	poor	till, fl,co	1125E, 63N	abundant mafic boulders Jason detecting sulfides
70	B1, 10% gravel, 80% sand, 10% silt	medium	drk red, brn, yell	well	till, fl,co	1125E, 50N	till, possible fluvial material
71	B1, 10% gravel, 80% sand, 10% silt	med-fine	drk red, brn, yell	poor	till, fl,co	1125E, 75N	till, Jason excited grabbing sulphide bearing rocks
72	B1, 10% gravel, 80% sand, 10% silt	med-fine	drk brown yellow	poor	till, fl,co	1125E, 80N	abundant mafic till, Jason detecting sulphides
73	B1, 10% gravel, 80% sand, 10% silt	med-fine	drk brown yellow	poor	till, fl,co	1125E, 100N	till, possible fluvial material
74	B1, 10% gravel, 80% sand, 10% silt	med-fine	drk brown yellow	poor	till, fl,co	1125E, 112N	material sampled is gossan, key analysis.
75	B1, 10% gravel, 80% sand, 10% silt	fine	dark red yellow	poor	till, fl,co	1125E, 125N	gossan zone, Jason detecting sulphides
76	B1, 10% gravel, 80% sand, 10% silt	med-fine	dark brown yellow	poor	till, fl,co	1125E, 138N	till, possible fluvial material
85	B1, 10% gravel, 80% sand, 10% silt	all grain sizes	medium brown	poor	fan & till dep	200W,Cogburn	samples over maximum SP anomly Cog. Ck. Rd.
86	B1, 10% gravel, 80% sand, 10% silt	all grain sizes	medium brown	poor	fan & till dep	225W,Cogburn	samples over maximum SP anomly Cog. Ck. Rd.
87	B1, 10% gravel, 80% sand, 10% silt	all grain sizes	medium brown	poor	fan & till dep	250W,Cogburn	samples over maximum SP anomly Cog. Ck. Rd.
88	B1, 10% gravel, 80% sand, 10% silt	all grain sizes	medium brown	poor	fan & till dep	275W,Cogburn	samples over maximum SP anomly Cog. Ck. Rd.

Table 5: Chemical analysis certificates for Ni Belt samples collected in 2001

File # A 102633 Overburden and Stream Sediment (#4) Samples
File # A102634 Outcrop and Float Samples

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Argo File # A102633 Page 1

2760 Dooley road, Victoria BC V8Y 1R7 Submitted by: David R. Haughton

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
DH1	<1	182	5	87	<.3	244	73	884	6.53	6	<8	<2	<2	9	<.2	<3	<3	66	.25	.103	1	369	1.25	25	.08	3	1.01	.02	.02	2
DH2	<1	178	8	76	<.3	330	77	523	3.67	2	<8	<2	<2	28	<.2	<3	3	57	.39	.070	4	137	1.01	115	.07	7	1.78	.03	.04	<2
DH3	<1	217	<3	84	<.3	250	79	496	6.84	5	<8	<2	<2	20	<.2	<3	<3	93	.29	.054	2	298	1.65	64	.10	3	1.54	.03	.02	<2
DH4	1	89	11	106	<.3	131	53	882	1.86	<2	<8	<2	<2	84	.4	<3	<3	51	1.17	.149	4	63	.89	130	.05	7	1.65	.05	.04	2
DH5	<1	16	6	56	<.3	14	8	186	1.85	2	<8	<2	<2	22	.2	<3	<3	49	.37	.095	3	37	.23	47	.07	<3	1.83	.02	.02	<2
DH6	<1	12	5	49	<.3	14	6	120	2.28	<2	<8	<2	<2	18	.2	<3	<3	65	.19	.052	3	31	.15	43	.10	3	.84	.02	.02	2
DH7	<1	17	7	37	.5	13	6	58	1.51	<2	<8	<2	<2	27	.2	<3	<3	63	.26	.042	3	25	.15	44	.06	<3	.87	.03	.02	<2
DH8	1	33	7	85	<.3	58	24	294	3.41	4	<8	<2	<2	31	<.2	<3	<3	82	.37	.106	3	38	.34	61	.12	6	3.78	.03	.03	<2
DH9	<1	67	8	66	<.3	74	28	327	2.91	<2	<8	<2	<2	16	<.2	<3	<3	72	.25	.059	4	65	.24	36	.09	3	2.38	.02	.02	<2
DH10	1	67	11	82	<.3	93	54	962	4.03	<2	<8	<2	<2	21	<.2	<3	3	61	.38	.072	3	104	.51	52	.08	3	1.87	.02	.02	2
DH11	<1	26	7	48	<.3	30	9	189	3.01	<2	<8	<2	<2	15	.2	<3	<3	126	.22	.052	4	72	.19	34	.18	4	.80	.02	.03	<2
DH12	<1	93	4	92	<.3	161	33	329	3.51	3	<8	<2	<2	14	<.2	<3	3	88	.27	.080	4	88	.57	45	.14	4	3.77	.02	.03	2
DH13	1	71	<3	80	<.3	97	22	240	5.49	4	<8	<2	<2	16	<.2	<3	<3	146	.26	.063	3	183	.46	57	.19	4	2.78	.02	.02	<2
DH14	<1	302	7	95	<.3	278	74	715	3.49	<2	<8	<2	<2	33	<.2	<3	<3	81	.44	.099	4	150	.87	83	.08	4	2.48	.04	.03	2
DH15	<1	26	17	47	.3	53	10	170	3.33	<2	<8	<2	<2	17	<.2	<3	3	147	.21	.082	3	72	.25	48	.14	3	2.34	.03	.02	<2
DH16	<1	42	6	61	<.3	44	12	181	3.48	6	8	<2	2	13	.2	<3	<3	105	.16	.145	4	81	.25	39	.11	5	4.14	.03	.02	<2
DH17	1	19	12	37	.6	18	5	152	2.37	<2	<8	<2	<2	14	<.2	<3	<3	83	.23	.065	4	49	.17	28	.09	<3	2.16	.02	.02	<2
DH18	1	29	8	43	<.3	28	7	249	2.83	<2	<8	<2	<2	20	<.2	<3	<3	111	.30	.071	4	70	.26	43	.13	6	2.30	.03	.03	<2
DH19	1	41	7	57	.3	28	8	346	3.84	3	<8	<2	<2	15	<.2	<3	<3	113	.20	.195	2	85	.22	34	.11	4	5.99	.02	.02	2
DH20	1	138	<3	55	<.3	122	28	216	2.89	3	<8	<2	<2	32	<.2	<3	<3	95	.44	.147	5	104	.89	102	.10	4	4.19	.07	.12	<2
RE DH20	1	142	<3	56	<.3	126	29	221	2.94	5	<8	<2	<2	33	<.2	<3	<3	97	.45	.150	5	105	.92	105	.11	<3	4.26	.07	.13	<2
DH21	<1	31	7	44	<.3	25	6	99	2.60	<2	<8	<2	<2	16	<.2	<3	<3	115	.19	.136	3	74	.19	38	.12	<3	2.25	.02	.02	<2
DH22	<1	54	15	69	<.3	43	11	217	2.82	<2	<8	<2	<2	15	.2	<3	<3	97	.19	.160	3	82	.30	41	.10	<3	3.65	.03	.02	2
DH23	1	114	<3	56	<.3	114	25	218	3.24	<2	<8	<2	<2	24	.2	<3	<3	94	.31	.186	4	112	.67	56	.11	5	4.78	.05	.05	<2
DH24	<1	97	<3	49	<.3	139	33	160	6.55	<2	<8	<2	<2	11	<.2	<3	<3	142	.14	.097	2	264	.53	25	.17	<3	1.25	.03	.01	<2
DH25	<1	35	11	60	<.3	42	10	146	3.59	<2	<8	<2	<2	21	<.2	<3	<3	114	.22	.064	3	70	.19	45	.13	<3	1.75	.03	.02	<2
DH26	<1	100	4	53	<.3	118	22	176	3.95	<2	<8	<2	<2	24	.3	<3	<3	110	.20	.064	2	111	.55	54	.14	4	3.07	.04	.03	2
DH27	<1	115	5	59	<.3	118	48	460	3.37	<2	<8	<2	<2	40	<.2	<3	<3	77	.37	.072	3	117	.85	66	.06	<3	2.04	.06	.02	2
DH28	<1	29	8	82	<.3	42	17	423	3.10	<2	<8	<2	<2	25	<.2	<3	<3	110	.29	.100	3	68	.50	64	.14	4	3.12	.03	.03	2
DH29	<1	8	9	40	<.3	12	5	81	1.71	<2	<8	<2	<2	25	<.2	<3	<3	89	.26	.044	3	36	.21	53	.10	<3	.66	.03	.02	<2
DH30	2	30	10	49	<.3	43	16	150	4.01	<2	<8	<2	<2	17	<.2	<3	<3	145	.33	.045	4	67	.29	26	.16	<3	3.20	.03	.02	<2
DH31	<1	75	7	89	.3	107	52	710	7.78	<2	<8	<2	<2	12	<.2	<3	<3	82	.27	.121	2	452	1.05	23	.09	<3	.96	.03	.02	<2
DH32	<1	49	6	70	<.3	97	62	3063	2.59	<2	<8	<2	<2	21	.2	<3	<3	52	.39	.077	3	204	.30	98	.04	3	.53	.03	.02	<2
DH33	<1	90	3	77	<.3	164	42	540	3.42	<2	<8	<2	<2	16	<.2	<3	<3	79	.28	.089	4	76	.44	41	.10	<3	2.58	.03	.02	<2
STANDARD C3	27	65	36	167	6.1	38	13	837	3.32	60	22	2	22	29	23.0	15	22	86	.57	.101	19	186	.64	153	.09	19	1.89	.04	.18	18
STANDARD G-2	2	4	<3	44	<.3	9	5	573	1.98	<2	<8	<2	4	71	<.2	<3	<3	42	.64	.102	8	85	.61	221	.13	5	.94	.08	.50	3

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL S230 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 10 2001 **DATE REPORT MAILED:** Aug 20/01 **SIGNED BY** ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

