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Voyager Explorations Ltd

Geological report on Echo-Bay Property Lake of the Woods District of Kenora N.W. Ont.

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TABLE OF CONTENTS

INTRODUCTION

In 1987, Voyageur Explorations initiated a geological and geophysical (mag, VLF and HLEM) surveys, following by 5 DDH (2,502ft) over 31 continuous claims. Since then, further claims were staked after the discovery of two gold zones north of Echo-Bay.

Most all of the rock are strained resulting from NW-SE compression which produce vertical mouvement. This leads the to development of ductile shear zone mainly along geological contact. Futher intense compression has created E-W ductile-brittle deformation which cross cut all lithologies. Gold occurences on the property are structurally controlled by the shear zones.

The goal of the 1988 mapping was to outline the most favorable area for detail investigation. Many areas were defined, based on their gold assay result and/or their structural setting and/or their rock alteration product. The most promessing sector is located east of Echo-Bay adit. This area comprise the M-14 adit, the Nonesuch pit and the Gauthier trench as well the Echo-Bay adit. There, the structural setting is complex with many anastomosed shears which splay off the main Echo Bay Shear Zone (EBSZ). In addition, many felsite dikes were intruded this area which are reputated for their role as an heat source in gold deposit. Moreover rock sample analysis indicate that this sector shows concentration of gold anomalies.

A 388 rock samples were collected through out the property. In addition, some 122 soil samples were collected over succeptible promessing area where outcrop was poorly exposed. Despite, few moderate gold assay result, the property remains very attractive for a major gold deposit.

LOCATION, ACCESS AND CLAIMS

The Echo Bay property consists of 70 contiguous mining claims and is covered by the waters and land of Echo Bay and Rush Bay in Lake of the Woods area, 20 km SW of Kenora, Forgie, Glass and Boys Townships, Kenora District, NW Ontario (NTS: 52E/10)

Acces to the property is via the Trans-Canada highway heading west from Kenora for about 35 km. Then, follow the Rush Bay road which leads south for approximatly 9 km to Rush Bay Landing. A boat is necessary to access the property near by the

Rush Bay Landing in summer time. Also, a right-angle road, 2 km before Rush Bay Landing, gives access to the western inland portion of the property.

Fifty per cent of the property is water. High ridges run roughly E-W with some steep cliffs up to 16 m in height along shorelines and inland. The inland area is covered by dense bush with oaks, balsams, birchs, pines, cedars and small cactus. Ontcrop exposure is excellent at the shoreline and moderate inland. Thick glacial till cover the SW inland north of Echo Bay.

REGIONAL GEOLOGY:

The archeen greenstone belt of the Echo Bay area, Lake of the Wood, can be subdivided into three major units (Smith, 1986). The oldest stratigraphic unit, the Lower Tholeiitic Volcanics consists of pillowed to massive basaltic flows. Conformably overlying the Lower Tholeiitic Volcanics is, the Upper Calc-alkaline Volcanics. They consist predominantly of debris flows (Ayers, 1986). Intercalated felsic units have pyroclastics deposits and some minor sediments as wackes, mudstones, siliceous silstones and chert-sulphide ironstones (Ayers, 1986). In place, the Upper Tholeiitic Volcanics overlies the calc- alkaline sequence (Smith, 1986). Younger conglomerates and wackes of the Crowduck Lake Group unconformably overlies the volcanic package (Smith, 1986).

Mafic sills intrude both the tholeiitic and calc-alkalic metavolcanics and the interflow metasediments (Ayers, 1986). Locallcy the sills display differenciation with ultramafic phases at the base grading upwards into gabbro or leuco-grabbro at the top.

The volcanic and sedimentary sequences have been intruded by numerous granitoid bodies as the Canoe Lake Stock and the Rush Bay Stock. These are of two types, either syn-volcanics or late tectonic (Smith, 1985).

Numerous felsic dikes intrude the rock package and are probably related to both early volcanism and later intrusive events (Smith, 1986). Lamprophyre dikes intrude all lithologies and are clearly late.

The structural geology of the area is comlex. In general, at least two periods of deformation have been identified. An earlier period (D_1) of predominantly vertical tectonics, related to the emplacement of large granitoid batholiths, appears

responsable for most of the major folding within the greenstone belt (Smith, 1986). Three fold ares have been identified (Ayers, 1986) in the area of Echo Bay:

1) The Corkscrew Island Syncline (CIS) which trends easterly to north easterly at the north.

2) The northeast trending Copper Island Anticlinal (CIA), east of Echo Bay and,

3) the northeast trending Canoe Lake Syncline (CLS), south and parallel to CIA.

A late period of large scale shearing (D_2) was active after plutonism and seems to be the result of a major northwest-southeast principal compression (Smith, 1986). This fact is clearly demonstrated with the elongated lensoidal shape of the Rush Bay and Canoe Lake Stock.

Major zones of ductile deformation such as the Crowduck Lake Shear Zone (CLSZ) and the Shoal Lake Deformation Zone (SLDZ) are the result of D_2 shearing.

The CLSZ is an extensive dextral shearing system, extending from Ontario-Manitoba border to the Dryberry Granitoid Complex (Sanborn, 1986) which trends westerly. Several splays occur off the main CLSZ (Ayers, 1986). The SLDZ can be traced along a NE trend from Gull Bay to Echo Bay. The SLDZ deflects eastward to the north until it merges with CLSZ (Smith, 1986). There is no evidence of modification of SLDZ by CLSZ, or vice versa. The transition from one strain zone to the other appears gradational, and the two are likely contemporaneous (Smith, 1986).

PROPERTY GEOLOGY

The property is characterized by numerous E-W parallel shears resulting from major ductile deformation of the CLSZ and SLDZ. All the rocks are moderately to intensily sheared, schistosed and mainly carbonatized, except the gabbro.

Primary textures such as pillows, clasts, porphyries and vesicules are highly deformed but usually recongnizable. This permits rock identification. However, when primary textures do not exist, some outcrops are obvious because shearing has tendancy to result in a schist which do not specify their origine.

The most common rock on the property is the grabbro including the melanogabbro. The gabbro occupies most of the central portion of the mapped area as a mass while the melanogabbro is intimately interbedded with mafic rocks on the western part.

The gabbroic rock ranges from a fine to a coarse grain. It displays a typical salt and pepper texture when it is coarse to medium grained. The gabbro and melanogabbro are massive, slightly sheared, schitosed and sparcely magnetic. However, their margins which are fine grained, are intensily sheared. No sharp contacts with the country rock can be observed because it appears to be masked by the intense shearing effect. The margin could be easily be confused with a schistosed basalt.

The gabbroic rocks display some rare ultramafic phases. They seem to occur along the margin of the intrusion (reference to the gabbro north of Homestead). Some ultramafic rocks are strongly altered into talc-chlorite-carbonate schist. On L96E, 2-3 cm abestos fibers have been noticed within the schist.

The melanogabbro forms high ridges which are characterized by moss and few pines on the uppermost surface. This rock could be interpreted as a sill or an amphibolite flow. It occasionly shows the typical salt and pepper texture of a gabbro intrusion on the oxydized surface but the dark-green fresh rock display more of an amphibolitic texture with coarse flakes of chlorite.

The intermediate volcanic rocks are widely abundant north, south and west of the mapped area. In the north, nice preserved pillow tops could be observed from the pillowed andesite. In the south, the rock is intensily laminated with segregation of dark and pale layering. Dark laminations mainly reflect chlorite horizons while the pale rock could be plagioclase-and/or silica-rich horizons. In the west, lapilli-tuff occurs north and west of the gabbroic intrusion. The lapilli-tuff is often interbedded with centimetre siliceous mudstone-like horizon. Some of them are believe to be mylonite.

The felsic volcanic rocks are fairly wide-spread in the mapped area. They constitue distinctive horizons through the mafic volcanic pile. They are intensily sheared and show a characteristic centimetre-lozenge shape resulting from the deep penetration of the S-and C-fabrics of the intense shearing into the rock. The most prominant horizon is the massive Golden Horn Rhyolite in the western portion of the mapped area. It has an ellipsoidal shape where its swell in the middle for about 3,000 feet and thins out towards its western extremity. The eastern portion is intruded by the quartz-monzodiorite stock.

Some felsic horizons may contain tuff breccia and lapilli-tuff in Echo Bay adit and Rush Bay adit vicinity.

All felsic horizons in the western part of the gabbroic intrusion are altered, at least, into sericite. The Golden Horn Rhyolite and a part of the felsic horizon underneath are strongly saussuricitized (epidote and sericite) and altered into potassic. However, the eastern portion of the gabbroic intrusion remains generally fresh.

The mafic volcanic rocks are fairly apparent north of Echo Bay shore. It consist of pillowed basalt, vesicular and massive flows which are intensily chloritized and schistozed. The pillow basalt varies from 15 cm to 1,5 m long. The pillow are strongly stretched and elongated. The weathered surface of the pillow basalt is distinguish by the dark black selvage while the core is, sometimes, lightly coloured green-white. But the main characteristic is a persistant crevisse along the resistant selvage which usually forms a tight V-shape caused by the erosion of the intersection of S and C fabric. Magnetite is present in the basalt and some good concentration could be observed in the rim of the pillow basalt.

Banded black and grey chert unit sits north of Homestead vicinity.

The country rocks have been intruded by the Canoe Lake Stock and the Rush Bay Stock. The Rush Bay Stock is a medium grained, porphyritic phenocryst measuring up to 3 cm in length. The phenocryst consist of potassium feldsphar core mantles with plagioclase rims (Ayers, 1986). The stock is strongly saussuritized and altered into potassic, except the southern margin where the rock is relatively fresh over 500 feet wide. The northern margin is highly sheared and friable with strong ablation of the phenocrysts.

The Canoe Lake Stock is medium grained, equigranular to quartz-porphyritic tonalite. Locally, anhedral to enkedral quartz and plagioclase phenocryst occur up to 1 cm in size. The centre of the intrusion is unstrained with strain increasing towards its margins (Ayers, 1986).

Some felsic dikes such as QFP, FP intruded the rock package. They are parallel to the shear trend. Also, discordants lamprophyre dikes are noticeable. Some may contain granitoid inclusions.

STRUCTURAL GEOLOGY:

Two major zones of ductile deformation, identified as the CLSZ and SLDZ, trend westerly. These structures consist of alterning zone of highly and moderately strained rock which collectively attain widths of up to several kilometers. The amount of deformation is typically in proportion to the competency of the original lithologies. Massive intrusives are weakly schistosed while fine-grained metavolcanics frequently have strongly developed planar schistosity and shear.

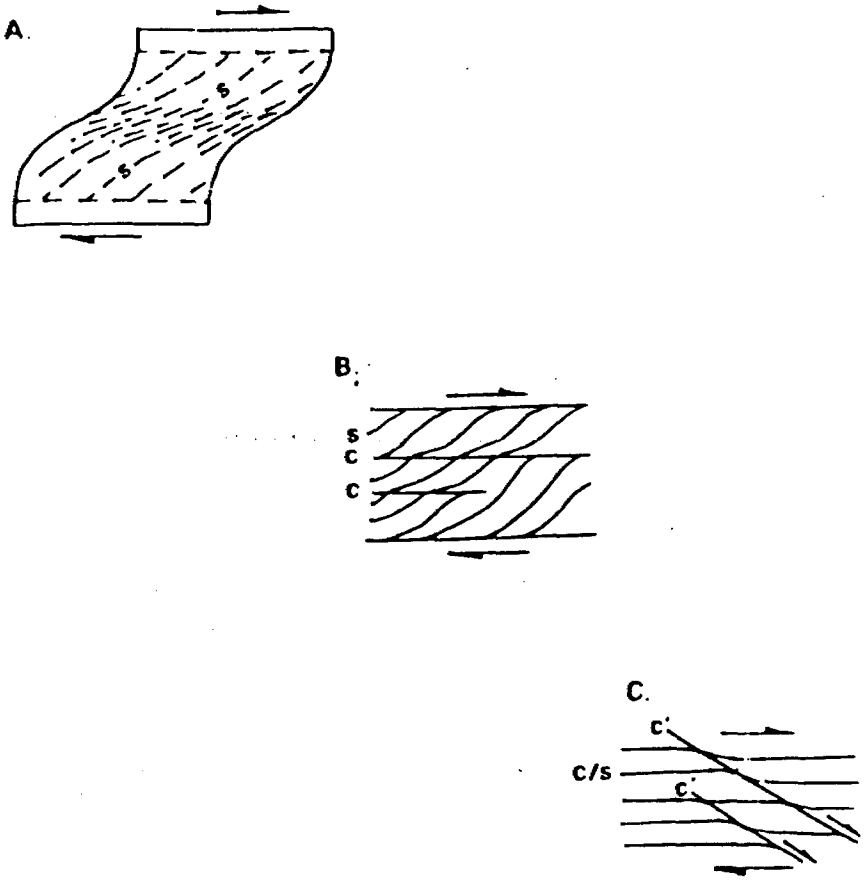
This is indicated by the presence of sigmoidal schistosity (S-fabric) at millimetre - and centimetre - scale which are obliquate to shear planes (C-fabric). Locally, these two fabrics are accompanied by another plane of shear (C'-fabric) at decimetre - scale which is developed with progressive intense shearing (figure 1).

Most lithologies in the property have a well developped C-fabric which trend N270 with a steep dip of about 75^0 to the north except when deflected in the vicinity of gabbroic intrusion (L4W to L20E). There, the trend is N235-N250 and lithologies seems to surround the gabbroic mass intrusion. Field evidence as geological contact, micro-layering in the chert, indicate that the bedding and the C-fabric appear to be sub-parallel.

The schisosity (S-fabric) is penetrative in most rock except the gabbroic intrusion and sill. Its make an low-angle of 10 to 30^0 with the C-fabric (N220 to N260 with steep dip around 75^0 to the north) when it is not rotated into the westerly trending C-fabric on a horizontal surface. In addition, S-fabric always displays dextral shearing when its detectable on surface.

The C'-fabric is less developed and more discrete. It also makes a low angle of 10 to 30^0 with the C-fabric. Its trend is about N280 to N310 and has a steep dip around $75\text{-}80^0$ to NE. In addition a dextral and sinistral shearing characterize the C' fabric on a horizontal surface when its visible on surface.

The shear zones are characterized by steep plunging mineral lineations and shows evidence of major up-side-down displacement. Crenulation along vertical component planes indicates a south side up vertical mouvement of the Canoe Lake Stock in the Homestead area. Mineral lineations show a tendancy to plunge NE except in the Homestead vicinity where they plunge to NW. Locally, horizontal surfaces display S-fabric rotated into east trending C-fabric consistent with transcurrent dextral displacement. These fabrics may reflect minor reactivition of the shear zones.



a. *The variation of attitude and intensity of the penetrative foliation S, developed in the planes of flattening across the shear zone.*
b. *With increased deformation, the C foliation, a spaced foliation, develops as planes of shear parallel to the walls of the shear zone. S is rotated into C.*
c. *The development of C' (shear banding); the spaced foliation transects C foliation in highly strained rocks (after Roberts 1987).*

FIGURE 1 : The development of foliations by simple shear strain in a ductile shear zone (from Arias & Heather, 1986)

Secondary fabrics such as kink band is only well developed south of the property. A conjugate pairs of kink bands predominate the area: the NW/SE kink band plunging NW and the NE/SW kink band plunging NE.

A brittle N-S, predominantly sinsitral micro fault was observed on small-scale outcrop (N/70/70) consistant with a trancurrent dextral displacement on the west portion of the map. However, dextral and sinistral micro fault are noticed on the east side of the map.

