

REPORT ON THE GEOLOGICAL MAPPING AND PROSPECTING WORK
CONDUCTED ON THE GIANT BAY RESOURCES LTD.
GORDON LAKE CLAIM GROUP
NORTHWEST TERRITORIES
SUMMER SEASON 1984

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ABSTRACT

A surface exploration program was conducted on the Giant Bay Resources Gordon Lake claim group between May 1 and September 7, 1984. This program was designed to provide a geological map of the property and was also intended to identify suitable exploration targets for subsequent development.

The property was mapped at a number of different scales varying between 1 inch to 40 feet up to 1 inch to 200 feet. Geological mapping and prospecting has been completed on the entire grid area.

The prospecting and sampling work conducted over the summer resulted in the discovery of several interesting gold showings. A number of these structures have now been drilled and the results are available in the drill report. However, the most significant find of the summer was turned up on the LYNK grid where a series of gold-bearing structures have been delineated. These zones have received only a preliminary examination and have yet to be tested through diamond drilling.

There are still several sites which are either in need of some additional prospecting or require a drill test. These showings were either located at the end of the season and thus have not been re-examined or were previously sampled and have yet to be drilled. The reader is asked to refer to the Recommendation section for a complete listing of these occurrences.

Finally, the author would like acknowledge Mr.J.D.Smith and Mr.D.Derrich for their assistance in the trenching and sampling

activities carried out over the summer. Mr.B.Riffal and Mr.J.Forster should also be mentioned for their comprehensive prospecting and sampling work over the north portion of the grid.

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INTRODUCTION

The purpose of this report is to provide an overview of the surface exploration program conducted on the Giant Bay Resources's Gordon Lake claim block during the Summer season of 1984. Surface Exploration will henceforth be defined as comprising all geological mapping, trenching and prospecting activities.

To simplify the presentation process, the property has been subdivided into a series of map sections. These include the North, South Central, South West, South East, Lynk and Kidney Pond grids. The reader is asked to refer to the individual grid descriptions for a precise breakdown of each of the grid blocks.

At this juncture, it is worthwhile to provide a brief explanation of the actual work procedures which were utilized to examine this property. The North Grid was prospected and sampled by Mr.J.Forster and Mr.B.Riffal between June 1 and September 1/1984. In addition, this section of the property was mapped by the author at a scale of 1"=200ft(see GBR-08SE).

The southern portion of the claim group (including the South Central, South West, South East and Kidney Pond map sections) was initially mapped by the author to locate suitable targets for additional sampling. A trenching and sampling program was subsequently conducted to test a number of geological and geophysical targets.

The Lynk grid was developed to test a series of old trenches which were found along the eastern margins of the claim group between 100N and 120N. The existing grid was extended from approximately 48E to 65E and a series of intermediate tie lines were cut to provide better control. A selected sample was taken from each trench and those trenches which yielded an anomalous gold assay were then resampled using unbiased channel sampling. A geological map of the grid was also prepared to both identify structural trends and to locate and correlate the results of the sampling program.

Finally, it should be noted that the mapping program was designed to define the structural rather than the lithological geology of the property. The decision to concentrate on the structural geology was made in light of the nature of the mineralization found on this property. The gold mineralization found in the Kidney Pond area appears to be epigenetic and structure-controlled and thus it was reasoned that it would be important to be able to identify similar structures elsewhere on the property. Moreover, the sediments of this area commonly grade from arenaceous to argillaceous end members and thus it is difficult to trace individual beds for any distance.

Note: All assays quoted in this report represent gold values in ounces per ton. The sample number is presented within the brackets. An anomalous sample is considered to have a gold concentration of greater than .05oz/ton.

History

The history of this property has been described by a number of other authors (Humphries 1983, Knutsen 1984 etc.). Therefore this report will not attempt to recapitulate that which has been stated elsewhere. However, it is worthwhile to provide a brief description of some of the salient aspects of the earlier trenching work conducted in the area.

Thompson (1938) description of the 1938 field season provides some excellent information regarding the numerous old showings which dot this property. A brief synopsis of the more important occurrences is given below:

i) Viv-15(82N-16E)- This Y-shaped trench is described as consisting of "large bodies of quartz with coarse feldspar and plentiful pyrite and pyrrhotite mineralization". Samples taken from one arm of the trench (see GBR-04TE, T1) yielded some high assays - actual results not available- which could not be reproduced in subsequent tests.

ii) Viv-8(90-92N-14E)- Thompson mentions that visible gold was found in several trenches located in the Viv-8 area. However, nothing of economic importance was discovered.

iii) Viv-26(126N-13E)- The Thompson group put in four trenches at this location to test an "extensive quartz zone". Thompson notes that "pyrite, pyrrhotite and arsenopyrite mineralization is fairly abundant".

REGIONAL GEOLOGY

The geology of the Gordon Lake area has been described by a number of previous authors (Henderson, 1938; Humphries, 1983 and Knutsen, 1984). Therefore, this report will attempt to correlate the existing data with the results of this season's field work.

Lithology

The stratigraphy of the Gordon Lake basin comprises a series of Greywacke turbidites with interlayered Black siltstone/shale members. A number of good primary sedimentary structures are clearly discernible on the outcrop surface including; graded bedding, ball and pillow and flame textures. These features provide an excellent means for determining younging directions, although care must be taken in accounting for later deformation effects. It is interesting to note that Harris's (1984) thin section examinations suggest that the undeformed Greywackes and Black Siltstones may be more properly referred to as "fine-grained crystal tuffs, ash tuffs or tuffaceous black shales". This apparent inconsistency is not unexpected as there is a very fine dividing line between fine-grained pyroclastic rocks and similar clastic sediments. Nonetheless, the abundance of primary sedimentary textures (particularly the turbidite series) would suggest that the rocks of the Gordon Lake area do represent a reworked sedimentary accumulation.

The third, and probably most important, lithological suite which occurs in the Gordon Lake area consists of the complex series of vein quartz and quartz breccia hybrid rocks. A number of good

descriptions of the vein structure and mineralization have been prepared by previous workers in the area; notably Groves(1983) and Humphries(1983). However, it is worthwhile to summarize the results of the thin section analyses which were prepared on several of the Quartz breccia/Black siltstone samples. Harris(1984) points out that the precise origin of this assemblage is difficult to define as these rocks have been subjected to a "complex history of post-formational recrystallization and metasomatism". In fact, one of the typical Quartz breccia samples exhibited an unusually coarse-grained (pseudo-igneous) matrix with associated felsitic fragments. Another sample, which was originally identified as a Black siltstone, turned out to be the "most intensely deformed and fluidally intermingled of the hybrid rocks of this suite". In essence, Harris's(1984) work appears to concur with the previously cited descriptions of the vein structures found in this area. The less competent Black siltstone/shales have reflected a series of deformation events some of which have resulted in the recrystallization of earlier quartz veins. It may also be true that the original sediments underwent a degree of soft sediment deformation (as suggested by Harris,1984) before being subjected to subsequent recrystallization.

A single polished section was prepared to identify the presence of gold and it's association with the coarse arsenopyrite. The arsenopyrite was transversed by a network of hair-like fractures with fine gold grains occurring within segments of the fractures. Gold was also located as small angular inclusions in apparently

unfractured sections of the arsenopyrite.

Structure

The structural history of the Gordon Lake area is marked by at least two folding events with concomitant cleavage foliations. It is particularly difficult to decipher the actual folding sequence although a number of writers in the area have developed mechanisms to explain this process. Fyson(1984) has proposed that the F1 folding event produced a series of tight isoclinal folds with closely-spaced axial planes. These folds (including some ancillary minor folds) were apparently refolded into the major fold structure that can be observed by comparing the trend in the stratigraphy on the Eastern and Western shores of Gordon Lake.

Post-folding cleavage foliations are readily definable in most of the rocks of the Gordon Lake area. These cleavage sets were formed after the F1 event and thus are of little use in determining the symmetry of the major fold structures(Fyson 1984). However, one can observe an interesting chevron cleavage pattern where the older cleavage direction is preserved in the sandy beds and the youngest cleavage trend is reflected in the less competent argillaceous layers.

