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REPORT ON DETAILED
GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL SURVEYS
FOR
Operator: INTERNATIONAL MAPLE LEAF RESOURCE CORPORATION
ON THE
STIRLING GROUP
DIANE 1-5 MINERAL CLAIMS
NICOLA MINING DIVISION
MERRITT, B.C.
NTS 92 1/2W

50°02.5' 120°47.5'

FILMED

Owner: Abermin Corporation

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,058

PART 1 OF 2

PART 1 OF 2

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December 30, 1986

OREQUEST



SUMMARY

An exploration program consisting of geological mapping, geochemical sampling, airborne geophysics and trenching was completed on the Stirling Group Diane 1 to 5 claims located 8 kilometers due south of Merritt, B.C. for International Maple Leaf Resources Corp.

Mapping and sampling of various mineral occurrences and rock types on the property identified a chemical zonation in an andesite-rhyolite sequence similar to that of a volcanogenic massive sulphide system.

Trenching on the Original Zone outlined an area of primary and secondary copper mineralization along a fracture system in andesitic flows and lithic tuffs. The zone strikes for a length of 200 meters. Grade varies from .1% to .69% copper over widths of 3 to 16 meters. A narrow zone of gold mineralization may also be present within the copper body. Assays ranging from .162 to .284 oz. per ton gold over one meter widths were obtained from small rusty shears in four consecutive trenches of the ten trenches sampled. The gold zone strikes for a length of 125 meters within the copper mineralization.

Helicopter-borne magnetic and electromagnetic geophysical surveys failed to detect any conductors that may host sulphide or gold mineralization. The surveys did however, confirm the presence of northwest and northeast trending faults inferred by geologic mapping.

Soil sampling and prospecting discovered several new zones of mineralization containing anomalous zinc, copper and gold values. These areas will require further evaluation in the next phase of work.

Several mineralized areas found by previous workers have yet to be evaluated. These include the North, STG and Olympic Zones.

Results are sufficiently encouraging to warrant recommending further work on the property.

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INTRODUCTION

A Phase I exploration program was completed November 8, 1986 on the Diane 1 to 5 claims of the Stirling Group for International Maple Leaf Resource Corporation. Approximately 160 man days were spent linecutting, mapping, soil and rock sampling, trenching and prospecting on the property located 8.0 kilometers south of Merritt, B.C. A separate airborne geophysical survey covering the entire property was carried out by Aerodat Ltd. of Mississauga, Ontario.

Two picket grids were established to aid in mapping and sampling. Work on the property was focused on the Original Zone on the Diane 1 claim.

The main purpose of this work was to evaluate the gold and copper mineralization detected in the Original Zone by Aberford Resources Ltd. during 1983 and subsequently exposed in small hand trenches by Kidd Creek Resources Ltd. during 1984.

Several new mineral occurrences were discovered while evaluating the claims and results were sufficiently encouraging to warrant recommending a Phase II exploration program involving more trenching, rock sampling and diamond drilling on the Original Zone. If results of Phase II are encouraging enough, a Phase III program consisting of further diamond drilling may be recommended.

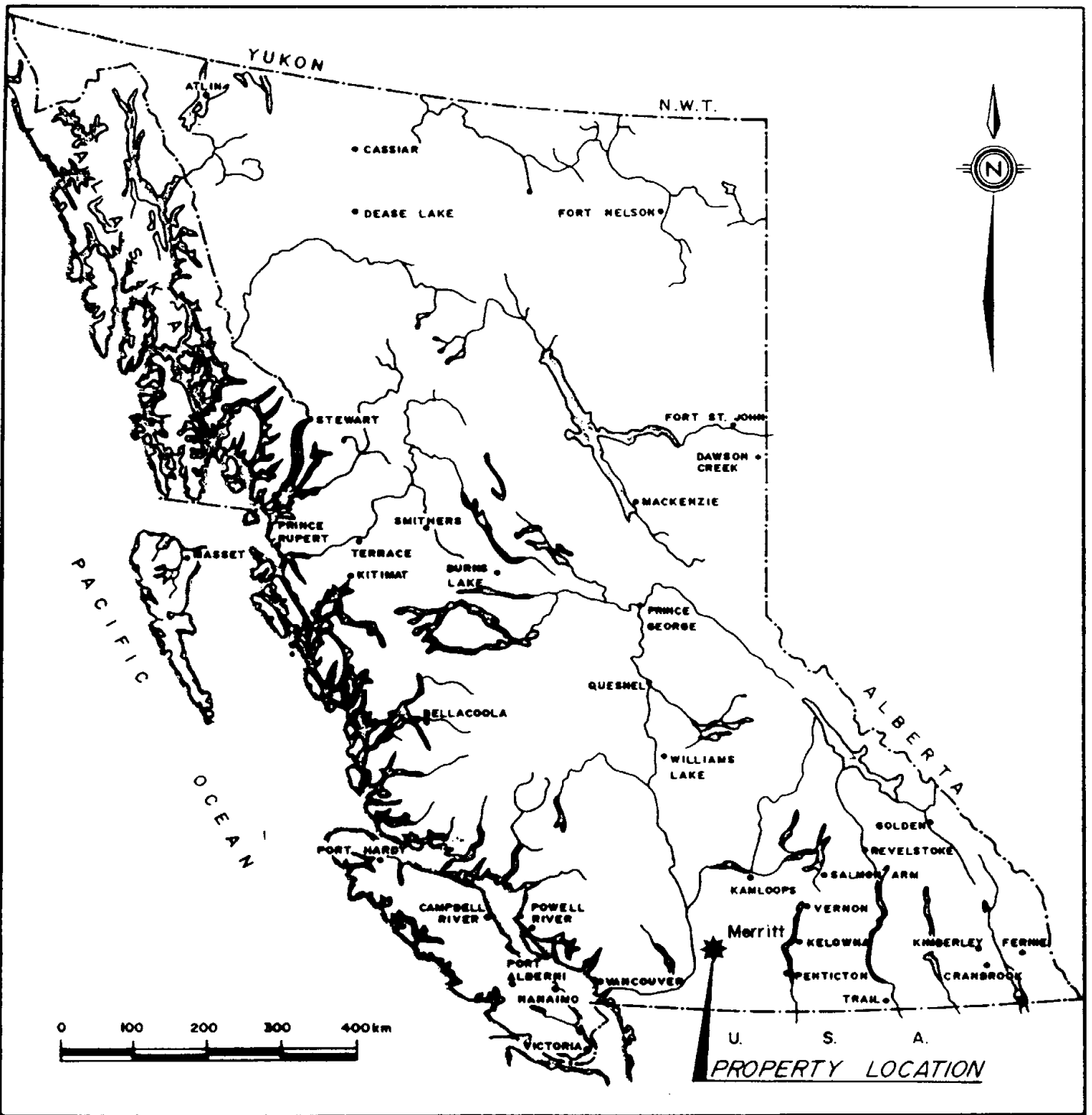


FIGURE 1

PROPERTY LOCATION MAP

Stirling Group , Diane Claims

INT'L MAPLE LEAF RESOURCE CORPORATION

NTS 92I/2E

B.C.

OREQUEST



LOCATION and ACCESS

The property, known as the Stirling Group, encompasses most of Iron Mountain and is centered approximately 8.0 kilometers due south of Merritt, B.C. (Figures 1 and 2). Merritt, a small sawmill and ranching town of 7,000, is only 265 kilometers from Vancouver via the recently completed Coquihalla Highway. This new four lane highway cuts across the western flank of the claim block and is presently being extended northward to Kamloops.

Although the highway runs across the claims, access to the property is gained by travelling south from Merritt on the Coldwater road for 5.0 kilometers to the "I Junction-Veale Road" turnoff. Seven kilometers up the Veale Road, which passes underneath the highway, the road forks. The left fork wings its way up through portions of the Diane 2, 3, and 5 claims of the Stirling group to an array of microwave and television antennas at the summit and is referred to as the Iron Mountain road.

Approximately 0.8 kilometers up the Iron Mountain road from this first fork the road forks again to the left. This third road winds its way northward through the Diane 1 and 2 claims and consists of approximately 1.0 kilometer of newly constructed road and an additional clearing of 2.4 kilometers of old logging road and skidder trails.

The construction was necessary to gain access to the trenching located at the "Original Zone" on the southwest flank of Iron Mountain (Figures 2 and 3). Previous access to this area via the Fierro road was effectively blocked off by a barb wire fence erected across the road by a local rancher who has grazing

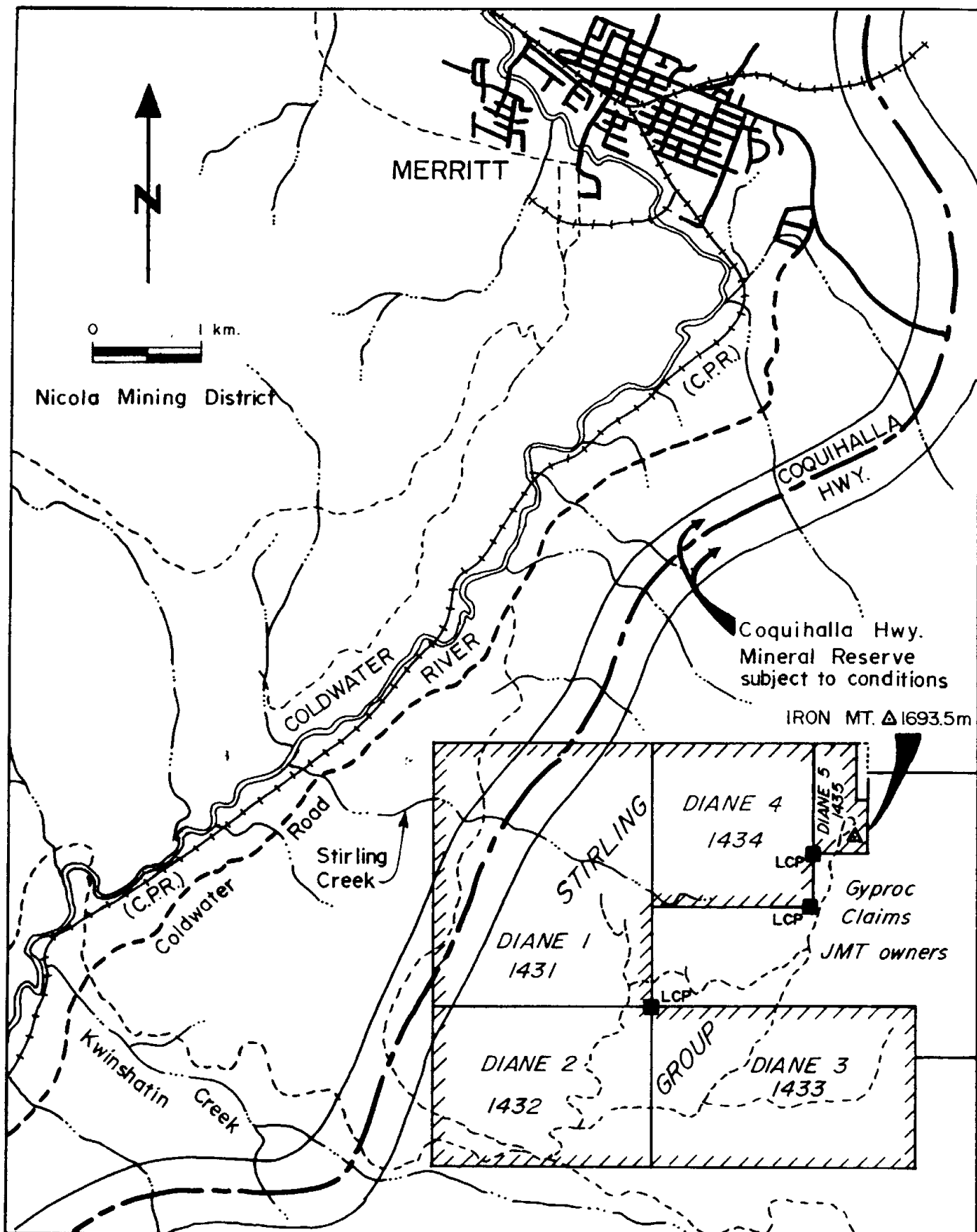


Figure 2
CLAIM LOCATION MAP
INT'L MAPLE LEAF RESOURCE CORP.
 Stirling Group, Diane Claims



rights to the mountain. This new road, called the Aberford road, is quite rough and steep and should be travelled with four-wheel drive vehicles only.

CLAIM STATUS

The Stirling Group consists of the Diane 1 to 5, mineral claims and was located July 14 through July 21 of 1983. The claims contain 58 units or approximately 3,583 acres in the Nicola Mining Division and are presently owned by Abermin Corporation of Vancouver, B.C. (formerly Aberford Resources).

International Maple Leaf Corp. of Vancouver has entered into an option agreement with Abermin whereby Maple Leaf has the right to earn a fifty percent interest in the property.

Present information on the claim block is as follows:

Claim Name	No. of Units	Record No.	Record Date	Expiry
Diane 1	20	1431	August 2, 1983	1989
Diane 2	12	1432	August 2, 1983	1989
Diane 3	15	1433	August 2, 1983	1989
Diane 4	9	1434	August 2, 1983	1989
Diane 5	2	1435	August 2, 1983	1989

ENVIRONMENTAL SETTING

Iron Mountain, an upland feature of the Douglas Plateau, is situated at the western edge of the Interior Plateau approximately 7.5 kilometers south of Merritt. Topography varies from 760 meters along the Coldwater River to 1,694 meters at the peak of Iron Mountain.

The mountain is moderately forested, with pine and fir occupying the steep

northwestern slopes and spruce and aspen dominating the more gentle, open timbered and grassy southeastern slopes. Much of the mountain has been logged over the years but some virgin timber still remains.

Till cover is generally one to two metres thick but may exceed ten meters on the lower slopes and along the Coldwater River valley.

The abundance and quality of rock outcrops (0-30%) vary greatly over the claims as indicated on the geology map (Figure 3) but is sufficient to provide enough information for a general understanding of the geology.

The Interior Plateau falls within the Pacific Coast rain shadow and as a consequence, summers in the Merritt area are long, hot and dry whereas the winters are rather short and moderate. Permanent water on Iron Mountain is virtually nonexistent and almost all creeks are dry soon after the last of the snow leaves the slopes.

HISTORY and PREVIOUS WORK

Exploration on Iron Mountain has been more or less continuous since 1896. Work performed consists of several shafts, hand dug trenches and pits, minor drilling, and more recently, geological mapping, geophysics and overburden stripping with bulldozers.

Most early work was restricted to the search for base metals; lead and zinc around the Comstock (also called Leadville or Lucky Todd) shaft and copper in the Charmer area. Both these areas are, however, located on the adjoining

Fierro 3 and other claims of the Gyproc group presently owned by J.M.T. Services Ltd. of Vancouver.

A renewed interest in the area was prompted by an anomalous gold geochemical rock sample in Stirling Creek during a reconnaissance program conducted in 1981 by Aberford Resources. Subsequent prospecting and sampling led to the staking of the Diane claims in 1983.

A comprehensive summary of activities and events on Iron Mountain leading up to the present day is provided below:

1896 - Three shafts, the Charmer, the Islander and Victoria (corresponding to shafts nos. 1, 2, and 3 on Figure 3) are sunk on the southwest slope of Iron Mountain on copper-iron showings. Chalcopyrite mineralization, observed in the vicinity of the shafts, occurs as stringers and blebs in andesitic pyroclastics and flows with associated specularite.

1927 - Emmitt Todd locates the "Leadville" property, approximately 800 metres northeast of the Charmer area. A shaft was sunk to a depth of 32 metres on a galena-sphalerite-barite vein striking north-south within a shear zone. Silver is reported to be localized along the vein where it transects east-west fault structures. Copper is reportedly found disseminated in andesite and rhyolite and late stage quartz-calcite veinlets (M.A.R., 1951 A128, BCDM-MIN INV #52, 92 I/2). Recent mapping by Chevron Minerals in 1981 indicates that the vein is localized between a sediment and rhyolite contact.

1929 - Comstock of B.C. Ltd. conducts a variety of work on the "Leadville" (now known as the Comstock).

1947 - "Leadville" property leased to George Hunter, renamed the "Lucky Todd", and 36 tons of ore are shipped to Trail (M.A.R., 1951 A128).

1951 - Granby Consolidated Mining and Smelting Power Co. Ltd. options the "Leadville" and dewateres the shaft. No further work recorded (M.A.R., 1951 A128).

1958 - New Jersey Zinc performs diamond drilling north of "Leadville".

1961 - Local Merritt interests locate the Judy claims and perform extensive trenching, stripping and sampling over the Charmer area in the vicinity of shafts no.1 and 2 (Figure 3).

1966 - Manor Mines drills two holes near the "Leadville" shaft.

1968-74 Acaplomo Mining and Development Co. Ltd. of Merritt stake the "Makelstin (1-60) claims over the south slopes of Iron Mountain (including Leadville and Charmer). Conducts linecutting, geophysics (magnetics and electromagnetics), geochemistry, mapping, trenching, prospecting and diamond drilling (approx. 3 holes of 200') (GEM, 1968, 1970, 1971, 1974). Claims dropped.

1976 - Quintana Mineral Corp. stakes the one-sixty-one and

one-sixty-one-2 claims over the south slope. Conducts geology and geochemistry (GEM, 1977, p.140). Claims dropped.

1978 - W.J. McMillan of the BCMM conducts regional mapping on Iron Mountain, Open File Map #47, 1:25,000.

1979-81 JMT stakes "Gyproc" group and Chevron options the claims for three years. JMT conducts geologic mapping and geochemistry for Chevron but Chevron drops its option in 1981.

1983 - Aberford Resources Ltd. stakes "Stirling" group (Diane 1-5) adjoining the Gyproc claims. The claims are staked based on an anomalous rock sample collected during a regional reconnaissance geochemical program. Aberford conducts prospecting, geology and geochemistry over portions of the claim group. Six areas of mineralization were outlined.

1984 - Kidd Creek Mines Ltd. takes over as operator of the Stirling Group and performs linecutting, geophysics, and geochemistry over portions of the property. An aerial survey is conducted and a 1:5,000 orthophoto is made. Results favourable. Kidd Creek discontinues as operator as Kidd and Abermin come under a legal dispute.

1986 - International Maple Leaf Resource Corp. enters into an option with Abermin and performs geophysics, geochemistry, mapping, extensive trenching and road building to eventually earn a 50% interest in the property.

REGIONAL GEOLOGY

The Stirling Group lies completely within a northeast trending belt of Upper Triassic Nicola Group marine and continental volcanic rocks. Due mainly to their complex geology, little is known about the stratigraphy of Nicola rocks in the Merritt region and only a few generalizations can be made about the geology of the Nicola belt as a whole.

Two large northerly trending, high angle fault systems, the Summers-Alleyene Creek system to the east and the Allison system to the west, effectively divide Nicola rocks south of Merritt into three subparallel units: the Western, Central and Eastern Belts. These belts contain rocks of varied lithology, but similar composition and mode of origin.

The Central Belt contains the oldest rocks of the Nicola group and is dominated by alkaline and calc-alkaline volcanic and intrusive rocks with some associated sedimentary units.

The Eastern Belt consists of a westerly facing sequence of volcanic siltstone and sandstone, laharic deposits, conglomerate and tuff and some alkaline flows that occur near stocks of micromonzonite porphyry.

The Stirling property is located wholly within the Western Belt, the youngest rocks of the Nicola group. The Western Belt consists mainly of an easterly facing sequence of calc-alkaline flows that grade upward into pyroclastic rocks, epiclastic sediments and abundant limestone (Petro, 1979).

Younger volcanic and sedimentary rocks, ranging in age from Lower-Middle Jurassic to Recent, lie either in fault contact with or unconformably overlies Nicola strata north and east of Iron Mountain.

A variety of Upper Triassic plutonic rocks are intrusive into the Nicola Group.

Western Belt volcanic rocks south of Merritt vary from fine grained or nearly aphanitic to coarsely porphyritic types. They are predominately green, but also occur in various shades of purple, red, brown or grey and include some with a dark or nearly black groundmass.

The rocks are chiefly andesites, but include basaltic types as well as feldspar porphyries with phenocrysts ranging from minute size to 13 mm. Much tuff, lapilli tuff and breccia is associated with the flows. The latter are partly altered to chlorite, epidote and calcite and boundaries of individual flows are generally difficult to detect.

Variable amounts of calcareous marine sedimentary rocks are associated with the volcanics and some provide marine fossils of Upper Triassic Age. Limestone is the most abundant sediment, but argillite and conglomerate occur sparingly. The limestone generally consists of a series of lenses rather than continuous beds.

Although dominately basic to intermediate, the Western Belt also contains local accumulations of more felsic rocks. The felsic rocks often occur in stratigraphic proximity to the calcareous marine sediments. Rhyolitic and

dacitic tuffs and flows on Iron Mountain represent one of the larger known accumulations of felsic volcanic rocks in the Nicola Group.

Western Belt sedimentary rocks in the Merritt area usually dip steeply and trend north to northeast and the Iron Mountain rocks follow this pattern. Although folding is difficult to demonstrate in Nicola rocks, the recurrence of calcareous sedimentary rocks three kilometers east of Iron Mountain, suggests that the mountain is on the west limb of a north striking syncline. Such large scale folding is probably related to the emplacement of the Upper Triassic Guichon Creek and Nicola batholiths to the northwest and northeast of Merritt respectively.

Rocks of the Western Belt have no obvious source with the Merritt area. However their chemical and physical similarity with volcanic rocks to the north and west that occur around the periphery of the Guichon Creek batholith suggests that they may have originated from this rather large calc-alkaline pluton (Petro, 1979).

EXPLORATION PROCEDURES

Airborne Geophysical Survey

The airborne geophysical survey was performed by Aerodat Ltd. using a 3 frequency 2 coil orientation electromagnetic system, a 2-frequency very low frequency electromagnetic system and a magnetometer.

Flight lines were oriented north south at 100 meter intervals. The

orientation of the flight lines was chosen to respect both the northeast/southwest stratigraphy and the northwest/southeast trend of the mineralization on the property.

Linecutting

A large grid with a two kilometer long north-south running baseline and east-west oriented cross-lines spaced 500 metres apart, was cut to provide access and control for mapping purposes. Some additional lines were placed at 250 meter intervals at selected places, where it was felt the extra control was warranted. The grid, known as the Diane grid, covers the entire Stirling group and consists of a total of 33 line kilometers. Stations are every 25 meters along both the baseline and crosslines. The grid outline is shown in both Figures 3 and 4.

A second, older grid originating on the Fierro claim and covering the mineralization in the Original zone on Diane 1, was extended 200 meters north and 400 meters south along a 143° trending baseline. Crosslines with 25 meter stations were cut at 100 meter intervals along this extended baseline. Some "missing" crosslines intermediate between the two mineralized zones were cut from a newly created 400 meter west parallel baseline between lines 500 north and 900 north. This grid contains 4.3 kilometers of previously cut lines as well as 10.5 kilometers of newly cut line and is known as the Fierro grid. The grid outline is shown in Figures 3 and 4 as well as in all figures in Appendix A.

Mapping

The property was mapped at a scale of 1 to 5,000 along the cut and flagged lines and road cuts of the Diane grid. The photo-mosaic of the property provided assistance in mapping the rugged west and northwest portions of the property. Steep terrain and tall, overmature stands of fir and pine made locating ones position on the photo extremely difficult. However, the mosaic was useful in mapping the southeastern corner of the property with its wide open spaces and gentle slopes.

The new lines of the Fierro grid were also mapped at 1:5,000 scale. Property geology and outcrop patterns are shown in Figure 3.

Soil Sampling

A total of 342 soil samples were taken on the newly created portions of the Fierro grid and assayed for copper, zinc, silver and gold. Sample stations were every 25 meters along each cross line. Soil was collected from the B or C horizon with the aid of a mattock and placed in numbered kraft paper bags. Geochemical maps with all the plotted results can be located in Appendix A. All samples were sent to Vangeochem Lab Ltd. of Vancouver for analysis, a detailed description of all analytical techniques and procedures used for both rock and soil samples is given in Appendix E.

Soil development in the till that drapes the slopes of Iron Mountain is moderate to poor. Previous workers have stated that the ability of soil sampling on the mountain to detect mineralization is based on a mechanical rather than a geochemical dispersion of elements in the soil.

Rock Sampling

While mapping, 52 rock geochemical samples were collected and sent to Vangeochem Lab Ltd. for analysis. Most samples were tested for copper, lead, zinc, silver and gold. Tables listing sample numbers, locations, field descriptions, and assays are given in Appendix B. Locations of all rock samples are shown in Figure 4.

A few of these samples were highly anomalous in copper but only one, STR86-38R, located 100 meters northeast of the Original Zone had significantly high gold values associated with it to warrant further investigation.

Trenching

A TD-20E bulldozer with ripper attachment was used to make a total of 15 trenches and approximately one kilometer of new road on the Diane 1 claim. The new road and an additional clearing of 2.4 kilometers of old logging road and skidder trails was necessary to provide an access route to the Original Zone.

The trenches are actually "road cuts" and do not resemble trenches at all. The rather steep terrain makes it easier and faster to build roads rather than dig holes that would later have to be filled. All excavated material has either been recontoured or used as road bases. Some of the road leading to the trenches may be used as drill platforms for any future drilling programs.

Of the 15 trenches, eleven were made on the Original Zone, one trench each on the South Zone, Lowell Zone, and Zinc Zone respectively, and one small trench

at coordinates 650N, 350W on the Fierro Grid next to the road. A total of 240 one meter samples were collected from 14 of the 15 trench sampled. Bad weather and a lack of time prevented the sampling of trench T86-11 on the Original Zone. However, the trench contains no visible mineralization or structures worthy of sampling.

All trench maps complete with assays are given in Appendix C and the location of all mineralized zones and trenches are given in Figure 4.

PROPERTY GEOPHYSICS

Airborne Geophysical Survey

The results of the airborne geophysical survey are compiled under separate cover. The electromagnetic surveys were unsuccessful in outlining any conductors.

The magnetic survey detected a 1 kilometer to 2 kilometer wide, high trending northeast/southwest across Iron Mountain. It terminates abruptly in the northeast corner of the property, but is open toward the southwest.

The high is made up of a number of small magnetic closures whose amplitudes vary up to 500 gammas. The small closures appear to be randomly oriented.

The cause of the high seems to be magnetite, in variable amounts observed throughout the andesite volcanics which under lie the property. The high is cut by two northwest trending relative, magnetic lows, one along Stirling Creek and

one along the unnamed creek located about 700 meters northeast of Stirling Creek. It is possible that these features represent faults particularly along Stirling Creek where a fault is inferred on geological evidence.

PROPERTY GEOLOGY

Introduction

Mapping revealed the presence of a complicated basal package of aphanitic, porphyritic and amygdaloidal flows and pyroclastic rocks of intermediate composition that grades upwards into a series of intercalated rhyolitic and minor andesitic flows and tuffs, abundant fossiliferous limestone and limey sediments. Some minor small lenses of banded jasper are present throughout.

Individual flows and tuff beds lack lateral continuity and defined lithological boundaries are not present. However, some of the jasper banding and flow banding have attitudes of between 020 and 060 degrees and dip gently to moderately steep to the east and southeast respectively.

The rocks appear to be gently folded on a large scale and in proper stratigraphic position younging from northwest to southeast. The basal unit of andesitic flows and lithic tuffs hosts the gold, copper and iron mineralization. This unit is also variably magnetic.

Lithologies

A thin section analysis of 28 individual rock samples from various parts of the property was performed by Harris Exploration Services of Vancouver. The

analyses were used to aid in identifying rock compositions and textures for mapping purposes. Results of the analysis are given in Appendix D.

Due to their complexity the rocks on the property were simply divided into four large mappable units based on their chemical composition: Unit 1 - andesite, Unit 2 - mixed dacite and rhyolite, Unit 3 - rhyolite and Unit 4 - limestone. Each unit was then subdivided on the basis of texture; flows, tuffs, lapilli tuffs, breccia and agglomerate for the volcanics and the presence of fossils or intercalated limey sediments or tuffs for the limestones.

The geology of the Stirling Group is shown in Figure 3 and the geologic legend listing the rocks from oldest to youngest is given below in the following table:

Volcanics

Mixed Andesite Flows and Pyroclastics

- 1A - dark green to grey-black, porphyritic, aphanitic and minor amygdaloidal andesite flows with minor intercalated andesite lithic tuffs, lapilli tuffs and breccia
- 1B - purple and green heterolithic andesitic lapilli tuffs, tuffs and breccia with minor intercalated dark green porphyritic and amygdaloidal andesite flows
- 1C - tan to light green homolithic lapilli tuff/tuff breccia with glassy andesitic matrix, possibly auto brecciated flow
- 1D - dark purple heterolithic tuff breccia/agglomerate

Mixed Dacite to Rhyolite Flows and Pyroclastics

- 2A - pink to purple-grey aphanitic dacitic to rhyolitic tuffs and flows

2B - green porphyritic dacite

Mixed Rhyolite to Rhyodacite Flows and Minor Tuffs

3A - dark purple to grey-black porphyritic rhyodacite flows and minor tuffs

3B - bleached tan aphanitic flow-banded rhyolite

3C - rhyodacite tuffs to lapilli tuff with minor porphyritic rhyodacite flows

Sediments

Limestones and Limey Sediments

4A - dark grey fossiliferous crystalline limestone

4B - grey to greywhite crystalline limestone

4C - dark grey crystalline limestone and medium grained limey sediments and minor intercalated green lapilli tuff

Faulting

Two northwesterly and two northeasterly trending faults were detected by geological mapping and confirmed by the airborne magnetic survey conducted over the property. The survey detected two additional northwesterly and two northeasterly faults, but these have not been confirmed by mapping.

The northwesterly faults all have physiographic expressions in the creeks along the northwest face of Iron Mountain, the most prominent of which corresponds to Stirling Creek. None of these faults appear to be directly associated with any mineralization found to date.

A short northeasterly fault extending from Stirling Creek to an unnamed creek to the south lies subparallel to the 1,300 meter contour (Figures 3 and

6). Copper mineralization in the Original Zone striking northwest appears to abruptly end at this fault.

Fracturing

Fracturing on the property is highly variable with the most intense fracturing localized in areas of mineralization. The N40W fracture set noted by previous workers as being related to most mineralization on the property is indeed the dominate set. Structures hosting gold and copper mineralization in the Original Zone (Figure 3) and exposed by trenching have an average strike of between 133 degrees and 143 degrees and dip shallow to steeply to the southwest. Gold bearing quartz veins in Shaft No. 3 on Fierro 3 (Figure 4) also share the same strike of 143 degrees while dipping steeply to the southwest.

Mineralization

Mineralization encountered during mapping has been of the quartz-hematite-chalcopyrite vein type localized and controlled by local faulting and fracturing. Only the Original Zone and Shaft No. 3 areas carry appreciable gold values to warrant further work. To date structures identified as hosting gold mineralization appear, on the surface, to be too small to be considered of any economic interest. However, such areas should be tested along strike and at depth before any final decisions concerning their fate can be made.

Much of the mineralization follows the 140 degree fracture sets and consequently crosscuts the northeasterly striking lithologies almost at right angles.

Metamorphism

In general, rocks on the property are not strongly altered nor do they show any noticeable metamorphic effects. Chlorite, epidote, and carbonate are common alteration minerals associated with intermediate rocks and quartz and sericite are associated with the the more felsic units.

Geological Model

The complex assemblages of rocks in Iron Mountain definitely resemble a tilted, partially eroded volcanic centre. A 50 meter wide breccia plug mapped by Chevron geologists in 1981 just north of the Charmer area on the Fierro 3 claim may indeed be a volcanic vent. The vent is represented on the geology map, Figure 3.

Claim boundaries of the Stirling Group and all known mineral occurrences on Iron Mountain are superimposed on a horizontal lying, cross section of an idealized volcanogenic massive sulphide system in Figure 5. The distribution of the various mineral showings matches completely with the various chemical zonations of the volcanogenic model. Although not shown in the figure, the various rock types of the model would also fit closely to those on the mountain (Figure 3).

