# Geological and Geochemical Report

# on the MacGold North Claim Group,

# Skeena and Liard Mining Divisions, British Columbia

NTS 104 B/10E

Latitude: 56°37' North
Longitude: 131°36' West

for

Golden Arrow Resources
#710 - 580 Hornby Street
Vancouver, B.C.



December, 1990

Calvin Church, B.Sc.
Leonard P. Gal, M.Sc.

International Kodiak Resources Inc.



.c:32761

**SUMMARY**

The MacGold North claim block is located near the Unuk River on N.T.S. map sheet 104 B/10 E, and straddles both the Skeena and Liard Mining Division's boundaries. The MacGold 3, 4, and 5 claims consist of 36 units owned equally by Ecstall Mining Corp. (50%) and Omega Gold Corp. (50%). Golden Arrow Resources is earning an interest in the property by making certain cash and share payments to Omega/Ecstall and by making expenditures on the property.

Reconnaissance mapping at 1:10,000 scale and extensive rock geochemical sampling from several prominent gossans and mineral occurrences constituted the majority of the 1990 exploration program. Results are encouraging with a number of showings discovered and supported by significant geochemical anomalies in precious and base metals. The highest value for gold was grab sample EMMR-097 which assayed 0.117 oz/ton Au, 2.2 oz/ton Ag and 8.01% Cu. Similar high Au-Ag-Cu values were found in the vicinity of this sample and elsewhere on the property.

Just over $44,000 was expended on the claims during 1990 and future work should focus on additional rock sampling with emphasis directed towards following up on anomalous samples located to date. Geophysics could also aid in delineating any possible drill targets.

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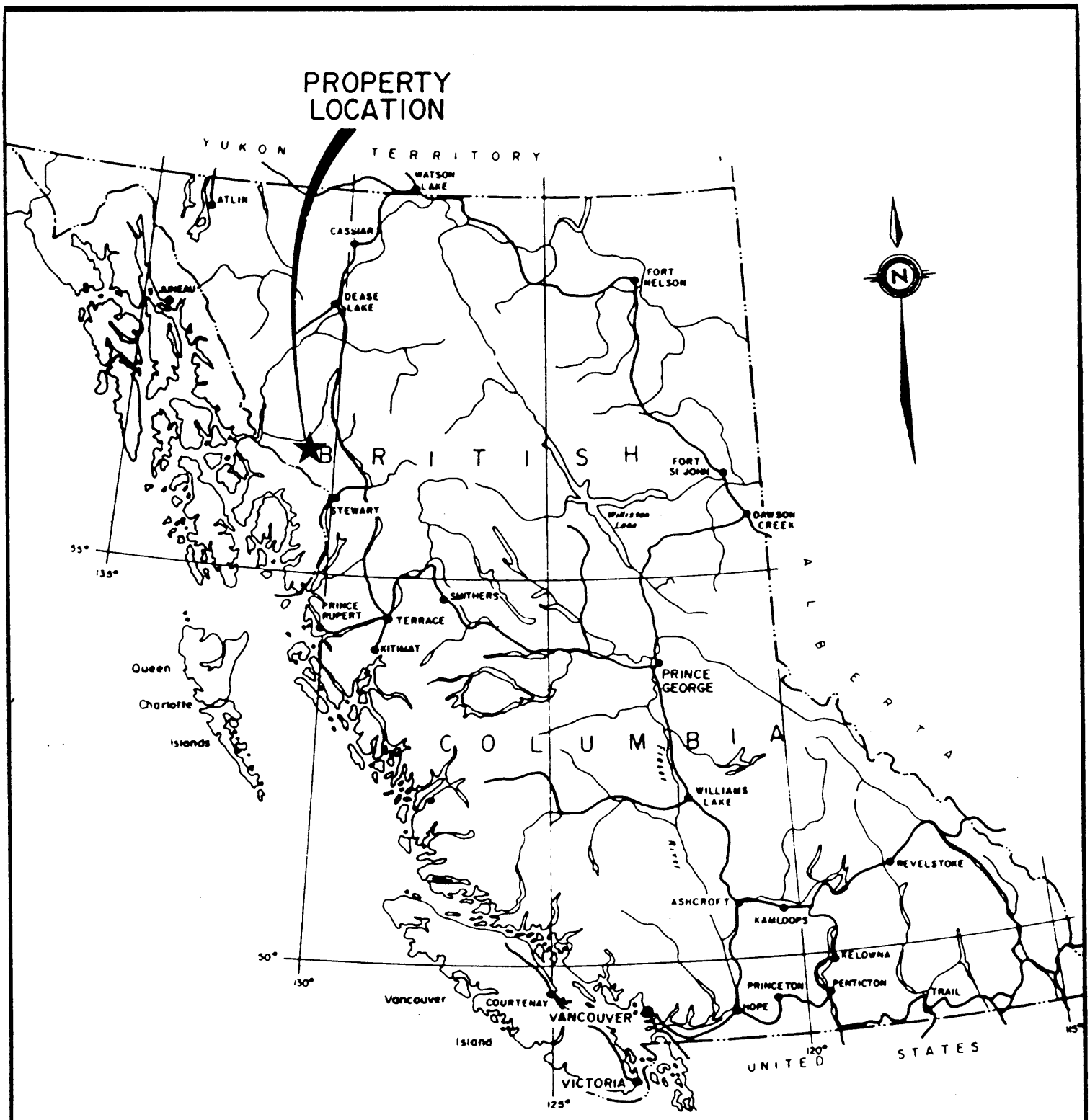
## INTRODUCTION

The MacGold North property is located in the Liard and Skeena Mining Divisions of British Columbia on N.T.S. mapsheet 104 B/10E. The claim block consists of 36 units held jointly by Ecstall Mining Corp. and Omega Gold Corp. on a 50/50 basis. Golden Arrow Resources has entered into an option agreement with Ecstall Mining Corp. and Omega Gold Corp. whereby Golden Arrow may earn 50% interest in the claims by making expenditures totalling $500,000 on the claims over four years, and by making certain cash and stock payments to Ecstall and Omega.

The preliminary program carried out by crews of International Kodiak Resources Inc. in July and August of 1990, included reconnaissance geological mapping at 1:10,000 scale and extensive rock geochemical sampling. Initial prospecting of mineralized zones were successful in locating areas containing encouraging Au, Ag, Cu, Pb, and Zn values. Quartz vein stockwork at the Lehto showing contains 3 to 5% sulphides (pyrite-chalcopyrite-galena) across a zone 2 to 3 m wide, exposed for 50 meters with probable strike extension under ice. Anomalous Au, Ag, Cu values occur over a large area on the South Ridge where a different style of mineralization and alteration dominates. A number of the gossans were not prospected because they occur on cliff faces not accessible without special climbing equipment.

## LOCATION AND ACCESS

The MacGold North claim group is located 12 kilometres southeast of Prime Resources'/Stikine Resources' Eskay Creek gold deposit. The property is situated at latitude 56°37' North and longitude 131°36' West on N.T.S. map sheet 104 B/10E (Figure 1). The property is accessed by helicopter from the Kodiak field camp 22 km to the north-northeast. Alternate access is from an airstrip at Bob Quinn Lake or regular scheduled flights from Terrace or Smithers to the Bronson airstrip 25 km to the west. Construction has begun on an access road from Bob Quinn Lake into the Iskut - Unuk River region that will pass within 100 m of the Kodiak Camp, and within approximately 10 km of the MacGold North property.




OMEGA/ECSTALL

# MACGOLD PROPERTY
# LOCATION MAP

SKEENA M.D., B.C.

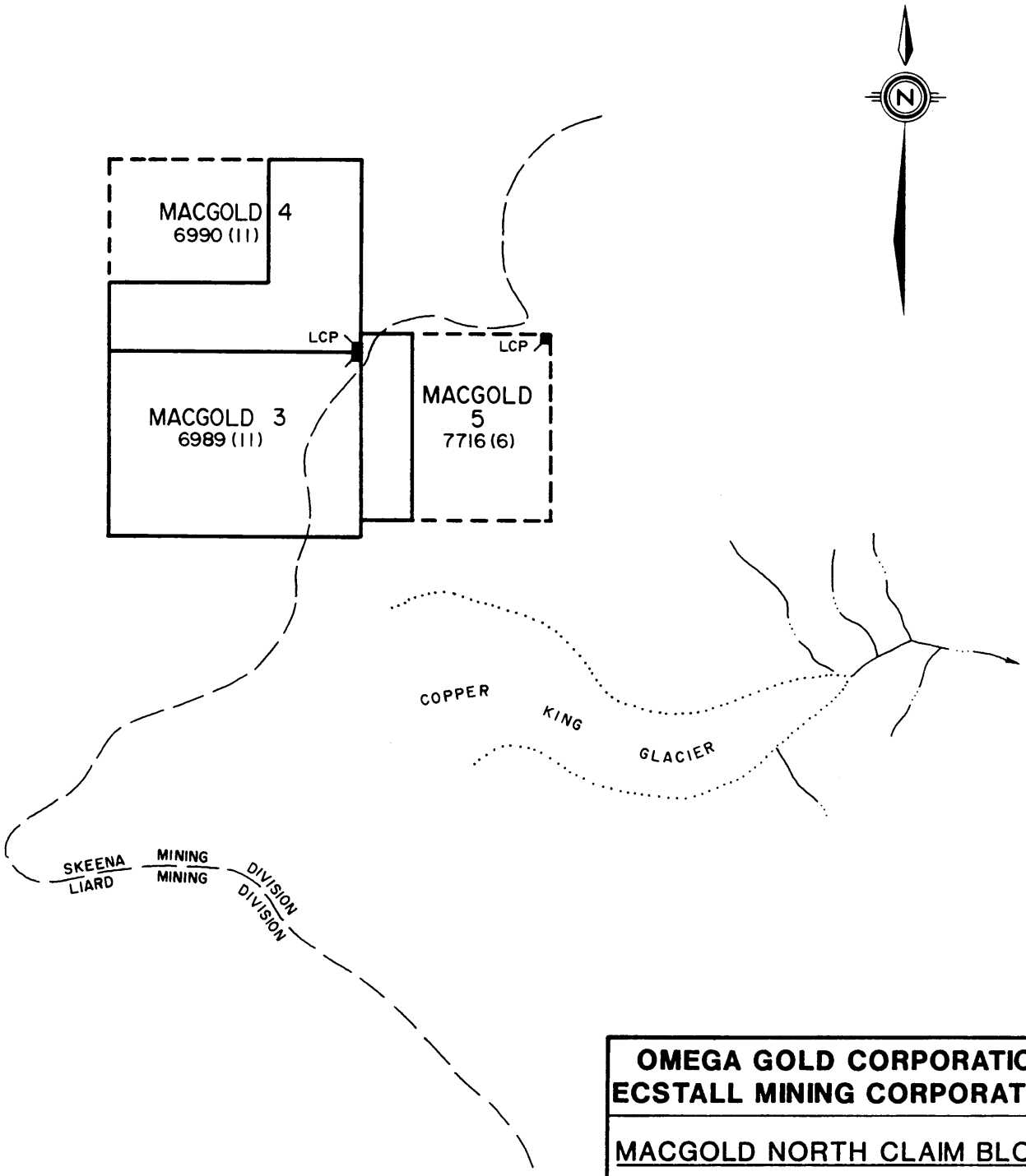
NICHOLSON & ASSOCIATES

| | | | |
|---|---|---|---|
| Drawn. J.W. | Date. Nov. 1989 | FIGURE | 1 |
| Scale. | N.T.S. 104 B 10 | | |

## CLAIM STATUS

The MacGold North claim block was staked during November of 1988 and June of 1989 in accordance with the modified grid system (Figure 2). The claims are owned by Ecstall Mining Corp. and Omega Gold Corp. on a 50/50 basis. Golden Arrow Resources may earn a 50% interest in the claims by making expenditures totalling $500,000 on the claims over four years, and by making certain cash and stock payments to Ecstall and Omega. The claims are covered by N.T.S. mapsheet 104B/10E and straddle the Skeena and Liard Mining Divisions of British Columbia. Following acceptance of this report for assessment purposes the claims will have expiry dates as shown below.

| CLAIM | RECORD NUMBER | M.D. | EXPIRY DATE |
|---|---|---|---|
| MacGold 3 | 6989 | Skeena/Liard | Nov 14, 1999 |
| MacGold 4 | 6990 | Liard | Nov 14, 1999 |
| MacGold 5 | 7716 | Skeena/Liard | June 30, 1997 |




**OMEGA GOLD CORPORATION**
**ECSTALL MINING CORPORATION**

MACGOLD NORTH CLAIM BLOCK

LIARD AND SKEENA MINING DIVISIONS, B.C.

# CLAIM MAP

NICHOLSON & ASSOCIATES

| | | |
|---|---|---|
| Drawn: Geodrafting | Date: March, 1990 | FIGURE |
| Scale: 1 : 50,000 | N.T.S. 104 B / 10 | 2 |

## PHYSIOGRAPHY AND CLIMATE

The MacGold North claim block is situated within the Intercostal Mountain Belt of the Coast Mountain Ranges. The property ranges in elevation from 1000 m (3280 ft) on the Lehto Glacier to more than 2000 m (6562 ft) on peaks in the southwest corner of the property. Steep mountain peaks rim the eastern boundary and south central area of the property while icefields cover almost 50% of the area. Most creeks are immature and run only in periods of high runoff or disappear beneath talus. There are no trees on the property and alpine slopes are virtually devoid of any vegetation. Steep talus slopes abut icefields at their bases and there is very little in the way of soil or till cover.