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
DH34	1	33	8	77	<.3	76	19	343	3.41	<2	<8	<2	<2	18	<.2	<3	<3	71	.25	.075	2	85	.68	59	.09	3	1.79	.02	.03	2
DH35	2	44	7	74	<.3	74	16	173	2.72	<2	<8	<2	<2	15	.2	<3	<3	74	.20	.068	3	70	.56	59	.11	<3	3.12	.03	.04	2
DH36	<1	431	<3	79	<.3	345	133	708	4.15	2	<8	<2	<2	20	<.2	<3	<3	58	.25	.071	3	198	1.34	63	.09	5	2.57	.03	.03	<2
DH37	1	154	8	83	<.3	262	36	324	3.73	2	<8	<2	<2	20	<.2	<3	<3	78	.31	.118	3	101	.89	84	.12	5	3.86	.03	.04	2
DH38	1	70	9	64	<.3	96	14	123	2.41	6	<8	<2	<2	34	.2	<3	<3	67	.39	.076	2	67	.43	121	.09	3	1.40	.02	.03	<2
DH39	2	129	9	61	<.3	255	32	172	2.92	<2	<8	<2	<2	20	.2	<3	<3	79	.27	.039	5	75	.60	95	.13	<3	2.71	.02	.03	<2
DH40	1	105	5	57	<.3	101	18	192	3.20	4	<8	<2	<2	12	<.2	<3	<3	78	.17	.127	5	88	.62	48	.12	3	3.92	.03	.04	2
DH41	2	78	7	47	<.3	75	15	117	2.99	2	<8	<2	<2	13	<.2	<3	<3	96	.16	.068	4	80	.62	51	.13	<3	3.16	.03	.03	<2
DH43	1	61	<3	43	<.3	58	10	77	3.08	<2	<8	<2	<2	10	<.2	<3	<3	101	.13	.074	3	70	.44	35	.13	<3	2.58	.03	.02	<2
DH45	<1	152	<3	108	<.3	304	58	336	4.55	2	<8	<2	<2	10	<.2	<3	<3	64	.17	.074	2	152	1.34	123	.13	<3	2.10	.02	.05	3
DH46	1	94	6	68	<.3	145	29	223	5.58	4	<8	<2	<2	14	<.2	<3	<3	90	.24	.109	2	198	.87	46	.13	3	1.56	.02	.03	<2
DH47	1	224	11	88	<.3	381	106	733	3.73	<2	<8	<2	<2	44	<.2	<3	<3	53	.59	.086	3	161	1.27	123	.05	5	1.38	.03	.02	2
DH48	1	57	19	64	<.3	123	26	231	2.47	2	<8	<2	<2	47	.2	<3	<3	79	.48	.062	2	79	.38	112	.07	<3	.90	.03	.02	2
DH49	<1	45	11	69	<.3	60	14	238	3.55	<2	<8	<2	<2	32	<.2	<3	<3	107	.32	.090	2	74	.41	57	.12	<3	2.15	.03	.03	2
DH50	1	39	3	74	<.3	48	10	166	3.31	<2	<8	<2	<2	19	<.2	<3	<3	106	.29	.058	3	80	.67	51	.14	3	2.45	.03	.03	<2
RE DH50	1	39	4	73	<.3	49	10	167	3.36	<2	<8	<2	<2	19	.2	<3	<3	107	.29	.058	3	79	.68	51	.14	<3	2.51	.03	.03	<2
DH51	5	46	9	90	<.3	70	16	223	3.99	4	<8	<2	<2	22	<.2	<3	<3	108	.34	.118	3	78	.75	62	.12	<3	4.56	.03	.03	<2
DH52	1	16	7	70	<.3	26	8	104	2.69	<2	<8	<2	<2	14	<.2	<3	<3	68	.24	.046	3	54	.26	31	.11	4	2.10	.02	.01	<2
DH53	2	25	4	50	<.3	51	10	158	2.70	<2	<8	<2	<2	12	<.2	<3	<3	77	.17	.054	3	55	.30	29	.10	<3	2.00	.02	.02	<2
DH54	1	50	11	73	<.3	87	25	224	3.15	2	<8	<2	<2	13	.2	<3	<3	69	.22	.116	4	57	.31	49	.10	<3	3.70	.02	.03	2
DH55	<1	84	<3	63	<.3	81	31	491	5.74	<2	<8	<2	<2	14	<.2	<3	<3	124	.22	.117	2	173	.35	35	.17	3	1.77	.02	.02	<2
DH56	<1	124	6	59	<.3	141	47	722	3.00	<2	<8	<2	<2	15	<.2	<3	<3	59	.22	.116	3	93	.43	49	.07	5	2.48	.02	.02	<2
DH57	1	23	10	60	<.3	49	15	180	2.82	<2	<8	<2	<2	14	<.2	<3	<3	65	.18	.082	2	65	.30	71	.10	4	3.25	.02	.03	<2
DH58	1	38	9	63	.3	76	26	415	2.83	2	<8	<2	<2	17	<.2	<3	<3	69	.22	.085	3	68	.38	55	.09	4	3.09	.02	.02	<2
DH59	1	87	6	33	<.3	102	22	199	3.07	3	<8	<2	<2	10	<.2	<3	<3	87	.17	.048	3	71	.35	40	.14	<3	2.16	.02	.02	<2
DH60	1	55	7	43	<.3	91	25	265	2.84	<2	<8	<2	<2	12	<.2	<3	<3	84	.16	.064	4	64	.50	61	.13	<3	2.69	.02	.03	<2
DH61	2	51	7	45	<.3	76	20	202	3.46	3	<8	<2	<2	14	.3	<3	<3	98	.19	.074	5	66	.49	61	.14	3	3.46	.03	.03	2
DH62	2	111	5	41	<.3	107	23	182	2.63	2	<8	<2	<2	19	<.2	<3	<3	64	.27	.137	5	75	.54	67	.09	<3	5.22	.03	.05	<2
DH63	1	50	7	47	<.3	53	11	86	3.26	<2	<8	<2	<2	12	<.2	<3	<3	95	.17	.130	4	78	.43	61	.12	4	4.11	.02	.05	<2
DH64	2	104	7	43	<.3	82	15	77	2.83	<2	<8	<2	<2	16	<.2	<3	<3	85	.17	.114	3	89	.55	43	.10	<3	3.98	.04	.02	<2
DH65	1	79	12	30	<.3	67	12	109	3.07	3	<8	<2	<2	20	<.2	<3	<3	102	.23	.101	3	88	.65	76	.12	3	3.36	.04	.07	<2
DH66	1	41	5	52	<.3	28	9	296	3.68	<2	<8	<2	<2	9	<.2	<3	<3	92	.14	.247	2	94	.17	22	.10	<3	6.37	.01	.01	<2
DH67	2	53	8	47	<.3	40	12	299	3.68	<2	<8	<2	<2	13	<.2	<3	<3	89	.20	.393	2	95	.23	26	.10	4	6.44	.02	.02	<2
DH68	1	42	6	55	.3	28	9	256	3.25	<2	<8	<2	<2	10	.2	<3	<3	106	.16	.208	3	87	.16	30	.11	4	4.48	.02	.02	<2
STANDARD C3	26	63	37	168	5.8	39	12	836	3.29	55	24	<2	21	29	23.1	15	20	82	.57	.097	18	177	.64	161	.09	16	1.84	.04	.18	18
STANDARD G-2	2	6	3	46	<.3	12	5	592	2.02	<2	<8	<2	4	74	<.2	<3	<3	40	.67	.107	8	82	.65	243	.13	<3	.94	.08	.52	2

Sample type: SOIL S230 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

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
DH69	2	24	7	29	.3	12	2	116	2.04	2	<8	<2	<2	8	.2	<3	<3	69	.12	.057	4	42	.09	20	.11	<3	1.29	.02	.02	<2
DH70	2	36	7	56	.3	25	7	148	2.96	<2	<8	<2	<2	10	<.2	<3	<3	91	.14	.114	4	65	.17	24	.12	<3	3.37	.02	.02	<2
DH71	2	43	13	68	<.3	30	7	390	3.02	<2	<8	<2	<2	12	.2	<3	<3	112	.21	.193	4	67	.25	34	.13	<3	3.59	.02	.02	<2
DH72	2	57	9	63	.3	44	12	526	2.89	<2	<8	<2	<2	16	<.2	<3	<3	85	.30	.159	3	84	.33	42	.11	<3	3.25	.02	.02	<2
DH73	2	46	4	57	<.3	25	5	378	3.62	2	<8	<2	<2	12	<.2	<3	<3	104	.15	.195	3	102	.14	25	.13	<3	4.58	.01	.01	<2
DH74	3	84	8	75	<.3	71	18	769	3.02	<2	<8	<2	<2	15	<.2	<3	<3	79	.19	.237	3	90	.38	39	.09	<3	4.59	.03	.02	<2
DH75	4	23	11	48	<.3	16	1	56	3.05	<2	<8	<2	<2	25	<.2	<3	<3	126	.11	1.587	3	71	.13	102	.13	<3	4.84	.02	.02	<2
DH76	2	30	3	45	.4	26	8	446	3.40	<2	<8	<2	<2	10	<.2	<3	<3	101	.13	.122	4	79	.16	37	.11	<3	3.40	.02	.02	<2
DH85	4	56	8	46	<.3	52	10	298	3.30	30	<8	<2	2	16	<.2	<3	<3	99	.28	.224	4	68	.65	105	.16	<3	4.57	.05	.12	<2
DH86	3	43	9	46	<.3	36	10	285	2.59	2	<8	<2	2	22	.6	<3	<3	90	.38	.137	4	62	.71	122	.15	<3	2.69	.06	.13	<2
DH87	2	48	11	43	<.3	45	12	237	2.34	2	<8	<2	<2	25	.2	<3	<3	81	.46	.137	5	61	.82	133	.14	<3	2.44	.07	.17	<2
DH88	2	52	11	51	<.3	46	11	264	2.56	2	<8	<2	<2	24	<.2	<3	<3	87	.44	.151	4	63	.90	164	.15	<3	2.79	.07	.20	<2
RE DH88	3	53	9	51	<.3	46	11	263	2.54	<2	<8	<2	<2	24	<.2	<3	<3	87	.44	.152	5	61	.90	164	.15	<3	2.81	.07	.20	<2
STANDARD C3	27	65	32	176	5.4	40	11	783	3.32	56	28	2	20	28	23.3	12	22	81	.56	.087	18	165	.62	150	.10	16	1.80	.04	.16	22

Sample type: SOIL S230 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Argo File # A102634