Even more surprising is the fact that the northwest striking fracture system and lithologies hosting the copper and gold mineralization in the Original Zone (as well as the mineralization in the North, South and Lowell Zones) are predicted by the model.

PROPERTY GEOCHEMISTRY

Soil Sampling

Only one gold anomaly of 50 ppb with corresponding zinc and copper values was detected. This anomaly occurs on the boundary between Diane 1 and Fierro 3 on line 900N at 075W of the Fierro grid. The anomaly is approximately 100 meters northwest of known gold mineralization in Shaft No. 3 on JMT's Fierro 3 claim. (All geochemical maps with results are located in Appendix A).

A polished thin section analysis of actual vein material from Shaft No. 3, sample STR-24, detected traces of gold interstitial or adjacent to euhedral masses of limonated pyrite crystals along with abundant malachite, specularite and a few scattered specs of chalcopyrite in a matrix of granular quartz. A sample assay of the same material returned an assay of 0.120 oz/ton gold and 14% copper.

Not surprisingly, some elevated copper values returned down the slope of the mineralization on the North Zone.

Elevated zinc values occur in thin covers of soil that overlie the dactic volcanic rocks within the grid.

Rock sample STR-40R, a limonitic grey pink rhyolitic tuff assaying 5.4% zinc, prompted the trenching in the Zinc Zone near line 100+00N at 92+40E of the Diane grid. A 25 meter long trench was dug with a bulldozer, but the trenching offered no explanation for the occurrence. A small shear or fracture containing

limonite and a few quartz veinlets were uncovered in an otherwise homogenous felsic tuff.

A thin section analysis of identical material from this trench performed by Harris Exploration Services (sample STR-24, Appendix D), failed to identify any source for the high zinc values. It was suggested that the rusty orange coloured secondary mineral called zincite could be mistakenly identified as limonite and be responsible for the anomaly. However, a primary source for this oxide would almost inevitably be present and should have been detected if this were the case. An assay of only 1,040 ppm zinc was obtained from sample STR-24 given to Harris for analysis.

Three assays from trench T86-15 did return an average of 1.6% zinc over 3 meters and the mineralization is still open at the south end of the trench. Normal to below normal background values were obtained for lead, copper and silver.

Further sampling and trenching should be performed on this zone based on the results of soil sampling, geophysics, geology and further prospecting. The property identification of the minerals causing the high values can probably be accomplished with alternate sample material from anomalous areas within the trench.

Rock Sampling

Sample STR 86-38R returned an assay of 1,230 ppb gold but the samples proximal to the Original Zone makes it all the more intriguing. The sample

consists of several pieces porphyritic amygdaloidal andesite containing massive specularite in fractures and amygdales and barren quartz veinlets that appear to strike 135° and dip south 45 to 60°, suggesting the presence of a subparallel zone of mineralization to that of the Original Zone. This area was discovered after trenching on the property had been completed and the equipment was removed from the mountain. Trench results are tabulated in Appendix B.

A zone of previously unknown copper mineralization is present in a rock cut exposed along the Coquihalla Highway, a couple of hundred meters north of the Veale Road (tunnel) underpass. An assay of 29,300 ppm copper was obtained from grab sample STR 86-18R of malachite stained porphyritic andesitic not unlike that of the Original Zone. A gold anomaly of 550 ppb was returned by sample STR 86-14R and consisted of gouge material from a small 8 centimeter wide horizontal fault within the same outcrop.

The copper staining is associated with very narrow, southeast, striking fractures and covers a width of about 3 metres across the face of the roadcut. The wall rocks are unaltered and unmetamorphosed. No trenching was performed as the outcrop is within the Coquihalla Highway mineral reserve and falls just outside the Diane 1 claim boundary (see Figure 4).

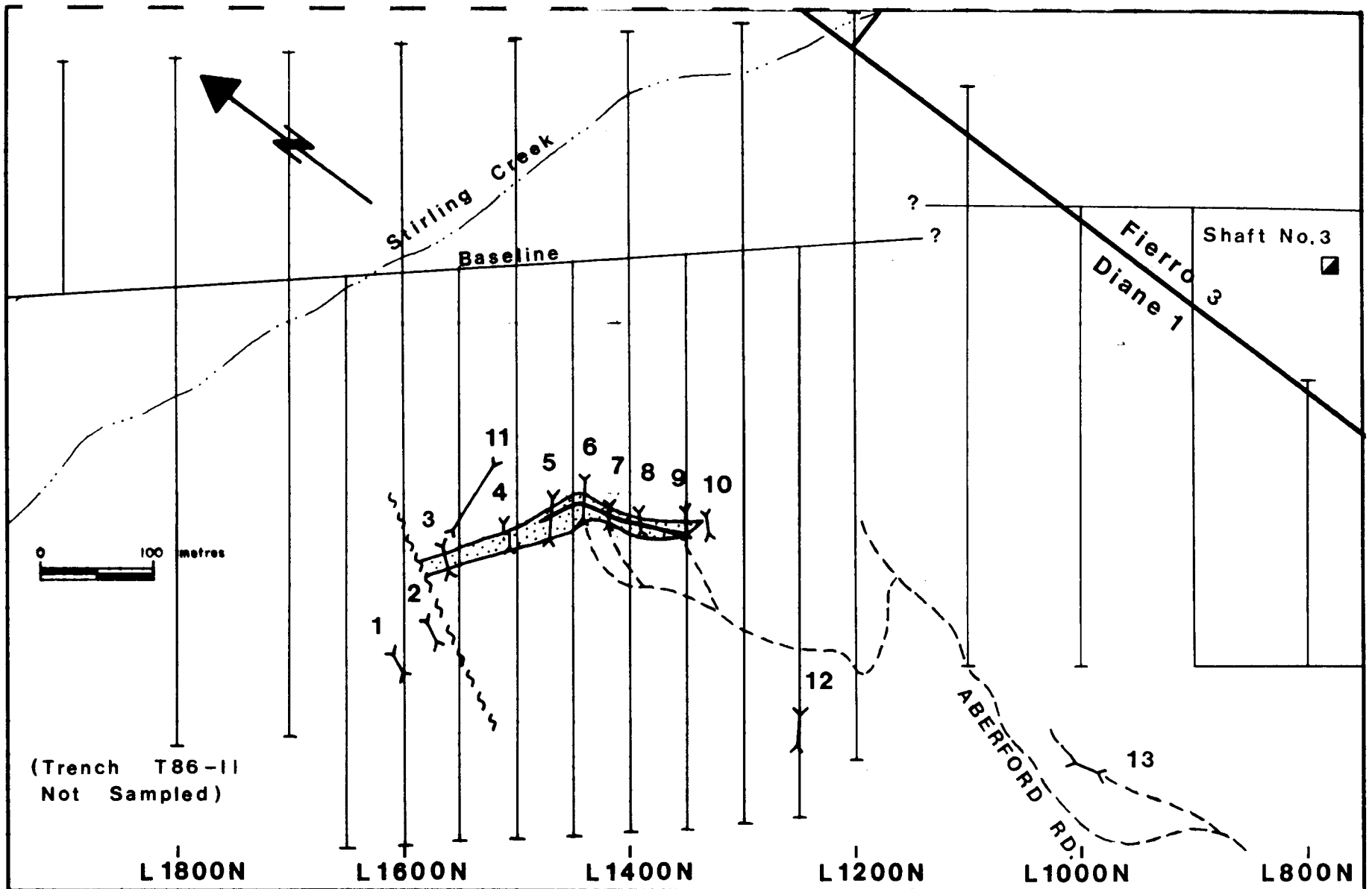
TRENCHING

Original Zone

Trenching along the Original Zone revealed the presence of a small body of very finely disseminated chalcopyrite, secondary malachite and quartz veins containing chalcopyrite and pyrite filling small fractures and shears in dark green andesitic flows, tuffs and lapilli tuffs. The mineralization trends perpendicular to the strike of the volcanics and is exposed to seven of the eleven trenches for a length of 200 meters. In general, structures hosting mineralization dip to the southwest. Grade varies from 0.1% to 0.69% copper over widths of 3 to 16 meters. Trench maps are located in Appendix C

The copper mineralization appears to be abruptly cut off just west of trench T86-3 by a small normal fault that strikes 030° and dips steeply west down slope. The mineralization itself strikes eastward in an arc between 133° and 143° where it again abruptly stops at an apparent lithological change between trenches T86-9 and T86-10 where the andesites grade into more competent and siliceous rhyodacitic rocks. It is conceivable that the zone may continue eastward at depth within the andesites as the rocks are thought to dip in that direction.

Superimposed over this mineralization and striking much the same direction is a hydrothermally altered zone of silicification and massive specular hematite veining that transgresses the confines of the fault and the lithological change. Consequently, specularite is found in all eleven trenches of the Original Zone and is found in varying amounts throughout the volcanic rocks of Iron Mountain. It is possible that much of the same fracture systems hosting copper



0 100 metres

(Trench T86-11
Not Sampled)

L1800N

L1600N

L1400N

L1200N

L1000N

L800N

LEGEND





-  5 TRENCH (Prefixed T86-)
-  FAULT
-  Extent of COPPER Mineralization
-  Extent of GOLD Mineralization

FIGURE 6

**MINERALIZED TRENDS IN
ORIGINAL ZONE-STIRLING GROUP
INT'L MAPLE LEAF RES. CORP.**

OREQUEST



mineralization were also used later by circulating hydrothermal fluids that deposited the quartz-specularite mineralization.

Gold values ranging from 0.164 to 0.284 oz/ton over a meter were obtained from small rusty shears less than a meter wide in trenches T86-5, T86-8 and T86-9 and an assay averaging 0.166 oz/ton over two meters was returned from trench T86-7. Two assays ten meters apart of 0.034 and 0.039 oz/ton over a meter were retrieved from trench T86-6.

Figure 6 shows mineralized trends in these trenches and suggests that a narrow but continuous gold bearing structure striking 143° for a length of 115 meters may indeed exist. However, a brief inspection of the gold bearing structures in each trench indicated that no real continuity exists between them.

Although the trenching failed to detect a sizable zone of gold mineralization it did, however, identify structures hosting such mineralization and some significant gold values were obtained to warrant recommending further work on the zone.

South Zone and Lowell Zone

Both zones contain botryoidal malachite, chalcopyrite, pyrite and quartz-specularite veins or stockwork along narrow shears (less than 1m in width) and fractures in mixed porphyritic and aphanitic andesite flows and lithic tuffs. Abundant chalcopyrite, malachite and specularite were encountered in a 10 cm wide quartz vein in the South Zone. The mineralization is almost identical to that in the Original Zone except that no gold values were detected.

Mineralized trends for both trenches are shown in Figure 6.

Trench T86-12 in the South Zone returned assays from three two meter intervals spaced four meters apart that run an average of 0.22%, 0.45% and 0.14% Copper respectively. A brief inspection of that area failed to detect any further surficial mineralization along strike.

Mineralization in the Lowell Zone was uncovered quite by accident while extending the road towards the Original Zone. The zone is approximately 250 meters southeast of the South Zone along side of a barren trench at the end of the older access road in that area. Mineralization here strikes almost perpendicular to that in the South Zone.

Trench T86-13 in the Lowell Zone returned assays from two intervals averaging 0.13% copper over 4 meters and 0.20% copper over 7 meters respectively. Fracture sets containing the most visible mineralization appear to strike 040° and dip steeply to the southeast. The area is covered with one to two meters of till and no further mineralization was discovered along strike.

Trench T86-14

A small six meter trench, T86-14, was made in grey to pink rhyodacitic tuffs resembling those in the Zinc Zone at coordinates 650N, 350W of the Fierro grid next to the road. Rocks here appeared partly sheared and silicified.

All assays reflect normal to below normal background levels for each of the elements tested. However, an assay of 0.034 oz/ton gold over a meter was

returned at the northeast end of the trench, although there were no elevated values for any other elements over the same interval (ie. silver).

This rather small anomaly should be followed up with further trenching and sampling.

Zinc Zone

Rock sample STR-40R, a limonitic grey pink rhyolitic tuff assaying 5.4% zinc, prompted the trenching in the Zinc Zone near line 100N+00N at 92+40E of the Diane grid. A 25 meter long trench was dug with a bulldozer but the trenching offered no explanation for the occurrence. A small shear or fracture containing limonite and a few quartz veinlets were uncovered in an otherwise homogenous felsic tuff.

A thin section analysis of identical material from this trench performed by Harris Exploration Services (sample STR-24, Appendix D), failed to identify any source for the high zinc values. It was suggested that the rusty orange coloured secondary mineral is zincite could be mistakenly identified as limonite and be responsible for this anomaly. However a primary source for this oxide would almost inevitably be present and should have been detected if this were the case. An assay of only 1,040 ppm zinc was obtained from sample STR-24 given to Harris for analysis.

Three assays from trench T86-15 did return an average of 1.6% zinc over 3 meters and the mineralization is still open at the south end of the trench. Normal to below normal background values were obtained for lead, copper, and

silver.

Additional sampling and trenching should be performed on this zone based on the results a future program of soil sampling, geophysics, geology or further prospecting. Proper identification of minerals causing the high zinc values can probably be accomplished with alternate sample material from anomalous areas within the trench.

CONCLUSIONS

An exploration program consisting of geological mapping, geochemical sampling, airborne geophysics and trenching was completed November 8, 1986 on the Stirling Group - Diane 1 to 5 claims located 8 kilometers due south of Merritt, B.C.

Mapping and sampling of various mineral occurrences and rock types on the property identified a chemical zonation in an andesite - rhyolite sequence similar to that of volcanogenic massive sulphide systems.

Trenching on the Original Zone outlined a zone of primary and secondary copper mineralization along a fracture system in andesitic flows and lithic tuffs. The zone strikes between 133 and 143 degrees for a length of 200 meters. Grade varies from .1% to .69% copper over widths of 3 to 16 meters.

A narrow zone of gold mineralization may also be present within the copper body. Assays ranging from .162 to .284 oz. per ton gold over one meter widths were obtained from small rusty shears in four consecutive trenches of the ten

trenches sampled. The zone appears to strike 143 degrees for a length of 125 meters.

Soil sampling detected a 50 ppb gold anomaly with corresponding high zinc and copper values 100 meters northwest of known gold mineralization in Shaft No. 3 on the Fierro 3 claim owned by JMT of Vancouver. The anomaly has yet to be followed up.

Rock sampling located two additional copper occurrences, the Lowell Zone, 400 meters southeast of the Original Zone and in a rock cut along the Coquihalla Highway. Mineralization is similar to the Original Zone except that no significant gold values are present.

Also discovered during sampling was the Zinc Zone located at 100+00N and 92+40E on the Diane grid. Assays averaging 1.6% zinc across three meters are present although minerals hosting the zinc were not identified.

Helicopter-borne magnetic and electromagnetic geophysical surveys failed to detect any conductors that may host sulphide or gold mineralization. The surveys did, however, confirm the presence of northwest and north east trending faults inferred by geologic mapping.

Several mineralized areas found by previous workers have to be evaluated. These include the North, STG and L.A. Zones.

RECOMMENDATIONS

Further work is recommended on the Stirling property. Work on the Original Zone indicates that economic mineralization exists, but is erratic in occurrence. A preliminary diamond drill program of 1,000 meters is recommended to test the continuity and strength of the mineral system at depth in the Original Zone. Ten 100 meter diamond drill holes, spaced every 25 to 50 meter could be used to test the zone at various depths along a 300 meter strike length. Drill sludges should be collected at three meter intervals and assayed for both copper and gold.

Based on results from this preliminary drill program additional property work would be recommended. This additional work would include further trenching along strike, more detailed rock sampling, prospecting and mapping on the new occurrences discovered this year as well as on previously discovered mineral showings yet to tested. The next phase (Phase II) of work is estimated to cost \$190,000.

COST ESTIMATES

Phase II

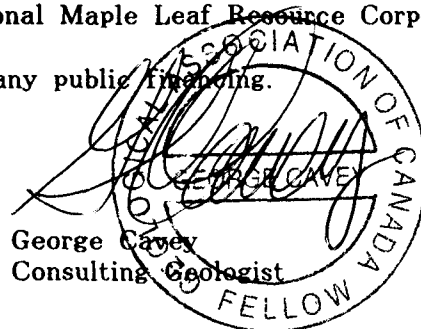
Diamond Drilling - 3,000 meters @ \$80/meter	\$ 80,000
Wages	10,000
Analysis - 750 samples @ \$20/sample	15,000
Geological Mapping and Sampling	10,000
Trenching	10,000
Microscopic Studies	2,000
Camp Costs and Supplies	23,000
Supervision and Report	15,000
Contingencies @ 15%	<u>25,000</u>
TOTAL COST OF PHASE II	<u>\$190,000</u>
TOTAL COST OF PROGRAM	<u>\$190,000</u>

QUALIFICATIONS

I, George Cavey, of 6891 Wiltshire Street, Vancouver, British Columbia hereby certify:

1. I am a graduate of the University of British Columbia (1976) and hold a BSc. degree in geology.
2. I am presently employed as a consulting geologist with OreQuest Consultants Ltd. of 404-595 Howe Street, Vancouver, British Columbia.
3. I have been employed in my profession by various mining companies for the past ten years.
4. I am a Fellow of the Geological Association of Canada.
5. I am a Member of the Canadian Institute of Mining and Metallurgy.
6. The information contained in this report was obtained from an onsite property examination and supervision of the field work program conducted by OreQuest Consultants Ltd. between September 20 to November 8, 1986.
7. Neither OreQuest Consultants Ltd. nor myself have or expect to receive direct or indirect interest in the property described nor in the securities of International Maple Leaf Resource Corporation.
8. This report may be used by International Maple Leaf Resource Corporation for all corporate purposes and including any public financing.

George Cavey
Consulting Geologist

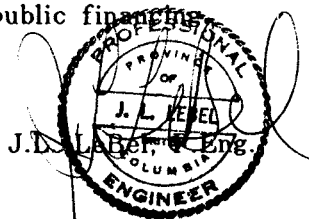


DATED at Vancouver, British Columbia, this 30th day of December, 1986.

CERTIFICATE of QUALIFICATIONS

I, J. L. LeBel, of 436 W. 6th Street, North Vancouver, British Columbia
hereby certify:

1. I am a graduate of the Queens University (1971) and the University of Manitoba (1973) and hold a BSc. degree in geological engineering and a MSc. degree in geophysics.
2. I am a Professional Engineer registered with the Association of Professional Engineers of British Columbia, Vancouver, British Columbia.
3. I have been employed in my profession as a geophysicist with various companies since 1972.
4. The information contained in this report is based on data obtained by OreQuest Consultants Ltd. during the 1986 field program.
5. I own no direct, indirect or expect to receive or contingent interests in the subject property or shares or securities of International Maple Leaf Resources Corporation.
6. This report may be used by International Maple Leaf Resource Corporation for all corporate purposes including any public financing.

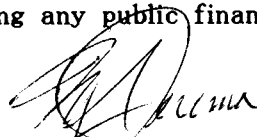


DATED at Vancouver, British Columbia, this 30th day of December, 1986.

QUALIFICATIONS

I, Michael Jerema, of 10734-120th Street, Surrey, British Columbia hereby certify:

1. I am a graduate of the University of Saskatchewan (1984) and hold a BSc. Advanced degree in geology.
2. I am presently employed as an exploration geologist with OreQuest Consultants Ltd. of 404-595 Howe Street, Vancouver, British Columbia.
3. I have been employed in my present profession by various mining companies for the past two years.
4. I have been actively involved with the mineral exploration industry in Canada and Australia for the past twelve years.
5. The information contained in this report is based on my personal onsite supervision of field work conducted by OreQuest Consultants Ltd. between the date of September 20 to November 8, 1986.
7. Neither OreQuest Consultants Ltd. nor myself have or expect to receive direct or indirect interest in the property described nor in the securities of International Maple Leaf Resource Corporation.
8. This report may be used by International Maple Leaf Resource Corporation for all corporate purposes and including any public financing.



Michael Jerema
Project Geologist

DATED at Vancouver, British Columbia, this 30th day of December, 1986.

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APPENDIX A

**SOIL GEOCHEMICAL MAPS
GOLD (ppb), SILVER (ppm), COPPER (ppm) and ZINC(ppm)
SOIL SAMPLE LOCATIONS**

APPENDIX B
ROCK GEOCHEMISTRY
SAMPLE LOCATIONS, DESCRIPTIONS and ASSAYS

See Figure 4
for location

STIRLING GROUP - DIANE CLAIMS
MERRITT, B.C.
ROCK GEOCHEMISTRY

- no assay
nd none detected

Sample No.	Location Line/Station	Rock Description	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
STR 86-1R	L124N/120+00E	-rusty fractures & qtz veins in rhyodacite tuff	4	-	-	-	nd
STR 86-2R	L125N/108+25E	-shear, feldspar porphyry, very rusty	46	-	-	-	nd
STR 86-3R	L125N/108+25E	-chip sample, feldspar porphyry, up to 5% euhedral Py & He patches	55	-	-	-	nd
STR 86-4R	L125N/105+00E	-extremely rusty gossan	27	-	-	-	nd
STR 86-5R	L123N/106+00E	-abundant quartz veining in brecciated feldspar porphyry	26	-	-	-	nd
STR 86-6R	L120N/117+00E	-breccia, qtz shear in rhyolite, feldspar porphyry, some qtz stringers	15	-	-	-	nd
STR 86-7R	L120N/119+50E	-feldspar porphyry with intense fracturing & limonite	1	-	-	-	nd
STR 86-8R	L120+10N 118+50E	-rusty qtz veining, drusy qtz with some hematite & limonite in vugs	16	-	-	-	nd
STR 86-9R	L118+60N 120+00E	-banded iron formation, jasper + hematite	2	-	-	-	nd
STR 86-10R	Coquihalla Hwy L125N/90+50E	-dark grey fine grain tuff, very siliceous epidote, qtz vein, limonitic alteration	56	27	51	0.6	290
STR 86-11R	Coquihalla Hwy	-same as 10R	43	10	8	0.7	410

Sample No.	Location Line/Station	Rock Description	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
STR 86-12R	Coquihalla Hwy 13m south of 10R & 11R	-chalcopyrite & malachite dissem. in feldspar porphyry	1090	5	24	0.3	10
STR 86-13R	Coquihalla Hwy	-quartz vein	17	5	7	1.1	70
STR 86-14R	Coquihalla Hwy 119N/88+00E	-gouge (very limonitic) from low angle fault; grab sample along fault	277	26	56	0.4	550
STR 86-15R	As above	-same location as 14R; banded iron formation located just above low angle fault. Some hematite + jasper	36	10	12	0.3	10
STR 86-16R	As Above	-calcite breccia in andesite, andesite breccia clasts	13	19	44	nd	nd
STR 86-17R	As Above	-shear, fault gouge (2m wide)	51	6	53	0.3	nd
STR 86-18R	As above	-feldspar porphyry, malachite stain, disseminated chalcopyrite	29300	12	54	0.2	20
STR 86-19R	As above	-kaolinite altered lapilli tuff, purple-white colour	89	3	4	0.2	nd
STR 86-20R	L125N/99+00E 50m south of L125N	-feldspar porphyry with 5% dissem. Py, tuffaceous porphyry, chlorite and epidote alteration	32	9	11	0.2	nd
STR 86-21R	L100N/122E	-quartz vein and stringers, abundant limonite in siliceous feldspar porphry	4	22	208	nd	nd
STR 86-22R	BL100E/111+50N	-calcite and epidote veining in dark grey tuff, quite siliceous, rusty weathering	12	30	79	0.3	5

Sample No.	Location Line/Station	Rock Description	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
STR 86-23R	BL100E/112+60N	-porphyritic andesite with pyrrhotite and pyrite to 5%, minor specular hematite; siliceous	11	14	155	0.2	10
STR 86-24R	L115N/95+80E	-specularite veining along fracture surfaces with malachite or azurite staining	1260	13	16	12.4	440
STR 86-25R	As above	-dark grey green fine grained tuff with hematite and limonite staining	1500	11	14	7.5	580
STR 86-26R	L115N/97+75E	-quartz float with limonite between drusy quartz crystals	15	14	117	0.6	nd
STR 86-27R	200m south of L90N/117+75E	-chalcedonic quartz veins in medium to light green dacitic tuff. Quartz veins brecciate rock, trace of pyrite	5	15	50	nd	nd
STR 86-28R	L92+50N/121+50E	-extremely rusty very fine grain dacite, siliceous, minor calcite veining, some hematite	5	15	26	0.1	nd
STR 86-29R	L91+75N/121+50E	-extremely rusty weathered light green siliceous porphyritic dacite	40	24	277	1.2	nd
STR 86-30R	L95+70N/112+50E	-quartz and epidote veining and sweats in dark grey tuff	80	19	100	0.3	nd
STR 86-31R	L95N/115+50E	-gouge and sheared rock from fault in dark grey limestone. Limonitic with traces of malachite, chalcopryrite, specularite and calcite veining	2990	32	70	0.2	nd
STR 86-32R	L97+50N/120+25E	-milky white bull quartz in porphyritic light green dacite	24	6	20	nd	nd

Sample No.	Location Line/Station	Rock Description	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
STR 86-33R	L97+50N/120+50E	-quartz sweats in dacite (as in 32R)	2	10	30	nd	nd
STR 86-34R	L115N/100+50E	-brecciated andesite and andesitic tuff, aphanitic dark green to purplish green, siliceous	17	18	125	0.1	nd
STR 86-35R	L115N/101+50E	-pale greenish grey very fine grain siliceous porphyritic dacite flow. Minor specularite veins 2 mm thick	3	9	22	nd	nd
STR 86-36R	L110N/114+50E	-quartz vein with hematite and limonite stain in pink purple fine grain siliceous rhyodacite, rusty weathering	56	23	189	0.6	nd
STR 86-37R	L110N/97+50E	-1 mm specularite veinlets filling fine fractures in dark grey-black andesite tuff or aphanitic flow	125	11	95	nd	nd
STR 86-38R	L110N/96+20E	-1 to 10% specularite in small fractures, amygdales and quartz veins in grey-black to green-grey porphyritic andesite. Trends 135° and dips south 45° to 60°	304	15	55	1.2	1230
STR 86-39R	L110N/90+50E	-specularite patches and veinlets in jasper float on talus slope. May have been humanly transported	700	16	45	6.8	820
STR 86-40R	L100N/92+25E	-minor quartz veining in rhyodacite tuff. Hematite and limonite boxwork. Minor specularite.	111	1120	54000	5.6	nd
STR 86-41R	L100N/87+00E	-quartz veining and siliceous breccia fragments in aphanitic dacitic matrix. Hematite and limonite stain.	75	10	92	0.1	nd

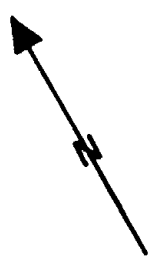
Sample No.	Location Line/Station	Rock Description	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
STR 86-42R	L100N 84+ 00 E	- specularite stringers and blebs in green and pink mottled looking dacitic tuff. Siliceous, rusty weathering	153	11	50	0.2	nd
STR 86-43R	L1300N/175E (Fierro Grid)	- dark green-grey andesitic crystal and lithic tuff. Specularite in fractures, traces pyrite	350	13	120	0.2	5
STR 86-44R	L105N/98+25E	- dark green very fine grain andesitic tuff or flow; some beige feldspar crystals. Specularite blebs in amygdules	300	12	76	nd	nd
STR 86-45R	L700N/245W (Fierro Grid)	- grab sample of specularite veining, massive specularite with altered pink siliceous angular fragments, lapilli tuff breccia	5	6	9	0.6	10
STR 86-46R	L700N/245W (Fierro Grid)	- specularite, quartz, talc veinlets in lapilli tuff breccia, extremely altered, limonitic, siliceous	5	5	9	0.4	nd
STR 86-47R	L700N/315 W (Fierro Grid)	- possible fault zone, extremely altered siliceous pyritic, limonitic, hematitic tuff, lapilli tuff	26	5	42	nd	nd
STR 86-48R	L300S/315W (Fierro Grid)	- quartz vein in green porphyritic andesite	156	16	85	0.3	nd

Sample No.	Location Line/Station	Rock Description	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
STR 86-49R	L100+50N/92+55E	-hematite in green to pale pink-beige altered dacitic lapilli tuff; extremely fractured with abundant limonite	205	9	124	.01	.005
STR 86-50R	L100N/92+75E	-yellow-beige altered limonitic tuff to tuff breccia; siliceous. (possible float)	27	11	107	.01	.005
STR 86-51R	12m south of L1450N/260W (Fierro Grid)	-white quartz, specularite, pyrite, chalcopyrite; malachite veins in dark grey green aphanitic andesite flow. Vein 1.5cm thick. Pyrite and chalcopyrite in center of vein; rusty weathering	5000	15	98	.10	.020

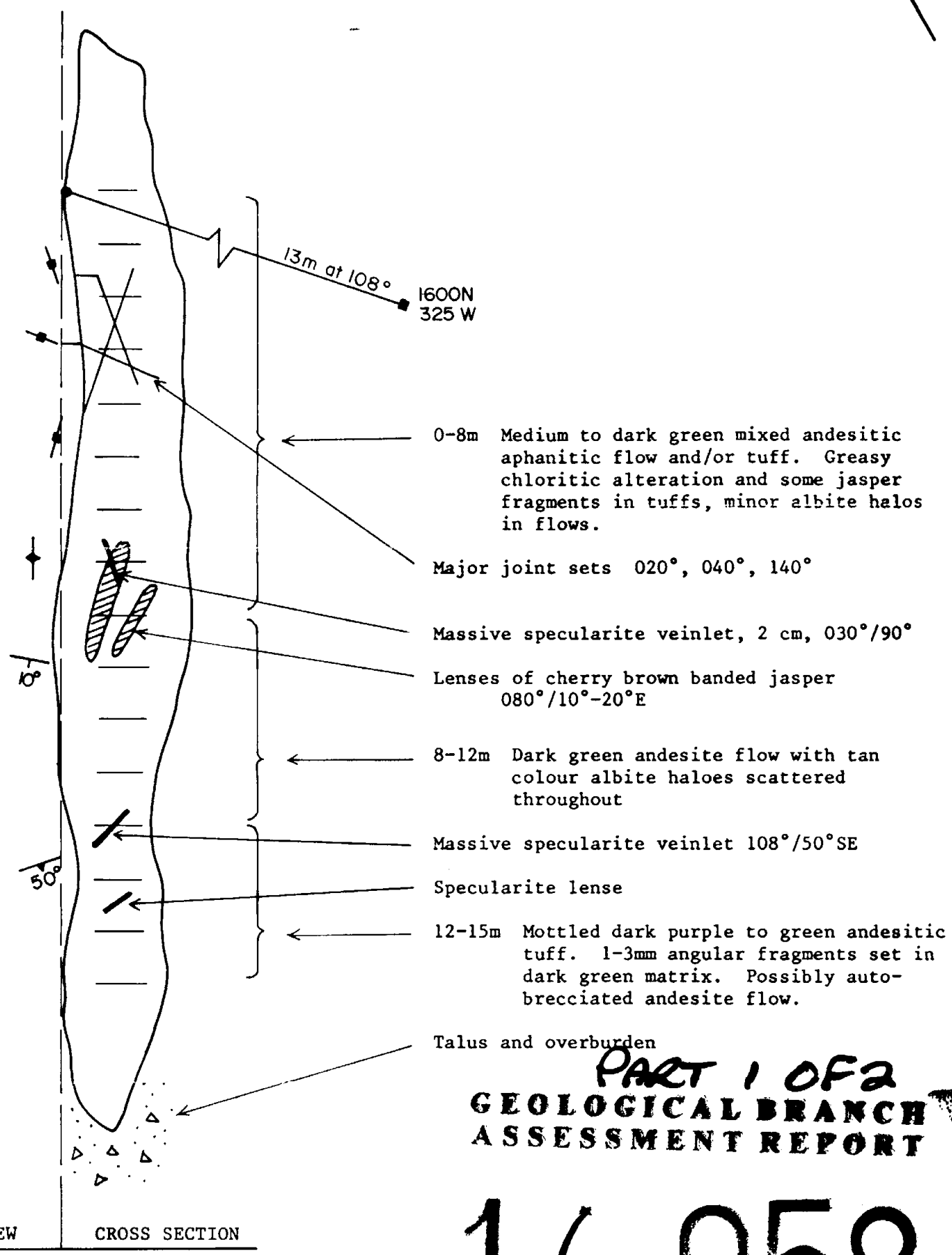
Sample No.	Location Line/Station	Rock Description	Cu %	Pb %	Zn %	Ag oz/t	Au oz/t
STR 86-52R	Shaft #3 L800N/50W (Fierro Grid)	-narrow 2 inch quartz veins with botyroidal malachite, specularite and limonite with dogs tooth quartz crystal intergrowth down center of veins. Samples from shaft 3 were reported to have assays to 6 oz/t in vein material. NIL assays in host rock	14.00	-	.01	.73	.120