Climatically, the MacGold North property is under the influence of coastal weather patterns. The summer weather varies from warm days to cool, wet conditions. Up to 12 m of snow can accumulate during the winter months. Normally, the property is workable from June until late September.

## HISTORY

The Iskut River - Unuk River area has seen sporadic mineral exploration activity until very recently. The first documented mineral discoveries occurred around the turn of the century. Mineralization was discovered along the Iskut and Unuk Rivers, and in close proximity to the town of Stewart. Prior to World War II, small precious metal mines operated intermittently. The largest of these was the Silbak - Premier Mine which produced 41 million ounces of silver and 1.8 million ounces of gold between 1920 and 1985. After World War II, exploration was focused on large tonnage base metal deposits. Although several deposits were defined, only the Granduc Mine reached production, with published reserves of 10.9 million tons grading 1.79% copper. Exploration in the 1970's shifted toward precious metals, and several deposits have since been discovered; including the Reg (Johnny Mountain Mine) of Skyline Gold Corp., with 740,000 tons grading 0.52 ounces/ton gold, 0.67 ounces/ton silver; Cominco/Prime's Snip deposit, with over 1 million tons of 0.875 ounces/ton gold; and the Eskay Creek deposit (Calpine/Stikine) with preliminary estimated reserves of 4.36 million tons grading 0.77 ounces /ton gold and 29.12 ounces/ton silver at a cutoff grade of 0.10 oz/ton Au.(Northern Miner, 6 Oct. 90). Several companies are presently exploring for base and precious metal deposits, and some are in the feasibility and pre-feasibility stages of production, i.e., the Sulphurets deposit (Newhawk/Granduc) with 715,000 tons of 0.431 ounces/ton gold, 19.7 ounces/ton silver, and the SB deposit (Tenajon) with 308,000 tons grading 0.51 ounces/ton gold.

The MacGold North area has, for the most part, seen little exploration until recently. No history of work on the claims is present in government files. The only report of any work comes from local prospector, John Lehto, who reportedly found pieces of copper stained float at the toe of Copper King Glacier. The MacGold South property, which adjoins the MacGold North has encountered encouraging results during work programs in 1989 and 1990 which included soil grids, blast trenching/sampling and IP and UTEM geophysical surveys.

## REGIONAL GEOLOGY

The MacGold North property is located near the boundary between the Intermontane Belt and the Coast Plutonic Complex. It is underlain by the Stikine Terrane, a mid-Paleozoic to Mesozoic island arc succession. Mesozoic rocks are represented by volcanic rocks of the Triassic Stuhini Group, and the volcanic and subordinate sedimentary lithologies of the Lower to Middle Jurassic Hazelton Group. This dominantly volcanic package is overlain by, and interfingers with successor basin clastics of the Bowser Basin.

An eastern facies and a western facies have been identified in the Upper Triassic Stuhini Group. The western facies can be traced from the Stikine River eastward at least to Snippaker Mountain. It is characterized by corraline limestone and polymict cobble conglomerate, overlain by breccia, felsic tuff, shale and micrite. Laminated mafic and felsic tuff with coarse pyroxene phenocrysts are present near the top. The eastern facies lacks the thick limestone and felsic tuff units. Orange and black weathering,thin bedded siltstone and fine grained, feldspathic, locally calcareous greywacke distinguish this facies. Polymict pebble conglomerate and shale are subordinate. Intermediate to mafic volcanics, breccias and conglomerates are typical.

A gradational contact between the Stuhini Group and the Hazelton Group has been mapped near the headwaters of the Unuk River (Anderson and Thorkelson, 1990). Siltstone above the orange and black weathering siltstones and shales becomes increasingly siliceous, and greywackes and conglomerates grow more abundant. This conglomerate is present as discontinuous lenses and consists of clast-supported porphyritic andesite

and dacite clasts. The uppermost strata in this transitional zone consist of laminated siliceous siltstone, fine grained greywacke, minor coarser grained greywacke and matrix to clast supported conglomerate.

Mineralization at the Snip deposit is hosted within the Stuhini Group and is believed to have occurred during the Upper Triassic. Several other deposits have been found in the Stuhini Group; including the Kerr, the Doc, the Inel and the Stonehouse.

The Hazelton Group has been divided into three heterogeneous formations: the Lower Jurassic Unuk River Formation and Betty Creek Formation, and the Lower to Middle Jurassic Salmon River Formation. In addition, a regional marker unit, the Mt. Dilworth formation, has been identified regionally between the Betty Creek and Salmon River Formations and has come to gain informal status as a formation. Some workers (Grove, 1986) have identified a fourth and uppermost formation in the Hazelton Group, the Nass Formation. However, this package of rocks includes Bowser Basin rocks and should not be included in the Hazelton Group, which encompasses the Stikine Arch (Anderson and Thorkelson, 1990).

The volcanic sequences of the Unuk River Formation are characterized by basal pyroclastic flows that are progressively overlain by tuffs, argillites, local andesitic breccia, and finally conglomerates with interbedded tuffs, wackes and siltstones.

The Betty Creek Formation unconformably overlies the Unuk River Formation and is comprised of maroon to green volcanic siltstone, greywacke, conglomerate, breccia, basaltic pillow lavas and andesitic

flows. The conglomerate/breccia unit consists of matrix supported pebble to boulder sized clasts of aphanitic to porphyritic andesite.

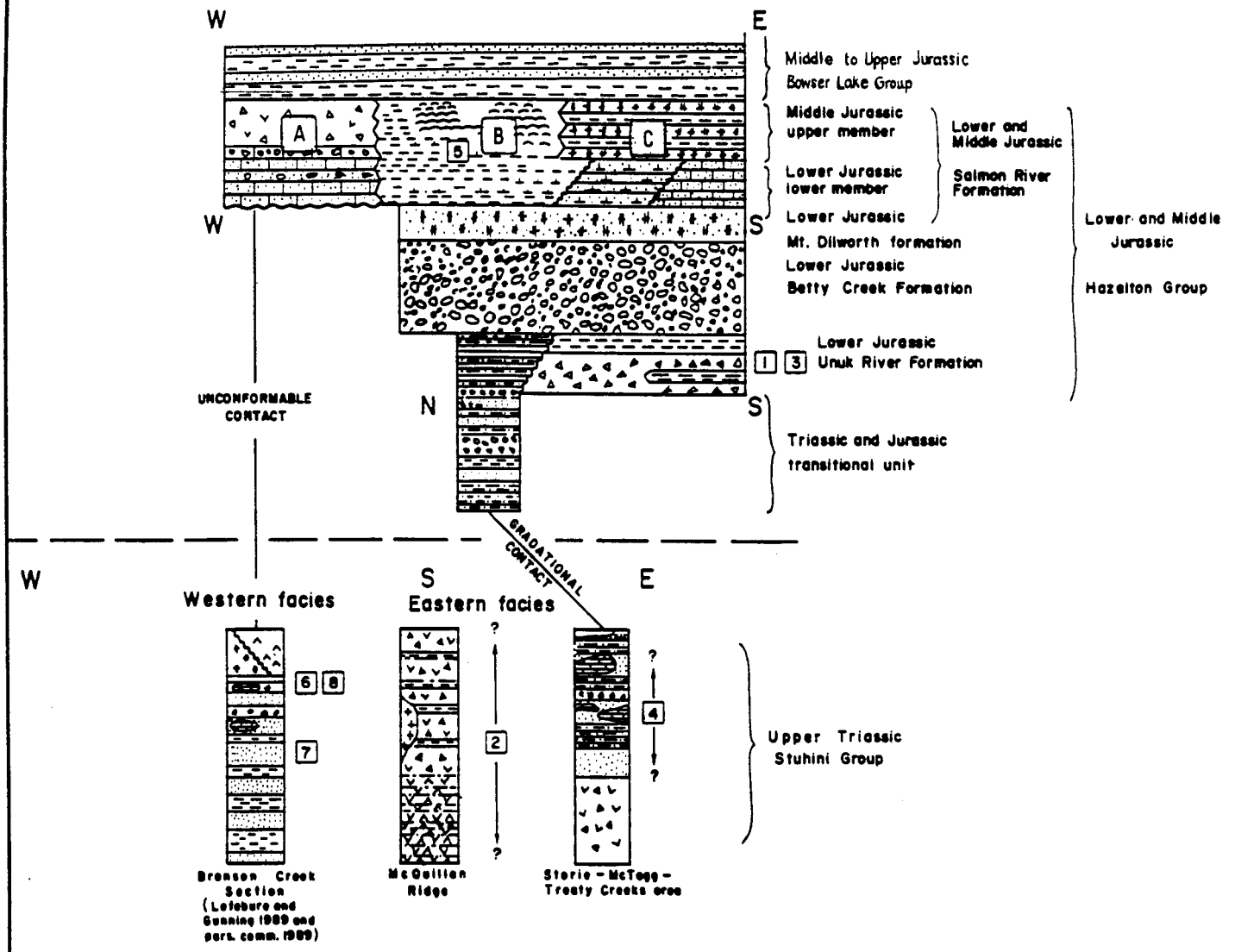
Overlying these rocks is the Mt. Dilworth formation (Aldrick et al., 1989; Anderson and Thorkelson, 1990), a regional marker unit consisting of tuff breccia, felsic tuff and dust tuff. These tuffs range from unwelded to welded, and aphyric to sparsely phyric.

The lower member of the Salmon River Formation ranges along strike from a limy argillite to limy greywacke to a sandy limestone. In most localities it is too thin to map, but it thickens in towards the north and northwest to at least 1500 m of siltstones, greywackes and rare fossiliferous limestones south of Telegraph Creek.

The upper member of the Salmon River Formation is made up of three distinct facies from east to west: the Snippaker Mountain facies, the Eskay Creek facies, and the Troy Ridge facies (Figure 3). The gold deposit presently being defined at Eskay Creek is stratabound in Eskay Creek facies rocks. This medial facies extends 50-60 kilometers north and south along strike from the deposit. The Eskay Creek facies comprises aphyric to augite phyric pillow basalts with interfingered siltstone, tuffaceous wacke and conglomerate. To the west, the Snippaker Mountain facies consists mainly of volcanic breccia. The eastern Troy Ridge facies comprises shales with interbedded tuffs and breccias (Anderson and Thorkelson, 1990).

At the end of the Middle Jurassic, the volcanic complex was uplifted to produce the Stikine Arch, which shed detritus into the adjacent Bowser Basin. These sediments form the Middle and Late Jurassic Bowser Lake Group sediments.

The volcanic and sedimentary rocks were subsequently intruded by granitoid intrusions associated with the Coast Plutonic Complex. Intrusive activity is interpreted to have occurred from the Middle Cretaceous to the Early Tertiary. Late stage (Quaternary) basaltic volcanism resulted in widespread deposits of columnar basalt flows, ash and tephra, and scattered cinder cones. Much of these rocks were buried and/or eroded through glacial activity in the Pleistocene.




## LITHOLOGY

- Volcanic breccia
- Intermediate, mixed and mafic tuff
- Felsic tuff, breccia and turbidite (in Eskay Creek facies)
- Pillow lava
- Shale and siliceous shale (in T - J transitional unit and Troy Ridge facies)
- Limy shale and shaly limestone (Eskay Creek facies)
- Limestone
- Sandy limestone in southern lower member of Salmon River formation
- Limy greywacke
- Siltstone siliceous siltstone (in T - J) transitional unit) and wavy laminated siltstone (Stuhini Group)
- Greywacke (feldspathic greywacke in T Bronson Creek section, Stuhini Group)
- Monolithic and heterolithic volcanic conglomerate
- Epiclastic siltstone, greywacke, breccia and conglomerate (Lower Jurassic Betty Creek formation)
- Quartz monzodiorite

## SYMBOLS

- A Snippaker Mtn. facies
- B Eskay Creek facies
- C Troy Ridge facies
- / Facies change

MODIFIED AFTER ANDERSON AND THORKELSON (1990)

8 - Approximate or uncertain stratigraphic position of precious metal veins for: 1. PREMIER 2. DOC 3. SULPHURETS CAMP 4. KERR 5. ESKAY CREEK 6. INEL 7. SNIP 8. STONEHOUSE

From G.S.C. PAPER 90 - 1F

**Schematic facies changes in Triassic and Lower and Middle Jurassic strata. Facies changes occur toward the east and northeast for Upper Triassic Stuhini Group and both south to north and east to west for Upper and Middle Jurassic Salmon River Formation in Iskut River map area.**

**Figure 3**

## LOCAL GEOLOGY

The MacGold North property is underlain by granitic rock of the Jurrassic Lehto Porphyry (Alldrick et al., 1989). The Lehto porphyry is an elongate northeast-trending body roughly 10 km long by 2 km wide. Associated northeast trending dyke swarms cut immediately adjacent country rocks of the Betty Creek Formation on the property. Granitoid rocks outcrop over greater than 40% of the property. They are largely porphyritic and vary compositionally from granodiorite to syenite. The different phases of the intrusive stock are characterized by varying sizes and percentages of potassium feldspar, plagiocase and hornblende phenocrysts. Phenocrysts of white weathering plagioclase feldspar range in size up to 0.5 cm diameter. Pink potassium feldspar phenocrysts vary from 0.2 to 5 cm in length. Some exposures have coarse potassium feldspar phenocrysts typical of the Lehto batholith and other early Jurassic plutons in the area (Iskut River Pluton). It should be noted that plutonic rocks of this age with similar textures have spatial and temporate relationships with mineral deposits in the area (eg. Texas Creek batholith and the Silbak-Premier gold-silver deposit). The mafic component, less than 30% volume, is comprised of hornblende phenocrysts up to 0.4 cm long. White to buff colored aplite dykes, some as wide as 70 cm, are seen to cut the granitoid rocks, but are considered part of the granitoid phase.