All these structural parameters control the later geological setting. For exemple, some lamprophyres and mafic dikes on the property are oriented along the C-fabric. In addition, these structural parameters also control the mineralization setting. For exemple, C - and C'- fabric hosted aurifereous quartz veins. The C'-fabric may reflected an opening space (tension gashes) created during the NW-SE compression.

Numerous E-W parallel shear zones splays off from the two major ductile deformation zones of CLSZ and SLDZ. At least 8 shears are recongnized on the field and air photo interpretation (lineaments, inland shape and swamps strike). On the field, most all of the shears are expressed by millimitric friable slated sericite and/or talc and/or chlorite schist.

The distinguishing CLSZ is characterized by a 1 to 3 m wide pinch and swell zone of brecciated dolomite-ankerite-quartz-(sericite) schist. The shear seems to be concentrated along the zone of pre-existing weakness and follows the shear trend. The contact between the felsic/intrusion rock (hanging-wall) and the pillowed basalt (footwall) was at a position of ductility contrast. The deflection of the CLSZ to NE, in the vicinity of gabbroic intrusion, intersect from the west, 3 E-W shears and/or lineaments. These shears are poorly exposed being masked by swamps and lakes along most of its lenght.

Theses shears and/or lineaments are from south to north:

1) The Golden Horn lineaments (GHL) caracterized by numerous dark grey and white quartz veins in the wall rock and some veins may contain tourmaline.

2) The Artie trench shear zone (ATSZ) and

3) the Rush Bay Adit shear zone (RBASZ)

The CLSZ curves into E-W trend, north of gabbroic intrusion, toward north of Victoria Island where floats of dolomite schists were observed. The shear seems to splay off toward south of Victoria Island.

Six hundred feet south of the main CLSZ, the Echo Bay shear zone (EBSZ) is a discontidued mylonized and brecciated zone between the mafic and felsic contact and has the same structural pattern than the CLSZ. This shear was drilled by Voyageur last year.

South of EBSZ, the SLDZ from Shoal Lake can divided into the northern and southern branch. The northern branch is deflected from its NE trend to E-W under Echo Bay to follow the same structural pattern than CLSZ and EBSZ to the west. This shear, masked by lakes, is more likely deduced from some inland shape. The EBSZ and SLDZ northern branch seem to merge and deflect into a SE trend. Some EW shears splay off the EBSZ and SLDZ at the gabbroic intrusion.

Futher south, south of Echo Bay, the SLDZ southern branch follows the contact between the Canoe Lake Stock and laminated intermediate rock. In the vicinity of the shear, the rochs are strongly laminated, crenulated, schistosed and are injected by central shear veins.

The Homestead shear zone (HSZ) trend E-W between the rhyolite and a gabbroic sill. The rhyolite is brecciated and cataclasted while the ultramafic rock derived from segregation of the gabbro, is strongly altered into talc-chlorite-carbonate schist. This zone is believe to be part of the SLDZ.

The writer believes that CLSZ, EBSZ, HSZ and SLDZ southern and northern branch were first ductile shears to appear during the NW-SE compression of D_2. These shears were initiated along zone of ductility contrast i.e between geological contact. This initial deformation likely focussed futher deformation which was then allowed to propagate along preexisting fractures and other planes of weakness to a brittle-ductile E-W shear zones such as GHL, ATSZ, RBASZ and others which sheared the competent rocks (rhyolite, quartz-monzodiorite and gabbroic intrusion).

Shearing resulted from NW-SE compression has left open spaces which have been injected by quartz veins (C'-fabric).

Most of the quartz veins/veinlets are central shear veins and are more likely to follow the trend and the dip of the C-fabric. Some of them are along the C'-fabric and more rarely along S-fabric. Quartz veins pattern in brittle deformation oriented along C'-fabric, shows a dextral pattern, consistant with a dextral displacement.

Occasionnals varieties of quartz vein/veinlet sets are noticed:

- N170/70 Q.V. in brittle N-S sinistral fault;

- N360 Q.V. with moderate dip to the east in the Homestead vicinity;

- dextral and sinistral sigmoidal vein in more competent rock resulted from brittle deformation;

- Q.V. left stepping en echelon in the rhyolite;

- flat vein in competent rock consistant with vertical mouvement noticed on the property and finally,

- quartz pods which somes are squeeze between tight kink band.

MINERALIZATION:

Known mineralization can be classified for the property into their caracteristic alteration and for host rock and/or structural features. Theses zones are:

1) Aurifereous silicified hanging-wall of a mylonized and brecciated ductile deformation of the EBSZ;

2) Pb-Cu-Zn-As-Bo-(Au) bearing central shear quartz vein which host competent rock (Golden Horn Rhyolite and quartz-monzodiorite) in brittle-ductile deformation of GHL, ATSH and RBASZ;

3) Cu-As-(Au) bearing brecciated dolomite-ankerite-quartz-(sericite) schist in ductile deformation of CLSZ;

4) Pb-Cu-(Au) bearing cataclastic rhyolite in ductile deformation of HSZ;

5) Aurifereous quartz vein and/or wall-rock associated with ductile shear zones;

6) Aurifereous massive chert and dolomitic-cherty breccia which host schistosed intermediate volcanic rock.

Others susceptible structural zones, may be gold bearing. Mineralization assemblage and their host rock are unknown because of lack exposure of outcrops. Theses zones are:

7) The SLDZ the northern and southern branch and,

8) Tension quartz vein along C'-fabric resulted from NW-SE compression such as Standard.

1- Aurifereous silicified hanging-wall of a mylonized and brecciated ductile deformation of the EBSZ.

The 1987 drilling campaign has identified two parallel mineralized gold zones north of Echo Bay (LO to 12W). The host rock of theses zones is pillowed basalt and sits within the hanging-wall of the mylonite-breccia zone refered as EBSZ.

The EBSZ trend NO80-N260 and dips 70-75^0 to the north at the Echo Bay adit. The rock is strongly mylonized and brecciated along the mafic and felsic volcanic rocks covering 1 to 26 feet wide which seem to open up at depth (reference to hole EB-87-1 and 2). A broad zone of weak to strongly sheared and altered rock is pervasive in all lithologies transected by the CLSZ. Alteration involved widespread carbonatization including an injection of concordant to sub-concordant carbonate-(quartz)-(ankerite)-dolomite??) veinlets. Sericitization and chloritization have commonly affected sheared felsic and mafic volcanic assemblages respectively. Locally, minor silicification, hematization and sulphidization are reported which are the key to gold mineralization. Sulphides are represented mainly by pyrite (stringer and disseminated grains) and more rarely smears of chalcopyrite and pyrrhotite.

The two gold zones are parallel to the mylonite-breccia zone. Zone 2 is just above the CLSZ and shows a true width ranging from 9.4 to 37.8 feet while zone 1, 25 feet north of zone 2, ranges from 9.6 to 84.57 feet in width. Interpretation data of zone 2 includes the Echo Bay adit (0,08 oz/t over 12') trench #1 (0.12 oz/t over 16.5') and the second zone intersected in hole 83-1 (0,045 oz/t over 37.8') while zone 1 comprises the first zone intersected in hole 83-1 (0,04 oz/t over 9.6') and the zone in hole 83-2 (0,028 oz/t over 27.8'). The overall average for gold mineralization is 0,05 oz/t over 18.9 feet true width for zone 2 while zone 1 is 0,03 oz/t over 37.5 feet true width.

Structural analysis commonly shows that ore zones plunge parallel to the stretch lineation, or to an intersection of lineation. Both lineations indicate that they plunge to NE at 55^0 in the Echo Bay adit area. This statement is confirmed with, the barren hole EB-87-4 west of the Echo Bay adit and the closure of the gold zone at depth under the Echo Bay adit referred to hole EB-87-2 (figure 2).

The EBSZ has been traced to the east up to L48E where its end. Its comprises of the M-14 adit and the Nonesuch pit. These two occurences are sunk into a pyritized pink-white feldspar porphyry. Some feldspar porphyries have been intersected within the EBSZ from last years drilling in the vicinity of Echo-Bay Adit.

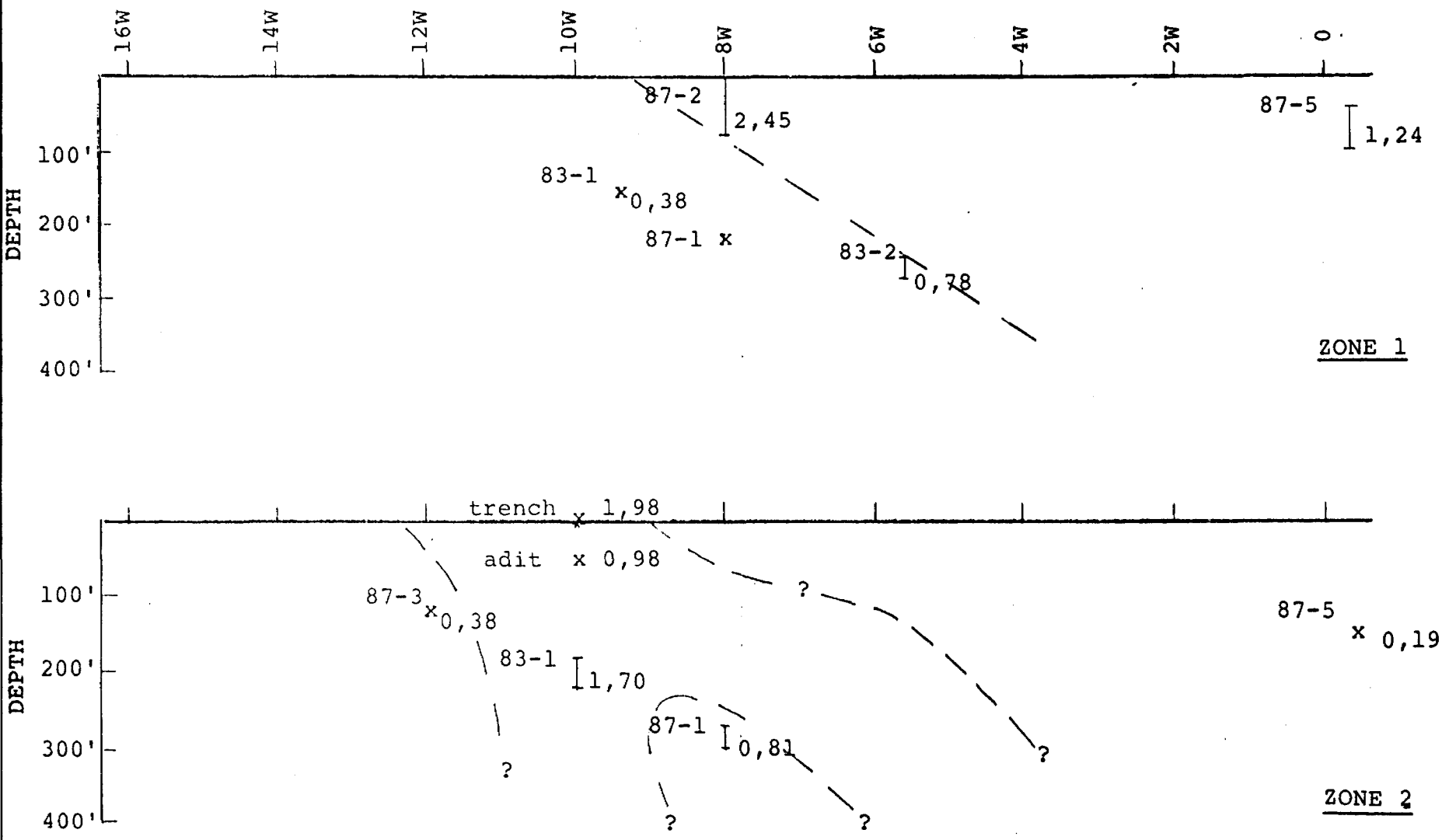


FIGURE 2 : Longitudinal product (assay x true width) of ZONE 1 & 2 at Echo Bay adit

FP with 1-2% pyrite stringers from the M-14 returned 352 ppb gold while the 1% disseminated pyrite in the QFP of the Nonesuch pit assayed only 28 ppb gold.

The M-14 adit vicinity assayed some gold anomalies. A flat grey quartz vein with 4% pyrite above the adit returned 145 ppb. Some quartz/carbonate veinlets with 1% from the dump gave 287 ppb gold. A pyritized andesite south end of M-14 assayed 124 ppb gold.

The sector between Echo Bay Adit to the M-14 adit which included the Gauthier trench in the south, shows numerous gold anomalies between the RBSZ to SLDZ northern branch (see geological map). In fact, despite moderate gold anomalies, this sector is indicative of gold enrichment.

2- Pb-Cu-Zn-As-Bo-(Au) bearing central shear quartz vein which host competent rock (Golden Horn Rhyolite and quartz-monzodiorite) in brittle-ductile deformation of GHL, ATSZ and RBASZ.

This type of mineralization is a white and/or dark grey central shear veins. The veins display sparce base metal and iron sulphides such as galena and/or chalcopyrite and/or sphalerite and/or bornite and/or arsenopyrite and/or pyrite. All theses occurences are hosted by the competent rhyolite or quartz-monzodiorite and are generally closely associated along the northern ENE contact with the andesite.

The ENE elongated rhyolite is believed to be initialy a E-W thick flow sequence which has been sheared along a dextral mouvement under high strain condition. Intensive dextral shearing had lead to development of a more extensive fracture pattern in the competent rock which acted as a structural canal to mineralized fluid.

a) Golden Horn trench:

Two dark grey glassy quartz veins are plus and less exposed over 60 feet within the Golden Horn Rhyolite in two old trenches. One vein is consistent with a 3 to 10 cm width while the second, less than 3 cm, pinchs and swells. Some wispy millimetre-quartz veinlets display tensional patterns between the two veins.

The quartz veins are almost pure quartz with minor dolomite and trace of pyrite. One speck of V.G. has been observed. The wallrock alteration shows only a weak sulphidization with traces of pyrite and arsenopyrite.

Grab samples returned 608, 573, 344, 164 and 44 ppb of gold.

b) Artie trench:

One white to dark grey quartz vein is exposed over 80 feet in an old excavated trench within the Golden Horn Rhyolite. The vein varies from 5 to 50 cm wide. Some tight parallel milimetre - quartz veinlets appear when the vein ranges from 5 to 10 cm wide. Also, couple feet north of the trench, a N090/18 a light grey quartz veinlet is noticed.

The white quartz is pure with sligth hematite staining. The dark grey quartz vein contains about 5% dolomite and trace of sulphide such as chalcopyrite, sphalerite, galena, arsenopyrite and pyrite. The best chip sample gave 215 ppb over 2 feet for the quartz vein while 996 ppb over 3 feet is returned for the footwall.

The vein seems to have some lateral extension. In fact, 350 feet to the east, a small trench exposed 60 cm of white quartz vein with 10 cm dark grey quartz vein on both side of the white quartz vein. The latter shows also a slight hematite staining. Grab sample returned 9 ppb gold for the white quartz vein while the grey quartz vein gave 55 ppb gold. The hanging-wall of the quartz vein assayed 19 ppb gold. Based on compositional quartz vein similarities, this trench is believed to be the extension of Artie trench. Over 400 feet to the west, many quartz floats are found along the strike of Artie trench.

c) Rush Bay adit:

The N-S Rush Bay adit is 45 feet long with a 27 feet cross-cut. The cross-cut was to investigate the quartz pod exposed in the excavation, 35' above the adit. The excavation is 10 feet long x 4 feet wide and 12 feet high. It was sunk in a grey quartz pod with 5-10% dolomite and 1-2% pyrite in the quartz-monzodiorite. One coarse grained (1 cm x 1 cm) galena was observed. The grab sample returned 58 ppb gold.

