MAP No.

106 D 1

ASSESSMENT REPORT [X]
PROSPECTUS [ ]
CONFIDENTIAL [X]
OPEN FILE [ ]

DOCUMENT NO.: 091922

MINING DISTRICT: MAYO

TYPE OF WORK: GEOLOGICAL, GEOPHYSICAL, TRENCHING, GEOCHEMICAL

REPORT FILED UNDER: ALL-NORTH RESOURCES LTD.

DATE PERFORMED: Aug. 8-31, 1986

DATE FILED: March 4, 1987

| LOCATION | |
|---|---|
| LAT. | 64°01'N |
| LONG. | 134°28'W |

AREA:

CLAIM NAME & NO.

TUDL 1-32 YA76768-799

| | |
|---|---|
| VALUE $ | |
| WORK DONE BY: | R.J. Cathro |
| WORK DONE FOR: | Archer, Cathro and Associates (1981) Ltd. |
| DATE TO GOOD STANDING | REMARKS: |
| | |
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| | |

#3 MARG

ARCHER, CATHRO
& ASSOCIATES (1981) LIMITED
CONSULTING GEOLOGICAL ENGINEERS

1016 - 510 WEST HASTINGS STREET
VANCOUVER, B. C. V6B 1L8
(604) 688-2568

# SUMMARY REPORT ON

# GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL SURVEYS

# AND HAND TRENCHING

RECEIVED
MAR - 4 1987
MINING RECORDER
MAYO, Y.T.
I.A. & N.D.

MARG PROPERTY

TUDL 1-32 CLAIMS (YA76768-YA76799)

MAYO M.D., YUKON - NTS 106D/1

64°01'N; 134°28'W

EIP Designation Number 86-014

OFFICE OF THE REGIONAL MANAGER
MINERAL RIGHTS
MAR 06 1987
WHITEHORSE
YUKON TERRITORY

091922

FOR

ALL-NORTH RESOURCES LTD.

R.J. Cathro, B.A.Sc., P.Eng.

December, 1986

BOX 4127, 3125 THIRD AVENUE, WHITEHORSE, Y. T. Y1A 3S9
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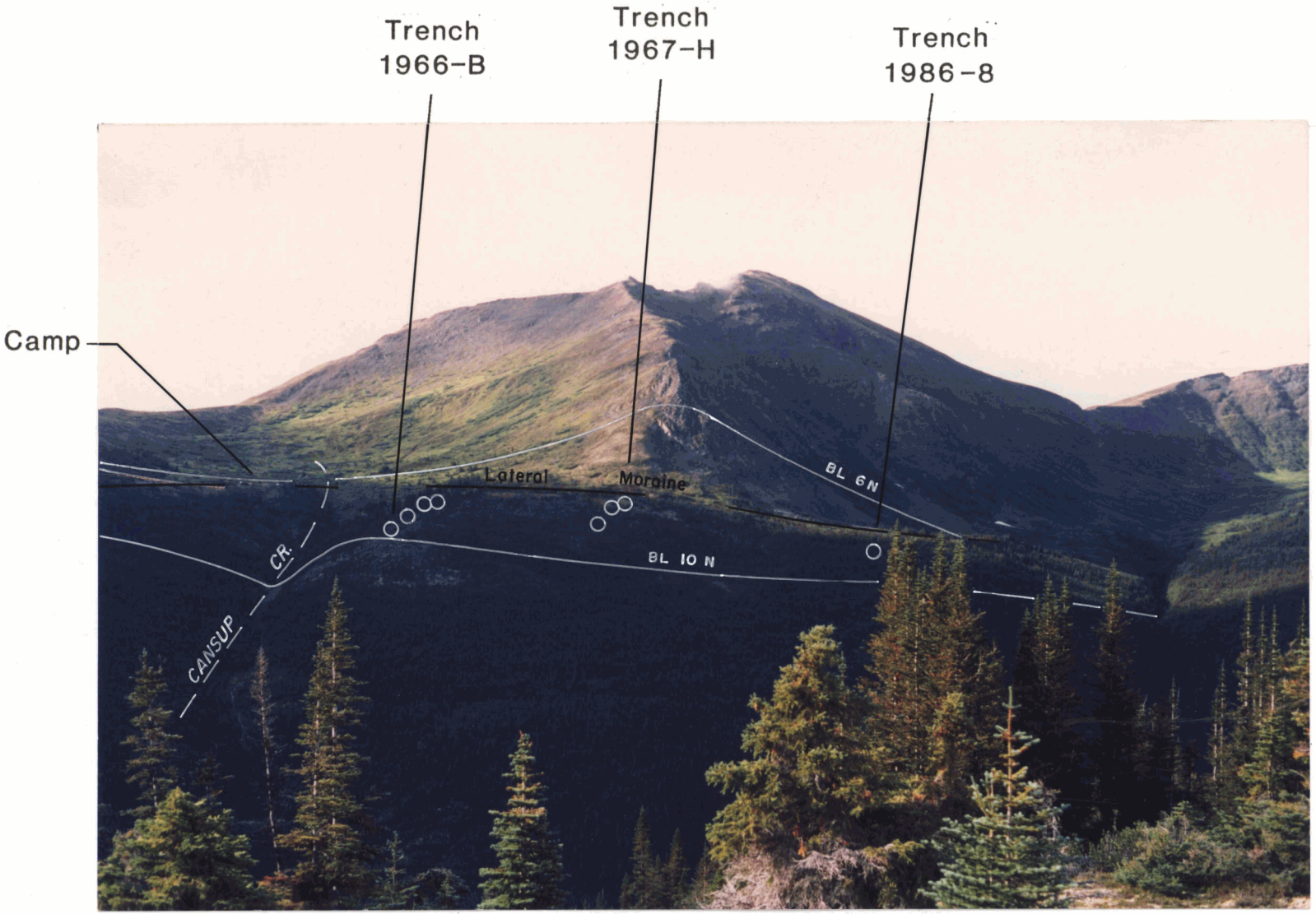


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## SUMMARY AND RECOMMENDATIONS

The Marg Property was initially identified by reconnaissance stream sediment surveys conducted by the Geological Survey of Canada (GSC) in 1964 and was first staked by Canadian Superior Exploration Ltd. and United Keno Hill Mines Ltd. in April, 1965. From 1965 to 1967, the property was explored by linecutting, soil geochemistry (lead and zinc only) and hand trenching which outlined a large area of strongly anomalous lead and zinc soil response but failed to locate significant bedrock mineralization. The property received no exploration until 1982, when it was restaked by ZX-Sentinel Joint Venture (Chevron Minerals Ltd., SMD Mining Co. Ltd. and Enterprise Exploration Ltd.), which performed limited sampling and hand trenching in 1982 and 1984 before entering into an option with All-North Resources Ltd. in 1986.

The 1986 field program described in this report was performed by All-North between August 8 and 31. It consisted of linecutting, baseline surveys, multi-element geochemistry, geophysical surveys (HLEM, VLFEM, magnetic, IP and resistivity), hand trenching and geological mapping.

The property lies within a narrow 400 km long belt of predominantly metasedimentary rocks that are now believed to be allochthonous and Mississippian in age. The Keno Hill silver-lead vein camp, located about 40 km southwest of the property, also lies within the belt. Most of the productive veins are hosted by a competent formation called the Central Quartzite but a few are developed within the recessive and lithologically more variable Lower Schist. Although GSC regional mapping shows the Marg Property is underlain by the Central Quartzite, detailed property mapping suggests it lies, in fact, within the Lower Schist.

Three apparently conformable units have been identified on the property (Chlorite, Graphite and Quartzite Units) and petrological studies indicate all three have a significant volcanic component. The sequence generally appears to form a northwest-striking, moderately southwest-dipping homocline but detailed mapping shows at least three phases of deformation. Although bedrock exposure is extremely limited, making geological interpretation difficult, it appears that all geochemical anomalies and mineralization are related to the Graphite Unit.

Grid soil geochemistry has been conducted over a 1400 by 500 m area in the centre of the property and has outlined a series of multi-element anomalies that stretch across the entire length of the grid. Most of the targets have anomalous response for at least four of six metals (gold, silver, lead, zinc, copper and arsenic) and some are anomalous for all six. While individual anomalies have a maximum length of 360 m, some appear to be fault offsets of others and most are obscured at one or both ends by glacial till or talus slides. Interpretation of geochemical data from soils, stream sediments and ferricrete deposits suggests that hydromorphic transport has played an important role in metal dispersion and that the more mobile metals are often displaced from the less mobile ones. In at least one area, paleogroundwaters that formed a lead-rich ferricrete appear to have had extremely low pH (<4). Acidity in this range is difficult to obtain within the surface environment unless large quantities of sulphides are oxidized. Even where this criteria is met, lead-rich ferricretes are extremely rare.

The geophysical surveys produced mixed results. HLEM and VLFEM data outlined a series of conductors, many of which lie slightly north of the

apparent source of the soil geochemical anomalies, suggesting a conductive graphitic horizon in the footwall of the mineralization. Although a few of the HLEM anomalies could be due to massive sulphides, that seems unlikely as effective depth of penetration was only 15 to 30 m and sulphides at that depth would be largely oxidized. Magnetic response was relatively flat and of little use, while IP and resistivity surveys were ineffective because the power source was too weak for the combination of resistant overburden and highly conductive bedrock.

Hand trenching was done before 1986 soil geochemical results were available and therefore was largely directed toward geophysical targets, most of which are downhill from the probable source of the soil anomalies. Most trenches did not reach bedrock and most sampling was limited to soil and float. Despite the problems, mineralization was located in three widely separated areas. In each case, the mineralization was highly oxidized and exhibited strong laminations with small scale folding similar to that in the surrounding host rocks. Where exposed in bedrock, the mineralization formed three limonitic horizons that are conformable with bedding. The best assays obtained to date from mineralized float are 14.4% Cu, 9.0% Pb, 3.3% Zn, 1.3% As, 169.40 g/t Ag and 2.6 g/t Au, while the best values from bedrock are 1.4% Cu, 9.1% Pb, 0.5% Zn, 323.1 g/t Ag and 8.1 g/t Au over 0.12 m. Metal ratios from mineralization in the three areas are highly variable and it is not known whether this is due to primary metal zoning within a single mineralized horizon, different metal signatures from more than one horizon, or differential leaching and/or enrichment of metals by supergene processes.

Based on the textures, metal ratios, and conformable nature of the mineralization and volcanic affinity of the host rocks, the most probable exploration target at the Marg Property appears to be a volcanogenic massive sulphide deposit. Although no deposits of this type have been recognized elsewhere in the belt of rocks containing the Marg Property, they do occur in similar Mississippian age rocks elsewhere in the Yukon. Recent mapping throughout the Cordillera has identified numerous belts of allochthonous rocks that are lithologically distinct from the surrounding rocks and some of the more exciting discoveries in recent years have been made by recognizing these exotic terranes and exploring them for deposits that occur in similar rocks elsewhere in the Cordillera.

In order to explore for the source of the geochemical anomalies and mineralized float and to test the validity of the volcanogenic model, a $400,000 program of bulldozer trenching and diamond drilling is proposed. The diamond drilling should be done on a series of section lines spaced about 300 m apart while the bulldozer will be used to provide drill support and bedrock exposure in areas with relatively shallow overburden. The proposed budget is as follows:

| | |
|---|---|
| Diamond Drilling, 1000 m HQ @ $115/m ..... | $115,000 |
| Labour ..... | 75,000 |
| Helicopter, 80 hrs @ $600/hr ..... | 48,000 |
| Bulldozer, D7 with ripper, incl fuel, 400 hrs @ $115/hr.. | 46,000 |
| Field Expenses, 600 mandays @ $60/day ..... | 36,000 |
| Assays, 1000 rock samples for ICP + Au @ $17.00 ..... | 17,000 |
| 185 for Au,Ag,Pb,Zn,Cu @ $32.50 ..... | 6,500 |

| | |
|---|---|
| Transportation ..... | $ 15,000 |
| Office Costs ..... | 15,000 |
| Accounting and Expediting ..... | 10,000 |
| Management ..... | 17,000 |
| TOTAL - | $400,000 |

Respectfully submitted

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

/mc

R.J. Cathro

## INTRODUCTION

A program of linecutting, baseline surveying, soil sampling, geophysical surveys, hand trenching (with explosives) and geological mapping was conducted between August 8 and 31, 1986 at the the Marg Property. The program was carried out by Archer, Cathro and Associates (1981) Limited on behalf of All-North Resources Ltd., which has optioned the claims from Chevron Minerals Ltd. and SMD Mining Co. Ltd.

The crew was led by K. Sax and consisted of M. Boulding, M. Gazetas, T. Knight, K. Capnerhurst, L. Robinson, and P. Gilchrist (cook). Geological mapping and field supervision was provided by R.C. Carne and the program was planned and managed by R.J. Cathro.

Electromagnetic, magnetic and induced polarization surveys were performed under contract by G. Hendrickson and S. Cosman of Delta Geoscience Ltd., Vancouver between August 16 and 22.

Consulting geologist J.P. Franzen visited the property from August 16 to 18.

The author's Statement of Qualifications is attached as Appendix A.

Plate 2: Marg Property, View East over Cansup Creek

## LOCATION AND ACCESS

The Marg Property is centered at 64°01'N and 34 28'W within NTS map sheet 106D/1. It is situated 80 km NE of Mayo, 52 km NE of Elsa (the mill site and administrative centre for United Keno Hill Mines Ltd.'s silver-lead mines) and 32 km from the nearest road point (see Figures 1 and 2). Access in 1986 was by helicopter operating from a seasonal base at Mayo, which is 407 km by road from Whitehorse, the Yukon capital. Mayo can also be reached by scheduled aircraft service from Whitehorse.

## CLAIM DATA

The property consists of 32 contiguous claims registered at the Mayo Mining Recorder in the name of Archer, Cathro & Associates (1981) Limited. A claim map is shown on Figure 3 while pertinent claim data is listed below.

| Claim Name | Grant Numbers | Expiry Date |
|---|---|---|
| Tudl 1-32 | YA76768-YA76799 | September 14, 1990 |

The claims were staked in August, 1982 on behalf of ZX-Sentinel Joint Venture (Chevron, SMD and Enterprise Exploration Limited). Enterprise Exploration subsequently abandoned its interest.

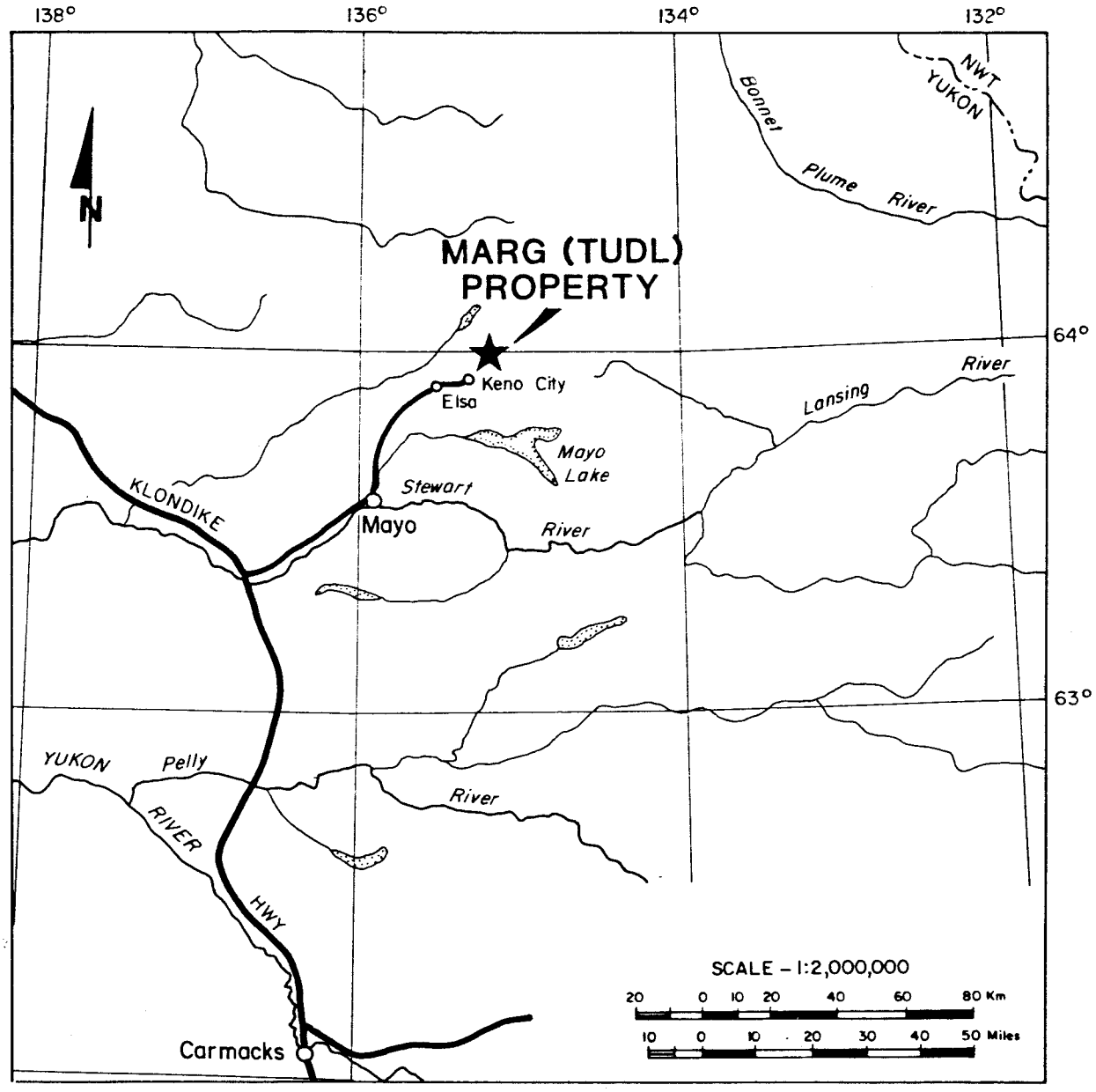



**Figure 1**

**ARCHER, CATHRO & ASSOCIATES (1981) LIMITED**

# LOCATION MAP

## MARG (TUDL) PROPERTY

## ALL-NORTH RESOURCES LTD.

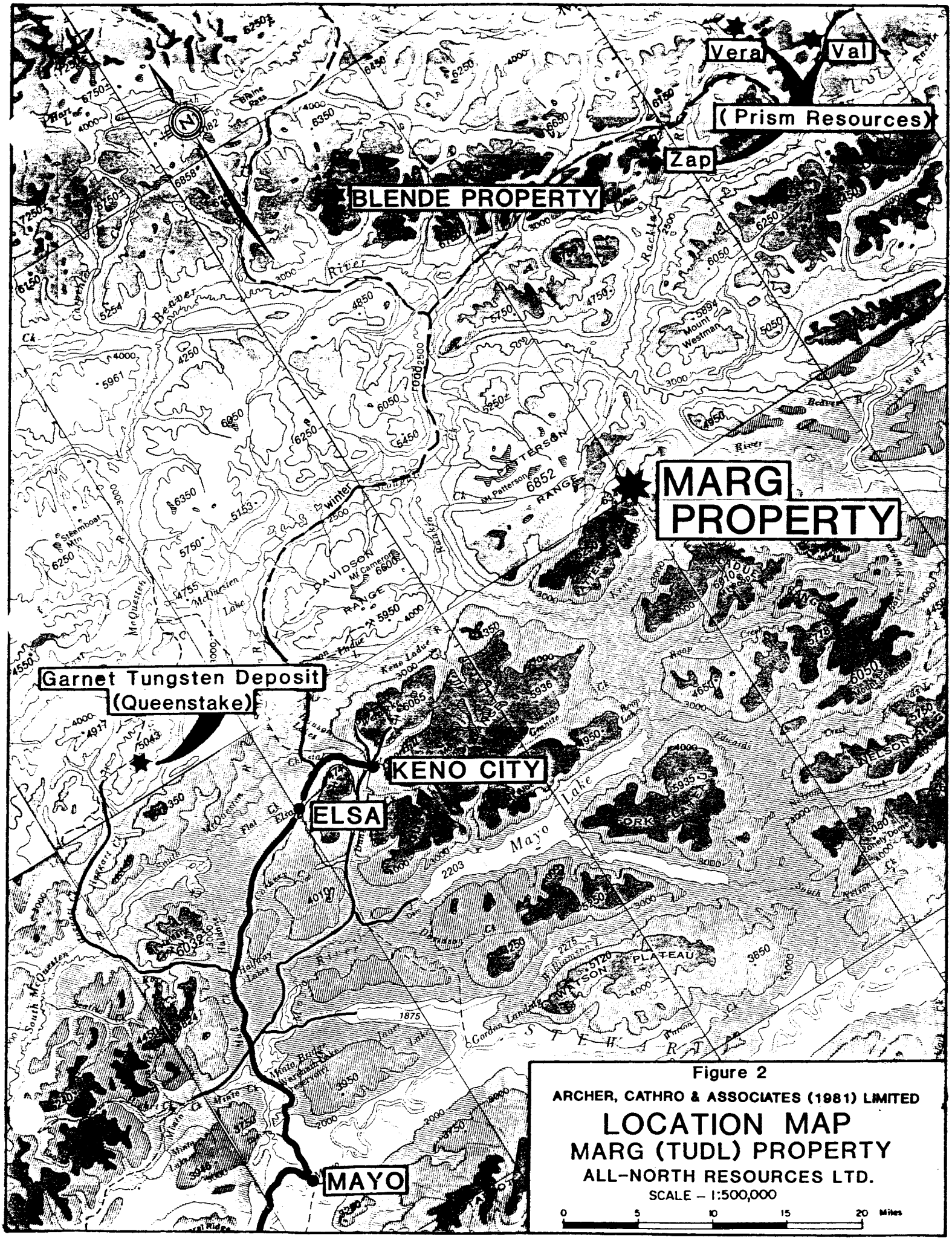



Figure 2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# LOCATION MAP

## MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

SCALE – 1:500,000

0 5 10 15 20 Miles

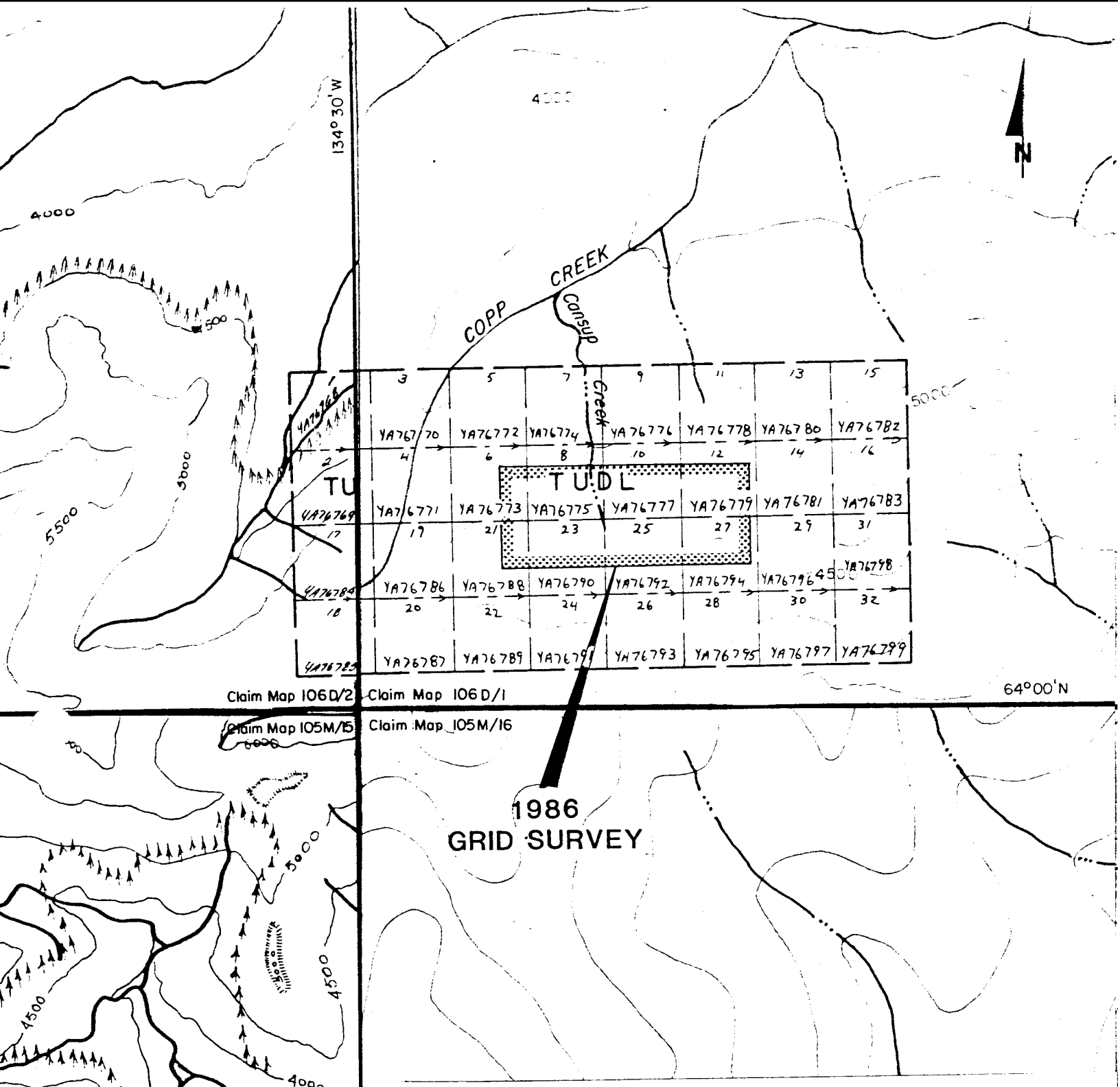



Figure 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# CLAIM MAP

## MARG (TUDL) PROPERTY

## ALL-NORTH RESOURCES LTD.

SCALE – 1 Inch = 1/2 Mile (1:31,680)

500 0 500 1000 1500 2000 2500 3000 Metres

1500 0 1500 3000 4500 6000 7500 9000 10,500 Ft.

To accompany report dated December, 1986

## HISTORY AND PREVIOUS WORK

The area was first staked in April, 1965 as Jack 1-8 claims by Canadian Superior Exploration Ltd. and United Keno Hill Mines Ltd. immediately following release of regional geochemical results by the GSC for samples collected in summer, 1964 during Operation Keno. The target was a stream sediment sample collected at the mouth of Cansup Creek which yielded strongly anomalous values of 300 ppm lead, 2400 ppm zinc, 230 ppm copper and 2.5 ppm antimony. In 1985, the companies performed a program of linecutting, soil sampling and hand trenching before adding 16 Marg, Heather and Jack claims in September. Additional sampling and hand trenching were done in 1966 by both companies and in 1967 by Canadian Superior under the supervision of Archer, Cathro.

While the 1965 to 1967 programs outlined an impressive soil geochemical anomaly, they were unable to locate a mineralized source because of overburden cover. Since the primary target was a Keno Hill-type galena vein with a high silver content, the owners soon lost interest in the Marg Property when it did not appear to host such a target.

After the Jack, Marg and Heather claims lapsed, the target remained idle until 1977 when Archer, Cathro encouraged Mountaineer Mines Ltd. to restaked it as the Flash claims. These lapsed in 1978 without receiving any work. Archer, Cathro returned in 1982 and staked the Tudl 1-32 claims on behalf of ZX-Sentinel Joint Venture. ZX-Sentinel performed limited sampling and hand trenching in 1982 and 1984 before entering into the current option with All-North Resources Ltd. Petrology done by ZX-Sentinel showed that the

property is largely underlain by metavolcanic rocks, rather than strictly metasedimentary rocks as shown on GSC maps, and that primary sulphide mineralization within the area of geochemical response is intensely weathered and almost totally converted to iron, copper, lead, zinc and arsenic oxide minerals and supergene sulphide minerals such as covellite.

## GEOMORPHOLOGY

The claims lie along the southern margin of the rugged Patterson Range and cover a series of short, steep, north-facing drainages. Local elevation range from 1200 to 1675 m with the main area of interest straddling treeline at about 1400 m. Typical vegetation consists of stunted balsam, buckbrush and grasses giving way to moss and lichen at higher elevations. The upper limit of Pleistocene valley glaciation crosses the property and a lateral moraine forms a pronounced terrace that rises from 1300 m near Copp Creek to 1350 m on the east side of Cansup Creek. Outcrop is limited to the ridge crest along the southern edge of the property. Seeps and springs are unusually abundant and occur either at the base of the glacial terrace or along a break in slope about 50 to 100 m above the terrace. Many of the seeps are associated with vegetation anomalies or, as they are commonly referred to, kill zones.

# GEOLOGY

## Regional

The Marg Property lies near the eastern end of a narrow, approximately 400 km long belt of predominantly metasedimentary rocks of disputed age and origin. The belt hosts the Keno Hill silver-lead vein camp and consists of Lower Schist, Central Quartzite and Hanging Wall Schist Units. Most mapping and exploration has been directed toward the Central Quartzite which hosts most of the silver-lead mines. The two schist units are less well mapped because they are more recessive and do not usually host productive veins.

Although geology in the immediate vicinity of Keno Hill has been mapped in varying detail by a number of GSC geologists, including Keele (1904), Cairnes (1915), Cockfield (1921-22), Stockwell (1926), Bostock (1938-42), Roddick and Green (1957), Boyle (1956-57), McTaggart (1960), and Green (1970), only Green's regional scale mapping extended far enough east to cover the Marg Property. Other GSC geologists who have worked within the belt include Blusson (1977) who mapped to the east on NTS map sheets 105N and 106C and Tempelman-Kluit (1970) who reinterpreted the stratigraphy in the Tombstone Mountains near Dawson on NTS map sheet 116B.

GSC regional mapping has shown that Lower Schist appears to conformably underlie the Central Quartzite throughout the belt. The Hanging Wall Schist is absent in the western part of the belt and, where present, is thrust over the other units. The relationship between the Lower Schist and underlying, relatively undeformed and unmetamorphosed Selwyn Basin rocks is not well understood. Tempelman-Kluit (1970 and 1979) assigned the Central Quartzite and Lower Schist Cretaceous and Jurassic ages, respectively, based on a

controversial fossil locality near Dawson and felt they were deposited over the Selwyn Basin rocks in a foreland molasse basin. Blusson (1977) described units that resemble those at the Marg Property and assigned them an Upper Devonian age. The most recent work by GSC and Department of Indian and Northern Affairs geologists, which includes a zircon age date performed by Mortensen (1986), suggests that the Lower Schist is Mississippian in age and that it and Central Quartzite are allochthonous. If this interpretation is correct, a correlation may exist between the Lower Schist and Mississippian age metavolcanic rocks south of Ross River which host syngenetic massive sulphide occurrences such as the MM deposit.