Large xenoliths (10 cm to 1.5 m) occur in the Lehto porphyry, especially near contacts with volcanic units. The xenoliths are of various lithologies, including black argillite and volcanic breccia. Several volcanic units outcrop on the property in isolated areas

(Figure 4). On the south and east boundary of the property fine grained quartz-feldspar crystal ash and lapilli tuffs (Figure 4, Unit 2b) overly granitoids. The tuffs weather orange-yellow and contain feldspar phenocrysts averaging 3-4mm. Dacite units (Unit 2a) interbedded with the tuffs have a siliceous aphanitic matrix and appear similar to the tuffs on fresh surfaces. Dark green andesite (Unit 7) occurs in fine grained, massive to thinly bedded outcrops on the southwest flank of the property. A distinctive white to grey marble unit (up to 15m wide) outcrops at several locations. It is usually fine grained and locally contains thin (5-10 cm) contorted beds of argillite. The volcaniclastic units described above are considered to be correlative with the Betty Creek Formation (Pliensbachian to Torcian).

Faults strike north to northeast trending subparallel to the elongate shape of the Lehto porphyry. The predominance of intrusive rock on the property makes the interpretation of movement on the faults difficult. However, markers within the Betty Creek Formation indicate substantial movement may have taken place syn- and post-tectonically with the emplacement of the Lehto porphyry.

## Mineralization

Sulphide mineralization on the MacGold North property is spatially and temporally related to the Lehto porphyry intrusion. This intrusive northwest trending body is the source for mineralization in the immediate area and is itself mineralized. Volcaniclastics of the Betty Creek Formation provide a host for mineralization on the property although they are not very extensive. Many of the gossans have been prospected and

mapped however there are several others that were inaccessible. A description of some of the mineral occurrences found while prospecting follows.

A gossanous zone (Lehto showing) occurs on the east edge of the Lehto glacier near the center of the property (sample numbers ECCR-149 to 152 and 160-162). Quartz-carbonate veins containing pyrite-chalcopyrite-galena mineralization are found here in a felsic volcanic. The largest of these veins is 10cm wide and is part of a stockwork veining zone 2 to 3 meters wide extending 50m to a point where it disappears beneath the ice. The zone strikes 160 to 170 degrees with a steep easterly dip. This gossan is located near the contact between intrusive granitoids and overlying volcanics. A 10m wide unit of marble is interbedded with the volcanics at this locality but contains no visible sulphides.

Skarn mineralization was observed in an outcropping of a similar marble unit in the northwest corner of the property near the toe of a hanging glacier (samples numbers ECCR-155,156). The attitude of this marble unit is 006/60E and contains thin vienlets (1 to 3cm) of pyrite-chalcopyrite-hematite in thin serpentinite layers where the marble contacts the granitoid. Large euhedral garnet,epidote and quartz characterize the skarn gangue assemblage.

A pegmatite pod was found on one of the traverses on the south facing flank of the ridge in the southwest corner of the property (ECCR-141, 142). The pegmatite is exposed in an area of 12 square meters and contains large euhedral quartz, calcite, and epidote. Massive sulphide mineralization consisting of chalcopyrite-pyrite-galena in thin (20 cm)

lenses is contained in the pod. Unfortunately the pegmatite bodies tend to be fairly small and localized making them a poor exploration target.

Quartz-epidote veins (1 to 15 cm wide) within the intrusive granitoids (Lehto porphyry) are occasionally stained with malachite and azurite with traces of chalcopyrite visible along facture surfaces. Sample EMMR-097 taken from a quartz flooded fracture in the granitoid returned a value of 2900 ppb Au (0.117 oz/ton), 76.5 ppm Ag (2.2 oz/ton), 53798 ppm Cu (8.01% Cu). The mineralization near this sample is along veins related to faults/ fractures with an orientation of 000/10W. This type of mineralization occurs mainly on the south ridge and is considered to be structurally controlled.

## Alteration

Propylitic alteration is by far the most common and widespread on the property. Plagioclase and mafic minerals of the Lehto porphyry alter to chlorite and epidote. Epidote stringers are noted in fracture infilling or in fault breccia. A late phase carbonate alteration overprint is evidenced by widespread malachite/azurite staining along fracture surfaces and carbonate veins.

## GEOCHEMICAL RESULTS

The geochemical sampling program involved prospecting accessible gossans and tracing mineralized float in talus to its source. Due to the nature of the terrain, very little detritus accumulates in the alpine streams and consequently no silt geochemistry is available for this property. A total of 92 rock samples and one moss sample were collected from outcrops on the claims (Figure 5). Rock sampling methods included either representative chips across veins or zones of mineralization or grab samples of disseminated or gossanous mineralization. The samples were then put in labelled plastic bags and a metal tag with flagging was nailed to the outcrop with the same label for future reference. Geochemical results for the elements Au, Ag, As, Pb, Zn, and Cu appear in Figures 6 and 7. Sample descriptions of rock samples are included in Appendix iii. Analytical procedures and results from Min - En Laboratories are detailed in Appendix ii. A description of anomalous values for selected elements follows.

### Gold

Gold values range from 5 (detection limit) to 2900 ppb over the entire property. The most consistent anomalous gold values come from the south ridge area. A cluster of 5 samples in this area (500m x 300m) average 930 ppb. The samples are typically breccia quartz veins (0.5 to 5 cm wide) in fractures or faults mineralized with blebs of pyrite, chalcopyrite and stained with malachite and/ or azurite.

Another notable anomalous area is from the quartz - carbonate stockwork (Lehto showing) on the east side of Lehto glacier. Gold values range from 50 to 980 ppb in samples that contain stringers and

disseminations of pyrite-galena-chalcopyrite (1-5%). On the west side of Lehto glacier samples ECCR-155, and 156 (1850 and 170 ppb Au respectively) are evidence of a possible gold enriched skarn. These samples are slightly anomalous in cobalt, a useful pathfinder element in tracing auriferous skarns.

**Silver**

Anomalous silver values generally accompanies anomalous gold values on the property (EMMR-097, 167, ECCR-141,142) although there are some exceptions. Eight of the nine samples on the south ridge area have silver values greater than 3.0 ppm.

**Arsenic**

The showing on the east side of Lehto glacier produced a number of high arsenic values. High gold values are associated with each arsenic anomaly which is consistent with the distribution of elements in epithermal vein systems. The highest arsenic value obtained was from sample ELGR-156 (2715 ppm arsenic) which was also weakly anomalous in gold and copper.

**Copper**

Anomalous copper geochemistry has a wide distribution on the property. Samples ECCR141 and EMMR097 yielded copper values of 25,146 ppm and 53,798 ppm respectively. These samples have the two most anomalous copper results on the property. Copper anomalies coincident with gold anomalies are generally five times higher than background.

**Lead**

The only area of anomalous lead is at the Lehto showing (east side of Lehto glacier).

### Zinc

The highest Zn values also occur at the Lehto showing. Here the anomalous values range from 131 ppm to 1791 ppm Zn. On the south ridge moderately anomalous Zn occurs with Cu anomalies (EMMR-096, 097, ECCR-101, 102).

## CONCLUSIONS AND RECOMMENDATIONS

MacGold North was a relatively unexplored property previous to 1990. British Columbia government geologists did regional mapping in the area in 1989, and Nicholson and Associates have been actively exploring a property to the south. Upon review of the results obtained from the 1990 exploration program several conclusions may be drawn.

Three areas of interest have been located by using prospecting techniques and rock geochemical results. A program of silt sediment or soil geochemical sampling is impractical for this property due to the terrain. The Lehto showing located on the east side of Lehto glacier consists of a mineralized quartz-carbonate stockwork, shows the most potential, and would be the easiest area in which to do development work. The zone of mineralization, at this showing could be further sampled using blast trenching and a small geophysical survey to delineate the extension of the zone. Samples from the south ridge revealed anomalous Au, Ag, and Cu in their assays. Although the results are indicative of the mineralization the samples occur over narrow faults in the intrusive Lehto porphyry. The Lehto porphyry is the potential source for mineralization of the overlying Betty Creek strata and not likely to host a deposit itself. A mineralized skarn carrying anomalous Cu and Au occurs west of Lehto glacier. The showing is small on surface but may extend further at depth or along strike. A geophysical survey is recommended to determine if there is any depth and/or strike length to this showing.

In summary, it is important to consider the geologic setting as it relates to the potential for finding a mineral deposit on the MacGold

North. The Lehto porphyry underlies a majority of the property and displays similarities of emplacement, mineralization, and alteration to other Jurassic porphyritic intrusions important to major mineral deposits. For many of the deposits in the area (eg. Premier, Kerr, Inel and Snip) proximity to an alkali feldspar porphyry is an important control for mineralization. It is also important to note that much of the property remains unexplored due to steep terrain and the potential for further mineral discoveries in these areas should not be overlooked.

## STATEMENT OF QUALIFICATIONS

I, Calvin Chruch do hereby certify that:

1) I am a graduate of the University of British Columbia with a Bachelor of Science in Geology and have worked in the mineral exploration industry since 1986, throughout B.C.

2) I am a contract geologist with principal residences at 2292 West 49th Ave, Vancouver B.C.

3) I worked as a field geologist for International Kodiak Resources Inc. on the MacGold North claims during the 1990 field season.

4) I am the co-author of this report and my findings are based on my observations in the field and on previously published and unpublished reports on the area.

5) I have no interest, direct or indirect in Golden Arrow Resources, nor any of its properties, nor do I expect to recieve any such interest.

Dated at Vancouver, British Columbia, this 19th day of December, 1990.

Calvin Church

Calvin Church BSc.

## STATEMENT OF QUALIFICATIONS

I, Leonard P. Gal, of 3373 West Seventh Ave. Vancouver, British Columbia, do hereby certify that:

1) I am a contract geologist in the employ of International Kodiak Resources Inc., with offices at #606-675 West Hastings Street, Vancouver, B.C.
2) I am a graduate of the University of British Columbia (B.Sc. Geology) and the University of Calgary (M.Sc. Geology), and have worked in British Columbia and the Northwest Territories since 1986.
3) I am the co-author of this report an my findings are based on work under taken on the property between July 23 and July 25, 1990, and examination of published and unpublished reports.
4) I have no interest, direct or indirect, in Golden Arrow Resources, nor in any of its properties, nor do I expect to recieve any such interest.
5) This report may be used by Golden Arrow Resources in whole or in part, as so required.

Dated at Vancouver, British Columbia this 19th day of December, 1990

Leonard Gal

Leonard P. Gal, M.Sc.

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# APPENDIX II

# STATEMENT OF COSTS

# INTERNATIONAL KODIAK RESOURCES INC.

Mineral Exploration Services

## STATEMENT OF COSTS

PROJECT: MACGOLD NORTH for GOLDEN ARROW RESOURCES

PERIOD: JULY-AUGUST 1990

| | |
|---|---|
| **Personnel** | |
| 22.2 man days @ $275/day | 6105.00 |
| 3.0 man days @ $240/day | 720.00 |
| 15.0 man days @ $225/day | 3375.00 |
| 9.0 man days @ $200/day | 1800.00 |
| **Helicopter** | |
| 12.5 hours @ 725 /hour (fuel included) | 9062.50 |
| **Room and Board** | |
| 49.2 man days @ $125/day | 6150.00 |
| ____ man days @ $40/day (fly camp) | |
| **Vehicle** | |
| ~~---@ $1,350/month--~~ 16 days at $50 per day | 800.00 |
| **Field Supplies** | |
| 49.2 days @ $20/man/day | 984.00 |
| **Samples** | |
| ~~124~~ Rock @ $20/sample | 2480.00 |
| ____ Soil @ $20/sample | |
| ____ Silt @ $20/sample | |
| **Mob./Demob.** | |
| **Office** (report) | 5000.00 |
| **Miscellaneous** | |
| 1. filing fees | 1800.00 |
| 2. travel | 3000.00 |
| 3. survey costs | 3400.00 |
| **Subtotal** | |
| **Contingency** | |
| **TOTAL TO DATE** | 44,676.55 |

E. & O.E.

# APPENDIX IV

## ASSAY TECHNIQUES AND RESULTS

MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR TRACE ELEMENT ICP

Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu,
Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb,
Sr, Th, U, V, Zn, Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized on a ring mill pulverizer.