Property Geology and Results

The proceeding discussion will provide a detailed breakdown of the mapping and prospecting results for each grid area. The reader is asked to refer to the geology and interpretation map sheets for further clarification.

a) Kidney Pond Grid(GBR-01SE)- The block between 96 to 104N and from the baseline east to Sentinel Lake was mapped at 1 inch to 40 feet. The stratigraphy strikes in a northwest-southeast direction, although there appears to be a slight shift to a more east-west strike along the south side of the Kidney Pond. The dominant cleavage strikes northwesterly and there are a number of secondary cleavages which are related to minor folds. In several locations, notably within the trench series on the north side of the Kidney Pond, the rocks are highly contorted/foliated and it is virtually impossible to distinguish bedding from cleavage. In these situations, one is forced to measure the foliation directions which are usually highly variable.

The axial plane of an anticline fold structure was defined through drill core analyses and occurs between 97+50N and 98N at approximately 1+50E. This structure, when examined in conjunction with the existing surface data, allows one to postulate on the precise nature of the #1 zone. An examination of the surface top directions suggests that the stratigraphy between the trace of the axial plane and the southern shore of Sentinel Lake exhibits a consistent northeasterly younging. This would in turn imply that the #1 zone occurs on the northeast limb of an anticline. Furthermore, a series of contorted minor folds can be observed in surface exposures at 102N-3+80E. These folds may be reflective of a drag fold structure which could act as a structural control for the #1 zone.

b) South Central Grid(see GBR-02+03SE)- The South Central grid

encompasses the area from 76 to 110N and from Gordon Lake to 20E. This section was mapped at 1 inch equals 100 feet.

The stratigraphy strikes from west/northwest to east/southeast with vertical or near vertical dips. Cleavages generally strike northwest although there are a number of minor distortions from this dominant direction. Minor folds/flexures are fairly common and are particularly notable at the following locations:

- Skull Zone(88N-BL)
- 75N-2+50E
- 82N-16E
- 88N-18E

These folds are generally steeply plunging and appear as irregular warps in the dominant bedding direction. Most of the multi-phase Quartz veining/brecciation is associated with these structures which seem to act as structural traps for the precipitation of Gold and sulphides. It is not known whether the minor folds are parasitic to a major fold or if they represent a unique deformation event.

The stratigraphy in the northeasterly fraction of the map area exhibits younging to the northeast. This observation concurs with the trace of the anticlinal axial plane defined on the Kidney Pond grid map. However, given the limited number of younging observations, it would be premature to suggest that all of the rocks in the northeastern block are situated on the limb of a single anticline. Finally, the tentative trace of the axial plane of a synclinal fold has been defined along the southern margins of the map area. The precise location of this structure is based upon

a limited sample of younging observations and thus is subject to further interpretation.

The South Central grid yielded a number of good prospecting targets. A local quartz vein-breccia zone at 90N-3W was expanded and resampled to test the validity of the earlier grab-sampling efforts. The subsequent channel sampling program produced two anomalous channel samples of .078(8925) and .054(8927)oz/ton gold respectively, over a sample width of 5 feet (see trench map GBR-01TE). This site was eventually tested through diamond drilling and the reader should refer to the drill report for the final results.

A small outcrop, located at 88N-2+50E, was trenched (see GBR-02TE) and sampled to test the prominent magnetometer anomaly which occurs at this location. The trenching activity revealed a well-sheared Quartz breccia with local concentrations of Pyrite and Pyrrhotite of up to 5%. A single anomalous assay of .115oz/ton(8904) was returned and the site was tested through diamond drilling.

An interesting showing of Chalcopyrite and Sphalerite was found adjacent to an old X-ray drill collar at 75N-2+50E (see GBR-03TE). This structure was subsequently tested through a series of three trenches and yielded assays of; .049oz/ton(8817) over 5 feet, .165oz/ton(8820) over 2 feet and .293oz/ton(8827) over 5 feet. This structure has not been tested by diamond drilling owing to the presence of three boxes of X-ray core which indicate that the showing has already been drilled off. Considering the angle of the

X-ray hole and the amount of core which is still left in the boxes, it would seem plausible that the structure is very shallow and does not possess any significant vertical depth.

A prominent trench network can be found at 82N-16E. This showing was originally discovered by the Borealis Syndicate in 1937 and has been subsequently described by Thompson in his 1938 report on the area. This season's exploration program included a resampling of the existing trench work with the aim of delineating suitable targets for further drill testing. Samples were taken at 5 foot intervals along the trench wall where each sample represented the best material that could be taken at that point (see GBR-04TE). The following anomalous assays were obtained:

- .085oz/ton(9434) at T1-20ft
- .048"(9436) at T1-30ft
- .066"(9440) at T1-10ft
- .28"(9445) at T2-60ft
- .047"(9446) at T2-65ft
- .066"(9450) at T2-45ft
- .207"(6351) at T2-50ft
- .063"(6354) at T2-15ft
- .065"(6360) at T1-5ft
- .055"(6361) at T1-50ft
- .054"(6378) at T3-35ft

This showing was drilled and the reader is asked to refer to the drill report for further information.

Fourteen trenches were put in by the Borealis(1937) and Thompson(1938) exploration parties and are located between 93N-

13E and 90N-15E. These trenches were resampled at 5 foot increments (selected samples only) and the following results were obtained(see GBR-05TE,T8+T9 only):

- 1.317oz/ton(6393) at T3-10ft
- .516oz/ton(6396) at T7-15ft
- .13oz/ton(6410) at T8-5ft
- .13"(6411) at T9-5ft
- .084"(6414) at T10-5ft
- .078"(6415) at T11-15ft
- .058"(6416) at T9-0ft
- .180"(6417) at T9-10ft

A diamond drill hole was put in at this location to test these results.

A single trench was put in at 92N-5E to test for the surface expression of the gold-bearing intersection that was encountered in DDH-62. This trench (see GBR-~~13~~¹⁷TE) returned two anomalous channel samples of 3.832oz/ton(8789) over 1.2 feet and .682oz/ton(8785) over 5 feet.

c) South East Grid(see GBR-04SE+05SE)- The South East Grid encompasses the area from 76N-20E to 132N from the baseline to the eastern ends of the lines. It also includes a portion of the western shore of Gordon Lake. This section of the property was mapped at 1 inch equals 200 feet.

The stratigraphy strikes in an approximately east-west orientation across the center of the center of the map area and shifts to a more northeast-southwest direction along the shores of Gordon

Lake. Again, the dips are at vertical or near vertical inclination. The dominant cleavage direction remains at a northwest-southeast azimuth.

Minor folds are present although not as apparent as in the previous map sheet. Nonetheless, a prominent shift in the stratigraphy is evident at the Bulge Vein(108N-11E). The flexure point of this drag or parasitic fold occurs in conjunction with the Quartz veining and stockwork which comprise the Bulge Zone.

It is difficult to define anticlinal and synclinal fold structures on this map sheet because of the lack of younging indicators. However, a series of three axial planes have been delineated along the lakeshore, although the precise location of these structures has been determined using limited data.

A diabase dyke cuts across the stratigraphy from the lakeshore in the southeast to the northwestern margins of the map sheet. This structure exhibits the characteristic north-northwesterly trend which seems to be a common attribute of most of the diabase dykes found on the property.

The Bulge or Main zone forms the most obvious and spectacular showing on this section of the property. The quartz vein and "Hump structure" have been explored by a series of 23 rock trenches extending over a length of 380 feet(Knutsen, 1984). There was no further surface work attempted on this occurrence as the structure has been sampled and described by previous authors(Thompson, 1938 and Knutsen,1984).