Marg Property

Although GSC mapping suggests the Marg Property lies within the Central Quartzite, mapping carried out in conjunction with prospecting and trenching programs suggests that most rocks belong to the Lower Schist.

Geological mapping of the Marg Property has been severely hampered by glacial till cover below the upper limit of valley glaciation, deep weathering above this elevation and the recessive nature of some units. However, three units have been recognized and have been given the field names Chlorite Unit, Graphite Unit and Quartzite Unit. They form an apparently conformable sequence that strikes N60°W and dips about 50° to the southwest. A petrographic study of representative specimens from the property by J. Mortensen in 1982 showed that, in spite of the deep weathering superimposed on lower greenschist facies metamorphism, there is a strong suggestion of an intermediate volcanic parentage for the Chlorite Unit, a pyroclastic component in the Graphite Unit, and a dominantly volcaniclastic protolith for the Quartzite Unit. Detailed

geology of the main area of interest is shown on Figure 4 while unit descriptions follow.

Chlorite Unit

The basal Chlorite Unit consists of resistant, thick-bedded to massive, chloritic grit and grey quartzite. In thin section, the rocks are composed of a fine-grained chlorite groundmass with variably abundant quartz eyes. Field and petrographic evidence suggest deposition as volcanic flows and pyroclastics of intermediate composition. Irregular masses of medium-grained gabbro located structurally below the main area of interest on the property are probably feeder dykes and sills for the volcanics.

Graphite Unit

The Graphite Unit overlies the Chlorite Unit with apparent conformity. It consists of grey to black weathering, variably pyritic, calcareous and graphitic phyllites interbedded with chloritic phyllite and feldspathic quartzite. Many individual subunits contain abundant sericite. Brown weathering dolomitic intervals are common throughout the unit. Consistent stratigraphic sequences are mapable in individual parts of the grid area but they cannot be correlated across overburden-covered areas. This indicates that detailed structural and stratigraphic relationships are more complex than the broad-scale property geology suggests.

All geochemical anomalies, gossans and mineralized float occurrences are associated with this unit.

Quartzite Unit

This resistant unit consists of brown weathering, finely laminated, slightly calcareous chloritic quartzite. It contains minor intervals of graphitic phyllite, thin- and thick-bedded phyllitic quartzite, limestone and chloritic phyllite. No thick sequences of clean orthoquartzite similar to the Central Quartzite observed in Keno Hill area are present but such rocks do occur across Copp Creek, northwest of the property.

Structure

In a broad sense, structural geology appears fairly simple with three major map units exposed across the property as a uniform homoclinal sequence. In detail, however, the Graphite Unit displays at least three phases of deformation. The oldest is reflected by a south-dipping, well developed cleavage related to north-verging, moderately inclined, isoclinal folds with east-plunging axes. These have been transposed by a northeast-directed strain regime represented by a southeast-plunging crenulation cleavage. F1 and F2 structures appear to be further modified by east-trending culminations.

North-northeast-trending faults displace earlier structures and stratigraphy but are not observed as they occupy overburden-filled, recessive linears.

## MINERALIZATION

Significant mineralization has been encountered in hand trenches in three areas on the Marg Property. In each instance, the mineralization consists of intensely oxidized and leached material with little megascopic evidence of sulphide minerals. These occurrences are located on Figure 4 and described below.

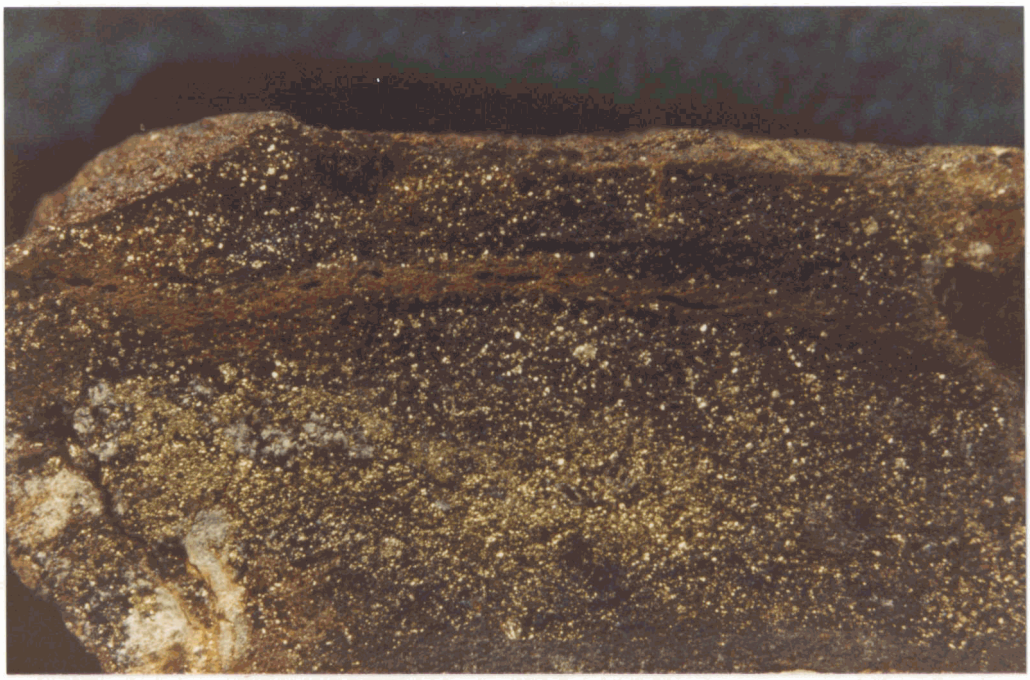
### Area 1

Mineralization in this area was exposed in two sets of trenches:

(a) Trench L - The first mineralization was found on the ridge west of Cansup Creek in 1967. It consisted of a single, small, oxide-coated fragment recognized in a panning concentrate. Under microscopic study, it was found to consist of about 40% sphalerite, 20% chalcopyrite and a trace of covellite, chalcocite, pyrargyrite and tetrahedrite.

(b) Trenches B, O & P - Three small hand specimens were obtained in 1982 from Trench B (north), situated about 120 m north of Trench L. The three specimens, which ranged up to 10 cm in length, were composed of fine-grained mineralization within a banded limonitic gangue of carbonate and foliated graphite. A photograph and photomicrograph from one of these specimens is shown on the following page. The 1982 assays from the three specimens were as follows:

| Specimen | Cu% | Pb% | Zn% | Ag g/t | Au g/t |
|---|---|---|---|---|---|
| AA (25681) | 14.4 | 7.5 | 3.3 | 161.1 | 1.9 |
| EE (25685) | 13.8 | 9.0 | 2.0 | 169.4 | 2.6 |
| FF (25686) | 10.2 | 7.5 | 1.4 | 149.5 | 2.4 |



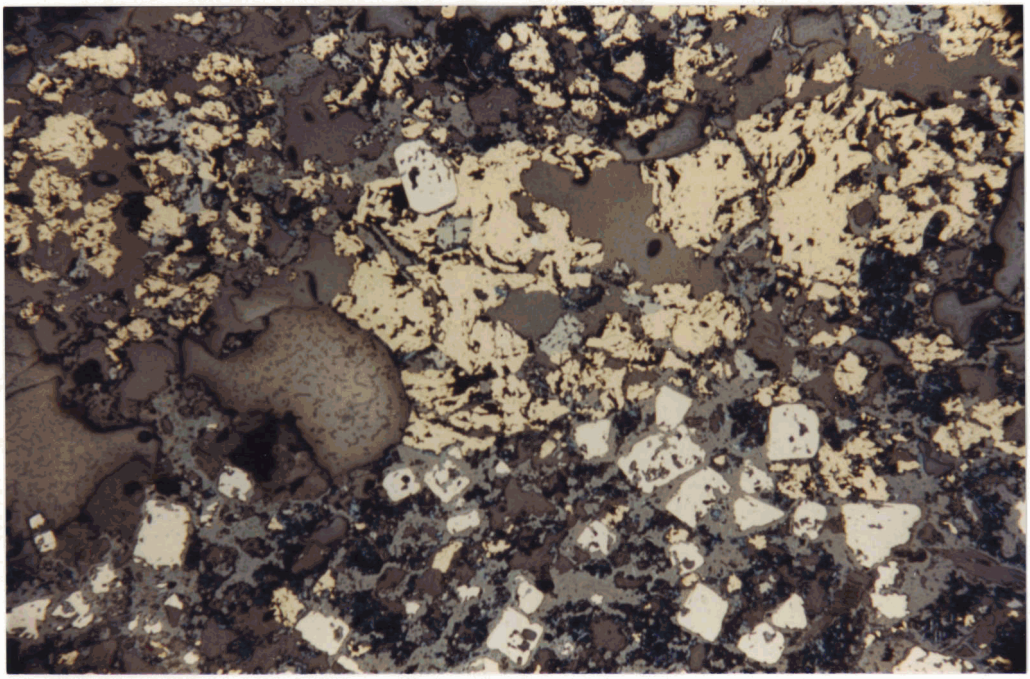


PLATE 3

SPECIMEN FF (25686) FROM TRENCH B (NORTH)

Oxidized sulphide interlaminated with quartz-sericite. Sulphides are mainly chalcopyrite (30%), pyrite (12%), and sphalerite (3%). Primary sulphides are partially oxidized to barthite(?) (25%), covellite (10%), limonite and hematite.

The specimen assayed 10.2% Cu, 7.5% Pb, 1.4% Zn, 0.63% As, 149.5 g/t Ag and 2.4 g/t Au.

Polished thin section study showed that these specimens were composed of crumbly, weathered euhedral pyrite (about 20%) and chalcopyrite (15%) with lesser amounts of covellite (6%), sphalerite (about 0.5%) and galena (trace). The latter two minerals were found mainly as inclusions in the pyrite while the covellite was found as intergrowths within the gangue and secondary minerals such as limonite and plumbojarosite. Since the assays were higher than the sulphide content would suggest, it was concluded that a major part of the values were present in supergene oxide minerals such as barthite ($3ZnO.CuO.3As_2O_5.2H_2O$).

Further trenching and sampling in this area in 1984 exposed three thin, conformable, isoclinally folded limonite-clay horizons. The upper horizon was exposed in Trench B (north), the middle horizon in Trenches O and P and the lower horizon in Trench B (west). The 1984 sampling gave the following assays from the upper and middle horizons:

| Trench | Thickness (m) | Cu% | Pb% | Zn% | Ag g/t | Au g/t |
|---|---|---|---|---|---|---|
| B(North) | 0.2 | 0.8 | 10.0 | 0.2 | 197.9 | 2.3 |
| | 1.3 | 0.4 | 3.7 | 0.1 | 82.3 | 1.4 |
| O | 0.12 | 1.4 | 9.1 | 0.5 | 323.1 | 8.1 |

The lower horizon was sampled in Trench B (west) and returned low values.

Mapping of these trenches showed that the mineralization occurs in a phyllitic sequence that is more graphitic at the top and sericitic at the bottom.

Area 2

The following low zinc values were obtained from 1982 sampling of an old trench (Trench H) situated about 250 m west of Area 1:

| Specimen | Cu% | Pb% | Zn% | Ag g/t | Au g/t |
|---|---|---|---|---|---|
| GG (25702) | 0.2 | tr | 2.1 | 0.2 | tr |
| KK (25706) | 0.1 | tr | 1.6 | 0.1 | tr |
| OO (25706) | 0.1 | tr | 2.0 | 0.1 | tr |
| SS (25714) | 0.1 | tr | 1.5 | 0.3 | tr |

These specimens consisted of limonitic quartz-sericite schist and an albite-siderite-pyrite assemblage. No other sulphide minerals were recognized.

Area 3

Laminated limonite float was found in a new area (Trenches 86-2 and 3) about 500 m east of Trenches B, L and O in 1986. This mineralization, which consists of limonitic quartz-sericite phyllite, is intensely leached and traces of pyrite and chalcopyrite were the only sulphides recognized under the microscope. Rock and soil sample assays from these trenches are shown on Figure 12, along with similar results from Trench 86-1, which is situated 280 m southwest.

Photographs of two specimens that were studied under the microscope are shown on the following pages. Assays of the best specimens are as follows:

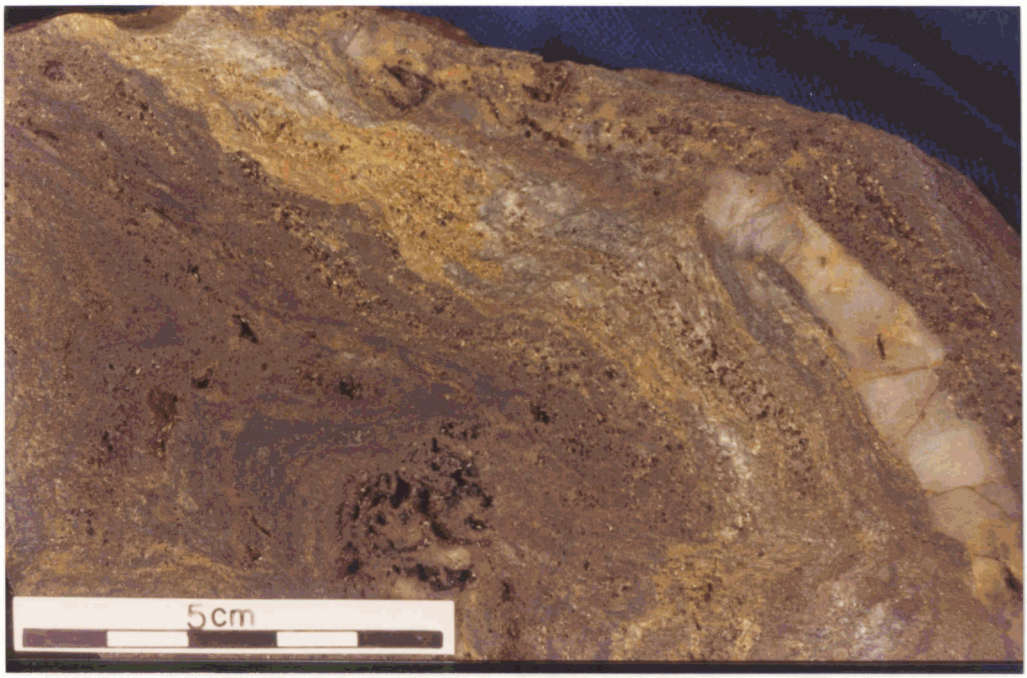
| Specimen | Cu% | Pb% | Zn% | As% | Ag g/t | Au g/t |
|---|---|---|---|---|---|---|
| SM-1 | 0.1 | 2.2 | <0.3 | 1.0 | 52.1 | 1.1 |
| SM-2 | 0.2 | 1.7 | <0.1 | 0.4 | 15.4 | 0.5 |
| 4038 | 0.1 | 4.0 | tr | 1.3 | 110.0 | 0.8 |
| 7318 | tr | 2.1 | tr | 0.3 | 37.6 | 1.2 |

PLATE 4

SPECIMEN SM-2 FROM TRENCH 86-2

Intensely oxidized and leached quartz-sericite-hematite schist from Trench 86-2. All sulphides have been oxidized and removed except for finely disseminated pyrite and chalcopyrite within quartz granules.

This specimen assayed 0.19% Cu, 1.72% Pb, 0.02% Zn, 0.39% As, 15.4 g/t Ag, and 0.54 g/t Au.



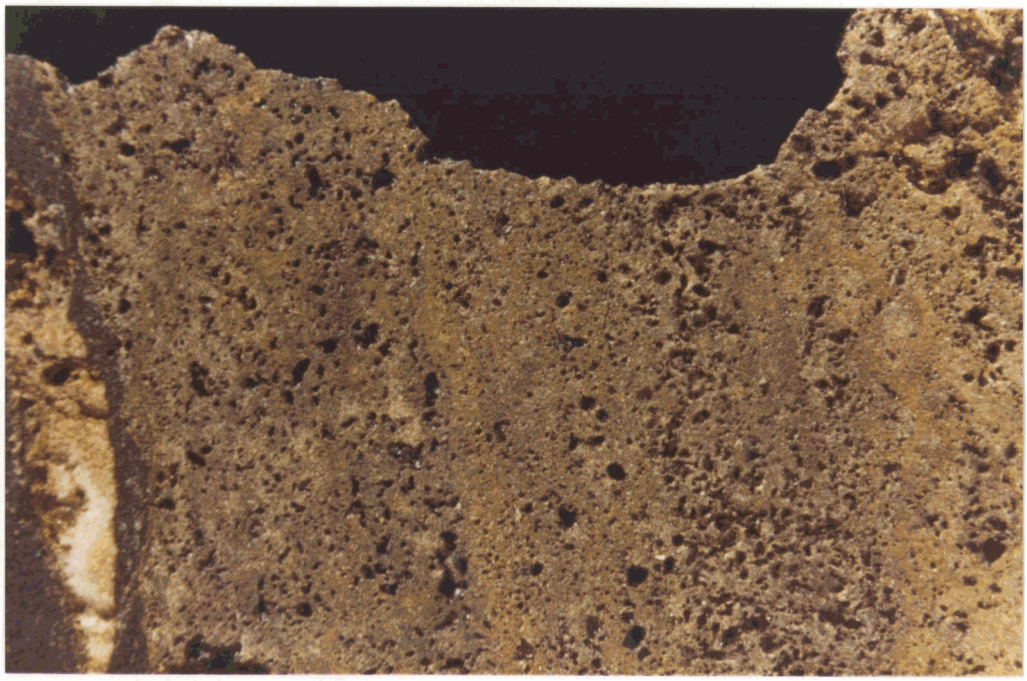



PLATE 5

SPECIMEN SM-1 FROM TRENCH 86-3

Contorted quartz-sericite-hematite schist from Trench 86-3. Only the sulphides pyrite and chalcopyrite are preserved and only within quartz granules. All other sulphides have been oxidized to iron oxides and barthite (Cu-Zn hydroxide).

This specimen assayed 0.11% Cu, 2.24% Pb, 0.05% Zn, 52.1 g/t Ag and 1.1 g/t Au.

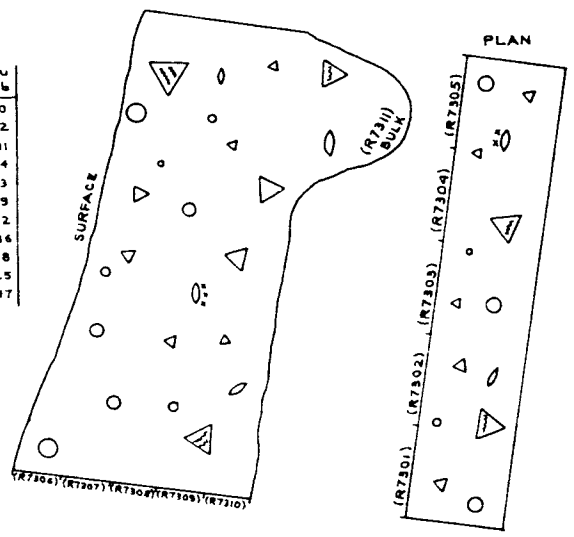
While the values are all subeconomic, the relatively high lead, arsenic, silver and gold values are certainly encouraging from such strongly weathered material. Metal ratios in Area 3 are quite different from those in Areas 1 and 2 and, in particular, copper and zinc contents are much lower.

In addition to the work done in the three main areas of interest, trenches were also dug in four other areas to test geochemical and geophysical anomalies. Figure 4 shows the location of these trenches, while Figures 12, 13 and 14 illustrate geology and assay results. None of the trenches reached bedrock and assay results were generally low. The best assay values were up to 0.48% Pb, 15 ppm Ag and 291 ppb Au from soil and float samples taken from Trench 86-1.

The widespread distribution of mineralized float and bedrock occurrences on the Marg Property indicates a sizable exploration target. Examination of metal ratios suggests that two types of mineralization are present, one of which is polymetallic and the other rich in lead, gold, silver and arsenic but depleted in zinc and copper. This could indicate either mineral zoning within a single deposit, the presence of two or more horizons with different metal signatures or selective leaching of some metals in the surficial environment. Both types are laminated and apparently conformable with enclosing Graphite Unit strata.

## TR86-1

| SAMPLE | Pb % | Ag ppm | Au ppb |
|---|---|---|---|
| (7301) | 0·36 | 10·6 | 180 |
| (7302) | 0·46 | 14·4 | 182 |
| (7303) | 0·44 | 10·8 | 251 |
| (7304) | 0·36 | 11·2 | 184 |
| (7305) | 0·38 | 12·0 | 183 |
| (7306) | 0·37 | 12·0 | 159 |
| (7307) | 0·33 | 10·0 | 182 |
| (7308) | 0·42 | 12·4 | 236 |
| (7309) | 0·32 | 11·4 | 158 |
| (7310) | 0·40 | 13·0 | 225 |
| (7311) | 0·48 | 15·0 | 247 |

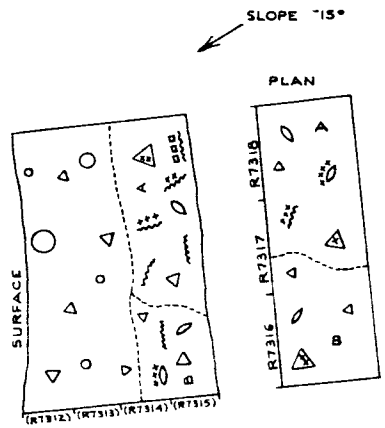



ALL UNITS PRESENT AS FLOAT

## TR86-2

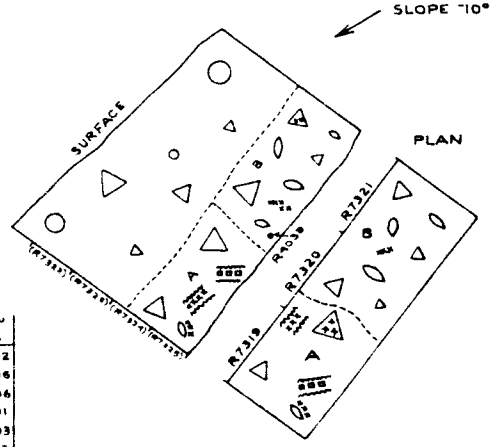
| SAMPLE | Pb % | Ag ppm | Au ppb | As % |
|---|---|---|---|---|
| (7312) | 0·12 | 4·4 | 107 | 0·02 |
| (7313) | 0·15 | 7·6 | 154 | 0·02 |
| (7314) | 0·15 | 8·0 | 173 | 0·02 |
| (7315) | 0·16 | 10·0 | 194 | 0·02 |
| 7316 | 0·15 | 8·2 | 154 | 0·02 |
| 7317 | 0·87 | 27·0 | 675 | 0·15 |
| 7318 | 2·10 | 37·6 | 1190 | 0·32 |

SUBCROP;
NO STRUCTURE
APPARENT



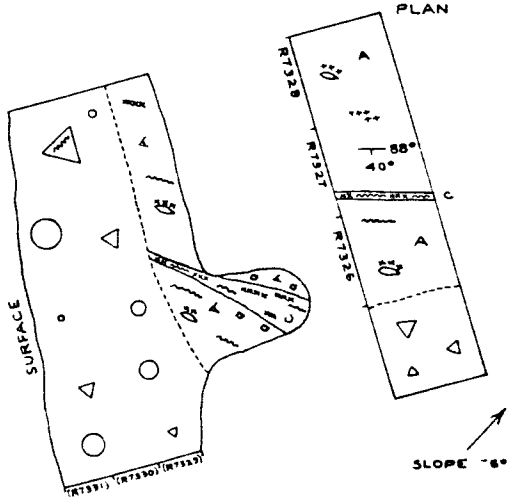

## TR86-3

SUBCROP;
NO STRUCTURE
APPARENT




| SAMPLE | Pb % | Ag ppm | Au ppb | As % | Cu % |
|---|---|---|---|---|---|
| 7319 | 0·84 | 18·6 | 378 | 0·16 | 0·02 |
| 7320 | 2·50 | 60·0 | 767 | 0·48 | 0·06 |
| 7321 | 1·43 | 50·0 | 593 | 0·52 | 0·06 |
| (7324) | 0·11 | 4·6 | 105 | 0·03 | 0·01 |
| (7325) | 1·60 | 32·0 | 359 | 0·33 | 0·03 |
| 4038 | 4·00 | 110·0 | 815 | 1·26 | 0·12 |

## TR86-4




N

## LEGEND

- GLACIAL TILL, TALUS
- A — PHYLLITE WITH >50% GRAPHITE
- B — PHYLLITE WITH <50% GRAPHITE
- C — SERICITIC PHYLLITE
- D — QUARTZITE
- PYRITE BOXWORK
- LIMONITE
- FOLIAFORM QUARTZ
- WHITE QUARTZ SWEAT
- R---- ROCK SAMPLE
- (R----) SOIL SAMPLE

ONLY ASSAYS EXCEEDING: 0.1% Pb, Zn, Cu. & As; 7 ppm Ag; & 100 ppb Au, ARE LISTED. FOR OTHER ASSAYS, REFER TO APPENDIX

Figure 12

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# TRENCH PLANS & SECTIONS TRENCHES 86-1 to 86-4

## MARG (TUDL) PROPERTY

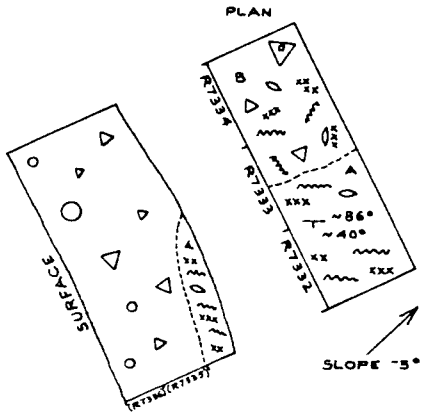
ALL-NORTH RESOURCES LTD.

SCALE 1:50

0·0 0·5 1·0 1·5 2·0 Metres

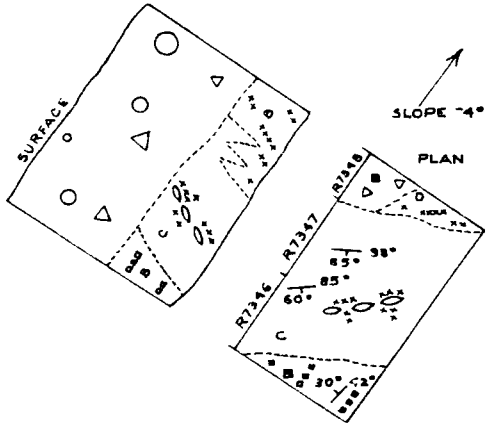
To accompany report dated December, 1986

## TR86-5

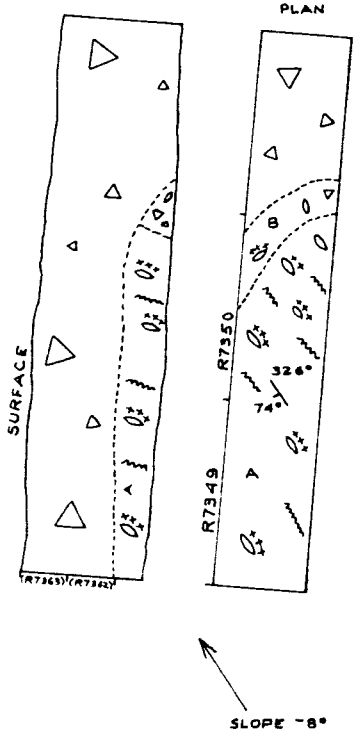



## TR86-7

| SAMPLE | Zn % |
|---|---|
| 7348 | 0.11 |




## TR-86-8




N

## LEGEND

- GLACIAL TILL, TALUS
- A — PHYLLITE WITH >50% GRAPHITE
- B — PHYLLITE WITH <50% GRAPHITE
- C — SERICITIC PHYLLITE
- D — QUARTZITE
- PYRITE BOXWORK
- LIMONITE
- FOLIAFORM QUARTZ
- WHITE QUARTZ SWEAT
- R---- ROCK SAMPLE
- (R----) SOIL SAMPLE

ONLY ASSAYS EXCEEDING: 0.1% Pb, Zn, Cu, & As; 7 ppm Ag; & 100 ppb Au, ARE LISTED. FOR OTHER ASSAYS, REFER TO APPENDIX

Figure 13

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# TRENCH PLANS & SECTIONS TRENCHES 86-5, 86-7, 86-8

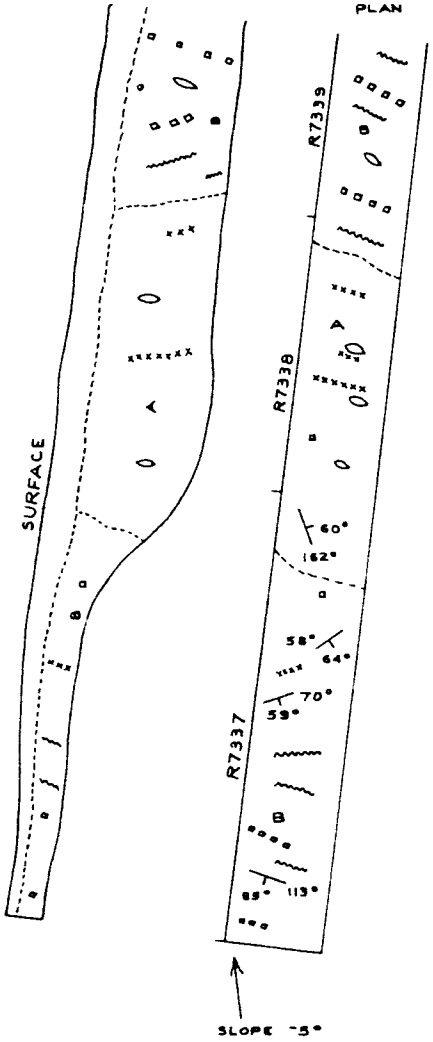
MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

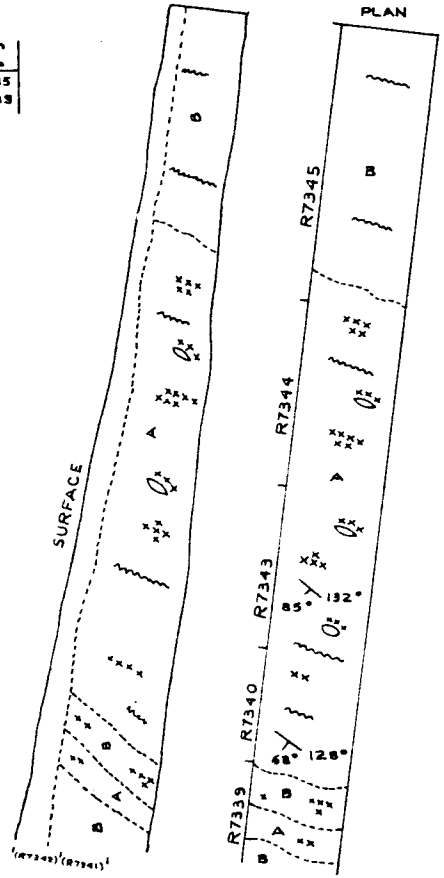
SCALE 1:50

To accompany report dated December, 1986

TR86-6




| SAMPLE | Zn % |
|---|---|
| 7340 | 0.15 |
| 7343 | 0.13 |




N

## LEGEND

- GLACIAL TILL, TALUS
- A — PHYLLITE WITH >50% GRAPHITE
- B — PHYLLITE WITH <50% GRAPHITE
- C — SERICITIC PHYLLITE
- D — QUARTZITE
- PYRITE BOXWORK
- LIMONITE
- FOLIAFORM QUARTZ
- WHITE QUARTZ SWEAT
- R---- ROCK SAMPLE
- (R----) SOIL SAMPLE

ONLY ASSAYS EXCEEDING: 0.1% Pb, Zn, Cu & As; 7 ppm Ag; & 100 ppb Au, ARE LISTED. FOR OTHER ASSAYS, REFER TO APPENDIX

**Figure 14**

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# TRENCH PLANS & SECTIONS
# TRENCH 86-6

## MARG (TUDL) PROPERTY

**ALL-NORTH RESOURCES LTD.**

SCALE 1:50

1:0 0·5 0 1·0 1·5 Metres

To accompany report dated December, 1986

## 1986 GEOCHEMICAL SURVEY

### General

A total of 294 soil samples were collected from the property in 1986. Sampling was performed using the grid established in 1965-67 which was brushed out, surveyed and repicketed metrically. Samples were collected at 40 m intervals on lines spaced about 50 m apart. They consisted of brown clay B horizon soil and were generally taken at depths of about 20 cm. In addition to the grid soil samples, five water and silt samples were taken from springs and creeks on the grid and 22 soil and 31 rock samples were collected from hand trenches.