APPENDIX C

**TRENCHES MAPS: T86-1 to T86-15
GEOLOGY and ASSAYS**



Sample number	Cu ppm	Zn ppm	Ag oz/ton	Au oz/ton
03876	33	60	.01	.005
03877	80	55	.01	.005
03878	70	32	.07	.005
03879	55	53	.04	.005
03880	112	20	.02	.005
03881	110	49	.04	.005
03882	142	56	.02	.005
03883	211	48	.01	.005
03884	120	54	.05	.005
03885	100	51	.01	.005
03886	39	22	.03	.008
03887	110	28	.04	.005
03888	349	75	.07	.005
03889	184	46	.02	.005
03890	80	42	.02	.005



- 0-8m Medium to dark green mixed andesitic aphanitic flow and/or tuff. Greasy chloritic alteration and some jasper fragments in tuffs, minor albite halos in flows.
- Major joint sets 020°, 040°, 140°
- Massive specularite veinlet, 2 cm, 030°/90°
- Lenses of cherry brown banded jasper 080°/10°-20°E
- 8-12m Dark green andesite flow with tan colour albite haloes scattered throughout
- Massive specularite veinlet 108°/50°SE
- Specularite lense
- 12-15m Mottled dark purple to green andesitic tuff. 1-3mm angular fragments set in dark green matrix. Possibly auto-brecciated andesite flow.
- Talus and overburden

**PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,058

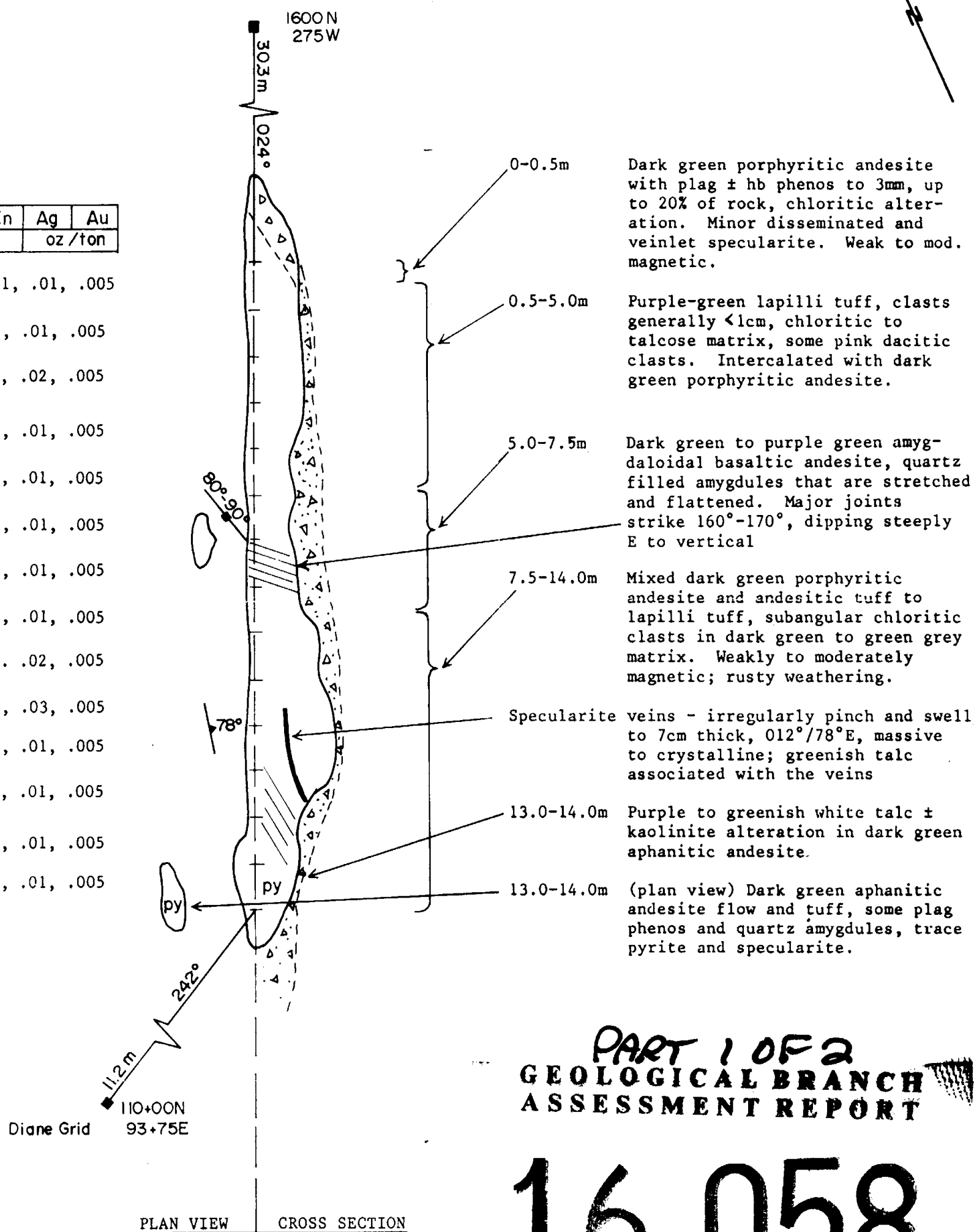
0 2m
Scale 1:100
LENGTH 15 m.
ORIENTATION 030°

STIRLING GROUP DIANE CLAIMS
INT'L MAPLE LEAF RESOURCE CORP.
OREQUEST

ORIGINAL ZONE
TRENCH T86-1

meters
0
2
4
6
8
10
12
14

Sample number	Cu	Zn	Ag	Au
	ppm	ppm	oz/ton	oz/ton
03862	146, 21,	.01,	.005	
03863	30, 22,	.01,	.005	
03864	16, 25,	.02,	.005	
03865	38, 60,	.01,	.005	
03866	70, 50,	.01,	.005	
03867	43, 40,	.01,	.005	
03868	27, 24,	.01,	.005	
03869	29, 24,	.01,	.005	
03870	19, 80,	.02,	.005	
03871	55, 26,	.03,	.005	
03872	52, 61,	.01,	.005	
03873	10, 76,	.01,	.005	
03874	19, 41,	.01,	.005	
03875	30, 55,	.01,	.005	



PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,058

0 2m
Scale 1:100

LENGTH 14 m.
ORIENTATION 024°

STIRLING GROUP DIANE CLAIMS

INT'L MAPLE LEAF RESOURCE CORP.

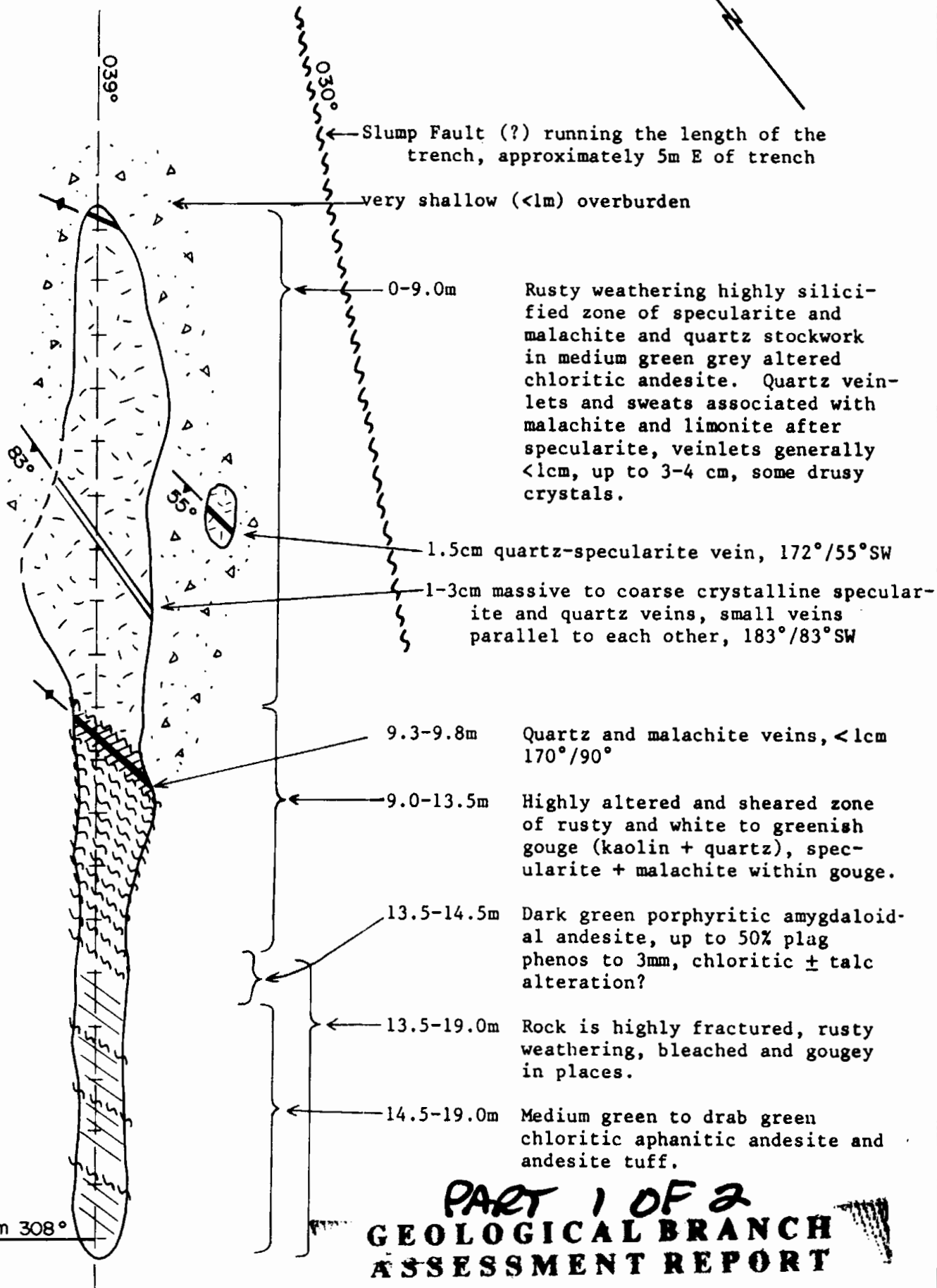
OREQUEST



ORIGINAL ZONE

TRENCH T86-2
(Formerly Trench W)

Sample number	Cu	Zn	Ag	Au
	ppm		oz / ton	
03843	950	115	.07	.005
03844	5400	45	.15	.005
03845	1830	73	.06	.005
03846	1080	60	.09	.005
03847	540	27	.07	.005
03848	490	22	.04	.005
03849	2950	10	.14	.006
03850	3650	9	.13	.005
03851	750	10	.05	.005
03852	3650	35	.06	.006
03853	2490	80	.01	.005
03854	1680	108	.01	.005
03855	2960	114	.07	.005
03856	2300	91	.06	.005
03857	1700	50	.07	.005
03858	85	21	.08	.005
03859	114	16	.02	.005
03860	39	15	.05	.005
03861	260	26	.01	.005



PLAN VIEW

16,058



LENGTH 19 m.
ORIENTATION 039°

STIRLING GROUP DIANE CLAIMS

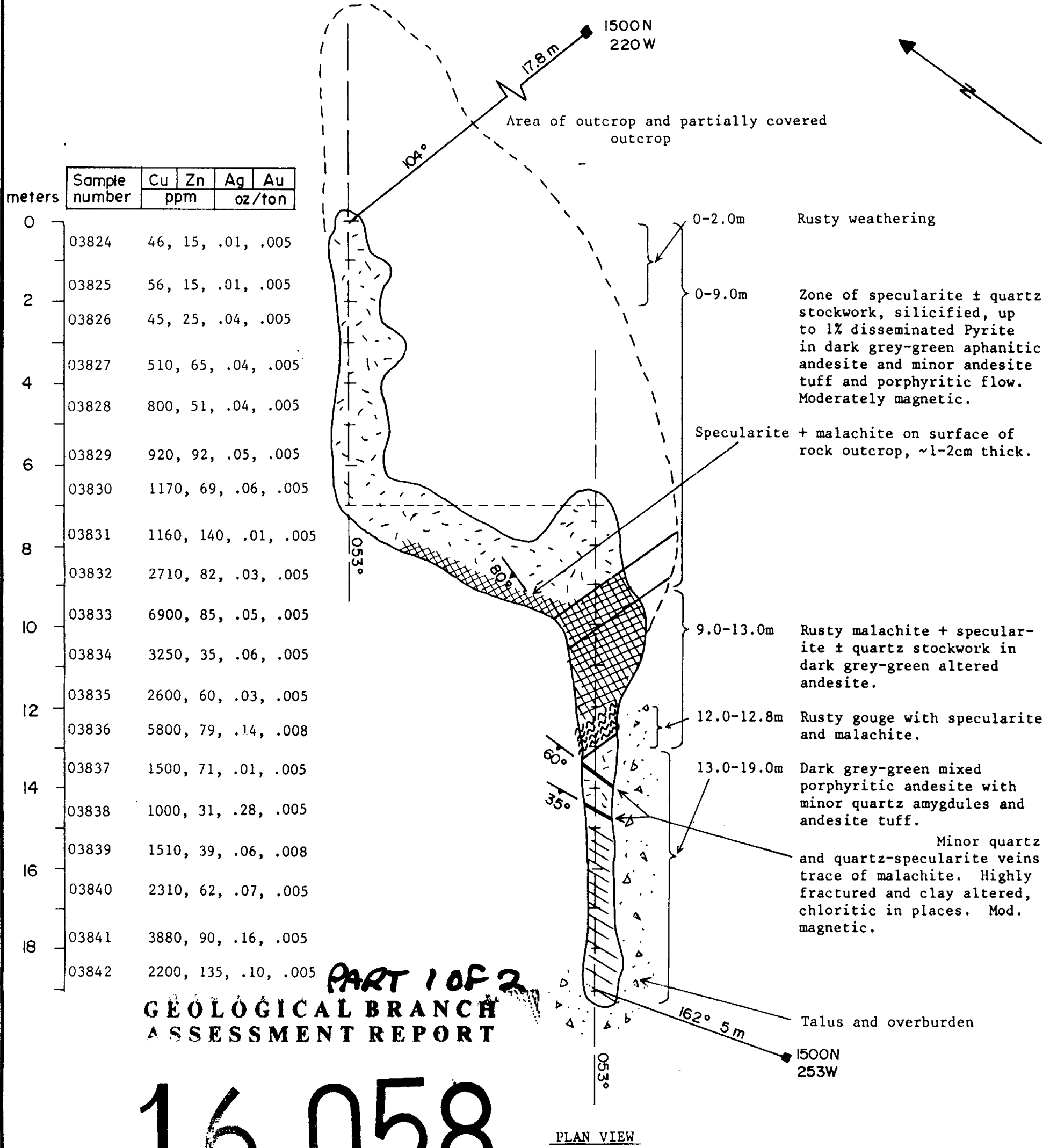
INT'L MAPLE LEAF RESOURCE CORP.

OREQUEST



ORIGINAL ZONE

TRENCH T86-3



16,058

PART 1 OF 2

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**



LENGTH 19 m.
ORIENTATION 053°

STIRLING GROUP DIANE CLAIMS

INT'L MAPLE LEAF RESOURCE CORP.

REQUEST

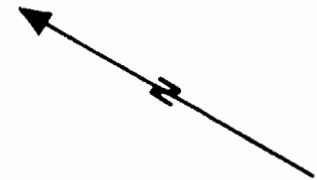


ORIGINAL ZONE

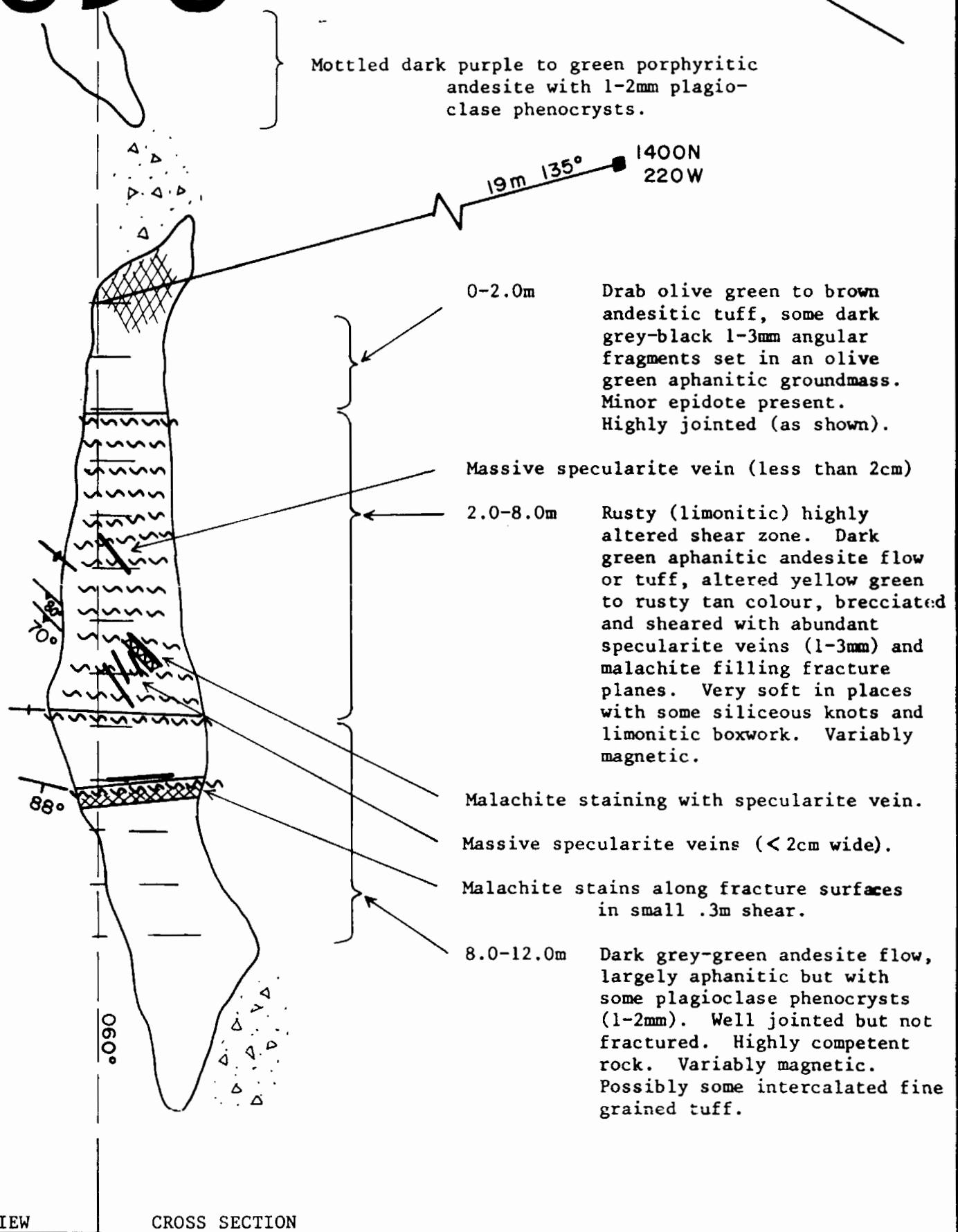
TRENCH T86-4

(Formerly Trenches K & L)

16,058



meters	Sample number	Cu	Zn	Ag	Au
		ppm	ppm	oz/ton	oz/ton
0	08162	54, 55		.01, .005	
	08163	146, 71		.04, .005	
2	08164	860, 95		.04, .005	
	08165	1490, 41		.33, .164	
4	08166	1010, 34		.37, .169	
	08167	1260, 47		.09, .040	
6	08168	990, 36		.09, .010	
	08169	2150, 21		.11, .034	
8	08170	1150, 59		.07, .006	
	08171	800, 66		.04, .005	
10	08172	550, 30		.04, .005	
	08173	291, 27		.03, .005	
12					



PLAN VIEW

CROSS SECTION



LENGTH 12 m.
ORIENTATION 060°

STIRLING GROUP DIANE CLAIMS

INT'L MAPLE LEAF RESOURCE CORP.

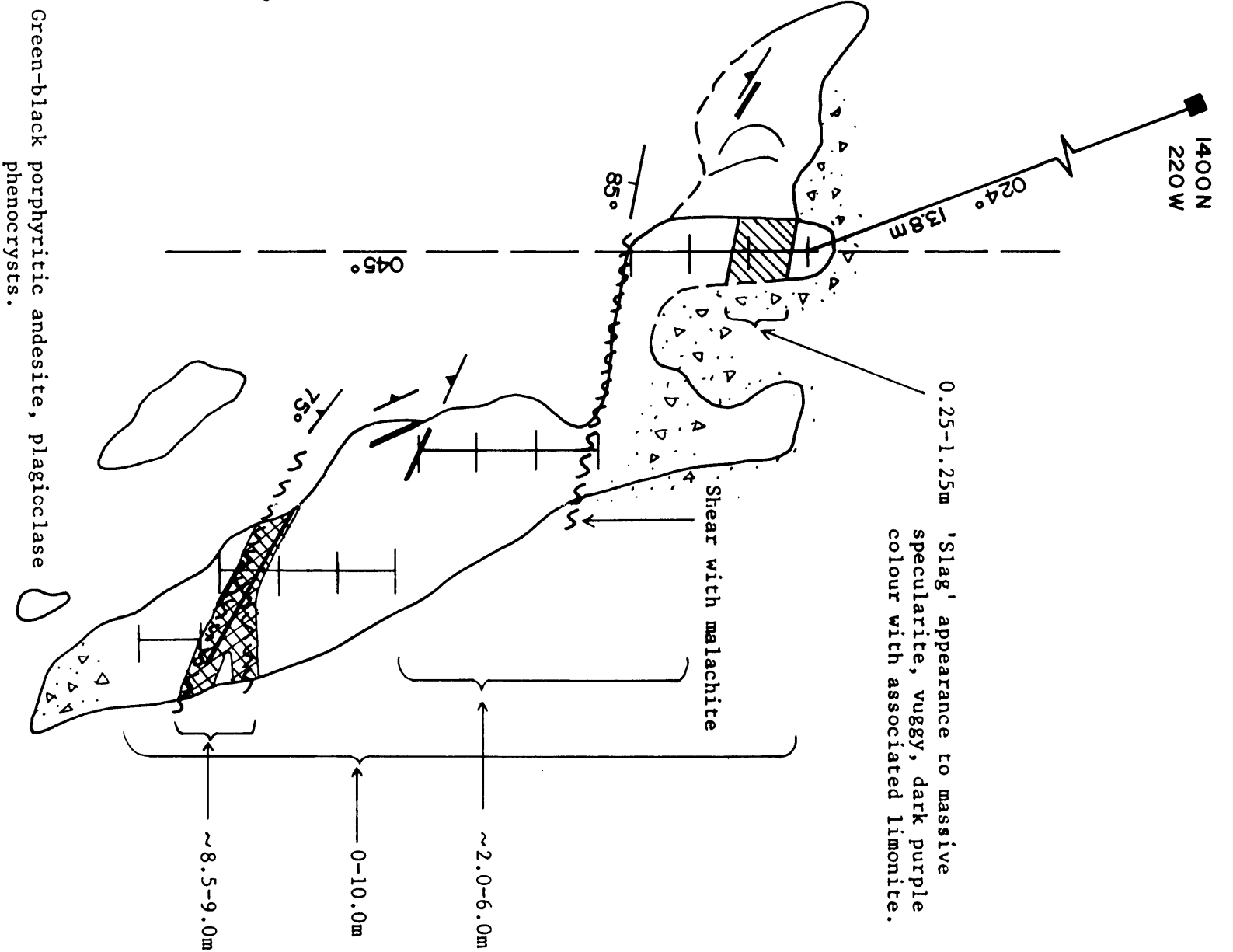
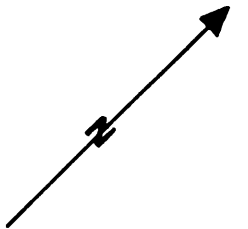
OREQUEST



ORIGINAL ZONE

TRENCH T86-7
(Formerly Trench H)

meters	Sample number	Cu	Zn	Ag	Au
		ppm			
0	08152	15, 35, .02, .005			
2	08153	1250, 85, .09, .026			
2	08154	3060, 95, .22, .264			
4	08155	3060, 100, .21, .008			
4	08156	1170, 103, .02, .005			
6	08157	1150, 75, .05, .005			
6	08158	540, 90, .01, .018			
8	08159	590, 95, .01, .016			
8	08160	1490, 105, .08, .005			
10	08161	54, 55, .01, .005			



PLAN VIEW

PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,058

Dark green to black andesite, fine to medium grained mixed andesite flow and tuff. (?) Some micro-brecciation and some auto-brecciated lapilli sized clasts = Flow Breccia.

40cm shear, highly fractured with abundant malachite and specularite mineralization in 1cm quartz veinlets - stockwork.

Minor Specularite veinlets, to 5% locally; minor malachite.



Scale 1:100

LENGTH 10 m.
 ORIENTATION 045°

STIRLING GROUP DIANE CLAIMS

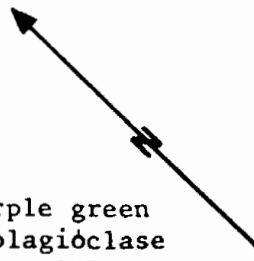
INT'L MAPLE LEAF RESOURCE CORP.

OREQUEST



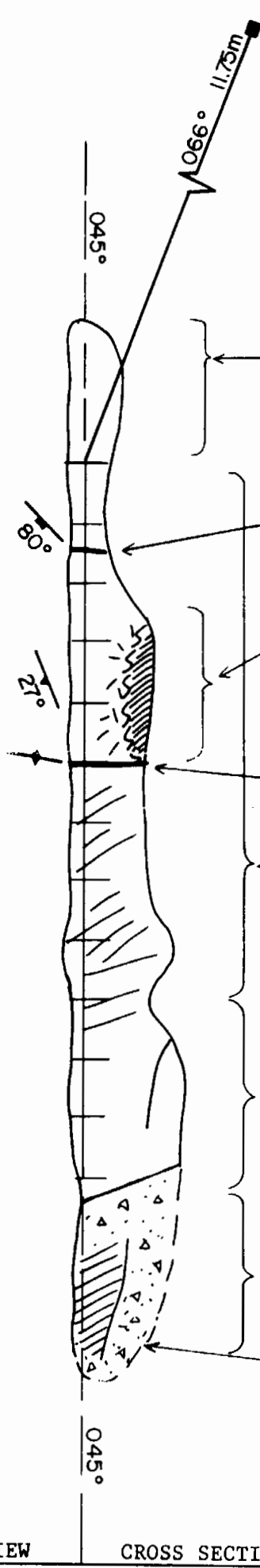
ORIGINAL ZONE

TRENCH T86-8



1350N
220W

At northwest end of road-cut is purple green porphyritic andesite, plagioclase phenocrysts to 4mm, up to 25% of rock.



Dark grey-green andesitic tuff, clasts to 4mm, and aphanitic andesite flow.

1.5m
Minor (<2mm thick) specularite coating along fracture and as discreet blebs.

2.5-5.0m
Specularite coating on exposed fracture surface (<2mm thick) above dark green-grey siliceous andesite and andesite lapilli tuff, rusty weathering, some gouge, trace malachite.

5.0m
1cm specularite + quartz vein 144°/90°

0-9.0m
Dark green to green + pink lapilli tuff, andesitic matrix with andesite, chloritic and pink dacite clasts to 5cm, generally 1cm, rusty weathering, variably siliceous and magnetic. Some mixed andesite flow and fine grained andesitic tuff, brown to rusty brown weathering. Moderate jointing.

9.0-12.0m
Minor specularite and quartz veins (<3mm thick) and disseminated blebs (to 4mm across) in green to dark green grey and pink andesite/andesitic dacite. Fairly competent rock.

past 12.0m
Porphyritic dark green andesite, 5-10% plagioclase phenocrysts.

Talus and overburden

PART 1 OF 2

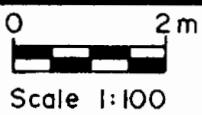
GEOLOGICAL BRANCH ASSESSMENT REPORT

16,058

Sample number	Cu	Zn	Ag	Au
	ppm		oz/ton	
09665	84	44	.01	.005
09666	35	30	.01	.005
09667	300	80	.06	.005
09668	1510	102	.05	.005
09669	1300	57	.01	.026
09670	1160	120	.01	.005
09671	121	96	.03	.015
09672	196	103	.04	.012
09673	154	105	.02	.005
09674	235	144	.05	.005
09675	316	130	.04	.005
08151	1350	52	.18	.183

0
2
4
6
8
10
12
meters

PLAN VIEW CROSS SECTION



Scale 1:100

LENGTH 12m.
ORIENTATION 045°

STIRLING GROUP DIANE CLAIMS

ORIGINAL ZONE

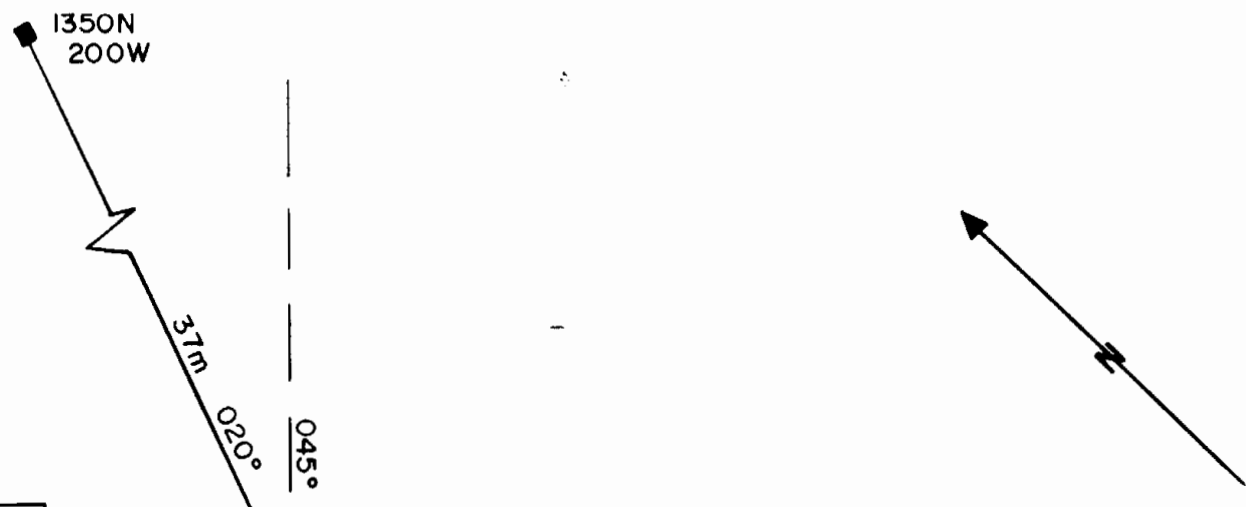
INT'L MAPLE LEAF RESOURCE CORP.