0.50 gram of the sample is digested for 2 hours with an aqua regia mixture. After cooling samples are diluted to standard volume.

The solutions are analyzed by computer operated Jarrall Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers.

OFFICE AND LABORATORIES:
705 WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C.
CANADA V7M 1T2

PHONE: (604) 980-5814 (604) 988-4524
TELEX: VIA USA 7601067

MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

# ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK

## PROCEDURE FOR AU, PT OR PD FIRE GEOCHEM

Geochemical samples for Au Pt Pd are processed by Min-En Laboratories, at 705 West 15th St., North Vancouver, B. C., laboratory employing the following procedures:

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized on a ring mill pulverizer.

A suitable sample weight; 15.00 or 30.00 grams is fire assay preconcentrated. The precious metal beads are taken into solution with aqua regia and made to volume.

For Au only, samples are aspirated on an atomic absorption spectrometer with a suitable set of standard solutions. If samples are for Au plus Pt or Pd, the sample solution is analyzed in an inductively coupled plasma spectrometer with reference to a suitable standard set.

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MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

# MERCURY ANALYTICAL PROCEDURE FOR ASSESSMENT FILING

Samples are processed by Min-En Laboratories at 705 West 15th St., North Vancouver, B. C., employing the following procedures.

After drying the samples @ 30 C, soil, and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ring pulverizer.

A 0.50 gram subsample is digested for 2 hours in an aqua regia mixture. After cooling samples are diluted to standard volume.

Mercury is analyzed by combining with a reducing solution and introducing it into a flameless atomic absorption spectrometer. A three point calibration is used and suitable delutions made if necessary.

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MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

GOLD ASSAY PROCEDURE:

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to - 1/8 inch. The whole sample is then riffled on a Jones Riffle down to a statistically representative 300 - 400 gram sub-sample (in accordance with Gy's statistical rules). This sub-sample is then pulverized on a ring pulverizer to 95% minus 120 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Samples are fire assayed using one assay ton sample weight. The samples are fluxed, a silver inquart added and mixed. The assays are fused in batches of 24 assays along with a natural standard and a blank. This batch of 26 assays is carried through the whole procedure as a set. After cupellation the precious metal beads are transferred into new glassware, dissolved, diluted to volume and mixed.

These aqua regia solutions are analyzed on an atomic absorption spectrometer using a suitable standard set. The natural standard fused along with this set must be within 3 standard deviations of its known or the whole set is re-assayed. Likewise the blank must be less than 0.015 g/tonne.

FFICE AND LABORATORIES:
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CANADA V7M 1T2

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TELEX: VIA USA 7601067
FAX: (604) 980-9621

MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

## AG, CU, PB, ZN, NI, AND CO ASSAY PROCEDURE:

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The -1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to -1/8 inch. The whole sample is then riffled on a Jones Riffle down to a statistically representative 300 - 400 gram sub-sample (in accordance with Gy's statistical rules). This sub-sample is then pulverized in a ring pulverizer to 95% minus 120 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

A 2.000 gram sub-sample is weighed from the pulp bag for analysis. Each batch of 70 assays has a natural standard and a reagent blank included. The assays are digested using a HNO3 - KCL04 mixture and when reaction subsides, HCL is added to assay before it is placed on a hotplate to digest. After digestion is complete the assays are cooled, diluted to volume and mixed.

The assays are analyzed on atomic absorption spectrometers using the appropriate standard sets. The natural standard digested along with this set must be within 3 standard deviations of its known or the whole set is re-assayed. If any of the assays are >1% they are re-assayed at a lower weight.

OFFICE AND LABORATORIES:
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TELEX: VIA USA 7604047