All samples were sent to Chemex Labs in North Vancouver. Soil and silt samples were sieved to minus 35 mesh and ring pulverized to minus 100 mesh whereas rock samples were prepared for assay using a standard crushing and pulverizing procedure. Water samples were tested for pH and SO4 and analyzed semi-quantitatively by induced coupled plasma (ICP) technique for 24 metals. All other samples were analyzed for gold using fire assay preconcentration and neutron activation analyses (NAA) and for 30 other metals by ICP.

Lead and silver results are plotted on Figure 5, arsenic and gold on Figure 6 and copper and zinc on Figure 7. Although the other metals have not been plotted, sample locations are plotted on Figure 8 and assay certificates are included as Appendix A to this report.

With such a small sample population, it is our experience that statistical analyses of the results are of little value and are often misleading. Using our extensive experience in interpreting geochemical dispersion in the Northern Cordillera and information gained in 1986 on the surficial and bedrock geology

of the property, assay levels have been selected that outline continuous and sizable anomalous areas. The anomalous patterns are consistent with known mineralization.

Results

The 1986 soil geochemical results produced a much different pattern than the 1965 to 1967 survey, even though the same grid and a similar sample spacing was used. This is perhaps due to the collection of deeper or more reliable samples in 1986. Lead values in the 1986 survey were comparable in magnitude to the earlier values whereas zinc generally gave a lower response in 1986. The other metals were not routinely assayed for during the 1965 to 1967 surveys.

Based on a careful review of the 1986 geochemical results, the following values were selected to provide a clear contrast with background levels and produce contourable patterns apparently related to mineralization:

| Metal | Threshold | Strongly Anomalous |
|---|---|---|
| Lead | 100 ppm | 500 ppm |
| Arsenic | 50 ppm | 100 ppm |
| Copper | 140 ppm | 400 ppm |
| Silver | 1.0 ppm | 3.0 ppm |
| Gold | 15 ppb | 30 ppb |

Anomaly A

Although it was identified in the 1965 to 1967 lead survey, this anomaly had not been trenched. The current work has outlined a 270 m long, intensely anomalous target that lies uphill from the top of the glacial moraine. The target is anomalous in lead, silver, arsenic and gold whereas copper and zinc values are only at background levels. The upper edge of the anomaly has been interpreted as trending northeast, subparallel to the contours. Since the strike of the anomaly does not correlate with either geological or geophysical

trends, the pattern may be reflecting overburden complications rather the position of the bedrock source. Trenches 86-1, 86-2 and 86-3 were dug within this anomaly and samples taken from them returned similarly high lead and arsenic and low copper and zinc values.

Anomaly B

This target is defined by a single sample which is only anomalous in lead (432 ppm). However, it is significant because the sample was collected from an iron-stained, kill zone along the front of the glacial moraine. Springs draining from this area flow into Cansup Creek at the head of a large ferricrete deposit that formed in modern times and is now eroding away. Ferricrete is a field term used to describe modern talus and gravel that has been cemented by iron oxides precipitated from spring waters because of a sudden change in pH. High contents of zinc are common in ferricrete but high copper values are rare and lead is almost never present.

As described earlier, strongly anomalous values in lead, zinc and copper were obtained from a stream sediment sample collected by the GSC in 1964 at the mouth of Cansup Creek. The anomalous values have been duplicated in samples collected upstream as far as the ferricrete deposit but do not occur above.

A sample consisting of ferricrete with no visible sulphide grains was collected in 1967 from the vicinity of Anomaly B and returned 15,000 ppm Pb. Two adjacent soil samples taken at 7.5 m intervals on the same line also yielded strongly anomalous values of 4,000 and 1,000 ppm Pb. The presence of such high lead contents suggests that the waters from which the lead was precipitated had extremely low pH as lead is insoluble in the surface weathering environment at pH greater than 4. The absence of zinc and copper

can be explained by their greater mobility at moderate pH which would allow them to remain in solution when the ferricrete was forming. Water samples taken in 1986 from the spring above the ferricrete were near neutral, suggesting that leaching of the source and precipitation of metals in the ferricretes are no longer active.

The interpreted source of Anomaly B is shown on Figure 11 as lying on the south side of a strong HLEM conductor located immediately uphill from the ferricrete under the glacial moraine. However, it is conceivable that the ferricrete represents the bottom end of a 300 m long dispersion train related to Anomaly A.

Anomaly C

This could be termed the Discovery Anomaly as it is associated with the first mineralization recognized on the property (Area 1). The anomalous values lie on the south side of a strong HLEM conductor near an interpreted sharp flexture and are situated along a bedrock ridge that disappears beneath the moraine to the east and are blanketed by thin but extensive overburden to the west. Thus, the potential target could be larger than the 50 m length of the soil anomaly would indicate.

Recent results are not as intense as those from the earlier sampling, even though this areas has been subsequently contaminated by blasting. All six major metals (copper, zinc, lead, arsenic, silver and gold) are anomalous in soils, which is consistent with the assays obtained from the mineralization in the trenches. It is noteworthy that the geochemical signature here is quite different from Anomaly A , reflecting the different mineralization found in trenches in the two areas.

Anomaly D

This anomaly, which was only crudely defined by the 1965 to 1967 sampling, extends for a 360 m length and may be the faulted off extension of Anomaly C. It is arsenic rich at the east end, lead and arsenic rich in the centre and weakly anomalous for lead at the west end. High copper values and occasional moderately high zinc values occur farther downhill along nearly the entire length of the anomaly. The copper-zinc response is interpreted as having been derived from the same source as the lead and arsenic but dispersed farther downhill because of higher mobility. The apparent source of this anomaly trends southwesterly subparallel to an HLEM conductor that lies to the north and the contact between the Graphite and Chlorite Units. No trenching has been performed near the interpreted source.

Anomaly E

This anomaly appeared to be the upper part of Anomaly D in the 1965 to 1967 sampling but the current survey has shown that it is derived from a separate source. Anomaly E is 290 m long and is principally a lead target with a local zone of zinc and copper enrichment occurring near its middle. As lead is the least mobile of the metals used in the survey, a nearby source is indicated. Like most of the anomalies, Anomaly E is situated just south of a strong HLEM conductor.

The only trenching done in the vicinity of this anomaly were Trenches H, 86-6 and 86-7, which are situated downhill over a second HLEM conductor. Rock and soil samples taken from near bedrock in both 1986 trenches were weakly anomalous in copper whereas those from Trench H returned zinc values between 1.5 and 2.1%. All other metals returned low values.

Anomaly F

This could be considered an extension of Anomaly E but has been interpreted as a separate anomaly because it has different metal ratios and appears to be on the opposite side of a transverse fault. This anomaly, which is 65 m long, trends under glacial material to the west and is strongly anomalous in lead, arsenic, silver, gold and copper. Intense zinc and copper dispersion occurs downhill where it is associated with an extensive cluster of ferricrete gossans and kill zones. Overburden cover is thicker and widespread in this part of the property and little is known about bedrock geology. The anomaly is situated just to the south of a strong HLEM conductor. Trench 86-8, which is located nearby, returned weakly anomalous copper values but lead values were only 50 ppm or less near bedrock compared with surface sample values of 194 and 262 ppm.

Unlike Cansup Creek, stream sediment in Copp Creek, which drains this anomaly, contains low metal values, possibly because Copp Creek is larger and most of its sediment is derived from several kilometres upstream.

Anomaly G

Unlike most of the other targets, Anomaly G occurs well uphill from the glacial moraine near the Quartzite-Graphite Unit contact. It is 80 m long and is masked at both ends by talus slides. Most samples are only anomalous for arsenic but a few at the east end are lead rich. Although prospecting and trenching are likely to be useful in locating a bedrock source for this anomaly, it is one of the smallest and least significant targets.

Anomaly H

This is 65 m long anomaly which is partially obscured by a talus slide and disappears to the east beneath the glacial moraine. It exhibits coincident lead-arsenic-silver-gold response and lies just to the south (uphill) from an HLEM conductor. No hand trenching has been performed in the vicinity of this anomaly.

## GEOPHYSICAL SURVEY

This phase of the 1986 program was contracted to Delta Geoscience Ltd. and consisted of VLFEM, horizontal co-planar loop EM (HLEM) and magnetic surveys over the entire grid (about 12 linear km), plus five lines (about 2 linear km) of test IP and resistivity surveys. The Delta Geoscience report, prepared by Grant A. Hendrickson, is included as Appendix B to this report and highlights are summarized below.

HLEM results are plotted on Figure 9. Although the survey outlined numerous conductors, most appear to be due to conductive phyllite horizons. While some of the conductors may be related to sulphide mineralization, it is unlikely as the effective penetration of the survey was only 15 to 30 m and, at this depth, most sulphides were probably oxidized. Fraser-filtered VLFEM data generally agrees with HLEM results but the HELM better defines folding and faulting.

Magnetic data is shown on Figure 10 and exhibits relatively low response, except in the northwest corner of the grid.

Test resistivity and IP surveys used only a 250 W transmitter and produced unsatisfactory results due to a combination of resistive overburden and highly conductive bedrock.

## DISCUSSION AND CONCLUSIONS

Figure 11 is an interpretative compilation map that illustrated the following:

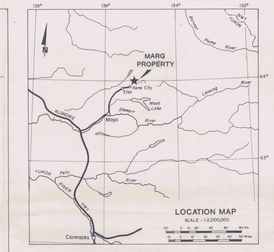
- major geological contacts and faults;
- axes of HLEM conductors;
- interpreted source of the soil geochemical anomalies;
- trenches and the location of mineralized float and bedrock; and,
- principal elements of surficial geology that influence the effectiveness of soil sampling, mapping and prospecting and interpretation of results, including lateral moraine deposits, talus and extensive areas of thick soil and mixed overburden devoid of outcrop or local bedrock float.

The geochemical surveys have outlined several strong multi-element anomalies, many of which appear to be partially obscured by glacial moraines or talus slides. Interpretation of stream sediment and soil geochemical data along Cansup Creek indicates that hydromorphic transport has played an important role in disposition of metal on the Marg Property. Most of the soil anomalies lie uphill from HLEM conductors, which probably represent conductive graphitic horizons in the footwall of the source beds.

The hand trenches were dug before the 1986 soil geochemical results were available but, despite this, significant mineralization was located in three wide spaced areas. All of the mineralization exhibits strong lamination with small scale folding similar to that in the host rocks and is intensely leached to porous residue of oxides, silicates and supergene sulphides. Mineralization found in bedrock is conformable with bedding. Metal ratios suggest that two

types of mineralization are present but this could be due to either variations in the primary mineralogy or differential leaching. The metal ratios, laminar textures and conformable nature of the mineralization, coupled with the composition of the host rocks are most compatible with a volcanogenic massive sulphide environment. Some trenches here exposed more than one mineralized horizon and this, plus different metal ratios, the distribution of the geochemical anomalies and the abundance of geophysical conductors, suggests that significant mineralization may not be confined to a single stratigraphic horizon.

The presence of significant base and precious metal values, in what appears to be a relatively untested volcanogenic environment, makes the Marg Property an attractive exploration target and justifies a program of bulldozer trenching and diamond drilling. The objectives of the program are to delineate thickness and grade at widely scattered locations, to determine the number of mineralized horizons present, to study the stratigraphic controls and structural style of the mineralization, and to indicate regional exploration potential by confirming the volcanogenic massive model.




## TABLE OF FORMATIONS

### PLEISTOCENE

unsorted glacial debris, lateral and terminal moraines at upper limit of valley glaciation.

### MISSISSIPPIAN (?)

**QUARTZITE UNIT**

brown weathering, finely laminated, slightly calcareous chloritic quartzite with minor intervals of graphitic phyllite, thin- and thick-bedded phyllitic quartzite, limestone and chloritic phyllite.

**GRAPHITE UNIT**

grey to black weathering, variably pyritic, calcareous and graphitic phyllites interbedded with chloritic phyllite and dolomitic grit. Minor subunits contain abundant sericite.

**CHLORITE UNIT**

grey weathering, resistant, thick-bedded to massive chloritic grit and grey quartzite. Minor lenzoidal medium-grained gabbro bodies are common north of the grid area

**ABBREVIATIONS**

| | | |
|---|---|---|
| Rocks: | PHYL | - phyllite |
| | QZTE | - quartzite |
| | GRIT | - grit |
| Minerals: | QZ | - quartz |
| | SE | - sericite |
| | CL | - chlorite |
| | GR | - graphite |
| | DO | - dolomite |

## GEOLOGICAL SYMBOLS

- major lithological contact (approximate)
- intraformational contact (approximate)
- fault (inferred)
- $S_0$ (bedding)
- $S_1$ (early cleavage)
- $S_2$ (late cleavage)
- $L_1$ (early lineation)
- $L_2$ (late crenulation fold axis)
- megascopic fold axis
- quartz rods

## LEGEND

- Vegetation kill zone
- Ferricrete gossan
- TUDL claim posts
- Helicopter pad
- 1986 soil sample site
- 1986 silt sample site
- 1986 water sample site
- 1986 trench
- 1967 or 1984 trench
- Mineralization

**Figure 4**

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# GEOLOGY

## MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

MAYO MINING DISTRICT, Y.T.

SEPTEMBER, 1986

SCALE 1:1000

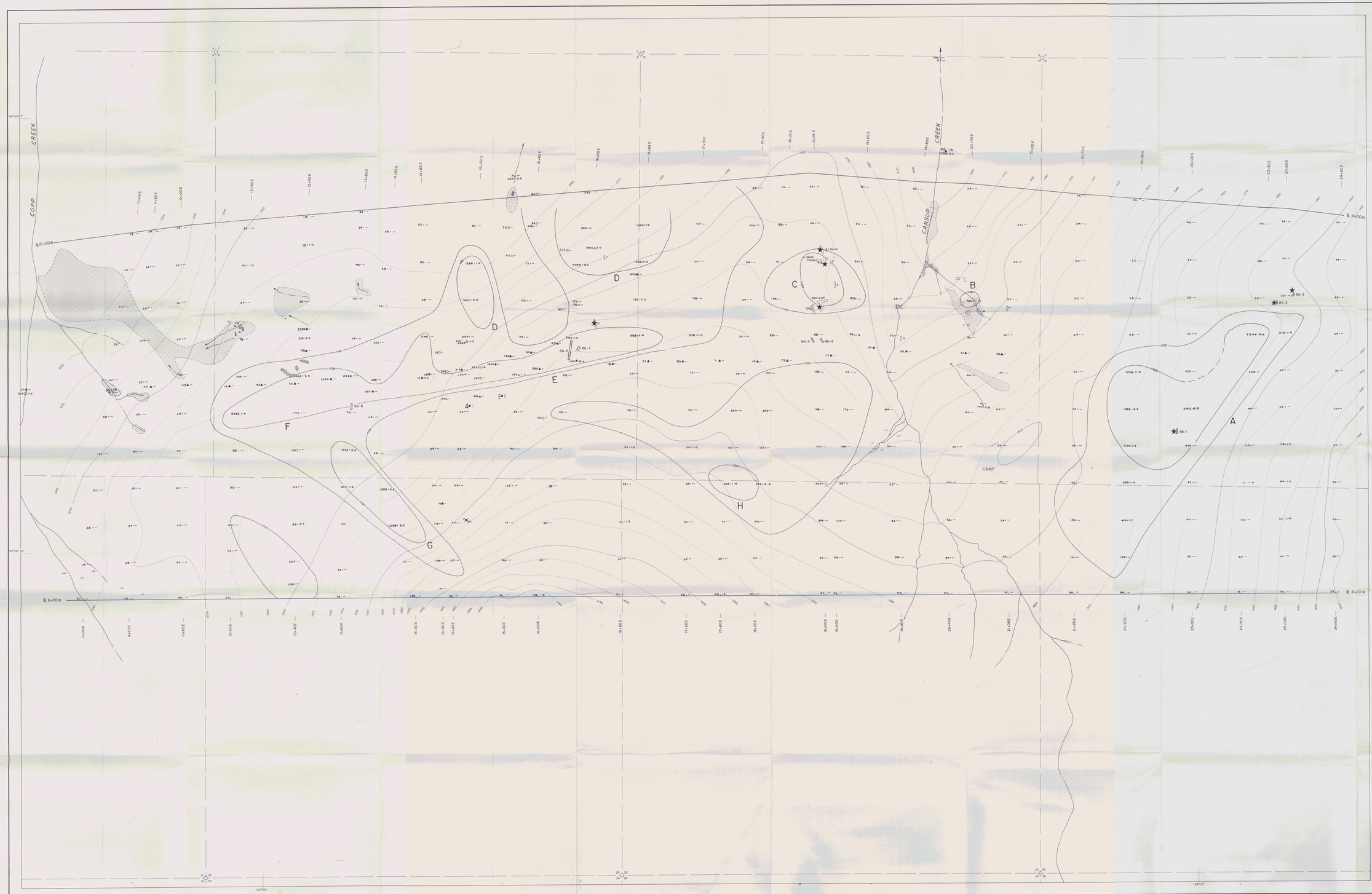
0 10 20 30 40 50 100 Metres

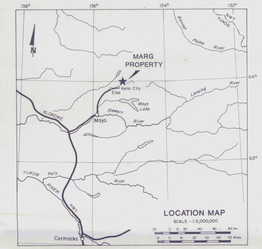
0 50 100 200 300 Feet

To accompany report dated Dec./86

1379

094122




Anomalous Soil Pattern

- >100 lead or 1.0 silver
- >500 lead or 3.0 silver
- Vegetation kill zone
- Ferricrete gossan
- TUDL claim posts
- 1986 soil sample site
- 1986 silt sample site
- 1986 water sample site
- 1986 trench
- 1967 or 1984 trench
- 1982 rock sample site
- 1967 rock sample site
- 1982 soil sample site
- 1967 soil sample site
- 1982 silt sample site
- 1982 pan sample site
- Mineralization

All assays in ppm by Chemex Labs Ltd., N. Vancouver, B.C.
( except water values which are in ppb )

Note: Silver values less than 1.0 ppm are shown as –
( refer to appendix for actual values)

**Figure 5**

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# LEAD-SILVER GEOCHEMISTRY

## MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

MAYO MINING DISTRICT, Y.T.

SEPTEMBER, 1986

SCALE 1:1000

0 10 20 30 40 50 100 Metres

0 50 100 200 500 Feet

1330

091922

To accompany report, dated December, 1986

COPP CREEK

CAMSUP CREEK

CAMP

10+00N

6+00N

64°00'30"

134°29'

134°27'

F

G

H

D

C

E

A

86-1

86-2

86-3

86-5

86-6

86-7

86-8

LOCATION MAP
SCALE - 1:2,000,000

MARG PROPERTY

Anomalous Soil Pattern

>50 arsenic or >.15 gold

> 100 arsenic or > 50 gold

Vegetation kill zone

Ferricrete gossan

TUDL claim posts

1986 soil sample site

1986 silt sample site

1986 water sample site

86-6 1986 trench

N 1967 or 1984 trench

1982 rock sample site

1967 rock sample site

1982 soil sample site

1967 soil sample site

1982 silt sample site

1982 pan sample site

Mineralization

All assays by Chemex Labs Ltd, N. Vancouver, B.C.
- arsenic in ppm (except water values, which are in ppb)
- gold in ppb

Note: Gold values less than 6 ppb are shown as –
(refer to appendix for actual values)

Figure 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# ARSENIC-GOLD GEOCHEMISTRY

## MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

MAYO MINING DISTRICT, Y.T.

SEPTEMBER, 1986

SCALE 1:1000

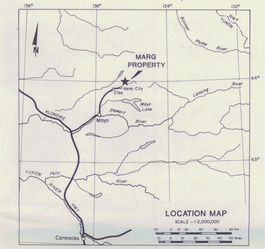
0 10 20 30 40 50 100 Metres

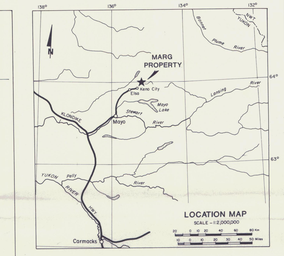
0 50 100 200 300 Feet

38

0091922

To accompany report dated December, 1986


MARG PROPERTY
Mayo
Stewart River
Dempster Highway
Klondike Highway
Mayo
Stewart River
Mayo Lake
Mayo River
Stewart River
Stewart River
Stewart




COPP CREEK

CAMSUP CREEK

CAMP

6+00N

10+00E

11+00E

12+00E

12+40E

13+40E

13+80E

14+20E

14+60E

15+00E

15+40E

16+00E

16+60E

17+00E

17+60E

18+00E

19+00E

19+20E

19+40E

20+40E

21+00E

21+70E

22+30E

23+00E

23+50E

24+00E

24+60E

64°00'45"

64°00'30"

134°23'

134°27'

## LEGEND

- Vegetation kill zone
- Ferricrete gossan
- TUDL claim posts
- Helicopter pad
- R 7023 1986 soil sample number
- 1986 silt sample number
- 1986 water sample number
- 86-4 1986 trench
- N 1967 or 1984 trench
- 1982 rock sample number
- 1967 rock sample number
- 1982 soil sample number
- 1967 soil sample number
- 1982 silt sample number
- 1982 pan sample number

Note: Cu, Zn, Pb, Ag, As and Au values are plotted on Figures 5, 6 and 7. See appendix for assays of other metals.

Figure 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# SAMPLE LOCATIONS

## MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

MAYO MINING DISTRICT, Y.T.

SEPTEMBER, 1986

SCALE 1:10000

0 10 20 30 40 50 100 Metres

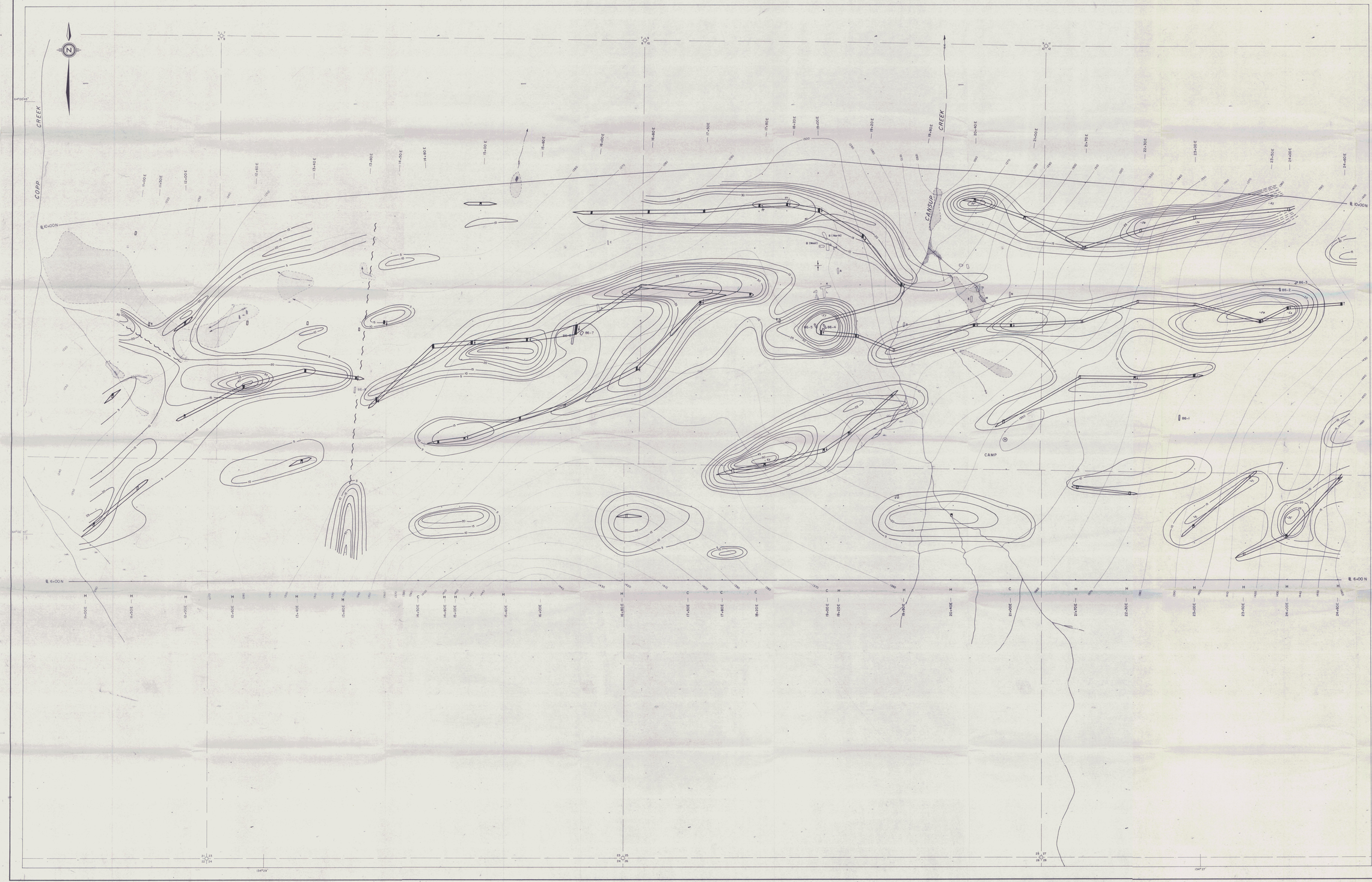
0 50 100 200 300 Feet

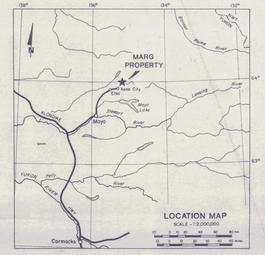
1:5000

To accompany report dated December 1986

1384

091922




V.L.F STATION DIRECTIONS

CUTLER, MAINE (C)

HAWAII (H)

Survey performed by DELTA GEOSCIENCE LTD. using a Scintrex I.G.S. II system (configured as a VLF/MAG) and an Apex Parametrics Ltd Maxmin-P Horizontal Loop EM system.

LEGEND

- Vegetation kill zone
- Ferricrete gossan
- TUDL claim posts
- Helicopter pad
- 1986 soil sample site
- 1986 silt sample site
- 1986 water sample site
- 86-4 1986 trench
- N 1967 or 1984 trench
- Contoured filtered VLF readings - contour interval - 5%
- strong / moderate / weak — Horizontal Loop (Max - Min II) conductor axis with apparent dip

Figure 9

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# FILTERED VLF AND HORIZONTAL LOOP ELECTROMAGNETIC SURVEY

## MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

MAYO MINING DISTRICT, Y.T.

SEPTEMBER, 1986

SCALE 1:1000

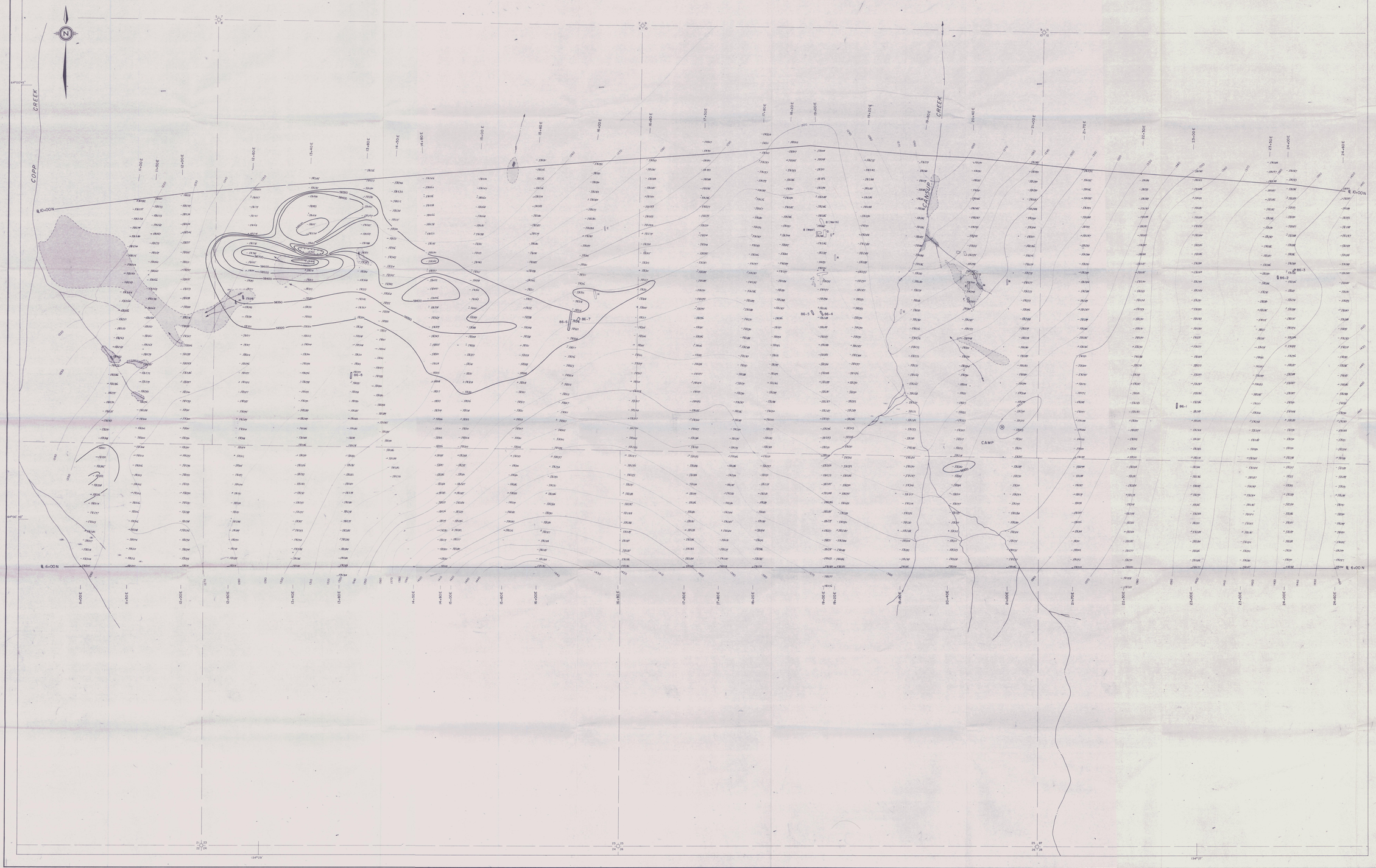
0 10 20 30 40 50 100 Metres

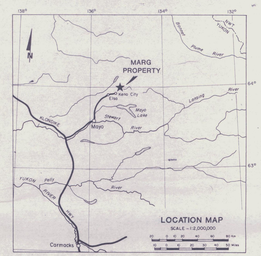
0 50 100 200 300 Feet

(125)

091928

To accompany report dated December, 1986




LEGEND

- Vegetation kill zone
- Ferricrete gossan
- TUDL claim posts
- Helicopter pad
- 1986 soil sample site
- 1986 silt sample site
- 1986 water sample site
- 1986 trench
- 1967 or 1984 trench
- Total field strength reading

Survey performed by DELTA GEOSCIENCE LTD using a Scintrex I.G.S. II system with a Scintrex MP-3 base station magnetometer.