TRENCH T86-9

OREQUEST



(Formerly Trenches G+R)



Sample number	Cu ppm	Zn ppm	Ag oz/ton	Au oz/ton
05647	6	140	.04	.005
05648	5	141	.01	.005
05649	5	44	.01	.005
05650	2	57	.16	.005
09651	42	114	.01	.005
09652	135	160	.01	.005
09653	205	142	.06	.005
09654	140	105	.03	.005
09655	71	52	.01	.005
09656	9	54	.01	.005
09657	500	40	.04	.005
09658	97	40	.02	.005
09659	10	56	.01	.005
09660	5	50	.01	.005
09661	90	46	.01	.005
09662	50	40	.02	.005
09663	131	74	.01	.005
09664	115	80	.01	.005



3.0-4.0m Minor quartz veins (2-4mm thick).

6.5m Small (1cm) specularite vein 170°/85°SW

5.0-9.0m Altered green purple silicified andesitic dacite. Quartz and specularite stockwork zone. Quartz veins parallel the zone, 127-130°/18°W.

8.0m 1.5cm specularite vein 156°/85°SW

Shear and gouge for about 5cm.

0-16.0m Medium grained dark purple to purple green and pink mottled siliceous andesitic dacite. Strong rusty weathering and highly fractured/jointed, chloritic and talcose along fractures.

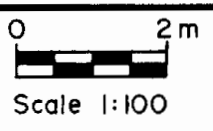
16.0-18.0m Rock more competent than from 0-16m. Dark green-blue green porphyritic andesite with 1-2mm hornblende and plagioclase phenocrysts. Moderately magnetic.

Talus and overburden

PLAN VIEW CROSS SECTION

**PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,058



LENGTH 18 m.
ORIENTATION 045°

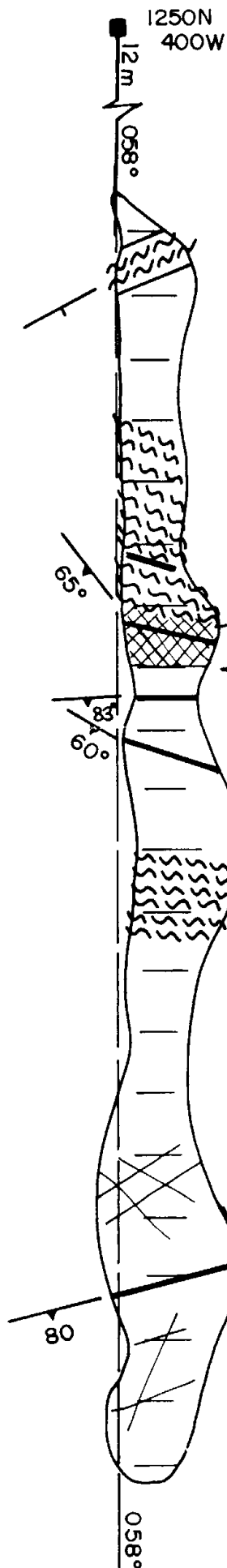
STIRLING GROUP DIANE CLAIMS
INT'L MAPLE LEAF RESOURCE CORP.

ORIGINAL ZONE
TRENCH T86-10



L1250N 400W to 0.0m Highly jointed/fractured olive green brown to drab olive green porphyritic andesite, limonitic in places.

Sample number	Cu	Zn	Ag	Au
	ppm		oz/ton	
05627	710	90	.05	.005
05628	270	47	.01	.005
05629	375	68	.08	.005
05630	110	49	.01	.006
05631	157	45	.07	.005
05632	3040	33	.01	.005
05633	1470	15	.01	.010
05634	113	29	.01	.010
05635	92	19	.02	.005
05636	195	31	.07	.005
05637	6700	86	.01	.005
05638	2260	58	.07	.005
05639	510	51	.02	.005
05640	315	52	.01	.005
05641	207	34	.01	.005
05642	344	33	.01	.005
05643	1760	31	.05	.005
05644	1030	41	.15	.005
05645	75	43	.04	.005
05646	75	60	.07	.005



- ← 0-1.0m Rusty shear zone
- ← 1.0-3.0m Altered dark drab grey-green andesite to porphyritic andesite.
- ← 3.0-6.25m Fault gouge, rock and clay, rusty limonitic green grey to tan and purple gouge, trend of zone 020°/65°SW, trace of malachite, massive specularite veins <2cm.
- ← 6.25-7.0m Botryoidal malachite and massive and disseminated specularite in quartz vein with cubic pyrite.
- ← 6.25-10.0m Dark grey-green porphyritic andesite, massive specularite veins <2cm thick.
- ← 10.0-11.5m Rubbly altered and fractured grey porphyritic andesite with purple grey green gouge and clay, trace malachite, Fault?
- ← 11.5-20.0m Dark grey porphyritic andesite, siliceous in places, quite competent, moderately to weakly magnetic, minor specularite veins, <2cm trace malachite.

**PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,058

PLAN VIEW CROSS SECTION



Scale 1:100

LENGTH 20 m.
ORIENTATION 058°

STIRLING GROUP DIANE CLAIMS

INT'L MAPLE LEAF RESOURCE CORP.

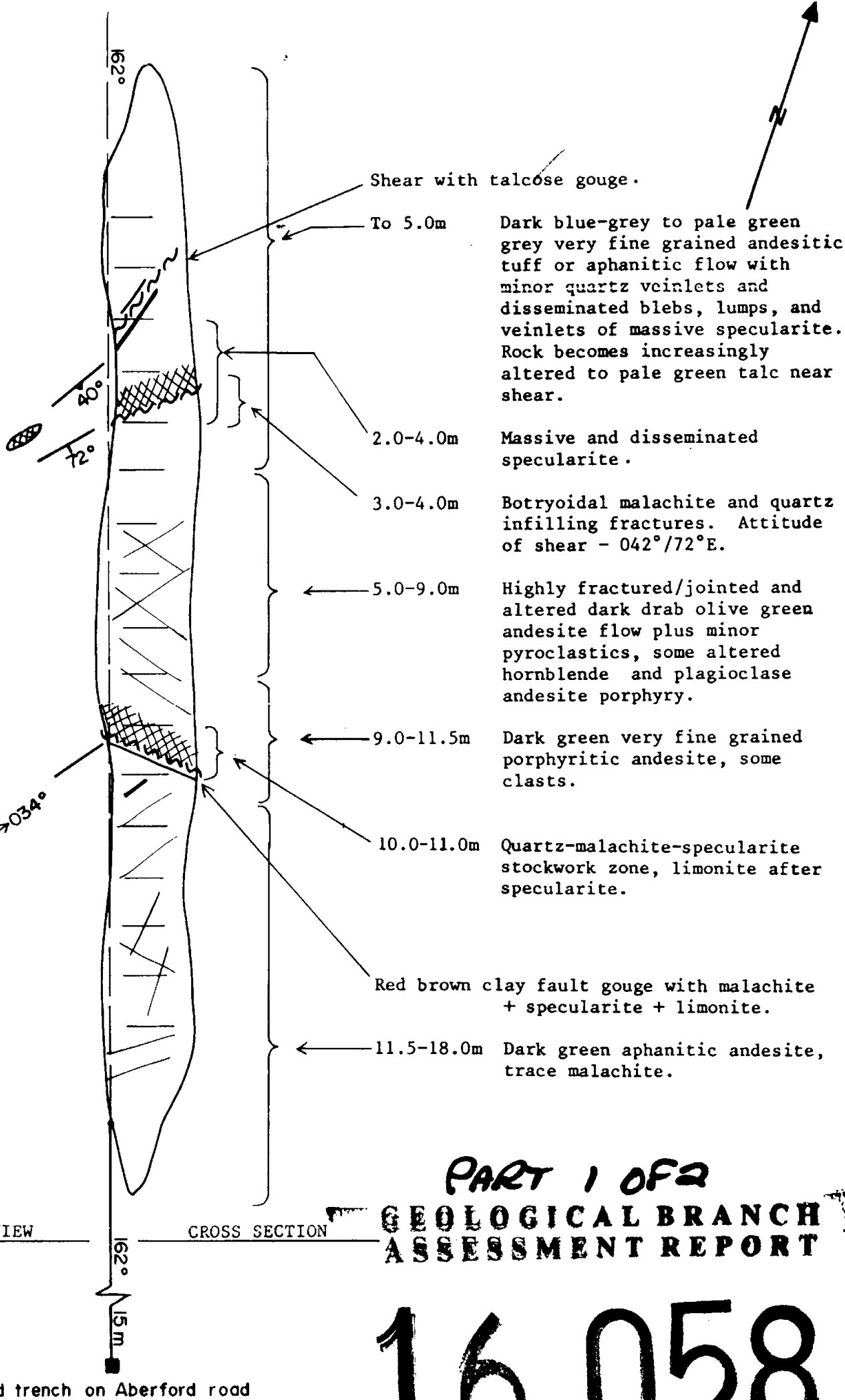
OREQUEST



TRENCH T86-12
(Formerly Trench 0)

Sample number	Cu	Zn	Ag	Au
	ppm		oz/ton	

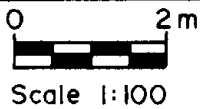
0	09687	1100, 95	.12, .005
2	09688	1350, 115	.06, .005
2	09689	1450, 66	.03, .005
4	09690	1250, 92	.06, .005
4	09691	220, 99	.02, .018
6	09692	490, 66	.03, .005
6	09693	103, 74	.01, .005
8	09694	600, 99	.01, .005
8	09695	860, 150	.01, .005
10	09696	2460, 190	.02, .005
10	09697	7100, 129	.12, .030
12	09698	1750, 85	.02, .005
12	09699	1400, 97	.08, .037
14	09700	820, 112	.03, .005
14	05626	1160, 123	.07, .005



PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,058

old trench on Aberford road



LENGTH 18 m.
 ORIENTATION 162°

STIRLING GROUP DIANE CLAIMS

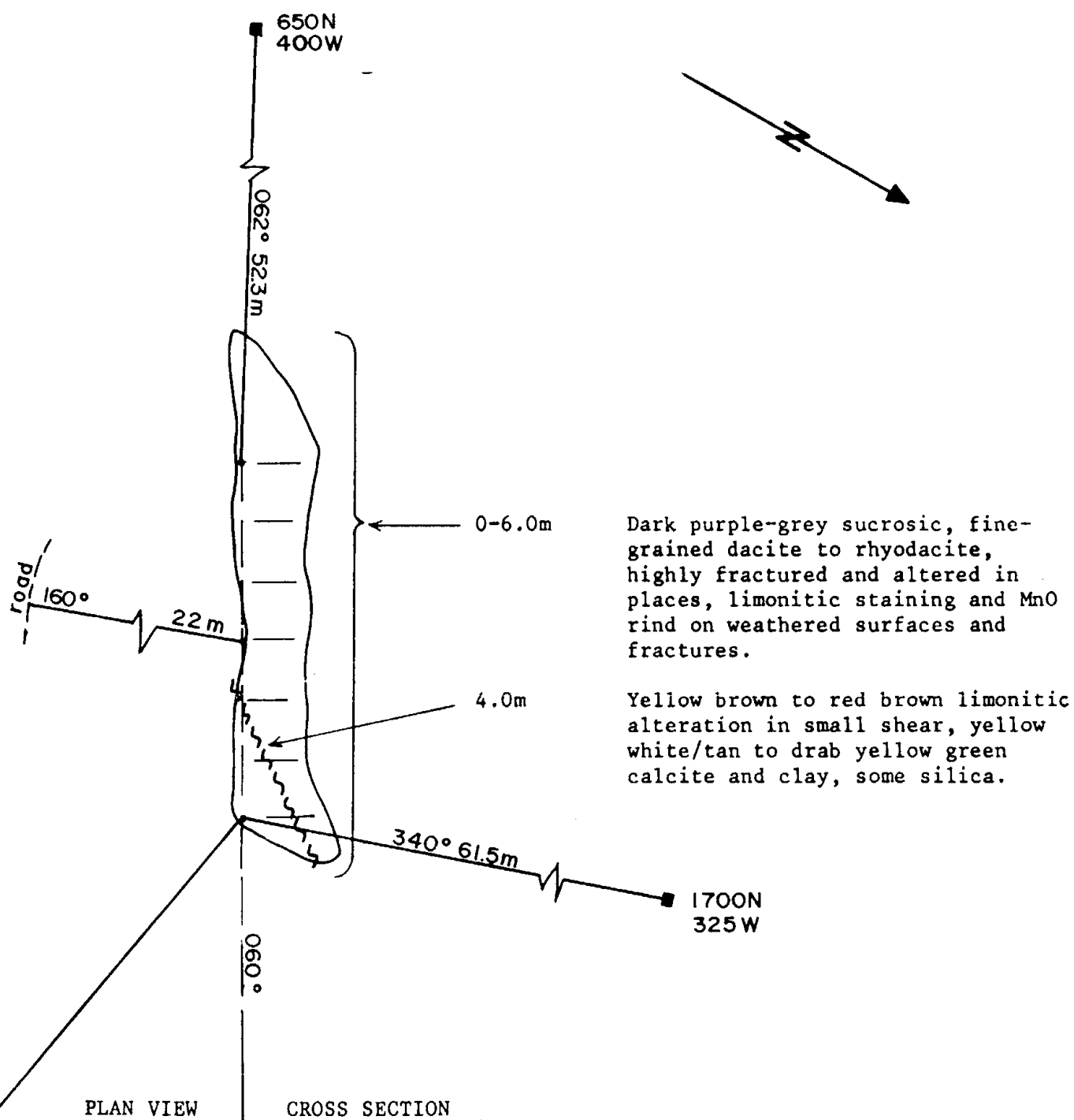
INT'L MAPLE LEAF RESOURCE CORP.

TRENCH T86-13

OREQUEST



meters	Sample number	Cu	Zn	Ag	Au
		ppm		oz/ton	
	09681	10,	176,	.01,	.039
	09682	26,	75,	.05,	.005
	09683	29,	214,	.01,	.005
	09684	10,	109,	.04,	.005
	09685	10,	145,	.06,	.005
	09686	25,	220,	.06,	.005

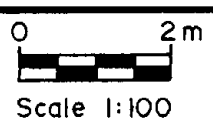


0-6.0m
Dark purple-grey sucrosic, fine-grained dacite to rhyodacite, highly fractured and altered in places, limonitic staining and MnO rind on weathered surfaces and fractures.

4.0m
Yellow brown to red brown limonitic alteration in small shear, yellow white/tan to drab yellow green calcite and clay, some silica.

PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT

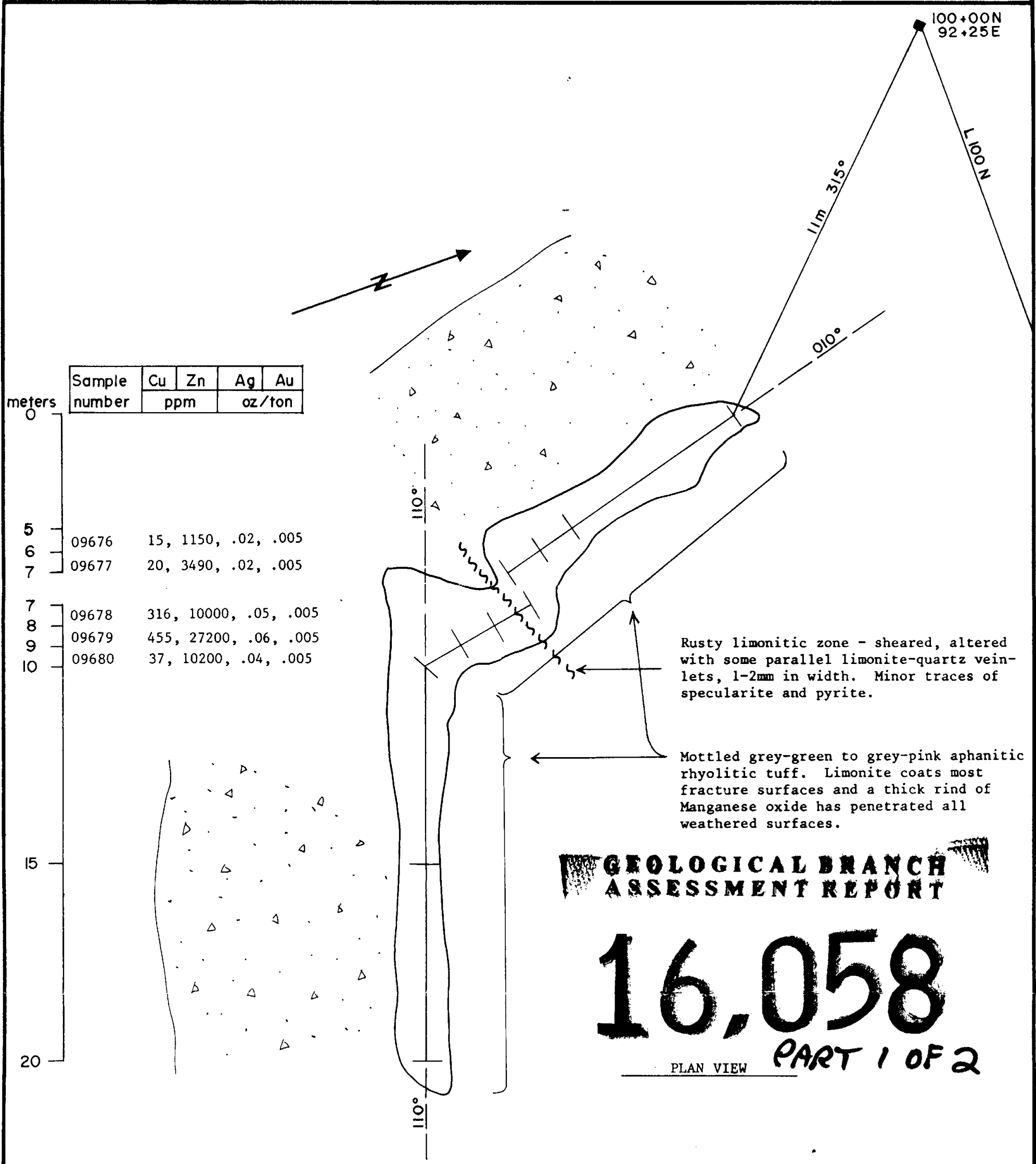
16,058



LENGTH 6m.
ORIENTATION 060°

STIRLING GROUP DIANE CLAIMS
INT'L MAPLE LEAF RESOURCE CORP. TRENCH T86-14
OREQUEST

100+00N
92+25E



Sample number	Cu	Zn	Ag	Au
	ppm			

0
5
6
7
7
8
9
10
15
20

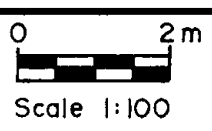
09676	15,	1150,	.02,	.005
09677	20,	3490,	.02,	.005
09678	316,	10000,	.05,	.005
09679	455,	27200,	.06,	.005
09680	37,	10200,	.04,	.005

Rusty limonitic zone - sheared, altered with some parallel limonite-quartz veinlets, 1-2mm in width. Minor traces of specularite and pyrite.

Mottled grey-green to grey-pink aphanitic rhyolitic tuff. Limonite coats most fracture surfaces and a thick rind of Manganese oxide has penetrated all weathered surfaces.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,058
PART 1 OF 2
PLAN VIEW



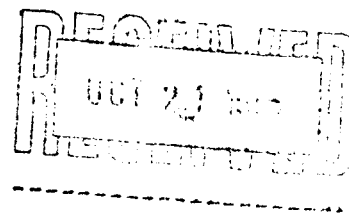
LENGTH 20 m.
ORIENTATION 110°
010°

STIRLING GROUP DIANE CLAIMS
INT'L MAPLE LEAF RESOURCE CORP. TRENCH T86-15
OREQUEST

APPENDIX D
THIN SECTION ANALYSIS

Harris
EXPLORATION
SERVICES

MINERALOGY AND GEOCHEMISTRY



534 ELLIS STREET, NORTH VANCOUVER, B.C., CANADA V7H 2G6

TELEPHONE (604) 929-5867

Job # 86-58

Report for: George Cavey,
Orequest Consultants Ltd.,
404-595 Howe St.,
Vancouver, B.C.
V6C 2T5

October 17th, 1986

Samples:

Sample No.	Slide No.	Sample No.	Slide No.
STR-1	86-231X	STR-6	86-239X
1A	232X	7	240X
1B	233X	8	241X
2	234X	9	242X
3	235X	10	243X
4	236X	11	244X
5	237X	12	245X
5A	238X	13	246X
		STIRLING X	247X

All samples were prepared as standard thin sections except the mineralized sample, Stirling X, which was prepared as a polished thin section

Individual petrographic descriptions of each sample are attached.

Summary:

This suite comprises a variety of volcanic rocks within which several distinct groupings can be established.

Samples STR-1, 1A, 1B, 3, 5 and 10 are potassic rocks of probable rhyolitic composition. All were originally glassy, contain tiny plagioclase microphenocrysts and exhibit more or less well-developed flow banding. Except for STR-10 (which is a dark brown glass characterised as a pitchstone), all show partial devitrification.

Samples STR-2 and 13 are glassy rocks of andesitic composition. The first is plagioclase-rich and contains altered pumiceous inclusions; the second is chlorite-rich, micro-amygdaloidal and shows spheroidal mottling.

Sample STR-11 is probably of similar type to the preceding group but has a somewhat more potassic composition. It is a sparsely microporphyrific, very fine-grained rock in which a patchy, cryptofragmental structure is probably related to cooling or devitrification.

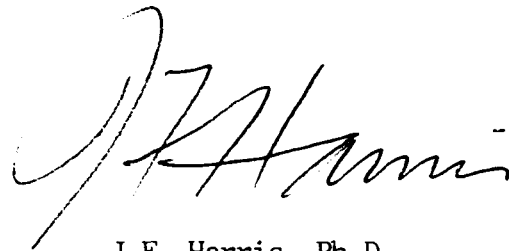
Samples STR-8 and 9 are lapilli tuffs made up of varied, but predominantly andesitic lithic fragments.

Sample STR-7 is of uncertain affinities. It may be a coarse pyroclastic and belong to the previous group (being composed largely of a similar glassy amygdaloidal andesite to that constituting the chief fragment type in STR-9); alternatively it may be a flow similar to STR-13, having a high content of xenoliths.

Samples STR-4 and 12 are distinctive in having a holocrystalline diabasic texture and including abundant fresh mafics (pyroxene). They have the aspect of dyke rocks, but STR-4 contains small amygdules and may, rather, be of extrusive origin.

Samples STR-5A and 6 are hematitic jaspers of unknown origin (possibly exhalites?). The first is a colloform/spherulitic aggregate, and the second is finely banded.

The mineralized sample (STIRLING X) is a colloform/cellular aggregate of botryoidal malachite, comb quartz and acicular hematite. It is presumably of secondary (or perhaps mixed) origin. It has a geochemically high content of Au (1070 ppb, equivalent to about 0.03 oz/ton), the mode of occurrence of which could not be definitively established.

A handwritten signature in cursive script, appearing to read 'J.F. Harris'.

J.F. Harris Ph.D.

Estimated mode

Altered potassic glass)	70
K-feldspar)	
Plagioclase	10
Quartz	8
Chlorite	3
Carbonate	4
Sericite	trace
Micron-sized opaques/ sub-opaques	5
Opaques (sulfides?)	trace

This rock shows a distinct, locally deformed, macroscopic banding on a scale of 1 - 5mm. Streaky, laminated bands are seen to alternate with more homogenous, granular-looking bands.

In thin section the rock is seen to consist essentially of variably devitrified glass (which, judging from the positive cobaltinitrite stain, is of potash-rich composition). This consists of a brownish, turbid, diffuse-margined aggregate of felsitic K-spar of grain size 0.01 - 0.05mm, in which a relict spherulitic texture is apparent in the form of close-packed radial clumps of micron-sized opaque dust and dendrites. Tiny pockets of chlorite occur throughout this matrix.

Small, well-formed, euhedral microphenocrysts of plagioclase, 0.1 - 0.5mm in size (rarely to 1.0mm), occur throughout. They are typically unaltered but occasionally show mild sericitization or replacement by carbonate. Rather ill-defined small clumps of what is probably quartz are also rather consistently present.

Carbonate occurs as small random flecks throughout the groundmass and is sometimes associated with chlorite in rare euhedral pseudomorphs (presumably altered mafic phenocrysts).

Rare tiny opaque granules may be sulfides or their oxidized equivalents.

The streaky bands apparent on the cut-off chip are distinguished in thin section by close-packed sets of sinuous, fluidal, laminar concentrations of micron-sized sub-opaques or spherical crystallites ('globulites'). These features show small scale contortion and divergence around the elongate prismatic plagioclase phenocrysts, which typically show a high degree of parallel orientation in these zones. Elongate segregations of cherty quartz and/or carbonate also occur in this textural assemblage, further emphasizing the foliated fabric.

This is a classic flow-banding texture.

The rock contains rare, small, rounded xenoliths (to 1.0mm) of very fine-grained, trachytic-textured, feldspathic rock.

Estimated mode

Altered potassic glass)	66
K-feldspar)	
Plagioclase	10
Quartz	7
Carbonate	4
Chlorite	3
Micron-sized opaques/ sub-opaques	10
Opagues (sulfides?)	trace

This is a very similar rock to STR-1, the principal difference being that the banded alternation of streaky flow-textured and more homogenous material is less apparent. In fact the majority of this sample is composed of the streaky flow-textured/pumiceous variety, and the high concentration of opaque/sub-opaque dust in this material gives rise to the dark body-colour of the rock.

The petrographic features are essentially as described for STR-1 except that the more homogenous, felsitic/micro-spherulitic devitrified glass is confined to a few minor intercalations. These zones appear also to be distinguished by smaller and less abundant phenocrysts.

The streaky-textured variant has euhedral plagioclase phenocrysts, 0.1 - 0.5mm in size (rarely to 1.0mm), some showing partial alteration to carbonate. They show a strong local parallelism with the sinuous fluidal configuration of the dusty opaque wisps and lenticles and clearly represent a flow structure.

As in the previous sample, the groundmass contains scattered, diffuse patches of quartz, pockets of chlorite and flecks of carbonate. Coarser pockets and lenses of quartz (sometimes with carbonate) occur as apparent porosity fillings between contorted flow laminae and, in a few cases, have the aspect of amygdules.

Sparsely disseminated tiny equant opaques may be sulfides or oxidized pseudomorphs.

Scattered, rounded to elongate xenoliths of trachytic felsite to 1mm in size are seen (including one microporphyritic variety with hematized matrix).

Sample STR-1B (Slide 86-233X)

FLOW-BANDED RHYOLITE

This rock is essentially identical to the previous two samples. It is texturally intermediate between STR-1 and 1A in that, although the streaky, flow-textured variant is dominant over the homogenous spherulitic form, a well-defined, rather regular, banded alternation is nevertheless apparent.

The petrographic features are in all respects as described for samples 1 and 1A.

Estimated mode

Altered glass matrix	75
Plagioclase	8
K-feldspar	2
Quartz	2(?)
Carbonate	6
Sericite)	7
Chlorite)	

This is a volcanic rock of somewhat uncertain affinities.

It consists predominantly of a homogenous, non-foliated matrix of turbid brownish glass showing a typical vitric fabric consisting of an incipient, fine-grained, curvate meshwork. It is partially devitrified to an extremely fine-grained, felsitic aggregate (grain size 5 - 6 microns). Judging from the lack of cobaltinitrite stain and the rather strong whitish etch, this is probably mainly plagioclase. Minute wisps and pockets of K-spar occur as a rather evenly dispersed accessory and there may also be a minor component of quartz (though this is not distinguishable with certainty).

Plagioclase also forms rather sparsely distributed, tiny, subhedral microphenocrysts (maximum size 0.5 mm).

The rock contains rather prominent, irregular-shaped inclusions, 0.5 - 5.0mm in size, which consist of various proportions of three intergrown components: a foliaceous, rather bright yellowish-green, micaceous material (probably sericite), often with wisps of micron-sized opaque dust; microgranular plagioclase (and possibly some quartz); and finely granular carbonate. Many of the more micaceous inclusions have a ragged, deformed, torn-up appearance, suggestive of altered pumiceous fragments, occasionally with microgranular felsite in inter-foliar, disseminated relationship. Some of the more carbonate-rich ones are rather equidimensional and somewhat resemble amygdules, though they are uncharacteristically diffuse in outline.

The rock also contains rare undoubted xenoliths, mainly very small, but including one opaque, black glass fragment 5mm in size.

This rock shows no flow features, nor is it amygdaloidal. The rather abundant small inclusions are probably fragments, though, in some cases, they appear almost gradational like segregations. Many of them resemble vitroclastic shards, but overall the rock does not have the aspect of a tuff. It may represent a form of autobrecciated flow with partially assimilated fragments.

Estimated mode

K-feldspar	62
Quartz	24
Sericitized plagioclase	8
Opagues	6
Limonite	trace

Judging from the positive cobaltinitrite stain, this rock is of similar composition to STR-1, 1A and 1B. Macroscopically it appears to consist of sub-parallel, elongate masses and irregular, dispersed wisps of compact potassic glass in a matrix of unstained material, probably of siliceous composition.

In thin section the potassic phase is seen to be distinguishable by a high content of micron-sized opaque or sub-opaque dust. It is thus similar to the flow-textured material in samples 1, 1A and 1B, though the dusty constituent does not display the finely laminar segregation seen in the previous samples. The form of the dusty patches is, however, often sinuous or even convoluted as in deformed glass.

The intervening phase is confirmed as being siliceous. It consists of a fine-grained felsitic aggregate (probably mainly K-spar), with abundant clumps and diffuse, patchy to elongate segregations of quartz, and disseminated tiny granules of opagues.

Small, randomly oriented, euhedral plagioclase microphenocrysts, 0.1 - 0.5mm in size, are sparsely disseminated throughout, occurring in both textural components. They are typically strongly altered to felted sericite.

The rock apparently contains no carbonate or chlorite.

The nature of the dusty potassic segregations is somewhat obscure. Microscopically, the groundmass felsitic fabric appears to continue uninterrupted from the siliceous to the dusty potassic areas; likewise plagioclase phenocrysts can sometimes be observed straddling the contact between the two variants. Clearly then, this cannot be the fragmental texture it somewhat resembles and is indicated, rather, as a form of segregation of more and less glassy material during cooling of a flow. The relationship has been partially obscured by almost complete subsequent devitrification.

The rock contains a few true xenoliths (up to 7mm in size) of trachytic-textured, opaque-rich rock.

Estimated mode

Plagioclase	70	
Sericite	5	
Chlorite	3	
Pyroxene	15	
Carbonate	2	
Quartz	}	2
Chalcedony		
Sphene	trace	
Prehnite	trace	
Opaques (hematite)	3	

This is a microporphyritic rock in which phenocrysts, 0.2 - 2.0mm, are gradational in size from the holocrystalline intergranular-textured groundmass.

Phenocrysts are predominantly plagioclase, subhedral to euhedral in form, and weakly to moderately sericitized. Pyroxene also forms phenocrysts, sometimes clumped. These are euhedral in form and unaltered.

The groundmass consists of fresh prismatic plagioclase of grain size 0.1mm with abundant interstitial small granules and coalescent clusters of pyroxene. Traces of sphene and small interstitial pockets of chlorite are minor groundmass constituents.

Somewhat surprisingly, for such a well-crystallized rock, the sample contains relatively abundant small amygdules. These are filled with quartz or chalcedony and/or chlorite. The same minerals also form veniform bodies of amygdaloidal affinities.

Some small equant/prismatic patches of chlorite with boxwork-like intergrowths of hematite may also be a form of amygdule. Alternatively they could be totally altered pseudomorphs after some mafic constituent, but this seems unlikely in view of the apparent striking freshness of the pyroxene.