2760 Dooley road, Victoria BC V8Y 1R7 Submitted by: David R. Haughton

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	Au** ppb	Pt** ppb	Pd** ppb
DH77	1	323	10	21	.4	466	77	123	3.06	<2	<8	<2	<2	143	.2	3	<3	36	1.33	.012	<1	132	1.11	39	.03	<3	1.97	.19	.05	<2	15	4	<2
DH78	1	69	9	30	<.3	57	15	123	1.62	2	<8	<2	2	239	<.2	<3	<3	71	2.71	.054	3	98	.56	169	.09	<3	4.31	.62	.19	<2	5	5	<2
DH79	<1	178	4	17	.3	164	33	81	2.39	2	<8	<2	<2	16	<.2	<3	<3	49	.48	.016	<1	193	.88	37	.04	<3	.56	.05	.03	<2	13	4	<2
DH81	<1	222	9	52	.3	408	73	519	4.80	4	<8	<2	<2	17	.2	<3	<3	48	.47	.015	<1	352	5.33	28	.05	<3	.49	.07	.03	<2	8	5	<2
DH83	<1	237	6	14	<.3	220	46	164	1.86	<2	<8	<2	<2	17	<.2	<3	<3	32	.60	.011	<1	139	1.02	12	.05	<3	.36	.07	.02	<2	<2	<2	<2
DH89	<1	186	4	12	<.3	209	40	122	1.70	<2	<8	<2	<2	15	<.2	<3	<3	49	.77	.009	<1	205	1.20	24	.08	<3	.56	.11	.03	<2	8	3	<2
DH90	5	108	6	67	<.3	90	19	202	2.27	3	<8	<2	2	22	<.2	3	<3	191	.32	.079	5	195	1.02	465	.18	<3	1.62	.12	.54	<2	14	<2	<2
DH91	3	75	3	31	<.3	68	17	323	2.77	<2	<8	<2	3	20	.2	<3	3	173	.25	.057	6	149	1.42	432	.08	<3	2.25	.07	.39	<2	3	8	5
JH1	1	140	<3	55	.3	295	68	729	5.71	2	<8	<2	<2	18	<.2	3	4	37	.55	.008	<1	297	7.39	17	.06	<3	.43	.10	.03	<2	9	2	<2
JH2	3	99	8	30	.5	28	6	92	1.98	<2	<8	<2	2	217	.6	<3	<3	146	2.66	.289	7	99	.76	213	.13	<3	4.11	.68	.41	<2	<2	<2	<2
JH3	2	96	3	9	<.3	42	8	170	1.77	<2	<8	<2	<2	43	<.2	<3	<3	55	.77	.043	1	181	.95	16	.08	<3	.90	.15	.03	<2	5	5	<2
JH4	<1	13	14	27	<.3	114	19	372	2.41	2	<8	<2	<2	156	.2	<3	<3	95	1.81	.045	2	194	1.55	38	.18	3	2.04	.43	.04	<2	<2	<2	7
RE JH4	<1	13	13	27	<.3	116	19	358	2.38	<2	<8	<2	<2	154	.3	<3	<3	92	1.78	.043	1	191	1.53	37	.18	<3	2.03	.42	.04	<2	<2	2	<2
JH5	2	76	<3	8	<.3	9	6	65	1.21	<2	<8	<2	<2	65	<.2	<3	<3	12	.42	.003	<1	60	.16	15	.03	<3	.92	.20	.02	<2	6	4	<2
JH6	<1	98	<3	22	<.3	32	13	238	2.54	<2	<8	<2	<2	32	.3	<3	<3	96	1.14	.037	<1	140	1.31	39	.14	<3	1.18	.21	.04	<2	13	11	<2
JH7	3	26	9	47	<.3	33	9	127	1.09	<2	<8	<2	<2	369	.7	<3	<3	60	4.55	.062	4	109	.30	114	.08	3	6.64	.70	.05	2	12	5	<2
JH8	<1	40	5	24	<.3	24	15	123	1.33	<2	<8	<2	<2	343	.3	<3	<3	83	3.70	.110	3	68	.53	90	.09	<3	5.46	.79	.11	<2	14	<2	<2
JH9	1	44	<3	18	<.3	23	10	245	2.66	<2	<8	<2	<2	36	<.2	<3	3	120	1.42	.008	<1	161	1.80	27	.21	<3	1.47	.32	.08	<2	11	3	<2
STANDARD C3/FA-10R	28	69	36	174	6.6	44	11	799	3.40	59	18	3	22	29	23.6	14	25	89	.58	.088	18	180	.63	152	.10	18	1.86	.04	.16	13	502	481	487
STANDARD G-2	2	4	3	43	<.3	10	4	560	2.03	<2	<8	<2	5	71	<.2	<3	<3	47	.65	.093	7	82	.61	221	.15	<3	.93	.07	.45	3	-	-	-

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 AU** PT** PD** GROUP 3B BY FIRE ASSAY & ANALYSIS BY ICP-ES. (30 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 10 2001 DATE REPORT MAILED: Aug 17/01 SIGNED BY C. L........ D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data L FA YWS

Chemical Analysis of Samples
Twenty-two outcrop and float samples were collected and of these 17 were analyzed. Seventy-eight unconsolidated samples (overburden and one stream sediment) were collected and of these 76 were analyzed. Table 5 lists the samples analyzed and the results of each analysis.

Magnetometer, VLF and HLEM Surveys
A proton magnetometer and a VLF survey were done in an integrated survey along the old logging road that crossed the area of the SP anomaly. An HLEM survey was conducted over this same logging road. The results of these surveys are presented in an accompanying report by geophysicist David Mark P. Geo. of Geotronics, Surrey, B.C.

Self Potential Survey
Two different self potential surveys were conducted on the Jason Claims. The first survey was conducted over the location of the SP anomaly located in 2000 on the old logging trail. The second survey was undertaken in an east-west direction across the east margin of the Hut Creek batholith. This latter survey was completed along the Cogburn Creek logging road on the north side of Cogburn Creek.

The first (south) survey was taken over the old logging road and on two traverses perpendicular to that on the logging road. The results of this survey are presented in Figure 7 as a plan view showing results listed from all traverses and on profile views Figures 8 to 11 showing plots of measured values against distance on the traverses.

The data from the traverses during the first SP survey and an examination of the results of the geology, geochemical and geophysical surveys were combined and yielded the following observations:

1) The lines cut above the trail allowed determination of the southern extent of the SP anomaly. The anomalous area does not extend south of Line 100S. However, it extends in a northeast direction over 350 metres. Its northeast limit was not determined.

2) The boundaries of the SP anomalies at the -100 mv level and other data defined a zone composed of two open ended anomalies. This zone has a minimum of 250 meters in width and more than 350 meters in length and is open ended to the northeast. See Figures 7 to 11.

3) Although thick surficial deposits mantle the area of the anomaly, together, the geology, geochemical and magnetometer surveys show that the anomaly detected, lies primarily on the west side of a major north south trending structural lineament separating the igneous units of the Hut Creek batholith from crustal rocks intruded by the batholith. Figures 12 to 16 present data from these surveys. Figure 17 is the bedrock interpretation based on data presented in these surveys.

4) On the east side of the structural lineament lies a biotite phase diorite and on the west side of the lineament lies the SP anomaly in hornblendic pyroxenite.

5) The diorite on the east side of the structural lineament is a biotite phase diorite possibly produced by anatexis of crustal rocks, whereas diorite which has been mapped west of the structural lineament is hornblende phase diorite produced by magmatic processes forming the Hut Creek batholith.

Figure 7 to 11:Self potential measurements and graphs.

No. 1 post Jason2 is located at station : 0N, 500E

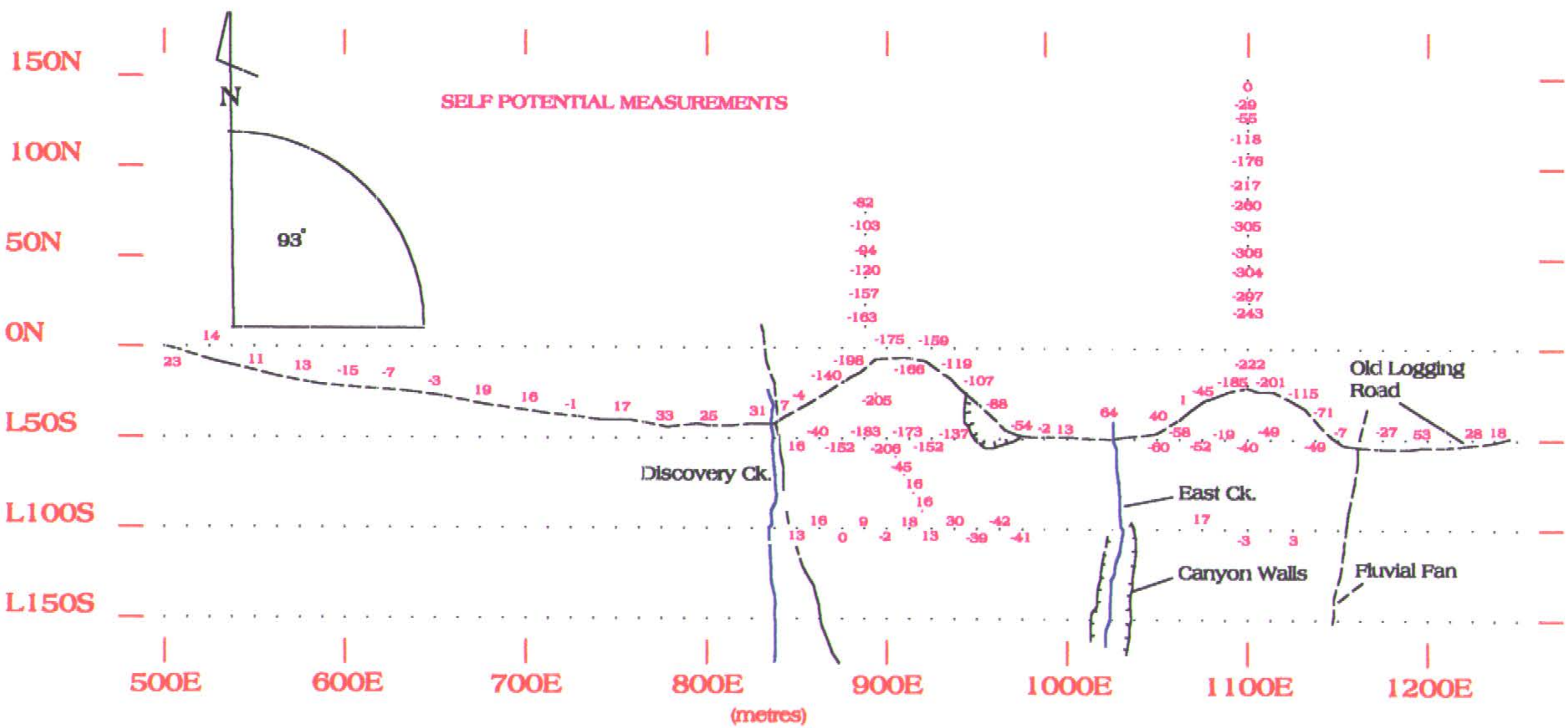
Figure 7: Self potential measurements. Scale: 1: 3650 1 cm = 36.5 m