Figure 10

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# TOTAL FIELD STRENGTH MAGNETIC SURVEY

## MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

MAYO MINING DISTRICT, Y.T.

SEPTEMBER, 1989

SCALE 1:1000

0 10 20 30 40 50 100 Metres

0 50 100 200 300 Feet

(138)

GM 21922

* to accompany report dated Dec./89

COPP CREEK

CAINSUP CREEK

CHLORITE UNIT
GRAPHITE UNIT

SOIL AND OVERBURDEN COVER

TALUS

MORAINE

GRAPHITE QUARTZITE UNIT

THICK SOIL AND OVERBURDEN COVER

CAMP

A

B

C

D

E

F

G

H

B (North)

B (West)

86-1

86-2

86-3

86-4

86-5

86-6

86-7

86-8

64°00'00"

64°00'30"

134°29'

134°27'

6+00 N

LOCATION MAP
SCALE - 1:2,000,000

MARG PROPERTY

Yukon Territory

Mayo

Carmacks

## LEGEND

- Mineralization
- Axis of EM conductor
- Interpreted source of Lead - Silver soil anomaly
- Interpreted source of Arsenic - Gold soil anomaly
- Interpreted source of Copper soil anomaly
- (G) Soil geochemical anomaly described in text
- Interpreted contact between geological units
- Vegetation kill zone
- Ferricrete gossan
- TUDL claim posts
- (H) Helicopter pad
- 1986 soil sample site
- 1986 silt sample site
- 1986 water sample site
- 86-6 1986 trench
- N 1967 or 1984 trench

Figure 11

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

# INTERPRETIVE COMPILATION MAP

## MARG (TUDL) PROPERTY

ALL-NORTH RESOURCES LTD.

MAYO MINING DISTRICT, Y.T.

SEPTEMBER, 1986

SCALE 1:1000

1333

091922

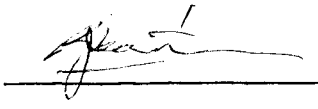
To accompany report dated December, 1986.

# APPENDIX A

## STATEMENT OF QUALIFICATIONS

I, Robert J. Cathro, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in West Vancouver, British Columbia, do hereby declare:

1. I am a 1959 graduate of the University of British Columbia in geological engineering.
2. I have been engaged in geological engineering for over 25 years, of which the past 20 have been as a consultant.
3. I am a registered professional engineer in British Columbia and in Yukon Territory.
4. I have supervised the work described in this report.



Robert J. Cathro, B.A.Sc., P.Eng.

# APPENDIX B

**Chemex Labs Ltd.**
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

# CERTIFICATE OF ANALYSIS A861 31

To : ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Project : ALL-NORTH MARL
Comments:

Page No. : 1-B
Tot. Pages: 1
Date : 18-SEP-86
Invoice # : I-8617831
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4038 | 205 | — | 0.02 | < 1 | 2960 | >10000 | 610 | 73 | < 0.01 | < 10 | < 10 | 150 | < 10 | 560 |

CERTIFICATION :

**Chemex Labs Ltd.**
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

# CERTIFICATE OF ANALYSIS A8661 55

To : ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Page No. : 2-A
Tot. Pages: 2
Date : 24-SEP-86
Invoice # : I-8617855
P.O. # : NONE

Project : MARG
Comments:

| SAMPLE DESCRIPTION | PREP CODE | | Au NAA ppb | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Mg % | Mn ppm | Mo ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7041 | 203 | 238 | 15 | 1.50 | 0.2 | 40 | 220 | < 0.5 | 2 | 0.18 | < 0.5 | 5 | 81 | 107 | 2.55 | < 10 | 0.11 | 20 | 0.40 | 221 | 2 |
| R 7042 | 203 | 238 | 13 | 1.23 | 2.4 | 110 | 130 | < 0.5 | 2 | 0.10 | < 0.5 | 3 | 72 | 96 | 2.58 | < 10 | 0.09 | 30 | 0.30 | 134 | 2 |
| R 7043 | 203 | 238 | 8 | 1.54 | 0.4 | 50 | 130 | < 0.5 | < 2 | 0.10 | < 0.5 | 9 | 66 | 87 | 3.40 | < 10 | 0.08 | 20 | 0.38 | 385 | 2 |
| R 7044 | 203 | 238 | 1 | 1.48 | 0.2 | 20 | 170 | < 0.5 | < 2 | 0.17 | < 0.5 | 16 | 86 | 37 | 3.55 | < 10 | 0.08 | 20 | 0.40 | 890 | 3 |
| R 7045 | 203 | 238 | 4 | 1.42 | 0.2 | 20 | 130 | < 0.5 | 2 | 0.12 | < 0.5 | 9 | 73 | 35 | 3.04 | < 10 | 0.09 | 20 | 0.39 | 306 | 1 |
| R 7306 | 203 | 238 | 199 | 1.17 | 12.0 | 400 | 180 | < 0.5 | 14 | 0.17 | < 0.5 | 5 | 106 | 102 | 3.06 | < 10 | 0.11 | 30 | 0.22 | 189 | 8 |
| R 7307 | 203 | 238 | 182 | 1.21 | 10.0 | 350 | 150 | < 0.5 | 10 | 0.19 | < 0.5 | 7 | 71 | 114 | 2.92 | < 10 | 0.10 | 20 | 0.27 | 257 | 6 |
| R 7308 | 203 | 238 | 236 | 1.18 | 12.4 | 450 | 180 | < 0.5 | 18 | 0.21 | < 0.5 | 7 | 84 | 127 | 3.03 | < 10 | 0.12 | 30 | 0.27 | 289 | 8 |
| R 7309 | 203 | 238 | 158 | 1.17 | 11.4 | 360 | 160 | < 0.5 | 12 | 0.20 | < 0.5 | 7 | 68 | 114 | 3.00 | < 10 | 0.11 | 30 | 0.27 | 320 | 6 |
| R 7310 | 203 | 238 | 225 | 1.02 | 13.0 | 530 | 170 | < 0.5 | 14 | 0.15 | < 0.5 | 5 | 76 | 157 | 3.16 | < 10 | 0.10 | 20 | 0.20 | 198 | 7 |
| R 7312 | 203 | 238 | 107 | 1.58 | 4.4 | 170 | 170 | < 0.5 | 8 | 0.11 | < 0.5 | 6 | 68 | 77 | 3.63 | < 10 | 0.10 | 20 | 0.29 | 379 | 7 |
| R 7313 | 203 | 238 | 154 | 1.41 | 7.6 | 190 | 150 | < 0.5 | 8 | 0.13 | < 0.5 | 7 | 70 | 134 | 4.13 | < 10 | 0.09 | 20 | 0.29 | 304 | 9 |
| R 7314 | 203 | 238 | 173 | 1.29 | 8.0 | 200 | 150 | < 0.5 | 8 | 0.14 | < 0.5 | 7 | 79 | 123 | 3.83 | < 10 | 0.08 | 20 | 0.26 | 328 | 9 |
| R 7315 | 203 | 238 | 194 | 1.17 | 10.0 | 210 | 140 | < 0.5 | 10 | 0.14 | < 0.5 | 7 | 78 | 128 | 3.70 | < 10 | 0.07 | 20 | 0.24 | 310 | 11 |
| R 7322 | 203 | 238 | 20 | 1.42 | 0.6 | 80 | 110 | < 0.5 | < 2 | 0.09 | < 0.5 | 9 | 74 | 34 | 3.41 | < 10 | 0.07 | 20 | 0.24 | 384 | 2 |
| R 7323 | 203 | 238 | 36 | 1.47 | 1.2 | 130 | 130 | < 0.5 | 2 | 0.11 | < 0.5 | 9 | 88 | 37 | 3.36 | < 10 | 0.08 | 20 | 0.25 | 381 | 3 |
| R 7324 | 203 | 238 | 105 | 1.35 | 4.6 | 330 | 150 | < 0.5 | 14 | 0.13 | < 0.5 | 9 | 72 | 59 | 3.14 | < 10 | 0.10 | 30 | 0.23 | 341 | 4 |
| R 7325 | 203 | 238 | 359 | 0.66 | 32.0 | 3260 | 230 | < 0.5 | 80 | 0.04 | < 0.5 | 2 | 61 | 349 | 5.26 | < 10 | 0.17 | 20 | 0.06 | 104 | 20 |
| R 7329 | 203 | 238 | 16 | 1.13 | 0.2 | 40 | 170 | < 0.5 | < 2 | 0.07 | < 0.5 | 6 | 64 | 41 | 3.22 | < 10 | 0.11 | 20 | 0.20 | 272 | 25 |
| R 7330 | 203 | 238 | 11 | 1.45 | 0.2 | 30 | 190 | < 0.5 | < 2 | 0.09 | < 0.5 | 7 | 81 | 26 | 3.50 | < 10 | 0.12 | 20 | 0.25 | 336 | 15 |
| R 7331 | 203 | 238 | 1 | 1.39 | 0.2 | 20 | 190 | < 0.5 | < 2 | 0.12 | < 0.5 | 6 | 71 | 27 | 3.26 | < 10 | 0.10 | 20 | 0.25 | 355 | 3 |
| R 7335 | 203 | 238 | 11 | 1.11 | 0.4 | 80 | 150 | < 0.5 | < 2 | 0.07 | 4.0 | 25 | 78 | 407 | 10.65 | < 10 | 0.11 | 30 | 0.11 | 1500 | 24 |
| R 7336 | 203 | 238 | 9 | 1.59 | 1.0 | 50 | 150 | < 0.5 | < 2 | 0.15 | < 0.5 | 13 | 95 | 67 | 4.39 | < 10 | 0.11 | 20 | 0.36 | 547 | 8 |
| R 7341 | 203 | 238 | 17 | 1.26 | 0.4 | 80 | 160 | < 0.5 | < 2 | 0.05 | < 0.5 | 8 | 87 | 135 | 5.62 | < 10 | 0.09 | 20 | 0.29 | 219 | 2 |
| R 7342 | 203 | 238 | 14 | 1.11 | 0.8 | 40 | 110 | < 0.5 | < 2 | 0.06 | < 0.5 | 8 | 63 | 130 | 5.98 | < 10 | 0.08 | 10 | 0.27 | 236 | 1 |
| R 7362 | 203 | 238 | 23 | 1.27 | 0.2 | 110 | 200 | < 0.5 | < 2 | 0.16 | 1.0 | 13 | 74 | 300 | 6.27 | < 10 | 0.10 | 20 | 0.31 | 389 | 1 |
| R 7363 | 203 | 238 | 10 | 1.55 | 0.2 | 60 | 120 | < 0.5 | < 2 | 0.17 | < 0.5 | 15 | 70 | 144 | 4.68 | < 10 | 0.07 | 20 | 0.34 | 394 | 1 |
| R 10475 | 203 | 238 | 1 | 0.54 | 0.2 | 30 | 110 | < 0.5 | < 2 | 0.63 | < 0.5 | 19 | 55 | 42 | 4.64 | < 10 | 0.11 | 30 | 0.14 | 555 | 5 |
| R 10476 | 203 | 238 | 3 | 0.45 | 0.2 | 10 | 160 | < 0.5 | < 2 | 0.33 | < 0.5 | 12 | 48 | 29 | 3.25 | < 10 | 0.08 | 30 | 0.06 | 820 | 4 |
| R 10477 | 203 | 238 | 3 | 1.26 | 0.2 | 20 | 220 | < 0.5 | < 2 | 0.09 | < 0.5 | 13 | 72 | 48 | 5.07 | < 10 | 0.10 | 10 | 0.24 | 370 | 5 |
| R 10478 | 203 | 238 | 2 | 0.91 | 0.2 | 20 | 140 | < 0.5 | < 2 | 0.06 | < 0.5 | 6 | 77 | 20 | 3.37 | < 10 | 0.10 | 10 | 0.16 | 219 | 4 |
| R 10479 | 203 | 238 | 3 | 1.27 | 0.2 | 40 | 110 | < 0.5 | < 2 | 0.07 | < 0.5 | 6 | 84 | 27 | 5.09 | < 10 | 0.07 | 20 | 0.20 | 183 | 7 |
| R 10480 | 203 | 238 | 6 | 1.46 | 0.2 | 30 | 190 | < 0.5 | < 2 | 0.11 | < 0.5 | 11 | 70 | 42 | 4.36 | < 10 | 0.12 | 20 | 0.35 | 376 | 6 |
| R 10481 | 203 | 238 | 3 | 1.52 | 0.2 | 30 | 180 | < 0.5 | < 2 | 0.17 | 2.0 | 15 | 77 | 90 | 4.51 | < 10 | 0.09 | 20 | 0.47 | 467 | 4 |
| R 10482 | 203 | 238 | < 1 | 1.48 | 0.2 | 20 | 160 | < 0.5 | < 2 | 0.10 | < 0.5 | 6 | 68 | 31 | 2.93 | < 10 | 0.10 | 20 | 0.33 | 178 | 5 |
| R 10483 | 203 | 238 | 6 | 1.44 | 0.2 | 20 | 80 | < 0.5 | < 2 | 0.07 | < 0.5 | 6 | 69 | 16 | 2.87 | < 10 | 0.05 | 20 | 0.17 | 263 | 1 |
| R 10484 | 203 | 238 | 4 | 1.78 | 0.2 | 10 | 100 | < 0.5 | < 2 | 0.09 | < 0.5 | 5 | 68 | 12 | 3.18 | < 10 | 0.07 | 20 | 0.26 | 202 | 1 |
| R 10485 | 203 | 238 | 3 | 1.14 | 0.2 | 10 | 80 | < 0.5 | < 2 | 0.13 | < 0.5 | 7 | 60 | 24 | 3.19 | < 10 | 0.03 | 20 | 0.25 | 344 | 1 |

CERTIFICATION :

**Chemex Labs Ltd.**
Analytical Chemists * Geochemists * Registered Assayers
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PHONE (604) 984-0221

# CERTIFICATE OF ANALYSIS A8661 55

To: ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Project : MARG
Comments:


Date : 24-SEP-86
Invoice # : I-8617855
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7041 | 203 | 238 | 0.01 | 19 | 630 | 132 | < 10 | 17 | 0.04 | < 10 | < 10 | 43 | < 10 | 194 |
| R 7042 | 203 | 238 | 0.01 | 13 | 620 | 398 | < 10 | 14 | 0.02 | < 10 | < 10 | 43 | < 10 | 100 |
| R 7043 | 203 | 238 | 0.01 | 22 | 730 | 220 | < 10 | 14 | 0.03 | < 10 | < 10 | 55 | < 10 | 130 |
| R 7044 | 203 | 238 | 0.01 | 26 | 840 | 34 | < 10 | 17 | 0.02 | < 10 | < 10 | 63 | < 10 | 94 |
| R 7045 | 203 | 238 | 0.01 | 26 | 730 | 30 | < 10 | 13 | 0.04 | < 10 | < 10 | 47 | < 10 | 102 |
| R 7306 | 203 | 238 | 0.01 | 20 | 1390 | 3720 | 60 | 32 | 0.02 | < 10 | < 10 | 45 | < 10 | 114 |
| R 7307 | 203 | 238 | 0.01 | 24 | 1210 | 3310 | 40 | 28 | 0.03 | < 10 | < 10 | 41 | < 10 | 122 |
| R 7308 | 203 | 238 | 0.01 | 26 | 1210 | 4220 | 60 | 35 | 0.03 | < 10 | < 10 | 43 | < 10 | 134 |
| R 7309 | 203 | 238 | 0.01 | 25 | 1160 | 3200 | 50 | 28 | 0.03 | < 10 | < 10 | 40 | < 10 | 128 |
| R 7310 | 203 | 238 | 0.01 | 19 | 1160 | 4010 | 70 | 26 | 0.02 | < 10 | < 10 | 36 | < 10 | 116 |
| R 7312 | 203 | 238 | 0.01 | 17 | 990 | 1250 | 30 | 20 | 0.03 | < 10 | < 10 | 65 | < 10 | 92 |
| R 7313 | 203 | 238 | 0.01 | 23 | 980 | 1480 | 30 | 17 | 0.03 | < 10 | < 10 | 51 | < 10 | 116 |
| R 7314 | 203 | 238 | 0.01 | 22 | 1050 | 1500 | 40 | 16 | 0.03 | < 10 | < 10 | 47 | < 10 | 116 |
| R 7315 | 203 | 238 | 0.01 | 24 | 1090 | 1650 | 40 | 15 | 0.03 | < 10 | < 10 | 42 | < 10 | 122 |
| R 7322 | 203 | 238 | 0.01 | 25 | 800 | 316 | < 10 | 12 | 0.02 | < 10 | < 10 | 43 | < 10 | 106 |
| R 7323 | 203 | 238 | 0.01 | 27 | 840 | 510 | < 10 | 14 | 0.02 | < 10 | < 10 | 45 | < 10 | 112 |
| R 7324 | 203 | 238 | 0.01 | 27 | 950 | 1135 | < 10 | 17 | 0.02 | < 10 | < 10 | 36 | < 10 | 124 |
| R 7325 | 203 | 238 | 0.03 | 8 | 1750 | >10000 | 90 | 39 | < 0.01 | < 10 | < 10 | 34 | < 10 | 272 |
| R 7329 | 203 | 238 | 0.01 | 18 | 530 | 118 | < 10 | 10 | 0.03 | < 10 | < 10 | 45 | < 10 | 314 |
| R 7330 | 203 | 238 | 0.01 | 20 | 570 | 96 | < 10 | 12 | 0.04 | < 10 | < 10 | 55 | < 10 | 284 |
| R 7331 | 203 | 238 | 0.01 | 14 | 640 | 100 | < 10 | 14 | 0.03 | < 10 | < 10 | 63 | < 10 | 156 |
| R 7335 | 203 | 238 | 0.02 | 73 | 3260 | 88 | < 10 | 15 | < 0.01 | < 10 | < 10 | 25 | < 10 | 824 |
| R 7336 | 203 | 238 | 0.01 | 29 | 1620 | 96 | < 10 | 16 | 0.04 | < 10 | < 10 | 43 | < 10 | 200 |
| R 7341 | 203 | 238 | 0.01 | 25 | 1290 | 534 | < 10 | 17 | 0.03 | < 10 | < 10 | 33 | < 10 | 164 |
| R 7342 | 203 | 238 | < 0.01 | 19 | 1390 | 376 | < 10 | 12 | 0.04 | < 10 | < 10 | 30 | < 10 | 140 |
| R 7362 | 203 | 238 | 0.01 | 35 | 1090 | 262 | < 10 | 16 | 0.04 | < 10 | < 10 | 37 | < 10 | 564 |
| R 7363 | 203 | 238 | 0.01 | 35 | 880 | 194 | < 10 | 14 | 0.05 | < 10 | < 10 | 36 | < 10 | 392 |
| R 10475 | 203 | 238 | 0.01 | 51 | 2400 | 24 | < 10 | 16 | < 0.01 | < 10 | < 10 | 6 | < 10 | 152 |
| R 10476 | 203 | 238 | 0.01 | 33 | 1770 | 20 | < 10 | 14 | < 0.01 | < 10 | < 10 | 7 | < 10 | 102 |
| R 10477 | 203 | 238 | 0.01 | 43 | 1090 | 22 | < 10 | 15 | 0.01 | < 10 | < 10 | 56 | < 10 | 254 |
| R 10478 | 203 | 238 | 0.01 | 20 | 650 | 22 | < 10 | 15 | 0.02 | < 10 | < 10 | 43 | < 10 | 110 |
| R 10479 | 203 | 238 | 0.01 | 24 | 1750 | 20 | < 10 | 13 | 0.03 | < 10 | < 10 | 66 | < 10 | 136 |
| R 10480 | 203 | 238 | 0.01 | 45 | 1200 | 20 | < 10 | 22 | 0.03 | < 10 | < 10 | 63 | < 10 | 188 |
| R 10481 | 203 | 238 | 0.01 | 59 | 1450 | 16 | < 10 | 50 | 0.02 | < 10 | < 10 | 53 | < 10 | 286 |
| R 10482 | 203 | 238 | 0.01 | 23 | 920 | 24 | < 10 | 35 | 0.02 | < 10 | < 10 | 56 | < 10 | 116 |
| R 10483 | 203 | 238 | < 0.01 | 17 | 620 | 68 | < 10 | 9 | 0.05 | < 10 | < 10 | 60 | < 10 | 72 |
| R 10484 | 203 | 238 | < 0.01 | 13 | 590 | 28 | < 10 | 13 | 0.06 | < 10 | < 10 | 78 | < 10 | 54 |
| R 10485 | 203 | 238 | < 0.01 | 24 | 800 | 20 | < 10 | 10 | 0.03 | < 10 | < 10 | 34 | < 10 | 84 |

CERTIFICATION :

**Chemex Labs Ltd.**
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

# CERTIFICATE OF ANALYSIS A861 56

To: ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Page No. : 1-A
Tot. Pages: 1
Date : 24-SEP-86
Invoice # : I-8617856
P.O. # : NONE

Project : MARG
Comments:

| SAMPLE DESCRIPTION | PREP CODE | | Au NAA ppb | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Mg % | Mn ppm | Mo ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7301 | 205 | 219 | 180 | 0.86 | 10.6 | 620 | 130 | < 0.5 | 12 | 0.11 | < 0.5 | 5 | 66 | 159 | 2.90 | < 10 | 0.09 | 10 | 0.23 | 192 | 6 |
| R 7302 | 205 | 219 | 182 | 0.76 | 14.4 | 800 | 140 | < 0.5 | 16 | 0.08 | < 0.5 | 4 | 58 | 195 | 2.89 | < 10 | 0.10 | 10 | 0.15 | 144 | 9 |
| R 7303 | 205 | 219 | 291 | 0.88 | 10.8 | 780 | 180 | < 0.5 | 14 | 0.09 | < 0.5 | 5 | 91 | 195 | 3.29 | < 10 | 0.12 | 20 | 0.17 | 178 | 8 |
| R 7304 | 205 | 219 | 184 | 0.83 | 11.2 | 640 | 140 | < 0.5 | 12 | 0.08 | < 0.5 | 3 | 74 | 149 | 2.82 | < 10 | 0.10 | 10 | 0.15 | 145 | 7 |
| R 7305 | 205 | 219 | 183 | 0.75 | 12.0 | 620 | 120 | < 0.5 | 12 | 0.06 | < 0.5 | 4 | 79 | 188 | 2.76 | < 10 | 0.09 | 10 | 0.15 | 160 | 6 |
| R 7311 | 205 | — | 247 | 0.90 | 15.0 | 800 | 150 | < 0.5 | 18 | 0.08 | < 0.5 | 5 | 77 | 218 | 3.22 | < 10 | 0.10 | 10 | 0.24 | 165 | 7 |
| R 7316 | 205 | 219 | 154 | 0.39 | 8.2 | 220 | 350 | < 0.5 | 8 | 0.02 | < 0.5 | 1 | 92 | 108 | 1.92 | < 10 | 0.10 | 20 | 0.05 | 57 | 8 |
| R 7317 | 205 | 219 | 675 | 0.22 | 27.0 | 1500 | 200 | < 0.5 | 44 | 0.01 | < 0.5 | < 1 | 56 | 336 | 4.27 | < 10 | 0.06 | < 10 | 0.01 | 39 | 22 |
| R 7318 | 205 | 219 | 1190 | 0.16 | 37.6 | 3220 | 370 | < 0.5 | 78 | < 0.01 | < 0.5 | < 1 | 60 | 743 | 7.07 | < 10 | 0.09 | < 10 | 0.01 | 50 | 27 |
| R 7319 | 205 | 219 | 379 | 0.33 | 18.6 | 1590 | 250 | < 0.5 | 38 | 0.01 | < 0.5 | 1 | 75 | 163 | 2.16 | < 10 | 0.16 | < 10 | 0.03 | 49 | 29 |
| R 7320 | 205 | 219 | 767 | 0.33 | 60.0 | 4820 | 290 | < 0.5 | 94 | 0.02 | < 0.5 | < 1 | 72 | 606 | 8.93 | < 10 | 0.28 | < 10 | 0.03 | 30 | 38 |
| R 7321 | 205 | 219 | 593 | 0.59 | 50.0 | 5180 | 210 | < 0.5 | 74 | 0.06 | < 0.5 | 1 | 65 | 595 | 12.30 | < 10 | 0.16 | 10 | 0.16 | 99 | 30 |
| R 7326 | 205 | 219 | 17 | 0.45 | 1.0 | 70 | 200 | < 0.5 | 2 | 0.02 | < 0.5 | 1 | 127 | 33 | 1.18 | < 10 | 0.16 | 20 | 0.03 | 39 | 11 |
| R 7327 | 205 | 219 | 8 | 0.44 | 0.6 | 30 | 130 | < 0.5 | < 2 | 0.02 | < 0.5 | 2 | 94 | 94 | 2.22 | < 10 | 0.13 | 10 | 0.06 | 34 | 16 |
| R 7328 | 205 | 219 | 5 | 0.37 | 0.6 | 20 | 110 | < 0.5 | < 2 | 0.02 | < 0.5 | 1 | 92 | 89 | 2.38 | < 10 | 0.11 | 10 | 0.02 | 32 | 11 |
| R 7332 | 205 | 219 | < 1 | 0.40 | 0.4 | 30 | 90 | < 0.5 | < 2 | 0.05 | 0.5 | 7 | 61 | 142 | 3.89 | < 10 | 0.12 | 10 | 0.03 | 271 | 13 |
| R 7333 | 205 | 219 | 4 | 0.42 | 0.8 | 20 | 130 | < 0.5 | < 2 | 0.04 | < 0.5 | 5 | 107 | 101 | 3.46 | < 10 | 0.13 | 10 | 0.04 | 92 | 13 |
| R 7334 | 205 | 219 | < 1 | 0.34 | 0.4 | 20 | 100 | < 0.5 | < 2 | 0.02 | 0.5 | 9 | 50 | 130 | 3.50 | < 10 | 0.11 | 20 | 0.03 | 381 | 8 |
| R 7337 | 205 | 219 | 4 | 0.96 | 0.4 | 10 | 210 | < 0.5 | 2 | 0.04 | < 0.5 | 5 | 76 | 37 | 3.23 | < 10 | 0.11 | 10 | 0.43 | 73 | 7 |
| R 7338 | 205 | 219 | 22 | 0.78 | 0.6 | 40 | 120 | < 0.5 | 4 | 0.02 | < 0.5 | 3 | 62 | 57 | 2.99 | < 10 | 0.06 | 10 | 0.28 | 68 | 4 |
| R 7339 | 205 | 219 | 10 | 0.82 | 1.0 | 20 | 350 | < 0.5 | 2 | 0.03 | < 0.5 | 1 | 76 | 43 | 2.02 | < 10 | 0.14 | 20 | 0.29 | 34 | 7 |
| R 7340 | 205 | 219 | 4 | 2.91 | 0.8 | 30 | 130 | < 0.5 | < 2 | 0.37 | 4.0 | 48 | 56 | 871 | 9.40 | 10 | 0.03 | 20 | 1.18 | 1450 | 1 |
| R 7343 | 205 | 219 | 3 | 2.92 | 0.6 | 20 | 170 | < 0.5 | < 2 | 0.18 | 11.0 | 30 | 65 | 724 | 10.20 | < 10 | 0.04 | 20 | 1.24 | 955 | 1 |
| R 7344 | 205 | 219 | 5 | 1.46 | 0.4 | 20 | 160 | < 0.5 | 2 | 0.04 | 1.0 | 7 | 73 | 171 | 4.17 | < 10 | 0.08 | 10 | 0.62 | 177 | 4 |
| R 7345 | 205 | 219 | 2 | 1.17 | 0.4 | 30 | 150 | < 0.5 | < 2 | 0.04 | 3.0 | 10 | 88 | 286 | 4.68 | < 10 | 0.06 | 10 | 0.36 | 272 | 2 |
| R 7346 | 205 | 219 | 6 | 2.21 | 0.8 | 80 | 200 | < 0.5 | < 2 | 0.08 | < 0.5 | 11 | 61 | 542 | 6.88 | < 10 | 0.06 | 10 | 0.89 | 188 | 9 |
| R 7347 | 205 | 219 | < 1 | 3.13 | 0.6 | 70 | 120 | < 0.5 | < 2 | 0.12 | < 0.5 | 10 | 55 | 718 | 10.50 | 10 | 0.03 | 10 | 1.23 | 151 | 1 |
| R 7348 | 205 | 219 | < 1 | 2.17 | 0.8 | 40 | 180 | < 0.5 | < 2 | 0.19 | 2.5 | 17 | 78 | 503 | 6.79 | < 10 | 0.07 | 20 | 0.86 | 364 | 4 |
| R 7349 | 205 | 219 | 5 | 0.38 | 0.6 | 30 | 140 | < 0.5 | < 2 | 0.03 | < 0.5 | 5 | 50 | 88 | 2.87 | < 10 | 0.11 | 20 | 0.05 | 98 | 11 |
| R 7350 | 205 | 219 | 8 | 0.36 | 0.8 | 40 | 180 | < 0.5 | < 2 | 0.06 | 0.5 | 4 | 63 | 78 | 2.19 | < 10 | 0.10 | 10 | 0.07 | 69 | 17 |
| R 7364 | 205 | 219 | 1 | 0.51 | 1.0 | 40 | 100 | < 0.5 | < 2 | 0.02 | 0.5 | 7 | 56 | 201 | 4.05 | < 10 | 0.06 | < 10 | 0.11 | 107 | 11 |