COMP: INTERNATIONAL KODIAK
PROJ: UNUK
ATTN: GEORGE NICHOLSON

# MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 0S-0216-RJ1+2
DATE: 90/08/07
* ROCK * (ACT:F31)

| SAMPLE NUMBER | AG PPM | AL PPM | AS PPM | B PPM | BA PPM | BE PPM | BI PPM | CA PPM | CD PPM | CO PPM | CU PPM | FE PPM | K PPM | LI PPM | MG PPM | MN PPM | MO PPM | NA PPM | NI PPM | P PPM | PB PPM | SB PPM | SR PPM | TH PPM | U PPM | V PPM | ZN PPM | GA PPM | SN PPM | W PPM | CR PPM | AU PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E-LG-R 153 | .3 | 20240 | 14 | 4 | 75 | .1 | 1 | 2980 | .1 | 20 | 61 | 61530 | 310 | 7 | 15780 | 1054 | 1 | 1100 | 1 | 740 | 49 | 1 | 2 | 1 | 1 | 173.7 | 99 | 1 | 1 | 1 | 6 | 5 |
| E-LG-R 154 | .6 | 20250 | 1 | 5 | 399 | .1 | 1 | 21340 | .1 | 22 | 25 | 51810 | 4410 | 10 | 20280 | 1427 | 1 | 1180 | 1 | 740 | 11 | 1 | 11 | 1 | 1 | 135.6 | 68 | 1 | 1 | 1 | 27 | 10 |
| E-LG-R 155 | 1.1 | 15970 | 170 | 3 | 237 | .1 | 1 | 19460 | .1 | 29 | 112 | 58610 | 2970 | 7 | 13460 | 823 | 1 | 140 | 4 | 660 | 11 | 1 | 1 | 1 | 1 | 113.6 | 49 | 1 | 1 | 2 | 61 | 10 |
| E-LG-R 156 | .7 | 13090 | 2715 | 2 | 267 | .1 | 3 | 11840 | 6.6 | 12 | 270 | 32540 | 4810 | 4 | 5610 | 337 | 1 | 270 | 1 | 350 | 9 | 1 | 2 | 1 | 1 | 44.5 | 12 | 1 | 1 | 2 | 68 | 160 |
| E-LG-R 157 | .1 | 29440 | 1 | 9 | 21 | .1 | 1 | 15550 | .1 | 85 | 122 | 152280 | 410 | 5 | 11580 | 1190 | 1 | 40 | 1 | 530 | 2 | 1 | 179 | 1 | 1 | 669.8 | 43 | 1 | 1 | 3 | 1 | 25 |
| E-LG-R 158 | 2.3 | 39490 | 20 | 7 | 16 | .8 | 5 | 34910 | .1 | 25 | 213 | 62370 | 760 | 5 | 8110 | 709 | 1 | 430 | 1 | 2210 | 10 | 1 | 2 | 1 | 1 | 158.3 | 27 | 1 | 1 | 1 | 6 | 10 |
| E-LD-R 159 | 1.4 | 48200 | 1 | 3 | 101 | .1 | 5 | 23660 | .1 | 17 | 43 | 38190 | 1760 | 12 | 9250 | 531 | 1 | 3750 | 1 | 850 | 11 | 1 | 35 | 1 | 1 | 111.8 | 67 | 1 | 1 | 3 | 65 | 5 |
| E-LG-R 160 | 2.0 | 25080 | 1 | 3 | 122 | .1 | 6 | 17090 | .1 | 20 | 74 | 52880 | 1360 | 9 | 12700 | 1049 | 1 | 2540 | 1 | 1630 | 7 | 1 | 16 | 1 | 1 | 183.1 | 56 | 1 | 1 | 1 | 5 | 5 |
| E-LG-R 161 | 1.5 | 18860 | 1 | 1 | 104 | .1 | 5 | 6730 | .1 | 13 | 59 | 42840 | 3980 | 15 | 12340 | 673 | 1 | 870 | 1 | 680 | 4 | 1 | 4 | 1 | 1 | 103.1 | 35 | 1 | 1 | 2 | 50 | 10 |
| E-LG-R 162 | .7 | 14860 | 1 | 1 | 62 | .1 | 2 | 11840 | .1 | 10 | 274 | 26330 | 1040 | 3 | 6050 | 495 | 1 | 730 | 1 | 1110 | 8 | 1 | 133 | 1 | 1 | 54.8 | 17 | 1 | 1 | 1 | 54 | 5 |
| E-LG-R 163 | 1.8 | 19150 | 1 | 2 | 32 | .1 | 7 | 11480 | .1 | 25 | 75 | 51090 | 1480 | 10 | 12810 | 852 | 1 | 1560 | 1 | 980 | 3 | 1 | 3 | 1 | 1 | 179.4 | 70 | 1 | 1 | 2 | 24 | 5 |
| E-LG-R 164 | 1.6 | 28070 | 1 | 3 | 110 | .1 | 6 | 7760 | .1 | 22 | 167 | 57640 | 4730 | 13 | 20810 | 599 | 1 | 920 | 1 | 470 | 2 | 1 | 4 | 1 | 1 | 163.1 | 36 | 1 | 1 | 2 | 35 | 460 |
| E-MM-R 158 | 1.1 | 15650 | 1 | 1 | 125 | .1 | 4 | 7170 | .1 | 17 | 68 | 37680 | 710 | 9 | 14780 | 338 | 1 | 1160 | 1 | 880 | 2 | 1 | 7 | 1 | 1 | 108.1 | 27 | 1 | 1 | 1 | 26 | 5 |
| E-MM-R 159 | 1.2 | 10710 | 1 | 1 | 44 | .1 | 4 | 9940 | .1 | 11 | 31 | 26700 | 750 | 4 | 9180 | 293 | 1 | 1870 | 1 | 890 | 21 | 1 | 9 | 1 | 1 | 72.3 | 57 | 1 | 1 | 2 | 43 | 10 |
| E-MM-R 160 | 1.7 | 15750 | 1 | 2 | 31 | .1 | 5 | 16830 | .1 | 20 | 232 | 39660 | 1310 | 7 | 5680 | 332 | 1 | 1010 | 1 | 1940 | 9 | 1 | 13 | 1 | 1 | 91.5 | 25 | 1 | 1 | 1 | 28 | 5 |
| E-MM-R 161 | 1.7 | 16630 | 1 | 2 | 39 | .1 | 5 | 13530 | .1 | 25 | 255 | 51740 | 1230 | 11 | 9910 | 605 | 1 | 1070 | 1 | 1820 | 8 | 1 | 13 | 1 | 1 | 113.8 | 27 | 1 | 1 | 1 | 14 | 5 |
| E-MM-R 162 | 1.3 | 10660 | 1 | 2 | 24 | .1 | 4 | 12510 | .1 | 23 | 293 | 54920 | 1550 | 2 | 2810 | 206 | 2 | 760 | 1 | 2190 | 3 | 1 | 33 | 1 | 1 | 155.7 | 15 | 1 | 1 | 2 | 39 | 70 |
| E-MM-R 163 | .9 | 5580 | 1 | 1 | 30 | .1 | 3 | 9170 | .1 | 5 | 54 | 25610 | 830 | 1 | 1020 | 66 | 63 | 1050 | 1 | 2610 | 6 | 1 | 15 | 1 | 1 | 56.7 | 1 | 1 | 1 | 1 | 15 | 380 |
| E-MM-R 164 | 1.3 | 9520 | 1 | 1 | 27 | .1 | 4 | 13670 | .1 | 18 | 245 | 42190 | 870 | 5 | 2340 | 320 | 1 | 990 | 1 | 3420 | 3 | 1 | 20 | 1 | 1 | 62.7 | 22 | 1 | 1 | 1 | 16 | 70 |
| E-MM-R 165 | 1.0 | 18690 | 1 | 2 | 49 | .1 | 4 | 12930 | .1 | 17 | 122 | 34270 | 1400 | 7 | 10640 | 258 | 11 | 1460 | 1 | 1300 | 10 | 1 | 13 | 1 | 1 | 144.8 | 32 | 1 | 1 | 2 | 38 | 5 |
| E-MM-R 166 | 2.2 | 13560 | 1 | 1 | 31 | .1 | 3 | 15630 | .1 | 19 | 2192 | 32420 | 1510 | 4 | 3280 | 118 | 1 | 930 | 1 | 2040 | 5 | 1 | 10 | 1 | 1 | 80.9 | 22 | 1 | 1 | 1 | 22 | 40 |
| E-MM-R 167 | 5.0 | 24810 | 1 | 7 | 253 | .1 | 7 | 3330 | .1 | 60 | 5447 | 118940 | 2410 | 5 | 7160 | 329 | 6 | 80 | 1 | 970 | 2 | 1 | 12 | 1 | 1 | 65.1 | 26 | 1 | 1 | 1 | 1 | 220 |
| E-MM-R 168 | 1.7 | 34630 | 1 | 3 | 12 | .1 | 5 | 25180 | .1 | 12 | 202 | 36980 | 330 | 6 | 10950 | 873 | 1 | 650 | 1 | 880 | 2 | 1 | 1 | 1 | 1 | 108.2 | 466 | 1 | 1 | 2 | 37 | 5 |
| E-MM-R 169 | 2.3 | 6190 | 33 | 2 | 274 | .1 | 3 | 107350 | .1 | 12 | 97 | 24980 | 1670 | 2 | 13360 | 1689 | 1 | 100 | 2 | 380 | 36 | 4 | 440 | 1 | 2 | 25.0 | 37 | 2 | 1 | 1 | 5 | 10 |
| E-MM-R 170 | 3.0 | 4940 | 60 | 1 | 36 | .1 | 4 | 122600 | .1 | 4 | 70 | 9960 | 580 | 2 | 2420 | 660 | 1 | 70 | 4 | 470 | 29 | 7 | 1 | 1 | 1 | 18.6 | 24 | 2 | 1 | 1 | 14 | 5 |
| E-GM-R 009 | 1.9 | 24370 | 1 | 4 | 121 | .2 | 4 | 72600 | .1 | 13 | 28 | 31330 | 2870 | 12 | 10200 | 1151 | 1 | 240 | 1 | 960 | 13 | 1 | 78 | 1 | 1 | 74.5 | 60 | 2 | 1 | 1 | 12 | 5 |
| E-GM-R 010 | 1.5 | 19790 | 1 | 3 | 82 | .1 | 4 | 15440 | .1 | 14 | 97 | 56930 | 2870 | 6 | 11700 | 372 | 15 | 600 | 1 | 1020 | 14 | 1 | 47 | 1 | 1 | 102.4 | 14 | 1 | 1 | 1 | 3 | 10 |
| E-GM-R 011 | 2.6 | 700 | 69 | 1 | 9 | .1 | 3 | 185530 | .1 | 2 | 8 | 4730 | 190 | 1 | 1120 | 210 | 1 | 40 | 2 | 180 | 23 | 8 | 1 | 1 | 1 | 8.5 | 4 | 3 | 1 | 1 | 15 | 5 |
| E-GM-R 012 | 1.7 | 4540 | 1 | 4 | 3 | .1 | 1 | 14150 | .1 | 70 | 410 | 111010 | 90 | 1 | 790 | 390 | 1 | 30 | 1 | 410 | 11 | 1 | 15 | 1 | 1 | 46.1 | 1 | 1 | 1 | 1 | 4 | 5 |
| E-GM-R 013 | .4 | 25520 | 1 | 4 | 34 | .1 | 1 | 8940 | .1 | 19 | 98 | 55960 | 2730 | 10 | 19880 | 615 | 1 | 290 | 1 | 1940 | 7 | 1 | 8 | 1 | 1 | 106.7 | 39 | 1 | 1 | 1 | 5 | 10 |
| E-GM-R 014 | 3.3 | 35420 | 1 | 6 | 91 | .1 | 8 | 17290 | .1 | 31 | 228 | 51630 | 1440 | 29 | 34110 | 711 | 1 | 2540 | 92 | 1330 | 2 | 1 | 44 | 1 | 1 | 136.0 | 73 | 1 | 1 | 1 | 72 | 10 |
| E-GM-R 015 | 2.6 | 20470 | 1 | 5 | 62 | .1 | 5 | 14900 | .1 | 25 | 268 | 42900 | 1400 | 12 | 14200 | 477 | 1 | 1000 | 5 | 2670 | 31 | 1 | 13 | 1 | 1 | 126.0 | 50 | 1 | 1 | 1 | 28 | 5 |
| E-GM-R 016 | 2.9 | 21020 | 1 | 5 | 49 | .1 | 8 | 14560 | .1 | 32 | 540 | 68590 | 1330 | 10 | 20130 | 725 | 1 | 1310 | 1 | 2270 | 6 | 1 | 15 | 1 | 1 | 193.9 | 52 | 1 | 1 | 1 | 3 | 25 |
| E-GM-R 017 | 2.6 | 30730 | 1 | 4 | 34 | .1 | 6 | 30390 | .1 | 16 | 188 | 36750 | 930 | 6 | 7460 | 270 | 1 | 730 | 1 | 2330 | 6 | 1 | 8 | 1 | 1 | 121.3 | 34 | 3 | 1 | 1 | 45 | 10 |
| E-GM-R 019 | .7 | 27250 | 1 | 4 | 145 | .1 | 2 | 7430 | .1 | 15 | 21 | 46870 | 2620 | 12 | 24200 | 630 | 1 | 770 | 1 | 940 | 6 | 1 | 7 | 1 | 1 | 93.6 | 35 | 1 | 1 | 1 | 40 | 5 |
| [redacted] | 3.5 | 50160 | 1 | 11 | 13 | .1 | 10 | 59630 | .1 | 31 | 42 | 54050 | 150 | 6 | 17780 | 557 | 1 | 770 | 30 | 850 | 2 | 1 | 1 | 1 | 1 | 140.0 | 53 | 5 | 1 | 1 | 72 | 5 |
| | 3.1 | 52140 | 1 | 8 | 9 | .1 | 9 | 56740 | .1 | 26 | 36 | 41780 | 130 | 5 | 14900 | 469 | 1 | 100 | 43 | 700 | 2 | 1 | 1 | 1 | 1 | 90.0 | 45 | 5 | 1 | 1 | 99 | 5 |
| | 4.3 | 25190 | 1 | 5 | 208 | .1 | 10 | 75300 | .1 | 34 | 38 | 57800 | 780 | 12 | 27890 | 1062 | 1 | 300 | 40 | 610 | 2 | 1 | 1 | 1 | 1 | 175.7 | 127 | 1 | 1 | 2 | 118 | 10 |
| | 4.1 | 48670 | 1 | 10 | 11 | .1 | 12 | 33330 | .1 | 40 | 39 | 100300 | 150 | 11 | 23810 | 478 | 9 | 180 | 45 | 490 | 2 | 1 | 1 | 1 | 1 | 208.7 | 55 | 1 | 1 | 1 | 43 | 10 |
| [redacted] | 2.4 | 12200 | 1 | 3 | 36 | .1 | 6 | 16520 | .1 | 24 | 186 | 37550 | 760 | 10 | 11230 | 249 | 1 | 1360 | 1 | 3190 | 11 | 1 | 16 | 1 | 1 | 108.5 | 32 | 2 | 1 | 1 | 14 | 10 |
| E-CC-R 147 | 2.2 | 11580 | 1 | 5 | 21 | .1 | 3 | 14050 | .1 | 67 | 680 | 83960 | 940 | 8 | 4270 | 162 | 1 | 1280 | 5 | 2760 | 5 | 1 | 13 | 1 | 1 | 62.4 | 9 | 1 | 1 | 1 | 1 | 20 |
| E-CC-R 148 | 2.4 | 19500 | 1 | 4 | 40 | .1 | 6 | 20710 | .1 | 26 | 283 | 42980 | 2080 | 6 | 7750 | 393 | 4 | 1340 | 1 | 1880 | 5 | 1 | 34 | 1 | 1 | 107.6 | 22 | 3 | 1 | 1 | 17 | 5 |
| E-CC-R 149 | 2.2 | 7600 | 10 | 5 | 1027 | .1 | 1 | 31860 | .1 | 9 | 1798 | 33040 | 3840 | 3 | 5150 | 525 | 1 | 130 | 1 | 530 | 309 | 1 | 21 | 1 | 1 | 31.6 | 131 | 3 | 1 | 1 | 93 | 50 |
| E-CC-R 150 | 1.2 | 14710 | 1 | 5 | 292 | .1 | 1 | 65630 | .1 | 16 | 75 | 58120 | 3770 | 11 | 12770 | 998 | 1 | 80 | 1 | 620 | 14 | 1 | 7 | 1 | 1 | 55.2 | 43 | 2 | 1 | 1 | 5 | 20 |
| E-CC-R 151 | 3.4 | 6330 | 17 | 4 | 503 | .2 | 1 | 12100 | 73.6 | 7 | 438 | 18260 | 4070 | 1 | 1250 | 159 | 3 | 70 | 1 | 870 | 2509 | 3 | 5 | 1 | 1 | 15.9 | 1791 | 1 | 1 | 1 | 62 | 15 |
| E-CC-R 152 | 16.8 | 5160 | 1041 | 6 | 885 | .1 | 1 | 28480 | 17.8 | 19 | 2861 | 45080 | 2990 | 1 | 5120 | 975 | 2 | 40 | 1 | 250 | 154 | 275 | 230 | 1 | 1 | 16.4 | 396 | 1 | 1 | 1 | 20 | 190 |
| E-CC-R 153 | 2.6 | 33480 | 1 | 5 | 803 | .1 | 6 | 19220 | .1 | 19 | 193 | 43050 | 2270 | 10 | 3180 | 627 | 1 | 3590 | 1 | 590 | 38 | 1 | 50 | 1 | 1 | 78.6 | 60 | 1 | 1 | 1 | 117 | 5 |
| E-CC-R 155 | 4.6 | 4280 | 1 | 8 | 279 | .1 | 1 | 18880 | .1 | 73 | 3072 | 126580 | 320 | 2 | 10030 | 241 | 22 | 220 | 1 | 10 | 11 | 1 | 1 | 1 | 1 | 126.2 | 19 | 1 | 1 | 1 | 1 | 1850 |
| E-CC-R 156 | 2.1 | 8010 | 1 | 7 | 229 | .1 | 1 | 74550 | .1 | 26 | 1024 | 96990 | 160 | 2 | 4470 | 1029 | 63 | 100 | 1 | 180 | 16 | 3 | 1 | 1 | 1 | 88.7 | 36 | 5 | 1 | 10 | 12 | 170 |
| E-CC-R 157 | .3 | 18440 | 1 | 9 | 107 | .1 | 1 | 13950 | .1 | 71 | 41 | 154590 | 3240 | 7 | 14790 | 311 | 1 | 230 | 1 | 470 | 2 | 1 | 7 | 1 | 1 | 148.2 | 4 | 1 | 1 | 3 | 1 | 10 |
| E-CC-R 158 | 2.3 | 41940 | 1 | 3 | 58 | .1 | 5 | 62290 | .1 | 22 | 92 | 21990 | 260 | 1 | 1700 | 180 | 1 | 90 | 27 | 1330 | 2 | 1 | 1 | 1 | 1 | 75.2 | 3 | 2 | 1 | 1 | 77 | 10 |
| E-CC-R 159 | 1.4 | 13860 | 24 | 1 | 99 | .1 | 3 | 11740 | .1 | 7 | 34 | 20840 | 370 | 8 | 5420 | 339 | 3 | 740 | 26 | 240 | 16 | 1 | 1 | 1 | 1 | 54.9 | 95 | 3 | 1 | 2 | 180 | 5 |
| E-CC-R 160 | .4 | 19620 | 1 | 4 | 128 | .2 | 1 | 5480 | .1 | 13 | 17 | 51280 | 2680 | 7 | 13420 | 355 | 1 | 820 | 1 | 600 | 9 | 1 | 1 | 1 | 1 | 71.7 | 24 | 3 | 1 | 1 | 42 | 10 |
| E-CC-R 161 | .5 | 19220 | 66 | 23 | 83 | .1 | 1 | 4010 | .1 | 17 | 18 | 62270 | 3380 | 8 | 12620 | 373 | 1 | 180 | 1 | 420 | 16 | 1 | 1 | 1 | 1 | 36.1 | 53 | 2 | 1 | 1 | 62 | 980 |
| E-CC-R 162 | 2.3 | 4430 | 28 | 2 | 470 | .1 | 1 | 4620 | 51.8 | 5 | 509 | 16770 | 3010 | 1 | 1060 | 91 | 7 | 180 | 1 | 430 | 4296 | 5 | 6 | 1 | 1 | 13.9 | 1367 | 1 | 1 | 2 | 166 | 750 |
| | 6.9 | 8670 | 47 | 8 | 258 | .4 | 1 | 1400 | .1 | 3 | 28 | 16950 | 3730 | 2 | 870 | 62 | 16 | 320 | 1 | 740 | 91 | 10 | 4 | 1 | 1 | 173.5 | 143 | 2 | 1 | 1 | 65 | 5 |