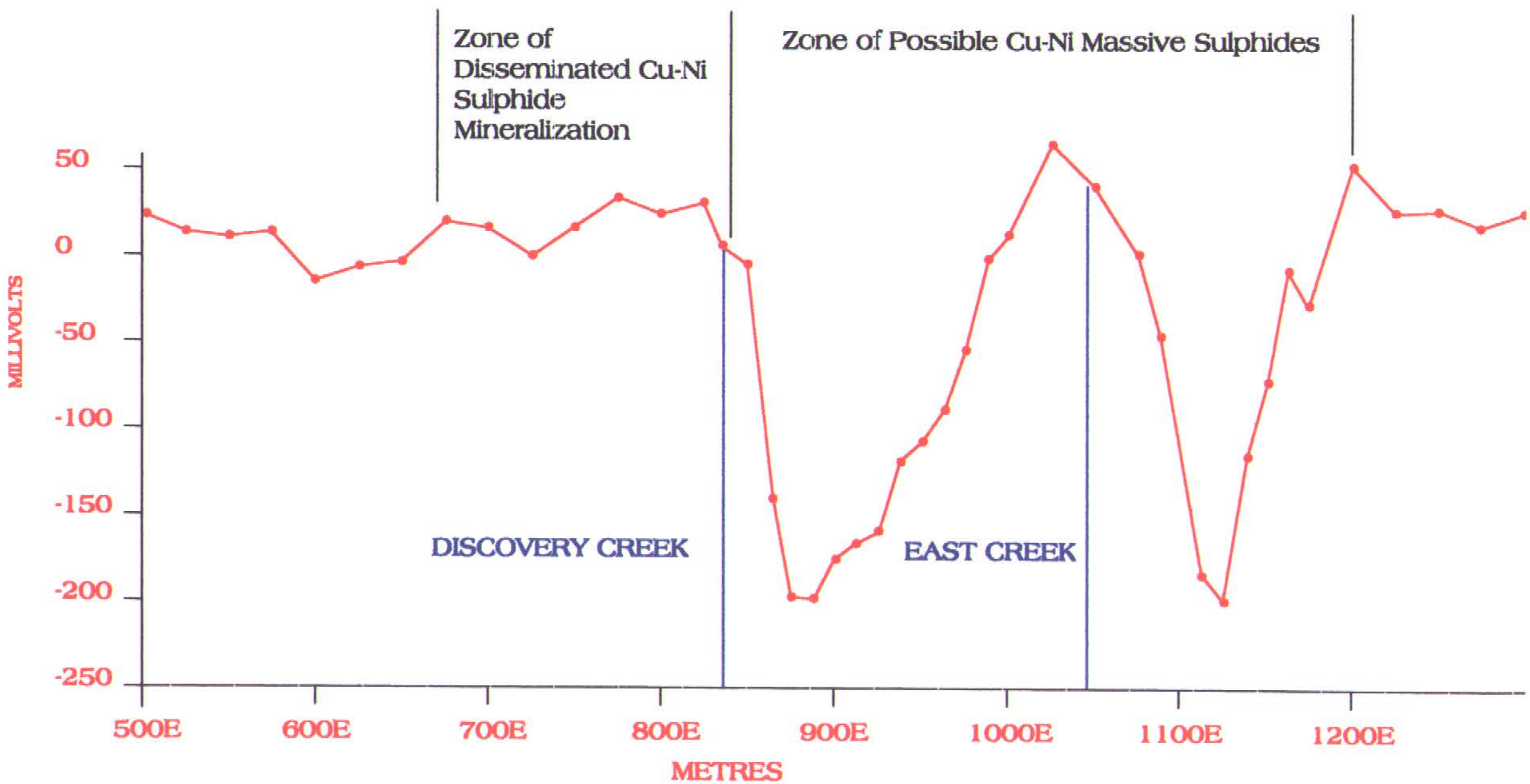
Figure 8: Self potential measurements, E-W logging trail, Jason Claims.

Figure 9: Self potential profile across anomaly, Section A-A'.

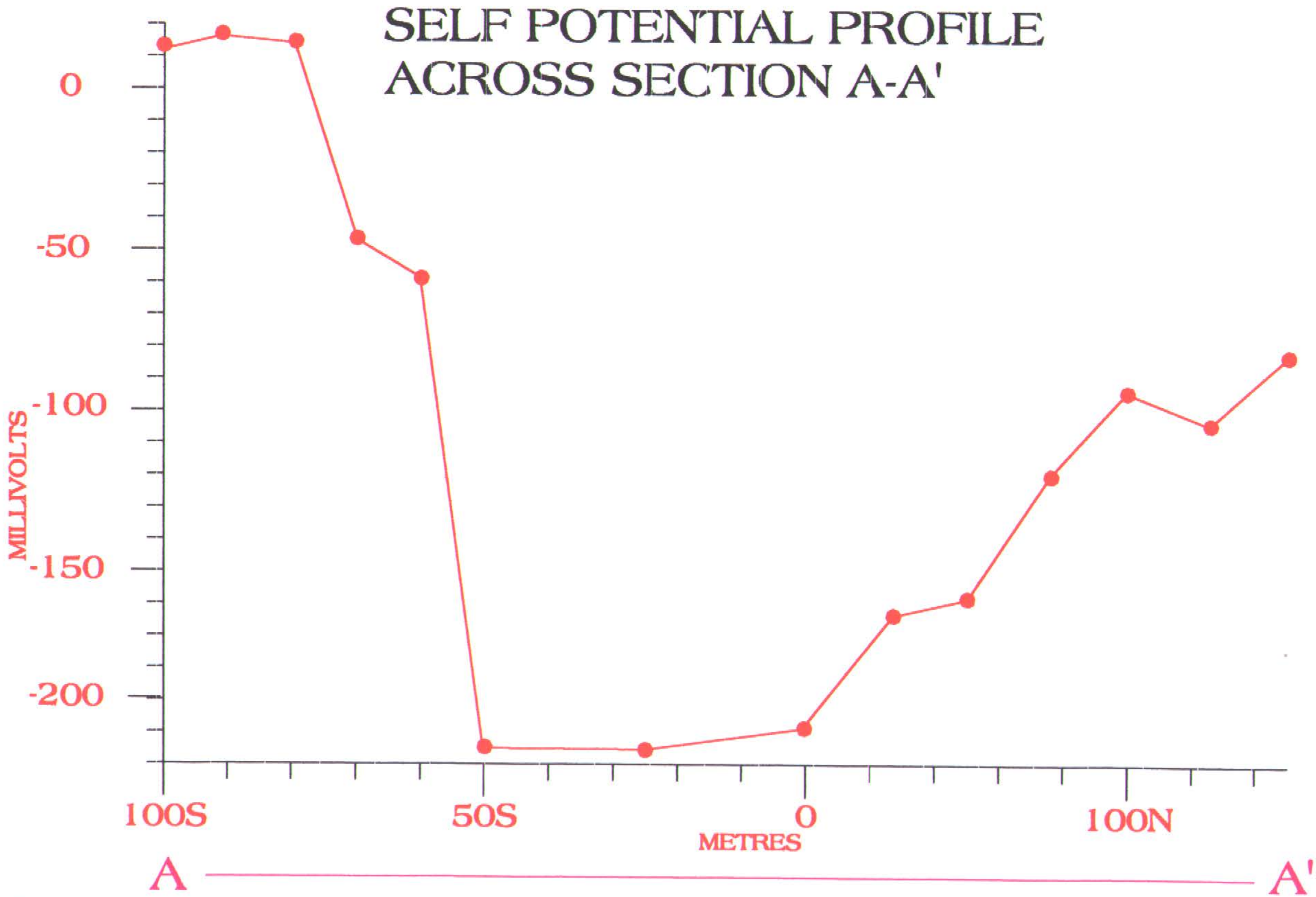
Figure 10: Self potential profile across anomaly, Section B-B'.

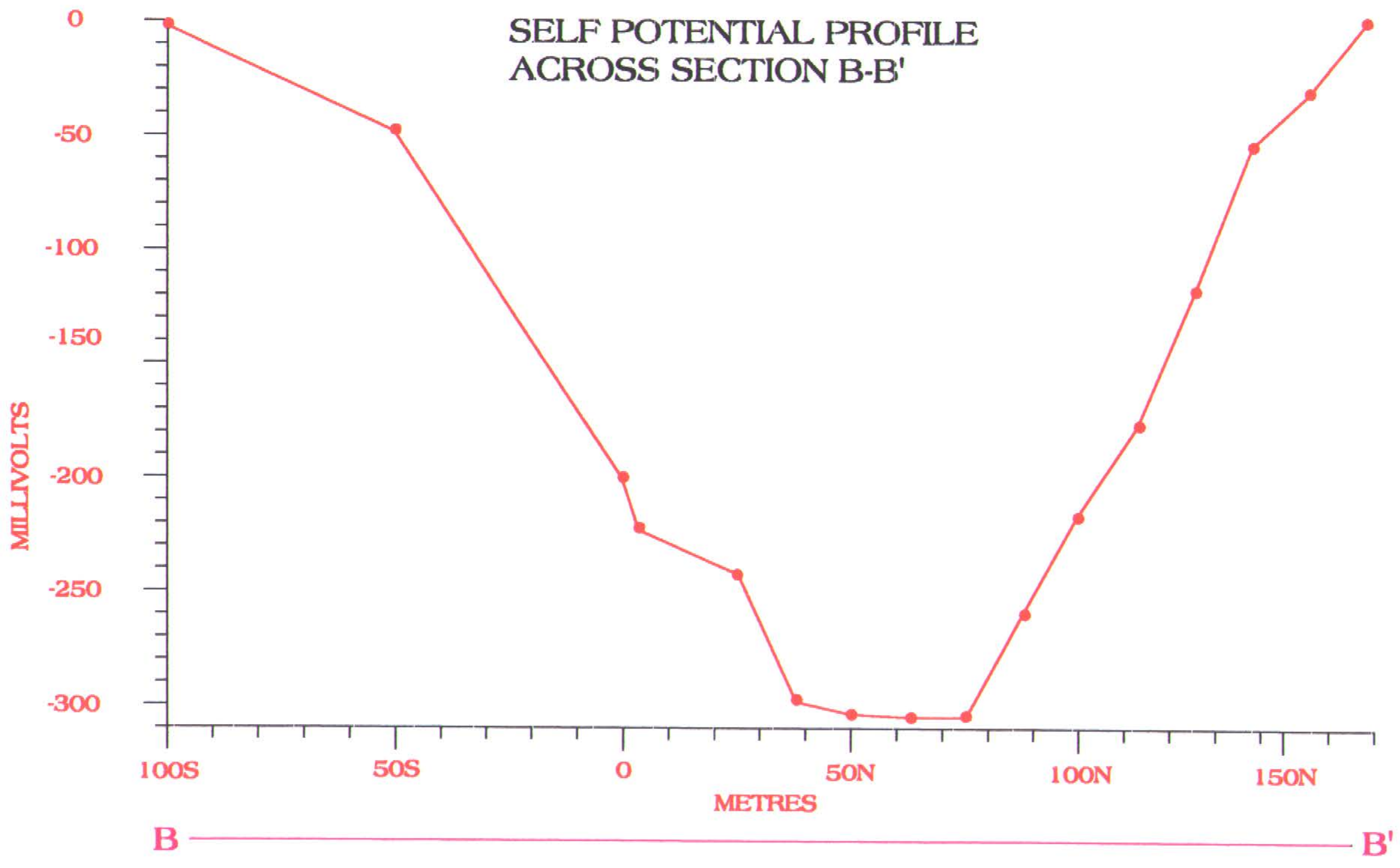
Figure 11: Contours of self potential anomalies. Scale: 1: 3650 1 cm = 36.5 m