CERTIFICATION :

**Chemex Labs Ltd.**
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

# CERTIFICATE OF ANALYSIS A8611880

To : ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Page No. : 1-B
Tot. Pages: 6
Date : 03-SEP-86
Invoice # : I-8616880
P.O. # : NONE

Project : ALL NORTH
Comments:

| SAMPLE DESCRIPTION | PREP CODE | | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7051 | 203 | 238 | 0.03 | 84 | 1040 | 28 | < 10 | 36 | 0.03 | < 10 | < 10 | 55 | < 10 | 1870 |
| R 7052 | 203 | 238 | 0.03 | 64 | 850 | 46 | < 10 | 25 | 0.07 | < 10 | < 10 | 87 | < 10 | 1475 |
| R 7053 | 203 | 238 | 0.02 | 46 | 1000 | 710 | < 10 | 20 | 0.05 | < 10 | < 10 | 55 | < 10 | 1145 |
| R 7054 | 203 | 238 | 0.02 | 26 | 910 | 54 | < 10 | 27 | 0.04 | < 10 | < 10 | 49 | < 10 | 472 |
| R 7055 | 203 | 238 | 0.04 | 89 | 1280 | 62 | < 10 | 37 | 0.04 | < 10 | < 10 | 53 | < 10 | 2720 |
| R 7056 | 203 | 238 | 0.04 | 30 | 1140 | 58 | < 10 | 34 | 0.05 | < 10 | < 10 | 54 | < 10 | 328 |
| R 7057 | 203 | 238 | 0.02 | 27 | 740 | 62 | < 10 | 18 | 0.05 | < 10 | < 10 | 48 | < 10 | 186 |
| R 7058 | 203 | 238 | 0.02 | 25 | 860 | 50 | < 10 | 20 | 0.05 | < 10 | < 10 | 40 | < 10 | 162 |
| R 7059 | 203 | 238 | 0.02 | 15 | 710 | 48 | < 10 | 15 | 0.10 | < 10 | < 10 | 79 | < 10 | 106 |
| R 7060 | 203 | 238 | 0.02 | 47 | 770 | 36 | < 10 | 23 | < 0.01 | < 10 | < 10 | 23 | < 10 | 188 |
| R 7061 | 203 | 238 | 0.01 | 48 | 590 | 30 | < 10 | 27 | < 0.01 | < 10 | < 10 | 16 | < 10 | 158 |
| R 7062 | 203 | 238 | 0.03 | 31 | 820 | 24 | < 10 | 18 | 0.01 | < 10 | < 10 | 44 | < 10 | 102 |
| R 7063 | 203 | 238 | 0.01 | 10 | 440 | 74 | < 10 | 12 | 0.06 | < 10 | < 10 | 59 | < 10 | 90 |
| R 7064 | 203 | 238 | 0.01 | 11 | 740 | 120 | < 10 | 12 | 0.05 | < 10 | < 10 | 68 | < 10 | 130 |
| R 7065 | 203 | 238 | 0.02 | 26 | 820 | 90 | < 10 | 19 | 0.05 | < 10 | < 10 | 69 | < 10 | 318 |
| R 7066 | 203 | 238 | 0.01 | 8 | 770 | 38 | < 10 | 13 | 0.05 | < 10 | < 10 | 88 | < 10 | 68 |
| R 7067 | 203 | 238 | 0.02 | 40 | 1520 | 4690 | < 10 | 15 | 0.03 | < 10 | < 10 | 45 | < 10 | 1230 |
| R 7068 | 203 | 238 | 0.02 | 26 | 890 | 148 | < 10 | 19 | 0.07 | < 10 | < 10 | 54 | < 10 | 338 |
| R 7069 | 203 | 238 | 0.04 | 45 | 750 | 78 | < 10 | 22 | 0.04 | < 10 | < 10 | 45 | < 10 | 1430 |
| R 7070 | 203 | 238 | 0.02 | 17 | 440 | 24 | < 10 | 21 | 0.09 | < 10 | < 10 | 78 | < 10 | 852 |
| R 7071 | 203 | 238 | 0.01 | 73 | 2510 | 26 | < 10 | 35 | 0.02 | < 10 | < 10 | 33 | < 10 | 2260 |
| R 7072 | 203 | 238 | 0.02 | 36 | 1430 | 36 | < 10 | 30 | 0.06 | < 10 | < 10 | 64 | < 10 | 1450 |
| R 7073 | 203 | 238 | 0.01 | 6 | 510 | 14 | < 10 | 11 | 0.04 | < 10 | < 10 | 67 | < 10 | 66 |
| R 7074 | 203 | 238 | 0.01 | 6 | 1040 | 18 | < 10 | 9 | 0.01 | < 10 | < 10 | 42 | < 10 | 60 |
| R 7075 | 203 | 238 | 0.02 | 39 | 880 | 38 | < 10 | 14 | 0.05 | < 10 | < 10 | 44 | < 10 | 762 |
| R 7076 | 203 | 238 | 0.01 | 7 | 820 | 34 | < 10 | 9 | 0.05 | < 10 | < 10 | 44 | < 10 | 2630 |
| R 7077 | 203 | 238 | 0.02 | 21 | 2330 | 3460 | < 10 | 9 | 0.01 | < 10 | < 10 | 18 | < 10 | 508 |
| R 7078 | 203 | 238 | 0.04 | 28 | 1230 | 1145 | < 10 | 18 | 0.03 | < 10 | < 10 | 52 | < 10 | 722 |
| R 7079 | 203 | 238 | 0.06 | 53 | 1040 | 342 | < 10 | 25 | 0.05 | < 10 | < 10 | 61 | < 10 | 376 |
| R 7080 | 203 | 238 | 0.03 | 55 | 1130 | 46 | < 10 | 21 | 0.06 | < 10 | < 10 | 54 | < 10 | 270 |
| R 7081 | 203 | 238 | 0.02 | 31 | 750 | 30 | < 10 | 19 | 0.10 | < 10 | < 10 | 85 | < 10 | 98 |
| R 7082 | 203 | 238 | 0.02 | 28 | 680 | 664 | < 10 | 15 | 0.05 | < 10 | < 10 | 44 | < 10 | 280 |
| R 7083 | 203 | 238 | 0.02 | 63 | 820 | 238 | < 10 | 15 | 0.05 | < 10 | < 10 | 50 | < 10 | 236 |
| R 7084 | 203 | 238 | 0.03 | 42 | 930 | 38 | < 10 | 24 | 0.16 | < 10 | < 10 | 111 | < 10 | 136 |
| R 7085 | 203 | 238 | 0.05 | 36 | 880 | 38 | < 10 | 33 | 0.13 | < 10 | < 10 | 108 | < 10 | 128 |
| R 7086 | 203 | 238 | 0.05 | 37 | 770 | 652 | 20 | 20 | 0.01 | < 10 | < 10 | 27 | < 10 | 378 |
| R 7087 | 203 | 238 | 0.03 | 10 | 900 | 1030 | < 10 | 17 | 0.04 | < 10 | < 10 | 57 | < 10 | 294 |
| R 7088 | 203 | 238 | 0.01 | 11 | 470 | 74 | < 10 | 12 | 0.07 | < 10 | < 10 | 59 | < 10 | 114 |
| R 7089 | 203 | 238 | 0.04 | 15 | 990 | 2070 | < 10 | 19 | 0.03 | < 10 | < 10 | 51 | < 10 | 288 |
| R 7090 | 203 | 238 | 0.01 | 8 | 440 | 28 | < 10 | 13 | 0.07 | < 10 | < 10 | 75 | < 10 | 80 |

CERTIFICATION : B. Cranfield

**Chemex Labs Ltd.**
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

# CERTIFICATE OF ANALYSIS A861 80

To: ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Page No. : 2-A
Tot. Pages: 6
Date : 03-SEP-86
Invoice # : I-8616880
P.O. # : NONE

Project : ALL NORTH
Comments:

| SAMPLE DESCRIPTION | PREP CODE | | Au NAA ppb | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Mg % | Mn ppm | Mo ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7091 | 203 | 238 | 43 | 1.85 | 0.2 | 10 | 320 | < 0.5 | < 2 | 0.22 | 0.5 | 5 | 100 | 97 | 3.49 | < 10 | 0.12 | 20 | 0.38 | 210 | 3 |
| R 7092 | 203 | 238 | < 1 | 1.66 | 0.2 | 30 | 240 | < 0.5 | < 2 | 0.26 | 2.0 | 34 | 70 | 275 | 9.06 | < 10 | 0.10 | 10 | 0.41 | 1160 | 2 |
| R 7093 | 203 | 238 | 55 | 1.86 | 0.2 | 20 | 140 | < 0.5 | < 2 | 0.14 | < 0.5 | 8 | 116 | 42 | 5.25 | < 10 | 0.11 | 20 | 0.43 | 314 | 2 |
| R 7094 | 203 | 238 | < 1 | 1.85 | 0.2 | 10 | 140 | < 0.5 | < 2 | 0.09 | < 0.5 | 5 | 69 | 15 | 4.16 | < 10 | 0.10 | 10 | 0.30 | 262 | 2 |
| R 7095 | 203 | 238 | 13 | 2.63 | 0.2 | 20 | 350 | < 0.5 | < 2 | 1.00 | < 0.5 | 39 | 97 | 382 | 9.04 | < 10 | 0.19 | 20 | 1.19 | 1600 | 1 |
| R 7096 | 203 | 238 | 3 | 1.81 | 0.6 | 40 | 160 | < 0.5 | < 2 | 0.23 | < 0.5 | 14 | 73 | 217 | 4.21 | < 10 | 0.10 | 20 | 0.58 | 474 | 2 |
| R 7097 | 203 | 238 | < 1 | 2.16 | 0.4 | 40 | 210 | < 0.5 | < 2 | 0.30 | < 0.5 | 22 | 149 | 178 | 4.84 | 10 | 0.15 | 40 | 0.58 | 359 | 2 |
| R 7098 | 203 | 238 | 3 | 1.59 | 0.2 | 50 | 180 | < 0.5 | < 2 | 0.13 | < 0.5 | 14 | 76 | 115 | 4.63 | < 10 | 0.13 | 30 | 0.42 | 306 | 4 |
| R 7099 | 203 | 238 | 4 | 1.72 | 0.2 | 60 | 230 | < 0.5 | < 2 | 0.20 | < 0.5 | 16 | 189 | 134 | 4.92 | < 10 | 0.19 | 40 | 0.58 | 345 | 3 |
| R 7100 | 203 | 238 | < 1 | 1.75 | 0.4 | 40 | 340 | < 0.5 | < 2 | 0.10 | < 0.5 | 11 | 128 | 75 | 4.56 | < 10 | 0.25 | 30 | 0.33 | 242 | 5 |
| R 7101 | 203 | 238 | 7 | 1.32 | 0.2 | 40 | 280 | < 0.5 | < 2 | 0.13 | < 0.5 | 6 | 92 | 277 | 4.37 | 10 | 0.15 | 40 | 0.30 | 159 | 4 |
| R 7102 | 203 | 238 | 2 | 2.09 | 0.6 | 50 | 220 | < 0.5 | < 2 | 0.16 | < 0.5 | 13 | 79 | 663 | 8.27 | < 10 | 0.15 | 20 | 0.47 | 449 | 3 |
| R 7103 | 203 | 238 | 18 | 1.42 | 0.2 | 10 | 150 | < 0.5 | < 2 | 0.11 | < 0.5 | 5 | 157 | 86 | 2.70 | < 10 | 0.12 | 20 | 0.24 | 199 | 2 |
| R 7104 | 203 | 238 | < 1 | 1.41 | 0.2 | 20 | 150 | < 0.5 | < 2 | 0.12 | < 0.5 | 5 | 79 | 239 | 3.13 | < 10 | 0.11 | 20 | 0.27 | 158 | 2 |
| R 7105 | 203 | 238 | 2 | 2.15 | 0.6 | 30 | 350 | < 0.5 | < 2 | 0.48 | 5.0 | 37 | 171 | 644 | 6.98 | < 10 | 0.15 | 20 | 0.46 | 1500 | 3 |
| R 7106 | 203 | 238 | < 1 | 1.57 | 0.6 | 10 | 210 | < 0.5 | < 2 | 0.41 | 0.5 | 11 | 94 | 110 | 2.80 | < 10 | 0.08 | 20 | 0.41 | 280 | 1 |
| R 7107 | 203 | 238 | 3 | 2.38 | 1.4 | 30 | 210 | < 0.5 | < 2 | 0.36 | 1.0 | 27 | 105 | 562 | 4.32 | < 10 | 0.14 | 20 | 0.49 | 854 | 3 |
| R 7108 | 203 | 238 | 14 | 2.50 | 2.6 | 40 | 160 | < 0.5 | < 2 | 0.15 | < 0.5 | 7 | 69 | 747 | 4.73 | < 10 | 0.14 | 20 | 0.44 | 163 | 3 |
| R 7109 | 203 | 238 | < 1 | 1.39 | 0.4 | 30 | 140 | < 0.5 | < 2 | 0.09 | < 0.5 | 7 | 151 | 173 | 5.09 | < 10 | 0.09 | 20 | 0.27 | 178 | 2 |
| R 7110 | 203 | 238 | 6 | 1.70 | 0.4 | 40 | 360 | < 0.5 | < 2 | 0.14 | < 0.5 | 4 | 126 | 130 | 3.67 | < 10 | 0.20 | 30 | 0.29 | 137 | 3 |
| R 7111 | 203 | 238 | < 1 | 1.94 | 0.4 | 30 | 320 | < 0.5 | < 2 | 0.09 | < 0.5 | 8 | 170 | 50 | 3.71 | < 10 | 0.21 | 20 | 0.32 | 285 | 5 |
| R 7112 | 203 | 238 | 4 | 1.12 | 0.2 | 50 | 420 | < 0.5 | < 2 | 0.07 | < 0.5 | 12 | 110 | 68 | 4.45 | < 10 | 0.19 | 50 | 0.26 | 151 | 6 |
| R 7113 | 203 | 238 | 2 | 1.67 | 0.4 | 50 | 280 | < 0.5 | < 2 | 0.15 | < 0.5 | 13 | 161 | 74 | 4.54 | < 10 | 0.20 | 30 | 0.29 | 191 | 3 |
| R 7114 | 203 | 238 | 1 | 1.88 | 0.6 | 60 | 200 | < 0.5 | < 2 | 0.19 | < 0.5 | 21 | 105 | 165 | 6.06 | < 10 | 0.16 | 20 | 0.53 | 440 | 6 |
| R 7115 | 203 | 238 | 2 | 3.08 | 0.2 | 50 | 200 | < 0.5 | < 2 | 0.70 | < 0.5 | 78 | 165 | 1620 | 6.19 | < 10 | 0.11 | 20 | 1.54 | 1645 | 3 |
| R 7116 | 203 | 238 | < 1 | 2.60 | 0.2 | 30 | 270 | < 0.5 | < 2 | 0.81 | < 0.5 | 41 | 106 | 349 | 7.48 | < 10 | 0.18 | 20 | 1.01 | 1250 | 2 |
| R 7117 | 203 | 238 | < 1 | 2.42 | 0.4 | 50 | 280 | < 0.5 | < 2 | 0.18 | < 0.5 | 29 | 198 | 160 | 5.49 | 10 | 0.20 | 40 | 0.58 | 640 | 3 |
| R 7118 | 203 | 238 | 1 | 2.93 | 0.2 | 70 | 150 | < 0.5 | < 2 | 0.32 | < 0.5 | 63 | 145 | 310 | 6.31 | < 10 | 0.09 | 30 | 1.36 | 1140 | 3 |
| R 7119 | 203 | 238 | < 1 | 2.86 | 0.2 | 30 | 170 | < 0.5 | < 2 | 0.59 | < 0.5 | 32 | 143 | 645 | 5.69 | < 10 | 0.11 | 10 | 1.23 | 742 | 2 |
| R 7120 | 203 | 238 | 2 | 0.98 | 0.4 | 40 | 480 | < 0.5 | < 2 | 0.06 | < 0.5 | 4 | 81 | 47 | 4.03 | 10 | 0.23 | 50 | 0.17 | 59 | 5 |
| R 7121 | 203 | 238 | < 1 | 1.94 | 0.4 | 40 | 480 | < 0.5 | < 2 | 0.12 | < 0.5 | 16 | 238 | 89 | 5.62 | 10 | 0.34 | 30 | 0.33 | 296 | 7 |
| R 7122 | 203 | 238 | < 1 | 1.46 | 0.4 | 30 | 490 | < 0.5 | < 2 | 0.09 | < 0.5 | 8 | 122 | 40 | 3.75 | < 10 | 0.23 | 30 | 0.27 | 254 | 4 |
| R 7123 | 203 | 238 | 3 | 1.96 | 0.8 | 30 | 140 | < 0.5 | < 2 | 0.12 | < 0.5 | 5 | 88 | 597 | 3.74 | < 10 | 0.13 | 20 | 0.27 | 257 | 3 |
| R 7124 | 203 | 238 | < 1 | 1.83 | 0.2 | 30 | 230 | < 0.5 | < 2 | 0.12 | < 0.5 | 10 | 152 | 66 | 4.64 | < 10 | 0.16 | 20 | 0.30 | 600 | 2 |
| R 7125 | 203 | 238 | 7 | 1.99 | 0.4 | 60 | 290 | < 0.5 | < 2 | 0.21 | 0.5 | 21 | 216 | 154 | 6.02 | < 10 | 0.19 | 30 | 0.51 | 662 | 4 |
| R 7126 | 203 | 238 | 1 | 2.04 | 0.2 | 30 | 210 | < 0.5 | < 2 | 0.20 | < 0.5 | 11 | 76 | 125 | 4.12 | < 10 | 0.14 | 20 | 0.52 | 345 | 3 |
| R 7127 | 203 | 238 | 2 | 1.87 | 0.6 | 10 | 170 | < 0.5 | < 2 | 0.11 | < 0.5 | 31 | 279 | 700 | 10.40 | < 10 | 0.11 | 10 | 0.29 | 906 | 2 |
| R 7128 | 203 | 238 | < 1 | 1.58 | 0.8 | 20 | 180 | < 0.5 | < 2 | 0.15 | < 0.5 | 5 | 74 | 327 | 3.42 | < 10 | 0.12 | 10 | 0.33 | 148 | 2 |
| R 7129 | 203 | 238 | < 1 | 1.39 | 0.8 | 20 | 120 | < 0.5 | < 2 | 0.12 | < 0.5 | 4 | 153 | 63 | 2.91 | < 10 | 0.07 | 10 | 0.26 | 131 | 2 |
| R 7130 | 203 | 238 | 94 | 1.72 | 8.0 | 140 | 230 | < 0.5 | 8 | 0.19 | < 0.5 | 5 | 88 | 242 | 3.77 | < 10 | 0.18 | 20 | 0.42 | 150 | 4 |

CERTIFICATION :

**Chemex Labs Ltd.**
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

# CERTIFICATE OF ANALYSIS A861 380

To : ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Page No. : 3-A
Tot. Pages: 6
Date : 03-SEP-86
Invoice # : I-8616880
P.O. # : NONE

Project : ALL NORTH
Comments:

| SAMPLE DESCRIPTION | PREP CODE | | Au NAA ppb | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Mg % | Mn ppm | Mo ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7131 | 203 | 238 | 6 | 1.60 | 0.4 | 30 | 150 | < 0.5 | < 2 | 0.14 | < 0.5 | 10 | 74 | 157 | 4.68 | < 10 | 0.10 | 20 | 0.41 | 553 | 2 |
| R 7132 | 203 | 238 | 23 | 1.36 | 1.4 | 100 | 200 | < 0.5 | 4 | 0.05 | < 0.5 | 3 | 86 | 186 | 5.74 | < 10 | 0.12 | 30 | 0.34 | 125 | 6 |
| R 7133 | 203 | 238 | < 1 | 1.48 | 0.8 | 20 | 130 | < 0.5 | < 2 | 0.12 | < 0.5 | 5 | 127 | 22 | 3.18 | < 10 | 0.07 | 20 | 0.27 | 193 | 2 |
| R 7134 | 203 | 238 | 6 | 1.38 | 0.4 | 30 | 260 | < 0.5 | < 2 | 0.13 | < 0.5 | 7 | 58 | 57 | 3.02 | < 10 | 0.10 | 40 | 0.40 | 223 | 3 |
| R 7135 | 203 | 238 | 4 | 0.89 | 0.6 | 50 | 270 | < 0.5 | < 2 | 0.06 | < 0.5 | 6 | 61 | 60 | 3.44 | < 10 | 0.12 | 40 | 0.20 | 135 | 4 |
| R 7136 | 203 | 238 | 5 | 1.32 | 0.6 | 70 | 240 | < 0.5 | < 2 | 0.09 | 0.5 | 21 | 172 | 120 | 6.98 | < 10 | 0.18 | 40 | 0.24 | 224 | 8 |
| R 7137 | 203 | 238 | 5 | 1.52 | 0.6 | 30 | 210 | < 0.5 | < 2 | 0.07 | < 0.5 | 12 | 145 | 95 | 5.09 | < 10 | 0.15 | 40 | 0.36 | 207 | 9 |
| R 7138 | 203 | 238 | 559 | 2.22 | 0.2 | 30 | 130 | < 0.5 | < 2 | 0.28 | < 0.5 | 21 | 124 | 192 | 4.04 | < 10 | 0.05 | 10 | 1.03 | 467 | 1 |
| R 7139 | 203 | 238 | 8 | 0.70 | 1.2 | 60 | 230 | < 0.5 | < 2 | 0.06 | < 0.5 | 10 | 150 | 76 | 4.16 | < 10 | 0.13 | 40 | 0.14 | 122 | 6 |
| R 7140 | 203 | 238 | 5 | 1.87 | 0.4 | 30 | 180 | < 0.5 | < 2 | 0.24 | < 0.5 | 15 | 162 | 105 | 4.94 | < 10 | 0.12 | 30 | 0.74 | 325 | 7 |
| R 7141 | 203 | 238 | 3 | 1.58 | 0.8 | 20 | 170 | < 0.5 | < 2 | 0.17 | < 0.5 | 10 | 218 | 89 | 4.12 | < 10 | 0.12 | 30 | 0.51 | 233 | 5 |
| R 7142 | 203 | 238 | 7 | 1.50 | 1.2 | 30 | 230 | < 0.5 | < 2 | 0.14 | < 0.5 | 11 | 168 | 88 | 5.08 | < 10 | 0.16 | 40 | 0.48 | 197 | 7 |
| R 7143 | 203 | 238 | 3 | 1.10 | 0.4 | 40 | 290 | < 0.5 | < 2 | 0.10 | < 0.5 | 11 | 180 | 63 | 4.48 | < 10 | 0.15 | 40 | 0.27 | 197 | 7 |
| R 7144 | 203 | 238 | 5 | 1.49 | 1.2 | 40 | 280 | < 0.5 | < 2 | 0.14 | < 0.5 | 13 | 230 | 78 | 4.83 | < 10 | 0.18 | 40 | 0.37 | 281 | 5 |
| R 7145 | 203 | 238 | 3 | 1.01 | 0.6 | 50 | 250 | < 0.5 | < 2 | 0.05 | < 0.5 | 3 | 64 | 57 | 3.08 | < 10 | 0.10 | 50 | 0.32 | 80 | 4 |
| R 7146 | 203 | 238 | 3 | 2.08 | 0.6 | 30 | 220 | < 0.5 | < 2 | 0.14 | < 0.5 | 8 | 90 | 38 | 4.53 | < 10 | 0.20 | 20 | 0.42 | 508 | 3 |
| R 7147 | 203 | 238 | 39 | 1.45 | 2.4 | 100 | 150 | < 0.5 | 2 | 0.12 | < 0.5 | 5 | 124 | 142 | 3.68 | < 10 | 0.09 | 30 | 0.30 | 132 | 3 |
| R 7148 | 203 | 238 | 2 | 1.33 | 2.0 | 30 | 240 | < 0.5 | < 2 | 0.11 | < 0.5 | 2 | 193 | 29 | 1.79 | < 10 | 0.15 | 20 | 0.14 | 85 | 2 |
| R 7149 | 203 | 238 | 4 | 1.65 | 2.0 | 40 | 160 | < 0.5 | < 2 | 0.16 | < 0.5 | 4 | 123 | 417 | 3.54 | < 10 | 0.11 | 20 | 0.35 | 125 | 3 |
| R 7150 | 203 | 238 | 2 | 2.02 | 1.2 | 50 | 230 | < 0.5 | < 2 | 0.26 | 1.0 | 8 | 104 | 722 | 4.20 | < 10 | 0.11 | 20 | 0.41 | 206 | 3 |
| R 7151 | 203 | 238 | < 1 | 1.38 | 0.4 | 70 | 180 | < 0.5 | < 2 | 0.24 | 1.5 | 26 | 159 | 709 | 4.80 | < 10 | 0.08 | 20 | 0.39 | 772 | 2 |
| R 7152 | 203 | 238 | 4 | 1.49 | 0.6 | 30 | 120 | < 0.5 | < 2 | 0.11 | < 0.5 | 5 | 89 | 89 | 3.11 | < 10 | 0.08 | 20 | 0.32 | 147 | 2 |
| R 7153 | 203 | 238 | 1 | 1.39 | 0.4 | 80 | 120 | < 0.5 | < 2 | 0.14 | < 0.5 | 5 | 80 | 147 | 3.89 | < 10 | 0.06 | 20 | 0.34 | 156 | 2 |
| R 7154 | 203 | 238 | 6 | 1.49 | 1.0 | 40 | 150 | < 0.5 | < 2 | 0.12 | < 0.5 | 4 | 94 | 73 | 4.43 | < 10 | 0.09 | 30 | 0.30 | 107 | 3 |
| R 7155 | 203 | 238 | 4 | 1.34 | 0.8 | 30 | 120 | < 0.5 | < 2 | 0.13 | < 0.5 | 8 | 121 | 59 | 3.49 | < 10 | 0.08 | 20 | 0.29 | 437 | 2 |
| R 7156 | 203 | 238 | 1 | 1.55 | 0.4 | 20 | 150 | < 0.5 | < 2 | 0.15 | < 0.5 | 9 | 85 | 32 | 3.61 | < 10 | 0.10 | 20 | 0.43 | 391 | 1 |
| R 7157 | 203 | 238 | 13 | 1.40 | 1.0 | 50 | 170 | < 0.5 | < 2 | 0.11 | < 0.5 | 4 | 88 | 80 | 3.05 | < 10 | 0.09 | 30 | 0.31 | 124 | 3 |
| R 7158 | 203 | 238 | < 1 | 1.59 | 0.4 | 20 | 240 | < 0.5 | < 2 | 0.16 | < 0.5 | 16 | 94 | 49 | 3.71 | < 10 | 0.15 | 20 | 0.31 | 927 | 4 |
| R 7159 | 203 | 238 | 6 | 2.10 | 0.6 | 30 | 310 | < 0.5 | < 2 | 0.38 | < 0.5 | 20 | 82 | 206 | 4.10 | < 10 | 0.18 | 20 | 0.50 | 656 | 6 |
| R 7160 | 203 | 238 | < 1 | 1.79 | 0.4 | 30 | 230 | < 0.5 | < 2 | 0.21 | < 0.5 | 15 | 108 | 60 | 4.07 | < 10 | 0.15 | 20 | 0.55 | 636 | 5 |
| R 7161 | 203 | 238 | 3 | 1.51 | 0.4 | 20 | 150 | < 0.5 | < 2 | 0.21 | < 0.5 | 14 | 110 | 67 | 4.16 | < 10 | 0.08 | 30 | 0.60 | 373 | 5 |
| R 7162 | 203 | 238 | 14 | 1.67 | 1.2 | 80 | 210 | < 0.5 | 4 | 0.13 | < 0.5 | 6 | 110 | 104 | 3.16 | < 10 | 0.13 | 20 | 0.39 | 177 | 4 |
| R 7163 | 203 | 238 | < 1 | 1.99 | 0.4 | 20 | 230 | < 0.5 | < 2 | 0.22 | < 0.5 | 17 | 186 | 60 | 4.30 | < 10 | 0.13 | 20 | 0.60 | 682 | 4 |
| R 7164 | 203 | 238 | 1 | 2.70 | 0.4 | 20 | 310 | < 0.5 | < 2 | 0.38 | < 0.5 | 16 | 112 | 72 | 4.88 | < 10 | 0.15 | 20 | 0.89 | 522 | 3 |
| R 7165 | 203 | 238 | 33 | 1.57 | 1.4 | 170 | 220 | < 0.5 | 6 | 0.13 | < 0.5 | 7 | 111 | 149 | 4.30 | < 10 | 0.14 | 40 | 0.46 | 168 | 6 |
| R 7166 | 203 | 238 | 8 | 1.83 | 0.6 | 30 | 120 | < 0.5 | < 2 | 0.11 | < 0.5 | 6 | 106 | 54 | 3.76 | < 10 | 0.07 | 20 | 0.26 | 224 | 2 |
| R 7167 | 203 | 238 | 5 | 1.50 | 0.4 | 50 | 230 | < 0.5 | < 2 | 0.10 | < 0.5 | 4 | 208 | 43 | 3.68 | < 10 | 0.13 | 20 | 0.21 | 256 | 3 |
| R 7168 | 203 | 238 | 4 | 1.60 | 0.2 | 20 | 130 | < 0.5 | < 2 | 0.14 | < 0.5 | 7 | 118 | 25 | 3.82 | < 10 | 0.08 | 20 | 0.33 | 327 | 2 |
| R 7169 | 203 | 238 | 3 | 1.57 | 0.2 | 10 | 120 | < 0.5 | < 2 | 0.14 | < 0.5 | 8 | 83 | 24 | 3.59 | < 10 | 0.08 | 20 | 0.33 | 340 | 2 |
| R 7170 | 203 | 238 | < 1 | 1.59 | 0.4 | 10 | 130 | < 0.5 | < 2 | 0.10 | < 0.5 | 4 | 76 | 17 | 3.30 | < 10 | 0.09 | 10 | 0.28 | 164 | 1 |