The slide is cut by a thin veinlet of prehnite.

The disseminated opaques in this rock appear to be hematite (rather than the more usual magnetite and/or sulfides). They form irregular grains, 0.02 - 0.1mm in size, randomly scattered through the groundmass, and occasionally forming inclusions in pyroxene phenocrysts.

Texturally this rock resembles a diabase. However, the presence of amygdules is more characteristic of a flow than a dyke rock so, in the absence of information as to field relations, it is classified simply as an andesite.

Estimated mode

K-feldspar	63
Quartz	22
Sericite	9
Ferruginous clays(?)	2
Opagues	4

This is another example of the rhyolitic sub-group within the suite. Of rocks already described it most closely resembles STR-3.

The bands of slightly more intense cobaltinitrite staining visible on the stained chip are distinguishable in thin section merely by an absence of the wisps of micron-sized sub-opaques which occur throughout most of the rock. Also they appear texturally a little more homogenous, with less of the siliceous clumps which are elsewhere prominent.

Overall the rock exhibits a finely granular felsitic fabric, on the scale 0.02 - 0.05mm, apparently composed largely of K-feldspar and probably (judging from the vitromorphic textures - convoluted wisps, atoll-forms, radial/spherulitic clusters, etc. - exhibited by the included micron-sized opaques) derived by devitrification of an original glass.

Quartz is an abundant accessory as individual diffuse grains and small clumps of grain size to 0.1mm.

Like STR-3 the rock contains scattered tiny microphenocrysts of plagioclase (0.1 - 0.3mm in size), almost totally altered to felted sericite.

In addition to the disseminated opaques (from micron-sized dust up to 0.1mm) this rock contains noticeable quantities of a brown amorphous-looking material which is probably a form of ferruginous clay. It forms diffuse patches and small angular pseudomorphs, and possibly represents the product of alteration of fine-grained accessory mafics.

As in the other rhyolites, this sample contains a few small xenoliths. These are up to 3mm in size and consist of glassy, opaque-rich and trachytic-textured potassic volcanics.

Estimated mode

Hematite		50
Quartz	}	50
Chalcedony		
Sericite		trace

This sample consists of an aggregate of partially fragmented, small, spherulitic/crustified masses of colloform hematite cemented by silica.

The silica fills the cusped interstices between adjacent botryoidal hematite surfaces, and fills concentric interlayer spaces. It exhibits a range of textural forms from cryptocrystalline chert, through granular comb-textures, to spectacular radial/fibrous chalcedonic masses.

A network of late hairline fractures filled by quartz and sericite cuts both the hematite and the intergrown silica.

Estimated mode

Hematite	50
Silica	50

This sample consists of an intimate intergrowth of minutely spherulitic hematite and cherty silica. The delicate parallel banding (on a scale of 1 - 4mm) is produced by variations in the proportions and relative grain size of the two constituents.

Examples of typical bands are:

- a) Compact structureless hematite speckled with tiny, rounded, diffuse siliceous spots.
- b) An aggregate of close-packed chert spheroids, 0.02 - 0.05mm in diameter, cemented interstitially by hematite.
- c) Micro-granular quartz, 0.02 - 0.05mm, as matrix to minute hematite granules, sometimes concentrating in sinuous trains.
- d) Irregular, diffuse, sub-colloform or graphic-textured segregations of chert in a hematite matrix.

Rare, cross-cutting, hairline veinlets of quartz, or rarely hematite, are seen, representing minor local remobilization.

Sample STR-7 (Slide 86-240X) GLASSY FRAGMENTAL ANDESITE (TUFF?)

This is a volcanic rock of uncertain origin.

One end of the slide is made up of abundant lithic fragments, 0.5 - 6.0mm in size, including a variety of types such as granular plagioclase rocks, trachytic-textured potassic rocks, black-matrixed, glassy microporphyritic or chlorite-rich amygdaloidal rocks, etc.

This assemblage would ordinarily be classified with confidence as a lapilli-tuff. However, in this case the fragments appear to be set in a matrix of the same porphyritic, amygdaloidal glassy andesite that makes up the major part of the slide. Moreover no defined contact can be seen between the fragmental area and the flow-type material, suggesting that perhaps the fragments are more in the nature of xenoliths, possibly originating through incorporation of unconsolidated pyroclastic ejecta by a lava flow.

The main area of the slide consists of abundant euhedral-subhedral plagioclase phenocrysts, 0.2 - 2.0mm in size, in a highly vesicular groundmass of murky, brown, altered glass. This contains abundant small carbonate-filled amygdules, 0.1 - 0.5mm in size, often showing an outer rim of fibrous sericite. In another variant, forming diffuse, irregular patchy intergrowths with the above, the glass is rendered sub-opaque by a high content of minute acicular opaques, and the amygdules are dominantly filled with fibrous chlorite. The distribution of phenocrysts appears independent of this groundmass variation.

The plagioclase phenocrysts are strikingly fresh and of distinctive appearance, in that they are often embayed by and/or sieved with emulsion-like inclusions of the groundmass glass.

Individual equant grains, 0.1 - 0.4mm, of Fe-oxides occur as a rather evenly, though sparsely disseminated accessory.

This sample is a fresh, unmodified aggregate of a wide variety of lithic fragments, 1 - 12mm in size. The fragments are closely packed, and there is only a minor component of (felsitic) matrix.

The commonest fragment types are porphyritic, with plagioclase phenocrysts, 0.2 - 1.0mm in size, set in glassy or microgranular groundmasses. Also present are some non-porphyritic, extremely fine-grained, felsitic to trachytic fragments of more or less potassic composition, and glassy andesites studded with chloritic amygdules. Fragments of amygdaloidal rocks similar to STR-7, with plagioclase phenocrysts sieved with inclusions of glass, are abundantly represented.

Plagioclase phenocrysts, and the fragments in general, are notably fresh. Very occasional clusters of granular epidote and rare patches of carbonate are the only evidence of alteration.

Disseminated individual grains of opaques, including pyrite and oxidized pseudomorphs thereof, are relatively abundant, and range in size up to 1.0mm. They occur both within certain lithic clasts (especially those of the STR-7 type) and, possibly, interstitial to them.

Sample STR-9 (Slide 86-242X) ANDESITIC LITHIC LAPILLI TUFF

This is a generally similar type of rock to STR-8, consisting of a close-packed, matrix-poor aggregate of various types of volcanic fragments.

A large part of the slide is made up of a single, large (30mm) fragment of non-porphyritic, intensely vesicular glass consisting of semi-coalescent, small amygdules of carbonate and chlorite in a brown, cellular matrix.

Other, smaller fragments are of various glassy, felsitic and microgranular andesites and occasional trachytic-textured potassic rocks. A few strongly porphyritic clasts with distinctive black opaque matrices are present.

The assemblage differs from that in STR-8 in that most of the fragments are of non-porphyritic types. There is also a rather higher proportion of small, rather ill-defined clasts. Many of them are strongly chloritic. A few clasts show flecks of carbonate, and there are rare specks of epidote. Plagioclase phenocrysts are typically fresh and unaltered.

Disseminated sulfides (or other opaques) are essentially absent.

Estimated mode

Dark brown glass	95
Chlorite	3
Quartz	2
Carbonate	trace
Opauques	trace

This sample is composed of compact, streaky, flow-textured, brown glass, varying in appearance in thin section from essentially opaque, through sub-translucent, resinous dark brown to local more or less speckled, vesicular/pumiceous streaks and patches.

The rock contains scattered phenocrysts ranging from a few microns in size up to 0.5mm, often in clusters. These are ubiquitously replaced by felted chlorite, with minor cherty quartz and traces of carbonate. They sometimes have small grains of associated opaques, and may have originated as some form of mafic silicate.

The more porous zones of glass show incipient permeation by cherty silica. The latter also forms occasional, irregular, threadlike veinlets

The rock contains a few tiny xenoliths of trachytic and microporphyritic rocks.

The dark colour and aphanitic appearance of this rock are not what one tends to associate with rhyolite. However, a strongly potassic composition is evident from the positive cobaltinitrite stain (which also reveals the flow-banded structure) and the rock probably constitutes an example of a rhyolitic pitchstone.

Sample STR-11 (Slide 86-244X) FINE-GRAINED ANDESITE-DACITE

Estimated mode

Plagioclase	32
K-feldspar	30
Quartz	12
Chlorite	16
Epidote) 8
Sub-opaques	
Opagues	2

This is a very fine-grained volcanic exhibiting a crypto-fragmental structure.

It is of a different type to any other in the suite and is of somewhat uncertain composition and mineralogy. It takes a weak to moderate cobaltinitrite stain and appears, therefore, to be somewhat potassic. The intensity of stain on the cut-off chip shows a patchy/network pattern of variation (fragmental?), but this is not readily correlatable with the features in thin section.

The latter shows the rock to consist of an aggregate of randomly oriented sub-trachytic to felsitic feldspars (and an indeterminate proportion of quartz) of grain size 0.02 - 0.1mm. This shows patchy variations (the crypto-fragmented structure?) in grain size, possible quartz content and, in particular, the abundance of interstitial chlorite. The more chloritic material forms a network or matrix surrounding less chloritic and possibly more siliceous patches. Finely disseminated tiny clumps of micron-sized epidote, and possibly some sphene/leucoxene, occur indiscriminately in the two variants.

A few small phenocrysts of plagioclase occur, often partially replaced by epidote and quartz. The latter minerals also form occasional irregular pockets and veinlets.

Another feature which adds to the crypto-fragmental appearance is a diffuse network of apparent very fine-grained cherty(?) material.

Most likely this is a flow of andesite to dacite composition in which the patchy textures are the result of compositional segregation associated with the cooling of an original glass and/or with its subsequent devitrification.

Estimated mode	
Plagioclase	45
K-feldspar	2
Chlorite	5
Epidote	6
Pyroxene	18
Amphibole	4
Quartz	2
Sericite)	15
Clays)	
Sphene	1
Opagues	2

This sample is of similar type to STR-4. It is a holocrystalline, fine to medium-grained rock having a semi-porphyrific texture in which there is essentially a complete size gradation from the coarsest to the finest crystals, and there is no very fine groundmass.

It is composed dominantly of plagioclase and is one of the few rocks in the suite to contain relatively abundant primary mafic silicates.

Plagioclase occurs as subhedral prismatic grains, 0.5 - 3.0mm in size, separated by an interstitial meshwork of smaller crystals (0.1 - 0.2mm). It typically shows strong, turbid, argillic alteration, plus local development of fine-grained sericite and clusters of epidote.

Pyroxene also forms phenocrysts, in a similar size range to the plagioclase but less abundant. It is mainly fresh. There is also a lesser proportion of amphibole which, by contrast, is typically of cloudy altered appearance, and often partially replaced by chlorite and epidote.

The groundmass, or interstitial phase, is composed of turbid plagioclase laths with granules and small prisms of pyroxene, fine-grained opagues and a little sphene/rutile. The opagues include a few specks of sulfides.

Fine-grained quartz forms small dispersed flecks through the groundmass and, in association with chlorite and epidote, somewhat coarser, more discrete patches which sometimes look like amygdules, and sometimes like totally altered mafics.

The textural features of this rock are consistent with its being a sub-volcanic minor intrusive.

Estimated mode

Altered glass	38
Plagioclase	30
Chlorite	25
Epidote	2
Carbonate	5
Opagues	trace

This is a very fine-grained, greenish rock displaying a prominent macroscopic structure of light-coloured, spheroidal patches, 1 - 10mm in size.

It is seen in thin section to consist of a rather heterogenous matrix of altered greenish glass, commonly packed with small (0.05 - 0.1mm) spheroidal to irregular-shaped blobs of chlorite.

The abundance and size of these emulsion-like blobs shows irregular, patchy variations. There are local crypto-fragmental and flow features. The pale-coloured macroscopic patches appear to represent areas of the glass in which incipient crystallization (to minutely fine-grained felsitic plagioclase) has taken place; furthermore, chlorite is absent, the micro-pelley spherulitic blobs being composed instead of sub-radial, spherulitic growths of (?) albite.

Other petrographic features appear consistent throughout, showing no distinction between the pale patches and the rest of the rock. The matrix is pervasively flecked with fine-grained carbonate and minor epidote, and there are rather abundant subhedral plagioclase phenocrysts, 0.1 - 2.0mm in size. These commonly have emulsion-like inclusions of groundmass glass and show partial alteration to granular epidote.

Rare prismatic-shaped patches of fine-grained carbonate may represent altered mafics.

Sample STIRLING X (Slide 86-247X) OXIDIZED ORE (GOSSAN)

Estimated mode

Malachite	40
Quartz	30
Hematite	30
Sericite	trace

This sample consists of a 3-component intergrowth of malachite, quartz and hematite in a coarse, cellular/boxwork intergrowth.

The malachite forms partially fragmented, fibrous/colloform masses, showing colour zonation from green to pale brown.

It is apparently cemented by vein-type quartz which is dominantly a coarse, comb-textured aggregate. This locally contains patches and wisps of felted sericite which have the appearance of altered feldspathic inclusions.

Hematite occurs as a network of fine-grained, compact material grading to interlocking meshworks of acicular crystals. It mainly follows the quartz/malachite contacts, for the most part appearing to encrust the malachite, with the acicular growth extending into the quartz-filled cavities.

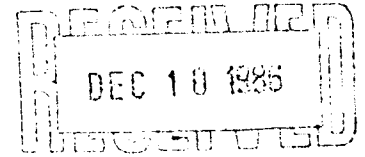
The quartz masses contain rare tiny grains (2 - 50 microns) of pyrite and chalcopyrite, often more or less rimmed and replaced by limonite. Very rare specks of chalcopyrite, 1 - 2 microns in size, occur in the hematite.

The cut-off chip relating directly to the portion of the sample thin-sectioned was submitted for analysis and found to contain 1070 ppb Au. The source of this is not readily apparent in the section, but a few of the minute (2 micron) reflective inclusions observed in the quartz look bright enough to be tentatively identifiable as gold.

The nature of this sample is not ascertainable from the petrography alone. The abundance of malachite (a secondary mineral) suggests that all the components may be of secondary/redistributed origin, though the occurrence of Fe-oxide in the form of well-crystallized hematite rather than limonite is somewhat atypical of a normal gossan.

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Report for: Michael Jerema,
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December 10th, 1986

Samples:

11 rock samples from the Stirling Project for sectioning and petrographic examination. Samples are numbered STR-14 - 24. The first nine were prepared as standard thin sections and the last two as polished thin sections.

Summary:

This is a suite of volcanic rocks, some of which are recognizably similar to types included in a previous group from this area (STR 1 - 13) described in my report 86-58 of October 17th, 1986.

Samples 14 and 22 are rather coarse, matrix-poor, intermediate tuffs. The first is andesitic and is composed of microcrystalline lithic fragments and plagioclase crystal clasts in approximately equal proportions. The second is made up mainly of lithic fragments, commonly glassy-textured, of which a proportion are of somewhat potassic (trachyandesitic) composition.

Sample 24 is a fragmental consisting of glassy lithic clasts of potassic (latitic) composition set in a highly siliceous matrix. It was intended to exemplify material which, though lacking obvious mineralization, yielded assays of several percent Zn. No recognizable Zn minerals could be seen, and chemical analysis shows that this particular sample is not, in fact, significantly enriched in Zn. The nature of the 'invisible' Zn remains to be resolved using alternate sample material.

Samples 16 and 20 are very fine-grained felsitic rocks of uncertain origin - possibly ash tuffs. The first has a cryptic spheroidal texture and is vuggy; it contains disseminated pyrite and possibly arsenopyrite. The second includes rare microphenocrysts (or clasts).

Samples 15 and 17 are trachyandesite lavas. Both are sparsely porphyritic and the second is strongly amygdaloidal.

Samples 18 and 19 are porphyritic andesites of probable extrusive type; the second is somewhat amygdaloidal. Both show strong alteration of plagioclase phenocrysts: to sericite in #18 and to epidote in #19.

Sample 21 is a flow-textured rhyolite, very similar to the rocks of this type from the previous suite.

Sample 23 is a mineralized quartz vein containing limonitized pyrite and patches of malachite. It includes relatively abundant native gold.

In general the rocks of this suite are not strongly altered, nor do they show noticeable metamorphic effects.

A handwritten signature in cursive script, appearing to read "J. F. Harris". The signature is written in black ink and is centered on the page.

J. F. Harris Ph.D.

This sample is a rather coarse-grained tuff made up mainly of clasts 0.2 - 5.0mm in size, plus a few coarser lapilli up to 7 or 8mm.

Clasts are approximately 50% lithic fragments and 50% crystals. The lithic fragments tend to be in a relatively coarser size range (0.5 - 7.0mm) than the crystals (0.2 - 1.5mm).

The lithic clasts are sub-angular and consist mostly of fine-grained, holocrystalline, felsitic or trachytic-textured andésites of plagioclase-rich composition. They are occasionally microporphyritic and/or amygdaloidal. Accessory constituents of these rocks are chlorite sphene/rutile. Some of them are flecked with carbonate alteration.

The crystal clasts are almost entirely plagioclase, of euhedral to subhedral form, and sometimes fractured. This is essentially fresh, showing only traces of argillic clouding and sericite dusting. Rare pyroxene crystals or fragments are also seen; again these are mainly fresh, though a few do show partial alteration to secondary amphibole/chlorite.

The clasts are close-packed and randomly oriented. Matrix is minimal. Where seen, it consists of a fine-grained greenish material (probably made up of a mixture of felsitic ash, chlorite and secondary amphibole).

Overall the rock appears fresh and unmetamorphosed, without mineralogical or textural modification.

Estimated mode

Plagioclase	70
K-feldspar	22
Hornblende	4
Secondary biotite	2
Sphene	1
Opaques	1

This is a rather even, fine-grained rock consisting essentially of a meshwork aggregate of prismatic feldspars on the scale 0.1 - 0.2mm. These are mainly plagioclase but, as can be seen from the cobaltinitrite stain, include a proportion of K-feldspar (mainly as an anhedral matrix phase to the randomly-oriented plagioclase laths).

Mafics are minor. They consist of euhedral, often strongly elongate hornblende, locally altered to a brownish-green felted material which may be a form of biotite. The latter also occurs in dispersed form as intergranular wisps and diffuse impregnations in the plagioclase aggregate.

Small granules of sphene and tiny equant opaques are disseminated accessories.

The rock is sparsely porphyritic, with occasional euhedral phenocrysts of plagioclase, and rare hornblende, to about 2.0mm in size. The plagioclase phenocrysts are distinctive in appearance, showing a peculiar distortion or fragmentation of the normal twinning pattern.

Feldspar alteration is very slight, consisting of a faint clouding and sericitic dusting. This affects both groundmass and phenocrysts.

A diffuse, patchy, coarsely granular structure is apparent throughout the rock, with irregular areas of the groundmass extinguishing without reference to the fine meshwork fabric. This may represent an incipient recrystallization effect.

Sample STR-16 (Slide 86-376X) VUGGY SPHEROIDAL FELSITE

Estimated mode

Plagioclase	84
Secondary biotite(?))	5
Sericite	
Clays	2
Rutile)	1
Leucoxene)	
Quartz	trace
Limonite)	3
Pyrite)	
Acicular opaques	5

This rock is composed essentially of a very fine, even-grained, felsitic aggregate of plagioclase. This is an interlocking anhedral mosaic of grain size 5 - 10 microns, locally grading to small, pockety segregations of somewhat coarser grain (to 30 microns). Very rare, tiny, individual crystals (phenocrysts?, clasts?) of plagioclase and quartz to 0.1mm in size are seen.

Rounded to elongate vugs, partly filled with clays and felted brownish sericite, are rather common.

The felsitic aggregate contains disseminated flecks and clusters of a very fine-grained, felted, yellowish brown material (sericite or secondary biotite), and minor, small granules of rutile and leucoxene. Another accessory is (or was) pyrite, as individual cubic grains to 0.3mm in size, now largely altered to limonite or empty casts.

The remaining constituent is a very fine-grained opaque mineral, as acicular grains 0.01 - 0.03mm. This forms irregular, locally dense disseminations which concentrate as a wispy network outlining rounded areas, 0.5 - 5.0mm in size, which are essentially free of the acicular opaque dust. These areas often have central vugs or pockets of coarser crystallization.

This cryptofragmental structure is of uncertain origin. Possibly it is a relict primary fragmental structure in a metasomatized (albitized) rock, or possibly a spheroidal, primary crystallization feature in a felsic lava.

The vuggy nature of this rock and its content of disseminated pyrite and possible arsenopyrite (the acicular opaque) suggest that it could be enriched in Au. A portion of the sample submitted for analysis returned a value of 50 ppb, confirming that it is, in fact, geochemically anomalous.

Estimated mode

Groundmass		
Plagioclase	30	
K-feldspar	10	
Chlorite	15	
Sphene	4	
Opagues	2	
Phenocrysts		
Plagioclase	3	
Epidote)		
Chlorite)	1	
Amygdules		
Quartz)		
Chalcedony)	30	
Epidote	2	
Chlorite	3	

This is a very fine-grained rock consisting of a sub-trachytic aggregate of feldspar microlites, 5 - 50 microns in length, with interstitial chlorite and rather abundant disseminated granules of sphene and micron-sized opaque dust.

Sparse micro-phenocrysts consist of individual euhedral plagioclase crystals 0.2 - 1.0mm in size. These are faintly turbid and occasionally host a few specks of epidote. There are also occasional small discrete clumps of chlorite and epidote which may represent altered mafic phenocrysts.

The most prominent feature of the rock is the abundance of amygdules. These are of elongate, pinch-and-swell shape, and are partially interconnected to form sub-parallel swarms and networks. The amygdules are filled by granular to feathery chalcedonic quartz, with minor intergrown epidote and chlorite. The outlines of the amygdules are strongly emphasized by rimming concentrations of groundmass sphene and opaques. Also, as can readily be seen by examination of the stained chip, the groundmass feldspar shows a strong compositional enrichment in potassium ash-like zones around the amygdules.

Sample STR-18 (Slide 86-378X) PORPHYRITIC ANDESITE

Estimated mode

Phenocrysts	
Altered plagioclase	32
Pyroxene	14
Altered mafics	4
Groundmass	
Plagioclase	25
Pyroxene	14
Chlorite	7
Sphene	2
Opagues	2

This is a strongly porphyritic andesite of conventional type.

Euhedral phenocrysts, 0.2 - 2.0mm in size, consist of strongly altered plagioclase and fresh pyroxene. There is also a minor proportion of prismatic pseudomorphs of chlorite and lesser carbonate which presumably represent totally altered forms of a second mafic constituent.

The plagioclase phenocrysts are almost totally sericitized. In addition they are distinctive in often containing abundant inclusions of groundmass (chlorite and sphene), typically as oriented lattice intergrowths following cleavages and growth zones.

The groundmass is a fine-grained, diabase-textured aggregate of plagioclase with abundant intergrown pyroxene, chlorite, sphene and tiny equant opaques.

The rock is cut by a few hair-line veinlets of quartz.

This could be a homogenous flow or a fine-grained dyke rock.

Sample STR-19 (Slide 86-379X) ALTERED AMYGDALOIDAL ANDESITE

Estimated mode

Phenocrysts	
Epidotized plagioclase	35
Chloritized mafics	3
Groundmass	
Plagioclase	22
Chlorite	24
Sphene	4
Amygdules	
Quartz)	
Chalcedony)	5
Carbonate	4
Epidote	3

This is another variety of andesitic flow.

Its most striking feature is the almost complete replacement of plagioclase phenocrysts by rather coarsely granular epidote. These altered phenocrysts are 0.2 - 1.0mm in size and commonly clumped. They retain their euhedral form though, for the most part, are pseudomorphed by epidote. Carbonate is a minor associate, and recognizable remnants of plagioclase are sometimes present.

These prismatic masses of epidote appear to be entirely after plagioclase. Mafic phenocrysts were apparently very sparse and are now represented by small patches of chlorite, sometimes with associated cherty quartz.

The groundmass shows intersertal texture, being composed of randomly oriented plagioclase laths (to 0.1mm in size) set in a matrix of chlorite with disseminated granules of sphene. Rather surprisingly the groundmass plagioclase shows no epidotization.

Scattered rounded amygdules, 0.5 - 2.0mm in size, are filled with intergrowths of chalcedonic quartz, carbonate and epidote in various proportions. Occasional more diffuse pockets of fine cherty quartz, sometimes with epidote, are also seen.

Estimated mode

Felsitic plagioclase	62	
Sericite	20	
Chlorite	8	
Carbonate	}	7
Limonite		
Quartz	2	
Rutile	1	

This rock is composed essentially of an almost structureless mass of cryptocrystalline felsite, pervasively dusted with wisps and flecks of sericite and tiny clumps of chlorite. Minor rutile occurs as disseminated granules.

The only obvious heterogeneities are scattered, small micro-phenocrysts 0.1 - 0.5mm in size. Most of these were presumably once plagioclase, but are now pseudomorphed by limonitic carbonate, sometimes intergrown with felted sericite. Rare, tiny, partially absorbed phenocrysts and microgranular clumps of quartz are also seen.

There is also an obscure cryptofragmental structure apparent, as defined by patchy variations in the abundance of sericite. This suggests a possible tuffaceous origin.

The rock is cut by several directions of discontinuous, hairline veinlets of quartz and/or limonitized carbonate.

Estimated mode

K-feldspar	45
Potassic glass	27
Plagioclase	3
Quartz	18
Chlorite	1
Sericite	2
Carbonate	trace
Micron-sized opaques	4
Pyrite) trace
Limonite	

This is a rock of strongly potassic composition. It consists of alternating bands of two textural types, on a scale of about 2mm.

One is a felsitic aggregate of K-feldspar of grain size 0.02 - 0.1mm, rather densely dusted with micron-sized granules and microlites of opaques. It contains prismatic K-spar microphenocrysts, 0.2 - 0.5mm in size, and clumps and elongate lenses of granular quartz, occasionally with intergrown chlorite. The other component is essentially the same except that it includes more or less close-spaced, wispy laminae of a brownish-green (locally chloritic or sericitic) glass. This is also loaded with opaque dust, often concentrating as selvages or rimming zones. These laminae show a sinuous, partially anastomosing form. They envelope and diverge around feldspar phenocrysts, and are separated or flanked by siliceous lenses.

Occasional, sub-concordant, sinuous seams or fractures containing sericite are present, chiefly in the streaky bands. Traces of pyrite and derived limonite staining occur throughout as randomly disseminated, small, equant grains.

The phenocrysts in this rock show partial orientation parallel to the streaky foliation, especially in the glass-rich bands, and the texture is clearly a flow banding.

This is a good example of an unmodified, coarse andesite tuff.

It consists of angular fragments, 0.2 - 7.0mm in size, of a variety of andesitic and trachyandesitic rocks. Many of these are glassy, dark-matrixed types, often with abundant dusty opaques; or micro-amygdaloidal, with chlorite in-fillings. A lesser proportion are fine-grained crystalline, trachytic or felsitic, rarely microporphyritic. Note the potassic composition of many fragments as revealed by staining of the cut-off chip.

The fragments (which make up some 80% of the rock) are non-oriented and set in a felsitic (locally chloritic) matrix containing small plagioclase crystal clasts and ash-sized lithic debris from 0.2 mm grading down to micron size.

A few of the fragments show partial sericitization of plagioclase phenocrysts, and some of the glassy types have porphyroblast-like clusters of sericite/brown carbonate. Overall, however, the rock is fresh, with the matrix and contained plagioclase crystal clasts showing no alteration. Secondary/deuteric constituents like sericite, carbonate and epidote are notably absent from the matrix.

Sample STR-23 (Slide 86-283X) VEIN QUARTZ WITH OXIDIZED PYRITE

Estimated mode

Quartz	50
Pyrite	4
Limonite	36
Malachite	10
Chalcopyrite	trace
Covellite	trace
Gold	trace

This sample consists of a matrix of anhedral granular quartz of grain size 0.2 - 3.0mm. Within this are set irregular masses of compact limonite, clearly pseudomorphous after coalescent aggregates of euhedral pyrite grains 0.2 - 0.5mm in size.

Unreplaced remnants of pyrite occur in parts of the limonite masses, and fine-grained quartz forms a veining and cementing phase.

Chalcopyrite is very minor. It is seen as scattered, individual, small specks in quartz, and in altered form (as covellite) as occasional concentric intergrowths in the limonite. Malachite occurs as scattered pockets in the quartz and concentrates as an extensive area showing the usual very fine-grained, internally fibrous texture.

Gold was observed relatively commonly as rounded to irregular grains up to 150 microns in size, moulded on, or interstitial to, limonitized pyrite pseudomorphs. It also occurs as threadlike, segmented veinlets with quartz, filling fractures or grain boundaries in limonite. Gold was also seen within the quartz matrix adjacent to limonite and, rarely, in malachite.

The character of this rock is readily apparent from low-power examination of the stained cut-off chip. It consists of ragged, sometimes streaky, elongate fragments of highly potassic material, 0.2 - 15.0mm in size, in a fine-grained siliceous matrix.

The fragments consist of various forms of glassy to felsitic/trachytic rocks, rarely microporphyritic; quartz is not a recognizable constituent, so they are presumably of latitic composition. Some fragments are heavily dusted with opaque granules; others are pervasively altered to networks of fine-grained sericite. They commonly include irregular ferruginous veinlets and pockets composed of sericite and limonite.

The fragments are set in a rather evenly microgranular matrix seemingly composed largely of anhedral quartz, with scattered small feldspar phenocrysts or crystal clasts. Traces of disseminated opaques and rutile are the only accessories.

No source of high Zn values could be seen. The remaining portion of the sample, corresponding to that mounted on the slide, was submitted for check analysis and returned only 1040 ppm Zn.

In order to establish the mode of occurrence of the much higher Zn contents indicated by previous assays, it is recommended that coarse-crushed reject material from the best of those samples be utilized for mineralogical examination.

APPENDIX E

CERTIFICATES of ANALYSIS for SOIL and ROCK GEOCHEMISTRY

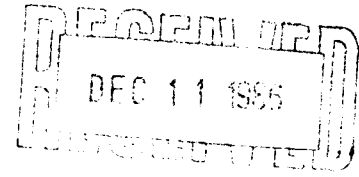


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(604) 251-5656

December 11, 1986



TO:

OREQUEST CONSULTANTS LTD.
404 - 595 Howe Street
Vancouver, B.C. V6C 2T5

FROM:

Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine hot acid soluble arsenic in geochemical silt, soil, lake sediment and rock samples.

1. Sample Preparation

- (a) Geochemical soil, silt, lake sediment or rock samples were received in the laboratory in wet-strength 3 1/2 x 6 1/2 Kraft paper bags and rock samples in 4" x 6" Kraft paper bags.
- (b) The wet samples were dried in a ventilated oven.
- (c) The dried soil and silt samples were sifted by hands using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (d) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

- (a) 0.25 gram of the minus 80-mesh sample was used. Samples were weighed out by using a electronic micro-balance.
- (b) Samples were heated in a sand bath with concentrated perchloric acid (70 - 72% HClO₄ by weight) at a medium heat for four hours.
- (c) The digested samples were diluted with demineralized water.



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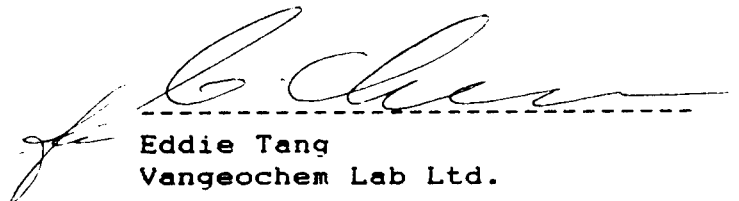
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3. Method of Analysis

- (a) Potassium iodide and stannous chloride in HCl were added to the digested samples.
- (b) Zinc metal was introduced and the arsenic in solution was gassed off as arsene through a glass wool scrubber plug saturated with lead acetate and into a solution of silver diethyldithiocarbamate in chloroform with 1-ephedrine, forming a red complex with the silver diethyldithiocarbamate.
- (c) The concentration of the arsenic was determined colorimetrically by comparing the intensity of the color of the red complex with a set of known standards prepared in a similar fashion as the samples.