A small chalcopyrite occurrence, located at 76+75N-32E(see GBR-

06TE), was originally discovered and trenched by the Borealis Syndicate in 1937. The showing was expanded and resampled and yielded selected samples of .684oz/ton(8836) and .530oz/ton(8838) respectively. However, the Quartz veins and stringers which host the Gold are of very limited width (maximum 2-4 inches) and lateral extent. Therefore, it would be inappropriate to recommend this site for additional development.

Three small trenches were put in at 92N-35E to test a local shear /quartz breccia zone. The trenches exposed a well-fractured grey siltstone with extensive quartz veining and local sections of massive pyrite and arsenopyrite. One trench (see GBR-15TE) returned .05oz/ton(8853) over 3 feet and .088oz/ton(8855) over 5 feet. A selected sample of .181oz/ton(8854) was also obtained from the same trench. This zone remains untested although Mr. Riffal conducted some additional prospecting in the area towards the end of the season. His sampling yielded sub-anomalous assays in the .02oz/ton to .04oz/ton range.

A group of four old trenches put in by the Thompson party in 1938 are now located at 126N-13E. These trenches were resampled and the following results were obtained(see GBR-08TE):

- .234oz/ton(6431) selected sample
- .126"(6434) " "
- .079"(8882) over 5 feet
- .063"(8873) over 5 feet
- .095"(8875) over 5 feet

The zone is difficult to evaluate in that the trenches were put in along the edge of a swamp and the lateral extension of the

trenched area is obscured by the dense woods and the overburden cover. Therefore, it would be necessary to use diamond drilling to further test this zone.

There are two remaining showings which should be mentioned at this point. A single grab sample was taken from 128N-35E which returned an assay of .079oz/ton(2832). This finding was located by Mr. Riffal at the end of the season and as such the site remains unexplored. A similar situation exists with the showing located at 132N-17E where an isolated sample yielded a value of .560oz/ton(2757).

d)Lynk(see GBR-06+07SE)- The Lynk Grid includes the area bounded by 100 to 120N and from 45E to the lakeshore at approximately 65E. As was mentioned in the introduction to this report, the grid was established to facilitate the mapping and sampling of the network of old trenches which occur in this area. The mapping was conducted at a scale of 1 inch equals 100 feet.

The stratigraphy strikes in a general east-west direction with vertical or near-vertical dips. A broad drag fold structure is evident in the sediments in the general area of the T5-T11 trench group (see GBR-09TE to 12TE for trench details). Cleavages are commonly oriented NW-SE with some local deviation.

Anomalous sample results were obtained from four separate locations covering a strike length of approximately 3000 feet. The trenches are situated adjacent to a prominent gully which transects the grid and separates Gordon Lake in the east from

Brad Lake in the west. The Gold mineralization is associated with Quartz veins and breccia zones which are of irregular width and lateral extent. A brief summary of the anomalous channel sample results includes the following:

i) 126N-42+50E- T16-.124oz/ton(8752) over 3 feet

T15-.058"(8755) over 3 feet

T19-.116"(8763) over 5 feet

T15-.082"(8765) over 6 feet

T24-.072"(8711) over 8 feet

T15-.053"(8775) over 7 feet

ii) 120N-49E- .066oz/ton over 5 feet

iii) 116-114N-55E- T5-.153oz/ton(8732) over 5 feet

T6-.401"(8735) over 2.5 feet

T9-.189"(8736) over 10 feet

T10-.217"(8737) over 10 feet

T11-.112"(8741) over 5 feet

T11-.078"(8743) over 6 feet

iv) 106-104N-62+50E- T32-.355oz/ton(8754) over 7 feet

T28-.241"(8756) over 6 feet

T32-.371"(8767) over 5 feet

The results of the sampling program suggest that the gold values are confined to the Quartz vein/breccia zones. In addition, the narrower veins found in the eastern trench series(T25-33) seem to yield higher grades than the wider structures found further to the west. The trench group located at 126N-42+50E likely represents a wider zone in that two of the showings(T23+24) were discovered this season during the sampling program. The position of the new showings with respect to the old trenching suggests that the zone

may possess a greater extent than had been originally examined. The T5-T11 structure exhibits a ten foot width of anomalous mineralization over an approximate surface length of 100 feet.

In summary, the apparent extent of the Gold mineralization indicates that the Lynk zone is well mineralized over a considerable strike length. However, it would be inappropriate to conclude that the structure will provide ore grade widths and values over it's entire length. It is more likely that the zone may be concentrated in certain sectors and will exhibit discontinuous veining and mineralization over a much longer distance- ie. the Kidney Pond- Middle Pond situation.

e) North Grid- The North Grid comprises the block between 136 and 172N and from 15W to 45E. This section of the property was mapped at 1 inch equals 200 feet (see GBR-08SE+09SE).

The bedding strikes at 270-290 degrees with vertical or near vertical dips. Local drag folding is evident at 144N-BL, 164N-7E and 168N-35E. The dominant cleavage direction is typically northwest-southeasterly. A 150 foot wide diabase dyke intrudes the southeast fraction of the map area between 136N-15W and the south end of Long Lake. It is interesting to note that rocks adjacent to the diabase dyke are strongly foliated with the foliation parallel to the bedding direction.

The North Grid was prospected by Mr.B.Riffal and Mr.J.Forster between June 1 and September 1/84. They were unable to locate anything of worth on this section of the property, despite an

intensive program of prospecting and sampling.

f) South West Grid(see GBR-10SE+11SE)- The South West Grid includes the portion of the property between 112N and 132N from the Baseline to 40W and also the peninsula from 92N to 112N bounded by 25W to 40W.

The stratigraphy strikes in a northwest-southeasterly direction in the north end of the section and in a east-west orientation in the south end. There are two diabase dykes which intrude the stratigraphy at a northwesterly declination. The dominant cleavage direction remains similar to that observed elsewhere on the property (NW).

The section of the property between 112N and 132N from the Baseline to the lakeshore was prospected by Mr.J.Forster at the beginning of the season. His sampling produced a single anomalous value of .506oz/ton(1882) at 124N-15W. The site was revisited and a second sample was assayed which did not replicate the earlier results.

Mr.W.Humphries reported collecting a sample of visible gold from the island at 118N-20W during the 1983 season. This site was resampled and failed to yield a single anomalous value.

Genesis

The gold mineralization found on this property is likely of epigenetic origin. Harris(1984) points out that the Black siltstone and Quartz breccia thin sections exhibit signs of having undergone a multi-phase origin with concomitant recrystallization. In fact, one of the Quartz breccia thin sections (see Appendix 2 for thin section descriptions) possesses a "striking igneous texture" with coarse plagioclase and quartz intergrowths. Harris also points that the chaotic texture present in the hybrid suite samples is reminiscent of soft sediment slumping- not unexpected in a turbidite environment. Gold occurs as fine particles in microfractures in the arsenopyrite grains implying a close affinity with the mineralizing solutions that precipitated the arsenopyrite.

Fyson's work(1984,1975) in the Gordon Lake basin provides some interesting insights into the structural history of the area. He points out that gold has been mined on the culmination of a F1 fold structure at the Thompson-Lundmark south of Gordon Lake. This information concurs with Knutsen's(1984) assertion that gold-bearing quartz bodies are often "distributed along axial planes of closely-spaced isoclinal folds". Fyson(1984) also theorizes that the apparent refold pattern in the F1 folds - as expressed along the east and west shores of Gordon Lake- is due to the interaction of contrasting fold trends at a structural front and not to the large-scale rotation of the original F1 fold traces.

The mineralized quartz veins/breccia zones present a number of field characteristics. First of all, these zones are often

associated with local concentrations of the less competent "Black siltstone" unit. Local warps and minor folds in the stratigraphy are also important in acting as structural controls for the quartz veining and brecciation (88N-2+50E, 86N-16E, 76+75N-32E and the Kidney Pond?). Finally, it is apparent that one can use the presence of topographic lineaments as a possible indicator of the existence of local structures. This appears to be the case in the Kidney Pond zone and may be also be true in the Lynk area.