In the adit, the E-W cross-cut exposed a weakly silicified quartz-monzodiorite with diffuse coarse grained quartz and poorly developed system of quartz stockwork. Pyrite average 1-2% throughout the quartz materiel and the quartz-monzodiorite. Local fair amounts of bornite are noticed in the south side wall on the east side of the cross-cut. A 6 ft chip sample returned 146 ppb gold in that zone. All others chip samples gave below 30 ppb in the adit.

d) Others occurences:

Two occurences were found along the ATSZ. The first one is located L5E, station 37N, in the sheared quartz-monzodiorite (L5E, 37N). This occurence is a pyritized white quartz vein of 1 m wide. Beside the vein, a 15 cm pinch and swell quartz-dolomite-ankerite vein contains 1-2% fine grained galena and pyrite. Grab sample returned 11 ppb gold. The adjacent footwall of this vein, shows diffuse quartz with 5-6% very fine grained arsenopyrite and 1-2% pyrite over few centimeters wide. Grab sample assayed 42 ppb gold.

The second occurence localized at L32E to L40+50E, station 35N, disappears under water to the west. A large white quartz vein of about 6 ft wide is fairly continuous for about 850 ft long. The quartz vein displays locally some hematite alteration, fuschitic chlorite alteration and trace of pyrite. The limonitic wallrock enclosed within the quartz vein contains 2-4% pyrite. Assays returned low gold values with 31 and 34 ppb.

3) Cu-As-(Au) bearing brecciated dolomite-ankerite-quartz-(sericite) schist in ductile deformation of CLSZ.

Carbonatization is the most prominent and commun gold related alteration on both regional and mine scales (Colvines and Al, 1988). Calcite gives way to ankerite and/or ferroan dolomite exclusively in the more highly altered wall-rocks immediatly adjacent to mineralized vein systems (Colvine and Al, 1988).

This persistant zone, which is characterized by a dark red brown alteration on weathered surface, can be traced from L8W to L124W, for a length of 11,600 feet. The zone sits between massive rhyolite (Golden Horn Rhyolite) and the quartz-monzodiorite to the north and pillowed/massive basalt to the south.

The zone is mainly dominated by dolomite-ankerite with a poorly developed system of white quartz stockwork. Some crack and seal veins occur in the zone and the footwall. The veins pinch and swell. Sulphides, such as pyrite, chalcopyrite and arsenopyrite are rarely noticeable in quartz veining. Lateral facies of the zone from east to west shows a sligtly quartz and sulphide enrichment to the west.

The footwall is fairly well exposed because it is protected by the steep dipping of the resistant dolomite zone. Over a couple hundred feet to south, the schistosed footwall displays a thin chloritic and dolomitic layering which is sporadictly intruded by quartz-dolomite-ankerite vein.

The Big Guy vein, located L86W, 22+50N, is the widest vein seen along the zone. It has a minimum lenght of 100 feet by a minimum tickness of 4 feet. The vein is sparcely pyritized and displays a fairly large amount of fuschitic chlorite alteration. Best of the grab samples returned 108 ppb gold.

Intensive rock samples along the zone indicates a low gold system near the surface. The absence of sulphidization and silicification, which are indicative of gold deposit within the carbonate zone on surface, bring the writer to believe that we are in the apex of the low temperature hydrothermal system. Probably, at depth, we should attempt a discharge of silica, sulphide and (gold) under modification of P/T temperature.

4- Pb-Cu-(Au) bearing cataclastic rhyolite in ductile deformation of HSZ.

This type of mineralization is unclear. It could be a remobilized volcanic disseminated sulphide because no quartz veins and/or veinlets were observed. In Homestead ground, the rhyolite shows typical lozenge-shape resulting from shearing and undeformed lithons which have a cherty apparence. Along the Homestead shore line, cataclastic and shear breccia indicate evidence of E-W shears.

At the western extremity of Homestead exploration pit, a float derived from the trench contains 5-10% galena, 2-3% chalcopyrite and rare malachite patches. The mineralization is free in the cherty apparence rhyolite. The contact with sheared rhyolite is characterized with massive galena over 3 cm wide. Grab sample returned 1484 ppb gold and the adjacent wall-rock, 1018 ppb gold.

The cherty apparence rhyolite and the sheared rhyolite. shows 1-3% disseminated pyrite in the Homestead shaft vicinity. Best of the grab samples assayed 1556 and 153 ppb gold. Within the sheared rhyolite, some places shows some amount of fuschitic chlorite alteration.

5) Aurifereous quartz vein and/or wall-rock associated with ductile shear zone.

a) <u>Aurifereous quartz vein in sheared pillowed basalt.</u>

This zone has similar characteristic than the mineralized gold zone at Echo Bay adit. It is located along the northern shore line of Echo Bay between L89W to 96W.

One vitreous quartz vein, located at 94W, returned 2,678 ppb gold over 2 feet chip sample. The hanging-wall (gossan zone) shows gold enrichment with 474 ppb gold over 8 feet chip sample with 0,12% zinc. However, channel samples gave 642 ppb/1.3' for the quartz vein, 26 ppb/1' and 250 ppb/3' for the hanging-wall while the footwall returned 854 ppb/1'gold. The difference in assay resulted from the channel and chip sample for the quartz vein could be explain by the gold nugget effect.

This type of mineralization is central shear vein which trend along the C-fabric. The vein is generally white color to vitreous. It contains about 1-10% fine to coarse-grained pyrite and locally trace of chalcopyrite.

The host rock is a sheared pillowed basalt locally silicified and injected by numerous parallel millimetre-quartz/carbonate/ankerite veinlets. Some of them may contain dolomite. The pillowed basalt has 1 to 6% fine to medium grained pyrite. One of the best grab sample returned 186 ppb gold.

b) Gauthier trench

The major trench is about 60 ft long by 6 ft wide on L27+80E, 15+80N. The rock exposed a slated sericite schist and quartz/sericite/carbonate schist. The latter may contain 10-12% of medium grained pyrite. Some white to light grey quartz/carbonate veins/veinlets are noticed in the trench. The veins are less than 1 foot wide and may contain 1-2% pyrite. The veins strike parallel to the C-fabric (N215). Best grab samples of some quartz veins/veinlets and/or quartz materiel gave 1,788, 1,377, 436 and 322 ppb gold while those for the quartz/sericite/carbonate schist returned 1,253 and 445 ppb gold.

Twenty-five ft west of Gauthier trench, a 100 ft trench exposed an unaltered andesite with few spot of concentrated pyrite. A grab sample assayed 18 ppb. All other trenches to the west along the strike of Gauthier trench display a sheared andesite with 2-3% pyrite in some place. One quartz pod has been noticed in one trench which gave 1,342 ppb in grab sample. The wall-rock returned 103 ppb. However, the small trench east of Gauthier occurence shows the same similarity that the Gauthier trench which returned 13 ppb in grab sample. It's believed that the alteration zone goes NE into the lake. Two hundred ft west of the Gauthier trench, two trenches exposed a well pyritized gabbro. One of them assayed 7,109 ppb gold. West of the two trenches, a quartz/carbonate stringers in the gabbro returned 413 ppb gold.

6) **Aurifereous massive chert and dolomitic cherty breccia which host schistosed intermediate volcanic rock.**

A massive chert interbedded with laminated intermediate volcanic rock on L96E, station 26+50S, contains some gold mineralization. The massive chert laminated with millimetre-chlorite and dolomite horizon is about 4 feet wide. The chert has limonitic staining with 1 to 3% pyrite. Adjacent to the massive rock, a 2 feet dolomitic-cherty breccia with gossan zones display 1% up to 30% pyrite. The best of the 4 chip samples gave 704 ppb/1' for gold while a grab sample from the brecciated chert/gossan zone returned 1,039 ppb gold.

7) **The southern branch of SLDZ between the geological contact of the Canoe Lake Stock and the intermediate volcanic rock.**

The area shows intense shearing with laminated, crenulated and schistosed rock. Along shore line far away from the core of the deformation zone, the rock is intruded by numereous parallel central shear vein along C-fabric. The veins are dolomitic-ankerite-quartz with trace of pyrite.

8) **Tension quartz vein along C'-fabric resulted from NW-SE compression.**

This structural parameter seen to be important for hosting gold mineralization. At Standard occurence, SW of the property, the gold/silver rich quartz vein strike N305. The vein displays segregation of 5-10% sphalerite with 2-3% chalcopyrite and pyrite. The air-photo interpretation point out that Standard occurence sits on a strong NW-SE lineament.

Many strong NW-SE lineaments are found on the property (see geological map). The intersection of the NW-SE lineament with E-W shear zone may be a favorable locus for gold concentration that we should keep in mind during DDH planification. The NW-SE lineaments are believe to reflect open space (tension gashes) create during the NW-SE compression.

CONCLUSION

All the rock on the property are moderately to intensily sheared resulting from NW-SE compression which produce vertical mouvement with minor dextral shearing. Major ductile shears such as CLSZ, EBSZ and SLDZ were first initiated along geological contact. Then, futher intense compression has created E-W brittle ductile shears such as GHL, ATSZ and RBASZ which cross cut all the lithologies.

The mineralization is shear related which permits circulation of hydrothermal fluid. Many occurence on the property support that statement. Despite moderate assays result, during the mapping survey, the property remains very attractive for a major gold deposit. The locus of gold concentration along shear zone is structurally controlled. It should be focussed in intersecting shears, anastomosed shears and/or dilated shear. For the latter, a dilated zone would be a right swing (toward south) of the E-W dextral shears. However, plunge of lineations indicate a predominante vertical mouvement and dilation zones should occur along a vertical component with sub-horizontal tension fracture.

Field observation permit identification and localisation of many shear zones. However, their lateral extension is mainly deduced by lineaments interpreted from air photos. With respect to structural data collected during the mapping survey one can only speculate as to the trend of the shear underwater.

Exploration should be focussed east of the Echo-Bay adit. In fact, many FP and QFP occur near and/or with mineralized occurences. The presence of these dikes are indicative of an important ingredient for the heat source which is often involved in hydrothermal gold deposit. In addition, the defection of the E-W lithologies to NE-SW has created shear patterns in both direction. This leads to anastomosed shears and intersecting shears which are important parameters for the locus of gold. Anamatosed shears occur on horizontal surface but could also be expected on vertical component because of the predominate vertical mouvement on the property. The rock in this sector should be regarded as large lithons in 3D delineated by shears which have splayed off the main EBSZ (figure 3). In addition, rock sample analysis indicate that this sector shows concentration of gold anomalies sites on the property.

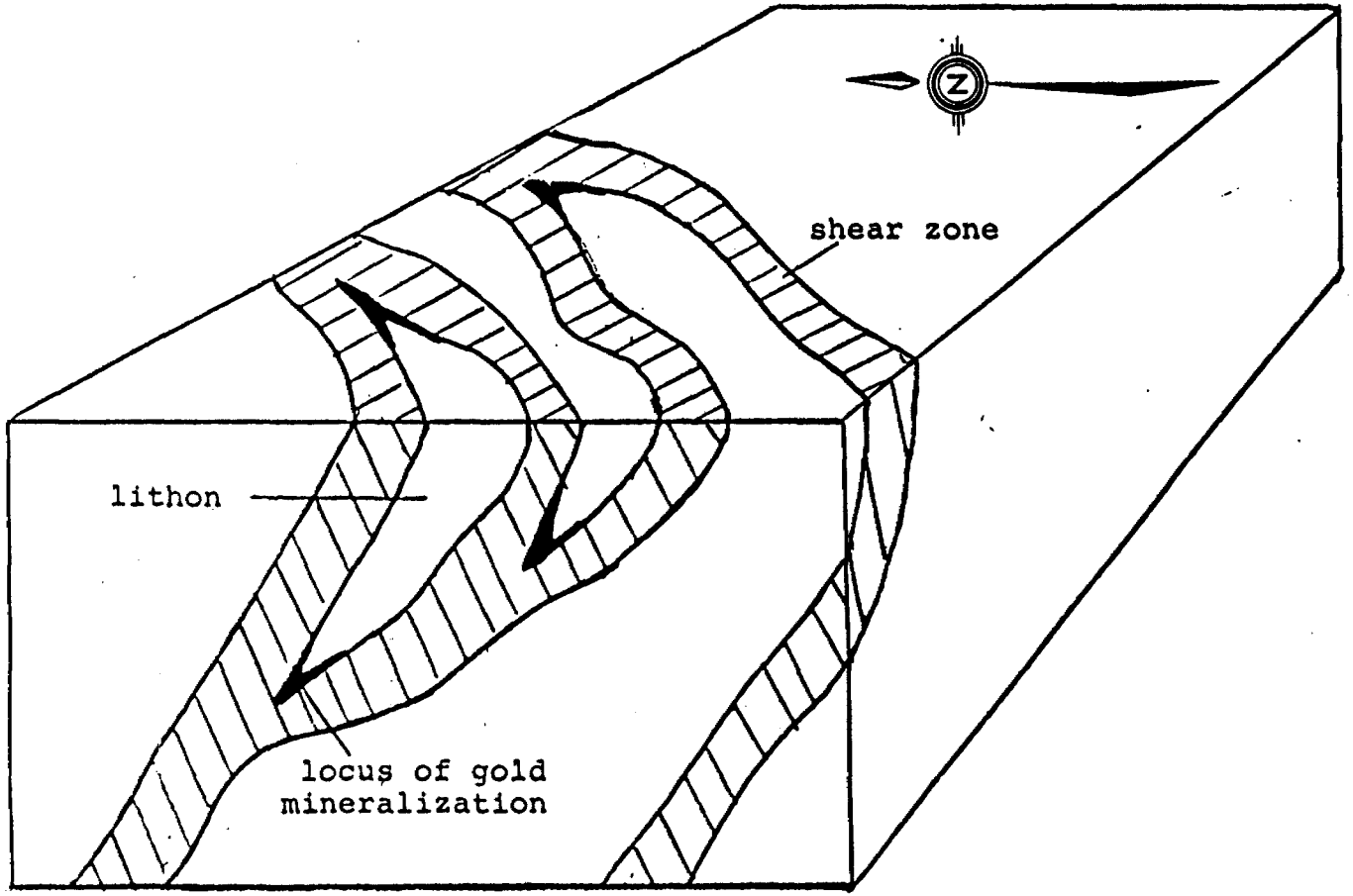


FIGURE 3: Anastomosed shear zones in 3D with the locus of gold mineralization

In second order, others areas remain to be investigate but geological informations do not emphasis which areas could be successfull. These areas of investigation are listed below from the most to the less important target based almost on gold assay result. They are:

1) Aurifereous quartz vein in sheared pillowed basalt from L84W to L100W, station 2N to 13N;

2) Aurifereous cataclastic rhyolite in the Homestead area from L72E to L104E, station 11S to 23S;

3) Aurifereous massive chert and dolomite - cherty breccia south of Homestead area from L82E to L104E, station 21S to 31S;

4) Brecciated dolomite - ankerite - quartz schist of the CLSZ;

5) The geological contact between the Canoe Lake Stock and the laminated intermediate volcanic rocks where the SLDZ southern branch is interpreted to pass, and;

6) The northern contact between the Golden Horn Rhyolite/quartz-monzodiorite with the intermediate volcanic rock. Many quartz veins are injected along the contact (Golden Horn trench, Artie trench, Rush Bay adit) but their tickness are to small to be economically mined.

In addition, other area could also be investigate but lack of outcrops do not permit localization of the shear zones. It is:

7) Echo Bay itself. Few islands indicate that shear zones may exist underwater because the rock are mainly slated schist and strongly crenulated and altered into chlorite and/or sericite. One of these shear zones could be the HSZ extension toward the west.