Comp: INTERNATIONAL KODIAK
PROJ: UNUK
ATTN: G.NICHOLSON

# MIN-EN LAB — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 0S-0153-RJ3
DATE: 90/07/24
* ROCK * (ACT:F31)

| SAMPLE NUMBER | AG PPM | AL PPM | AS PPM | B PPM | BA PPM | BE PPM | BI PPM | CA PPM | CD PPM | CO PPM | CU PPM | FE PPM | K PPM | LI PPM | MG PPM | MN PPM | MO PPM | NA PPM | NI PPM | P PPM | PB PPM | SB PPM | SR PPM | TH PPM | U PPM | V PPM | ZN PPM | GA PPM | SN PPM | W PPM | CR PPM | AU PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [redacted] | .2 | 7640 | 20 | 1 | 149 | .2 | 1 | 6040 | .1 | 3 | 37 | 7600 | 1540 | 1 | 1630 | 110 | 1 | 620 | 11 | 60 | 21 | 1 | 11 | 2 | 1 | 4.9 | 12 | 1 | 1 | 7 | 183 | 5 |
| | 1.2 | 34550 | 1 | 1 | 1484 | .3 | 8 | 7470 | .1 | 17 | 227 | 65800 | 470 | 7 | 21910 | 1033 | 1 | 440 | 16 | 870 | 29 | 1 | 20 | 1 | 1 | 120.0 | 50 | 2 | 1 | 3 | 62 | 5 |
| | 4.6 | 25840 | 1 | 1 | 67 | .1 | 15 | 19770 | .7 | 40 | 1297 | 89030 | 190 | 5 | 14450 | 815 | 1 | 80 | 6 | 610 | 27 | 1 | 58 | 1 | 1 | 133.3 | 849 | 1 | 1 | 3 | 49 | 5 |
| | 3.5 | 26550 | 1 | 1 | 60 | .1 | 8 | 19440 | 90.6 | 23 | 1774 | 41720 | 390 | 4 | 12250 | 679 | 1 | 300 | 6 | 900 | 36 | 3 | 31 | 1 | 1 | 73.3 | 8076 | 2 | 1 | 1 | 56 | 5 |
| | 2.9 | 26600 | 1 | 7 | 15 | .1 | 9 | 22930 | 378.0 | 100 | 1209 | 156000 | 160 | 9 | 9180 | 557 | 2 | 170 | 31 | 660 | 43 | 5 | 29 | 1 | 1 | 135.8 | 38353 | 1 | 1 | 1 | 1 | 10 |
| | .3 | 6670 | 14 | 1 | 12 | .1 | 3 | 8860 | 1.2 | 11 | 85 | 19040 | 220 | 2 | 5320 | 223 | 1 | 160 | 19 | 100 | 26 | 1 | 1 | 1 | 1 | 48.9 | 308 | 1 | 1 | 7 | 182 | 5 |
| | 7.9 | 38560 | 1 | 1 | 152 | .1 | 16 | 10610 | .1 | 63 | 4265 | 110260 | 9530 | 7 | 30780 | 506 | 1 | 1390 | 40 | 660 | 28 | 1 | 11 | 1 | 1 | 282.4 | 352 | 1 | 1 | 6 | 83 | 60 |
| | 2.4 | 36760 | 1 | 1 | 6 | .1 | 11 | 15710 | 1.7 | 35 | 367 | 78520 | 150 | 7 | 29720 | 1354 | 1 | 120 | 64 | 390 | 30 | 1 | 32 | 1 | 1 | 172.6 | 891 | 1 | 1 | 9 | 187 | 5 |
| | 1.5 | 15350 | 1 | 1 | 266 | .1 | 7 | 12580 | .1 | 20 | 126 | 33900 | 620 | 3 | 8940 | 325 | 1 | 990 | 9 | 1220 | 22 | 1 | 30 | 1 | 1 | 80.2 | 43 | 1 | 1 | 2 | 38 | 5 |
| E RM R 191 | 2.0 | 22840 | 1 | 1 | 78 | .1 | 9 | 7940 | .1 | 18 | 50 | 54660 | 1570 | 16 | 18080 | 905 | 1 | 860 | 1 | 1280 | 39 | 1 | 5 | 1 | 1 | 112.0 | 102 | 2 | 1 | 2 | 46 | 10 |
| E RM R 194 | .7 | 12350 | 10 | 1 | 68 | .2 | 4 | 2890 | .1 | 5 | 23 | 27840 | 2850 | 8 | 7930 | 500 | 2 | 850 | 1 | 330 | 31 | 1 | 4 | 1 | 1 | 4.8 | 65 | 2 | 1 | 3 | 79 | 5 |
| E RM T 192 | 2.4 | 26420 | 1 | 1 | 261 | .1 | 11 | 6130 | .1 | 18 | 43 | 61420 | 5950 | 18 | 19450 | 779 | 1 | 1040 | 1 | 1010 | 33 | 1 | 5 | 1 | 1 | 200.2 | 53 | 2 | 1 | 2 | 18 | 5 |
| E RM T 193 | 1.9 | 26050 | 1 | 1 | 665 | .1 | 8 | 7190 | .1 | 13 | 42 | 47530 | 8180 | 13 | 18160 | 699 | 1 | 1950 | 9 | 990 | 28 | 1 | 12 | 1 | 1 | 61.3 | 54 | 2 | 1 | 3 | 60 | 5 |
| E RM T 195 | 1.0 | 11720 | 1 | 1 | 62 | .2 | 5 | 3360 | .1 | 7 | 53 | 33950 | 2480 | 7 | 6580 | 718 | 1 | 950 | 1 | 490 | 29 | 1 | 3 | 1 | 1 | 5.5 | 52 | 1 | 1 | 3 | 87 | 35 |
| E MM T 101 | .3 | 6680 | 18 | 1 | 1104 | .2 | 2 | 11350 | .1 | 10 | 1125 | 13310 | 2560 | 1 | 2530 | 351 | 5 | 220 | 5 | 310 | 25 | 1 | 25 | 1 | 1 | 16.0 | 9 | 1 | 1 | 4 | 124 | 400 |
| E MM R 96 | 1.8 | 11260 | 1 | 1 | 74 | .1 | 4 | 11430 | .1 | 11 | 2069 | 25570 | 1730 | 5 | 5860 | 469 | 1 | 540 | 32 | 1160 | 33 | 1 | 28 | 1 | 1 | 75.6 | 101 | 1 | 1 | 1 | 23 | 30 |
| E MM R 97 | 76.5 | 7480 | 1 | 6 | 35 | .1 | 12 | 1450 | .5 | 175 | 53798 | 194310 | 1520 | 6 | 2030 | 76 | 4 | 60 | 1 | 150 | 67 | 47 | 5 | 1 | 1 | 16.3 | 697 | 1 | 1 | 2 | 10 | 2900 |
| E MM R 98 | 1.4 | 12890 | 12 | 1 | 173 | .3 | 3 | 8690 | .1 | 8 | 900 | 25000 | 2270 | 8 | 7460 | 557 | 2 | 590 | 1 | 820 | 28 | 1 | 13 | 1 | 1 | 69.0 | 28 | 1 | 1 | 3 | 80 | 5 |
| E MM R 99 | 1.4 | 10550 | 18 | 2 | 762 | .4 | 4 | 67110 | .1 | 8 | 235 | 28550 | 3430 | 4 | 16800 | 5751 | 4 | 190 | 11 | 790 | 54 | 6 | 16 | 1 | 1 | 35.7 | 9 | 2 | 1 | 1 | 13 | 5 |
| E MM R 100 | 1.5 | 26790 | 1 | 2 | 84 | .6 | 5 | 34390 | .1 | 9 | 31 | 27530 | 750 | 4 | 5490 | 836 | 1 | 530 | 1 | 1110 | 28 | 1 | 445 | 1 | 1 | 102.4 | 25 | 2 | 1 | 2 | 44 | 5 |
| E MM R 102 | 1.9 | 18630 | 1 | 1 | 66 | .1 | 6 | 10180 | .1 | 14 | 135 | 35950 | 1440 | 10 | 11450 | 395 | 1 | 1300 | 1 | 620 | 26 | 1 | 20 | 1 | 1 | 120.2 | 37 | 1 | 1 | 2 | 41 | 5 |
| E MM R 103 | 1.6 | 14330 | 1 | 1 | 131 | .1 | 7 | 6740 | .1 | 14 | 39 | 30980 | 2430 | 6 | 10850 | 303 | 1 | 1050 | 3 | 510 | 31 | 1 | 11 | 1 | 1 | 125.6 | 66 | 1 | 1 | 2 | 37 | 5 |
| E MM R 104 | 1.6 | 18100 | 1 | 1 | 44 | .1 | 6 | 12960 | .1 | 14 | 138 | 28220 | 1200 | 5 | 7610 | 243 | 2 | 1820 | 5 | 1430 | 26 | 1 | 26 | 1 | 1 | 98.8 | 18 | 1 | 1 | 2 | 35 | 5 |
| E MM R 105 | 1.5 | 18120 | 1 | 1 | 111 | .1 | 6 | 7760 | .1 | 14 | 114 | 34990 | 2880 | 7 | 11730 | 254 | 1 | 1500 | 1 | 510 | 24 | 1 | 16 | 1 | 1 | 145.4 | 24 | 1 | 1 | 2 | 28 | 10 |
| D BC R 062 | 28.2 | 21920 | 1 | 1 | 499 | .1 | 13 | 5230 | .1 | 19 | 21542 | 64140 | 750 | 6 | 16100 | 1305 | 1 | 250 | 18 | 450 | 52 | 21 | 32 | 1 | 1 | 84.8 | 164 | 1 | 1 | 3 | 31 | 25 |
| E GB R 029 | 1.8 | 18270 | 1 | 1 | 146 | .1 | 7 | 7390 | .1 | 17 | 107 | 42740 | 1770 | 12 | 16320 | 577 | 1 | 900 | 1 | 910 | 29 | 1 | 5 | 1 | 1 | 112.3 | 87 | 1 | 1 | 1 | 12 | 5 |
| E GB R 030 | 2.2 | 28300 | 1 | 1 | 284 | .1 | 8 | 5080 | .1 | 19 | 282 | 62850 | 3520 | 11 | 23500 | 608 | 1 | 420 | 1 | 730 | 23 | 1 | 3 | 1 | 1 | 99.0 | 71 | 1 | 1 | 1 | 1 | 5 |
| E GB R 031 | .4 | 9130 | 19 | 1 | 30 | .2 | 3 | 2210 | .1 | 4 | 33 | 21880 | 1130 | 7 | 5530 | 364 | 1 | 520 | 1 | 250 | 28 | 1 | 2 | 1 | 1 | 2.8 | 22 | 1 | 1 | 3 | 88 | 15 |
| E GB R 032 | .1 | 8580 | 14 | 1 | 50 | .3 | 2 | 850 | .1 | 3 | 23 | 17750 | 1610 | 6 | 5760 | 296 | 2 | 540 | 2 | 190 | 25 | 1 | 3 | 1 | 1 | 5.2 | 19 | 1 | 1 | 3 | 106 | 5 |
| H TT R 069 | .6 | 1920 | 20 | 1 | 30 | .1 | 1 | 44710 | .1 | 2 | 9 | 5400 | 330 | 4 | 1940 | 802 | 1 | 80 | 9 | 90 | 25 | 1 | 786 | 1 | 1 | 5.8 | 7 | 1 | 1 | 2 | 80 | 5 |

(19)

JUL 24 '90 13:01 MIN-EN LABS VANC. 449 P03

MP: INTERNATIONAL KODIAK
OJ: UNUK
TN: G.NICHOLSON

# MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: OV-1032-RJ3
DATE: 90/08/06
* ROCK * (ACT:F31)

| SAMPLE NUMBER | AG PPM | AL PPM | AS PPM | B PPM | BA PPM | BE PPM | BI PPM | CA PPM | CD PPM | CO PPM | CU PPM | FE PPM | K PPM | LI PPM | MG PPM | MN PPM | MO PPM | NA PPM | NI PPM | P PPM | PB PPM | SB PPM | SR PPM | TH PPM | U PPM | V PPM | ZN PPM | GA PPM | SN PPM | W PPM | CR PPM | AU PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E-CC-R-132 | 17.5 | 6760 | 5 | 4 | 325 | .1 | 1 | 9410 | .1 | 14 | 48889 | 55600 | 800 | 3 | 4670 | 536 | 16 | 70 | 1 | 30 | 70 | 45 | 15 | 1 | 1 | 25.3 | 51 | 1 | 1 | 9 | 106 | 1850 |
| E-CC-R-133 | 5.1 | 17320 | 1 | 3 | 428 | .1 | 1 | 14470 | .1 | 12 | 12475 | 36400 | 1830 | 5 | 7450 | 370 | 4 | 390 | 1 | 1140 | 20 | 1 | 62 | 1 | 1 | 79.9 | 27 | 2 | 1 | 3 | 55 | 235 |
| E-CC-R-134 | 2.8 | 29600 | 1 | 5 | 152 | .1 | 1 | 21460 | .1 | 19 | 10836 | 37330 | 850 | 5 | 10250 | 848 | 1 | 630 | 1 | 1720 | 21 | 1 | 165 | 1 | 1 | 107.5 | 47 | 4 | 1 | 3 | 52 | 15 |
| E-CC-R-140 | 2.3 | 24820 | 1 | 4 | 47 | .1 | 6 | 12910 | .1 | 23 | 204 | 55680 | 750 | 18 | 26120 | 1634 | 1 | 830 | 1 | 510 | 10 | 1 | 5 | 1 | 1 | 174.3 | 113 | 1 | 1 | 1 | 19 | 5 |
| E-CC-R-141 | 7.1 | 7910 | 4 | 5 | 238 | .1 | 1 | 14720 | .1 | 30 | 25146 | 63680 | 2610 | 2 | 2240 | 438 | 12 | 160 | 1 | 780 | 29 | 18 | 5 | 1 | 1 | 19.5 | 15 | 1 | 1 | 3 | 58 | 750 |
| E-CC-R-142 | 3.2 | 18930 | 1 | 7 | 54 | .1 | 10 | 60770 | .1 | 18 | 1039 | 92610 | 800 | 1 | 770 | 1179 | 1 | 70 | 1 | 8430 | 8 | 1 | 128 | 1 | 1 | 128.3 | 1 | 1 | 1 | 4 | 37 | 25 |
| E-CC-R-143 | 1.7 | 13740 | 1 | 3 | 56 | .1 | 4 | 17480 | .1 | 27 | 469 | 47160 | 1070 | 2 | 1560 | 123 | 1 | 620 | 1 | 1460 | 8 | 1 | 24 | 1 | 1 | 84.5 | 5 | 1 | 1 | 1 | 32 | 40 |
| E-CC-R-144 | 3.1 | 61040 | 12 | 7 | 37 | .4 | 8 | 66390 | .1 | 17 | 216 | 51510 | 200 | 4 | 5110 | 440 | 6 | 130 | 1 | 1660 | 8 | 1 | 1 | 1 | 1 | 172.7 | 3 | 5 | 1 | 2 | 49 | 50 |
| E-CC-R-145 | 3.1 | 41410 | 1 | 6 | 40 | .1 | 8 | 33820 | 18.5 | 25 | 191 | 49300 | 740 | 10 | 13040 | 674 | 1 | 490 | 1 | 1530 | 923 | 1 | 1 | 1 | 1 | 158.5 | 555 | 5 | 1 | 1 | 23 | 35 |