CERTIFICATION : B. Cook

**Chemex Labs Ltd.**
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# CERTIFICATE OF ANALYSIS A861 80

To : ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Page No. : 4-A
Tot. Pages: 6
Date : 03-SEP-86
Invoice # : I-8616880
P.O. # : NONE

Project : ALL NORTH
Comments:

| SAMPLE DESCRIPTION | PREP CODE | | Au NAA ppb | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Mg % | Mn ppm | Mo ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7171 | 203 | 238 | 9 | 1.43 | 0.4 | 20 | 120 | < 0.5 | < 2 | 0.15 | < 0.5 | 6 | 116 | 30 | 3.75 | < 10 | 0.05 | 20 | 0.36 | 190 | 2 |
| R 7172 | 203 | 238 | 8 | 1.72 | 0.6 | 50 | 150 | < 0.5 | < 2 | 0.13 | < 0.5 | 7 | 84 | 94 | 4.48 | < 10 | 0.09 | 20 | 0.37 | 247 | 3 |
| R 7173 | 203 | 238 | 1 | 2.06 | 0.2 | 10 | 170 | < 0.5 | < 2 | 0.23 | < 0.5 | 7 | 131 | 25 | 3.47 | < 10 | 0.13 | 20 | 0.46 | 259 | 2 |
| R 7174 | 203 | 238 | < 1 | 1.99 | 0.4 | 10 | 160 | < 0.5 | < 2 | 0.15 | < 0.5 | 6 | 94 | 20 | 3.89 | < 10 | 0.09 | 20 | 0.33 | 220 | 1 |
| R 7175 | 203 | 238 | 3 | 2.56 | 0.6 | 10 | 310 | < 0.5 | < 2 | 0.31 | < 0.5 | 6 | 345 | 46 | 2.95 | < 10 | 0.27 | 20 | 0.34 | 284 | 6 |
| R 7176 | 203 | 238 | 55 | 1.88 | 4.2 | 130 | 270 | < 0.5 | 10 | 0.62 | 6.5 | 16 | 108 | 700 | 4.22 | 10 | 0.13 | 60 | 0.55 | 1965 | 5 |
| R 7177 | 203 | 238 | < 1 | 2.11 | 6.0 | 30 | 170 | < 0.5 | < 2 | 0.15 | < 0.5 | 15 | 63 | 126 | 4.02 | < 10 | 0.10 | 20 | 0.30 | 599 | 2 |
| R 7178 | 203 | 238 | 2 | 2.01 | 0.4 | 10 | 170 | < 0.5 | < 2 | 0.21 | < 0.5 | 10 | 79 | 21 | 3.25 | < 10 | 0.12 | 20 | 0.45 | 561 | 5 |
| R 7179 | 203 | 238 | 2 | 1.66 | 0.4 | 20 | 410 | < 0.5 | < 2 | 0.08 | < 0.5 | 4 | 63 | 30 | 2.08 | < 10 | 0.13 | 40 | 0.73 | 163 | 2 |
| R 7180 | 203 | 238 | 9 | 1.43 | 0.4 | 30 | 260 | < 0.5 | < 2 | 0.18 | < 0.5 | 6 | 102 | 82 | 2.85 | < 10 | 0.11 | 40 | 0.50 | 187 | 3 |
| R 7181 | 203 | 238 | 5 | 1.90 | 0.8 | 30 | 510 | < 0.5 | < 2 | 0.28 | < 0.5 | 6 | 129 | 69 | 2.87 | < 10 | 0.15 | 30 | 0.46 | 253 | 2 |
| R 7182 | 203 | 238 | 16 | 1.35 | 0.6 | 70 | 190 | < 0.5 | < 2 | 0.19 | < 0.5 | 8 | 79 | 79 | 3.07 | < 10 | 0.07 | 30 | 0.42 | 264 | 3 |
| R 7183 | 203 | 238 | < 1 | 1.71 | 0.4 | 20 | 290 | < 0.5 | < 2 | 0.20 | < 0.5 | 13 | 79 | 28 | 3.35 | < 10 | 0.10 | 20 | 0.38 | 1090 | 3 |
| R 7184 | 203 | 238 | 4 | 1.67 | 0.2 | 10 | 180 | < 0.5 | < 2 | 0.22 | < 0.5 | 8 | 94 | 27 | 3.21 | < 10 | 0.10 | 30 | 0.41 | 312 | 2 |
| R 7185 | 203 | 238 | 4 | 1.37 | 0.2 | 10 | 180 | < 0.5 | < 2 | 0.25 | < 0.5 | 10 | 75 | 17 | 2.94 | < 10 | 0.08 | 20 | 0.34 | 584 | 1 |
| R 7186 | 203 | 238 | 1 | 1.45 | 0.2 | 10 | 170 | < 0.5 | < 2 | 0.21 | < 0.5 | 8 | 128 | 21 | 3.07 | < 10 | 0.12 | 30 | 0.38 | 283 | 1 |
| R 7187 | 203 | 238 | 5 | 1.43 | 0.2 | 20 | 160 | < 0.5 | < 2 | 0.16 | < 0.5 | 6 | 87 | 31 | 3.16 | < 10 | 0.10 | 30 | 0.34 | 237 | 2 |
| R 7188 | 203 | 238 | 10 | 1.51 | 0.2 | 30 | 180 | < 0.5 | < 2 | 0.28 | < 0.5 | 8 | 84 | 52 | 2.84 | < 10 | 0.10 | 30 | 0.44 | 242 | 2 |
| R 7189 | 203 | 238 | < 1 | 1.64 | 0.4 | 10 | 270 | < 0.5 | < 2 | 0.28 | < 0.5 | 6 | 109 | 24 | 2.61 | < 10 | 0.11 | 30 | 0.38 | 259 | 1 |
| R 7190 | 203 | 238 | 7 | 1.42 | 0.4 | 40 | 250 | < 0.5 | < 2 | 0.18 | < 0.5 | 5 | 99 | 55 | 2.80 | < 10 | 0.08 | 40 | 0.39 | 168 | 3 |
| R 7191 | 203 | 238 | 4 | 1.76 | 0.6 | 30 | 560 | < 0.5 | < 2 | 0.36 | 1.0 | 6 | 80 | 234 | 2.55 | < 10 | 0.13 | 20 | 0.47 | 209 | 3 |
| R 7192 | 203 | 238 | 7 | 1.89 | 0.6 | 30 | 270 | < 0.5 | < 2 | 0.15 | < 0.5 | 7 | 108 | 170 | 3.02 | < 10 | 0.10 | 30 | 0.52 | 305 | 3 |
| R 7193 | 203 | 238 | 5 | 1.91 | 1.4 | 50 | 310 | < 0.5 | < 2 | 0.18 | < 0.5 | 7 | 116 | 109 | 3.56 | < 10 | 0.15 | 30 | 0.41 | 316 | 8 |
| R 7194 | 203 | 238 | < 1 | 1.34 | 0.8 | 30 | 160 | < 0.5 | < 2 | 0.13 | < 0.5 | 4 | 116 | 92 | 3.86 | < 10 | 0.10 | 20 | 0.23 | 128 | 3 |
| R 7195 | 203 | 238 | < 1 | 1.46 | 0.8 | 20 | 180 | < 0.5 | < 2 | 0.21 | < 0.5 | 4 | 117 | 49 | 3.50 | < 10 | 0.09 | 20 | 0.33 | 157 | 3 |
| R 7196 | 203 | 238 | < 1 | 1.89 | 0.4 | 10 | 150 | < 0.5 | < 2 | 0.13 | < 0.5 | 5 | 93 | 21 | 3.25 | < 10 | 0.13 | 20 | 0.31 | 320 | 2 |
| R 7197 | 203 | 238 | 2 | 1.97 | 0.4 | 10 | 190 | < 0.5 | < 2 | 0.14 | < 0.5 | 6 | 77 | 20 | 3.21 | < 10 | 0.14 | 20 | 0.40 | 251 | 2 |
| R 7201 | 203 | 238 | 2 | 1.35 | 0.4 | 10 | 360 | < 0.5 | < 2 | 0.26 | < 0.5 | 10 | 96 | 31 | 3.24 | < 10 | 0.14 | 30 | 0.30 | 966 | 4 |
| R 7202 | 203 | 238 | < 1 | 1.15 | 0.6 | 10 | 250 | < 0.5 | < 2 | 0.12 | < 0.5 | 7 | 116 | 19 | 3.30 | < 10 | 0.15 | 30 | 0.15 | 772 | 5 |
| R 7203 | 203 | 238 | 3 | 1.36 | 1.4 | 10 | 190 | < 0.5 | < 2 | 0.08 | < 0.5 | 11 | 107 | 40 | 4.56 | < 10 | 0.14 | 20 | 0.27 | 362 | 5 |
| R 7204 | 203 | 238 | 12 | 1.27 | 1.6 | 40 | 330 | < 0.5 | < 2 | 0.12 | < 0.5 | 6 | 197 | 43 | 4.03 | < 10 | 0.24 | 20 | 0.21 | 212 | 11 |
| R 7205 | 203 | 238 | 2 | 1.71 | 1.0 | 20 | 220 | < 0.5 | < 2 | 0.11 | < 0.5 | 8 | 118 | 42 | 4.51 | < 10 | 0.16 | 20 | 0.30 | 260 | 6 |
| R 7206 | 203 | 238 | 3 | 1.89 | 0.8 | 20 | 430 | < 0.5 | < 2 | 0.17 | < 0.5 | 13 | 288 | 47 | 4.62 | < 10 | 0.24 | 30 | 0.39 | 472 | 6 |
| R 7207 | 203 | 238 | 4 | 1.39 | 0.4 | 20 | 200 | < 0.5 | < 2 | 0.23 | < 0.5 | 9 | 105 | 36 | 3.75 | < 10 | 0.12 | 20 | 0.41 | 237 | 5 |
| R 7208 | 203 | 238 | 19 | 1.57 | 1.4 | 40 | 190 | < 0.5 | < 2 | 0.16 | < 0.5 | 7 | 116 | 42 | 3.19 | < 10 | 0.13 | 20 | 0.35 | 268 | 4 |
| R 7209 | 203 | 238 | 1 | 2.42 | 0.4 | 10 | 140 | < 0.5 | < 2 | 0.12 | < 0.5 | 8 | 73 | 24 | 4.06 | < 10 | 0.09 | 20 | 0.43 | 351 | 2 |
| R 7210 | 203 | 238 | 5 | 1.90 | 0.6 | 20 | 90 | < 0.5 | < 2 | 0.12 | < 0.5 | 9 | 71 | 42 | 4.07 | < 10 | 0.05 | 20 | 0.36 | 374 | 2 |
| R 7211 | 203 | 238 | < 1 | 2.18 | 0.2 | 10 | 150 | < 0.5 | < 2 | 0.15 | < 0.5 | 14 | 78 | 67 | 4.03 | < 10 | 0.13 | 20 | 0.53 | 690 | 2 |
| R 7212 | 203 | 238 | 1 | 1.70 | 0.4 | 20 | 100 | < 0.5 | < 2 | 0.11 | < 0.5 | 6 | 59 | 30 | 3.59 | < 10 | 0.08 | 20 | 0.29 | 225 | 2 |
| R 7213 | 203 | 238 | < 1 | 1.66 | 0.2 | 10 | 110 | < 0.5 | < 2 | 0.11 | < 0.5 | 5 | 57 | 16 | 3.19 | 10 | 0.09 | 20 | 0.25 | 201 | 2 |

CERTIFICATION :

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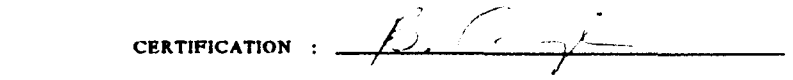
# CERTIFICATE OF ANALYSIS A8611 `80

To: ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Page No. : 5-A
Tot. Pages: 6
Date : 03-SEP-86
Invoice # : I-8616880
P.O. # : NONE

Project : ALL NORTH
Comments:

| SAMPLE DESCRIPTION | PREP CODE | | Au NAA ppb | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Mg % | Mn ppm | Mo ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7214 | 203 | 238 | 2 | 1.56 | 0.2 | 20 | 140 | < 0.5 | < 2 | 0.13 | < 0.5 | 6 | 89 | 31 | 3.33 | < 10 | 0.10 | 20 | 0.28 | 220 | 2 |
| R 7215 | 203 | 238 | 38 | 1.84 | 9.2 | 60 | 230 | < 0.5 | < 2 | 0.17 | < 0.5 | 6 | 71 | 96 | 3.10 | < 10 | 0.12 | 20 | 0.38 | 311 | 3 |
| R 7216 | 203 | 238 | 18 | 1.39 | 0.4 | 20 | 190 | < 0.5 | < 2 | 0.08 | < 0.5 | 7 | 100 | 21 | 3.10 | < 10 | 0.11 | 20 | 0.25 | 335 | 3 |
| R 7217 | 203 | 238 | 6 | 1.38 | 0.4 | 20 | 200 | < 0.5 | < 2 | 0.06 | < 0.5 | 7 | 139 | 30 | 3.65 | < 10 | 0.12 | 20 | 0.24 | 308 | 3 |
| R 7218 | 203 | 238 | < 1 | 1.63 | 0.4 | 20 | 300 | < 0.5 | < 2 | 0.09 | < 0.5 | 9 | 109 | 25 | 3.90 | 10 | 0.22 | 20 | 0.22 | 528 | 4 |
| R 7219 | 203 | 238 | 4 | 1.57 | 1.0 | 40 | 310 | < 0.5 | < 2 | 0.19 | < 0.5 | 9 | 111 | 40 | 3.63 | < 10 | 0.21 | 30 | 0.28 | 317 | 8 |
| R 7220 | 203 | 238 | 4 | 1.98 | 0.4 | 20 | 430 | < 0.5 | < 2 | 0.08 | < 0.5 | 9 | 166 | 31 | 4.37 | 10 | 0.31 | 30 | 0.29 | 430 | 7 |
| R 7221 | 203 | 238 | 8 | 1.80 | 0.4 | 10 | 270 | < 0.5 | < 2 | 0.07 | < 0.5 | 6 | 89 | 22 | 3.63 | < 10 | 0.19 | 20 | 0.23 | 268 | 9 |
| R 7222 | 203 | 238 | < 1 | 1.62 | 0.2 | 10 | 200 | < 0.5 | < 2 | 0.11 | < 0.5 | 9 | 90 | 23 | 3.50 | < 10 | 0.18 | 30 | 0.33 | 540 | 2 |
| R 7223 | 203 | 238 | < 1 | 1.84 | 0.2 | 10 | 260 | < 0.5 | < 2 | 0.11 | < 0.5 | 7 | 89 | 20 | 3.11 | < 10 | 0.18 | 20 | 0.32 | 413 | 2 |
| R 7224 | 203 | 238 | < 1 | 1.92 | 0.4 | 20 | 340 | < 0.5 | < 2 | 0.12 | < 0.5 | 11 | 79 | 36 | 3.62 | < 10 | 0.20 | 20 | 0.32 | 710 | 4 |
| R 7225 | 203 | 238 | 6 | 2.01 | 0.6 | 20 | 510 | < 0.5 | < 2 | 0.22 | < 0.5 | 9 | 222 | 47 | 3.83 | < 10 | 0.28 | 30 | 0.39 | 296 | 3 |
| R 7226 | 203 | 238 | 4 | 1.85 | 0.4 | 20 | 230 | < 0.5 | < 2 | 0.17 | < 0.5 | 11 | 109 | 32 | 3.31 | < 10 | 0.16 | 30 | 0.35 | 546 | 2 |
| R 7227 | 203 | 238 | 21 | 1.74 | 0.8 | 60 | 210 | < 0.5 | < 2 | 0.14 | < 0.5 | 7 | 110 | 45 | 3.59 | < 10 | 0.15 | 30 | 0.29 | 251 | 3 |
| R 7228 | 203 | 238 | 143 | 1.41 | 8.8 | 240 | 200 | < 0.5 | 8 | 0.25 | < 0.5 | 8 | 91 | 101 | 2.92 | < 10 | 0.13 | 30 | 0.29 | 270 | 6 |
| R 7229 | 203 | 238 | 20 | 1.67 | 0.8 | 60 | 190 | < 0.5 | < 2 | 0.16 | < 0.5 | 7 | 81 | 58 | 3.30 | < 10 | 0.10 | 20 | 0.37 | 255 | 2 |
| R 7230 | 203 | 238 | 4 | 1.44 | 0.2 | 20 | 160 | < 0.5 | < 2 | 0.13 | < 0.5 | 6 | 166 | 69 | 3.24 | < 10 | 0.09 | 20 | 0.26 | 182 | 2 |
| R 7231 | 203 | 238 | 10 | 1.63 | 0.4 | 30 | 110 | < 0.5 | < 2 | 0.13 | < 0.5 | 12 | 104 | 30 | 4.71 | < 10 | 0.06 | 10 | 0.22 | 540 | 3 |
| R 7232 | 203 | 238 | < 1 | 1.77 | 0.2 | 10 | 150 | < 0.5 | < 2 | 0.09 | < 0.5 | 4 | 84 | 24 | 4.05 | < 10 | 0.09 | 20 | 0.28 | 189 | 3 |
| R 7233 | 203 | 238 | 3 | 1.67 | 0.8 | 40 | 1110 | < 0.5 | < 2 | 0.19 | 0.5 | 18 | 163 | 62 | 3.74 | < 10 | 0.33 | 20 | 0.27 | 989 | 28 |
| R 7234 | 203 | 238 | < 1 | 2.43 | 0.6 | 10 | 300 | < 0.5 | < 2 | 0.18 | < 0.5 | 7 | 78 | 125 | 3.58 | < 10 | 0.19 | 20 | 0.48 | 285 | 2 |
| R 7235 | 203 | 238 | 7 | 2.01 | 0.2 | 20 | 200 | < 0.5 | < 2 | 0.10 | < 0.5 | 7 | 105 | 27 | 4.11 | < 10 | 0.13 | 20 | 0.33 | 250 | 2 |
| R 7236 | 203 | 238 | < 1 | 1.82 | 0.2 | 20 | 220 | < 0.5 | < 2 | 0.16 | < 0.5 | 9 | 194 | 35 | 4.08 | < 10 | 0.13 | 20 | 0.26 | 508 | 2 |
| R 7237 | 203 | 238 | < 1 | 2.38 | 0.2 | 10 | 170 | < 0.5 | < 2 | 0.15 | < 0.5 | 7 | 85 | 16 | 3.67 | < 10 | 0.14 | 20 | 0.38 | 322 | 2 |
| R 7238 | 203 | 238 | 91 | 1.70 | 3.4 | 200 | 200 | < 0.5 | 6 | 0.25 | < 0.5 | 6 | 105 | 83 | 3.30 | 10 | 0.14 | 30 | 0.33 | 181 | 4 |
| R 7239 | 203 | 238 | 105 | 1.53 | 6.6 | 300 | 180 | < 0.5 | 8 | 0.21 | < 0.5 | 6 | 122 | 119 | 3.28 | < 10 | 0.12 | 30 | 0.28 | 220 | 4 |
| R 7240 | 203 | 238 | 40 | 2.16 | 1.4 | 60 | 230 | < 0.5 | < 2 | 0.22 | < 0.5 | 7 | 94 | 67 | 3.56 | < 10 | 0.13 | 20 | 0.40 | 241 | 2 |
| R 7241 | 203 | 238 | 10 | 1.81 | 1.4 | 40 | 280 | < 0.5 | < 2 | 0.24 | < 0.5 | 8 | 108 | 36 | 3.18 | < 10 | 0.13 | 30 | 0.40 | 506 | 2 |
| R 7242 | 203 | 238 | 22 | 1.46 | 1.0 | 60 | 220 | < 0.5 | < 2 | 0.18 | < 0.5 | 9 | 99 | 42 | 3.47 | < 10 | 0.12 | 20 | 0.31 | 531 | 3 |
| R 7243 | 203 | 238 | 4 | 1.43 | 0.8 | 20 | 270 | < 0.5 | < 2 | 0.13 | < 0.5 | 9 | 97 | 50 | 3.33 | < 10 | 0.11 | 20 | 0.28 | 502 | 2 |
| R 7244 | 203 | 238 | 5 | 1.73 | 0.2 | 20 | 560 | < 0.5 | < 2 | 0.22 | < 0.5 | 12 | 125 | 38 | 3.64 | < 10 | 0.14 | 20 | 0.39 | 498 | 3 |
| R 7245 | 203 | 238 | 3 | 1.58 | 0.4 | 20 | 200 | < 0.5 | < 2 | 0.16 | < 0.5 | 8 | 102 | 29 | 3.15 | < 10 | 0.10 | 30 | 0.37 | 259 | 1 |
| R 7246 | 203 | 238 | 7 | 1.63 | 0.2 | 20 | 300 | < 0.5 | < 2 | 0.20 | < 0.5 | 12 | 125 | 48 | 3.09 | < 10 | 0.15 | 30 | 0.39 | 354 | 2 |
| R 7247 | 203 | 238 | 13 | 2.04 | 0.6 | 30 | 520 | < 0.5 | < 2 | 0.28 | < 0.5 | 10 | 113 | 28 | 3.41 | < 10 | 0.17 | 20 | 0.48 | 382 | 2 |
| R 7248 | 203 | 238 | 4 | 2.58 | 0.6 | 20 | 530 | < 0.5 | < 2 | 0.39 | < 0.5 | 12 | 107 | 97 | 3.43 | < 10 | 0.22 | 30 | 0.61 | 426 | 1 |
| R 7249 | 203 | 238 | < 1 | 2.59 | 0.2 | 10 | 250 | < 0.5 | < 2 | 0.17 | < 0.5 | 10 | 176 | 19 | 3.84 | < 10 | 0.23 | 20 | 0.48 | 523 | 1 |
| R 7250 | 203 | 238 | 5 | 2.47 | 0.6 | 30 | 310 | < 0.5 | < 2 | 0.20 | < 0.5 | 12 | 246 | 44 | 4.11 | < 10 | 0.25 | 20 | 0.45 | 584 | 2 |
| R 7251 | 203 | 238 | 6 | 2.00 | 0.4 | 20 | 230 | < 0.5 | < 2 | 0.17 | < 0.5 | 11 | 167 | 42 | 3.74 | < 10 | 0.16 | 20 | 0.32 | 448 | 2 |
| R 7252 | 203 | 238 | < 1 | 1.81 | 0.4 | 10 | 210 | < 0.5 | < 2 | 0.11 | < 0.5 | 8 | 111 | 16 | 3.70 | < 10 | 0.17 | 20 | 0.30 | 471 | 2 |
| R 7253 | 203 | 238 | < 1 | 1.91 | 0.4 | 10 | 300 | < 0.5 | < 2 | 0.12 | < 0.5 | 7 | 157 | 18 | 3.59 | 10 | 0.24 | 20 | 0.24 | 389 | 2 |

CERTIFICATION : 

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# CERTIFICATE OF ANALYSIS A861 180

To : ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Project : ALL NORTH
Comments:

Page No. : 6-A
Tot. Pages: 6
Date : 03-SEP-86
Invoice # : I-8616880
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | Au NAA ppb | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Mg % | Mn ppm | Mo ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7254 | 203 238 | < 1 | 2.44 | 0.2 | 10 | 390 | < 0.5 | < 2 | 0.21 | < 0.5 | 17 | 104 | 34 | 4.11 | < 10 | 0.22 | 20 | 0.48 | 716 | 2 |
| R 7255 | 203 238 | < 1 | 1.88 | 0.2 | 20 | 240 | < 0.5 | < 2 | 0.19 | < 0.5 | 9 | 192 | 55 | 3.50 | < 10 | 0.12 | 30 | 0.34 | 307 | 1 |
| R 7256 | 203 238 | < 1 | 2.17 | 0.2 | 20 | 340 | < 0.5 | < 2 | 0.14 | < 0.5 | 9 | 157 | 68 | 4.29 | < 10 | 0.21 | 20 | 0.38 | 410 | 2 |
| R 7257 | 203 238 | < 1 | 2.20 | 0.2 | 10 | 310 | < 0.5 | < 2 | 0.10 | < 0.5 | 7 | 138 | 23 | 3.76 | < 10 | 0.24 | 20 | 0.29 | 756 | 1 |
| R 7258 | 203 238 | < 1 | 1.74 | 0.2 | 20 | 170 | < 0.5 | < 2 | 0.12 | < 0.5 | 7 | 194 | 30 | 4.64 | < 10 | 0.10 | 20 | 0.28 | 233 | 1 |
| R 7259 | 203 238 | < 1 | 1.80 | 0.2 | 20 | 280 | < 0.5 | < 2 | 0.11 | < 0.5 | 7 | 259 | 23 | 5.35 | < 10 | 0.22 | 20 | 0.21 | 579 | 1 |
| R 7260 | 203 238 | < 1 | 2.47 | 0.4 | 20 | 300 | < 0.5 | < 2 | 0.21 | < 0.5 | 14 | 192 | 30 | 4.22 | < 10 | 0.23 | 20 | 0.49 | 640 | 2 |
| R 7261 | 203 238 | < 1 | 1.69 | 0.2 | 10 | 220 | < 0.5 | < 2 | 0.14 | < 0.5 | 5 | 154 | 25 | 3.17 | < 10 | 0.15 | 20 | 0.28 | 227 | 2 |
| R 7262 | 203 238 | < 1 | 2.02 | 0.4 | 20 | 320 | < 0.5 | < 2 | 0.20 | < 0.5 | 10 | 180 | 44 | 3.78 | < 10 | 0.17 | 30 | 0.34 | 422 | 3 |
| R 7263 | 203 238 | < 1 | 2.04 | 0.2 | 20 | 260 | < 0.5 | < 2 | 0.20 | < 0.5 | 8 | 176 | 25 | 4.65 | < 10 | 0.15 | 30 | 0.34 | 529 | 1 |
| R 7264 | 203 238 | 3 | 2.18 | 0.2 | 10 | 240 | < 0.5 | < 2 | 0.17 | < 0.5 | 8 | 146 | 22 | 3.07 | < 10 | 0.20 | 20 | 0.39 | 377 | 1 |
| R 7265 | 203 238 | < 1 | 1.79 | 0.2 | 10 | 290 | < 0.5 | < 2 | 0.21 | < 0.5 | 9 | 157 | 71 | 2.94 | < 10 | 0.17 | 20 | 0.39 | 366 | 1 |
| R 7266 | 203 238 | < 1 | 1.93 | 0.2 | 20 | 460 | < 0.5 | < 2 | 0.28 | < 0.5 | 10 | 122 | 26 | 3.04 | < 10 | 0.16 | 20 | 0.48 | 400 | 1 |
| R 7267 | 203 238 | < 1 | 2.04 | 0.2 | 10 | 350 | < 0.5 | < 2 | 0.50 | < 0.5 | 10 | 142 | 27 | 3.19 | < 10 | 0.19 | 30 | 0.46 | 392 | 1 |
| R 7268 | 203 238 | 6 | 1.29 | 0.2 | 10 | 300 | < 0.5 | < 2 | 0.29 | < 0.5 | 9 | 112 | 28 | 2.65 | < 10 | 0.12 | 30 | 0.36 | 353 | 1 |
| R 7269 | 203 238 | 5 | 1.67 | 0.2 | 20 | 410 | < 0.5 | < 2 | 0.37 | < 0.5 | 9 | 113 | 24 | 3.07 | < 10 | 0.13 | 30 | 0.42 | 402 | 1 |
| R 7270 | 203 238 | 4 | 1.17 | 0.2 | 20 | 320 | < 0.5 | < 2 | 0.22 | < 0.5 | 12 | 158 | 45 | 3.42 | < 10 | 0.15 | 30 | 0.25 | 511 | 2 |
| R 7271 | 203 238 | 4 | 1.46 | 0.2 | 20 | 320 | < 0.5 | < 2 | 0.24 | < 0.5 | 10 | 115 | 75 | 3.53 | < 10 | 0.07 | 20 | 0.31 | 389 | 2 |
| R 7272 | 203 238 | 2 | 1.51 | 0.2 | 10 | 170 | < 0.5 | < 2 | 0.13 | < 0.5 | 10 | 143 | 40 | 3.21 | < 10 | 0.07 | 20 | 0.27 | 384 | 1 |
| R 7273 | 203 238 | < 1 | 1.57 | 0.2 | 20 | 260 | < 0.5 | < 2 | 0.10 | < 0.5 | 8 | 170 | 36 | 3.38 | < 10 | 0.12 | 10 | 0.26 | 346 | 2 |
| R 7274 | 203 238 | < 1 | 1.53 | 0.2 | 20 | 330 | < 0.5 | < 2 | 0.23 | < 0.5 | 7 | 105 | 24 | 2.98 | < 10 | 0.09 | 20 | 0.31 | 296 | 2 |
| R 7275 | 203 238 | 24 | 1.61 | 0.2 | 20 | 170 | < 0.5 | < 2 | 0.28 | < 0.5 | 14 | 99 | 43 | 3.47 | < 10 | 0.09 | 30 | 0.36 | 614 | 1 |
| R 7276 | 203 238 | < 1 | 1.40 | 0.2 | 20 | 160 | < 0.5 | < 2 | 0.11 | < 0.5 | 5 | 117 | 67 | 4.50 | < 10 | 0.09 | 10 | 0.21 | 242 | 1 |
| R 7277 | 203 238 | 2 | 1.63 | 0.2 | 20 | 220 | < 0.5 | < 2 | 0.28 | < 0.5 | 13 | 101 | 54 | 3.71 | < 10 | 0.08 | 20 | 0.39 | 472 | 1 |
| R 7278 | 203 238 | 5 | 1.57 | 0.2 | 10 | 140 | < 0.5 | < 2 | 0.16 | < 0.5 | 8 | 66 | 36 | 3.25 | < 10 | 0.08 | 20 | 0.35 | 323 | 1 |
| R 7279 | 203 238 | < 1 | 1.61 | 0.2 | 10 | 290 | < 0.5 | < 2 | 0.23 | < 0.5 | 8 | 93 | 31 | 3.10 | < 10 | 0.09 | 20 | 0.32 | 362 | 1 |
| R 7280 | 203 238 | 3 | 1.69 | 0.2 | 10 | 130 | < 0.5 | < 2 | 0.09 | < 0.5 | 7 | 91 | 45 | 3.62 | < 10 | 0.07 | 20 | 0.27 | 234 | 2 |
| R 7281 | 203 238 | 5 | 1.58 | 0.6 | 30 | 250 | < 0.5 | < 2 | 0.22 | 0.5 | 13 | 70 | 133 | 5.16 | < 10 | 0.08 | 20 | 0.25 | 1110 | 5 |
| R 7282 | 203 238 | < 1 | 1.21 | 0.2 | 10 | 230 | < 0.5 | < 2 | 0.10 | < 0.5 | 3 | 81 | 54 | 2.53 | < 10 | 0.11 | 20 | 0.15 | 152 | 4 |
| R 7283 | 203 238 | < 1 | 1.10 | 0.2 | 20 | 110 | < 0.5 | < 2 | 0.10 | < 0.5 | 4 | 82 | 28 | 2.91 | < 10 | 0.06 | 20 | 0.24 | 156 | 2 |
| R 7284 | 203 238 | < 1 | 0.93 | 0.6 | 20 | 140 | < 0.5 | < 2 | 0.06 | < 0.5 | 3 | 57 | 80 | 2.73 | < 10 | 0.04 | 20 | 0.13 | 126 | 3 |
| R 7285 | 203 238 | 3 | 1.22 | 0.2 | 20 | 210 | < 0.5 | < 2 | 0.31 | < 0.5 | 9 | 65 | 36 | 2.75 | < 10 | 0.05 | 20 | 0.32 | 590 | 2 |
| R 7286 | 203 238 | 3 | 1.69 | 0.2 | 20 | 320 | < 0.5 | < 2 | 0.38 | < 0.5 | 9 | 75 | 41 | 2.90 | < 10 | 0.07 | 20 | 0.40 | 396 | 1 |
| R 7287 | 203 238 | 4 | 1.64 | 0.2 | 10 | 420 | < 0.5 | < 2 | 0.54 | < 0.5 | 7 | 73 | 21 | 2.62 | < 10 | 0.10 | 20 | 0.38 | 260 | 1 |
| R 7288 | 203 238 | 3 | 1.69 | 0.2 | 20 | 300 | < 0.5 | < 2 | 0.34 | < 0.5 | 9 | 79 | 30 | 3.40 | < 10 | 0.09 | 30 | 0.41 | 334 | 2 |
| R 7289 | 203 238 | < 1 | 1.28 | 0.2 | 40 | 210 | < 0.5 | < 2 | 0.34 | < 0.5 | 12 | 95 | 39 | 4.51 | < 10 | 0.11 | 20 | 0.27 | 471 | 2 |
| R 7290 | 203 238 | < 1 | 1.88 | 0.2 | 20 | 450 | < 0.5 | < 2 | 0.63 | < 0.5 | 11 | 124 | 24 | 3.31 | < 10 | 0.13 | 30 | 0.50 | 523 | 1 |
| R 7291 | 203 238 | 2 | 1.34 | 0.2 | 10 | 250 | < 0.5 | < 2 | 0.26 | < 0.5 | 11 | 62 | 24 | 2.82 | < 10 | 0.11 | 30 | 0.28 | 1060 | 1 |

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# CERTIFICATE OF ANALYSIS A8617978

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

Project : MARG
Comments:

Page No. : 1-A
Tot. Pages: 1
Date : 18-SEP-86
Invoice # : I-8617978
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Au NAA ppb | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Mg % | Mn ppm | Mo ppm |
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| R 7351 | 203 | 238 | 5 | 1.26 | 0.6 | 60 | 2570 | < 0.5 | < 2 | 0.38 | 3.5 | 22 | 89 | 508 | 6.25 | < 10 | 0.10 | 20 | 0.32 | 971 | 4 |
| R 7352 | 203 | 238 | 3 | 0.99 | 1.0 | 20 | 1090 | < 0.5 | < 2 | 0.70 | 19.0 | 4 | 85 | 182 | 1.94 | < 10 | 0.09 | 20 | 0.31 | 122 | 1 |
| R 7353 | 203 | 238 | 2 | 0.61 | 0.6 | 640 | 550 | < 0.5 | < 2 | 0.34 | 21.0 | 224 | 15 | 403 | 36.0 | < 10 | < 0.01 | 10 | 0.11 | 7040 | < 1 |
| R 7354 | 203 | 238 | 4 | 2.85 | 2.6 | 20 | 230 | < 0.5 | < 2 | 0.17 | 1.0 | 103 | 67 | 723 | 3.25 | < 10 | 0.07 | 20 | 0.40 | 2490 | 1 |
| R 7361 | 203 | 238 | 2 | 1.29 | 0.4 | 80 | 790 | < 0.5 | < 2 | 0.34 | 6.5 | 13 | 45 | 1925 | 6.06 | < 10 | 0.05 | 20 | 0.26 | 295 | 1 |
| R 7387 | 203 | 238 | 9 | 1.05 | 2.8 | 10 | 950 | < 0.5 | < 2 | 0.92 | 2.5 | 6 | 94 | 1040 | 1.58 | < 10 | 0.07 | 30 | 0.25 | 266 | < 1 |

CERTIFICATION : B. Cook

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# CERTIFICATE OF ANALYSIS A8661 79

To : ARCHER CATHRO & ASSOC. (1981) LTD.