- 4. The analyses were supervised or determined by Mr. Eddie Tang or Mr. Conway Chun and their laboratory staff.



Eddie Tang
Vangeochem Lab Ltd.



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December 9, 1986

TO:

OREQUEST CONSULTANTS LTD.
404 - 595 Howe Street
Vancouver, B.C. V6C 1T5

FROM:

Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine multiple elements in hot acid soluble by Induction Couple Plasma Spectrometer (ICP) analysis.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

- (a) 0.500 gram of -80 mesh sample was used.
- (b) Samples were digested in a hot water bath at 95 C for 75 minutes with diluted aqua regia acids. (3 : 1 : 3, HCl : HNO3 : H2O)
- (c) The digested samples were diluted to a fixed volume and shaken well.



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- 2 -

3. Method of Analysis

The analyses were determined by using a Jarrel Ash ICAP model 9000 direct reading emission spectrometer with an inductively coupled plasma excitation source. Background and inter-element corrections (IEC'S) were applied. All data is compiled into an Apple IIe computer, stored on floppy disk and printed by an Epson 100 dot-matrix printer.

4. The analyses were supervised by Mr. Wade Reeves and Mr. Conway Chun of Vangeochem Lab Ltd. and their staff.

A handwritten signature in black ink, appearing to read 'Conway Chun', is written above a dashed horizontal line.

Conway Chun
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December 9, 1986

TO:

OREQUEST CONSULTANTS LTD.
404 - 595 Howe Street
Vancouver, B.C. V6C 1T5

FROM:

Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine gold by fire-assay method in geological samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

- (a) 20.0 - 30.0 grams of the pulp samples were used. Samples were weighed out by using a top-loading balance into a fusion pot.
- (b) A Flux of litharge, soda ash, silica, borax, flour, or potassium nitrite is added, then fused at 1900 degrees F and a lead button is formed.
- (c) The gold and silver is extracted by cupellation, silver is then dissolved with diluted nitric acid.



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3. Method of Calculation

The gold is calculated by weighing of the bead and then ounce per ton is calculated.

4. The analyses were supervised or determined by Mr. Conway Chun or Mr. David Chiu.

A handwritten signature in black ink, appearing to read 'D. Chiu', written over a horizontal dashed line.

David Chiu
VANGEOCHEM LAB LTD.



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December 9, 1986

TO:

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404 - 595 Howe Street
Vancouver, B.C. V6C 1T5

FROM:

Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine silver by fire-assay method in geological samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

- (a) 20.0 - 30.0 grams of the pulp samples were used. Samples were weighed out by using a top-loading balance into a fusion pot.
- (b) A Flux of litharge, soda ash, silica, borax, flour, or potassium nitrite is added, then fused at 1900 degrees F and a lead button is formed.
- (c) The silver is extracted by cupellation, weigh and part with diluted nitric acid.



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3. Method of Calculation

The silver is calculated by the weigh loss of the bead and then parts per million (ppm) is calculated.

4. The analyses were supervised or determined by Mr. Conway Chun or Mr. David Chiu.

A handwritten signature in black ink, appearing to read 'D. Chiu', written over a horizontal dashed line.

David Chiu
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December 9, 1986

TO:

OREQUEST CONSULTANTS LTD.
404 - 595 Howe Street
Vancouver, B.C. V6C 1T5

FROM:

Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine gold by fire-assay method and detected by atomic absorption spec. in geological samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Extraction

- (a) 20.0 - 30.0 grams of the pulp samples were used. Samples were weighed out by using a top-loading balance into fusion pot.
- (b) A Flux of litharge, soda ash, silica, borax, flour, or potassium nitrite is added, then fused at 1900 degrees F and a lead button is formed.
- (c) The gold is extracted by cupellation and part with diluted nitric acid.
- (d) The gold bead is saved for measurement later.



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3. Method of Detection

- (a) The gold bead is dissolved by boiling with sodium cyanide, hydrogen peroxide and ammonium hydroxide.
- (b) The gold analyses were detected by using a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. The gold values in parts per billion were calculated by comparing them with a set of gold standards.

- 4. The analyses were supervised or determined by Mr. Conway Chun or Mr. David Chiu and his laboratory staff.

A handwritten signature in black ink, appearing to read 'D. Chiu'.

David Chiu
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December 9, 1986

To:

OREQUEST CONSULTANTS LTD.
404 - 595 Howe Street
Vancouver, B.C. V6C 1T5

FROM:

Vangoechem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine Aqua Regia soluble gold in geochemical samples

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

- (a) 5.00 - 10.00 grams of the minus 80-mesh samples were used. Samples were weighed out by using an electronic micro-balance into beakers.
- (b) 20 ml of Aqua Regia (3:1 HCl : HNO₃) were used to digest the samples over a hot plate vigorously.
- (c) The digested samples were filtered and the washed pulps were discarded and the filtrate was reduced to about 5 ml.
- (d) The Au complex ions were extracted into diisobutyl ketone and thiourea medium. (Anion exchange liquids "Aliquot 336").



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- (e) Separate Funnels were used to separate the organic layer.

3. Method of Detection

The gold analyses were detected by using a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. A hydrogen lamp was used to correct any background interferences. The gold values in parts per billion were calculated by comparing them with a set of gold standards.

4. The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and his laboratory staff.

A handwritten signature in black ink, appearing to read 'E. Tang'.

Eddie Tang
VANGEOCHEM LAB LTD.



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December 9, 1986

TO:

OREQUEST CONSULTANTS LTD.
404 - 595 Howe Street
Vancouver, B.C. V6C 1T5

FROM:

Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine hot acid soluble for Cu,Pb,Zn & Ag in geochemical silt and soil samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

- (a) 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a electronic micro-balance.
- (b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively).
- (c) Minimum of 5000 ppm of AlCO₃ was added to each samples when Mo analysis is required, digested samples were diluted with demineralized water to a fixed volume and shaken.

3. Method of Analysis

Cu,Pb,Zn & Ag analyses were determined by using a Techtron Atomic Absorption Spectrophotometer



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Model AA5 with their respective hollow cathode lamps. The digested samples were aspirated directly into an air and acetylene mixture flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption units.

4. Background Correction

A hydrogen continuum lamp is used to correct the Silver background interferences.

5. The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and the laboratory staff.

A handwritten signature in black ink, appearing to read 'Eddie Tang'.

Eddie Tang
VANGEOCHEM LAB LTD.



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ASSAY ANALYTICAL REPORT

=====

CLIENT: OREQUEST CONSULTANTS LIMITED
ADDRESS: 404 - 595 Howe Street
: Vancouver, B.C.
: V6C 2T5

DATE: Nov 19 1986

REPORT#: 860628 AA
JOB#: 860628

PROJECT#: MERRITT B.C.
SAMPLES ARRIVED: Nov 10 1986
REPORT COMPLETED: Nov 19 1986
ANALYSED FOR: Ag Au

INVOICE#: 860628 NA
TOTAL SAMPLES: 243
REJECTS/PULPS: 90 DAYS/1 YR
SAMPLE TYPE: 243 Rock

SAMPLES FROM: MERRITT B.C.
COPY SENT TO: OREQUEST CONSULTANTS LIMITED

PREPARED FOR: Mr. GEORGE CAVEY

ANALYSED BY: David Chiu

SIGNED: _____

Registered Provincial Assayer

GENERAL REMARK: None



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REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

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PAGE 1 OF 13

SAMPLE #	Ag oz/st	Au oz/st
3801	.03	.016
3802	.57	.034
3803	.38	.020
3804	.26	.284
3805	.41	.058
3806	.07	<.005
3807	.04	<.005
3808	.06	<.005
3809	.01	.024
3810	.02	<.005
3811	.17	.006
3812	.14	.040
3813	.14	.022
3814	.13	.030
3815	.21	.034
3816	.05	<.005
3817	.10	<.005
3818	.05	<.005
3819	.10	<.005
3820	.03	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

< = less than

signed: _____



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REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

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PAGE 2 OF 13

SAMPLE #	Ag oz/st	Au oz/st
3821	.04	<.005
3822	.02	<.005
3823	.06	<.005
3824	<.01	<.005
3825	<.01	<.005
3826	.04	<.005
3827	.04	<.005
3828	.04	<.005
3829	.05	<.005
3830	.06	<.005
3831	<.01	<.005
3832	.03	<.005
3833	.05	<.005
3834	.06	<.005
3835	.03	<.005
3836	.14	.008
3837	.01	<.005
3838	.28	<.005
3839	.06	.008
3840	.07	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

< = less than

signed: _____



VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

OREQUEST CONSULTANTS LIMITED

PAGE 3 OF 13

SAMPLE #	Ag oz/st	Au oz/st
3841	.16	<.005
3842	.10	<.005
3843	.07	<.005
3844	.15	<.005
3845	.06	<.005
3846	.09	<.005
3847	.07	<.005
3848	.04	<.005
3849	.14	.006
3850	.13	<.005
3851	.05	.005
3852	.06	.006
3853	<.01	<.005
3854	<.01	<.005
3855	.07	<.005
3856	.06	<.005
3857	.07	<.005
3858	.08	<.005
3859	.02	<.005
3860	.05	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01
1 ppm = 0.0001%

.005
ppm = parts per million

(= less than

signed: _____



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(604) 251-5656

REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

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PAGE 4 OF 13

SAMPLE #	Ag oz/st	Au oz/st
3861	.01	<.005
3862	.01	<.005
3863	<.01	<.005
3864	.02	<.005
3865	<.01	<.005
3866	<.01	<.005
3867	<.01	<.005
3868	<.01	<.005
3869	.01	<.005
3870	.02	<.005
3871	.03	<.005
3872	<.01	<.005
3873	<.01	<.005
3874	<.01	<.005
3875	<.01	<.005
3876	<.01	<.005
3877	<.01	<.005
3878	.07	<.005
3879	.04	<.005
3880	.02	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

(< = less than

signed: _____



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(604) 251-5656

REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

OREQUEST CONSULTANTS LIMITED

PAGE 5 OF 13

SAMPLE #	Ag oz/st	Au oz/st
3881	.04	<.005
3882	.02	<.005
3883	<.01	<.005
3884	.05	<.005
3885	<.01	<.005
3886	.03	.008
3887	.04	<.005
3888	.07	<.005
3889	.05	<.005
3890	.02	<.005
05626	.07	<.005
05627	.05	<.005
05628	<.01	<.005
05629	.08	<.005
05630	.01	.006
05631	.07	<.005
05632	<.01	<.005
05633	.01	.010
05634	.01	.010
05635	.02	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01
1 ppm = 0.0001%

.005
ppm = parts per million

(< = less than

signed: _____



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REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

OREQUEST CONSULTANTS LIMITED

PAGE 6 OF 13

SAMPLE #	Ag oz/st	Au oz/st
05636	.07	<.005
05637	.01	<.005
05638	.07	<.005
05639	.02	<.005
05640	<.01	<.005
05641	<.01	<.005
05642	<.01	<.005
05643	.05	<.005
05644	.15	<.005
05645	.04	<.005
05646	.07	<.005
05647	.04	<.005
05648	.01	<.005
05649	<.01	<.005
05650	.16	<.005
08151	.18	.183
08152	.02	<.005
08153	.09	.026
08154	.22	.264
08155	.21	.008

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

< = less than

signed: _____



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REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

OREQUEST CONSULTANTS LIMITED

PAGE 7 OF 13

SAMPLE #	Ag oz/st	Au oz/st
08156	.02	<.005
08157	.05	<.005
08158	.01	.018
08159	.01	.016
08160	.08	<.005
08161	.01	<.005
08162	<.01	<.005
08163	.04	<.005
08164	.04	<.005
08165	.33	.164
08166	.37	.169
08167	.09	.040
08168	.09	.010
08169	.11	.034
08170	.07	.006
08171	.04	<.005
08172	.04	<.005
08173	.03	<.005
08174	.03	<.005
08175	.02	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

< = less than

signed: _____



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REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

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PAGE 8 OF 13

SAMPLE #	Ag oz/st	Au oz/st
08176	.01	<.005
08177	.01	<.005
08178	.03	.006
08179	.03	.006
08180	.01	<.005
08181	.07	<.005
08182	.01	.034
08183	.01	<.005
08184	.02	<.005
08185	.10	<.005
08186	.05	<.005
08187	.07	.019
08188	.05	<.005
08189	.04	<.005
08190	.01	.010
08191	.01	<.005
08192	.11	.039
08193	.10	.005
08194	.02	<.005
08195	.11	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01
1 ppm = 0.0001%

.005
ppm = parts per million

(= less than

signed: _____



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(604) 251-5656

REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

OREQUEST CONSULTANTS LIMITED

PAGE 9 OF 13

SAMPLE #	Ag oz/st	Au oz/st
08196	.01	<.005
08197	.09	<.005
08198	<.01	<.005
08199	.01	<.005
08200	<.01	<.005
08201	.05	.016
08202	<.01	<.005
08203	.06	<.005
08204	.03	<.005
08205	.03	.018
08206	.20	<.005
08207	.01	<.005
08208	.15	.011
08209	.06	<.005
08210	.01	<.005
08211	.05	<.005
08212	.01	<.005
08213	<.01	<.005
08214	.02	<.005
08215	.06	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

(< = less than

signed: _____



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(604) 251-5656

REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

OREQUEST CONSULTANTS LIMITED

PAGE 10 OF 13

SAMPLE #	Ag oz/st	Au oz/st
08216	.01	.005
08217	.10	.020
08218	.11	.044
08219	.09	.012
08220	.11	.020
08221	.01	.010
08222	<.01	.008
08223	<.01	<.005
08224	<.01	<.005
08225	.04	<.005
09651	<.01	<.005
09652	<.01	<.005
09653	.06	<.005
09654	.03	<.005
09655	<.01	<.005
09656	<.01	<.005
09657	.04	<.005
09658	.02	<.005
09659	.01	<.005
09660	<.01	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01
1 ppm = 0.0001%

.005
ppm = parts per million

(= less than

signed: _____



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(604) 251-5656

REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

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PAGE 11 OF 13

SAMPLE #	Ag oz/st	Au oz/st
09661	<.01	<.005
09662	.02	<.005
09663	<.01	<.005
09664	<.01	<.005
09665	<.01	<.005
09666	<.01	<.005
09667	.06	<.005
09668	.05	<.005
09669	.01	.026
09670	.01	<.005
09671	.03	.015
09672	.04	.012
09673	.02	<.005
09674	.05	<.005
09675	.04	<.005
09676	.02	<.005
09677	.02	<.005
09678	.05	<.005
09679	.06	<.005
09680	.04	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

< = less than

signed: _____



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(604) 251-5656

REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

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PAGE 12 OF 13

SAMPLE #	Ag oz/st	Au oz/st
09681	.01	.039
09682	.05	<.005
09683	.01	.005
09684	.04	<.005
09685	.06	<.005
09686	.06	<.005
09687	.12	<.005
09688	.06	<.005
09689	.03	<.005
09690	.06	.005
09691	.02	.018
09692	.03	<.005
09693	.01	<.005
09694	<.01	<.005
09695	.01	<.005
09696	.02	<.005
09697	.12	.030
09698	.02	<.005
09699	.08	.037
09700	.03	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

(< = less than

signed: _____



VANGEOCHEM LAB LIMITED

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1630 PANDORA ST.
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(604) 251-5656

REPORT NUMBER: 860628 AA

JOB NUMBER: 860628

OREQUEST CONSULTANTS LIMITED

PAGE 13 OF 13

SAMPLE #	Ag	Au
	oz/st	oz/st
STR-49R	.01	<.005
STR-50R	<.01	<.005
STR-51R	.10	.020

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

< = less than

signed: _____



VANGEOCHEM LAB LIMITED

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NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

ASSAY ANALYTICAL REPORT

CLIENT: OREQUEST CONSULTANTS LIMITED
ADDRESS: 404 - 595 Howe Street
: Vancouver, B.C.
: V6C 2T5

DATE: Dec 1 1986

REPORT#: 860671AA
JOB#: 860671

PROJECT#: 5454 MERRITT
SAMPLES ARRIVED: Nov 25 1986
REPORT COMPLETED: Dec 1 1986
ANALYSED FOR: Cu Zn Ag Au

INVOICE#: 860671NA
TOTAL SAMPLES: 1
REJECTS/PULPS: 90 DAYS/1 YR
SAMPLE TYPE: 1 ROCK

SAMPLES FROM: MIKE JEREMA
COPY SENT TO: OREQUEST CONSULTANTS LIMITED

PREPARED FOR: MR. GEORGE CAVEY

ANALYSED BY: David Chiu

SIGNED: _____

Registered Provincial Assayer

GENERAL REMARK: None



VANGEOCHEM LAB LIMITED

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1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
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(604) 251-5656

REPORT NUMBER: 860671AA

JOB NUMBER: 860671

OREQUEST CONSULTANTS LIMITED

PAGE 1 OF 1

SAMPLE #	Cu %	Zn %	Ag oz/st	Au oz/st
STR - 86 - 52R	14.00	<.01	.73	.120

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01
1 ppm = 0.0001%

.01
ppm = parts per million

.005
(= less than

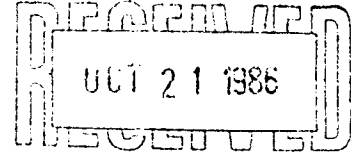
signed: _____



VANGEOCHEM LAB LIMITED

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(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656



GEOCHEMICAL ANALYTICAL REPORT

CLIENT: OREQUEST CONSULTANTS LIMITED
ADDRESS: 404 - 595 Howe Street
: Vancouver, B.C.
: V6C 2T5

DATE: Oct 21 1986

REPORT#: 860527 GA
JOB#: 860527

PROJECT#: Int. Maple Leaf
SAMPLES ARRIVED: Oct 10 1986
REPORT COMPLETED: Oct 21 1986
ANALYSED FOR: Cu Zn Ag Au

INVOICE#: 860527 NA
TOTAL SAMPLES: 180
SAMPLE TYPE: 180 SOIL
REJECTS: DISCARDED

SAMPLES FROM: Merritt, B.C.
COPY SENT TO: OREQUEST CONSULTANTS LIMITED

PREPARED FOR: MR. GEORGE CAVEY

ANALYSED BY: VGC Staff

SIGNED: _____

GENERAL REMARK: Samples submitted by MIKE JEREMA



VANGEOCHEM LAB LIMITED

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(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
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(604) 251-5656

REPORT NUMBER: 860527 GA

JOB NUMBER: 860527

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PAGE 1 OF 5

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR-001S	61	50	nd	nd
STR-002S	15	34	.2	nd
STR-003S	20	56	.1	nd
STR-004S	40	60	.5	nd
STR-005S	34	65	.3	nd
STR-006S	35	50	.2	nd
STR-007S	39	86	nd	nd
STR-008S	25	55	.3	nd
STR-009S	40	38	.2	nd
STR-010S	50	45	.3	nd
STR-011S	45	32	nd	nd
STR-012S	81	40	.2	nd
STR-013S	63	50	.3	nd
STR-014S	83	48	.6	nd
STR-015S	74	60	.4	nd
STR-016S	45	47	.5	nd
STR-017S	51	46	nd	nd
STR-018S	80	62	.4	nd
STR-019S	59	48	.2	nd
STR-020S	130	50	.2	nd
STR-021S	97	70	.4	nd
STR-022S	70	68	.2	nd
STR-023S	75	93	.7	nd
STR-024S	59	79	.1	nd
STR-025S	39	80	.4	nd
STR-026S	60	50	.1	nd
STR-027S	49	61	.5	nd
STR-028S	45	70	.4	nd
STR-029S	41	61	.3	nd
STR-030S	53	77	.3	nd
STR-031S	45	66	.2	nd
STR-032S	82	65	.3	nd
STR-033S	29	74	nd	nd
STR-034S	44	46	.1	nd
STR-035S	46	55	.2	nd
STR-036S	45	61	.3	nd
STR-037S	36	47	nd	nd
STR-038S	45	46	.1	nd
STR-039S	60	72	nd	nd

DETECTION LIMIT

1

1

0.1

5

nd = none detected

-- = not analysed

is = insufficient sample



VANGEOCHEM LAB LIMITED

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(604) 251-5656

REPORT NUMBER: 860527 GA

JOB NUMBER: 860527

OREQUEST CONSULTANTS LIMITED

PAGE 2 OF 5

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR-040S	32	73	.4	10
STR-041S	28	70	.2	nd
STR-042S	31	80	.6	nd
STR-043S	21	60	.1	nd
STR-044S	24	69	.2	nd
STR-045S	21	57	.3	5
STR-046S	26	68	nd	nd
STR-047S	40	79	.2	nd
STR-048S	40	58	.2	nd
STR-049S	36	46	nd	nd
STR-050S	49	41	.1	nd
STR-051S	120	75	.4	nd
STR-052S	40	45	.3	nd
STR-053S	35	45	.2	nd
STR-054S	28	51	.2	nd
STR-055S	21	86	.4	nd
STR-056S	36	95	.2	nd
STR-057S	71	63	nd	nd
STR-058S	81	50	.2	nd
STR-059S	67	45	.1	5
STR-060S	45	75	.2	nd
STR-061S	80	81	.9	nd
STR-062S	75	83	.5	nd
STR-063S	30	115	.1	nd
STR-064S	27	75	.1	nd
STR-065S	15	55	.2	nd
STR-066S	30	59	.2	nd
STR-067S	40	76	.4	nd
STR-068S	30	67	.2	nd
STR-069S	45	50	nd	nd
STR-070S	46	40	nd	nd
STR-071S	45	36	nd	nd
STR-072S	39	65	nd	nd
STR-073S	26	70	nd	nd
STR-074S	21	60	nd	nd
STR-075S	31	71	.1	nd
STR-076S	56	54	.2	nd
STR-077S	30	49	nd	nd
STR-078S	26	74	nd	nd

DETECTION LIMIT

1

1

0.1

5

nd = none detected

-- = not analysed

is = insufficient sample



VANGEOCHEM LAB LIMITED

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REPORT NUMBER: 860527 GA

JOB NUMBER: 860527

OREQUEST CONSULTANTS LIMITED

PAGE 3 OF 5

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR-079S	24	40	.1	nd
STR-080S	40	95	.4	nd
STR-081S	65	103	.4	nd
STR-082S	65	60	.4	nd
STR-083S	52	90	.4	nd
STR-084S	35	98	.2	nd
STR-085S	40	55	.3	nd
STR-086S	30	66	.3	nd
STR-087S	24	40	nd	nd
STR-088S	39	85	nd	nd
STR-089S	47	109	.4	nd
STR-090S	44	123	.5	nd
STR-091S	40	119	.2	nd
STR-092S	40	86	.4	nd
STR-093S	45	104	.2	nd
STR-094S	49	105	.2	nd
STR-095S	52	105	.2	nd
STR-096S	50	110	.4	nd
STR-097S	32	52	nd	nd
STR-098S	31	60	nd	5
STR-099S	30	50	.3	nd
STR-100S	40	67	.3	10
STR-101S	20	80	.3	nd
STR-102S	16	65	.2	nd
STR-103S	17	74	.1	nd
STR-104S	50	45	.2	nd
STR-105S	50	54	.1	nd
STR-106S	40	55	.2	nd
STR-107S	50	72	.1	nd
STR-108S	40	89	.2	nd
STR-109S	18	71	.3	nd
STR-110S	24	85	.1	nd
STR-111S	30	115	.2	nd
STR-112S	68	80	nd	nd
STR-113S	55	60	nd	nd
STR-114S	29	94	.2	nd
STR-115S	51	115	.1	nd
STR-116S	40	120	.3	nd
STR-117S	22	89	.2	nd

DETECTION LIMIT

1

1

0.1

5

nd = none detected

— = not analysed

is = insufficient sample



VANGEOCHEM LAB LIMITED

MAIN OFFICE
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NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 860527 GA

JOB NUMBER: 860527

OREQUEST CONSULTANTS LIMITED

PAGE 4 OF 5

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR-110S	15	55	.2	5
STR-119S	22	80	.1	20
STR-120S	46	97	.3	5
STR-121S	34	66	.4	nd
STR-122S	38	84	.2	nd
STR-123S	31	66	nd	nd
STR-124S	22	62	.3	nd
STR-125S	15	35	.2	nd
STR-126S	24	51	nd	5
STR-127S	16	75	.1	nd
STR-128S	19	95	.2	nd
STR-129S	30	110	.4	10
STR-130S	30	50	nd	5
STR-131S	39	75	.4	5
STR-132S	45	80	.4	nd
STR-133S	80	60	nd	nd
STR-134S	51	54	.2	5
STR-135S	81	112	.5	nd
STR-136S	65	67	.1	nd
STR-137S	47	70	.4	nd
STR-138S	49	40	.3	nd
STR-139S	41	40	.2	nd
STR-140S	36	95	.2	nd
STR-141S	45	58	.3	nd
STR-142S	35	60	.2	nd
STR-143S	24	66	.1	10
STR-144S	55	127	.3	10
STR-145S	46	740	.6	nd
STR-146S	43	173	.2	nd
STR-147S	40	169	nd	5
STR-148S	30	84	.1	nd
STR-149S	54	99	.2	nd
STR-150S	53	60	nd	5
STR-151S	80	132	.1	nd
STR-152S	40	156	.1	nd
STR-153S	44	170	nd	nd
STR-154S	36	75	.1	nd
STR-155S	22	100	.3	nd
STR-156S	50	60	.3	nd

DETECTION LIMIT

1

1

0.1

5

nd = none detected

-- = not analysed

is = insufficient sample



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REPORT NUMBER: 860527 GA

JOB NUMBER: 860527

OREQUEST CONSULTANTS LIMITED

PAGE 5 OF 5

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR-157S	51	60	.1	10
STR-158S	45	90	.3	nd
STR-159S	42	70	.2	nd
STR-160S	52	82	.3	nd
STR-161S	50	95	nd	nd
STR-162S	60	214	.1	nd
STR-163S	46	70	nd	nd
STR-164S	50	76	.2	nd
STR-165S	35	65	.3	nd
STR-166S	26	60	.2	nd
STR-167S	40	70	.1	nd
STR-168S	40	45	.2	nd
STR-169S	46	44	.5	nd
STR-170S	48	50	.3	nd
STR-171S	52	56	.2	nd
STR-172S	60	62	.3	nd
STR-173S	64	80	.2	nd
STR-174S	51	44	.3	nd
STR-175S	42	36	.1	nd
STR-176S	40	53	.3	nd
STR-177S	65	119	.2	nd
STR-178S	69	70	.4	nd
STR-179S	49	82	.2	nd
STR-180S	50	70	.1	10

DETECTION LIMIT

nd = none detected

1 1

-- = not analysed

0.1 5

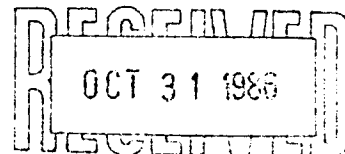
is = insufficient sample



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(604) 251-5656



----- GEOCHEMICAL ANALYTICAL REPORT -----

CLIENT: OREQUEST CONSULTANTS LIMITED
ADDRESS: 404 - 595 Howe Street
: Vancouver, B.C.
: V6C 2T5

DATE: Oct 31 1986

REPORT#: 860587 GA
JOB#: 860587

PROJECT#: 5454 (MERRITT)
SAMPLES ARRIVED: Oct 30 1986
REPORT COMPLETED: Oct 31 1986
ANALYSED FOR: Cu Pb Zn Ag Au (FA/AAS)

INVOICE#: 860587 NA
TOTAL SAMPLES: 6
SAMPLE TYPE: 6 ROCK
REJECTS: SAVED

SAMPLES FROM: MR. MIKE JEREMA
COPY SENT TO: OREQUEST CONSULTANTS LIMITED

PREPARED FOR: MR. GEORGE CAVEY

ANALYSED BY: VGC Staff

SIGNED: _____


GENERAL REMARK: None



VANGEOCHEM LAB LIMITED

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REPORT NUMBER: 860587 GA

JOB NUMBER: 860587

OREQUEST CONSULTANTS LIMITED

PAGE 1 OF 1

SAMPLE #	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppb
STR 86-43R	350	13	120	.2	5
STR 86-44R	300	12	76	nd	nd
STR 86-45R	5	6	9	.6	10
STR 86-46R	5	5	9	.4	nd
STR 86-47R	26	5	42	nd	nd
STR 86-48R	156	16	85	.3	nd

DETECTION LIMIT
nd = none detected

1 2
-- = not analysed

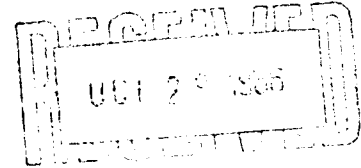
1 0.1 5
is = insufficient sample



VANGEOCHEM LAB LIMITED

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----- GEOCHEMICAL ANALYTICAL REPORT -----

CLIENT: OREQUEST CONSULTANTS LIMITED
ADDRESS: 404 - 595 Howe Street
: Vancouver, B.C.
: V6C 2T5

DATE: Oct 29 1986

REPORT#: 860551 GA
JOB#: 860551

PROJECT#: None Given
SAMPLES ARRIVED: Oct 21 1986
REPORT COMPLETED: Oct 29 1986
ANALYSED FOR: Cu Zn Ag Au

INVOICE#: 860551 NA
TOTAL SAMPLES: 120
SAMPLE TYPE: 120 SOIL
REJECTS: DISCARDED

SAMPLES FROM: MIKE JERENA
COPY SENT TO: OREQUEST CONSULTANTS LIMITED

PREPARED FOR: MR. GEORGE CAVEY

ANALYSED BY: VGC Staff

SIGNED: _____

GENERAL REMARK: None



VANGEOCHEM LAB LIMITED

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(604) 251-5656

REPORT NUMBER: 860551 6A

JOB NUMBER: 860551

OREQUEST CONSULTANTS LIMITED

PAGE 1 OF 4

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR 181 S	25	55	.5	nd
STR 182 S	26	55	.2	nd
STR 183 S	30	65	.3	nd
STR 184 S	18	68	.3	nd
STR 185 S	53	76	.1	nd
STR 186 S	44	116	.6	nd
STR 187 S	25	140	.2	nd
STR 188 S	33	120	.3	nd
STR 189 S	19	115	.3	5
STR 190 S	75	234	.4	5
STR 191 S	60	63	.3	nd
STR 192 S	15	60	nd	nd
STR 193 S	48	75	.2	nd
STR 194 S	15	130	.4	nd
STR 195 S	15	41	.5	nd
STR 196 S	55	100	.4	nd
STR 197 S	26	95	.1	nd
STR 198 S	60	124	nd	5
STR 199 S	33	61	.4	nd
STR 200 S	21	84	.1	nd
STR 201 S	20	130	nd	nd
STR 202 S	100	98	.2	nd
STR 203 S	56	90	.1	nd
STR 204 S	24	82	.1	nd
STR 205 S	50	117	.2	nd
STR 206 S	45	72	.3	nd
STR 207 S	18	90	.3	nd
STR 208 S	35	84	.2	nd
STR 209 S	36	86	.1	nd
STR 210 S	32	60	.1	nd
STR 211 S	46	55	.1	nd
STR 212 S	30	92	nd	nd
STR 213 S	55	95	.1	nd
STR 214 S	31	85	.3	10
STR 215 S	54	125	nd	nd
STR 216 S	32	77	nd	nd
STR 217 S	30	101	.2	nd
STR 218 S	46	56	nd	nd
STR 219 S	30	120	.2	nd