Conclusions

- 1) Geological Mapping and Prospecting has been completed on all of the grid area of the Giant Bay Resources claim block in the Gordon Lake area, NWT.
- 2) Every showing of merit was sampled and where results warranted, was also trenched. The old trenches were resampled, excluding the Kidney Pond and Main Zone trench groups.
- 3) Structural and Lithological examinations suggest that the mineralization in the area is associated with multiple phases of quartz veining and brecciation. Gold is present as variably-sized particles which occur in micro-fractures in arsenopyrite grains. The mineralized zones are highly irregular and discontinuous in both lateral and vertical extent and thus are difficult to trace or correlate. Nonetheless, certain zones (Kidney Pond and possibly 82N-16E) possess acceptable vertical and horizontal continuity. The vein structures are usually parallel or sub-parallel to bedding, although the stratigraphy adjacent to the zones is

commonly highly sheared and attenuated.

4) A number of new zones were located during the summer and most of these have been drilled with varying results (see drill report). However, the Lynk block has received only a preliminary examination which indicated that the existing trenching has outlined four areas of anomalous gold mineralization. The four zones are fairly widely separated over a strike length of approximately 3000 feet. The results obtained from the Lynk area are of sufficient merit to warrant additional exploration (see Recommendations).

5) The following sites require additional attention:

i) 126N-13E- A series of four trenches which have yielded anomalous channel results(see South Central Grid description).

ii) 92N-35E- A local shear zone where several good assays were obtained (see South East Grid description).

iii) 132N-17E(150 feet at AZ136)- A single grab sample from this location returned an assay of .560oz/ton(2757).

iv) 128N-35E(150 feet at AZ240)- A single grab sample from this location returned an assay of .079oz/ton(2832).

v) 120N-46E(230 feet at AZ310)- A single grab sample from this location returned an assay of .088oz/ton(2834). This site is likely related to the Lynk structure.

The afore-mentioned samples were collected at the end of the season and thus have not been rechecked.

RECOMMENDATIONS

1) A magnetometer and an E.M. survey should be run on the Lynk block to provide necessary data on those sections of the grid which are covered in overburden. The magnetometer survey provides a good indication of the presence of pyrrhotite (as proven at the Skull zone) and a V.L.F. survey will also give a crude estimation of the concentration of conductive sulphides in the structure.

2) The sample values obtained from the Lynk trenches represent the most encouraging surface results yet defined on the property. The quality and evident consistency of the channel assays coupled with the possible strike length of the structure provides reasonable evidence for an eventual drill test. It may also be worthwhile to go back and reinspect the area adjacent to the T13-T24 trench series as this portion of the structure has received only a preliminary examination. In conclusion, a short diamond drill program (3000-5000 feet) would be warranted on the Lynk structure providing that the following additional work is completed:

- magnetometer and V.L.F. surveys

- closer examination of the T13-T24

trench area including the region between the trenches and west to the lake.

3) The following sites should be considered as eventual drill targets:

i) 126N-13E (South East sheet)

ii) 92N-35E (South East sheet)-
providing that the area receives additional trenching/prospecting
attention and results are satisfactory.

4) The following sites require additional prospecting:

i) 120N-46E(230 feet at AZ310)- a
single grab sample of .088oz/ton(2834)

ii) 132N-17E(150 feet at AZ136)- a
single grab sample of .560oz/ton(2757)

iii) 128N-35E(150 feet at AZ240)- a
single grab sample of .079oz/ton(2832)

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APPENDIX 1

Sample Records

South Central

South East

South West

Lynk

North

SAMPLE RECORDArea: South Central

Sample Number	Location	Assay	Type	Width
9406	105N-2+20E	.009	HG	N/A
9407	89N-14E	.130	HG	N/A
9411	108N-18E	.029	HG	N/A
9412	B.K-HG	.771	HG	N/A
9413	82N-16E	.371	HG	N/A
9414	82N-16E	.181	HG	N/A
9415	82N-16E	.366	HG	N/A
9416	82N-16E	.011	HG	N/A
9417	82N-16E	.011	HG	N/A
9418	76+50N-3E	.022	HG	N/A
9419	82N-3E	.009	HG	N/A
9420	83+50N-2+50E	.005	HG	N/A
9421	84+50N-6+50E	.012	HG	N/A
9422	86N-6E	.007	HG	N/A
9423	86N-6W	.004	HG	N/A
9424	88N-2+25E	.008	HG	N/A
9425	88+25N-6+50E	.003	HG	N/A
9426	84N-15E	.045	HG	N/A
9427	84N-24+50E	.004	HG	N/A
9428	82N-16E	.011	HG	N/A
9429	82N-15+50E	.010	HG	N/A
9430	77+25N-12E	.008	HG	N/A
9431	90N-13+50W	.005	HG	N/A
9432	90N-2+75W	.014	HG	N/A
9433	90N-2+75W	1.062	HG	N/A
9434	82N-16E, T1-20	.085	HG	N/A
9435	" "T1-25	.011	HG	N/A
9436	" "T1-30	.048	HG	N/A
9437	" "T1-15	.025	HG	N/A
9438	" "T1-40	.008	HG	N/A
9439	" "T1-35	.027	HG	N/A
9440	" "T1-10	.066	HG	N/A
9441	" "T1-55	.015	HG	N/A
9442	" "T1-45	.033	HG	N/A
9443	" "T1-65	.004	HG	N/A
9445	" "T2-60	.28	HG	N/A
9446	" "T2-65	.047	HG	N/A
9447	" "T2-55	.029	HG	N/A
9448	" "T2-70	.012	HG	N/A
9449	" "T2-40	.034	HG	N/A
9450	" "T2-45	.066	HG	N/A
6351	" "T2-50	.207	HG	N/A
6352	" "T2-10	.001	HG	N/A
6353	" "T2-25	.008	HG	N/A
6354	" "T2-15	.063	HG	N/A
6355	" "T2-35	.047	HG	N/A
6356	" "T2-20	.005	HG	N/A
6357	" "T2-30	.006	HG	N/A
6358	" "T1-60	.007	HG	N/A
6359	" "T2-05	.007	HG	N/A
6360	" "T1-05	.065	HG	N/A

6361	"	"T1-50	.055	HG	N/A
6362	"	"T1-70	.007	HG	N/A
6363	"	"T6	.005	HG	N/A
6364	"	"T3-10	.030	HG	N/A
6365	"	"T7-15	.009	HG	N/A
6366	"	"T3-15	.007	HG	N/A
6367	"	"T7-0	.005	HG	N/A
6368	"	"T7-20	.009	HG	N/A
6369	"	"T5-45	.009	HG	N/A
6370	"	"T5-15	.020	HG	N/A
6371	"	"T3-25	.012	HG	N/A
6372	"	"T1-75	.015	HG	N/A
6373	"	"T5-10	.009	HG	N/A
6374	"	"T4-05	.021	HG	N/A
6375	"	"T7-10	.004	HG	N/A
6376	"	"T5-35	.006	HG	N/A
6377	"	"T5-25	.047	HG	N/A
6378	"	"T3-35	.054	HG	N/A
6379	"	"T3-20	.021	HG	N/A
6380	"	"T7-05	.012	HG	N/A
6381	"	"T3-30	.009	HG	N/A
6382	"	"T3-0	.011	HG	N/A
6383	"	"T3-5	.018	HG	N/A
6384	"	"T3-39	.016	HG	N/A
6385	"	"T5-40	.017	HG	N/A
6386	"	"T1-10	.008	HG	N/A
6387	"	"T5-30	.009	HG	N/A
6388	"	"T1-05	.013	HG	N/A
6389	"	"T5-0	.020	HG	N/A
6390	"	VIV-8, T7-10	.008	HG	N/A
6391	"	"T2-05	.011	HG	N/A
6392	"	"T7-05	.010	HG	N/A
6393	"	"T3-10	1.317	HG	N/A
6394	"	"T7-0	.008	HG	N/A
6395	"	"T6-30	.028	HG	N/A
6396	"	"T7-15	.516	HG	N/A
6397	"	"T6	.07	HG	N/A
6398	"	"T4-0	.022	HG	N/A
6399	"	"T1-15	.025	HG	N/A
6400	"	"T3-5	.026	HG	N/A
6401	"	"T4-5	.004	HG	N/A
6402	"	"T6-25	.006	HG	N/A
6403	"	"T6-15	.02	HG	N/A
6404	"	"T5-5	TR	HG	N/A
6405	"	"T5-20	TR	HG	N/A
6406	"	"T5-01	.054	HG	N/A
6407	"	"T2-10	.036	HG	N/A
6408	"	"T6-20	.006	HG	N/A
6409	"	93+75N-5W	.018	HG	N/A
6410	"	VIV-8, T8-05	.13	HG	N/A
6411	"	"T9-05	.13	HG	N/A
6412	"	"T10-15	.014	HG	N/A
6413	"	"T12-25	.TR	HG	N/A
6414	"	"T10-05	.084	HG	N/A
6415	"	"T11-15	.078	HG	N/A
6416	"	"T9-0	.058	HG	N/A
6417	"	"T9-10	.180	HG	N/A