RECOMMANDATIONS

Based on the above discussion, it is recommanded that exploration should comprise the following work:

1) I.P. survey between LO to 8E, station 8N to 18N; L12E to 28E, station 5N to 42N and; L32E to 48E, station 14N to 42N.

I.P. would be the best geophysical tool (chargeability and resistivity) to delineate gold setting because last year program pointed out that gold is related to silicification and sulphidization. Also, the survey should investigate at depth by using n=1 to 6 because pinch and swell is commun to shear related gold mineralization and for the search of anastomosed shear zones along a vertical component.

<u>This survey need to be done over the M-14 island in order to have a complete comprehensive picture of this favorable structural area</u>.

The survey will cover the two gold zones and theirs extensions to the east and probably a third zone (reference to 6,010 ppb Au over 10 feet north of zone 1). Also, it will investigate the Nonesuch pit, the Gauthier trench and the M-14 adit. In addition, the survey will investigate the NE deflection of CLSZ trending along the geological contact which intersected the E-W ATSZ and GHL. Within the shear systems, both intersecting shears and felsic intrusions commonly represent the locus of gold concentration (Colvine and Al, 1988). Also, the survey will cover the EBSZ and its play off shear zones. In addition, the 1987 HLEM survey pointed out a conductor at L12E and L16E, station 30N which corrolate to the GHL.

2) Drilling program over best geophysic anomalies in regard with the structural setting.

3) All other listed targets enumerated in the conclusion should be covered by I.P. survey.

The writer would add additional recommandations which have no relationship with futur exploration program. They are:

4) It would be advisable to fence of the Homestead shaft and pit to protect the safety of the general public and the workers of Voyageur Exploration. Also, it will guard against liability and possible legal action.

5) It would be advisable to re-analyse 10% of the rock sample assayed during the 1988 mapping to an other laboratory in order to be confident about the assay result.

DATE THIS 14TH SEPTEMBER, 1988 AT DEUX-MONTAGNES, QUEBEC

Paul-Claude Delisle, geol.

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CERTIFICATE OF QUALIFICATIONS

I, Paul-Claude Delisle, geologist, of 2456 Boul. Rome, Brossard, Province of Quebec, certify as follows concerning my report on the Echo Bay Project, Glass, Forgie and Boys Townships, NW Ontario of Voyager Explorations Ltd and dated September 14, 1988.

1) I am a member in good standing of:

   a) Association des Prospecteurs du Québec.
   b) Prospectors and Developers Association of Canada.

2) I am a graduate of UQAM, Montreal with a BSc degree in Geological Sciences in 1982.

3) I have been practicing my profession in Quebec and Ontario for the past 6 years.

4) I have no direct interest in the property, leases or securities of Voyager Explorations Ltd nor do I expect to receive any.

DATE THIS 14TH OF SEPTEMBER, 1988 AT DEUX-MONTAGNES, QUEBEC

Paul-Claude Delisle, geol.

Appendix 1:
Rock sample log.

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108501	9+65W,19+10 N	M1	5.6' CHIP	105
502	9+65W,19+40 N	M1	14' CHIP	95
503	9+65W,19+90 N	V7 S	5.6' CHIP	106
504	9+50W,20+00 N	V7 S	6' CHIP	53
505	9+50W,19+70 N	M1	3' CHIP	175
506	8+00W,22+00 N	Q.V.	17' CHIP	15
507	9+25W,20+10 N	V7 S	10' CHIP	14
508	9+00W,20+10 N	M1	1' CHIP	<5
509	9+00W,20+30 N	V7 S.	1.2' CHIP	15
510	8+85W,20+35 N	M1	2' CHIP	20/40
511	8+60W,20+30 N	V7 S.	1' CHIP	39
512	10'SE of 511	V7 S.	1' CHIP	20
513	10'SE of 512	V7 S.	1' CHIP	49
514	10'SE of 513	V7 S.	1' CHIP	49
515	10'SE of 514	V7 S.	1' CHIP	15
516	10'SE of 515	V7 S.	1' CHIP	19
517	10'SE of 516	V7 S.	6" CHIP	53
518	10'SE of 517	V7 S.	6" CHIP	20
519	10'SE of 518	V7 S.	1' CHIP	<5/10
520	10'SE of 519	V7 S.	1' CHIP	10
521	10'SE of 520	V7 S.	1' CHIP	15
522	10'SE of 521	V7 S.	1' CHIP	69
523	10'SE of 522	V7 S.	6" CHIP	10
524	10'SE of 523	V7 S.	6" CHIP	10
525	10'SE of 524	V7 S.	6' CHIP	19
526	10'SE of 525	V7 S.	2' CHIP	19
527	10'SE of 526	V7 S.	6" CHIP	<5
528	10'SE of 527	V7 S.	6" CHIP	15/<5
529	10'SE of 528	V7 S.	1' CHIP	20
530	10'SE of 529	V7 S.	1' CHIP	24
531	10'SE of 530	V7 S.	1' CHIP	34
532	10'SE of 531	V7 S.	1' CHIP	15
533	10'SE of 532	V7 S.	1' CHIP	14
534	10'SE of 533	V7 S.	1' CHIP	40
535	10'SE of 534	V7 S.	1' CHIP	34
536	L9+75W +19+45N	M1	35' CHIP	15
537	L9+75W ,19+10N	V7 S	1' CHIP	94
538	L9+75W, 19+00N	M1	35' CHIP	20/20
539	L10W, 19+50 N	V7 S	1' CHIP	88
540	L10W, 19+45 N	M1	1' CHIP	24
541	L10W, 19+40 N	V7 S	5' CHIP	24
542	L10W, 19+15 N	V7 S	25' CHIP	19
543	L10+25W, 19+05 N	V7 S	1' CHIP	15
544	L10+25W, 19+10 N	M1	6" CHIP	39
545	L10+25W, 19+45 N	1MD	6" CHIP	25
546	L10+50W, 19+45 N	1MD	5' CHIP	164
547	L10+50 W,19+35 N	M1	1' CHIP	35/24
548	L10+50 W,19+10 N	V7 S	25' CHIP	63
549	L10+50 W,19+09 N	V7 S	1' CHIP	20

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108550	L10+75 W,19+20 N	M_1	7' CHIP	64
551	L10+75 W,19+30 N	V7 S	1' CHIP	48
552	L10+75 W,19+40 N	M_1	3' CHIP	10
553	L11W, 19+35 N	V7 S	6" CHIP	39
554	21+50W, 15+80N	M_1 / V7 S	10' CHIP	50
555	22+00W,15+70 N	M_1 / 1MD	10' CHIP	113
556	22+00W,15+60 N	M_1	20' CHIP	53/15
557	22+50W,15+60 N	M_1 / V7 S	10' CHIP	20
558	22+50W,15+50 N	M_1	5' CHIP	19
559	22+50W,15+45 N	M_1 / V7 S	20' CHIP	29
560	23+00W,15+20 N	M_1	5' CHIP	29
561	23+00W,15+60 N	M_1 / 1MD	40' CHIP	29
562	23+50W,15+50 N	M_1 / V7 S	30' CHIP	20
563	24W,14+80 N	M_1 /V7S/1MD	40' CHIP	10/10
564	4+40 W,17+70 N	V7 S	10' CHIP	6010
565	4+30 W,17+40 N	V7 S	10' CHIP	217
566	4+20 W,17 N	V7 S	10' CHIP	65
567	11+25 W,18+25 N	M_1	25' CHIP	25
568	11+25 W,18+00 N	1MD	6' CHIP	49
569	11+50 W,18+20 N	V7 S	6' CHIP	20
570	11+50 W,17+80 N	M_1	40' CHIP	43
571	11+75 W,18+05 N	V7 S	25' CHIP	30
572	11+75 W,18+40 N	M_1	35' CHIP	44
573	12+00W,18+00 N	M_1 / 1MD	40' CHIP	193
574	L9+25 W,19+00 N	M_1	6' CHIP	19
575	L25W, 15+25 S	M_2 /M_3 ,py,ank	3' CHIP	39/15
576	L30W, 16+00 S	M_2 /M_3	6' CHIP	15
577	L30W, 16+00 S	M_2 /M_3	5' CHIP	29
578	L30W, 16+00 S	M_2 /M_3	10' CHIP	30
579	L30W, 16+00 S	py, ank	4' CHIP	45
580	L6W, 26+00 N	IMD, 1% py	CHIP	68
581	L67W, TL 13 N	M_3	18' CHIP	19
582	L94N, 8+50 N	M_3 , 1% py	8' CHIP	474
583	L94W, 8+50 N	Q.V. 2% py	2' CHIP	2678
584	L24W, 14+00 N	Q.V.4%py,ank	5' CHIP	34
585	L11E, 22 N	QV	40' CHIP	216
586	L11E, 21 N	V7	7' CHIP	62
587	L13E, 26 N	QV	40' CHIP	160
588	L30W, 16 S	M_2 /M_3	20' CHIP	15
589	L76W, 35+50 N	IMD/Qvlts	GRAB	34
590	L92W, 34+90 N	smokey QV, 1% sph	GRAB	68/40
591	L92S, 31+80 N	QV/V_2	GRAB	24
592	L88+50W,34+80 N	QV with wall-rock	10' CHIP	35
593	L88+70W,34+80 N	QV, V_2	5' CHIP	35
594	L88+70N,34+80 N	QV	2' CHIP	215

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108595	L88+70W,34+80 N	QV, V_2	3' CHIP	40
596	L88+90W,34+80 N	QV, V_2	3' CHIP	40
597	L88+90W, 34+80 N	QV	2' CHIP	68
598	L88+90W,34+80 N	QV, V_2	3' CHIP	996
599	L19+20W, 15+50 N	3	6' CHIP	70
600	L120+10W,15+50 N	3	4' CHIP	34
601	GAUTHIER L27+80E,15+80 N	QCV M3/M2,10% py	GRAB	1788
602	TRENCH L27+55E,16+30 N	V6, 5% PY	GRAB	18
603	TRENCH L24+60E,13+80 N	V6S,carb,2%	GRAB	103
604	same as 108603	QTZ PODS, 2-3% py	GRAB	1342
605	OLD PIT L37+80E,7+15 N	3G,carb,tr py	GRAB	21
701	L63+50W, 18+50N	V7S, 1% py,cp	GRAB	82/24
702	L68+00W, 17+00N	V7S, 1-3% py	GRAB	53
703	L91+80W, 22+15N	Qpod,ank,1%py	1' CHIP	19
704	L88+85W, 22+60N	M_1	GRAB	49
705	ARTIE TRENCH	white QV 1% sph, py	GRAB	24
706	ARTIE TRENCH	barren QV	GRAB	20
707	THOMPSON PIT-B	3G, 1% py	GRAB	35
708	ADIT DUMP N.E. SHORE M-14	QC vlts, 1% py	COMPOSITE GRAB	287
709	SAME AS 108708	SAME AS108708	GRAB	1417
710	L12+60W, 19+20N	IMD, QC vlts, py	GRAB	34/29
711	NW SHORE OF ISLD P549	V7m, 5% py	GRAB	15
712	SAME AS 108711	volcanic breccia,10%py	GRAB	25
713	ESCHOLA SHAFT DUMP	V2, carb, 1% py	GRAB	10
714	RUSH BAY ADIT	QC vlts, 1% py	35' CHIP	30
715	SAME AS 108714	SAME AS108714	35' CHIP	15/24
719	SOUTH SHORE OF ECHO BAY	V7, carb	GRAB	702
720	SAME AS 108719	Intrusion margin, QV, diorite,carb	GRAB	1276
724	L104W,25+30N	M_3, Qvlts,ank 1% py	GRAB	173
725	L112+20W,17+30N	Smokey grey QV,1% py	GRAB	247/34
726	L78+00W,19+00N	glassy QV,mt, ank, 1% py	GRAB	29

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108727	L99+75W,16+80N	Sil. M_2,QCV, ank, <1% py	GRAB	158
729	L117+00N,34+50N	TQV - ank	GRAB	53
730	FIRST TRENCH GOLDEN HORN TRENCH	QV, 1-2% py	GRAB	573
731	FIRST TRENCH GOLDEN HORN TRENCH	FW of QV,1-2% py, asp	GRAB	344
732	OLD TRENCH L119+65W,19+60N	QV, ank, 1% py	GRAB	317
733	L120W,15+80N LUCKY BALLS	3, 1-3% py cp, ga, mt	GRAB FROM RUBBLE	55/54
734	BIG GUY	white QV, ank 1-2% fu	GRAB	43
735	BIG GUY	white QV,ank 1-2% fu	GRAB	34
736	BIG GUY	white QV, ank 1% py	GRAB	108
737	BIG GUY	white QV, ank 1% py	GRAB	53
738	85+50E, 16+50S	M_3, 1% py	GRAB	297
739	L84+90E,16+50S	lakeshore float,3% py	GRAB	65
740	L10+00E, 41+00N	M_3-ank,1% py	GRAB	49
741	L10+00E, 40+50N	TQ vlts,ank, 1% py	GRAB	39/44
742	L8+00E, 45+30N	TQ pods, ank, 1% py	GRAB	14
743	L7+50E, 46+00N	M_3/1R, 1% py	GRAB	15
744	L4+50E, 37+00N	QV ank, dol, 1-2% py	GRAB	15
745	L4+75 E,36+80N	IMD, chl, ser 1-2% py	GRAB	74
746	L0+00, 34+30 N	same as108745	GRAB	15
747	L0+00, 44+87 N	M_3 - ank, QV stringers	GRAB	15
748	L4+00E, 46+00N	float, QV,ank 1% py	GRAB	15
749	L47+00W, 24+00N	TQV, 1% py	GRAB	209
750	L52W, 26+00N	QV, <1% py	GRAB	241/252
751	L60+00W,36+00N	QV, 1% py	GRAB	
752	L40+00W,40+00N	QCV, 1% py	GRAB	63
753	L4+30 W,32+50N Old trench	IMD, 1-2% py	GRAB	82
754	L4+30 W,32+50N	QV 1% py	GRAB	415
755	L4+30 W,32+50N	H.W. of QV 1 - 2% py	GRAB	38
756	L8+00W, 27+00N	IMD, 1-2% py	GRAB	38

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108757	OLD TRENCH? L12+00W, 25+50N	float,QV,ank	GRAB	34
758	L16+00W, 31+00N	Q vlts, ank, 1% py	1' CHIP	20
759	S.W. SHORE M 14	QV,ank, 2% py	GRAB	20
760	S.W. SHORE M.14	sil.M_1, 2% py	GRAB	164
761	N.SIDE OF NARROW	CATACLISTITE,	GRAB	14
	CHANNEL OF M.14	FLOAT	GRAB	14
762	S.E. CORNER OF M14 AT OLD TRENCH	SILICIFIED 3G 1-2% py	GRAB	44/20
763	20 east of 108762	chert like 3G 1% py	GRAB	10
764	10'NE of 108763	same as 108763	GRAB	14
765	L24E, 1+70N	chert like V7 tr py	GRAB	29
766	L24E, 3+30S	V7s, tr py	GRAB	53
767	L47E, 3+80N	TQV in 3G, tr py	GRAB	20
768	L36E, 3+80N	chert like 3G tr py,float	GRAB	14
769	L48+88E, 0+00N	cherty V7 py	1'CHIP	10
770	L48E, 10+30N	Q vlts in 3G tr py	GRAB	112
771	L58+50E, 14+25N	TQV in 3G	GRAB	1181/1830
772	L60E, 13+50N	QCV,chl, ank	GRAB	716
773	L68E, 11+50N	TQV in 3G	GRAB	58
774	L71+50E, 16N Old trench	Brecciated M_2 1% py F.W. of 108775	GRAB	108
775	L71+50E, 16N Old trench	gossan M_2, 3-5% py	1'CHIP	238
776	L71+50E, 16N Old trench	M_2, H.W. of 108775	1'CHIP	25
777	L72+75E, 6+25N	QV in 3G, tr py	GRAB	97
778	L73E, 6+50N	Q vlts, 1% py	1'CHIP	29
779	L74+25E, 6+25N	chert like QV 1% py tr cp	1'CHIP	34
780	L76E, 6+00N	QC pod, tr py	GRAB	120/19
781	L75E, 10N	TQV in 3G, tr py	GRAB	12
782	L4+20W, 17+20N	QC vlts,sil. V7 loc. 3% py	5'CHANNEL	73
783	SAME AREA AS 782	same as108782	3'CHANNEL	962/1026
784	SAME AREA AS 782	same as108782	3'CHIP	28
785	SAME AREA AS 782	same as108782	3'CHANNEL	18
786	SAME AREA AS 782	same as108782	3'CHANNEL	16