AUG 14 '90 15:29 MIN-EN LABS VANC. 909 P08

COMP: INTERNATIONAL KODIAK
PROJ: UNUK
ATTN: G.NICHOLSON

# MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: OV-1032-RJ1+2
DATE: 90/08/06
• ROCK • (ACT:F31)

| SAMPLE NUMBER | AG PPM | AL PPM | AS PPM | B PPM | BA PPM | BE PPM | BI PPM | CA PPM | CD PPM | CO PPM | CU PPM | FE PPM | K PPM | LI PPM | MG PPM | MN PPM | MO PPM | NA PPM | NI PPM | P PPM | PB PPM | SB PPM | SR PPM | TH PPM | U PPM | V PPM | ZN PPM | GA PPM | SN PPM | W PPM | CR PPM | AU PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [redacted] | 3.0 | 12440 | 1 | 3 | 38 | .1 | 6 | 11310 | .1 | 40 | 34 | 40490 | 370 | 4 | 13010 | 426 | 1 | 620 | 32 | 1590 | 7 | 1 | 25 | 1 | 1 | 59.1 | 44 | 1 | 1 | 1 | 27 | 5 |
| | 1.6 | 14570 | 1 | 5 | 770 | .1 | 4 | 16840 | .1 | 12 | 86 | 38970 | 1640 | 4 | 13290 | 1957 | 1 | 480 | 1 | 940 | 15 | 1 | 24 | 1 | 1 | 60.8 | 108 | 2 | 1 | 1 | 11 | 10 |
| | 1.2 | 7870 | 1 | 3 | 611 | .1 | 3 | 2040 | .1 | 9 | 64 | 52700 | 940 | 1 | 3540 | 194 | 4 | 690 | 1 | 370 | 17 | 1 | 20 | 1 | 1 | 58.8 | 24 | 1 | 1 | 1 | 1 | 5 |
| | 2.3 | 22700 | 1 | 4 | 137 | .1 | 8 | 8720 | .1 | 20 | 12 | 50480 | 660 | 4 | 15090 | 1559 | 1 | 670 | 1 | 950 | 7 | 1 | 12 | 1 | 1 | 112.5 | 87 | 2 | 1 | 1 | 11 | 5 |
| | 2.3 | 22980 | 1 | 3 | 136 | .1 | 8 | 8520 | .1 | 13 | 32 | 36440 | 2680 | 4 | 13960 | 486 | 1 | 400 | 9 | 1320 | 7 | 1 | 3 | 1 | 1 | 71.5 | 26 | 1 | 1 | 1 | 20 | 10 |
| | 1.1 | 11770 | 1 | 3 | 180 | .1 | 5 | 2660 | .1 | 10 | 10 | 41230 | 2490 | 2 | 6530 | 232 | 1 | 600 | 1 | 440 | 17 | 1 | 11 | 1 | 1 | 51.5 | 14 | 1 | 1 | 1 | 5 | 5 |
| | .8 | 6120 | 1 | 6 | 57 | .1 | 3 | 5930 | .1 | 24 | 17 | 89820 | 790 | 1 | 2570 | 53 | 1 | 840 | 1 | 310 | 12 | 1 | 27 | 1 | 1 | 46.4 | 14 | 1 | 1 | 1 | 1 | 5 |
| | .3 | 6250 | 1 | 3 | 109 | .1 | 2 | 460 | .1 | 17 | 23 | 50130 | 3150 | 1 | 1270 | 1 | 1 | 80 | 1 | 40 | 7 | 1 | 1 | 1 | 1 | 15.5 | 1 | 1 | 1 | 1 | 19 | 25 |
| | .6 | 13080 | 1 | 5 | 554 | .1 | 4 | 1810 | .1 | 21 | 20 | 64940 | 3130 | 3 | 5100 | 213 | 8 | 90 | 1 | 850 | 11 | 1 | 4 | 1 | 1 | 26.0 | 54 | 1 | 1 | 1 | 1 | 15 |
| | NO SAMPLE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.9 | 25500 | 1 | 4 | 81 | .1 | 9 | 10510 | .1 | 26 | 56 | 50970 | 600 | 5 | 26800 | 1326 | 1 | 600 | 44 | 1470 | 7 | 1 | 4 | 1 | 1 | 139.9 | 519 | 1 | 1 | 4 | 77 | 5 |
| | 1.8 | 21340 | 1 | 3 | 119 | .1 | 6 | 6600 | .1 | 15 | 18 | 41210 | 1690 | 4 | 9150 | 1601 | 1 | 470 | 2 | 670 | 8 | 1 | 2 | 1 | 1 | 72.7 | 87 | 2 | 1 | 1 | 12 | 5 |
| | 7.8 | 14360 | 1 | 6 | 344 | .1 | 1 | 3020 | .1 | 25 | 22184 | 73720 | 2910 | 6 | 5550 | 1458 | 1 | 250 | 1 | 750 | 41 | 16 | 5 | 1 | 1 | 38.1 | 125 | 1 | 1 | 1 | 1 | 5 |
| | 3.6 | 18930 | 1 | 9 | 88 | .1 | 7 | 8710 | .1 | 35 | 135 | 114440 | 1950 | 4 | 17770 | 737 | 16 | 400 | 21 | 1280 | 37 | 1 | 14 | 1 | 1 | 110.1 | 65 | 1 | 1 | 1 | 1 | 10 |
| | 37.8 | 8140 | 1 | 4 | 93 | .1 | 1 | 450 | .1 | 11 | 15208 | 89540 | 880 | 1 | 3490 | 330 | 1 | 400 | 1 | 90 | 26 | 5 | 10 | 1 | 1 | 55.4 | 46 | 1 | 1 | 2 | 28 | 5 |
| | .8 | 5590 | 3 | 1 | 45 | .1 | 1 | 1200 | .1 | 5 | 346 | 16150 | 400 | 1 | 3150 | 424 | 3 | 340 | 1 | 120 | 17 | 1 | 2 | 1 | 1 | 17.2 | 68 | 1 | 1 | 2 | 76 | 5 |
| | .7 | 1490 | 4 | 5 | 346 | .1 | 2 | 150 | .1 | 8 | 51 | 33220 | 1150 | 1 | 210 | 6 | 2 | 230 | 1 | 120 | 16 | 1 | 5 | 1 | 1 | 11.3 | 4 | 1 | 1 | 3 | 105 | 5 |
| | 3.6 | 18490 | 1 | 5 | 100 | .1 | 9 | 10580 | .1 | 28 | 37 | 70970 | 1890 | 3 | 14800 | 637 | 1 | 450 | 14 | 1490 | 27 | 1 | 27 | 1 | 1 | 126.2 | 47 | 1 | 1 | 2 | 19 | 5 |
| | 1.8 | 22210 | 57 | 11 | 101 | .3 | 1 | 12080 | .1 | 8 | 52 | 63100 | 4760 | 8 | 7070 | 245 | 7 | 240 | 1 | 6900 | 14 | 12 | 13 | 1 | 1 | 244.5 | 231 | 4 | 1 | 2 | 13 | 10 |
| | 4.0 | 30910 | 1 | 8 | 30 | .1 | 11 | 25700 | .1 | 37 | 50 | 57680 | 280 | 9 | 20000 | 678 | 1 | 3400 | 50 | 670 | 7 | 1 | 1 | 1 | 1 | 158.1 | 57 | 1 | 1 | 7 | 120 | 5 |
| | 2.3 | 11760 | 14 | 4 | 75 | .1 | 5 | 6600 | 19.2 | 9 | 36 | 31800 | 1170 | 7 | 10740 | 223 | 8 | 500 | 2 | 1350 | 14 | 1 | 1 | 1 | 1 | 161.3 | 294 | 4 | 1 | 2 | 38 | 5 |
| | 3.3 | 16100 | 1 | 4 | 22 | .1 | 8 | 14540 | .1 | 24 | 46 | 50910 | 370 | 10 | 15520 | 524 | 4 | 930 | 37 | 700 | 7 | 1 | 1 | 1 | 1 | 255.7 | 310 | 2 | 1 | 6 | 99 | 5 |
| | 1.4 | 11960 | 25 | 11 | 120 | .1 | 1 | 64360 | .1 | 28 | 40 | 47750 | 2060 | 17 | 17320 | 951 | 1 | 270 | 53 | 680 | 13 | 34 | 1 | 1 | 1 | 94.4 | 37 | 4 | 1 | 2 | 62 | 5 |
| | 2.0 | 24860 | 1 | 13 | 109 | .1 | 4 | 30360 | .1 | 36 | 41 | 61400 | 2040 | 30 | 25070 | 705 | 1 | 460 | 62 | 720 | 7 | 25 | 1 | 1 | 1 | 153.7 | 69 | 1 | 1 | 4 | 110 | 5 |
| | 1.3 | 10940 | 127 | 16 | 109 | .2 | 1 | 64360 | .1 | 31 | 36 | 49040 | 4330 | 9 | 19720 | 1130 | 1 | 90 | 49 | 770 | 7 | 30 | 1 | 1 | 1 | 75.1 | 27 | 2 | 1 | 1 | 39 | 5 |
| | 1.8 | 21390 | 1 | 7 | 141 | .1 | 5 | 12550 | .1 | 32 | 14 | 47410 | 980 | 7 | 24020 | 1027 | 22 | 650 | 41 | 2290 | 10 | 1 | 12 | 1 | 1 | 191.2 | 74 | 1 | 1 | 2 | 23 | 10 |
| | .8 | 11020 | 1 | 5 | 31 | .3 | 1 | 19090 | .1 | 17 | 41 | 45380 | 1520 | 9 | 22850 | 1826 | 1 | 330 | 14 | 1910 | 17 | 1 | 5 | 1 | 1 | 110.0 | 98 | 1 | 1 | 1 | 22 | 5 |
| | 2.4 | 18680 | 1 | 5 | 78 | .1 | 6 | 9530 | .1 | 44 | 18 | 85990 | 1000 | 8 | 17360 | 1004 | 1 | 180 | 1 | 1180 | 9 | 1 | 16 | 1 | 1 | 74.8 | 58 | 1 | 1 | 1 | 5 | 5 |
| | 1.7 | 2270 | 1 | 6 | 2276 | .1 | 1 | 68270 | .1 | 12 | 6 | 43390 | 1530 | 1 | 47070 | 2346 | 1 | 50 | 1 | 280 | 7 | 1 | 30 | 1 | 1 | 52.8 | 167 | 1 | 1 | 1 | 1 | 5 |
| | .5 | 13790 | 1 | 4 | 1890 | .8 | 1 | 18610 | .1 | 15 | 2 | 34600 | 4750 | 3 | 12670 | 886 | 1 | 140 | 10 | 1740 | 12 | 1 | 32 | 1 | 1 | 26.5 | 53 | 1 | 1 | 1 | 9 | 5 |
| | 1.1 | 4610 | 7 | 5 | 814 | .6 | 1 | 28290 | .1 | 6 | 4 | 23770 | 2260 | 1 | 8090 | 927 | 1 | 360 | 1 | 770 | 18 | 1 | 4 | 1 | 1 | 13.4 | 36 | 3 | 1 | 1 | 28 | 5 |
| | .7 | 8200 | 33 | 6 | 811 | 1.3 | 1 | 14040 | .1 | 15 | 3 | 38130 | 4690 | 1 | 14650 | 918 | 1 | 60 | 5 | 1810 | 13 | 1 | 9 | 1 | 1 | 21.3 | 64 | 2 | 1 | 1 | 1 | 5 |
| | 1.7 | 3640 | 1 | 7 | 84 | .1 | 1 | 5360 | .1 | 51 | 25 | 56800 | 2280 | 1 | 1590 | 124 | 19 | 200 | 1 | 350 | 17 | 1 | 5 | 1 | 1 | 6.3 | 20 | 1 | 1 | 1 | 15 | 10 |
| | 1.0 | 3380 | 1 | 9 | 55 | .1 | 1 | 8810 | .1 | 71 | 18 | 106220 | 2180 | 1 | 3640 | 345 | 2 | 50 | 1 | 780 | 39 | 1 | 5 | 1 | 1 | 14.9 | 27 | 1 | 1 | 1 | 4 | 5 |
| | .3 | 3770 | 11 | 6 | 365 | .1 | 1 | 4840 | .1 | 6 | 4 | 19050 | 1790 | 1 | 870 | 158 | 5 | 330 | 1 | 580 | 25 | 1 | 10 | 1 | 1 | 2.0 | 29 | 1 | 1 | 1 | 38 | 5 |
| | .1 | 3290 | 9 | 3 | 1008 | .3 | 1 | 3390 | .1 | 2 | 3 | 7620 | 1420 | 1 | 330 | 428 | 1 | 660 | 1 | 240 | 18 | 1 | 10 | 1 | 1 | 3.6 | 31 | 1 | 1 | 1 | 60 | 5 |
| | .4 | 3120 | 6 | 1 | 357 | .1 | 1 | 5800 | .1 | 3 | 8 | 9020 | 1000 | 1 | 640 | 477 | 1 | 690 | 2 | 150 | 16 | 1 | 1 | 1 | 1 | 3.7 | 29 | 1 | 1 | 1 | 48 | 5 |
| | 1.5 | 34970 | 1 | 6 | 105 | .1 | 3 | 32280 | .1 | 27 | 36 | 61910 | 2270 | 12 | 22330 | 1164 | 1 | 390 | 16 | 360 | 9 | 1 | 5 | 1 | 1 | 127.4 | 76 | 1 | 1 | 1 | 10 | 10 |
| | 1.9 | 16900 | 21 | 4 | 50 | .3 | 2 | 73840 | .1 | 11 | 30 | 26860 | 1860 | 7 | 10080 | 948 | 1 | 150 | 26 | 890 | 20 | 1 | 47 | 1 | 1 | 39.2 | 42 | 8 | 1 | 1 | 17 | 5 |
| | 2.4 | 28590 | 1 | 5 | 27 | .1 | 7 | 13820 | .1 | 35 | 9 | 69980 | 420 | 8 | 27260 | 1375 | 1 | 590 | 2 | 1740 | 14 | 1 | 51 | 1 | 1 | 104.9 | 67 | 1 | 1 | 2 | 54 | 5 |
| | 3.5 | 22120 | 1 | 4 | 85 | .1 | 10 | 8710 | .1 | 29 | 317 | 60100 | 1430 | 5 | 21920 | 1550 | 3 | 340 | 1 | 1360 | 21 | 1 | 1 | 1 | 1 | 123.5 | 96 | 2 | 2 | 1 | 1 | 5 |
| | 1.6 | 6140 | 1 | 8 | 112 | .5 | 1 | 43960 | .1 | 27 | 72 | 50260 | 3860 | 1 | 34310 | 1824 | 1 | 120 | 45 | 490 | 11 | 1 | 5 | 1 | 1 | 60.0 | 92 | 1 | 1 | 1 | 19 | 5 |
| | 1.4 | 21250 | 4 | 7 | 30 | .1 | 3 | 11240 | .1 | 17 | 169 | 92560 | 500 | 16 | 20670 | 463 | 7 | 740 | 7 | 4640 | 9 | 22 | 15 | 1 | 1 | 431.6 | 62 | 1 | 1 | 4 | 28 | 10 |
| | .1 | 6290 | 21 | 2 | 41 | .3 | 1 | 820 | .1 | 2 | 11 | 19260 | 860 | 5 | 2030 | 123 | 5 | 620 | 1 | 370 | 15 | 7 | 1 | 1 | 1 | 30.9 | 66 | 3 | 1 | 1 | 36 | 5 |
| | 1.0 | 8880 | 61 | 5 | 47 | .1 | 1 | 1450 | .1 | 7 | 40 | 49470 | 2010 | 5 | 3900 | 151 | 3 | 330 | 1 | 610 | 21 | 37 | 1 | 1 | 1 | 186.8 | 137 | 2 | 1 | 1 | 23 | 5 |
| | 2.6 | 19300 | 183 | 8 | 40 | .1 | 1 | 3000 | .1 | 11 | 71 | 92780 | 1610 | 14 | 6260 | 234 | 1 | 280 | 1 | 660 | 11 | 13 | 1 | 1 | 1 | 304.3 | 137 | 1 | 1 | 3 | 34 | 5 |
| E-GM-R-001 | .1 | 22320 | 1 | 5 | 101 | .1 | 1 | 1230 | .1 | 17 | 12 | 66870 | 2780 | 12 | 4340 | 444 | 1 | 230 | 1 | 620 | 9 | 1 | 1 | 1 | 1 | 7.0 | 27 | 1 | 1 | 1 | 1 | 5 |
| E-GM-R-002 | .1 | 26930 | 78 | 10 | 9 | .1 | 1 | 420 | .1 | 52 | 13 | 114850 | 690 | 12 | 7770 | 758 | 1 | 20 | 1 | 380 | 9 | 1 | 1 | 1 | 1 | 88.5 | 29 | 1 | 1 | 1 | 11 | 5 |
| E-GM-R-003 | .2 | 6340 | 31 | 56 | 31 | .1 | 1 | 300 | .1 | 49 | 8 | 43970 | 740 | 3 | 3260 | 127 | 2 | 60 | 1 | 330 | 9 | 1 | 3 | 1 | 1 | 21.1 | 9 | 2 | 1 | 3 | 103 | 5 |
| E-GM-R-004 | 5.3 | 42430 | 1 | 13 | 37 | .3 | 14 | 50990 | .1 | 38 | 223 | 89640 | 3560 | 23 | 24730 | 170 | 1 | 110 | 9 | 4480 | 9 | 1 | 44 | 1 | 1 | 132.8 | 71 | 1 | 1 | 1 | 1 | 5 |
| E-GM-R-005 | .4 | 17440 | 11 | 4 | 96 | .1 | 1 | 3490 | .1 | 13 | 18 | 43110 | 4130 | 7 | 6050 | 345 | 1 | 90 | 1 | 560 | 13 | 1 | 1 | 1 | 1 | 10.6 | 27 | 4 | 1 | 1 | 18 | 5 |
| E-GM-R-006 | .1 | 34320 | 123 | 9 | 79 | .1 | 1 | 2590 | .1 | 23 | 35 | 123970 | 4440 | 16 | 13370 | 644 | 1 | 70 | 1 | 850 | 9 | 1 | 7 | 1 | 1 | 149.0 | 30 | 1 | 1 | 1 | 1 | 5 |
| E-GM-R-007 | .1 | 23430 | 1 | 18 | 20 | .1 | 1 | 2790 | .1 | 29 | 7 | 149590 | 540 | 9 | 13870 | 622 | 1 | 610 | 1 | 810 | 9 | 1 | 1 | 1 | 1 | 193.3 | 17 | 1 | 1 | 4 | 1 | 10 |
| E-GM-R-008 | .1 | 4790 | 1 | 34 | 1 | .1 | 1 | 240 | .1 | 51 | 26 | 384640 | 220 | 1 | 920 | 1 | 1 | 60 | 1 | 10 | 9 | 1 | 1 | 1 | 1 | 167.9 | 1 | 1 | 1 | 1 | 1 | 5 |
| D-CC-R-131 | 2.8 | 24860 | 1 | 6 | 38 | .1 | 7 | 9110 | .1 | 20 | 155 | 62860 | 270 | 3 | 17540 | 3621 | 3 | 660 | 1 | 1390 | 374 | 1 | 18 | 1 | 1 | 103.7 | 871 | 1 | 1 | 2 | 28 | 5 |
| [redacted] | 132.7 | 8070 | 3128 | 12 | 2548 | .4 | 1 | 3940 | 15.2 | 13 | 37407 | 69460 | 3280 | 1 | 320 | 231 | 1 | 160 | 1 | 850 | 51 | 555 | 14 | 1 | 1 | 36.9 | 475 | 1 | 1 | 1 | 1 | 5 |
| | 13.7 | 5620 | 149 | 10 | 4655 | .1 | 2 | 59770 | 4.8 | 14 | 1182 | 44380 | 2730 | 1 | 1410 | 3059 | 1 | 70 | 1 | 750 | 23 | 103 | 20 | 1 | 1 | 44.3 | 311 | 1 | 1 | 1 | 12 | 5 |
| | 6.2 | 8110 | 130 | 6 | 1579 | .1 | 1 | 4530 | .1 | 9 | 13875 | 50490 | 1970 | 11 | 1530 | 383 | 1 | 620 | 1 | 1100 | 26 | 63 | 13 | 1 | 1 | 33.4 | 168 | 1 | 1 | 1 | 20 | 5 |
| | 281.2 | 1060 | 324 | 1 | 4615 | .1 | 1 | 1420 | 15.4 | 5 | 2527 | 5050 | 560 | 1 | 210 | 225 | 1 | 10 | 1 | 80 | 15 | 1234 | 372 | 1 | 3 | 3.8 | 282 | 1 | 1 | 1 | 47 | 5 |
| | 3.5 | 7090 | 141 | 7 | 392 | .8 | 1 | 23820 | 61.8 | 14 | 445 | 42980 | 4140 | 1 | 25870 | 1990 | 7 | 120 | 1 | 1100 | 25 | 19 | 16 | 1 | 1 | 30.8 | 6455 | 1 | 1 | 1 | 20 | 5 |