6418	88N-7E,T2	.148	HG	N/A
6419	82N-3E,T2	.278	HG	N/A
6420	88N--7E,T1	200.ppb	HG	N/A
6421	84N-6+50E	190.ppb	HG	N/A
6422	90N-3W	.538	HG	N/A
6423	86N-6E	195.ppb	HG	N/A
6424	84N-6+50E	35.ppb	HG	N/A
6425	84N-2+50E	10.ppb	HG	N/A
6426	84N-2+50E	525.ppb	HG	N/A
6427	82N-3E	.09	HG	N/A
6428	86N-6E	675.ppb	HG	N/A
6436	92+50N-5W	.071	HG	N/A
6437	92+50N-5W	.023	HG	N/A
6438	92+50N-5W	.023	HG	N/A
6441	92+50N-5W,T2	.025	CH	5ft
6442	" "T2	.009	CH	2ft
6443	" "T1	.002	CH	3ft
6444	" "T1	.003	CH	5ft
6445	" "T3	.002	CH	4ft
6446	" "T3	.002	CH	5ft
6447	" "T3	.004	CH	5ft
6450	" "T1	.005	CH	5ft
8901	" "T1	.013	HG	N/A
8904	" "T1	.115	HG	N/A
8905	87N-2W,T1	.009	HG	N/A
8906	" "T2	.008	HG	N/A
8907	86N-5W,T1	.010	HG	N/A
8908	87N-2W,T1	.002	CH	5ft
8909	86N-5W,T1	.003	CH	3ft
8910	87N-2W,T2	.003	CH	5ft
8911	86N-5W,T1	.002	CH	5ft
8912	" "T1	.003	CH	3ft
8913	87N-2W,T2	.028	CH	2ft
8914	" "T1	.009	CH	2ft
8915	86N-5W,T1	.025	CH	5ft
8916	88N-2+50E,T1	.012	CH	5ft
8917	89+50N-BL,T1	.016	CH	5ft
8918	88N-2+50E,T1	.024	CH	5ft
8919	" "T2	.016	CH	5ft
8920	89+50N-BL,T1	.011	CH	5ft
8921	88N-2+50E,T1	.022	CH	5ft
8924	90N-3W,T1	.030	CH	5ft
8925	" "T1	.078	CH	5ft
8926	" "T1	.026	CH	5ft
8927	" "T1	.054	CH	5ft
8928	" "T1	.028	CH	5ft
8929	88N-12W,T2	.005	CH	5ft
8930	" "T3	.017	CH	5ft
8931	" "T1	.005	CH	2ft
8932	" "T1	.007	CH	5ft
8933	88N-12W,T3	.005	CH	5ft
8934	" "T2	.008	CH	5ft
8935	" "T4	.012	HG	N/A
8936	" "T3	.011	HG	N/A
8937	" "T2	.005	HG	N/A
8938	" "T1	.009	HG	N/A
8939	88N-9W,T1	.011	HG	N/A

8940	90N-13+40W, T2	.013	HG	N/A
8941	88N-9W, T2	.014	HG	N/A
8942	90N-13+40W, T1	.039	HG	N/A
8943	77+50N-5+50E, T1	.015	CH	5ft
8944	" "T1	.012-	CH	5ft
8945	" "T1	.011	CH	5ft
8946	" "T1	.030	CH	5ft
8947	" "T1	.013	CH	5ft
8948	" "T1	.05	CH	5ft
8949	" "T1	.015	CH	5ft
8950	" "T1	.014	HG	N/A
8801	" "T1	.015	CH	5ft
8802	" "T1	.02	HG	N/A
8803	78N-1+70E, T4	.015	HG	N/A
8804	" "T8	.055	HG	N/A
8805	" "T7	.035	HG	N/A
8806	" "T1	.033	HG	N/A
8807	" "T8	.016	CH	5ft
8808	" "T4	.05	CH	5ft
8809	" "T1	.012	CH	3ft
8810	" "T2	.016	CH	5ft
8811	" "T3	.017	CH	5ft
8812	" "T4	.017	CH	2ft
8813	" "T1	.009	CH	5ft
8814	" "T8	.02	CH	5ft
8815	" "T5	.006	CH	5ft
8816	" "T5	.013	CH	3ft
8817	75N-2+50E, T2	.049	CH	5ft
8818	" "T3	.014	CH	5ft
8819	" "T3	.027	CH	5ft
8820	" "T1	.165	CH	2ft
8821	" "T2	.031	HG	N/A
8822	" "T2	.005	CH	4ft
8823	" "T3	.082	HG	N/A
8824	" "T1	.003	HG	N/A
8825	" "T3	.02	HG	N/A
8826	" "T3	.005	CH	5ft
8827	" "T1	.293	CH	5ft
8857	102N-6W, T4	.031	HG	N/A
8858	" "T1	.007	CH	5ft
8859	" "T2	.014	CH	4ft
8860	" "T1	.015	CH	5ft
8861	" "T2	.014	CH	5ft
8862	" "T1	.019	HG	N/A
8863	" "T2	.009	HG	N/A
8864	" "T3	.017	HG	N/A
8783	92N-5E, S1	.018	CH	3.5ft
8784	" "S12	.033	CH	5ft
8785	" "S11	.682	CH	5ft
8786	" "S3	.018	CH	5ft
8787	" "S4	.003	CH	5ft
8788	" "S2	.003	CH	4.5ft
8789	" "S6	3.832	CH	1.2ft
8790	" "S5	.005	CH	3ft
8791	" "S13	.007	CH	1ft
8792	" "S9	.011	CH	5ft
8793	" "S8	.008	CH	2ft

8794	"	"S7	.015	CH	5.8ft
8795	"	"S10	.003	CH	5ft
8003		82N-8E	.003	HG	N/A
		(60ft at AZ290)			
8004	"	"	.003	HG	N/A
		(100ft at AZ279)			
2775		87+90N-0+34E	.018	CH	2.7ft
2776	"	"	.012	CH	1.7ft
2777	"	"	.178	CH	1.2ft
2778	"	"	.005	CH	.81ft
2779	"	"	.009	CH	2.1ft
2781	"	"	.006	CH	2.7ft

Note: Results for 2780 and 2774 have been misplaced.