SELF POTENTIAL MEASUREMENTS
N
93°
150N
100N
50N
0N
L50S
L100S
L150S
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)
Discovery Ck.
East Ck.
Canyon Walls
Old Logging Road
Fluvial Fan

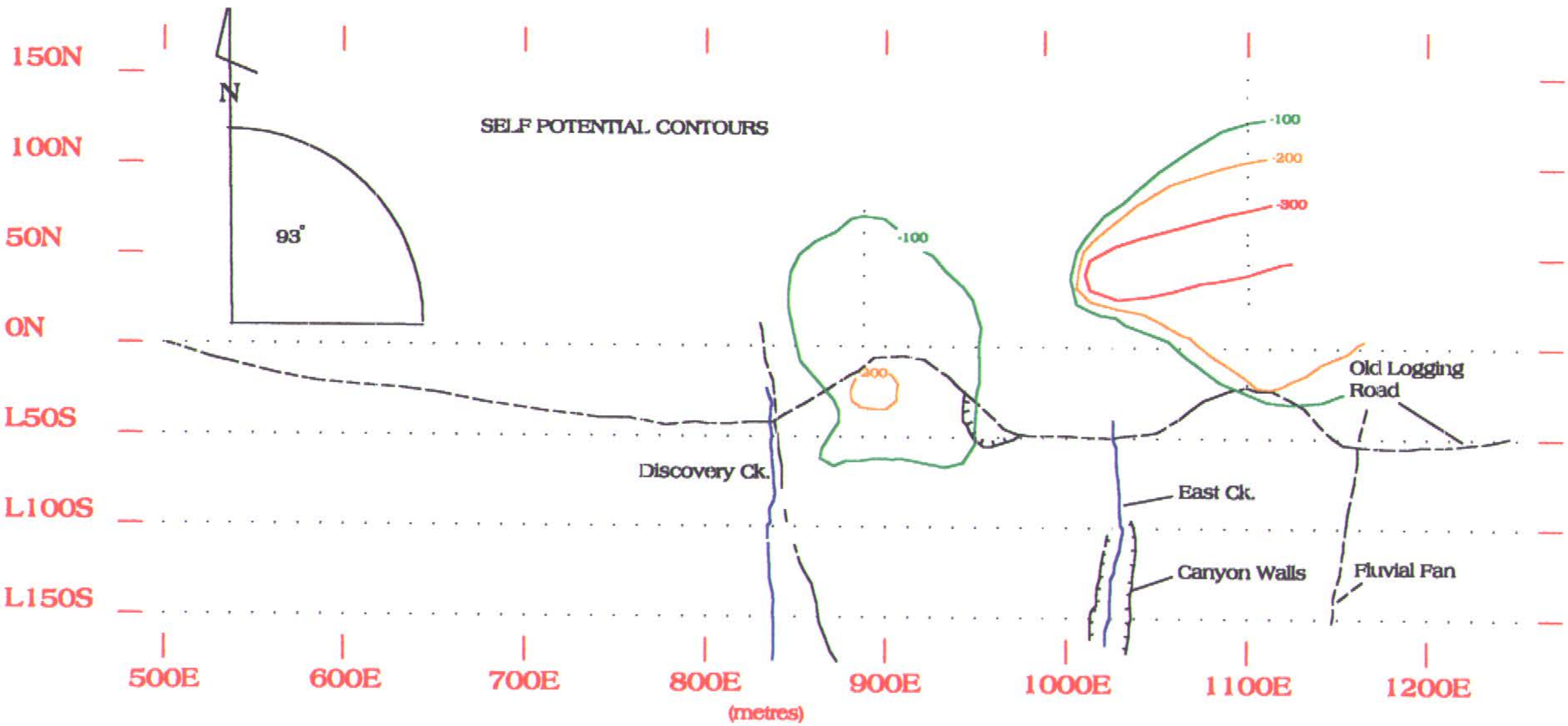


SELF POTENTIAL MEASUREMENTS, E-W LOGGING TRAIL, JASON CLAIMS


SELF POTENTIAL PROFILE
ACROSS SECTION A-A'
0
-50
-100
-150
-200
MILLIVOLTS
100S
50S
0
100N
METRES
A
A'



SELF POTENTIAL PROFILE
ACROSS SECTION B-B'
0
-50
-100
-150
-200
-250
-300
MILLIVOLTS
100S
50S
0
50N
100N
150N
METRES
B
B'



SELF POTENTIAL CONTOURS
N
93°
150N
100N
50N
0N
L50S
L100S
L150S
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)
-100
-200
-300
Old Logging Road
Discovery Ck.
East Ck.
Canyon Walls
Fluvial Fan

6) Examination of a portion of the Siegel airborne magnetic survey of 1970, depicted in Figure 4, indicates that the hornblende phase diorite is characterized by magnetic values ranging from approximately 2000 to over 3500 gammas Figure 4. The biotite phase diorite and metasediments in the area are characterized by magnetic values of less than approximately 1800 gammas. The sulphide bearing hornblendic pyroxenite has an intermediate magnetic signature ranging from approximately 1800 to 2000 gammas. The higher magnetic intensity measured over the hornblendic phase of the diorite is assumed to result from magnetite dispersed through the diorite. Compared to hornblendic diorite the lower magnetic intensity measured over the hornblendic pyroxenite is presumably a result of lower magnetite content than in the diorite, even though the pyroxenite contains pyrrhotite which has a lower magnetic intensity than magnetite.

The results of the north SP survey on a marginal zone of the Hut Creek batholith are listed in Table 6. The SP traverse was done across Hut Creek and along the main Cogburn Creek logging road. The road is oriented in an east- west direction. Unfortunately, thick fluvial deposits from the Hut Creek fan mantle the area of the survey. The survey indicates that several well defined SP anomalies exist on either side of Hut Creek. The largest anomaly has a value of –398 mv. Because of the scarcity of outcrop or geochemical data along this traverse, no conclusions have been reached regarding the nature of the anomalies. Additional geological fieldwork will be required to determine the cause of these anomalies.

Table 6: Results of a Self Potential Survey Across the East Margin of the Hut Creek Batholith

STATION	READING(mv)	REMARKS
25 E	-94	475 metres west of initial claim post for Jason 17
50 E	-21	
75 E	-21	
100 E	-40	
125 E	+14	
150 E	-80	
175 E	-134	
200 E	-108	
225 E	-203	Sample 88 collected
250 E	-398	Minimum reading obtained, Sample 87 collected
275 E	-365	Sample 86 collected
300 E	-336	Sample 85 collected
313 E	-330	Fluvial sands appear gossanous.
325 E	-270	Fluvial sands appear gossanous
337 E	-295	
350 E	-325	
362 E	-331	
375 E	-184	
387 E	-160	
400 E	-108	
412 E	-161	
425 E	+12	
450 E	+39	

475 E	+24	
500 E	+44	Reading taken on north side of road opposite IP Jason17
600 E	+1	500 E on West side of Hut Ck. 600E on East side of Hut Ck.
625 E	-42	Hut Creek is located at 575 E
650 E	-20	From Hut Creek to 950 thick sandy fluvial fan deposits occur
675 E	-29	
700 E	-45	
725 E	-5	
738 E	-27	
750 E	-185	
751 E	-190	
763 E	-192	
775 E	-75	
788 E	-146	
800 E	-124	
813 E	-147	
825 E	-96	
838 E	-26	
850 E	-52	
863 E	-63	
875 E	-30	
888 E	-48	
900 E	-50	
913 E	-52	
925 E	-68	
938 E	-79	
950 E	-27	Small hornblendite outcrop on north side of road
963 E	-70	
975 E	-33	
988 E	-6	
1000 E	-13	
1025 E	-71	
1038 E	-108	
1050 E	-91	
1063 E	-121	
1075 E	-128	
1088 E	-92	
1100 E	-45	
1113 E	-30	
1125 E	-12	
1138 E	-65	
1150 E	-36	
1175 E	-35	

GEOPHYSICAL REPORT BY D. MARK P. GEO

David G. Mark P.Geo., consulting geophysicist was contracted to conduct VLF, proton magnetometer and horizontal loop electromagnetometer surveys over the area of interest. In order to interpret the results of these surveys he examined the geological geochemical and self potential data. His report is therefore included as a separate report accompanies this report. The two reports are essential to the evaluation and interpretation of all surveys described. Portions of D. Mark's summary page and his conclusions are presented below:

Summary:

The main purpose of the magnetic and electromagnetic surveys was to help in determining the causative sources of the previously done SP and soil geochemistry surveys............................

The magnetic and VLF-EM surveys were carried out with a combination proton precession magnetometer/VLF-EM receiver by taking readings every 12.5 m along the logging access road, and along one cross line. The readings were input into a computer with the magnetic readings being diurnally corrected and the VLF-EM readings being Fraser-filtered. They were then plotted and profiled along with the SP and copper/nickel soil geochemistry results using a horizontal scale of 1:5,000. The amount surveyed was 1,738 meters.

The horizontal loop electromagnetic (HLEM) survey was carried out with an Apex Parametrics MaxMin II electromagnetometer in the horizontal loop mode along the same logging access road. The coil spacing was 50 m; the reading interval, 12.5 m, and all five frequencies read, 222, 444, 888, 1777 and 3555 Hz. The HLEM readings were profiled onto the same figure as for the correlating geophysical and geochemical surveys. The amount surveyed was 1,250 meters.