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108787	SAME AREA AS 782	same as108782	3'CHANNEL	19
788	L88W, 38N	QV,tourmaline	GRAB	17
789	SAME AS 108788	QV,ank	GRAB	13
790	L84W, 35N	white QV, hematite	GRAB	8/11
791	L84W, 35N	grey QV, limonite	GRAB	55
792	L84W, 35N	H.W. of108791 2% py	GRAB	19
793	L54+75W, 32N	grey QV,tr py	GRAB	12
794	W.side, narrow channel into Echo Bay	Banded QC vlts, V7,2% py	3'CHANNEL	<5
795	SAME AS 108794	same as108794	2.5' CHANNEL	30
796	SAME AS 108794	same as108794	4.2' CHANNEL	83
797	SAME AS 108794	same as108794	3'CHANNEL	132
798	SAME AS 108794	same as108794	3'CHANNEL	136
799	SAME AS 108794	same as108794	2.75' CHANNEL	23
800	SAME AS 108794	same as108794 tr cp	3'CHANNEL	112
801	12+80W, 19N	IMD, py	GRAB	876
802	6+10W, 15N	V7S, py	GRAB	35
803	5W, 15+50N	3G, py	GRAB	639
804	ARTIE TRENCH	white QV 1%py	GRAB	15
805	BIG GUY	QV, M_2, ank ö	GRAB	14
806	L84+70E, 16+40S	CATACLASTITE, 1-3% py	GRAB	10
807	L86+50E, 16+40S	M_1, green M_2	GRAB	29/24
808	Golden Horn Trench	Dark black QV	GRAB	164
809	Golden Horn Trench	QV	GRAB	44
810	L119+00W,29+50N	FLAT LYING QVLTS	GRAB	58
811	West Side P.549	QV white	GRAB	34
812	40W north shore	QV, tourmaline	GRAB	19
813	S.END M-14	V6, py	GRAB	124
814	91+60E, 6+50S	V6, py	GRAB	34
815	95E, 9S	V2	GRAB	19
816	94+90E, 13+50S	V2	GRAB	15
817	95E, 14+30S	M4	GRAB	10
818	96+30E, 14+40S	M4, Asbestos	GRAB	30
819	96+30E, 14+45S	M4	GRAB	10
820	96+70E, 15+80S	V2	GRAB	84

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108821	96+20E, 16S	V6	GRAB	10/<5
822	95+90E, 16+40S	V6	GRAB	24
823	95+90E, 16+50S	V2	GRAB	<5
824	95+80E, 16+50S	V2,Breccia	GRAB	19
825	94E, 16+70S	V2,Breccia	GRAB	10
826	93E, 16+90S	Sandy Slate 5% py	GRAB	15
827	91+16E, 17S	M_1, in V_2	GRAB	43
828	91+60E, 17+02S	V_2,Cataclas-tite	GRAB	1556
829	89+70E, 16+50S	cataclastite, M_1, py	GRAB	96
830	CHANNEL TO RUSH BAY LANDING WEST NARROWS ADIT	V2, py <1%	GRAB	30/97
831	L83+30E, 16+40S		GRAB	40
832			GRAB	44
833	L82+80E, 16+60S		GRAB	63
834	L82+30E, 16+80S	CATACLASTITE, py	GRAB	30
835	L82E, 17S	V2, BRECCIA	GRAB	1018
836	L82E, 17+05S	V2, py	GRAB	67
837	L82E, 17+15S	CARBONATYZED DYKE	GRAB	15
838	L82E, 17+25S	V2,BRECCIA	GRAB	153
839	L83E, 17+70S	QV	GRAB	25/20
840	L83+20E, 17+70S	V2,CATACLAS-TITE, py	GRAB	49
841	L83+20E, 17+70S	PINK CATACLAS TITE	GRAB	10
842	L84+80E, 20+70S	ferrugenousS3	GRAB	92
843	L84+80E, 20+70S	sulphide/carb iron form.	GRAB	80
844	L84+80E, 20+80S	V2, py	GRAB	40
845	L84+80E, 21S	M3, tr py	GRAB	25
846	L83+50E, 22+90S	Qvlts, ank, tr. py	GRAB	10
847	L82E, 24S	M_3, 1% py	GRAB	14
848	L81+90E, 24S	QV, ank, V_2	GRAB	10/10
849	S.Shore of H.Bay	QV, py tr.	GRAB	10
850	S.Shore of H.Bay	V_6, M_2	GRAB	15
851	L87E, 24+50S	fine Schist	GRAB	<5
852	L87E, 24+50S	V_6,M_2 (Rusty)	GRAB	10
853	L77E, 24+20S	Cataclastite Schist	GRAB	15
854	L82E, 17 S	V_2,15%ga,2%cp	GRAB	1484
855	L75E, 24S	V_2	GRAB	18

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108856	L72E, 23+50S	Q, M_1, py	GRAB	10
857	L72E, 23+50S	F.W. schist	GRAB	<5
858	L72E, 23+50S	V_2, schist	GRAB	5
859	L74+30E,23+80S	QCV, in M_2	GRAB	<5
860	same as 108859	50% black schist, 50% QV, py, cpy	GRAB	8
861	L67+20E, 24S	QCV in M_2	GRAB	8
862	L66+30E, 24S	QCV in Black schist	GRAB	<5
863	L64E, 23S	Blk schist, 3% chloritids	GRAB	<5
864	L63+70E, 23S	QV in M_2, tourmaline	GRAB	<5/11
865	L63+65E, 23S	Blue/black schist, chloritoid	GRAB	9
866	L61+40E, 22+60S	QV in M_2	GRAB	<5
867	L62E, 22+50S	Rusty weathery blue/hornblend schist, QV	GRAB	6
868	L59+60E, 23+50S	Wallrock schist blue only	GRAB	6
869	L59+55E, 23+50S	QCvlts	GRAB	6
870	82+50E, 17S Old trench	chert horizon 1-2% py	GRAB	10
871	73+50E, 27S	3G specularite stringers	GRAB	<5
872	Homestead	V_2, M_3, py	GRAB	<5/8
873				8
874				1129/1296
901	66+30W, 13+00N	1R 2% py	6'CHIP	39
902	103+90W, 24+00N	QV, ank,2% py, asp.	GRAB	114
903	91+50W, 23+00N	QV, 2-3% cp	GRAB	15
904	120+00W, 25+50N	Grey QV	GRAB	10/29
905	Golden Horn trench	Grey QV, tr py	GRAB	608
906	51+75W, 21+00N	M_1/M_2, 3% py	GRAB	49
907	check 108564	Cherty app., sil. V70/3-5% py cp	GRAB	357
908	L44+50E, 34+80N	FW of M_1, 3% py	GRAB	44/110

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108909	Excavation,Rush Bay adit	QV 1-2% py,tr ga	GRAB	58
910	L96W, 26+50N	S7/gossan, 3% pyrite	4.5' CHIP	87
911	L96E, 26+50S	S7, 1% py	6' CHIP	49/53
912	L96E, 26+50S	S7, 1% py	8' CHIP	20
913	L96E, 26+50S	S7, 1% py	5' CHIP	20
914	L96E, 26+50S	S7	1' CHIP	704
915	L96E, 26+50S	Brecciated S7 1% py, gossan (30% py)	GRAB	1039
916	L96E, 26+50S	S7, 2-3% py	GRAB	668/747
917	M14 Adit	Flat grey QV, 4% py	GRAB	145
918	61W, 17N	QCV,(dol) in V7S, 1% py	GRAB	18
919	69+50N, 17+10N	QCV,(dol) of M_1, 2-3% cp	GRAB	48
920	69+50N, 17+10N	M_2 of 108919, 2% py	GRAB	19
921	20W, 28N	1MD, 2 - 3% py	GRAB	35
922	Rush Bay adit	E side wall from 13'-26'	13' CHIP	7/6
923	Rush Bay adit	N side wall of the cross-cut	5' CHIP	14
924	Rush Bay adit	S side wall of cross-cut	6' CHIP	146
925	Rush Bay adit	east backwall of cross-cut	4' CHIP	9
926	4.6'W of 108925	Backwall	8.6' CHIP	13
927	6'W of 108926	Backwall	7' CHIP	8
928	12'W of 108927	Backwall	3' CHIP	6
929	Rush Bay adit	E side wall from 33'-39'	6' CHIP	7
930	Rush Bay adit	E side wall from 39'-45'	6' CHIP	8/12
931	5E, 37N	QV, dolomite, ank,1-2%ga,py	GRAB	11
932	5E, 37N	QV,M_3,5-6% asp, py	GRAB	42
933	same as 108794	same as108794	3'CHANNEL	48/49
934	same as 108794	same as108794	2'CHANNEL	50
935	same as 108794	same as108794	2'CHANNEL	124
936	89+50W, 8+70N	QV,hem, 1% py	GRAB	9
937	same as 108936	V7,sil.QCvlts	GRAB	52

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108938	same as 108936	1R,hem,8% py	GRAB	20
939	90W, 9+40N	V7,sil.QCvlts 6% py	GRAB	186
940	90W, 9+40N	same as108939	GRAB	17
941	90+80W, 9+20N	V7,sil.QCvlts tr py	GRAB	9
942	same as 108582	F.W.,V7S,1%py	1' CHIP	920/789
943	same as 108583	white QV,1%py	1.3' CHANNEL	642
944	same as 108942	H.W.,V7S,QV, 1-2% py	1'CHANNEL	26
945	same as 108942	H.W., V7S, 1-3% py	3'CHANNEL	250
946	89+50W, 3+50N	gos, V4 pil., tr py	GRAB	67
947	71W, 9S	white QV, tr py	GRAB	17/14
948	55E, 15N(old pit)	QV2% py,po,cp	GRAB	21
949	55+35E,14+20N (pit)	QCvlts, 3G, 1% py	GRAB	11
950	0+00, 19+50N	V7, 1% py	GRAB	21
951	0+00, 22+50N	M_2, 1% py	GRAB	17
952	2+10E, 22+75N	M_2, 1-2% py	GRAB	366/254
953	8E, 26N	Qvlts, 1% py	GRAB	25
954	Nonesuch	Qvlts, QFP,	GRAB	28
955	same as 108954	M_1/M_2/M_3, tr py	GRAB	13
956	48E, 9S	V_4, 20-25% py	GRAB	17
957	82+50E, 7+70N	V_{11} int.,10% py	GRAB	6/7
958	14E, 21+50N	V_6, 1-2% py	GRAB	703
959	21+50E, 26N	brecciated chert, muds-tone, 5% py	GRAB	86
960	21+50E, 26N	QC stringer 1-3% py	GRAB	60
961	21+50E, 26N	sil. mudstone 1-2% py	GRAB	70
962	21+60E, 26+10N	QV, ank pod. tr py	GRAB	16
963	21+60E, 26+10N	sil. mudstone 3% py	GRAB	94
964	21+65E, 26+10N	sil. mudstone 3% py	GRAB	185
965	31E, 31+50N	pyritic schist, 80%py	GRAB	26
966	M-14 Adit	FP, 1-2% py stringers	GRAB	352

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108967	36E, 23+40N	V_4, 2-3% py	GRAB	13/12
968	40E, 23+80N	3G, 3% py	GRAB	21
969	42E, 24+30N	QCV. tr py	GRAB	7
970	same as 108969	H.W.of108969, 2% py	GRAB	8
971	44E, 24N	mylonite,2%py	GRAB	9
972	Nonsuch pit	mylonite,1%py	GRAB	<5
973	49E, 24+30N	3G, 3% py	GRAB	7
974	34+50E, 21+50N	QV, 1% py	GRAB	6/6
975	22E, 13N	V_6S, 5% py	GRAB	112
976	22+50E, 13+50N	mylonite,1-3% py	GRAB	21
977	24+50E, 16+50N	QC stringers, 3G, 1-3% py	GRAB	413
978	Old trench 25+30E, 16+20N	3G, 3-4% py	GRAB	31
979	Old trench 25+80E, 16+20N	3G, 40% py	GRAB	7,109
980	Gauthier trench 27+80E, 16+30N	QV in M_3, tr py	GRAB	322
981	27+80E, 16+40N	QCV in M_3, 2-3% py	GRAB	30
982	27+80E, 16+10N	M_3, Qvlts, ank, 1-2% py	GRAB	43
983	27+80E, 16+50N	M_3, QV, carb schist,10% py	GRAB	1,253
984	27+80E, 16+10N	silicified zone,10% py	GRAB	517/355
985	27+80E, 16+10N	M_3,QV,carb schist,5% py	GRAB	445
986	28+50E, 17+10N	QV,carb,k schist,2-3%py	GRAB	13
987	19+30E, 23+50N	sil. mudstone 3% py	GRAB	92
988	same as 108987	sil. mudstone 3% py, 1% cp	GRAB	84
989	same as 108987	sil.mudstone 5-10%py,1%cp	GRAB	48
990	40E, 35+50N	QV, 1-2% py	GRAB	34
991	36E, 35N	QV, 1% py	GRAB	31/31
992	L99+40E, 27S	float,QV pod. 1%py,3%sph(?)	GRAB	8
993	same as 108992	QCV, 1-2% py	GRAB	<5
994	L44+70E, 34+60N	py, V9 int., 5-8% py	GRAB	158
995	L42+50E, 32+50N	py,V9 int., 5-8% py	GRAB	16
996	L40E, 33N	V_2,3%py,1%cp sph	GRAB	13/15

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	LENGTH	RESULTS (AU) PPB
108997	L56+70W, 46+50N	V9 felsic,20% py	GRAB	40
998	L53+40W, 48N	V9 felsic,3-5% py	GRAB	<5
999	L36+60E, 23+50N	QV pods, 2%py	GRAB	106
109000	Gauthier trench L27+80E, 15+90N	sil. M_3, QV, 5-6% py	GRAB	1472/1282