DETECTION LIMIT

nd = none detected

1 1

-- = not analysed

0.1 5

is = insufficient sample



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REPORT NUMBER: 860551 GA

JOB NUMBER: 860551

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PAGE 2 OF 4

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR 220 S	24	78	.2	5
STR 221 S	94	60	.2	5
STR 222 S	460	70	nd	50
STR 223 S	115	126	.5	nd
STR 224 S	35	95	.3	nd
STR 225 S	39	60	.3	nd
STR 226 S	25	59	.2	nd
STR 227 S	64	64	.2	nd
STR 228 S	23	70	.2	nd
STR 229 S	50	80	nd	nd
STR 230 S	45	74	nd	nd
STR 231 S	140	94	.4	nd
STR 232 S	24	65	.3	nd
STR 233 S	50	110	.2	nd
STR 234 S	24	40	.3	nd
STR 235 S	72	105	.2	nd
STR 236 S	42	114	.2	nd
STR 237 S	31	182	.5	5
STR 238 S	30	160	.1	nd
STR 239 S	27	71	.3	nd
STR 240 S	51	80	nd	nd
STR 241 S	46	106	nd	nd
STR 242 S	72	75	.2	5
STR 243 S	31	83	nd	nd
STR 244 S	32	60	nd	5
STR 245 S	28	131	.1	nd
STR 246 S	34	134	.1	nd
STR 247 S	40	141	.1	nd
STR 248 S	115	90	.3	nd
STR 249 S	34	41	nd	5
STR 250 S	45	56	nd	nd
STR 251 S	41	92	nd	nd
STR 252 S	70	89	nd	nd
STR 253 S	35	61	.2	nd
STR 254 S	86	125	nd	nd
STR 255 S	30	70	.3	nd
STR 256 S	52	112	nd	nd
STR 257 S	55	120	.5	nd
STR 258 S	36	59	nd	nd

DETECTION LIMIT

nd = none detected

1

1

0.1

5

-- = not analysed

is = insufficient sample



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1630 PANDORA ST.
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REPORT NUMBER: 860551 GA

JOB NUMBER: 860551

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PAGE 3 OF 4

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR 259 S	34	61	nd	10
STR 260 S	35	90	nd	5
STR 261 S	14	45	.2	5
STR 262 S	35	94	.2	5
STR 263 S	23	85	.4	5
STR 264 S	35	64	nd	10
STR 265 S	46	95	.2	5
STR 266 S	25	85	.4	nd
STR 267 S	31	56	.1	nd
STR 268 S	21	70	.6	5
STR 269 S	87	57	nd	10
STR 270 S	143	75	.2	10
STR 271 S	35	82	nd	10
STR 272 S	90	91	.4	5
STR 273 S	35	50	.4	nd
STR 274 S	20	60	.6	5
STR 275 S	19	45	.2	10
STR 276 S	81	79	.6	5
STR 277 S	30	65	.3	10
STR 278 S	6	46	.1	10
STR 279 S	35	101	.2	5
STR 280 S	45	75	.3	5
STR 281 S	60	55	.1	5
STR 282 S	95	57	.5	20
STR 283 S	75	50	.7	10
STR 284 S	24	39	.2	5
STR 285 S	45	65	.4	15
STR 286 S	55	44	.4	5
STR 287 S	20	50	.1	nd
STR 288 S	20	70	.1	5
STR 289 S	31	77	nd	10
STR 290 S	40	72	nd	5
STR 291 S	20	51	nd	5
STR 292 S	19	36	.3	5
STR 293 S	22	39	nd	5
STR 294 S	31	89	.2	nd
STR 295 S	33	49	nd	nd
STR 296 S	30	44	.5	5
STR 297 S	127	31	nd	15

DETECTION LIMIT

1

1

0.1

5

nd = none detected

-- = not analysed

is = insufficient sample



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(604) 251-5656

REPORT NUMBER: 860551 6A

JOB NUMBER: 860551

OREQUEST CONSULTANTS LIMITED

PAGE 4 OF 4

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR 298 S	106	28	.1	10
STR 299 S	40	47	nd	5
STR 300 S	16	26	.1	5

DETECTION LIMIT

nd = none detected

1 1

-- = not analysed

0.1 5

is = insufficient sample



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(604) 251-5656

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: OREQUEST CONSULTANTS LIMITED
ADDRESS: 404 - 595 Howe Street
: Vancouver, B.C.
: V6C 2T5

DATE: Oct 22 1986

REPORT#: 860526 GA
JOB#: 860526

PROJECT#: None Given *Maple Leaf Stirling*

SAMPLES ARRIVED: Oct 10 1986
REPORT COMPLETED: Oct 22 1986
ANALYSED FOR: Au Cu Pb Zn Ag

INVOICE#: 860526 NA
TOTAL SAMPLES: 21
SAMPLE TYPE: 21 ROCK
REJECTS: SAVED

SAMPLES FROM: OREQUEST CONSULTANTS LIMITED
COPY SENT TO: OREQUEST CONSULTANTS LIMITED

PREPARED FOR: MR. GEORGE CAVEY

ANALYSED BY: VGC Staff

SIGNED: _____

GENERAL REMARK: None



VANGEOCHEM LAB LIMITED

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(604) 251-5656

REPORT NUMBER: 860526 6A

JOB NUMBER: 860526

OREQUEST CONSULTANTS LIMITED

PAGE 1 OF 1

SAMPLE #	Au	Cu	Pb	Zn	Ag
	ppb	ppm	ppm	ppm	ppm
STR 86 22 R	5	12	30	79	.3
STR 86 23 R	10	11	14	155	.2
STR 86 24 R	440	1260	13	16	12.4
STR 86 25 R	580	1500	11	14	7.5
STR 86 26 R	nd	15	14	117	.6
STR 86 27 R	nd	5	15	50	nd
STR 86 28 R	nd	5	15	26	.1
STR 86 29 R	nd	40	24	277	1.2
STR 86 30 R	nd	80	19	100	.3
STR 86 31 R	nd	2990	32	70	.2
STR 86 32 R	nd	14	6	20	nd
STR 86 33 R	nd	2	10	30	nd
STR 86 34 R	nd	17	18	125	.1
STR 86 35 R	nd	3	9	22	nd
STR 86 36 R	nd	56	23	189	.6
STR 86 37 R	nd	125	11	95	nd
STR 86 38 R	1230	304	15	55	1.2
STR 86 39 R	820	700	16	45	6.8
STR 86 40 R	nd	111	1120	54000	5.6
STR 86 41 R	nd	75	10	92	.1
STR 86 42 R	nd	153	11	50	.2

DETECTION LIMIT

nd = none detected

5 1
-- = not analysed

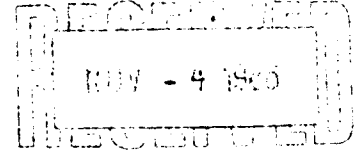
2 1 0.1
is = insufficient sample



VANGEOCHEM LAB LIMITED

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(604) 251-5656



----- GEOCHEMICAL ANALYTICAL REPORT -----

CLIENT: OREQUEST CONSULTANTS LIMITED
ADDRESS: 404 - 595 Howe Street
: Vancouver, B.C.
: V6C 2T5

DATE: Nov 4 1986

REPORT#: 860588 GA

JOB#: 860588

PROJECT#: 5454 (MERRITT)
SAMPLES ARRIVED: Oct 30 1986
REPORT COMPLETED: Nov 4 1986
ANALYSED FOR: Cu Zn Ag Au

INVOICE#: 860588 NA
TOTAL SAMPLES: 42
SAMPLE TYPE: 42 SOIL
REJECTS: DISCARDED

SAMPLES FROM: MIKE JEREMA
COPY SENT TO: OREQUEST CONSULTANTS LIMITED

PREPARED FOR: MR. GEORGE CAVEY

ANALYSED BY: VGC Staff

SIGNED: _____


GENERAL REMARK: None



VANGEOCHEM LAB LIMITED

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REPORT NUMBER: 860588 6A JOB NUMBER: 860588 OREGON CONSULTANTS LIMITED PAGE 1 OF 2

SAMPLE #	Cu ppm	Zn ppm	Ag ppm	Au ppb
STR 301S	20	30	.1	nd
STR 302S	21	25	.1	nd
STR 303S	23	27	.5	nd
STR 304S	13	66	.1	nd
STR 305S	25	55	.3	nd
STR 306S	41	45	.4	10
STR 307S	40	42	nd	10
STR 308S	91	50	.7	20
STR 309S	16	45	nd	5
STR 310S	11	60	.2	nd
STR 311S	35	78	.3	nd
STR 312S	9	61	nd	nd
STR 313S	120	54	.2	nd
STR 314S	34	44	nd	nd
STR 315S	20	36	.2	nd
STR 316S	20	40	.2	nd
STR 317S	34	40	nd	nd
STR 318S	21	46	.2	nd
STR 319S	50	54	nd	nd
STR 320S	130	75	nd	nd
STR 321S	15	77	.3	nd
STR 322S	22	57	nd	nd
STR 323S	30	85	nd	nd
STR 324S	24	45	.2	nd
STR 325S	11	74	.5	nd
STR 326S	400	146	.2	nd
STR 327S	145	81	.3	15
STR 328S	75	30	.3	10
STR 329S	92	30	.6	10
STR 330S	48	28	.2	10
STR 331S	96	40	.3	10
STR 332S	20	46	.2	nd
STR 333S	25	25	.2	nd
STR 334S	31	30	nd	nd
STR 335S	25	48	.2	nd
STR 336S	7	75	.1	nd
STR 337S	15	40	.2	nd
STR 338S	38	255	.1	nd
STR 339S	32	89	nd	nd

DETECTION LIMIT 1 1 0.1 5
nd = none detected -- = not analysed is = insufficient sample



VANGEOCHEM LAB LIMITED

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REPORT NUMBER: 860588 GA

JOB NUMBER: 860588

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PAGE 2 OF 2

SAMPLE #	Cu	Zn	Ag	Au
	ppm	ppm	ppm	ppb
STR 340S	40	58	.2	5
STR 341S	147	160	.4	10
STR 342S	95	61	nd	20

DETECTION LIMIT

nd = none detected

1

1

-- = not analysed

0.1

5

is = insufficient sample



VANGEOCHEM LAB LIMITED

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(604) 251-5656

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: OREQUEST CONSULTANTS LIMITED
ADDRESS: 404 - 595 Howe Street
: Vancouver, B.C.
: V6C 2T5

DATE: Nov 19 1986

REPORT#: 860628 GA
JOB#: 860628

PROJECT#: MERRITT B.C.
SAMPLES ARRIVED: Nov 10 1986
REPORT COMPLETED: Nov 19 1986
ANALYSED FOR: Cu Pb Zn

INVOICE#: 860628 NA
TOTAL SAMPLES: 243
SAMPLE TYPE: 243 Rock
REJECTS: SAVED

SAMPLES FROM: MERRITT, B.C.
COPY SENT TO: OREQUEST CONSULTANTS LIMITED

PREPARED FOR: Mr. GEORGE CAVEY

ANALYSED BY: VGC Staff

SIGNED: _____


GENERAL REMARK: None



VANGEOCHEM LAB LIMITED

MAIN OFFICE
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REPORT NUMBER: 860620 GA

JOB NUMBER: 860620

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PAGE 1 OF 7

SAMPLE #	Cu ppm	Pb ppm	Zn ppm
3801	710	15	93
3802	6500	176	113
3803	3250	24	134
3804	4000	29	54
3805	6400	27	105
3806	2000	25	116
3807	1200	24	140
3808	750	25	153
3809	900	20	135
3810	750	15	95
3811	1390	14	99
3812	910	5	9
3813	620	8	9
3814	470	11	5
3815	2370	16	25
3816	3650	30	100
3817	5400	30	81
3818	1470	26	120
3819	135	24	107
3820	94	20	170
3821	73	20	143
3822	1290	21	118
3823	600	25	93
3824	46	15	15
3825	56	18	15
3826	45	20	25
3827	510	20	65
3828	800	15	51
3829	920	20	92
3830	1170	10	69
3831	1160	15	140
3832	2710	12	82
3833	6900	14	85
3834	3250	14	35
3835	2600	10	60
3836	5800	90	79
3837	1500	15	71
3838	1000	10	31
3839	1510	14	39

DETECTION LIMIT

nd = none detected

1

2

1

-- = not analysed

is = insufficient sample



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NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 860628 GA

JOB NUMBER: 860628

ORQUEST CONSULTANTS LIMITED

PAGE 2 OF 7

SAMPLE #	Cu ppm	Pb ppm	Zn ppm
3840	2310	15	62
3841	3800	110	90
3842	2200	25	135
3843	950	20	115
3844	5400	14	45
3845	1830	15	73
3846	1000	10	60
3847	540	8	27
3848	490	9	22
3849	2950	9	10
3850	3650	5	9
3851	750	6	10
3852	3650	20	35
3853	2490	25	80
3854	1680	20	108
3855	2960	34	114
3856	2300	24	91
3857	1700	20	50
3858	85	17	21
3859	114	13	16
3860	39	8	15
3861	260	10	26
3862	146	15	21
3863	30	17	22
3864	16	18	25
3865	38	20	60
3866	70	20	50
3867	43	15	40
3868	27	21	24
3869	29	15	24
3870	19	20	80
3871	55	15	26
3872	52	19	61
3873	10	15	76
3874	19	17	41
3875	30	18	55
3876	33	20	60
3877	80	12	55
3878	70	10	32

DETECTION LIMIT

nd = none detected

1

2

-- = not analysed

1

is = insufficient sample



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REPORT NUMBER: 860628 GA

JOB NUMBER: 860628

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PAGE 3 OF 7

SAMPLE #	Cu ppm	Pb ppm	Zn ppm
3879	55	14	53
3880	112	14	20
3881	110	15	49
3882	142	21	56
3883	211	16	48
3884	120	15	54
3885	100	11	51
3886	39	7	22
3887	110	8	28
3888	349	15	75
3889	184	15	46
3890	80	15	42
05626	1160	18	123
05627	710	22	90
05628	270	23	47
05629	375	20	68
05630	110	14	49
05631	157	10	45
05632	3040	10	33
05633	1470	6	15
05634	113	10	29
05635	92	10	19
05636	195	15	31
05637	6700	25	86
05638	2260	25	58
05639	510	16	51
05640	315	13	52
05641	207	14	34
05642	344	10	33
05643	1760	13	31
05644	1030	15	41
05645	75	10	43
05646	75	15	60
05647	6	14	140
05648	5	15	141
05649	5	12	44
05650	2	14	57
00151	1350	14	52
00152	15	6	35

DETECTION LIMIT

nd = none detected

1 2

-- = not analysed

1

is = insufficient sample



VANGEOCHEM LAB LIMITED

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JOB NUMBER: 860628

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SAMPLE #	Cu ppm	Pb ppm	Zn ppm
00153	1250	24	85
00154	3060	20	95
00155	3060	26	100
00156	1170	29	103
00157	1150	29	75
00158	540	27	90
00159	590	21	95
00160	1490	20	105
00161	69	26	150
00162	54	15	55
00163	146	15	71
00164	860	20	95
00165	1490	19	41
00166	1010	25	34
00167	1260	17	47
00168	990	13	36
00169	2150	12	21
00170	1150	14	59
00171	800	10	66
00172	550	14	30
00173	291	15	27
00174	246	25	66
00175	201	27	67
00176	153	29	46
00177	277	30	45
00178	1000	17	60
00179	225	18	55
00180	177	20	39
00181	550	23	64
00182	1430	25	119
00183	1010	22	146
00184	760	23	172
00185	1300	23	160
00186	3100	25	148
00187	3740	24	160
00188	1810	26	135
00189	3450	20	139
00190	1150	15	94
00191	610	15	94

DETECTION LIMIT

nd = none detected

1

2

-- = not analysed

1

is = insufficient sample



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SAMPLE #	Cu	Pb	Zn
	ppm	ppm	ppm
00192	1810	18	96
00193	2050	20	115
00194	590	20	115
00195	294	15	95
00196	283	14	80
00197	358	15	79
00198	550	20	88
00199	375	16	89
00200	870	15	66
00201	950	14	60
00202	590	15	82
00203	640	20	96
00204	1090	17	100
00205	2390	16	62
00206	2620	24	85
00207	2700	30	160
00208	3850	21	138
00209	384	20	75
00210	205	20	45
00211	205	15	42
00212	212	20	55
00213	171	29	80
00214	1060	27	85
00215	600	35	120
00216	970	25	160
00217	2900	27	138
00218	510	6	13
00219	560	10	45
00220	3450	6	67
00221	3430	11	100
00222	1050	9	80
00223	371	15	97
00224	550	15	101
00225	480	14	99
09651	42	10	114
09652	135	20	160
09653	205	26	142
09654	140	16	105
09655	71	12	52

DETECTION LIMIT

nd = none detected

1

2

-- = not analysed

1

is = insufficient sample



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REPORT NUMBER: 860628 GA

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PAGE 6 OF 7

SAMPLE #	Cu ppm	Pb ppm	Zn ppm
09656	9	17	54
09657	500	20	40
09658	97	15	40
09659	10	24	56
09660	5	24	50
09661	90	24	46
09662	50	19	40
09663	131	20	74
09664	115	18	80
09665	84	15	44
09666	35	12	30
09667	300	18	80
09668	1510	21	102
09669	1300	15	57
09670	1160	25	120
09671	121	20	96
09672	196	24	103
09673	154	30	150
09674	235	20	144
09675	316	24	130
09676	15	15	1150
09677	11	20	3490
09678	60	316	10000
09679	71	455	27200
09680	6	37	10200
09681	10	16	176
09682	26	9	75
09683	29	12	214
09684	10	10	109
09685	10	12	145
09686	25	14	220
09687	1100	20	95
09688	1350	22	115
09689	1450	21	66
09690	1250	24	92
09691	220	25	99
09692	490	16	66
09693	103	17	74
09694	600	15	99

DETECTION LIMIT

nd = none detected

1

2

-- = not analysed

1

is = insufficient sample



VANGEOCHEM LAB LIMITED

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(604) 251-5656

REPORT NUMBER: 860628 GA

JOB NUMBER: 860628

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SAMPLE #	Cu ppm	Pb ppm	Zn ppm
09695	860	24	150
09696	2460	24	190
09697	7100	20	129
09698	1750	15	85
09699	1400	10	97
09700	820	15	112
STR-49R	205	9	124
STR-50R	27	11	107
STR-51R	5000	15	98

DETECTION LIMIT
nd = none detected

1 2
— = not analysed

1
is = insufficient sample

Filename:MAPLEBUDG

OREQUEST CONSULTANTS LTD

INTERNATIONAL MAPLE LEAF - MERRIT B.C. PROJE19-Jan-87
COMPLETED DECEMBER 1986.

COPY

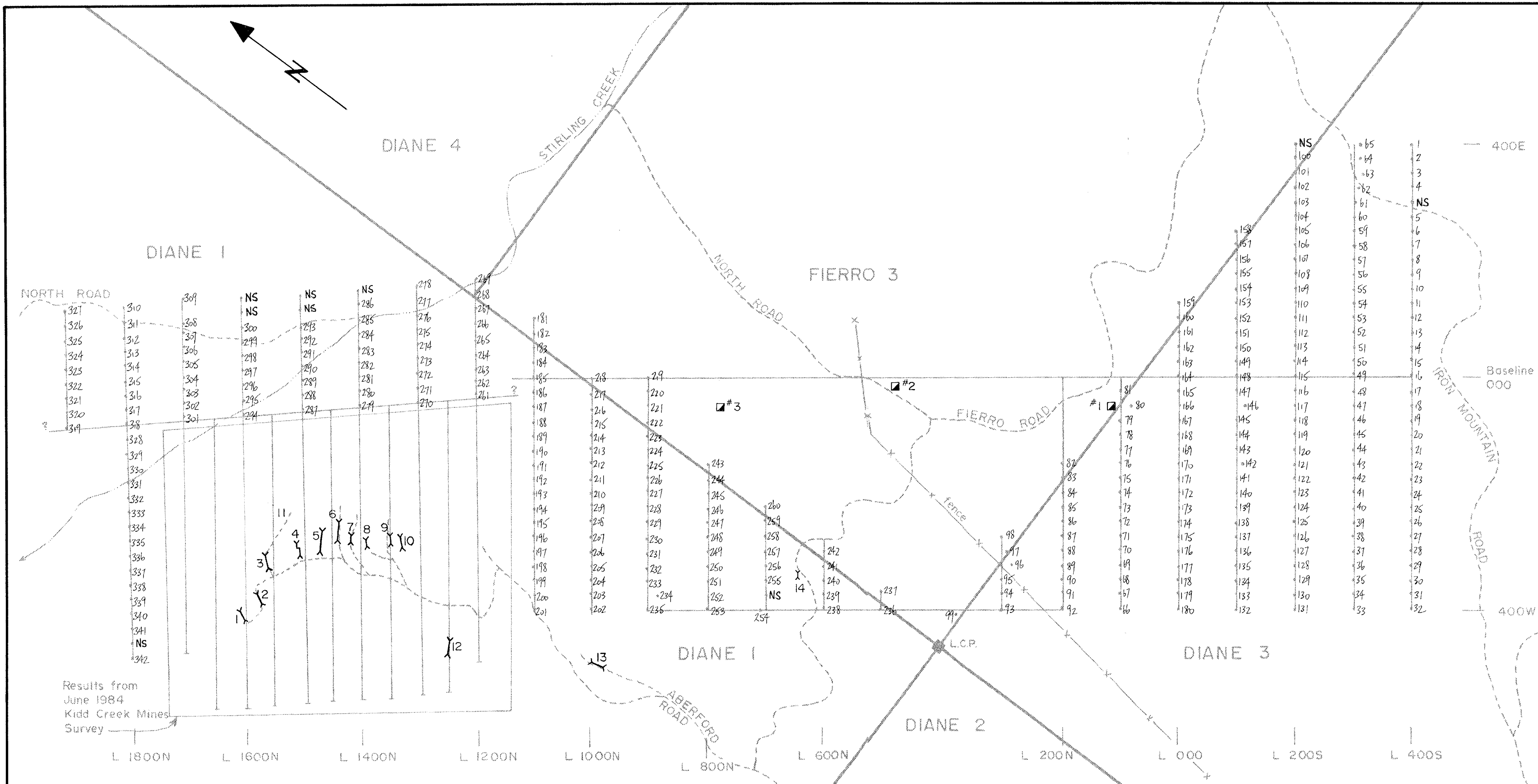
	COSTS
Preliminary Report	\$2,670.00
Linecutting	14,994.00
Airborne and Ground Geophysics	23,443.75
Geological Survey	13,732.50
Geochemical Survey	6,860.00
Assays	11,243.15
Trenching	11,074.79
Truck	2,220.00
Camp Costs	10,368.23
Supervision & Report	12,371.02
Total	\$108,977.44

Cash call #1	(108,170.00)
Credit budget difference	(807.44)

Outstanding	\$.00
-------------	--------



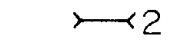

PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,058



Results from
June 1984
Kidd Creek Mines
Survey

LEGEND

-  Claim post and boundaries
-  Grid lines
- NS No Sample
- ND None Detected
-  Trench, numbers preceded by T86
- 028 Sample number, STR-028 S
-  Old shaft

**PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,058

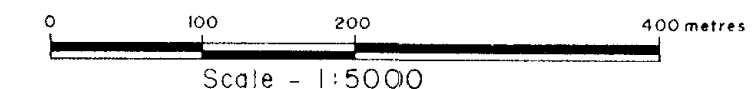


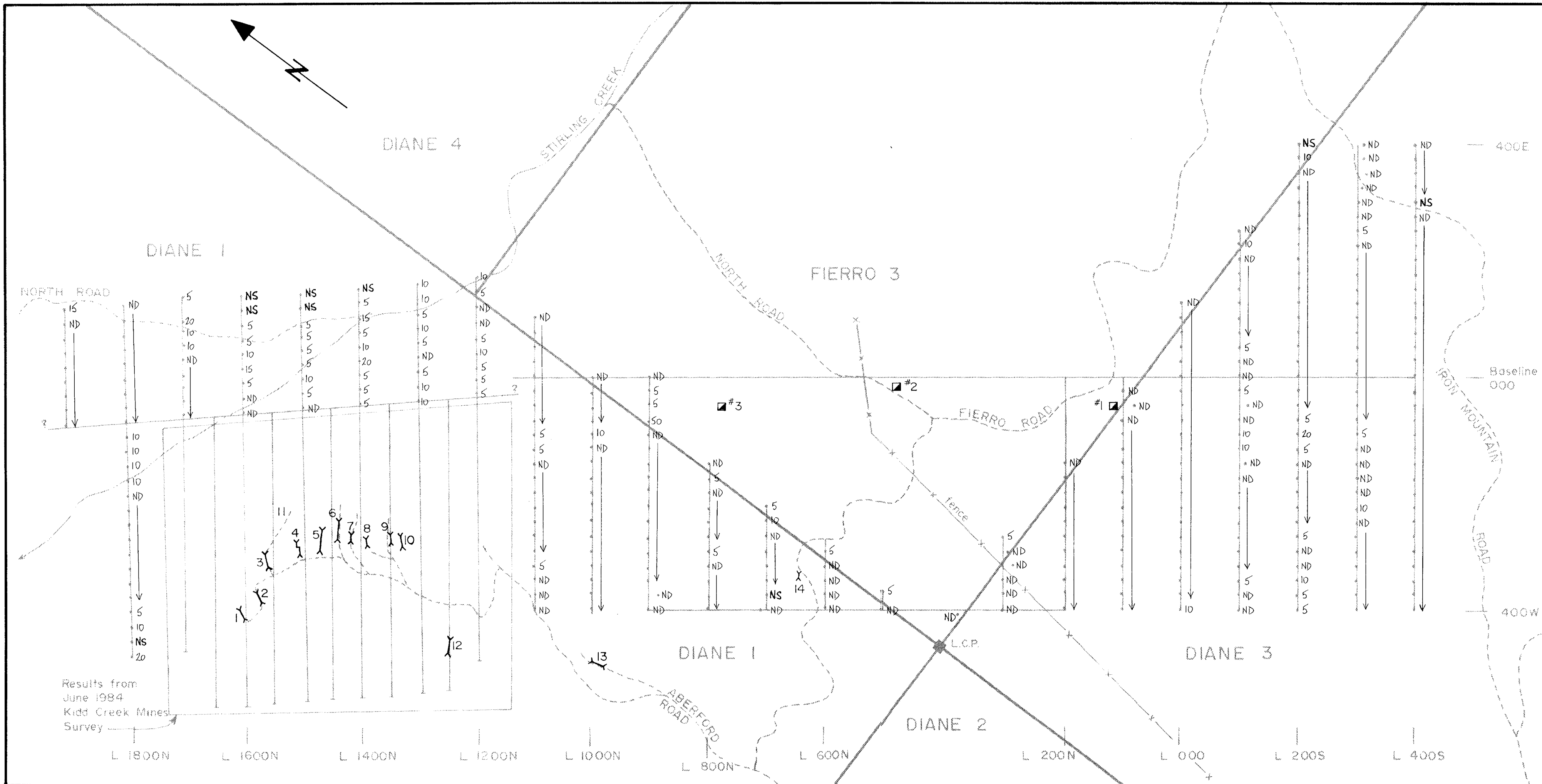
FIGURE 5

SOIL SAMPLE LOCATIONS

Stirling Group Diane Claims
INT'L. MAPLE LEAF
RESOURCE CORP.
NTS 921/2E,2 B.C.

OREQUEST





LEGEND

- Claim post and boundaries
- Grid lines
- NS No Sample
- ND None Detected
- T86 Trench, numbers preceded by T86
- 028 Sample number, STR-028 S
- Old shaft

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,058
PART 1 OF 2

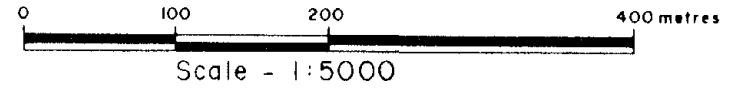
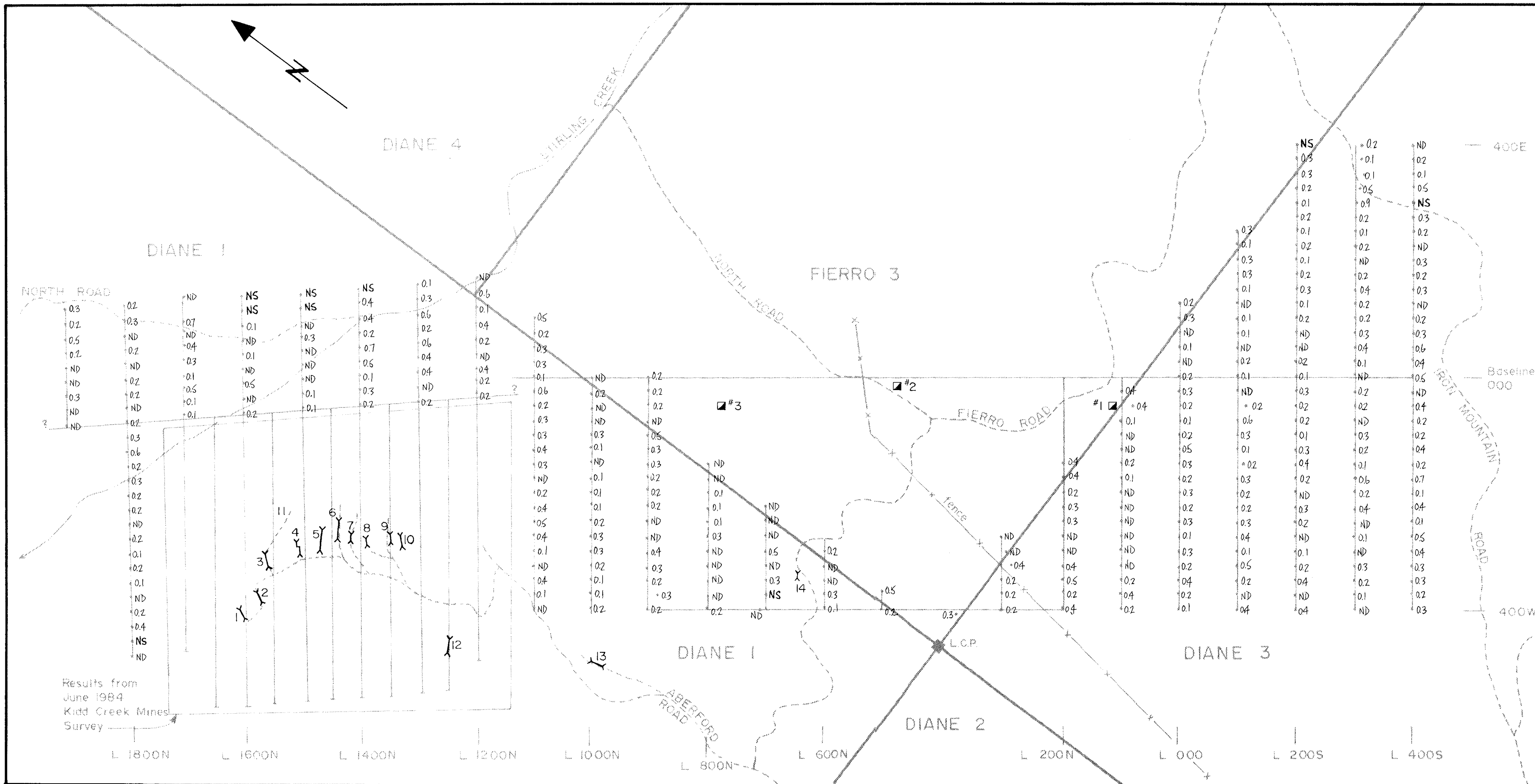



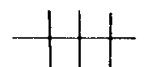
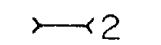

FIGURE 1

SOIL GEOCHEMISTRY GOLD (ppb)

Stirling Group Diane Claims
 INT'L. MAPLE LEAF
 RESOURCE CORP.
 NTS 92I/2E,2 B.C.