Conclusions:

1. *The SP readings taken along the logging access road labeled line 0N, have revealed two strong anomalies and therefore suggest that the causative source(s) is massive sulphides. In support of this is the fact that at least one of the anomalies occurs within a hornblendic pyroxenite that is disseminated with pyrite, pyrrhotite, chalcopyrite, and pentlandite.*
2. *The two SP anomalies are open-ended toward each other and thus could be actually one anomaly. If they are, then the causative source would be striking in a 70°E – 250°E direction with a minimum strike length of 225 m being open in both directions.*
3. *Soil geochemical analysis have revealed anomalous values in copper and nickel that are, at a minimum, adjacent to the two SP highs. This suggests that the causative source(s) of the SP anomalies contains nickel and copper sulphides.*
4. *The magnetic survey revealed magnetic highs correlating with the SP highs indicating that magnetite and/or pyrrhotite is associated with the SP causative source(s).*
5. *The magnetic survey also showed a strong magnetic signature correlating with the diorite and a weaker one correlating with the hornblendic pyroxenite and felsite. It also shows, with VLF-EM support, a possible fault occurring along the contact between the diorite and the hornblendic pyroxenite at East Creek.*
6. *The HLEM and VLF-EM surveys revealed anomalous readings (or conductors) correlating with the SP anomalies, which support that massive sulphides are the cause of the SP highs.*

Figure 12 to 17: Overburden and Geology surveys.

Scale: 1: 3650
1 cm = 36.5 m

No. 1 post Jason2 is located at station : 0N, 500E

Figure 12: Cu in overburden samples (ppm).

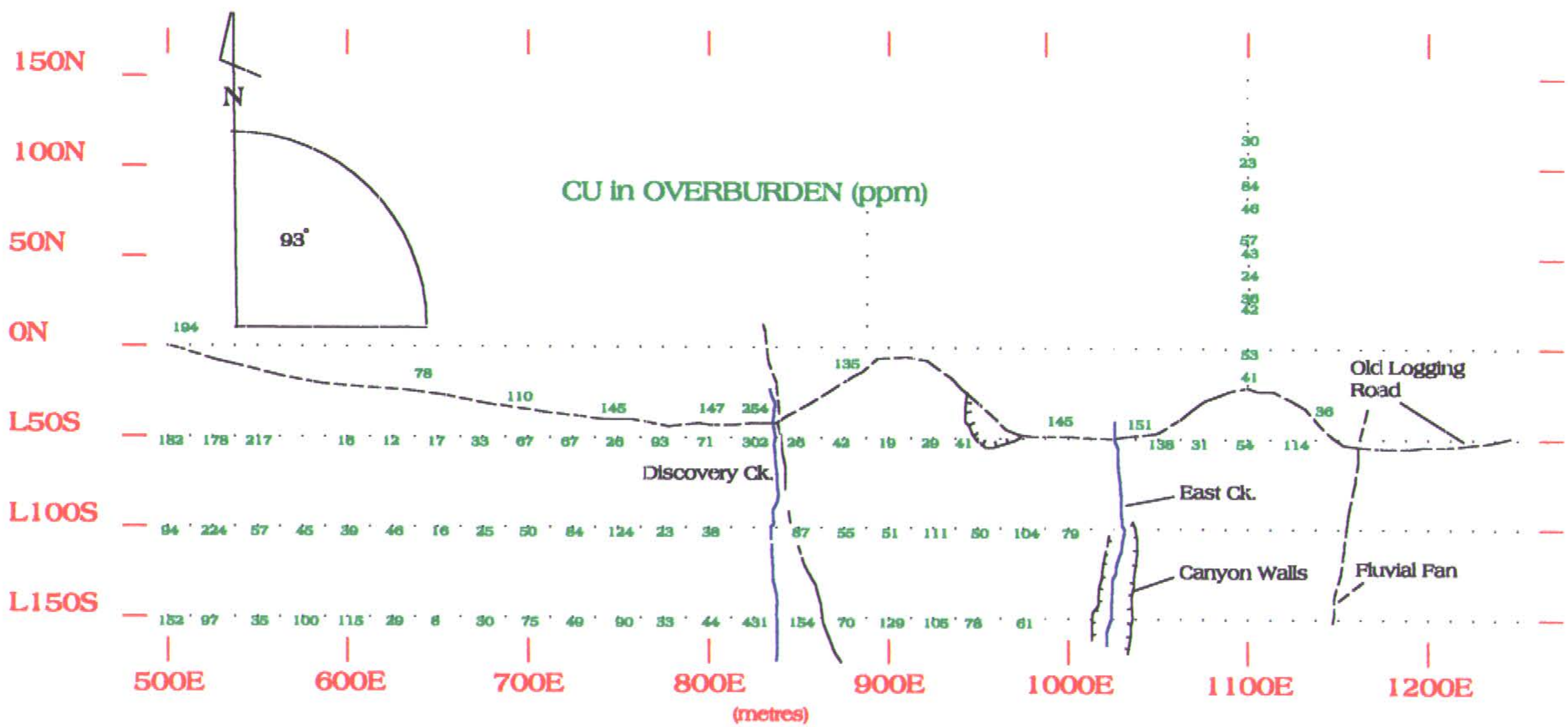
Figure 13: Cu in overburden (Contours ppm).

Figure 14: Ni in overburden samples (ppm).

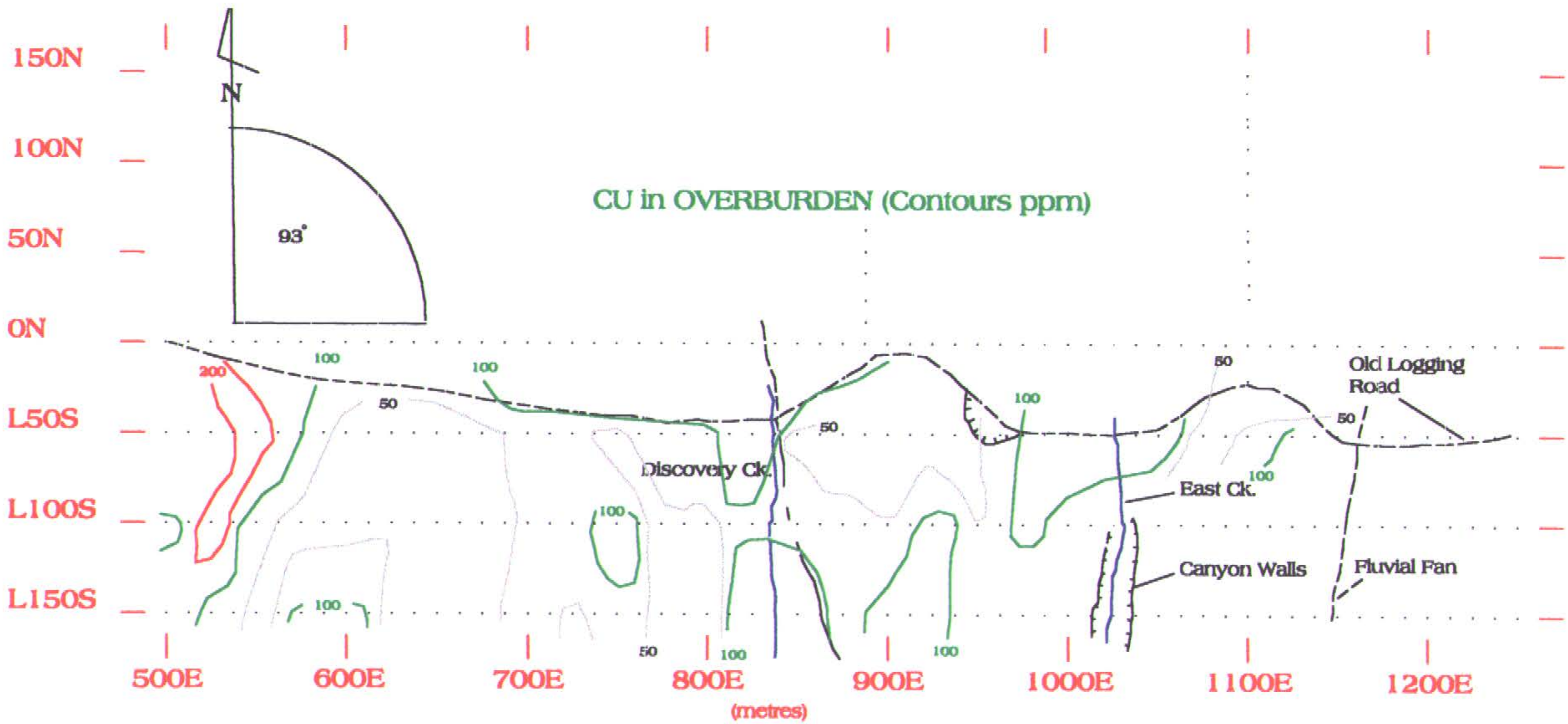
Figure 15: Ni in overburden (Contours ppm).

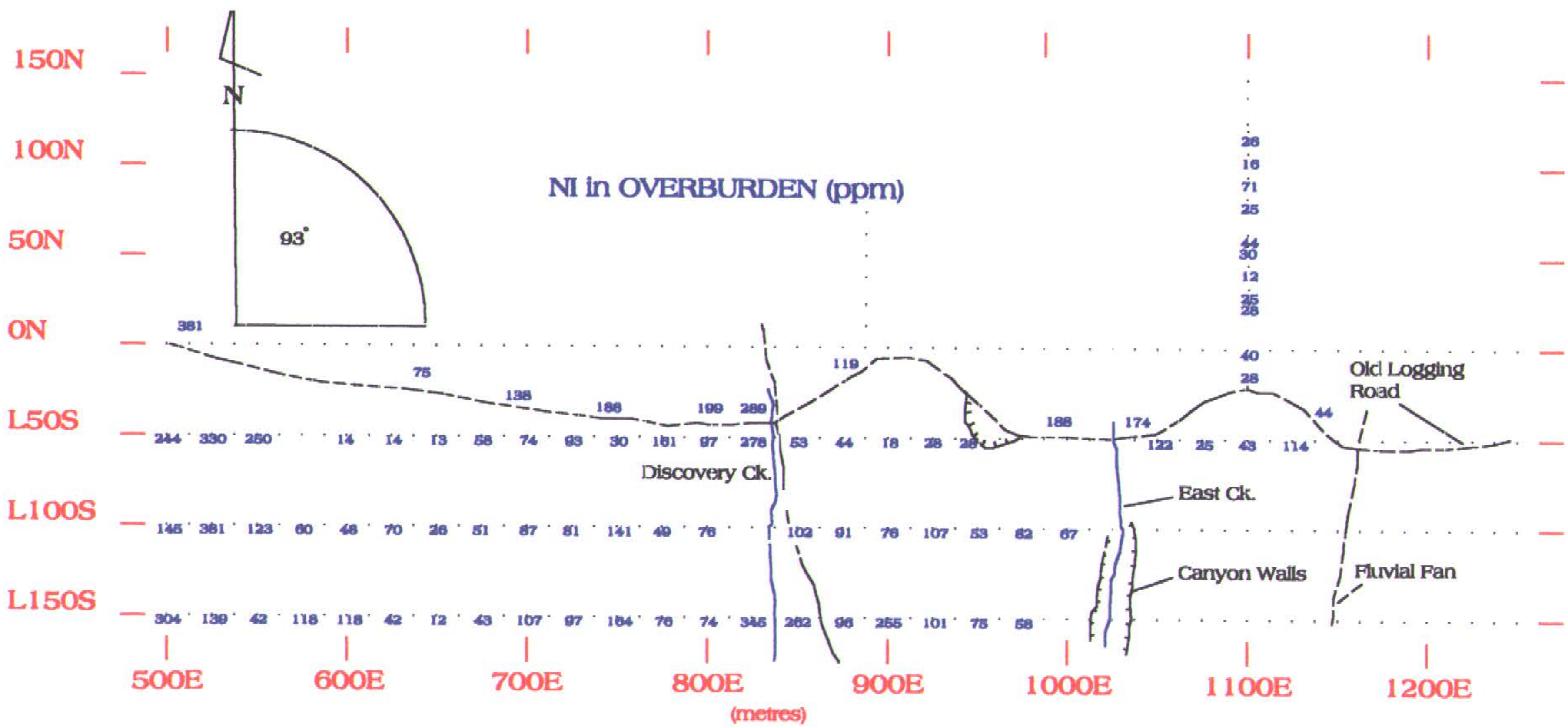
Figure 16: Surficial and Outcrop Geology