Appendix 2:
Soil sample log

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	RESULTS (AU)
88-01	96W, 21N	Black	
88-02	96W, 22N	Black	
88-03	96W, 23N	Black-brown	
88-04	96W, 24N	Black-brown	
88-05	92W, 24N	Black	
88-06	92W, 23N	Brown	
88-07	92W, 22N	Brown-black	
88-08	92W, 20+80N	Black-brown	
88-09	88W, 21N	Black	
88-10	88W, 22N	Black	
88-11	88W, 23N	Black	
88-12	88W, 24N	Black	
88-13	84W, 21N	Black	
88-14	84W, 22N	Black	
88-15	84W, 23N	Black	
88-16	84W, 24+10N	Brown	
88-17	80W, 21N	Black	
88-18	80W, 20N	Black	
88-19	80W, 19N	Black	
88-20	80W, 18N	Black	
88-21	76W, 16N	Black	
88-22	76W, TL17N	Black	
88-23	76W, 18N	Black	
88-24	76W, 19N	Black	
88-25	76W, 20N	Black	
88-26	72W, 16N	Black	
88-27	72W, TL17N	Rusty brown	
88-28	72W, 18N	Black	
88-29	72W, 19N	Black	
88-30	72W, 20N	Black	
88-31	70W, 16N	Rusty brown	
88-32	70W, TL17N	Black	
88-33	70W, 18N	Black	
88-34	70W, 19N	Black	
88-35	70W, 20N	Black	
88-36	68W, 20N	Black	
88-37	68W, 19N	Brown	
88-38	68W, 18N	Black	
88-39	68W, TL17N	Black	
88-40	68W, 16N	Black	
88-41	56W, 18N	Black-brown	
88-42	56W, 17N	Black	
88-43	56W, 16N	Black	
88-44	56W, 15N	Black	
88-45	60W, 16N	Black	
88-46	60W, 16+85N	Black	
88-47	64W, 19N	Black	

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	RESULTS (AU)
88-48	64W, 18+10N	Black-brown	
88-49	64W, 17N	Black-brown	
88-50	64W, 16N	Black-brown	
88-51	66W, 16N	Black	
88-52	66W, 17N	Black	
88-53	66W, 18N	Black	
88-54	66W, 19N	Brown	
88-55	92E, 24S	Brown	
88-56	92E, 25S	Black-brown	
88-57	92E, 26S	Black	
88-58	92E, 27S	Black	
88-59	92E, 28S	Brown	
88-60	93E, 28S	Black	
88-61	93E, 27S	Brown-black	
88-62	93E, 26S	Black	
88-63	93E, 25S	Black	
88-64	93E, 24S	Brown-black	
88-65	96E, 24S	Black	
88-66	96E, 25S	Black	
88-67	96E, 26S	Black	
88-68	96E, 27S	Brown	
88-69	96E, 28S	Black	
88-70	98E, 28S	Brown	
88-71	98E, 27S	Black-brown	
88-72	98E, 26S	Black	
88-73	98E, 25S	Black	
88-74	98E, 24S	Black	
88-75	100E, 24S	Black	
88-76	100E, 25S	Black	
88-77	100E, 26S	Black	
88-78	100E, 27S	Black	
88-79	100E, 28S	Black	
88-80	L12W, 21S	Brown	
88-81	L12W, 22S	Black	
88-82	L12W, 23S	Black	
88-83	L12W, 24S	Black	
88-84	L12W, 25S	Black	
88-85	L16W, 25S	Black	
88-86	L16W, 24S	Black	
88-87	L16W, 23S	Black	
88-88	L16W, 22S	Black	
88-89	L16W, 21S	Brown	
88-90	L20W, 23S	Black	
88-91	L20W, 24S	Black	
88-92	L20W, 25S	Black	
88-93	L24W, 25S	Brown	
88-94	L24W, 24S	Brown	

SAMPLE NUMBERS	LOCALISATION	DESCRIPTION	RESULTS (AU)
88-95	L24W, 22+85'S	Black	
88-96	L8W, 25S	Black	
88-97	L8W, 24S	Black	
88-98	L4W, 22+10S	Black	
88-99	L4W, 23S	Black	
88-100	L4W, 24S	Black	
88-101	L4W, 25S	Black	
88-102	L0W, 22S	Black	
88-103	L0W, 21S	Black	
88-104	L0W, 20+20	Black	
88-105	L0W, 23S	Black	
88-106	L0W, 24+80S	Black	
88-107	L0W, 25S	Brown	
88-108	L4E, 25S	Brown	
88-109	L4E, 24S	Black	
88-110	L4E, 23S	Black	
88-111	L4E, 22S	Black	
88-112	L8E, 24S	Black	
88-113	L8E, 25S	Brown	
88-114	L12E, 24S	Black	
88-115	L12E, 23S	Black	
88-116	Claim Line	Brown	
88-117	Claim Line	Brown	
88-118	Claim Line	Black-brown	
88-119	Claim Line	Black	
88-120	Claim Line	Brown	
88-121	Claim Line	Black-brown	
88-122	Claim Line	Brown	

Appendix 3:
Certificate of assay

ACCURASSAY LABORATORIES LTD.

P.O. BOX 604
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

22582

Babu Gajaria
Voyager Exploration
Suite 1101, 10 King St. East
Toronto, Ontario
M5C 1C3

Date: August 4 19 88

Work Order # : 180933
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248000	108501	105	
248001	108502	95	
248002	108503	106	
248003	108504	53	
248004	108505	175	
248005	108506	15	
248006	108507	14	
248007	108508	<5	
248008	108509	15	
248009	108510	20	
248009	108510	40	Check
248010	108511	39	
248011	108512	20	
248012	108513	49	
248013	108514	49	
248014	108515	15	
248015	108516	19	
248016	108517	53	
248017	108518	20	
248018	108519	<5	
248018	108519	10	Check
248019	108520	10	
248020	108521	15	
248021	108522	69	
248022	108523	10	
248023	108524	10	
248024	108525	19	
248025	108526	19	
248026	108527	<5	
248027	108528	15	
248027	108528	<5	Check

Per: Blaine Veitch

ORIGINAL

ACCURASSAY LABORATORIES LTD.

P.O. BOX 604
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

22583

Babu Gajaria
Voyager Exploration
Suite 1101, 10 King St. East
Toronto, Ontario
M5C 1C3

Date: August 4 19 88

Work Order # : 180933
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248028	108567	25	
248029	108568	49	
248030	108569	20	
248031	108570	43	
248032	108571	30	
248033	108572	44	
248034	108573	193	
248035	108574	19	
248036	108575	39	
248036	108575	15	Check
248037	108576	15	
248038	108577	29	
248039	108579	45	
248040	108580	68	
248041	108581	19	
248042	108582	474	
248043	108583	2678	
248044	108584	34	
248045	108701	24	
248045	108701	82	Check
248046	108702	53	
248047	108703	19	
248048	108704	49	
248049	108705	24	
248050	108706	20	
248051	108707	35	
248052	108708	287	
248053	108709	1417	
248054	108710	34	
248054	108710	29	Check
248055	108711	15	

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M5C 1C3

Date: August 4 19 88

Work Order # : 180933
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248056	108712	25	
248057	108713	10	
248058	108714	30	
248059	108715	15	
248059	108715	24	Check

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M5C 1C3

Date: August 8 19 88

Work Order # : 180945
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248417	108564	6010	
248418	108565	217	
248419	108566	65	
248420	108578	30	
248421	108585	216	
248422	108586	62	
248423	108587	160	
248424	108588	15	
248425	108589	34	
248426	108590	68	
248426	108590	40	Check
248427	108591	24	
248428	108592	35	
248429	108593	35	
248430	108594	215	
248431	108595	40	
248432	108596	40	
248433	108597	68	
248434	108598	996	
248435	108716	83951	
248435	108716	97188	Check
248436	108717	33831	
248437	108718	1866	
248438	108719	702	
248439	108720	1276	
248440	108721	151	
248441	108722	222	
248442	108723	704	
248443	108724	173	
248444	108725	247	
248444	108725	34	Check

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Date: August 8 19 88

Work Order # : 180945
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248445	108726	29	
248446	108727	158	
248447	108728	240	
248448	108729	53	
248449	108730	573	
248450	108731	344	
248451	108732	317	
248452	108733	55	
248452	108733	54	Check

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Suite 1101, 10 King St. East
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M5C 1C3

Date: August 8 19 88

Work Order # : 180949
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248521	108529	20	
248522	108530	24	
248523	108531	34	
248524	108532	15	
248525	108533	14	
248526	108534	40	
248527	108535	34	
248528	108536	15	
248529	108537	94	
248530	108538	20	
248530	108538	20	Check
248531	108539	88	
248532	108540	24	
248533	108541	24	
248534	108542	19	
248535	108543	15	
248536	108544	39	
248537	108545	25	
248538	108546	164	
248539	108547	35	
248539	108547	24	Check
248540	108548	63	
248541	108549	20	
248542	108550	64	
248543	108551	48	
248544	108552	10	
248545	108553	39	
248546	108554	50	
248547	108555	113	
248548	108556	43	
248548	108556	15	Check

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M5C 1C3

Date: August 8 19 88

Work Order # : 180949
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248549	108557	20	
248550	108558	19	
248551	108559	29	
248552	108560	29	
248553	108561	29	
248554	108562	20	
248555	108563	10	
248555	108563	10	Check

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Date: August 15 19 88

Work Order # : 180972
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248950	108599	70	
248951	108600	34	
248952	108734	43	
248953	108735	34	
248954	108736	108	
248955	108737	53	
248956	108738	297	
248957	108739	65	
248958	108740	49	
248959	108741	39	
248959	108741	44	Check
248960	108742	14	
248961	108743	15	
248962	108744	15	
248963	108745	74	
248964	108746	15	
248965	108747	15	
248966	108748	15	
248967	108749	209	
248968	108750	241	
248968	108750	252	Check
248969	108751	Results to be Forwarded	
248970	108752	63	
248971	108801	876	
248972	108802	35	
248973	108803	639	
248974	108804	15	
248975	108805	14	
248976	108806	10	
248977	108807	29	
248977	108807	24	Check

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Date: August 15 19 88

Work Order # : 180972
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
248978	108808	164	
248979	108809	44	
248980	108810	58	
248981	108811	34	
248982	108812	19	
248983	108901	39	
248984	108902	114	
248985	108903	15	
248986	108904	10	
248986	108904	29	Check
248987	108905	608	
248988	108906	49	
248989	108907	357	
248990	108908	44	
248990	108908	110	Check

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Date: August 23 1988

Work Order # : 180984
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
249332	108753	82	
249333	108754	415	
249334	108755	38	
249335	108756	58	
249336	108757	34	
249337	108758	20	
249338	108759	164	
249339	108760	40	
249340	108761	14	
249341	108762	44	
249341	108762	20	Check
249342	108763	10	
249343	108764	14	
249344	108765	29	
249345	108766	53	
249346	108767	20	
249347	108768	14	
249348	108769	10	
249349	108770	112	
249350	108771	1181	
249350	108771	1830	Check
249351	108772	716	
249352	108773	58	
249353	108774	108	
249354	108775	238	
249355	108776	25	
249356	108777	97	
249357	108778	29	
249358	108779	34	
249359	108780	120	
249359	108780	19	Check

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Date: August 23 1988

Work Order # : 180984
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
249360	108813	124	
249361	108814	34	
249362	108815	19	
249363	108816	15	
249364	108817	10	
249365	108818	30	
249366	108819	10	
249367	108820	84	
249368	108821	10	
249368	108821	<5	Check
249369	108822	24	
249370	108823	<5	
249371	108824	19	
249372	108825	10	
249373	108826	15	
249374	108827	43	
249375	108828	1556	
249376	108829	96	
249377	108830	30	
249377	108830	97	Check
249378	108831	40	
249379	108832	44	
249380	108833	63	
249381	108834	30	
249382	108835	1018	
249383	108836	67	
249384	108837	15	
249385	108838	153	
249386	108839	25	
249386	108839	20	Check
249387	108840	49	

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Date: August 23 1988

Work Order # : 180984
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
249388	108841	10	
249389	108842	92	
249390	108843	80	
249391	108844	40	
249392	108845	25	
249393	108846	10	
249394	108847	14	
249395	108848	10	
249395	108848	10	Check
249396	108849	10	
249397	108850	15	
249398	108851	<5	
249399	108852	10	
249400	108853	15	
249401	108854	1484	
249402	108909	58	
249403	108910	87	
249404	108911	49	
249404	108911	53	Check
249405	108912	20	
249406	108913	20	
249407	108914	704	
249408	108915	1039	
249409	108916	668	
249409	108916	747	Check

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Page: 1

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Date: September 8 1988

Work Order # : 880912
Project : Shpd. by D. Langdon

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
144461	108601	1788	← Gauthier
144462	108602	18	
144463	108603	103	
144464	108604	1342	← Trench 24+60E, 13+80N
144465	108605	21	
144466	108992	8	
144467	108993	<5	
144468	108994	158	
144469	108995	16	
144470	108996	13	
144470	108996	15	Check
144471	108997	40	
144472	108998	<5	
144473	108999	106	
144474	109000	1472	← Gauthier - near Amaulen
144474	109000	1282	Check

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Date: September 7 1988

Work Order # : 880906
Project : Shpd. by D. Langdon

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
44156	108948	21	
44157	108949	11	
44158	108950	21	
44159	108951	17	
44160	108952	366	
44160	108952	254	Check
44161	108953	25	
44162	108954	28	
44163	108955	13	
44164	108956	17	
44165	108957	6	
44165	108957	7	Check

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Date: September 8 1988

Work Order # : 880917
Project : Shpd. by D. Langdon

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
144492	108958	703	← HE ; 21+50N - E.W. Echo Bay Shear Zone
144493	108959	86	
144494	108960	60	
144495	108961	70	
144496	108962	16	
144497	108963	94	
144498	108964	185	
144499	108965	26	
144500	108966	352	← M-14 Adit - Felsp. porph. 1-2% Py
144501	108967	13	
144501	108967	12	Check
144502	108968	21	
144503	108969	7	
144504	108970	8	
144505	108971	9	
144506	108972	<5	
144507	108973	7	
144508	108974	6	
144508	108974	6	Check

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Date: September 8 1988

Work Order # : 880916
Project : Shpd. by D. Langdo

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
144475	108975	112	
144476	108976	21	
144477	108977	413	
144478	108978	31	
144479	108979	7109	← old 55+80E - Miranda. Gabbro 40% Py.
144480	108980	322	
144481	108981	30	
144482	108982	43	
144483	108983	1253	← Granite Serc. gn. calc. schi 10%
144484	108984	517	
144484	108984	355	Check
144485	108985	445	
144486	108986	13	
144487	108987	92	
144488	108988	84	
144489	108989	48	
144490	108990	34	
144491	108991	31	
144491	108991	31	Check

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Date: August 29 1988

Work Order # : 880883
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
143319	108781	12	
143320	108782	73	
143321	108783	962	1026
143322	108784	28	
143323	108785	18	
143324	108786	16	
143325	108787	19	
143326	108788	17	
143327	108789	13	
143328	108790	8	
143328	108790	11	Check
143329	108791	55	
143330	108792	19	
143331	108793	12	
143332	108917	145	
143333	108918	18	
143334	108919	48	
143335	108920	19	
143336	108921	35	
143337	108922	7	
143337	108922	6	Check
143338	108923	14	
143339	108924	146	
143340	108925	9	
143341	108926	13	
143342	108927	8	
143343	108928	6	
143344	108929	7	
143345	108930	8	
143345	108930	12	Check

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Date: September 1 1988

Work Order # : 880894
Project : Shpd. by D. Langdon

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
143648	108794	<5	
143649	108795	30	
143650	108796	83	
143651	108797	132	
143652	108798	136	
143653	108799	23	
143654	108800	112	
143655	108931	11	
143656	108932	42	
143657	108933	48	
143657	108933	49	Check
143658	108934	50	
143659	108935	124	
143660	108936	9	
143661	108937	52	
143662	108938	20	
143663	108939	186	
143664	108940	17	
143665	108941	9	
143666	108942	920	
143666	108942	789	Check
143667	108943	642	
143668	108944	26	
143669	108945	250	
143670	108946	67	
143671	108947	17	
143671	108947	14	Check