LEGEND

-  Claim post and boundaries
-  Grid lines
- NS No Sample
- ND None Detected
-  Trench, numbers preceded by T86
- 028 Sample number, STR-028 S
-  Old shaft

**PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,058

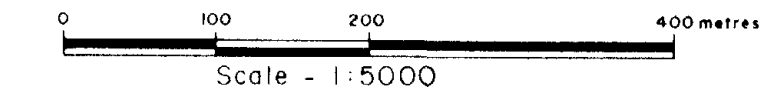
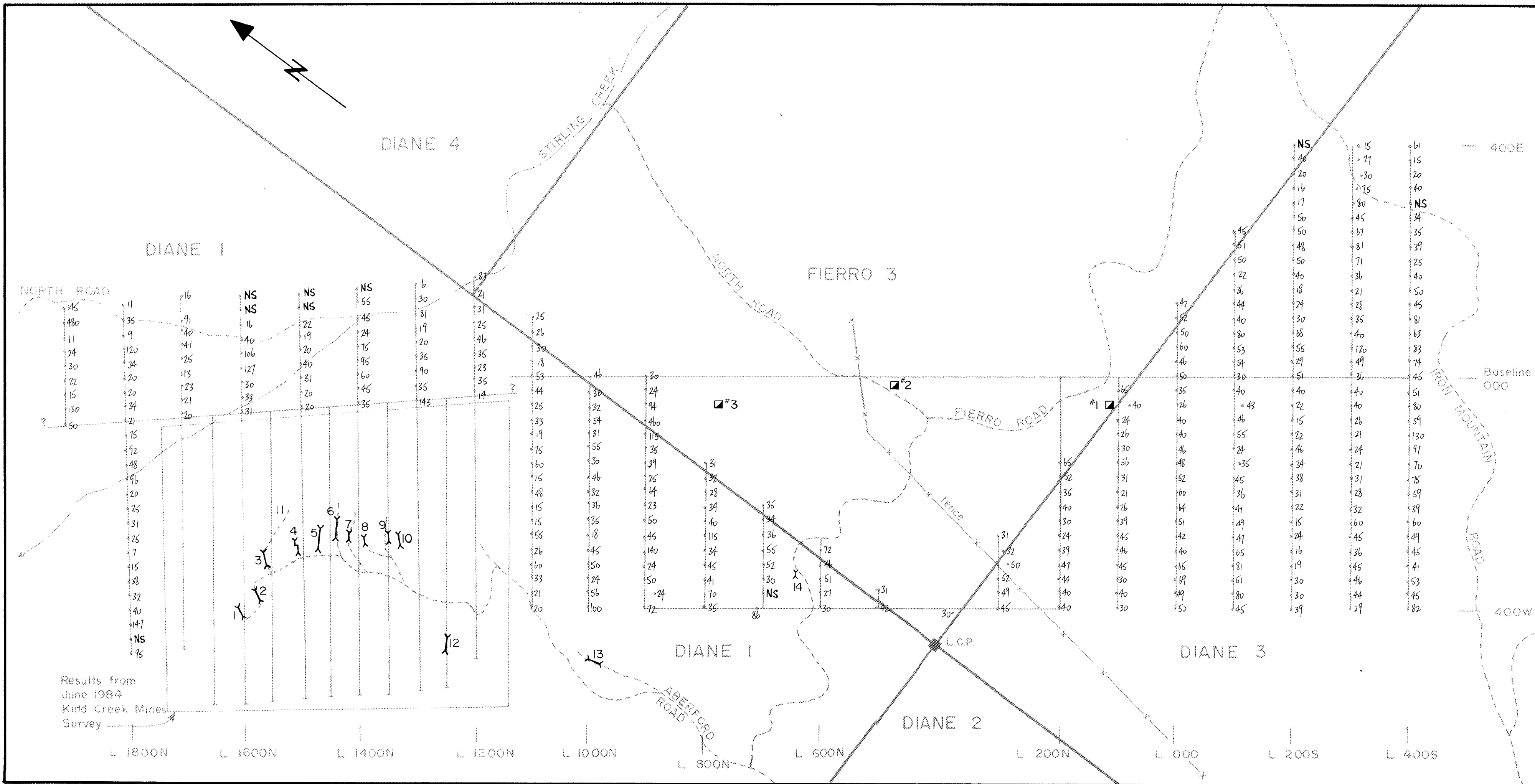




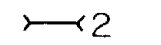

FIGURE 2

**SOIL GEOCHEMISTRY
SILVER (ppm)**

Stirling Group Diane Claims
INT'L. MAPLE LEAF
RESOURCE CORP.
NTS 92I/2E,2 B.C.



LEGEND

-  Claim post and boundaries
-  Grid lines
- NS No Sample
- ND None Detected
-  Trench, numbers preceded by T86
- 028 Sample number, STR-028 S
-  Old shaft

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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PART 1 OF 2

Scale - 1:5000

FIGURE 3

**SOIL GEOCHEMISTRY
COPPER (ppm)**

Stirling Group Diane Claims
INT'L. MAPLE LEAF
RESOURCE CORP.
NTS 92I/2E,2 B.C.

OREQUEST

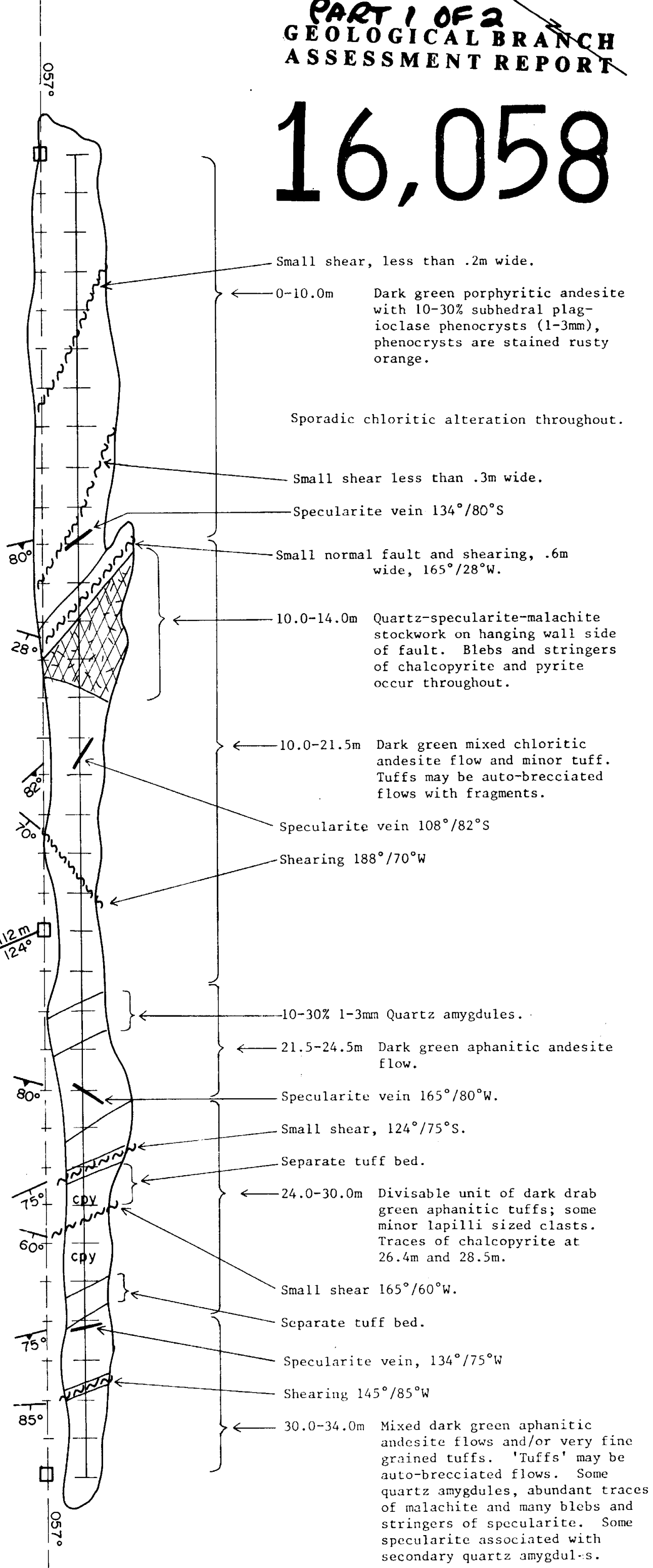


**PART 1 OF 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,058

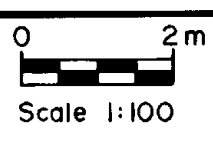
Sample number	Cu	Zn	Ag	Au
	ppm		oz/ton	

Sample number	Cu	Zn	Ag	Au
08174	246	66	.03	.005
08175	201	67	.02	.005
08176	153	46	.01	.005
08177	277	45	.01	.005
08178	1000	60	.03	.006
08179	225	55	.03	.006
08180	177	39	.01	.005
08181	550	64	.07	.005
08182	1430	119	.01	.034
08183	1010	146	.01	.005
08184	760	172	.02	.005
08185	1300	160	.010	.005
08186	3100	148	.05	.005
08187	3740	160	.07	.019
08188	1810	135	.05	.005
08189	3450	139	.04	.005
08190	1150	94	.01	.010
08191	610	94	.01	.005
08192	1810	96	.11	.039
08193	2050	115	.10	.005
08194	590	115	.02	.005
08195	294	95	.11	.005
08196	283	80	.01	.005
08197	358	79	.09	.005
08198	550	88	.01	.005
08199	375	89	.01	.005
08200	870	66	.01	.005
08201	950	60	.05	.016
08202	590	82	.01	.005
08203	640	96	.06	.005
08204	1090	100	.03	.005
08205	2390	62	.03	.018
08206	2620	85	.20	.005
08207	2700	160	.01	.005



1450 N
220 W

PLAN VIEW CROSS SECTION



LENGTH 34 m.
ORIENTATION 057°

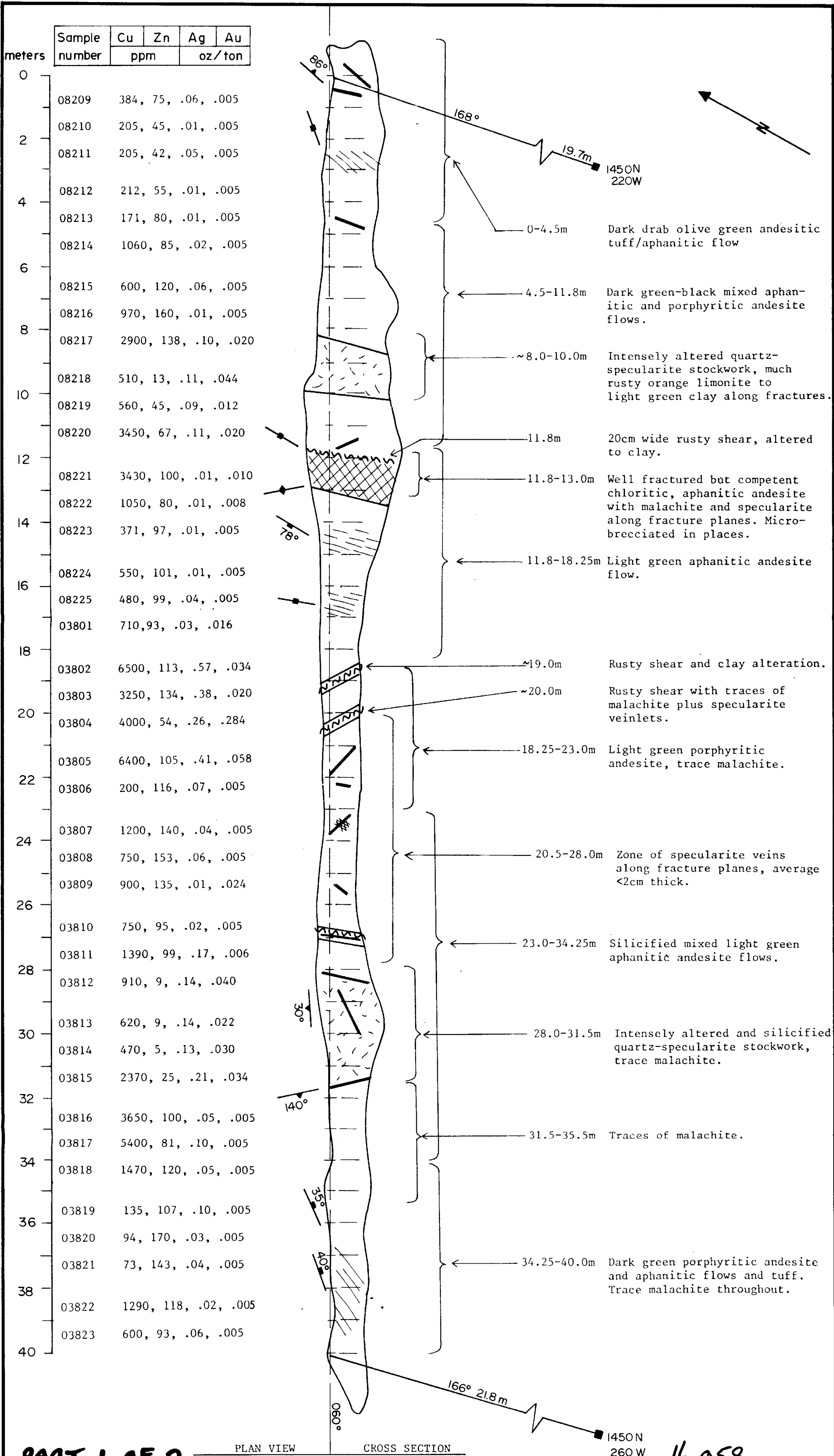
STIRLING GROUP DIANE CLAIMS

INT'L MAPLE LEAF RESOURCE CORP.

OREQUEST



ORIGINAL ZONE
TRENCH T86-6
(Claim Post Trench)

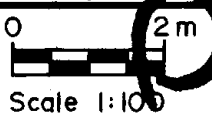


PART 1 OF 2

PLAN VIEW

CROSS SECTION

16,058



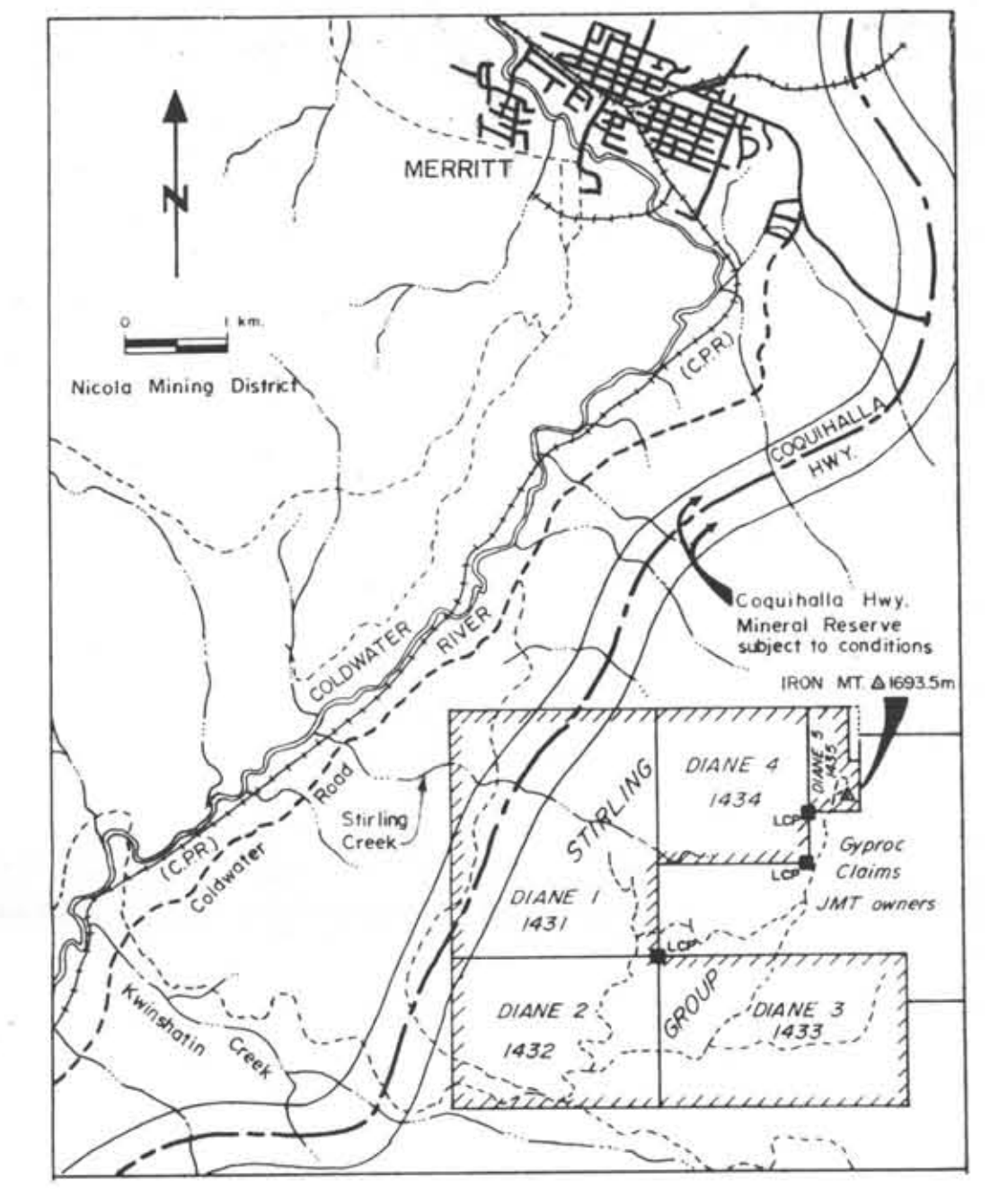
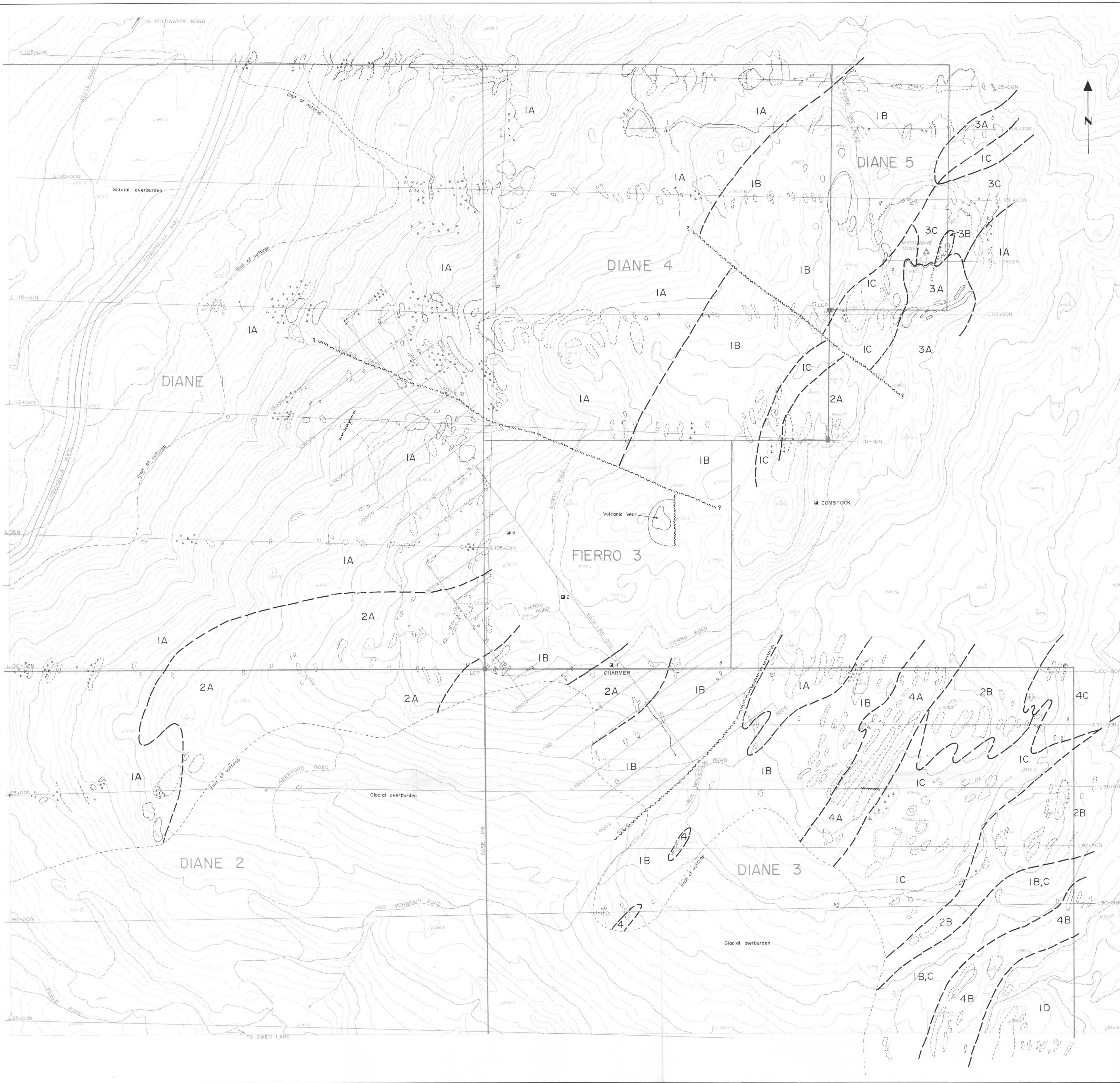
LENGTH 40 m.
ORIENTATION 060°

STIRLING GROUP DIANE CLAIMS
INT'L MAPLE LEAF RESOURCE CORP.

ORIGINAL ZONE
TRENCH T86-5
(Formerly Trenches I&J)

OREQUEST





- ROCK TYPE**
- SEDIMENTS**
Limestones and Limy Sediments
 4A dark grey fossiliferous crystalline limestone
 4B grey to greyish crystalline limestone
 4C dark grey crystalline limestone and medium grained limy sediments ± minor intercalated green lapilli tuff
- VOLCANICS**
Mixed Rhyolite to Rhodacite Flows and Minor Tuffs
 3A dark purple to grey-black porphyritic rhodacite flows and minor tuffs
 3B bleached tan aphanitic flow-banded rhyolite
 3C rhodacite tuffs to lapilli tuff with minor porphyritic rhodacite flows
- Mixed Dacite to Rhyolite Flows and Proclastics**
 2A pink to purple-grey aphanitic dacite to rhyolitic tuffs and flows
 2B green porphyritic dacite
- Mixed Andesite Flows and Proclastics**
 1A dark green to grey-black, porphyritic, aphanitic and minor amygdaloidal andesite flows with minor intercalated andesite lithic tuffs, lapilli tuffs and breccia
 1B purple and green heterolithic andesite lapilli tuffs, tuffs and breccia with minor intercalated dark green porphyritic ± amygdaloidal andesite flows
 1C tan to light green homolithic lapilli tuff / tuff breccia with silty andesitic matrix, possibly auto brecciated flow
 1D dark purple heterolithic tuff breccia / agglomerate

- LEGEND**
- geological contact, assumed
 - ||||| fault
 - area of outcrop
 - small outcrop
 - x cliff
 - old shaft
 - swamp
 - △ talus

**PART 1 OF 2
 GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

16,058

Scale - 1:5000

**FIGURE 3
 GEOLOGY**

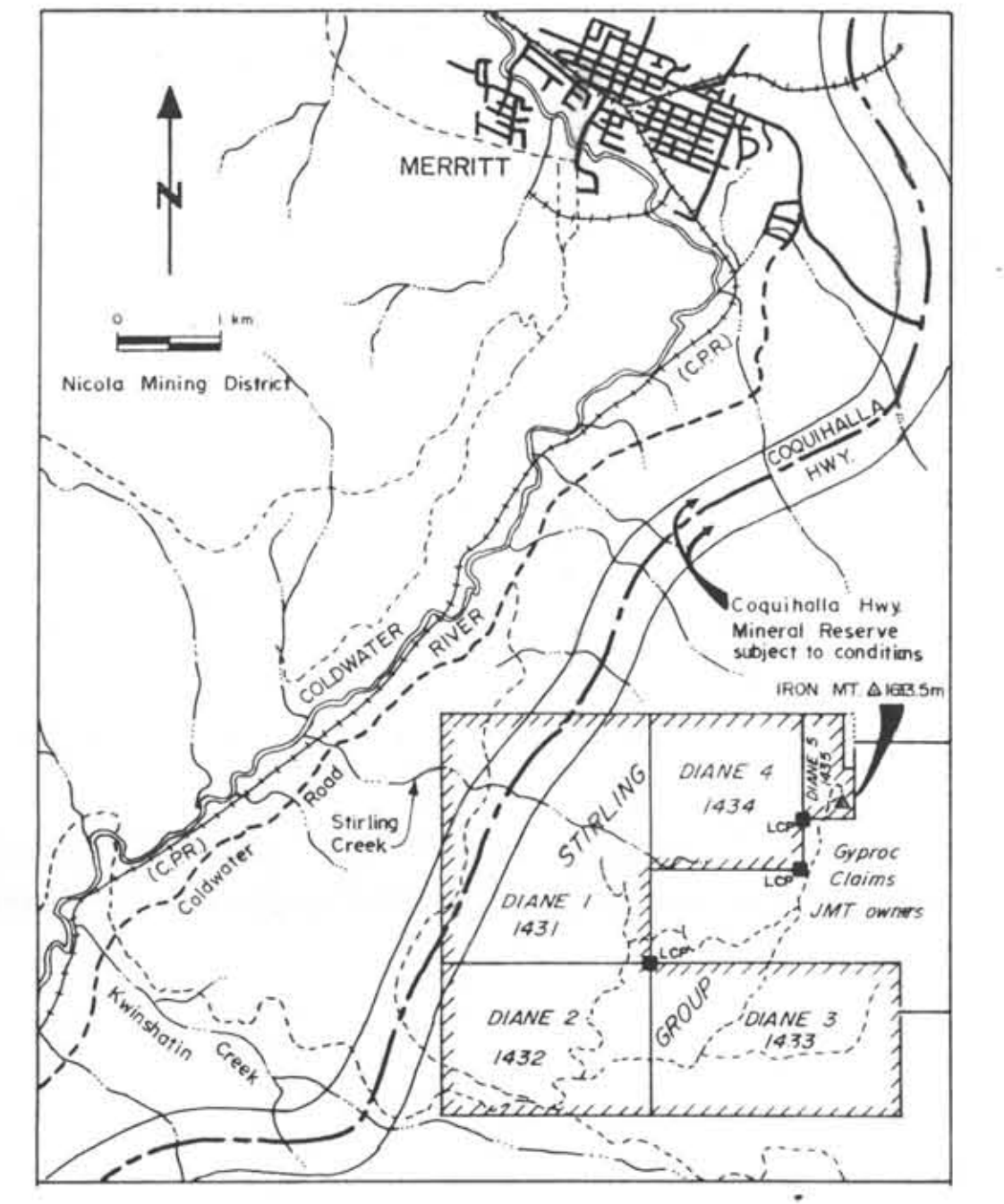
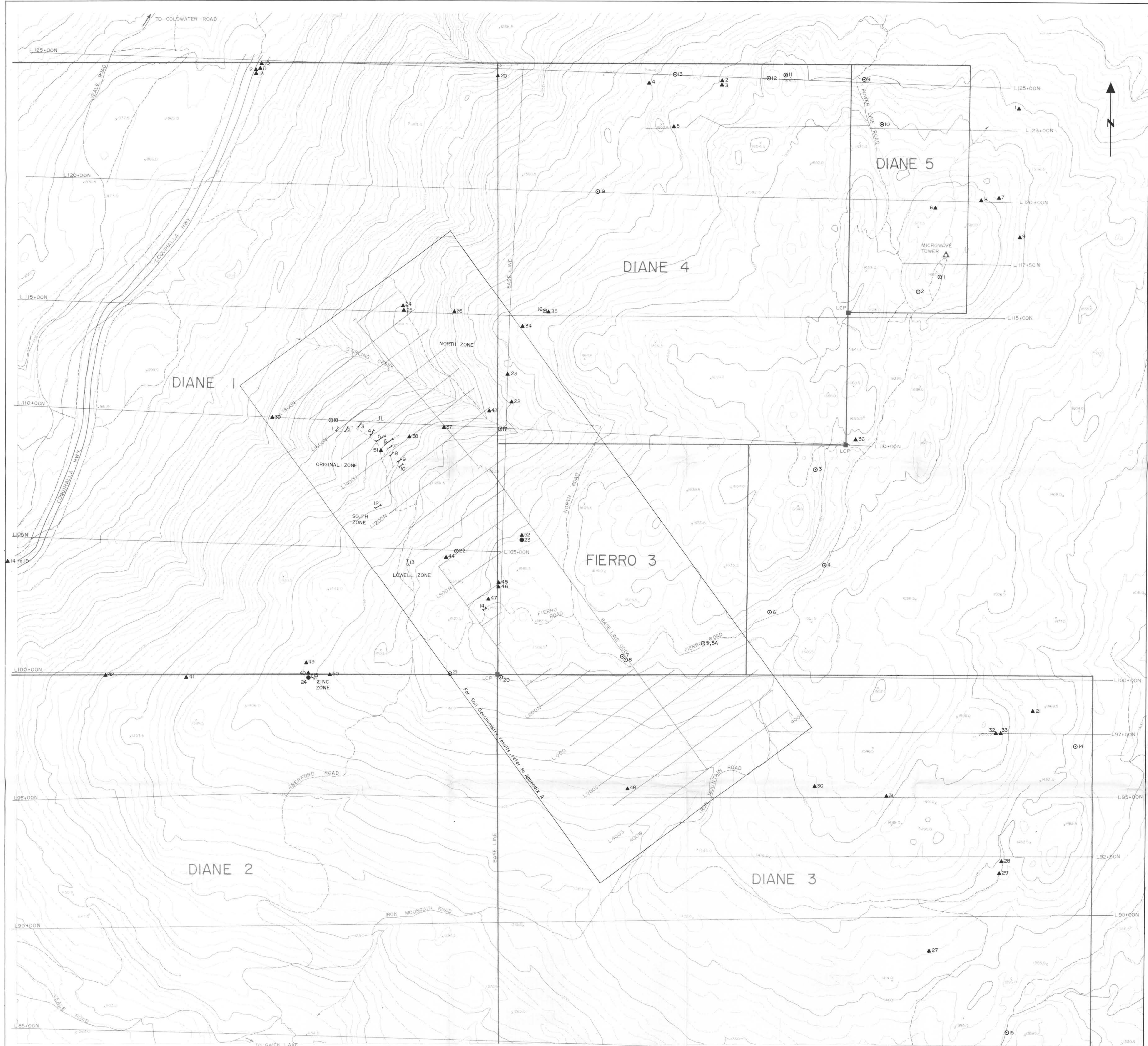
Stirling Group Diane Claims

INTERNATIONAL MAPLE LEAF RESOURCE CORP.

NTS 921/2E BC.

OREQUEST

DEC. 1986



- LEGEND**
- trench (all numbers preceded by TR6-)
 - ▲ rock sample (all numbers preceded by STR6- R)
 - thin section (all numbers has suffix STR)
 - polished section (all numbers has suffix STR)

PART 1 OF 2
GEOLOGICAL BRANCH
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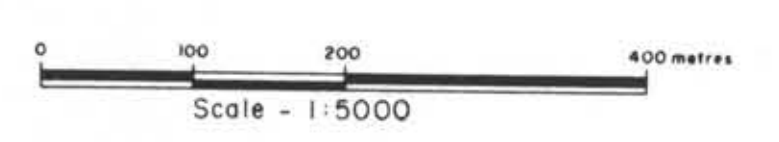


FIGURE 4
ROCK SAMPLES
and
TRENCH LOCATIONS
 Stirling Group Diane Claims
 INTERNATIONAL MAPLE LEAF RESOURCE CORP.