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V6B 1L8

Project : MARG
Comments:

Page No. : 1
Tot. Pages: 1
Date : 18-SEP-86
Invoice # : I-8617979
P.O. # : NONE

| PARAMETER DESCRIPTIONS | SAMPLE R 7382 | SAMPLE R 7383 | SAMPLE R 7384 | SAMPLE R 7385 | SAMPLE R 7386 | SAMPLE R 7388 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample preparation code | 221 | 221 | 221 | 221 | 221 | 221 | --- | --- | --- | --- |
| Sample preparation code | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| pH | 7.3 | 6.5 | 6.2 | 6.2 | 7.1 | 6.7 | | | | |
| Sulphate/SO2/SO3 (mg/L) | 12.00 | 160.0 | 41.0 | 25.0 | 12.00 | 7.00 | | | | |

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# CERTIFICATE OF ANALYSIS A861 980

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V6B 1L8

Page No. : 1-A
Tot. Pages: 1
Date : 23-SEP-86
Invoice # : I-8617980
P.O. # : NONE

Project : MARG
Comments:

| SAMPLE DESCRIPTION | PREP CODE | | Mo ppm (ICP) | W ppm (ICP) | Zn ppm (ICP) | P ppm (ICP) | Pb ppm (ICP) | Bi ppm (ICP) | Cd ppm (ICP) | Co ppm (ICP) | Ni ppm (ICP) | Ba ppm (ICP) | Fe % (ICP) | Mn ppm (ICP) | Cr ppm (ICP) | Mg % (ICP) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R 7382 | 221 | 232 | < 2 | < 20 | 17 | < 20 | 4 | < 4 | < 1.0 | < 2 | < 2 | 55 | < 0.20 | < 2 | < 20 | 3.30 |
| R 7383 | 221 | 232 | < 2 | < 20 | 3620 | < 20 | 4 | < 4 | 12.0 | < 2 | 54 | 35 | < 0.20 | < 2 | < 20 | 23.0 |
| R 7384 | 221 | 232 | < 2 | < 20 | 1490 | 35 | 4 | < 4 | 6.0 | < 2 | 32 | 30 | 1.40 | 40 | < 20 | 7.40 |
| R 7385 | 221 | 232 | < 2 | < 20 | 465 | < 20 | 4 | < 4 | 1.0 | < 2 | 10 | 40 | 0.50 | 15 | < 20 | 4.00 |
| R 7386 | 221 | 232 | < 2 | < 20 | 170 | < 20 | 4 | < 4 | 4.0 | < 2 | 6 | 60 | < 0.20 | < 2 | < 20 | 3.00 |
| R 7388 | 221 | 232 | < 2 | < 20 | 12 | 35 | 4 | < 4 | < 1.0 | < 2 | < 2 | 125 | < 0.20 | < 2 | < 20 | 1.70 |

CERTIFICATION :

# APPENDIX C

# GEOPHYSICAL REPORT

ON

MARG PROPERTY
MAYO MINING DISTRICT, Y.T.

BY

DELTA GEOSCIENCE LTD.

NOVEMBER, 1986

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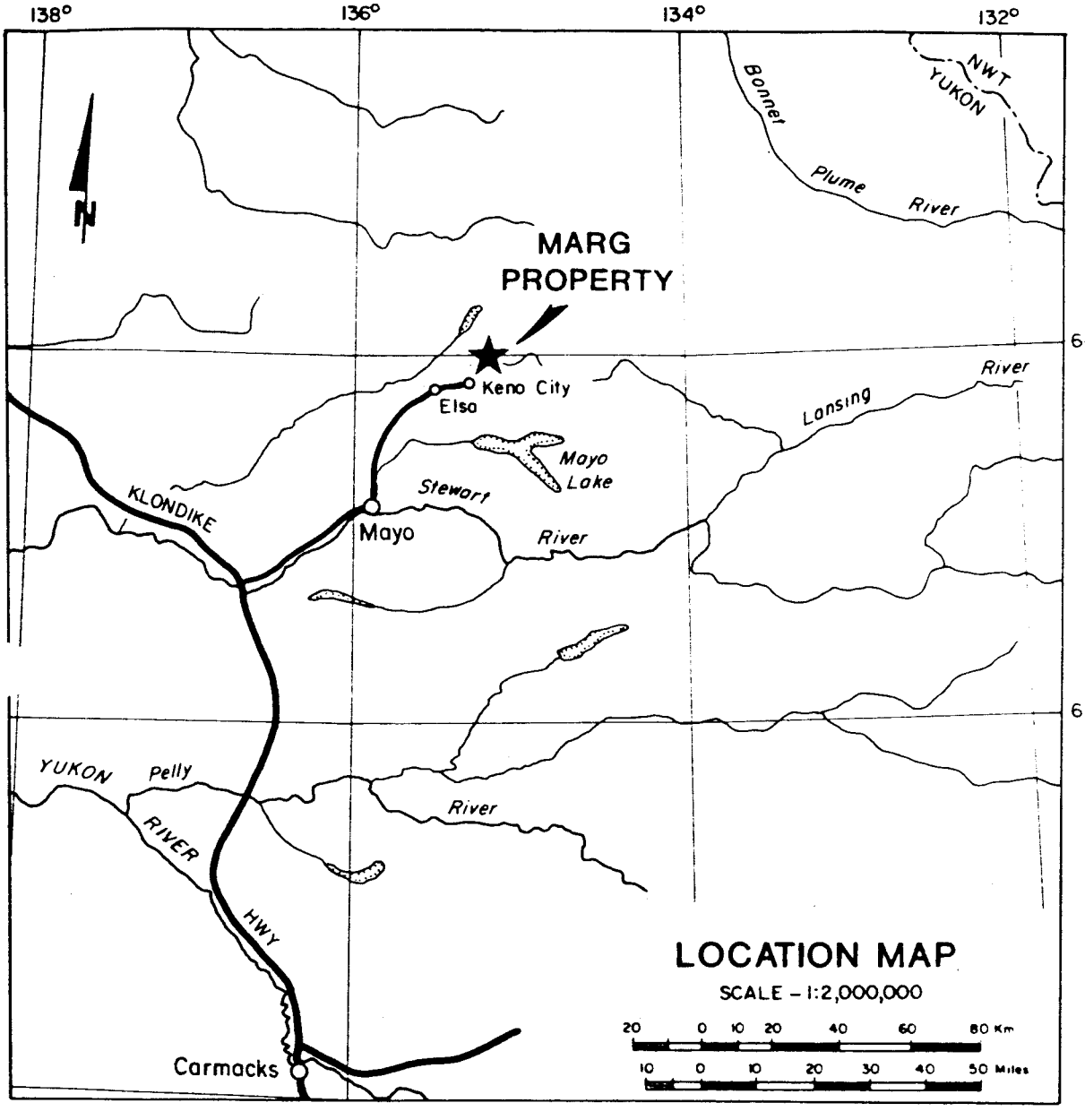
## Introduction

This report discusses a ground geophysical program conducted by Delta Geoscience Ltd., on Archer, Cathro & Associates Marg property. The property is located approximately 8 km. northeast of Keno City, in the Yukon Territories of Canada.

The geophysical program was commissioned by Bob Cathro of Archer, Cathro & Associates. Mr. Cathro was present at the start of the survey, at which time Grant Hendrickson of Delta Geoscience Ltd., was given an overview of the property.

The geology of the property will be described in Archer, Cathro's report, to which the reader is referred. However, it should be noted here that the grid area is largely underlain by graphitic Phyllites and Quartzites.

Twenty-six lines, 24+60E to 11+00E, totalling approximately 12 km. were surveyed with V.L.F., Magnetics and Horizontal Co-Planer Loop Electromagnetics. In addition, five lines (2 km.) were surveyed with Induced Polarization and Resistivity in an attempt to evaluate electromagnetic conductors as to their sulphide content.


138°
136°
134°
132°
64°
63°
N
MARG
PROPERTY
Bonnet
Plume
River
NWT
YUKON
Keno City
Elsa
Mayo
Lake
Stewart
River
Lansing
River
KLONDIKE
HWY
Mayo
YUKON
Pelly
RIVER
River
Carmacks
LOCATION MAP
SCALE – 1:2,000,000
20 0 10 20 40 60 80 Km
10 0 10 20 30 40 50 Miles

Personnel

| | |
|---|---|
| Grant Hendrickson<br>Scott Cosman | Geophysicists, Delta Geoscience Ltd. |
| Kevin Capnerhurst<br>Extra Helper | Junior Geologist, Archer, Cathro & Associates. |

Equipment

1 - Apex Parametrics Ltd. MAXMIN 1+ horizontal loop electromagnetic system.
1 - Scintrex I.G.S. II System (configured as a V.L.F/MAG).
1 - Scintrex MP-3 base station magnetometer.
1 - Scintrex I.P.R. 10A (time domain induced polarization receiver).
1 - Scintrex I.P. 250w. transmitter.
1 - H.P. 110 portable computer, complete with printer and disc drive.

Data Presentation

The data is presented both in section and plan. Plans, at a scale of 1:1000 show the correlation of V.L.F. and H.L.E.M. conductors, plus the magnetic total field contours.

Sections of the H.L.E.M. and I.P. data are presented at a scale of 1:2000, with the topography profile at the bottom of the page.

In addition, computer listings and plots of the V.L.F/MAG data are provided at the back of this report.

## Survey Procedures

### Horizontal Co-Planer Loop E.M:

Slope corrected chaining and topography profiles provided by Archer, Cathro & Associates, gave the information necessary to keep the coils co-planer and to correct the in-phase data for coil separation variations.

An 80m. coil separation was used to maximize resolution and to cut down the response of the host rock, which was expected to be weakly conductive.

Maximum depth of investigation for vertical bodies with this coil separation is 40 metres.

Two frequencies were used, 3555 Hz. and 444 Hz. The higher frequency was expected to respond to all conductivity, whereas the lower frequency would only respond to good conductivity. This discrimination provided a means of evaluating conductors and eliminates most of the host rock response.

### V.L.F/Magnetics:

The V.L.F. work was done using either the Cutler, Maine station (N.A.A.) transmitting at 24.0 khz., or Lualualui, Hawaii station (N.P.M.), transmitting at 23.4 khz. Station shutdowns or weak signals were the reason for station changes; however both stations were approximately in line with the expected strike of the conductors, thus provided good coupling. Three components of the V.L.F. field were measured: the horizontal field strength, vertical in-phase, and vertical quadrature. On the V.L.F. plan, the station used is mentioned at the south end of the lines. The V.L.F. data (vertical in-phase) was subsequently filtered to reduce topographical effects and to allow for contouring of the data.

Note: To facilitate filtering, the sign of the vertical in-phase was changed and should be noted when looking at the filtered listings.

The magnetic survey was done simultaneously with the V.L.F. survey. Magnetic total field strength readings were taken every 10 metres. The MP-3 base station magnetometer was used to correct the data for any diurnal change of the magnetic field. The earth's magnetic field proved quiet during the course of this survey.

Induced Polarization/Resistivity:

The I.P. work was done using the Schlumberger array. Current electrode separation was initially set at 180 metres, while potential electrode separation was set at 20 metres. This array gives excellent horizontal resolution, with the prime depth of investigation at the 20 to 30 metre depth. This array also gives better signal to noise response, when compared to other arrays for the same depth of investigation - an important consideration when using a small battery-powered transmitter.

Unfortunately, the combined effect of a thin, yet resistive, overburden and a very conductive ( 20 ohm.m) host rock, made it very difficult to do I.P. The transmitting line was shortened to 100 metres to improve the signal to noise response; however, near areas of interest, i.e. conductors, the signal was still unacceptable. Any future I.P. work would require a much larger transmitter.

## Discussions of the Data

### Induced Polarization/Resistivity:

The generally low resistivities created by the host Graphitic Phyllite, made it very difficult to acquire useful induced polarization data. Attempts to improve the signal to noise response were generally unsuccessful, particularly within areas of interest (near conductors). Therefore, I.P. surveying was limited to five lines, L.2300E, L.2100E, L.1900E, L.1780E and L.1380E. The chargeability background is quite high, approximately 60 msec, due to the Graphite. Areas of higher chargeability were recorded, however signal to noise problems in these areas made the readings suspect (see profiles). Resistivities were generally around 20 ohm.m, however thin areas of higher resistivity >200 ohm.m were noted. These high resistivities could be caused by Quartzite or Volcanics.

### V.L.F:

The V.L.F. work appears quite successful at mapping the zones of improved conductivity within the Graphitic Phyllite. Filtering (Fraser) helped in the interpretation and correlation of zones.

On this property, the V.L.F. has to be regarded only as a near surface tool, since the attenuation of V.L.F. fields in a conductive host rock is quite severe. The skin depth is in the 15 to 20 metre range. Skin depth is a useful parameter for describing the depth of penetration of electromagnetic signals, as a function of frequency and resistivity.

The filtered and contoured V.L.F. data indicates folding and subsequent faulting of two main conductive horizons. (See V.L.F. plan map). The correlation of the V.L.F. and H.L.E.M. data is quite good.

### Magnetics:

It is readily apparent that the rocks within the grid area have a low magnetic susceptibility (flat response). The notable exception is the moderate magnetic anomaly (approx. 600$\gamma$) in the northwest corner. This thin anomaly is near surface and dipping approximately 60° to the south, and appears to have three (faulted) individual zones that perhaps were once connected. The lack of a directly coincident V.L.F. or H.L.E.M. anomaly suggests that the magnetic response is due to Magnetite.

Minor magnetic anomalies (<40$\gamma$) were sometimes coincident with strong conductors. However, these weak anomalies were not consistent nor reliable enough to correlate line to line. When present, these weak anomalies do indicate a steep south dip and a very minor magnetic mineral component to the conductors (see computer magnetic plots).

Horizontal Co-Planer Loop E.M:

The conductive host rock and varying attitude of the conductive horizons have created interpretation problems. All the conductors appear near surface underneath a thin resistive overburden, probably averaging 3 metres in thickness. On the accompanying V.L.F. and H.L.E.M. conductor plan, the trace of the conductors and their relative strength are shown by black bars. The correlation with the V.L.F. is quite good. It should be noted that weak conductivity is widespread on this grid and the anomalies picked are conductors within conductors, i.e. the axis of the conductors. Conductor dip is indicated on the accompanying profiles, where possible. A general south dip is quite evident. Good depth extent is often indicated by strong shoulders to the H.L.E.M. responses, i.e. conductor at 820N on L.13+80E.

Correlation of conductors line to line has been possible. However, in the centre of the grid, folding and subsequent faulting is evident and difficult to interpret. There is very good evidence in the H.L.E.M. data for L.1900E that conductors at 8+80N and 10+00N are connected thru a synclinal structure at depth. This fact, plus the trace of V.L.F. and H.L.E.M. anomalies immediately to the west, suggest the large amplitude drag folds shown on the accompanying V.L.F/H.L.E.M. plan.

The crests of folds appear to be strong conductors, probably due to thickening and good graphite development from the heat and pressure generated by folding.

The accompanying plans and sections present what the author thinks is the most likely case, but is by no means the only possibility.

Conclusion

Conductive horizons, conformable with the stratigraphy, have been mapped across the grid. The trace of these conductive horizons has helped to understand the complicated geologic structure of the property. The V.L.F. and H.L.E.M. produced complimentary results; the H.L.E.M. data gives more structural and qualitative information on conductors.

Large areas of Graphitic Phyllite have made serious interpretation problems for the electromagnetic data. Sulphide mineralization may be causing some of these conductors, however most conductors are due to Graphite. Areas of strong conductivity may be due to the combined effects of conductive sulphide mineralization and Graphite.

Anomalous geochemistry will help to indicate which conductors or parts of conductors are most promising for Sulphides.

The magnetic anomaly in the northwest corner is probably due to magnetic bearing horizons, perhaps with minor Phrrhotite.

The amount of Graphite and resulting low resistivities preclude the induced polarization technique from helping in the exploration of this property.

G. Hendrickson

Grant A. Hendrickson, P.Geoph.

November, 1986

Statement of Qualification

Grant A. Hendrickson

- B.Science, U.B.C., 1971, Geophysics option.
- for the past 16 years, I have been actively involved in mineral exploration projects throughout Canada and the United States.
- I am a registered Professional Geophysicist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- I am a member of the S.E.G., E.A.E.G., and C.I.M.

G. Hendrickson

Grant A. Hendrickson.

# ARCHER, CATHRO
& ASSOCIATES LIMITED

CONSULTING GEOLOGICAL ENGINEERS

VANCOUVER, B.C. (604) 688-2568

BOX 4127, WHITEHORSE, Y.T. Y1A 3S9 (403) 667-4415

1016 - 510 WEST HASTINGS STREET
VANCOUVER, B.C. V6B 1L8



RECEIVED
10 SEP 1986
MINING RECORDER
MAYO, Y.T.


## AFFIDAVIT

I, Joan Mariacher, of Whitehorse, Yukon make oath and say:

That to the best of my knowledge the attached Statement of Expenditures for exploration work on the Tudl 1-32 mineral claims on Claim Sheet 106D/1 is accurate.

Joan Mariacher

Sworn before me at Whitehorse, Yukon

this 9th day of

September, 198 6

Notary, Yukon Territory

Statement of Expenditures
Hand Trenching Program
Tudl 1-32 Claims
August 15 - September 1, 1986

| | | |
|---|---|---|
| **Labour** | | |
| R. Cathro, geologist - Aug. 17-18, 29-31, Sept. 1 - total 6 days at $400/day | $2,400.00 | |
| R. Carne, geologist - Aug. 17-18 - total 2 days at $270/day | 540.00 | |
| A. Archer - Aug. 25 - 4 hours at $50/hr | 200.00 | |
| K. Sax, crew chief - Aug. 20-21 - total 2 days at $119/day | 238.00 | |
| M. Boulding, blaster - Aug. 18, 20-28 - total 10 days at $116/day | 1,160.00 | |
| P. Gilchrist, cook/helper - Aug. 23-27 - total 5 days at $113/day | 565.00 | |
| K. Capnerhurst, helper - Aug. 22-27 - total 6 days at $94/day | 564.00 | |
| M. Gazetas, helper - Aug. 20 & 22 - total 2 days at $88/day | 176.00 | $ 5,843.00 |
| **Helicopter** | | |
| TNA - Aug. 8, 18, 19, 25, 29 & 31 - total 8.066 hours at $472.50/hr plus fuel | 4,059.91 | 4,059.91 |
| **Truck Rental** | | |
| Norcan Leasing & Archer, Cathro - 1/3 of $645.42 + $575.20 + $480.54 + $509.71 | 736.96 | |
| Norcan Leasing | 737.68 | |
| Norcan Leasing | 194.58 | 1,669.22 |
| **Camp Costs** | | |
| Room and board - including groceries and supplies - 33 1/2 mandays at $60/day | | 2,010.00 |
| | | $13,582.13 |

L = LIVINGSTONE
S = SPUCE CLS
T = STAKING REQUIREM.

Project - ALL-NORTH RESOURCES LTD
Date - AUG 31, 1986

LAND = DAWSON
NORE = NEW DAWSON AREA
M = MARG

| | | Total |
|---|---|---|
| **MANAGEMENT, CONSULTING FEES** | | |
| R.J. CATHRO - 69 hrs @ $50/hr (600 G, 50L, 50R, 2750 M) | 3450.00 | |
| A.R. ARCHER - 22 hrs @ $50/hr (1100 M, 250 G) | 1350.00 | |
| | | 4,800. |
| **LABOUR** | | |
| Field | | |
| R. Carne - 6 days @ $220/d (135 NDR, 1485 M) | 1620.00 | |
| K. CAMPBELLHURST - 16 days @ 94 | 1504. | M |
| L. ROBINSON - 6 days @ 97 | 582. | M |
| K. SAX - 26 days @ 119 | 3094. | M |
| M. BOULDING - 25 days @ 116 | 2900. | M |
| T. KNIGHT - 6 days @ 88 | 529. | M |
| M. GAZETAS - 17 days @ 88 | 1496. | M |
| P. GILCHRIST - 26 days @ 113 | 2938. | M |
| B. WRNGRYNOWSKI - 2 days @ 110 | 220. | M |
| D. McBETH - 1 day @ 94 | 94. | M |
| A. GELLING - 47 hrs drilling exp. @ $35/hr | 1645. | M |
| | | 16,624.00 |
| Secretarial - M. Cook - 1/2 hr | 11.18 | G |
| Accounting & Expediting J. Marwick 80 1/4 hrs @ $35/hr. (1855 M, 945 G, 8.75 R) | 2808.75 | |
| | | 2,819,93 |
| **EXPENSES** | | |
| Room & Board in Whse 26 days @ $60/d (240 G, 1320 M) | 1560.00 | - |
| Field equipment from AC stock (2566.67 M, 85.50 T) | 2652.17 | - |
| Xerox copies, 409 copies at 25 /copy (70.25 G, 29.50 M, 2.50 R) | 102.25 | |
| Radio rental SBX 11 Monitor for Aug | 300.00 | M |
| Petty Cash 12.99 D1 (M), 5.65 D2 (M), 10.59 C2 (M), 23.75 D2 (M) 14 D1 (M), 7.95 D2 (M), 9.09 D1 (M), 73.75 D2 (M) | 157.77 | M |
| Telephone 6.89 G + 5.76 M | 12.65 | |
| Blueprinting, 144 sq. ft Ozalid at 30 c/ft plus - sq. ft. Dilar at $ - /ft. | 43.20 | M |
| Drafting, 6 1/2 hrs at $ 25 /hr (100 M, 62.50 G) | 162.50 | |
| Bank of N.S service charges for July & Aug | 14.00 | G |
| Rental Hunter 300 generator, Aug | 150.00 | M |
| Rental AC transit, shovel & metal claim for Aug | 150.00 | M |
| Sub-Dat Research truck 8 days @ 36.66 plus 1509 km @ 25¢ (160.92 G, 509.71 M) | 670.63 | |
| A. Archer expenses Aug 10 - D2 | 20.75 | M |
| C.P. Air | 18.00 | G |
| Corporate Comm | 2.45 | R |
| Hardware | 8.72 | G |
| Nikon Handmade | 23.17 | G |
| MACs | 7.50 | M |
| | | 6055.76 |
| | | 30296.69 |

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TELEPHONE (403) 668-2177 TELEX 036-8-290

ACCOUNT NUMBER: 1030
INVOICE NUMBER: 77112
INVOICE DATE: 13 018 816
AREA: B.C. ☐ YUKON ☐ NWT ☐ ALTA. ☐

CHARTERER: ARCHER CATHRO

BILLING ADDRESS:

A/C TYPE: Bell 206B
AIRCRAFT REGISTRATION C-: GTNH
FLIGHT DATE: DAY 08 MONTH 08 YEAR 86
PURCHASE ORDER NO.:

| FUEL & OIL-X TNTA | FUEL & OIL-X CUST. | TNTA FUEL USED | ~~IMP.~~/LITRES | FROM |
|---|---|---|---|---|
| | X | 440 | | SADIE |

| FROM | TO | MILES | HOURS | ZONE | REMARKS - NO. OF PASS - | FREIGHT Kg |
|---|---|---|---|---|---|---|
| MAYO | MARG | | | | | |
| SADIE | MARG | | | | | |
| MARG | MAYO | | | | | |
| MAYO | ALL-NSROH MARG | | | | | |

| SUB | G.L. | AMOUNT |
|---|---|---|
| 3108 | 5020 | 2079 — |

| | | | |
|---|---|---|---|
| 4.4 @ ~~525.00~~ | | 2310 | 00 |
| 4.4 @ 472.5° | | 2079 | — |
| @ | | | |
| @ | | | |
| WAITING TIME @ /HR. | | | |
| FUEL: @ /LITRE | | | |
| FUEL: @ /LITRE | | | |
| MEALS & LODGING | | | |
| OTHER | | | |
| OTHER | | | |
| TOTAL $ | | 2079 | — |

TERMS: PAYABLE UPON RECEIPT OF INVOICE.
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS. IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A CASH BASIS.

X _____ CHARTERER'S SIGNATURE

DJR — Dave Reid — PILOT'S SIGNATURE
INITIALS — CO-PILOT'S NAME

MJB — ENGINEER'S NAME: Sally Bradley
FLIGHT ATTENDANT

1/3 693.00

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ACCOUNT NUMBER: 1030
INVOICE NUMBER: 73430
INVOICE DATE: 25 018 816
AREA: B.C. ☐ YUKON ☐ NWT ☐ ALTA. ☐

CHARTERER: ARCHER CATHRO

BILLING ADDRESS:

A/C TYPE: Bell 206B
AIRCRAFT REGISTRATION C-: GTNH
FLIGHT DATE: DAY 18 MONTH 08 YEAR 86
PURCHASE ORDER NO.:

| FUEL & OIL-X TNTA | FUEL & OIL-X CUST. | TNTA FUEL USED | ~~IMP.~~/LITRES | FROM |
|---|---|---|---|---|
| X | | ALL | 130 | MAYO |

| FROM | TO | MILES | HOURS | ZONE | REMARKS - NO. OF PASS - | FREIGHT Kg |
|---|---|---|---|---|---|---|
| MAYO | MARG | | | | P.O. 2 PAX, | |
| SADIE | MAYO | | | | RECCE MARG. | |
| MAYO | | | | | TAKE IN FOOD | |

| SUB | G.L. | AMOUNT |
|---|---|---|
| 3108 | 5020 | 614 25 |
| 3108 | 5110 | 76 70 |

| | | | |
|---|---|---|---|
| 1.3 @ ~~525.00~~ | | | |
| @ 472.50 | | 614 | 25 |
| @ | | | |
| @ | | | |
| WAITING TIME @ /HR. | | | |
| FUEL: 130 ℓ @ .59 /LITRE | | 76 | 70 |
| FUEL: @ /LITRE | | | |
| MEALS & LODGING | | | |
| OTHER | | | |
| OTHER | | | |
| TOTAL $ | | 690 | 95 |

TERMS: PAYABLE UPON RECEIPT OF INVOICE.
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS. IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A CASH BASIS.