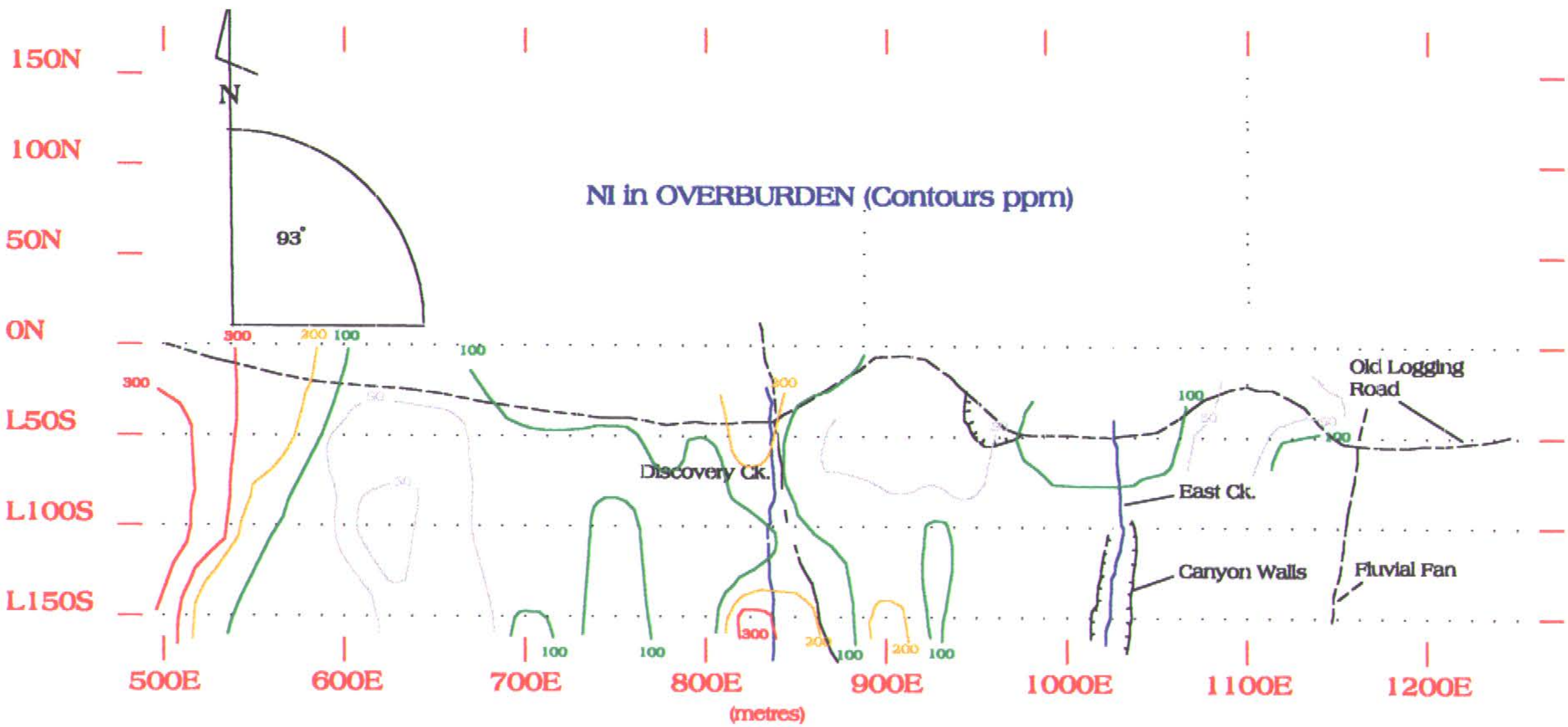
Figure 17: Bedrock Geology Interpretation

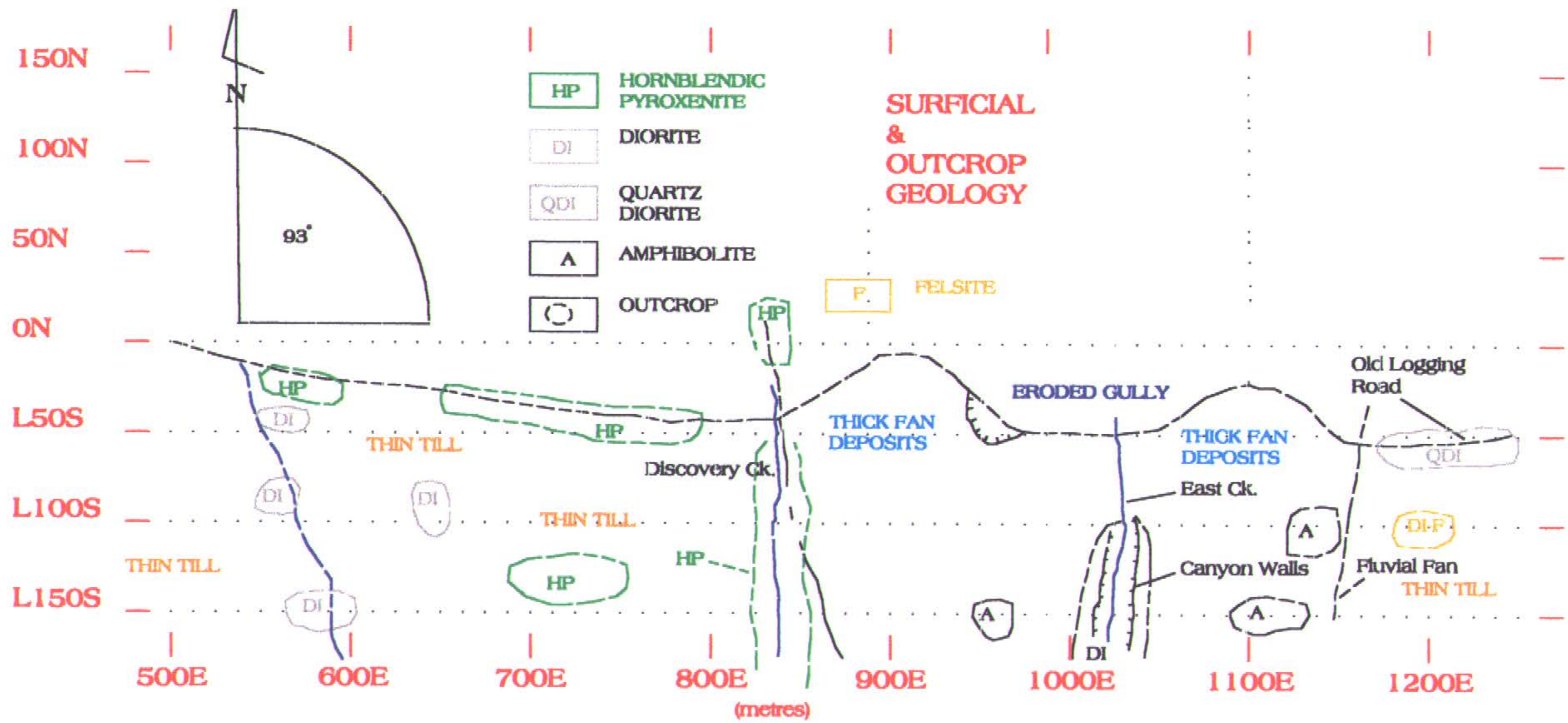


CU in OVERBURDEN (ppm)
N
93°
150N
100N
50N
0N
L50S
L100S
L150S
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)
Discovery Ck.
East Ck.
Canyon Walls
Old Logging Road
Fluvial Fan