SAMPLE RECORDArea: South East

Sample Number	Location	Assay	Type	Width
6429	126N-13E	.038	HG	N/A
6430	108N-18E,T1	980.ppb	HG	N/A
6431	126N-13E,T3	.234	HG	N/A
6432	108N-18E,T2	180.ppb	HG	N/A
6433	126N-18E,T2	.048	HG	N/A
6434	" "T3	.126	HG	N/A
6435	" "T2	265.ppb	HG	N/A
6439	76N-30E	.04	HG	N/A
6440	76N-32E	.281	HG	N/A
8902	82N-21E	.029	HG	N/A
8903	84N-37+50E	.014	HG	N/A
8922	92N-29+50E	.006	HG	N/A
8923	92N-35E	.014	HG	N/A
8828	76N-30E,T2	.017	HG	N/A
8829	" "T1	.034	CH	5ft
8830	" "T3	.006	CH	4ft
8831	" "T3	.010	HG	N/A
8832	" "T1	.016	CH	4ft
8833	" "T2	.005	CH	2ft
8834	" "T1	.021	HG	N/A
8835	" "T2	.013	CH	5ft
8836	76+75N-32E,T1	.684	HG	N/A
8837	" "T1	.021	CH	5ft
8838	" "T1	.530	HG	N/A
8839	" "T2	.014	HG	N/A
8840	" "T1	.024	CH	5ft
8841	" "T1	.005	CH	5ft
8842	76N-30E,T3	.0023	CH	5ft
8843	76+75N-32E,T1	.007	CH	5ft
8844	" "T1	.010	CH	5ft
8845	92N-35E,T1	.011	CH	5ft
8846	" "T1	.016	CH	4ft
8847	" "T1	.017	HG	N/A
8848	" "T1	.034	HG	N/A
8849	108N-39E	.032	HG	N/A
8850	104N-24+75E	.041	HG	N/A
8851	92N-34E	.007	HG	N/A
8852	" "	.019	HG	N/A
8853	" "T2	.050	CH	3ft
8854	" "T2	.181	HG	N/A
8855	" "T2	.088	CH	5ft
8856	" "T3	.018	HG	N/A
8865	120N-49E	.134	HG	N/A
8866	104N-24+75E,T2	.009	HG	N/A
8867	126N-13E,T2	.025	CH	5ft
8868	" "T4	.029	CH	5ft
8869	" "T1	.015	CH	5ft
8870	" "T2	.064	CH	5ft
8871	104N-24+75E,T1	.005	CH	5ft
8872	126N-13E,T1	.011	CH	3ft
8873	" "T3	.063	CH	5ft

8874	104N-24+75E, T1	.025	CH	5ft
8875	126N-13E, T3	.095	CH	5ft
8876	104N-24+75E, T1	.019	HG	N/A
8877	126N-13E, T4	.038	CH	5ft
8878	104N-24+75E, T1	.014	HG	N/A
8879	" "T2	.034	CH	5ft
8882	126N-13E, T3	.079	CH	5ft
8883	" "T2	.018	CH	5ft
8899	106N-18+75E	.056	HG	N/A
8725	128N-34E	.028	HG	N/A
8726	116N-4+25E	.005	HG	N/A
8727	132N-15+50E	.005	HG	N/A
8728	108N-1+50E, T1	.002	HG	N/A
8729	108N-1+50E, T2	.006	HG	N/A
8730	106N-2+00E	.009	HG	N/A
8778	112N-50+50E	.029	HG	N/A
8779	106N-57+50E	.013	HG	N/A
8780	82N-24+50W	.021	HG	N/A
.8781	118N-20W	.023	HG	N/A
8005	124N-30+50W	.005	HG	N/A
8006	116N-24W	.031	HG	N/A
2596	102N-41E	.012	HG	N/A
2597	108N-41E	.012	HG	N/A
2598	108N-21E	.020	HG	N/A
2600	124N-20+70E	.004	HG	N/A
2832	128N-35E	.079	HG	N/A
2757	132N-17E	.560	HG	N/A
	150ft at AZ136			

SAMPLE RECORDArea: South West

Sample Number	Location	Assay	Type	Width
1851	116N-BL	80.ppb	HG	N/A
1852	120N-1W	25.ppb	HG	N/A
1853	116N-3W	35.ppb	HG	N/A
1854	116N-5W	15.ppb	HG	N/A
1855	120N-6W	5.ppb	HG	N/A
1856	116N-6W	5.ppb	HG	N/A
1857	116N-7W	35.ppb	HG	N/A
1858	116N-11W	135.ppb	HG	N/A
1859	112N-10W	115.ppb	HG	N/A
1860	112N-6W	10.ppb	HG	N/A
1861	112N-4W	120.ppb	HG	N/A
1864	112N-6W	15.ppb	HG	N/A
1867	120N-1W	15.ppb	HG	N/A
1868	122N-BL	50.ppb	HG	N/A
1869	124N-2W	15.ppb	HG	N/A
1870	124N-4W	30.ppb	HG	N/A
1871	120N-3W	25.ppb	HG	N/A
1872	124N-9W	10.ppb	HG	N/A
1873	124N-10W	5.ppb	HG	N/A
1874	120N-7W	45.ppb	HG	N/A
1875	120N-9W	35.ppb	HG	N/A
1881	124N-15W	20.ppb	HG	N/A
1882	124N-15W	.506	HG	N/A

(200FT at AZ168)

SAMPLE RECORDArea: Lynk

Sample Number	Location	Assay	Type	Width
8890	T1	.057	hg	n/a
8891	T3	.051	hg	n/a
8893	T2	.072	hg	n/a
8894	T6	2.456	hg	n/a
8895	T7	.084	hg	n/a
8896	T4	.143	hg	n/a
8897	T5	.594	hg	n/a
8900	T12	.014	hg	n/a
8701	T9	.192	hg	n/a
8702	T10	.175	hg	n/a
8703	T8	.03	hg	n/a
8704	T11	.60	hg	n/a
8705	T13	.058	hg	n/a
8706	T14	.057	hg	n/a
8707	T15	.047	hg	n/a
8708	T18	.038	hg	n/a
8709	T16	.168	hg	n/a
8710	T20	.094	hg	n/a
8711	T19	.063	hg	n/a
8712	T17	.02	hg	n/a
8713	T22	.099	hg	n/a
8714	T24	.219	hg	n/a
8715	T23	.276	hg	n/a
8717	T30	.342	hg	n/a
8718	T28	.250	hg	n/a
8719	T29	.032	hg	n/a
8720	T32	.380	hg	n/a
8721	T27	.012	hg	n/a
8722	T26	.045	hg	n/a
8723	T25	.028	hg	n/a
8724	T31	.04	hg	n/a
8731	T6	.008	ch	3.5ft
8732	T5	.153	ch	5ft
8733	T5	.014	ch	9ft
8734	T5	.002	ch	7ft
8735	T6	.401	ch	2.5ft
8736	T9	.189	ch	10ft
8737	T10	.217	ch	10ft
8738	T10	.03	ch	6ft
8739	T11	.009	ch	7.5ft
8740	T11	.011	ch	1.5ft
8741	T11	.112	ch	5ft
8742	T11	.015	ch	4ft
8743	T11	.078	ch	6ft
8744	T15	.041	ch	5ft
8745	T14	.012	ch	4ft
8746	T28	.037	ch	5ft
8747	T28	.018	ch	2ft
8748	T30	.027	ch	5ft
8749	T32	.009	ch	2ft
8750	T30	.016	ch	6ft

8751	T14	.030	ch	10ft
8752	T16	.124	ch	3ft
8753	T28	.046	ch	4ft
8754	T32	.355	ch	7ft
8755	T15	.058	ch	3ft
8756	T28	.241	ch	6ft
8757	T16	.009	ch	4ft
8758	T16	.013	ch	8ft
8759	T16	.022	ch	2ft
8760	T16	.019	ch	3ft
8761	T32	.006	ch	2ft
8762	T22	.052	ch	11ft
8763	T19	.116	ch	5ft
8764	T30	.009	ch	6ft
8765	T15	.082	ch	6ft
8766	T18	.034	ch	8ft
8767	T32	.371	ch	5ft
8768	T15	.036	ch	12ft
8769	T14	.015	ch	7ft
8770	T18	.012	ch	9ft
8771	T24	.072	ch	8ft
8772	T19	.041	ch	7ft
8773	T23	.035	ch	10ft
8774	T15	.007	ch	4ft
8775	T15	.053	ch	7ft
8776	T32	.027	ch	7ft
8777	T28	.028	ch	7ft