X _____ CHARTERER'S SIGNATURE

DJR — David A. Reid — PILOT'S SIGNATURE
INITIALS — CO-PILOT'S NAME

XXX — ENGINEER'S NAME: Shop
FLIGHT ATTENDANT

PM

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ARCHER CATHRO

CHARTERER

BILLING ADDRESS

ACCOUNT NUMBER 1030

INVOICE NUMBER 73431

INVOICE DATE 25 08 86

AREA: B.C. ☐ YUKON ☐ NWT ☐ ALTA ☐

A/C TYPE: Bell 206B

AIRCRAFT REGISTRATION C.: G T N H

FLIGHT DATE: DAY 19 MONTH 08 YEAR 86

PURCHASE ORDER NO.

| FUEL & OIL-X TNTA | FUEL & OIL-X CUST. | TNTA FUEL USED | /LITRES | FROM |
|---|---|---|---|---|
| | X | 70 | | SADIE |

| FROM | TO | MILES | HOURS | ZONE | REMARKS - NO. OF PASS. | FREIGHT Kg |
|---|---|---|---|---|---|---|
| SADIE | MARG | | | | FUEL & FOOD IN | |
| SADIE | MAYO | | | | 2 PAX OUT | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| SPLIT WITH # 73432 | | | | | | |

| SUB | G.L. | AMOUNT |
|---|---|---|
| 3108 | 5020 | 330 75 |

0.7 @ ~~525.00~~ @ 471.50 = 330 75

TERMS: PAYABLE UPON RECEIPT OF INVOICE.
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS. IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A CASH BASIS.

X CHARTERER'S SIGNATURE

DJR INITIALS — Dave Reid PILOT'S SIGNATURE

CO-PILOT'S NAME

XXX ENGINEER'S NAME — Shop

FLIGHT ATTENDANT

| | | | |
|---|---|---|---|
| WAITING TIME | @ | /HR. | |
| FUEL: | @ | /LITRE | |
| FUEL: | @ | /LITRE | — |
| MEALS & LODGING | | | |
| OTHER | | | |
| OTHER | | | |
| TOTAL | $ | | 330 75 |

P11

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ARCHER CATHRO

CHARTERER

BILLING ADDRESS

ACCOUNT NUMBER

INVOICE NUMBER 73440

INVOICE DATE

AREA: B.C. ☐ YUKON ☐ NWT ☐ ALTA ☐

A/C TYPE: BH06B

AIRCRAFT REGISTRATION C: G T N H

FLIGHT DATE: DAY 25 MONTH 08 YEAR 86

PURCHASE ORDER NO.

| FUEL & OIL-X TNTA | FUEL & OIL-X CUST. | TNTA FUEL USED | HRS./LITRES | FROM |
|---|---|---|---|---|
| ✓ | ✓ | | 180 | MA |

| FROM | TO | MILES | HOURS | ZONE | REMARKS - NO. OF PASS. | FREIGHT Kg |
|---|---|---|---|---|---|---|
| Mayo | Pike | | | | | |
| Marg | | | | | | |
| Sth Mayo | | | 3.9 | | 3 PAX RECD | |
| 1.9 MARG | | 94 | 49 | | | |
| 2.0 PIKE | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| SUB | G.L. | AMOUNT |
|---|---|---|
| | | |

3.9 @ 47.50 = 184.50

TERMS: PAYABLE UPON RECEIPT OF INVOICE.
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS. IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A CASH BASIS.

X CHARTERER'S SIGNATURE

GEH INITIALS — PILOT'S SIGNATURE

CO-PILOT'S NAME

ENGINEER'S NAME BRADLEY

FLIGHT ATTENDANT

| | | | |
|---|---|---|---|
| WAITING TIME | @ | /HR. | |
| FUEL: 180 | @ .59 | /LITRE | 106 20 |
| FUEL: | @ | /LITRE | |
| MEALS & LODGING | | | |
| OTHER | | | |
| OTHER | | | |
| TOTAL | $ | | 1948 95 |

49.49

**FLIGHT REPORT - CUSTOMER'S COPY**

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ARCHER & CATHRO

CHARTERER

BILLING ADDRESS

ACCOUNT NUMBER

INVOICE NUMBER 73445

INVOICE DATE — AREA: B.C. YUKON NWT ALTA

A/C TYPE: BH06B — AIRCRAFT REGISTRATION C: GTNH

FLIGHT DATE: DAY 31 — MONTH 08 — YEAR 86

PURCHASE ORDER NO.

| FUEL & OIL-X TNTA | FUEL & OIL-X CUST. | TNTA FUEL USED | HRS. / LITRES | FROM |
|---|---|---|---|---|
| ✓ | ✓ | | 130 | MA |

| FROM | TO | MILES | HOURS | ZONE | REMARKS - NO. OF PASS - | FREIGHT Kg |
|---|---|---|---|---|---|---|
| Mayo | Marg | | | | | |
| | Dennis Camps | | | | | |
| | & Sadie | | | | 3 slings loads | |
| | Stn Mayo | | 3.3 | | 1 part & gear load | |

| SUB. | G.L. | AMOUNT |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

| | | | | |
|---|---|---|---|---|
| 3.3 | @ | 471.50 | 1555 | 95 |
| | @ | | | |
| | @ | | | |
| | @ | | | |

TERMS: PAYABLE UPON RECEIPT OF INVOICE.
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS. IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A CASH BASIS.

X Rod Sax (Marg)
CHARTERER'S SIGNATURE

GEH — PILOT'S SIGNATURE
INITIALS — CO-PILOT'S NAME

ENGINEER'S NAME: Shop

FLIGHT ATTENDANT

| | | | | | |
|---|---|---|---|---|---|
| WAITING TIME | | @ | | /HR. | |
| FUEL: | 130 | @ | .59 | /LITRE | 76 70 |
| FUEL: | | @ | | /LITRE | |
| MEALS & LODGING | | | | | |
| OTHER | | | | | |
| OTHER | | | | | |

TOTAL $ 1631 95

1/3 545.32

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HER & CATHRO

BILLING ADDRESS

ACCOUNT NUMBER

INVOICE NUMBER 73443

INVOICE DATE — AREA: B.C. YUKON NWT ALTA

A/C TYPE: BH06B — AIRCRAFT REGISTRATION C: GTNH

FLIGHT DATE: DAY 29 — MONTH 08 — YEAR 86

PURCHASE ORDER NO.

| FUEL & OIL-X TNTA | FUEL & OIL-X CUST. | TNTA FUEL USED | HRS. / LITRES | FROM |
|---|---|---|---|---|
| ✓ | | JP4 | 160 | MA |

| FROM | TO | MILES | HOURS | ZONE | REMARKS - NO. OF PASS - | FREIGHT Kg |
|---|---|---|---|---|---|---|
| Mayo | Sadie | | - | | P/U Rob. | |
| | Marg. | | | | Dropped boats | |
| | Stn Mayo | | 1.6 | | on claim bnp | |
| | | | | | Flew gear & | |
| | | | | | samples back | |
| | | | | | & Sadie | |

MARG

| SUB | G.L. | AMOUNT |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

| | | | | |
|---|---|---|---|---|
| 1.6 | @ | 471.50 | 756 | 00 |
| | @ | | | |
| | @ | | | |
| | @ | | | |

TERMS: PAYABLE UPON RECEIPT OF INVOICE.
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS. IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A CASH BASIS.

X
CHARTERER'S SIGNATURE

GEH — PILOT'S SIGNATURE
INITIALS — CO-PILOT'S NAME

ENGINEER'S NAME: Shop

FLIGHT ATTENDANT

| | | | | | |
|---|---|---|---|---|---|
| WAITING TIME | | @ | | /HR. | |
| FUEL: | 160 | @ | .59 | /LITRE | 94 40 |
| FUEL: | | @ | | /LITRE | |
| MEALS & LODGING | | | | | |
| OTHER | | | | | |
| OTHER | | | | | |

TOTAL $ 756 —

850.40

FLIGHT REPORT • CUSTOMER'S COPY

NAME AND ADDRE

~ CATHRO

[redacted] ...AN LEASING LTD.
917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5
1-403-668-2137

10. KILOMETERS IN: 5555

11. KILOMETERS OUT: 3463

KILOMETERS DRIVEN: 209 2N

14. DATE & TIME IN: Aug. 9/86

15. DATE & TIME OUT: Aug 6/86 ~~Feb 30/86~~

SGR (PORKER)

4x2 Rates

2. TYPE OF PAYMENT:
☑ CASH ☐ C.C. ☐ DIR BILL
C/C NAME
AUTH'D BY

16. DAYS UTILIZED

17. 2092 x @ 36¢ = 753 12

3. VEHICLE: VEHICLE NO. 32018S | MAKE Chm | TYPE 4X4 IT STK
LICENSE NO. RAZ-8 | PROVINCE Y.T. | COMMODITY HAULED

18. TIME 1 @ | 19. RATE $ 13.00 = 13 00
1 @ $ 52.00 = 52 00
1 @ $ 312.00 = 312 00

4. ADDITIONAL CHARGE: OPTIONAL EQUIPMENT/MISC. Jack + Wrenches $ 17.00
VEHICLE WILL BE RETURNED ____ DAY ____ MTH ____ YR TO ____

RENTER IS RESPONSIBLE FOR ALL OVERHEAD AND CARGO DAMAGES WHETHER OR NOT THE COLLISION DAMAGE WAIVER IS ACCEPTED

20. SUB TOTAL 777 12
21.
22. TOTAL TIME & KM 777 12
23. ADDITIONAL CHARGES
24. SUB TOTAL 777 12

5. ADDITIONAL TERMS AND CONDITIONS:
Porker - Aug 1-4 incl - plus 97 x Km - 511.70
May - Aug 5-9 incl plus 1120 Km - 605.40
$40

25. COLLISION DAMAGE WAIVER, SEE PARA. 7
DAYS ☐ @ 10.00
WKS. ☐ @
MTHS. ☐ @
ACCEPTS x 4 DECLINES 80 00

26. AMOUNT DEDUCTIBLE $
27. SUB TOTAL 1197 12

28. TAX % OF SUB TOTAL

29. FUEL: GAL @ 16¢ = 17 FUEL
TICKET NO
30. TOTAL CHARGE 1197 12

**THIS IS YOUR INVOICE PAYABLE ON RECEIPT TO:**
**NORCAN LEASING LTD.**
**917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5**

6. I HAVE READ THE TERMS AND CONDITIONS ON BOTH SIDES OF THIS RENTAL AGREEMENT AND AGREE HERETO.
X. _____ SIGNATURE

CUSTOMER IS LIABLE FOR ALL PARKING AND TRAFFIC VIOLATIONS

33. DEPOSITS: 1 ____ 2 ____ TOTAL DEPOSIT
31. ROAD EXPENSES
32. NET CHARGES 1197 12

7. DRIVER: NAME Carney, Robert | AGE
ADDRESS 5665 Toronto Road
LICENSE 1322555 PROV. Vancouver, BC EXP. DATE 87

8. OUT BY SIGNATURE

34. TOTAL AMOUNT DUE 1197 12

35. CASH REFUND RECD BY

36. IN BY SIGNATURE

07312
THIS INVOICE NUMBER MUST APPEAR ON ALL CORRESPONDENCE AND REMITTANCES

W E ON THE ROAD:
- OBTAIN RECEIPTS FOR ALL REIMBURSABLE EXPENSES AND PRESENT THEM WITH THIS COPY AT CHECK-IN.
- REPORT ACCIDENTS IMMEDIATELY TO LOCAL POLICE AND CALL NORCAN COLLECT.
- IF DELAYED IN RETURNING VEHICLE PLEASE CALL NORCAN COLLECT.

GAS NOT INCLUDED IN RATES

NORCAN
FEATURES FORD CARS & TRUCKS

WHITE - ORIGINAL • YELLOW - CUSTOMER COPY • PINK - INVOICE COPY • GREEN - ACCTS. RECEIVABLE • BUFF - VEHICLE FILE

PRESS HARD—YOU ARE MAKING MULTIPLE COPIES

**07361** NAME AND ADDRESS—PLEASE PRINT

Blue Sub 4x2

# NORCAN

NORCAN LEASING LTD.
917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5
1-403-668-2137

1. Archer Cathro

10. KILOMETERS IN: 48514

11. KILOMETERS OUT: 47504

KILOMETERS DRIVEN: 1010

14. DATE & TIME IN: Aug 10/86 14:00

15. DATE & TIME OUT: Aug. 7/86 10 AM

2. TYPE OF PAYMENT:
[V] CASH  C/C NAME
one C.C.  DIR. BILL  AUTH'D BY

16. DAYS UTILIZED

17. 1010 @ 32¢ = 323 20

3. VEHICLE
VEHICLE NO.: 22016 9 | MAKE: G.M | TYPE: 4x2 Sub
LICENSE NO.: RGK-7 | PROVINCE: Y.T. | COMMODITY HAULED:

18. TIME @ 3 | 19. RATE @ $13.50 = 156 00
@ | @ $52.00
@ | @ $312.00

4. ADDITIONAL CHARGE
OPTIONAL EQUIPMENT/MISC.: Jacknll + 4 way $ 7.50
VEHICLE WILL BE RETURNED: DAY 19 / MTH 08 / YR 86 TO

RENTER IS RESPONSIBLE FOR ALL OVERHEAD AND CARGO DAMAGES WHETHER OR NOT THE COLLISION DAMAGE WAIVER IS ACCEPTED

20. SUB TOTAL: 479 20

21.

22. TOTAL TIME & KM: 479 20

23. ADDITIONAL CHARGES

5. ADDITIONAL TERMS AND CONDITIONS:

Jacknll 11 50.00
Rd Aug 18/86 #060

25. COLLISION DAMAGE WAIVER, SEE PARA. 7
DAYS [3] @ 10.00
WKS. [ ] @
MTHS. [ ] @
ACCEPTS [ ] DECLINES [X]

24. SUB TOTAL: 479 20

DECLINES: 30 00

26. AMOUNT DEDUCTIBLE $

27. SUB TOTAL: 509 20

28. TAX: % OF SUB TOTAL

**THIS IS YOUR INVOICE PAYABLE ON RECEIPT TO:**
**NORCAN LEASING LTD.**
917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5

29. FUEL
GAL. @ 110 ¢ 60
TICKET NO.
FUEL: 66 00

30. TOTAL CHARGE: 575 20

6. I HAVE READ THE TERMS AND CONDITIONS ON BOTH SIDES OF THIS RENTAL AGREEMENT AND AGREE HERETO.
X [signature] SIGNATURE

CUSTOMER IS LIABLE FOR ALL PARKING AND TRAFFIC VIOLATIONS

33. DEPOSITS
1
2
TOTAL DEPOSIT

31. ROAD EXPENSES

32. NET CHARGES: 575 20

7. DRIVER
NAME: Ka L. Say | AGE:
ADDRESS:
LICENSE | PROV. | EXP. DATE

34. TOTAL AMOUNT DUE: 575 20

35. CASH REFUND REC'D BY

8. OUT BY SIGNATURE

36. IN BY SIGNATURE

**07361**
THIS INVOICE NUMBER MUST APPEAR ON ALL CORRESPONDENCE AND REMITTANCES.

WHILE ON THE ROAD:
- OBTAIN RECEIPTS FOR ALL REIMBURSABLE EXPENSES AND PRESENT THEM WITH THIS COPY AT CHECK-IN.
- REPORT ACCIDENTS IMMEDIATELY TO LOCAL POLICE AND CALL NORCAN COLLECT.
- IF DELAYED IN RETURNING VEHICLE PLEASE CALL NORCAN COLLECT.

GAS NOT INCLUDED IN RATES

NORCAN
FEATURES FORD CARS & TRUCKS

WHITE - ORIGINAL • YELLOW - CUSTOMER COPY • PINK - INVOICE COPY • GREEN - ACCTS. RECEIVABLE • BUFF - VEHICLE FILE

PRESS HARD—YOU ARE MAKING MULTIPLE COPIES

**07452** NAME AND ADDRESS—PLEASE PRINT

# NORCAN

Blue GM Suburban with Dodge 4x4 5 litre

NORCAN LEASING LTD.
917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5
1-403-668-2137

1. Arden Calkin
Box 4127
Whitehorse, Yukon Y1A 3E5

10. KILOMETERS IN: 5 8 5 1 3

11. KILOMETERS OUT: 5 7 1 8 2 0

KILOMETERS DRIVEN: 1 0 3 1

14. DATE & TIME IN: Aug 23/86 1800

15. DATE & TIME OUT: Aug. 22/86 10:30

2. TYPE OF PAYMENT:
☑ CASH ☐ C.C. ☐ DIR. BILL
C/C NAME
AUTH'D BY

1031

16. DAYS UTILIZED

17. @ 34¢ 350 54

3. VEHICLE
VEHICLE NO. 2 2 0 1 8 3
MAKE ~~GM~~ Dodge
TYPE ~~4x4 SUB~~ 1/2 Ton
LICENSE NO. R160-4
PROVINCE Y.T.
COMMODITY HAULED

18. TIME @
19. RATE $ 13.50
2. @ $ 58.00 110 00
@ $ 380.00

4. ADDITIONAL CHARGE
OPTIONAL EQUIPMENT/MISC.
TAKALL & 4 Way $ 7.50
VEHICLE WILL BE RETURNED 29 08 86 (DAY MTH YR) TO

RENTER IS RESPONSIBLE FOR ALL OVERHEAD AND CARGO DAMAGES WHETHER OR NOT THE COLLISION DAMAGE WAIVER IS ACCEPTED

20. SUB TOTAL 460 54
21.
22. TOTAL TIME & KM 460 54
23. ADDITIONAL CHARGES
24. SUB TOTAL 460 54

5. ADDITIONAL TERMS AND CONDITIONS:
~~ALL BOOKS~~

25. COLLISION DAMAGE WAIVER, SEE PARA. 7
DAYS ☐ @ 10.00
WKS. ☐ @
MTHS. ☐ @
ACCEPTS (X) DECLINES ☐
DECLINES 20 00

26. AMOUNT DEDUCTIBLE $
27. SUB TOTAL 480 54

28. TAX: % OF SUB TOTAL

29. FUEL
GAL. @ ¢ FUEL
TICKET NO

30. TOTAL CHARGE 480 54

33. DEPOSITS
1
2
31. ROAD EXPENSES
32. NET CHARGES 480 54
TOTAL DEPOSIT

34. TOTAL AMOUNT DUE 480 54

**THIS IS YOUR INVOICE PAYABLE ON RECEIPT TO:**
**NORCAN LEASING LTD.**
917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5

6. I HAVE READ THE TERMS AND CONDITIONS ON BOTH SIDES OF THIS RENTAL AGREEMENT AND AGREE HERETO.
X C. Kelly (MARG)
SIGNATURE

CUSTOMER IS LIABLE FOR ALL PARKING AND TRAFFIC VIOLATIONS

7. DRIVER
NAME AGE
ADDRESS
LICENSE PROV. EXP. DATE

8. OUT BY SIGNATURE

35. CASH REFUND REC'D BY

36. IN BY SIGNATURE

**07452**
THIS INVOICE NUMBER MUST APPEAR ON ALL CORRESPONDENCE AND REMITTANCES.

WHILE ON THE ROAD:
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- IF DELAYED IN RETURNING VEHICLE PLEASE CALL NORCAN COLLECT.

GAS NOT INCLUDED IN RATES

NORCAN
FEATURES FORD CARS & TRUCKS

WHITE - ORIGINAL • YELLOW - CUSTOMER COPY • PINK - INVOICE COPY • GREEN - ACCTS. RECEIVABLE • BUFF - VEHICLE FILE

L2 LLWINGSTONE
SE SPUCK CLS
T= STAKING REQUIREM.

Project- ALLNORTH RESOURCES LTD

Date -- AUG 31, 1986

LAWE DAWSON
NORE NEW DAWSON RANGE
M = MARG

| | | Total |
|---|---|---|
| **MANAGEMENT, CONSULTING FEES** | | |
| R.J. CATHRO - 69 hrs @ "50/h (600 G, 50L, 50R, 2750 M) | 3450.00 | |
| A.R. ARCHER - 22 hrs @ "50/h (1100 M, 250 G) | 1350.00 | |
| | | 4800. |
| **LABOUR** | | |
| Field | | |
| R. Carne - 6 days @ "220/d ("135 NOR, 1485 M) | 1620.00 | |
| K. CAPPERHURST - 16 days @ 94 | 1504. | M |
| L. ROBINSON - 6 days @ 97 | 582. | M |
| K. SAX - 26 days @ 119 | 3094. | M |
| M. BOULDING - 25 days @ 116 | 2980. | M |
| T. KNIGHT - 6 days @ 88 | 528. | M |
| M. GAZETAS - 17 days @ 88 | 1496. | M |
| P. GILCHRIST - 26 days @ 113 | 2938. | M |
| B. WRNGZYNOWSKI - 2 days @ 110 | 220. | M |
| D. McBRTH - 1 day @ 94 | 94. | M |
| A. GELLING - 47 hrs drilling exp. @ "35/h | 1645. | M |
| | | 16,621.00 |
| Secretarial - M. Cook - 1/2 hr | 11.18 | G |
| Accounting & Expediting J. Manning 80 1/4 hrs @ "35/hr. (17.55 M, 945 G, 8.75 R) | 2808.75 | |
| | | 2,819.93 |
| **EXPENSES** | | |
| Room & Board in Whse 26 days @ "60/d (240 G, 1320 M) | 1560.00 | - |
| Field equipment from AC stock (2566.67 M, 85.50 T) | 2652.17 | - |
| Xerox copies, 409 copies at 25 /copy (70.25 G, 29.50 M, 2.50 R) | 102.25 | |
| Radio rental SBX 11 Motorola for Aug | 300.00 | M |
| Petty Cash 12.99 D1 (M), 5.65 D2 (M), 10.59 C2 (M), 23.75 D2 (M) 14 D1 (M), 7.95 D2 (M), 9.09 D1 (M), 73.75 D2 (M) | 157.17 | M |
| Telephone 6.89 G + 5.76 M | 12.65 | |
| Blueprinting, 144 sq. ft Ozalid at 30 c/ft plus - sq. ft. Dilar at $ - /ft. | 43.20 | M |
| Drafting, 6 1/2 hrs at $ 25 /hr. (100 M, 62.50 G) | 162.50 | |
| Bank of N.S service charges for July & Aug | 14.50 | G |
| Rental Honda 300 generator Aug | 150.00 | M |
| Rental AC transit, stakes skid & misc claim for Aug | 150.00 | M |
| Sub-Let Reverse truck 8 days @ 36.66 plus 150% hr @ 25% (160.42 G, 509.71 M) | 670.63 | |
| A. ARCHER expenses Aug 10 - D2 | 20.75 | M |
| C.P. Air | 18.00 | G |
| Corporate Grain | 2.45 | R |
| Hardware | 8.72 | G |
| Nelson Hardware | 23.17 | G |
| MAC's | 7.50 | M |
| | | 6055.71 |
| | | 30296.64 |

# NORCAN

1000 4x2 SUVs

**07387** NAME AND ADDRESS—PLEASE PRINT


NORCAN LEASING LTD.
917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5
1-403-668-2137


1. ARCHER CATHRO

10. KILOMETERS IN: 2 8 9 3 8

11. KILOMETERS OUT: 2 0 9 4 7

12. KILOMETERS DRIVEN: 1 9 3 1

14. DATE & TIME IN: Aug 18/86 9AM

15. DATE & TIME OUT: Aug. 13/86 10AM

16. DAYS UTILIZED:

17. 1931 @ 32¢ = 617 92

2. TYPE OF PAYMENT:
Done ☑ CASH ☐ C.C. ☐ DIR. BILL
C/C NAME
AUTH'D BY

3. VEHICLE
VEHICLE NO.: 2 2 0 1 7 1
MAKE: GM
TYPE: SUB 4X2
LICENSE NO.: RGB-9
PROVINCE: Y.T.
COMMODITY HAULED:

18. TIME @ 19. RATE
@ $ 13 50 =
5 @ $ 52 00 = 260 00
@ $ 3 12 00 =

4. ADDITIONAL CHARGE
OPTIONAL EQUIPMENT/MISC.
Tacknell + 4/way $ 7 35 00
VEHICLE WILL BE RETURNED 21 DAY / 08 MTH / 86 YR TO

20. SUB TOTAL: 801 92
21.
22. TOTAL TIME & KM: 877 92
23. ADDITIONAL CHARGES
24. SUB TOTAL: 877 92

**RENTER IS RESPONSIBLE FOR ALL OVERHEAD AND CARGO DAMAGES WHETHER OR NOT THE COLLISION DAMAGE WAIVER IS ACCEPTED**

25. COLLISION DAMAGE WAIVER, SEE PARA. 7
DAYS ☐ @ 10 00
WKS. ☐ @
MTHS. ☐ @
ACCEPTS x 00 DECLINES

26. AMOUNT DEDUCTIBLE $

27. SUB TOTAL: 50 00

28. TAX % OF SUB TOTAL: 927 92

5. ADDITIONAL TERMS AND CONDITIONS:

Wellgreen -
2 days @ 52 - 104.
2 @ 10 kms - 20.
207 km @ .32 - 66.24
190.24

Aug 20/86

Mary - 3 days @ 52 - 156.
3 @ 10 - 30.
1714 km @ 32 - 551.68
737.68

29. FUEL
GAL @ ¢
TICKET NO.

30. TOTAL CHARGE

**THIS IS YOUR INVOICE PAYABLE ON RECEIPT TO:**
**NORCAN LEASING LTD.**
**917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5**

6. I HAVE READ THE TERMS AND CONDITIONS ON BOTH SIDES OF THIS RENTAL AGREEMENT AND AGREE HERETO.
x C. Archer Wellgreen + Dare
SIGNATURE

CUSTOMER IS LIABLE FOR ALL PARKING AND TRAFFIC VIOLATIONS

33. DEPOSITS
1
2

91. ROAD EXPENSES

32. NET CHARGES

TOTAL DEPOSIT

34. TOTAL AMOUNT DUE: 927 92

7. DRIVER
NAME | AGE
ADDRESS
LICENSE | PROV. | EXP. DATE

35. CASH REFUND REC'D BY

8. OUT BY SIGNATURE

36. IN BY SIGNATURE

07387
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WHILE ON THE ROAD:
- OBTAIN RECEIPTS FOR ALL REIMBURSABLE EXPENSES AND PRESENT THEM WITH THIS COPY AT CHECK-IN.
- REPORT ACCIDENTS IMMEDIATELY TO LOCAL POLICE AND CALL NORCAN COLLECT.
- IF DELAYED IN RETURNING VEHICLE PLEASE CALL NORCAN COLLECT.

GAS NOT INCLUDED IN RATES

NORCAN
FEATURES FORD CARS & TRUCKS

WHITE - ORIGINAL • YELLOW - CUSTOMER COPY • PINK - INVOICE COPY • GREEN - ACCTS. RECEIVABLE • BUFF - VEHICLE FILE

# 07459 NAME AND ADDRESS—PLEASE PRINT

**NORCAN** Comm 4x4 Sub

NORCAN LEASING LTD.
917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5
1-403-668-2137

1.

Archer Cathro.
Box 4127
Whitehorse, Yukon Y1A 3S5

10. KILOMETERS IN | 5 | 1 | 5 | 5 | 1

11. KILOMETERS OUT | 5 | 0 | 5 | 0 | 9 | 9

KILOMETERS DRIVEN | 1 | 0 | 4 | 2

14. DATE & TIME IN Aug 27/86 17:30

15. DATE & TIME OUT Aug 23/86 noon

2. TYPE OF PAYMENT:
☑ CASH — C/C NAME
one: C.C. — DIR BILL — AUTH'D BY

16. DAYS UTILIZED

17. 1042 @ 32¢ 333 44

3. VEHICLE

| VEHICLE NO. | MAKE | TYPE |
|---|---|---|
| 2120111 9 | Gmc | 4x4 Sub |

| LICENSE NO. | PROVINCE | COMMODITY HAULED |
|---|---|---|
| RAH-6 | YT | |

2 wheel rates

18. TIME — 19. RATE
5 @ $52.00 = 260 00
@ $

4. ADDITIONAL CHARGE — OPTIONAL EQUIPMENT/MISC.
jackall 4 way wr $ 175 00

VEHICLE WILL BE RETURNED DAY 08 MTH 86 YR TO

**RENTER IS RESPONSIBLE FOR ALL OVERHEAD AND CARGO DAMAGES WHETHER OR NOT THE COLLISION DAMAGE WAIVER IS ACCEPTED**

20. SUB TOTAL 593 44
21.
22. TOTAL TIME & KM 593 44
23. ADDITIONAL CHARGES 50 00
SUB TOTAL 643 44

5. ADDITIONAL TERMS AND CONDITIONS:

Larsen - 2 days + 5 ¢/km - 298.08
Fitz - 1½ days + 2 ¢/km - 194.58
Mary - 1½ days + 2 ¢/km - 194.58

[signature] #026

25. COLLISION DAMAGE WAIVER, SEE PARA. 7
DAYS ☐ @ 10.00
WKS. ☐ @
MTHS. ☐ @
ACCEPTS ☒ DECLINES ☐

26. AMOUNT DEDUCTIBLE $ 1500 00

27. SUB TOTAL 643 44

28. TAX: % OF SUB TOTAL

29. FUEL — 73 ~~GAL~~ LT @ 160¢ — FUEL 43 80
TICKET NO
30. TOTAL CHARGE 687 24

**THIS IS YOUR INVOICE PAYABLE ON RECEIPT TO:**
**NORCAN LEASING LTD.**
**917. 4 ALASKA HIGHWAY, WHITEHORSE, YUKON Y1A 3E5**

6. I HAVE READ THE TERMS AND CONDITIONS ON BOTH SIDES OF THIS RENTAL AGREEMENT AND AGREE HERETO.

X [signature]
SIGNATURE

CUSTOMER IS LIABLE FOR ALL PARKING AND TRAFFIC VIOLATIONS

33. DEPOSITS
1
2
31. ROAD EXPENSES
32. NET CHARGES
TOTAL DEPOSIT

7. DRIVER
NAME A. Archer — AGE
ADDRESS on file.
LICENSE — PROV. — EXP. DATE

34. TOTAL AMOUNT DUE 687 24

35. CASH REFUND REC'D BY

8. OUT BY SIGNATURE

36. IN BY SIGNATURE

**07459**
THIS INVOICE NUMBER MUST APPEAR ON ALL CORRESPONDENCE AND REMITTANCES.

WI ON THE ROAD:
- OBTAIN RECEIPTS FOR ALL REIMBURSABLE EXPENSES AND PRESENT THEM WITH THIS COPY AT CHECK-IN.
- REPORT ACCIDENTS IMMEDIATELY TO LOCAL POLICE AND CALL NORCAN COLLECT.
- IF DELAYED IN RETURNING VEHICLE PLEASE CALL NORCAN COLLECT.

GAS NOT INCLUDED IN RATES

**NORCAN**
FEATURES FORD CARS & TRUCKS

WHITE - ORIGINAL • YELLOW - CUSTOMER COPY • PINK - INVOICE COPY • GREEN - ACCTS. RECEIVABLE • BUFF - VEHICLE FILE