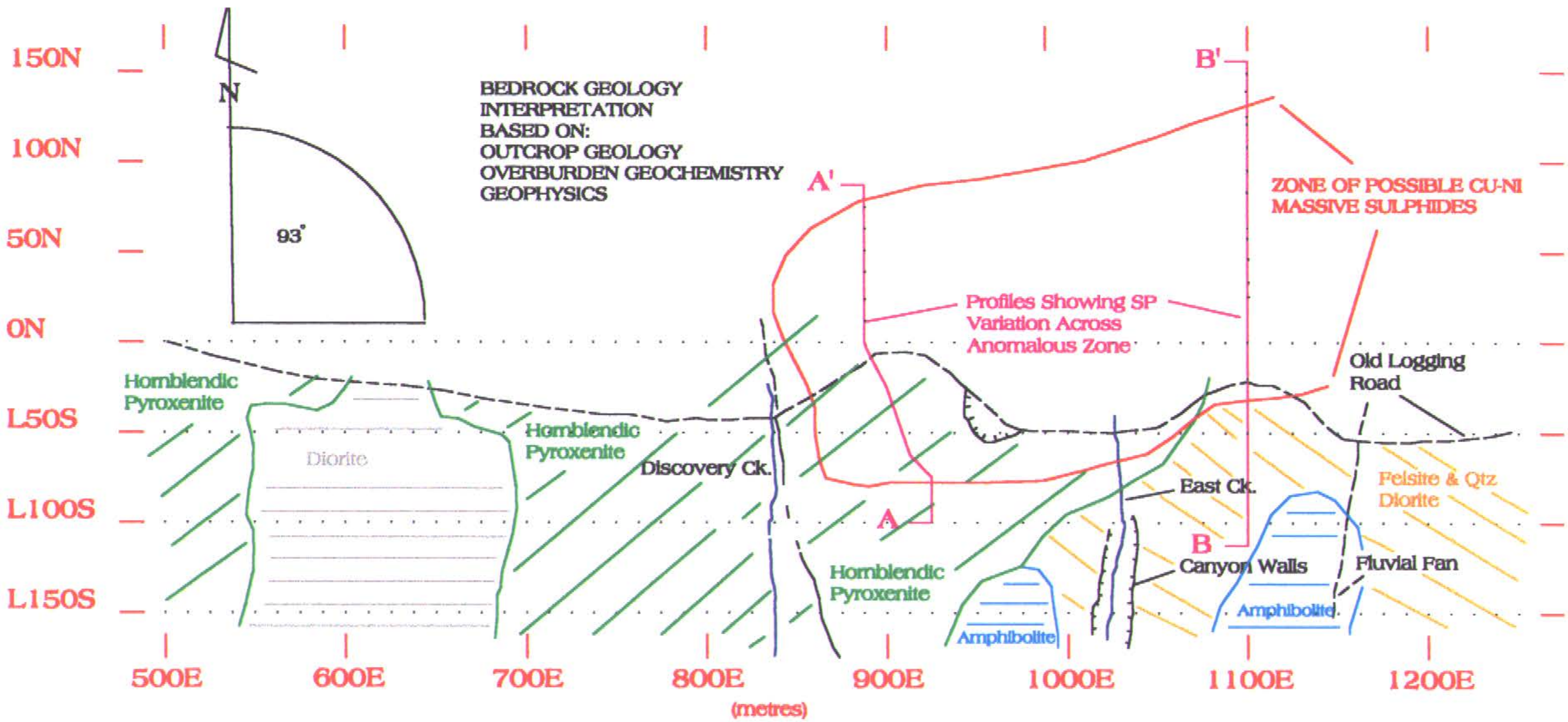

CU in OVERBURDEN (Contours ppm)
N
93°
150N
100N
50N
0N
L50S
L100S
L150S
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)
200
100
50
Discovery Ck.
East Ck.
Canyon Walls
Old Logging Road
Fluvial Fan


NI in OVERBURDEN (ppm)
N
93°
150N
100N
50N
0N
L50S
L100S
L150S
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)
Discovery Ck.
East Ck.
Canyon Walls
Old Logging Road
Fluvial Fan


NI in OVERBURDEN (Contours ppm)
150N
100N
50N
0N
L50S
L100S
L150S
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)
N
93°
300
200
100
Discovery Ck.
East Ck.
Canyon Walls
Old Logging Road
Fluvial Fan



SURFICIAL & OUTCROP GEOLOGY
HP HORNBLENDIC PYROXENITE
DI DIORITE
QDI QUARTZ DIORITE
A AMPHIBOLITE
OUTCROP
F FELSITE
N
93°
150N
100N
50N
0N
L50S
L100S
L150S
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)
THIN TILL
Discovery Ck.
THICK FAN DEPOSITS
ERODED GULLY
East Ck.
Canyon Walls
Old Logging Road
Fluvial Fan


150N
100N
50N
0N
L50S
L100S
L150S
N
93°
BEDROCK GEOLOGY
INTERPRETATION
BASED ON:
OUTCROP GEOLOGY
OVERBURDEN GEOCHEMISTRY
GEOPHYSICS
A'
B'
ZONE OF POSSIBLE CU-NI
MASSIVE SULPHIDES
Profiles Showing SP
Variation Across
Anomalous Zone
Old Logging
Road
Hornblendic
Pyroxenite
Diorite
Hornblendic
Pyroxenite
Discovery Ck.
East Ck.
Felsite & Qtz
Diorite
A
B
Hornblendic
Pyroxenite
Canyon Walls
Fluvial Fan
Amphibolite
Amphibolite
500E
600E
700E
800E
900E
1000E
1100E
1200E
(metres)

CONCLUSIONS AND RECOMMENDATIONS

1) Two large areas that have self potential anomalies of –306 mv. and –398 mv. have been located on the Jason claims. The –306 mv. anomaly may be part of a larger zone which also contains a –206 mv reading. This zone is east of Discovery Creek and south of Cogburn Creek and will be referenced as the Discovery Ck. anomaly. The –398 mv. anomaly is located on the north side of Cogburn Creek and the west side of Hut Creek. It was defined on an east-west Self Potential survey on the Cogburn Creek road across Hut Creek.

2) The Discovery Creek anomaly, with the minimum value of –306 mv. commences within hornblendic pyroxenite containing the disseminated magmatic sulphides: pyrrhotite, pentlandite, chalcopyrite and pyrite. Also geochemical analysis of overburden indicates that anomalous Cu and Ni values are associated with the anomaly. This suggests that Cu and Ni bearing massive magmatic sulphides may cause the anomaly. Two anomalies form the Discovery Creek anomaly. However, they are both considered to be open ended. Additional geological, geochemical and geophysical work should be done to define their exact dimensions.

3) Anomalous values were measured over the Discovery Creek SP anomaly when a Max-Min, horizontal loop, electromagnetometer (HLEM) and VLF-EM were used to conduct a survey across the SP anomaly. This supports the conclusion that the sulphides causing the anomaly are conductive, connected and massive.

4) The SP anomaly zone in claims Jason2 and Jason9 commences at Discovery Creek and extends in a northeast direction over 350 metres. The large anomalous zone is open-ended to the northeast. At the –100 mv. level as measured by SP, it has a width of approximately 250 metres.

5) Geology, geochemical and geophysical data indicate that East Creek lies along the trace of a major north-south trending fault separating the hornblende diorite and ultramafics of the Hut Creek batholith, to the west, from the metamorphic crustal rocks (felsite and biotite diorite) on the east side of the fault zone.

6) One sulphide source appears to cause the two Discovery Creek anomalies that extend from Discovery Creek in a northeast direction to an area east of East Creek. This anomalous area may lie against a major north trending lineament or fault zone or extend across the fault zone as an offset from the Hut Creek batholith. This anomalous zone is a drill target. However, lines should be cut over the anomalous zone. The lines should be used to conduct additional geological, geophysical and geochemical surveys. The geophysical surveys should include self potential surveys and other complementary geophysical surveys, VLF and HLEM. This will serve to define the extent of this anomalous zone and to precisely define the optimal drill site.

7) A large self potential anomaly has been located on the north side of Cogburn Creek along the Cogburn Creek logging road. Since this anomaly lies within the Hut Creek batholith, additional geological, geochemical, and geophysical surveys should be conducted to define the nature of this large anomaly.

REFERENCES

Aho, A.E., 1952, Geology and Ore Deposits of Pacific Nickel Mines; Unpublished Report, 92 p.

Berg, N.W., 1972, Geological, Geochemical and Geophysical Assessment Report on the Ni Claim Groups, Harrison Lake area, B.C. Mineral Titles Branch, Assessment Report # 3615.

Christopher, P.A., 1975, Report on the Giant Mascot Ultrabasic Project; Unpublished Report, 22 p.

Christopher, P.A.; Robinson, J.W., 1975, Pride of Emory Mine; B.C. Ministry of Energy Mines and Petroleum Resources; Geology, Exploration and Mining in British Columbia, pp.105-113.

Clarke, W.E., 1969, Giant Mascot Mines Ltd.; Geology and Ore Controls; Western Miner, v.42, pp.40-46.

Clarke, W.E., 1971, Giant Mascot Mines Ltd.; Geology, Western Miner, v. 44, pp.23-61.

Eastwood, G.E.P., 1972, Ni; B.C. Ministry of Energy, Mines and Petroleum Resources; Geology Exploration and Mining in British Columbia, pp. 258-264.

Gabites, J.E., 1985, Geology and Geochronometry of the Cogburn Creek - Settler Creek Area, Northeast of Harrison Lake, B.C.; Unpublished M.Sc. Thesis; The University of British Columbia, 153 p.

Gonzalez, R.A., 1972, Geological, Geochemical & Geophysical Report on the 316 Group Harrison Lake Area, B.C., B.C. Mineral Titles Branch, Assessment Report # 4071.

Gonzalez, R.A., 1974, Geological, Geochemical & Geophysical Report on the Giant Nickel Mine; Unpublished Report, 25 p.

Hancock, K.D., 1990, Ultramafic Associated Chromite and Nickel Occurrences in British Columbia; B.C. Ministry of Energy Mines and Petroleum Resources; Open File 1990-27.

Haughton, D.R., 1999, Assessment Report, Geological and Geochemical Report, Jason Claim Group, B.C. Mineral Titles Branch

Haughton, D.R. 2000, Assessment Report, Jason Claim Group, B.C. Mineral Titles Branch

Horwood, H.C., 1936, Geology and Mineral Deposits at the Mine of B.C. Nickel Mines, Limited; Yale District; B. C., Geological Survey of Canada, Memoir 190.

Lowe, B.E.,1972, Metamorphic Petrology and Structural Geology of the Area East of Harrison Lake, British Columbia; Unpublished Ph.D. Thesis; University of Washington, 162 p.

McLeod, J.A., 1975, The Giant Mascot Ultramafite and Its Related Ores; Unpublished M.Sc. Thesis; The University of British Columbia, 88 p.

Monger, J.W.H., 1989,Geology, Hope, British Columbia; Geological Survey of Canada, Map 41-1989.

Muir, J.E., 1971, A Study of the Petrology and Ore Genesis of the Giant Nickel 4600 Orebody; Unpublished M.Sc. Thesis; University of Toronto, 125 p.

Naldrett, A.J.; Craig, J.R.; and Kullerud, G.; 1967, The central portion of the Fe-Ni-S System and its Bearing on Pentlandite Exsolution in Iron-Nickel Sulfide Ores; Economic Geology, V 62, pp. 826-847.

Nixon, G.T., and Hammack, J.L.; 1991, Metallogeny of Ultramafic Rocks in British Columbia with Emphasis on the Platinum-Group Elements; Ministry of Energy Mines and Petroleum Resources; Paper 1991-4, pp. 125-161.

Rublee, V.J., 1986, Occurrence and Distribution of Platinum-Group Elements in British Columbia; Ministry of Energy Mines and Petroleum Resources; Open File 1986-7.

Van Groos, A.F.K., 1967, The Origin of Sulfide Droplets: Petrographic Evidence for Liquid Immiscibility Between Silicate Magmas and Sulfide Melts; Economic Geology, V 62, pp. 551-553.