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KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

22801

Babu Gajaria
Voyager Exploration
Suite 1101, 10 King St. East
Toronto, Ontario
M5C 1C3

Date: September 7 19 88

Work Order # : 180972A
Project :

SAMPLE NUMBERS		Silver	Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm	ppm
100012	108564	8	101	37	172
100013	108582	2	138	169	1288
100014	108583	1	35	2	43
100015	108598	3	107	7	477
100016	108709	1	103	30	302
100017	108716	210	596	171	10432
100018	108719	<1	86	2	31
100019	108720	<1	44	6	110
100020	108730	<1	32	6	41

Babu Gajaria
Voyager Exploration
Suite 1101
10 King St. East
Toronto, Ontario
M5C 1C3

September 9 88

Work Order # : 880886
Project : Shpd by Dave Langdon

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
143403	108855	18	
143404	108856	10	
143405	108857	<5	
143406	108858	5	
143407	108859	<5	
143408	108860	8	
143409	108861	8	
143410	108862	<5	
143411	108863	<5	
143412	108864	<5	
143412	108864	11	Check
143413	108865	9	
143414	108866	<5	
143415	108867	6	
143416	108868	6	
143417	108869	6	
143418	108870	10	
143419	108871	<5	
143420	108872	5	
143421	108873	<5	
143421	108873	8	Check
143422	108874	1129	
143422	108874	1296	Check

XRAL

04-OCT-88 REPORT 6416 REF.FILE 2891-U4 PAGE 1 OF 1

Accorassay Labs

SAMPLE	AU PPB	
108791	15	55
108924	220	146
108979	5700	7109
108996	16	13, 15

XRAL

04-OCT-88 REPORT 6417 REF.FILE 2907-U4 PAGE 1 OF 1

SAMPLE	AU PPB	Accuassay Labs
108502	85	95
108505	3	175
108540	6	24
108547	24	35; 24
108555	9	113
108556	6	53; 15
108573	180	193
108598	1300	996
108705	21	24
108733	30	55; 54
108902	97	114
108903	<1	15
108906	32	49
108909	2	58

XRAL

13-SEP-88 REPORT 6162 REF.FILE 2528-SR

SAMPLE	AU PPB	AS PPM
88-51	2	2
88-52	<1	2
88-53	3	3
88-54	2	5
88-55	<1	2
88-56	1	3
88-57	1	4
88-58	<1	4
88-59	<1	4
88-60	<1	5
88-61	NH	NH
88-62	<1	4
88-63	<2	3
88-64	<1	2
88-65	<1	2
88-66	<2	3
88-67	NH	NH
88-68	3	3
88-69	2	3
88-70	<1	5
88-71	<1	5
88-72	<2	3
88-73	3	3
88-74	1	2
88-75	<1	2
88-76	<1	4
88-77	<1	2
88-78	<1	2
88-79	2	3

NH - NOT HUMUS

XRAL

13-SEP-88 REPORT 6162 REF.FILE 2528-SR PAGE 1 OF 2

SAMPLE	AU PPB	AS PPM
88-01	1	3
88-02	2	4
88-03	1	3
88-04	1	3
88-05	4	4
88-06	1	3
88-07	NH	NH
88-08	6	9
88-09	<1	4
88-10	<1	4
88-11	1	4
88-12	1	3
88-13	2	4
88-14	2	3
88-15	4	5
88-16	3	3
88-17	<1	2
88-18	2	3
88-19	2	5
88-20	<1	8
88-21	1	6
88-22	1	2
88-23	3	6
88-24	<1	3
88-25	1	3
88-26	<1	7
88-27	NH	NH
88-28	1	1
88-29	2	4
88-30	16	4
88-31	NH	NH
88-32	1	2
88-33	<1	1
88-34	<1	1
88-35	2	16
88-36	1	4
88-37	<1	5
88-38	2	2
88-39	<2	3
88-40	<2	5
88-41	1	3
88-42	NH	NH
88-43	<1	7
88-44	<2	3
88-45	<1	2
88-46	<1	3
88-47	2	3
88-48	2	3
88-49	<1	4
88-50	2	2

NH - NOT HUMUS

XRAL

22-SEP-88 REPORT 6295 REF.FILE 2634-SR PAGE 1 OF 1

SAMPLE	AU PPB	AS PPM
88-80	<1	<1
88-81	<1	<1
88-82	<1	<1
88-83	<1	<1
88-84	<1	<1
88-85	<1	<1
88-86	<1	<1
88-87	<1	<1
88-88	<1	<1
88-89	<1	<1
88-90	<1	<1
88-91	<1	<1
88-92	<1	<1
88-93	<1	<1
88-94	<1	<1
88-95	<1	<1
88-96	<1	<1
88-97	11	1
88-98	5	<1
88-99	<1	<1
88-100	<1	<1
88-101	<1	<1
88-102	<1	<1
88-103	8	<1
88-104	<1	<1
88-105	<1	<1
88-106	<1	<1
88-107	<1	<1
88-108	<1	<1
88-109	<1	<1
88-110	<1	<1
88-111	<1	<1
88-112	<1	<1
88-113	<1	<1
88-114	<1	<1
88-115	<1	<1
88-116	<1	<1
88-117	<1	<1
88-118	<1	<1
88-119	<1	<1
88-120	<1	<1
88-121	<1	<1
88-122	<1	<1

CERTIFICATE OF ANALYSIS

REPORT 6295

TO: VOYAGEUR EXPLORATION
ATTN: BABU GAJARIA
10 KING STREET, SUITE 1101
TORONTO, ONTARIO
M5C 1C3

CUSTOMER No. 1450

DATE SUBMITTED
6-Sep-88

REF. FILE 2634-SR

Total Pages 1

43 HUMUS

	METHOD	DETECTION LIMIT
AU PPB	NA	1.
AS PPM	NA	1.

X-RAY ASSAY LABORATORIES LIMITED

DATE 22-SEP-88

CERTIFIED BY .....

Ministry of Northern Development and Mines

Ontario

G T

52E10NW9494 2.11750 ECHO BAY

900

File _____

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) GEOLOGICAL MAPPING

Township or Area ECHO BAY; KENORA G2616

Claim Holder(s) VOYAGER EXPLORATIONS LIMITED

Survey Company VOYAGER EXPLORATIONS LIMITED

Author of Report PAUL CLAUDE DELISLE

Address of Author 2456 Boulevard Rome; Brossard Province of Quebec

Covering Dates of Survey July 24/88 to Sept. 3/88
(linecutting to office)

Total Miles of Line Cut 38

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	40
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: October 25/88 SIGNATURE: B. GAJARIA (Agent)
Author of Report or Agent

Res. Geol. _____ Qualifications This file

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
K	1003647; 1003649
	1003650
	1018379 - 1018384 incl.
	1018399 - 1018403 incl.
	1018409 - 1018410
	1018430 - 1018434
	1018709 - 1018711 incl.
	1018713 - 1018715 incl.
	1051457 - 1051460 incl.
	1051477
	1058360 - 1058365

If space insufficient, attach list

TOTAL CLAIMS 38

OFFICE USE ONLY

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

File _____

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) GEOLOGICAL MAPPING

Township or Area ECHO BAY; KENORA G2616

Claim Holder(s) VOYAGER EXPLORATIONS LIMITED

Survey Company VOYAGER EXPLORATIONS LIMITED

Author of Report PAUL CLAUDE DELISLE

Address of Author 2456 BOULEVARD ROME; Brossard Province of Quebec

Covering Dates of Survey July 24/88 to Sept. 3/88
(linecutting to office)

Total Miles of Line Cut 12

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
--Electromagnetic	
--Magnetometer	
--Radiometric	
--Other	
Geological	20
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: October 25/88 SIGNATURE: B. GAJARIA (Agent)
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
K	1003648
	1007289 - 1007294 incl.
	1044139 - 1044143 incl.

If space insufficient, attach list

TOTAL CLAIMS 12

OFFICE USE ONLY

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

File _____

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Humus Sampling & Rock Chip Sampling - Assaying (Expenditure)

Township or Area ECHO BAY; KENORA G2616

Claim Holder(s) VOYAGER EXPLORATIONS LIMITED

Survey Company VOYAGER EXPLORATIONS LIMITED

Author of Report PAUL CLAUDE DELISLE

Address of Author 2456 BOULEVARD ROME; Brossard Province of Quebec

Covering Dates of Survey July 24/88 to Sept. 3/88 (linecutting to office)

Total Miles of Line Cut 38

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

DAYS per claim

Geophysical

–Electromagnetic _____

–Magnetometer _____

–Radiometric _____

–Other Expenditure

Geological _____

Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____ (enter days per claim)

DATE: Oct 25/88 SIGNATURE: _____ Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
K	1003647; 1003649
	1003650
	1018379 - 1018384 incl.
	1018399 - 1018403 incl.
	1018409 - 1018410
	1018430 - 1018434 incl.
	1018709 - 1018711 incl.
	1018713 - 1018715 incl.
	1051457 - 1051460 incl.
	1051477
	1058360 - 1058365 incl.

If space insufficient, attach list

TOTAL CLAIMS 38

OFFICE USE ONLY

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

DOCUMENT No. W8801· 257

Dec 6

Mining Act MINING LANDS

Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.

Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

Type of Survey(s): GEOLOGICAL MAPPING

Township or Area: ECHO BAY AREA: G2616

Claim Holder(s): VOYAGER EXPLORATIONS LIMITED 2.11750

Prospector's Licence No.: A - 33975

Address: SUITE #1101 - 10 KING STREET EAST; TORONTO, ONTARIO M5C 1C3

Survey Company: VOYAGER EXPLORATIONS LIMITED

Date of Survey (from & to): 24 Day | 07 Mo. | 88 Yr. | 03 Day | 09 Mo. | 88 Yr.

Total Miles of line Cut: 12

Name and Address of Author (of Geo Technical report): PAUL CLAUDE DELISLE
2456 Boulevard Rome; Brossard, Province of Quebec.

Credits Requested per Each Claim in Columns at right

		Days per Claim
Special Provisions: For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	20
	Geochemical	
Man Days: Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	
Airborne Credits: Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
K	1003648	
	1007289	
	1007290	
	1007291	
	1007292	
	1007293	
	1007294	
	1044139	
	1044140	
	1044141	
	1044142	
	1044143	

Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED
OCT 24 1988
MINING LANDS SECTION

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES OFFICE
DEC 19 1988
RECEIVED

KENORA MINING DIV.
RECEIVED
OCT 17 1988
AM 9:13 PM
7 8 9 10 11 12 1 2 3 4 5 6

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

1 003647

Total number of mining claims covered by this report of work: 12

For Office Use Only

Total Days Cr. Recorded: 240

Date Recorded: 88 oct 17

Date Approved as Recorded:

Mining Recorder: ACTING

Branch Director: See revised work Statement.

Date: Oct. 14/88

Recorded Holder or Agent (Signature):

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: BABU GAJARIA; c/o VOYAGER EXPLORATIONS LIMITED
Suite #1101 - 10 KING STREET EAST; TORONTO, ONTARIO M5C 1C3

Date Certified: Oct. 14/88

Certified by (Signature):

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

DOCUMENT No. W8801·260

Mining Act MINING LANDS

Instructions: - Please type or print. Lec 6
- If number of mining claims traversed exceeds space on this form, attach a list.

Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns. Do not use shaded areas below.

Type of Survey(s)
GEOLOGICAL MAPPING

Township or Area
ECHO BAY AREA: G2616

Claim Holder(s)
VOYAGER EXPLORATIONS LIMITED 2.11750

Prospector's Licence No.
A-33975

Address
SUITE #1101 - 10 KING STREET EAST, TORONTO, ONTARIO M5C 1C3

Survey Company
VOYAGER EXPLORATIONS LIMITED

Date of Survey (from & to): 24 07 88 (Day / Mo. / Yr.) — 03 09 88 (Day / Mo. / Yr.)

Total Miles of line Cut: 38

Name and Address of Author (of Geo Technical report)
PAUL CLAUDE DELISLE, 2456 Boulevard Rome, Brossard, Province of Quebec.

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	40
	Geochemical	

RECEIVED
OCT 24 1988
MINING LANDS SECTION

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date: Oct. 14/88

Recorded Holder or Agent (Signature)

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
K	1003647	
	1003649	
	1003650	
	1018379	
	1018380	
	1018381	
	1018382	
	1018383	
	1018384	
	1018399	
	1018400	
	1018401	
	1018402	
	1018403	
	1018409	
	1018410	
	1018430	
	1018431	
	1018432	
	1018433	
	1018434	
	1018709	
	1018710	

Prefix	Mining Claim Number	Expend. Days Cr.
	1018711	
	1018713	
	1018714	
	1018715	
	1051457	
	1051458	
	1051459	
	1051460	
	1051477	
	1058360	
	1058361	
	1058362	
	1058363	
	1058364	
	1058365	

KENORA MINING DIV. RECEIVED OCT 17 1988 AM 9:13 7 8 9 10 11 12 1 2 3 4 5 6 PM

Total number of mining claims covered by this report of work: 38

1 003 647

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1520	88 OCT 17	ACTING
	Date Approved as Recorded	Branch Director
	See revised work Statement.	

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: BABU GAJARIA; c/o VOYAGER EXPLORATIONS LIMITED

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

DOCUMENT No. W8801·261

Dec. 6

Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.

Note - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns. Do not use shaded areas below.

Mining Act — Mining Lands

Type of Survey(s): HUMUS SAMPLING & ROCK CHIP SAMPLING } ASSAYING

Township or Area: ECHO BAY AREA: G2616

Claim Holder(s): VOYAGER EXPLORATIONS LIMITED 2.11750

Prospector's Licence No.: A - 33975

Address: Suite #1101 - 10 KING STREET EAST, TORONTO, ONTARIO M5C 1C3

Survey Company: VOYAGER EXPLORATIONS LIMITED

Date of Survey (from & to): 24 Day | 07 Mo | 88 Yr | 03 Day | 09 Mo | 88 Yr

Total Miles of line Cut: 38

Name and Address of Author (of Geo Technical report): PAUL CLAUDE DELISLE; 2456 Boulevard Rome Brossard; Province of Quebec.

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

RECEIVED OCT 24 1988 MINING LANDS SECTION

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
K	1003647	13
	1003649	13
	1003650	11
	1018379	9
	1018380	9
	1018381	9
	1018382	9
	1018383	9
	1018384	9
	1018399	11
	1018400	9
	1018401	9
	1018402	9
	1018403	9
	1018409	9
	1018410	11
	1018430	9
	1018431	9
	1018432	9
	1018433	9
	1018434	9
	1018709	9
	1018710	9
	1018711	9
	1018713	9
	1018714	9
	1018715	9
	1051457	11
	1051458	11
	1051459	11
	1051460	11
	1051477	9
	1058360	9
	1058361	9
	1058362	9
	1058363	9
	1058364	9
	1058365	9

KENORA MINING DIV. OCT 17 1988 AM 9:13 PM 7 8 9 10 11 12 1 2 3 4 5 6

Total number of mining claims covered by this report of work: 38

Expenditures (excludes power stripping)

Type of Work Performed: ASSAYING - HUMAS SAMPLING ROCK CHIP SAMPLING

Performed on Claim(s): AS LISTED

Calculation of Expenditure Days Credits

Total Expenditures: $ 5,465.25 ÷ 15 = Total Days Credits: 364.35

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

1 003 647

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
364	88 OCT 17	ACTING
	Date Approved as Recorded	Branch Director

See revised work Statement.