SAMPLE RECORDArea: North

Sample Number	Location	Assay	Type	Width
1951	172N-33E	.002	HG	N/A
1952	172N-31E	.005	HG	N/A
1953	172N-33+40E	.002	HG	N/A
1954	172N-31E	.038	HG	N/A
1955	172N-29E	.027	HG	N/A
1956	172N-28E	.003	HG	N/A
1957	172N-29E	.002	HG	N/A
1958	172N-27E	.002	HG	N/A
1959	172N-13+50E	.001	HG	N/A
1960	172N-12E	.009	HG	N/A
1961	172N-10E	.002	HG	N/A
1962	172N-7E	.008	HG	N/A
1963	168N-14E	.015	HG	N/A
1964	168N-24E	.008	HG	N/A
1965	168N-29E	.011	HG	N/A
1966	168N-25E	.005	HG	N/A
1967	168N-29E	.010	HG	N/A
1968	168N-29E	.007	HG	N/A
1969	168N-33E	.012	HG	N/A
1970	172N-23E	.008	HG	N/A
1971	172N-24E	.011	HG	N/A
1973	168N-34E	.005	HG	N/A
1974	168N-33E	.011	HG	N/A
1975	160N-40+50E	.007	HG	N/A
1976	160N-39E	.005	HG	N/A
1978	160N-39E	.025	HG	N/A
1980	164N-37E	.015	HG	N/A
1981	164N-36E	.013	HG	N/A
1982	160N-37E	.008	HG	N/A
1983	160N-34E	.002	HG	N/A
1984	160N-34E	.009	HG	N/A
1985	160N-33E	.005	HG	N/A
1986	156N-29E	.014	HG	N/A
1987	156N-29E	.004	HG	N/A
1988	156N-23E	.002	HG	N/A
1989	156N-20E	.021	HG	N/A
1990	156N-20E	.018	HG	N/A
1991	156N-18E	.005	HG	N/A
1992	156N-17E	.002	HG	N/A
1993	156N-18E	.002	HG	N/A
1994	156N-16E	.012	HG	N/A
1995	156N-14+50E	.003	HG	N/A
1996	156N-12E	.047	HG	N/A
1997	160N-8E	.009	HG	N/A
1998	160N-6E	.011	HG	N/A
1999	156N-5E	.005	HG	N/A
2000	156N-2E	.004	HG	N/A
2465	148N-22E	.008	HG	N/A
2466	148N-20E	.008	HG	N/A
2467	148N-20E	.011	HG	N/A
2468	148N-20E	.004	HG	N/A

2469	148N-20E	.007	HG	N/A
2470	152N-21E	.008	HG	N/A
2471	152N-22+60E	.004	HG	N/A
2472	152N-22E	.006	HG	N/A
2473	152N-22E	.003	HG	N/A
2474	148N-18E	.005	HG	N/A
2475	148N-18E	.008	HG	N/A
2476	148N-18E	.005	HG	N/A
2477	148N-18E	.002	HG	N/A
2478	148N-18E	.001	HG	N/A
2479	148N-16E	.015	HG	N/A
2480	148N-15E	.003	HG	N/A
2481	148N-13E	.005	HG	N/A
2482	148N-9E	.001	HG	N/A
2483	148N-9E	.015	HG	N/A
2484	148N-9E	.023	HG	N/A
2485	148N-9E	.012	HG	N/A
2486	148N-9E	.007	HG	N/A
2487	148N-9E	.005	HG	N/A
2488	148N-9E	.005	HG	N/A
2489	148N-9E	.002	HG	N/A
2490	148N-9E	.008	HG	N/A
2491	148N-9E	.006	HG	N/A
2492	148N-9E	.005	HG	N/A
2494	148N-5+60E	.003	HG	N/A
2495	152N-7E	.001	HG	N/A
2496	152N-7E	.001	HG	N/A
2497	152N-7E	.002	HG	N/A
2498	152N-8E	.004	HG	N/A
2499	152N-6E	.004	HG	N/A
2500	152N-6E	.002	HG	N/A
1901	SE Camp Lk	.001	HG	N/A
1902	SE Brad Lk	.003	HG	N/A
1903	168N-36+50E	.014	HG	N/A
1904	168N-38E	.006	HG	N/A
1906	164N-15E	.017	HG	N/A
1907	164N-14+50E	.009	HG	N/A
1908	164N-29E	.003	HG	N/A
1909	168N-10E	.012	HG	N/A
1913	156N-17E	.004	HG	N/A
1914	148/152N-30E	.008	HG	N/A
1915	152/148N-28E	.012	HG	N/A
1916	156N-2E	.020	HG	N/A
1917	168N-40E	.002	HG	N/A
1918	S-Camp Lk	.007	HG	N/A
2551	168N-39E	.008	HG	N/A
2552	168N-37E	.005	HG	N/A
2554	164N-38+50E	.004	HG	N/A
2555	164N-37E	.002	HG	N/A
2556	164N-36E	.003	HG	N/A
2557	168N-29E	.002	HG	N/A
2558	168N-25E	.001	HG	N/A
2559	168N-25E	.008	HG	N/A
2560	164N-23E	.011	HG	N/A
2561	164N-27E	.001	HG	N/A
2562	168N-15E	.008	HG	N/A
2563	168N-10E	.007	HG	N/A

2564	168N-10E	.007	HG	N/A
2565	168N-8+60E	.011	HG	N/A
2567	164N-6E	.002	HG	N/A
2568	148N-7E	.004	HG	N/A
2569	148N-5E	.002	HG	N/A
2570	148N-5E	.009	HG	N/A
2571	148N-2E	.003	HG	N/A
2572	148+70N-BL	.009	HG	N/A
2573	160N-24E	.013	HG	N/A
2574	160N-24E	.003	HG	N/A
2575	160N-24E	.006	HG	N/A
2576	160N-24E	.004	HG	N/A
2577	160N-23E	.005	HG	N/A
2578	160N-20E	.004	HG	N/A
2579	160N-20E	.001	HG	N/A
2580	164N-14E	.003	HG	N/A
2581	160N-14E	.005	HG	N/A
2583	164N-14E	.006	HG	N/A
2584	164N-13E	.002	HG	N/A
2585	164N-9+50E	.006	HG	N/A
2586	164N-9+50E	.010	HG	N/A
2587	164N-9+50E	.035	HG	N/A
2588	164N-33E	.002	HG	N/A
2589	160N-8E	.006	HG	N/A
2590	160N-8E	.004	HG	N/A
2591	160N-8E	.025	HG	N/A
2592	160N-6E	.003	HG	N/A
2594	160N-6E	.005	HG	N/A
2595	160N-6E	.013	HG	N/A
2801	Brad Lk N-S Camp Lk	.006	HG	N/A
2802	CL 2S-60W	.008	HG	N/A
2803	CL 6S	.008	HG	N/A
2804	CL 9S	.009	HG	N/A
2805	CL 10S	.002	HG	N/A
2806	CL 14S	.004	HG	N/A
2807	CL 16S	.015	HG	N/A
2808	156N-5E	.011	HG	N/A
2809	152N-6E	.018	HG	N/A
2810	152N-6E	.012	HG	N/A
2811	152N-7E	.011	HG	N/A
2812	152N-9E	.013	HG	N/A
2813	144N-1W	.002	HG	N/A
2814	144N-4E	.012	HG	N/A
2815	144N-4E	.008	HG	N/A
2816	144N-10E	.012	HG	N/A
2817	144N-13E	.008	HG	N/A
2818	144N-14E	.001	HG	N/A
2819	144N-17E	.002	HG	N/A
2820	148N-20E	.003	HG	N/A
2821	148N-23E	.002	HG	N/A
2822	144N-26+50E	.002	HG	N/A
2823	144N-27E	.003	HG	N/A
2824	168N-30E	.005	HG	N/A
2825	152N-26E	.014	HG	N/A
2826	152N-22E	.011	HG	N/A
2827	156N-20E	.008	HG	N/A

2828	136N-30E	.019	HG	N/A
2829	Gord. Lk-	.007	HG	N/A
	N of Lynk			
2830	" "	.004	HG	N/A
2831	" "	.054	HG	N/A

APPENDIX 2
Thin Section Summary

Sample#1

Mode:

Plagioclase	50
Biotite	32
Sub-opaques	10
Chlorite	1

Location: 89N-14E

Notes: This sample was identified as a Blk slt in the field. Asp at 5-10%. Lab analysis suggests a Asp composition of 1%. Thin Section examination indicates a fragmental texture with ovoid masses of Plagioclase rimmed in Biotite. Sample#1 has been identified as a fg crystal tuff, ash tuff or a tuffaceous Black shale.