Date: Oct. 14/88

Recorded Holder or Agent (Signature):

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Section
3rd floor, 880 Bay Street
Toronto, Ontario
M5S 1Z8

Telephone: (416) 965-4888

December 9, 1988

Your file: W8801-259,260
& 261
Our file: 2.11750

Mining Recorder
Ministry of Northern Development and Mines
808 Robertson Street
P.O. Box 5200
Kenora, Ontario
P8N 3X9

Dear Sir:

Re: Notice of Intent dated November 22, 1988
Geological Survey and Data for Assaying
submitted on Mining Claims K 1003647 et al in Echo Bay Area

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

W.R. Cowan
Provincial Manager, Mining Lands
Mines & Minerals Division

DK:pl
Enclosure

cc: Mr. G.H. Ferguson
Mining and Lands Commissioner
Toronto, Ontario

Resident Geologist
Kenora, Ontario

Voyager Explorations Limited
Suite 1101
10 King Street East
Toronto, Ontario
M5C 1C3

Mr. Paul Claude Delisle
2456 Boulevard Rome
Brossard, Quebec
J4Y 1R1

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File 2.11750

Date November 22,1988

Mining Recorder's Report of Work No. W8801-259

Recorded Holder: Voyager Explorations Limited

Township or Area: Echo Bay Area

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	K-1003648 1007289 to 92 inclusive 1007294 1044139 to 43 inclusive
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 12 days	
Geochemical _____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☒ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☒ not sufficiently covered by the survey ☐ insufficient technical data filed

K-1007293

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File 2.11750

Date: November 22, 1988

Mining Recorder's Report of Work No.: W8801-260

Recorded Holder: Voyager Explorations Limited

Township or Area: Echo Bay area

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	K-1003647 1003649-50 1018379 to 84 inclusive 1018399 to 403 inclusive 1018409-10 1018430 to 34 inclusive 1018709 to 11 inclusive 1018713 to 15 inclusive 1051457 to 60 inclusive 1051477 1058360 to 65 inclusive
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 31 days	
Geochemical _____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☒ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File 2.11750

Date November 22, 1988

Mining Recorder's Report of Work No. W8801-261

Recorded Holder: Voyager Explorations Limited

Township or Area: Echo Bay Area

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days ☐ Airborne ☐ Special provision ☐ Ground ☐ ☐ Credits have been reduced because of partial coverage of claims. ☐ Credits have been reduced because of corrections to work dates and figures of applicant.	$5,465.25 SPENT ON ANALYSES OF SAMPLES TAKEN FROM MINING CLAIMS: K-1003647 1003649-50 1018379 to 84 inclusive 1018399 to 403 inclusive 1018409-10 1018430 to 34 inclusive 1018709 to 11 inclusive 1018713 to 15 inclusive 1051457 to 60 inclusive 1051477 1058360 to 65 inclusive 1003648 1007289 to 94 inclusive 1044139 to 43 inclusive 364.35 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.

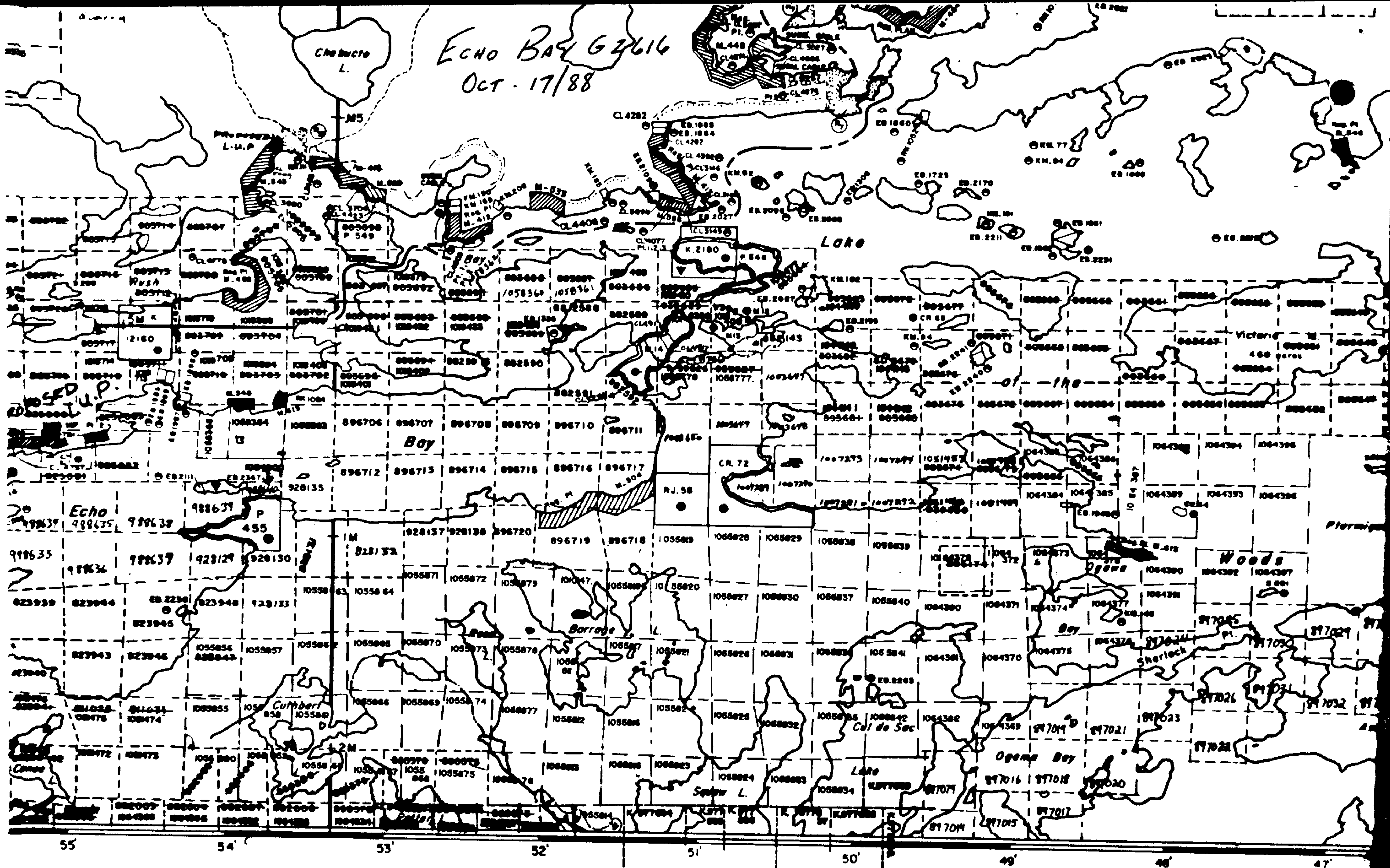
Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

626 (85/12)



ECHO BAY G2616
OCT. 17/88
Chebucto L.
Lake
Bay
of the
Victoria
Echo
Rush
Woods
Ogema
Borrage L.
Sherlock
Cul de Sac
Lake
Ogema Bay
Squaw L.
Cuthbert
Ptarmigan
55'
54'
53'
52'
51'
50'
49'
48'
47'

NOTES

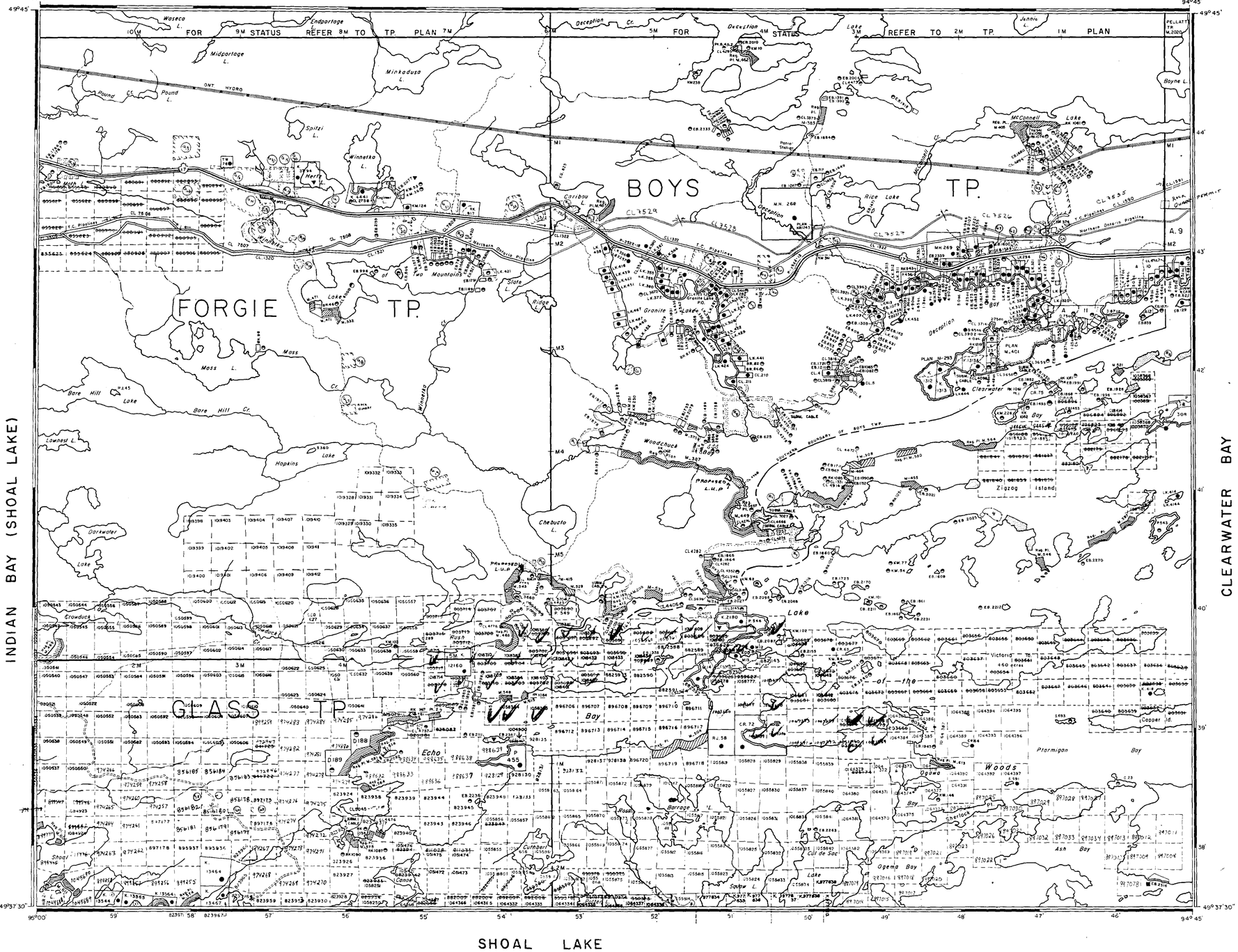
RESERVE FLOODING RIGHTS TO CONTOUR 1064' ON ALL LANDS BORDERING ON LAKE OF THE WOODS.

400' SHOWN THUS ---- S.R.O. RESERVED TO M.N.R. FILE 163473

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

	Description	Order No.	Date	Disposition	File
(1)	M.N.R. RESERVE			S.R.O.	77094 vol.5
(2)	CROWN RESERVE			S.R.O.	163473
(3)	M.T.C. RESERVE				83811
(4)	CROWN RESERVE			S.R.O.	163473
(5)	PUBLIC RESERVE			S.R.O.	122182
(6)	CROWN RESERVE			S.R.O.	77094 vol.6
(7)	CROWN RESERVE			S.R.O.	163473 vol.1
(8)	CROWN RESERVE			S.R.O.	
(9)	PUBLIC USE- RESERVE			S.R.O.	163473 vol.2
(10)	TOWER RESERVE				99852
(11)	CROWN RESERVE			S.R.O.	179645
(12)	SEC. 43/70 w65/76		19/11/76	S.R.O.	188521
(13)	SEC. 36/80 w.20/83		9/8/83	M.R.S.	188521
(14)	SEC. 36/80 w. 2/85		21/8/85	M.R.S.	
(15)	SEC. 36/80 w.63/86		13/8/86	M.R.S.	18855
(16)	PUBLIC RESERVE				188555



LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◒
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	▣
" , MINING RIGHTS ONLY	▣
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	⊕
CANCELLED	⊗
SAND & GRAVEL	⊕

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 2000 (1 KM) (2 KM)

AREA
ECHO BAY

M.N.R. ADMINISTRATIVE DISTRICT
KENORA

MINING DIVISION
KENORA

LAND TITLES / REGISTRY DIVISION
KENORA

Ontario
Ministry of Natural Resources
Ministry of Northern Development and Mines

Date JANUARY, 1987
Number

LEGEND

SCHISTS

M1 Dolomite-ankerite-quartz-(sericite) schist
M2 Chlorite-(carbonate) schist
M3 Sericite schist
M4 Talc-chlorite-carbonate schist

MAFIC INTRUSIVE ROCKS

3L Lamprophyre
3L1 Lamprophyre with granitoid inclusions

FELSIC INTRUSIVE ROCKS

1MD Quartz-monzodiorite (Rush Bay Stock)
FP Feldspar porphyry
QFP Quartz-feldspar porphyry
1R Felsite

METAMORPHIC MAFIC INTRUSIVE ROCKS

3G Gabbro
3Gm Melanogabbro
3 Mafic dyke
4 Ultramafic rock

METASEDIMENTS

S4 Mudstone
S7 Chert

METAMORPHIC VOLCANIC ROCKS

V2 Felsic rock
V4-V6 Intermediate rock
V7 Mafic rock
V8 Pyroclastic rock
V11 Lapilli tuff
V12 Cristal tuff

SUFFIXE

α Felsic
β Mafic
int Intermediate
m Massif
⊖ Pillow
⊙ Vesicular

ALTERATION

σ Silicified
λ Sericitized
× Saussuritized
κ Hematized
gos Gossan

TEXTURE

△ Brecciated
⊡ Porphyritic

STRUCTURE

cren Crenulation
Kb Kink band
ct Contact
Lam Lamination
s Schistosed
intb Interbedded

SYMBOLS

Outcrop, sub-outcrop
Geological contact: observed, presumed
Strike and dip of bedding
Strike and dip of pillow showing top direction
Strike and dip of schistosity and shear plane: C-, S-, C'-fabric
Strike and dip of joint
Strike and dip of drag fold
Strike and plunge of kink band
Bearing and plunge of lineation (mineral reading)
Strike (and dip) of shear with direction of movement: observed
Block movement: uplift, downlift
Strike and dip of quartz vein (Qv)/veinlet (Qvlt): barren, mineralized
DTQV : dextral tension quartz
STQV : sinistral tension quartz vein
LSEQV : left steeping 'en echelon' quartz vein
SQV : shear quartz vein
TQV : tension quartz vein
Core of high strain zone
Lineament
Swamp
Cliff face with abrupt in meter
Trench
Power line
Claim boundary with claim post: located, unlocated
Cottage
Shaft
Exploration pit
Mineral concentration: less than 4%, over than 4%

Ag Silver
Po Pyrrhotite
Py Pyrite
Ga Galene
Sph Sphalerite
Cp Chalcopyrite
Bo Bornite
Ma Malachite
VG Visible gold
Au Gold
Ma Magnetite
Spec Specularite
Hem Hematite
Plag Plagioclase
Qtz Quartz
Chl Chlorite
Bi Biotite
Fu Fuschite
Tourm Tourmaline

VOYAGER EXPLORATIONS LTD.

ECHO BAY PROPERTY

GEOLOGY MAP

2.11[illegible]0

Work by: P.C. DELISLE, D. LANGDON Drawing by: M. LAITHIER	Date: JULY 1988
Scale: 1":300'	NTS: 52 E/10

for P.C. Delisle.