Sample#2

Mode:

Plagioclase:	54
Quartz:	25
Biotite:	5
Chlorite:	10
Sphene:	2
Apatite:	1
Epidote:	trace
sub-opaques:	2
Sulphides:	1

Location: 89N-14E

Notes: This sample was identified as a Qtz bx with minor sulphides. An examination of an etched cut-off chip yielded a feldspathic matrix with irregular and angular fragments. In thin section the fragments consist of felsitic plagioclase (.01-.05mm) with opaque grain boundaries. The fragment margins are poorly defined and are frequently penetrated by veinlike masses of the coarser plagioclase matrix. In addition, the fragment margins are also bounded by sinuous shears filled with chlorite, biotite and opaques and show attenuated shapes reminiscent of soft sediment deformation.

The matrix exhibits a coarse grained - pseudo igneous texture with crystalline plagioclase aggregates (.5-1.0mm). Quartz occurs as angular interstitial pockets and as granophyre-like intergrowths within the plagioclase.

Harris is rather indefinite in his lithological identification of this sample. He points out that rock exhibits an igneous (Quartz Dioritic) texture with partially assimilated fragments. In essence, the sample is probably best described as a Breccia, be that of a tectonic or metamorphic origin.

As a postscript, it is also worthwhile to point out that the sample contains sphene which also points to an

igneous origin. In fact, Harris closes his description by stating that; "the texture of the host phase in this rock is hard to explain as other than igneous - in which case the fragments are xenoliths, possibly of an altered tuff."

Sample #3

Mode:

Quartz:	30
Plagioclase:	20
Biotite:	18
Chlorite:	2
Sericite:	1
sub-opaques:	12
Pyrrhotite:	14
Arsenopyrite:	3
Chalcopyrite:	tr.

Location: 108N-13E

Notes: Another sample of Blk slt which appears to be of the Breccia suite. The cut-off chip comprises fragments of a dark speckled rock with interstitial zones of chaotic-textured quartz/sulphide material. The dark speckled rock consists of fg felsitic-sericitic aggregate which has been masked by a pervasive dissemination of sub-opaques. A faint layering is apparent as defined by fine black lamellae. The layering effect is clearly older than the recrystallized quartz plagioclase grain network.

The intervening material (quartz/sulphide) consists of coarse patches of quartz mosaic which are separated by pockets of felted biotite. Sulphides occur as intergranular networks, irregular replacements, and as patches of fg impregnations in the granular quartz component. Harris suggests that this sample could represent a slump breccia of interlayered sulfidic chert and fg tuffs and black shales. However, he also points out that the presence of the fg layering is inconsistent with the degree of recrystallization.

Sample #4

Mode:

Plagioclase:	55
Sericite:	23
K-Feldspar:	4
Quartz:	2
Chlorite:	9
Epidote:	2
Sub-Opagues:	4
Sulphides:	1

Location: 96N-6E

Notes: This sample was originally identified as a Gry

slt-Gw. Harris describes this rock as fg, cross-bedded and of tuffaceous character. Thin section analysis indicates that the sample is composed of crystal clasts of Plagioclase and rare quartz set in a fg sericitic/felsitic matrix. The rock also contains a number of veinlets of albite and K-feldspar.

Sample #5

Mode:

Quartz:	65
Plagioclase:	10
Sericite:	12
Biotite:	8
Chlorite:	2
Opaques:	3
Sulphides:	tr.

Location: Viv-15 (82N-16E)

Notes: Another representative of the Qtz bx suite. The cut-off chip consists of granular qtz with included patches of fluidally-controlled, feldspar-cemented breccia. The inclusions comprise cg biotite, intergrown cg plagioclase and variable amounts of fg sericite. In addition, dark fg shale or tuff fragments are also present and have been extensively replaced by the plagioclase/biotite phase.

Harris suggests that this sample could represent a recrystallized slump breccia with the quartz being derived from an original chert. Alternatively, the fragments could be xenoliths of feldspathized/biotitized shale which were incorporated into a multi-phase breccia-in association with vein quartz. The author would tend to concur with the latter.

Sample #6

Mode:

Quartz:	87
Chlorite:	4
Plag.:	3
Asp:	3
Au:	tr

Location: Viv-15(82N-16E)

Notes: This sample exhibits the same sort of textural features that were noted in the previous rock type. It is worthwhile to point out that a number of gold grains were identified associated with Arsenopyrite clumps. These grains are associated with intergranular cavities and microfractures and also with the compact arsenopyrite. This feature is worth noting as it may have some implications for the metallurgical tests.

Sample #7

Mode:

Plagioclase:	70
Quartz:	3
Biotite:	15
Carbonate:	tr
sub-opaques:	10
Sulphides:	2

Location: Viv-26

Notes: A fairly typical Blk slt with associated Asp. Harris describes this sample as consisting of an interlayered fg crystal tuff with a laminated ash component. The bedding is completely undeformed.

The tuff consists of close-packed crystal clasts of plagioclase set in a very fg felsite matrix. The plagioclase is predominately anhedral although minor amounts of subhedral grains are also present.

The ash layers are of a similar composition to the tuff although they lack the plagioclase clasts.

Sulphides are dominately arsenopyrite, which occurs as coarse euhedral grains.

In summary, it is probably worthwhile to investigate the tuff-siltstone ambiguity which is becoming apparent in these fg sediments. Admittedly, this may be a moot point since the precise Sediment-Volcanic demarcation is often defined on the basis of convention.

Sample #8

Mode:

Plagioclase:	50
Quartz:	3
Chlorite:	20
Sericite:	5
Opagues:	22
Sphene:	tr
Apatite:	tr
Sulphides:	tr

Location: 82N-21E

Notes: This sample was nominally described as a Blk slt. However, it appears that the rock is considerably more deformed than was first apparent. In thin section the rock consists of a melange of dark-colored fragments which has been invaded by a network of plagioclase veinlets. The dark fragments appear to be of a chloritic-sericitic composition although this determination is somewhat clouded by the persuasive opaque pigmentation.

Again, the precise origins of this rock is difficult to define. Harris suggests that it may be related to a faulting episode although the degree of recrystallization does not indicate extreme dislocation metamorphism. Finally, the presence of Sphene and Apatite may reflect

an igneous origin.

Sample #9

Notes: A simple diabase with characteristic plagioclase phenocrysts.

Location: 86N-5W

Sample #10

Mode:

Arsenopyrite with minor amounts of Gold, Galena, Chalcopyrite and Tetrahedrite.

Location: 90N-3W

Notes: This sample was taken to examine the relationship between gold and the host arsenopyrite. In polished section the arsenopyrite is traversed by a series of hair-line fractures. Gold was located in the fractures as a series of thread-like particles. In addition, Gold was also found as small angular inclusions in unfractured sections of arsenopyrite.

In summary, it appears that the bulk of the observed Gold grains occur within microfractures in the Arsenopyrite.

APPENDIX 3ABBREVIATIONS

asp - arsenopyrite
AZ - compass bearing
bx - breccia
Blk slt - black siltstone
ch - channel sample
cg - coarse grained
E.M.- electromagnetic
fg - fine grained
ga - galena
Gry slt - grey siltstone
gw - greywacke
hg - selected sample
n/a - not available
po - pyrrhotite
py - pyrite
qtz - quartz
T - trench
tr - trace
V.L.F.- very low frequency electromagnetic
method