INTE ONAL AK

PROJ: UNUK

ATTN: G.NICHOLSON

# [illegible] EN and - ICP REPORT

705 WEST 15TH ST., N[illegible] VANCOUVER, B.C. V7M 1T2

(604)980-5814 OR (604)988-4524

FI [illegible]: 0S-0153-RJ4

DATE: 90/07/24

* ROCK * (ACT:F31)

| SAMPLE NUMBER | AG PPM | AL PPM | AS PPM | B PPM | BA PPM | BE PPM | BI PPM | CA PPM | CD PPM | CO PPM | CU PPM | FE PPM | K PPM | LI PPM | MG PPM | MN PPM | MO PPM | NA PPM | NI PPM | P PPM | PB PPM | SB PPM | SR PPM | TH PPM | U PPM | V PPM | ZN PPM | GA PPM | SN PPM | W PPM | CR PPM | AU PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [redacted] | .1 | 14700 | 1 | 2 | 252 | 1.0 | 1 | 4450 | .8 | 8 | 35 | 22680 | 3580 | 27 | 6650 | 154 | 4 | 830 | 47 | 680 | 46 | 1 | 20 | 1 | 1 | 45.2 | 209 | 1 | 1 | 1 | 74 | 10 |
| | .1 | 16940 | 2 | 2 | 261 | 1.4 | 1 | 2380 | .1 | 9 | 51 | 26590 | 4400 | 25 | 6920 | 78 | 2 | 510 | 54 | 520 | 44 | 1 | 12 | 1 | 1 | 40.6 | 75 | 1 | 1 | 1 | 53 | 5 |
| | .1 | 20230 | 6 | 3 | 378 | 1.2 | 1 | 1900 | .1 | 8 | 37 | 26270 | 5040 | 33 | 9650 | 129 | 2 | 700 | 52 | 510 | 47 | 1 | 8 | 1 | 1 | 48.6 | 50 | 2 | 1 | 2 | 79 | 5 |
| | .1 | 10450 | 1 | 4 | 238 | .6 | 1 | 1240 | .1 | 14 | 67 | 61110 | 2890 | 4 | 2630 | 27 | 1 | 820 | 1 | 880 | 36 | 1 | 6 | 1 | 1 | 84.5 | 13 | 1 | 1 | 1 | 15 | 10 |
| | 2.8 | 11710 | 27 | 1 | 88 | .3 | 4 | 1710 | 33.8 | 6 | 1051 | 26660 | 1860 | 4 | 13770 | 527 | 52 | 60 | 2 | 410 | 40 | 1 | 4 | 1 | 1 | 42.8 | 4606 | 2 | 2 | 2 | 136 | 5 |
| | 2.6 | 26810 | 3 | 1 | 1117 | .5 | 9 | 8360 | .1 | 20 | 23 | 52430 | 1870 | 8 | 28380 | 1199 | 4 | 190 | 18 | 1290 | 41 | 1 | 27 | 1 | 1 | 120.5 | 124 | 1 | 1 | 3 | 73 | 5 |
| | 1.9 | 8210 | 110 | 1 | 279 | .6 | 3 | 4030 | .1 | 14 | 28 | 48690 | 5090 | 1 | 1110 | 15 | 3 | 60 | 8 | 1070 | 43 | 7 | 3 | 1 | 1 | 21.6 | 12 | 1 | 1 | 1 | 54 | 5 |
| | .7 | 7380 | 29 | 3 | 696 | 1.2 | 2 | 44450 | .1 | 17 | 24 | 40750 | 3800 | 1 | 23520 | 1982 | 1 | 90 | 9 | 840 | 45 | 1 | 8 | 1 | 1 | 57.8 | 123 | 1 | 1 | 1 | 8 | 5 |
| | .1 | 16660 | 75 | 1 | 346 | .7 | 3 | 5350 | .1 | 15 | 29 | 50070 | 2680 | 10 | 20180 | 730 | 1 | 80 | 1 | 2000 | 42 | 1 | 6 | 1 | 1 | 157.4 | 58 | 2 | 1 | 1 | 25 | 5 |
| | .9 | 13500 | 1 | 1 | 189 | .2 | 5 | 4320 | .1 | 10 | 23 | 39530 | 2470 | 2 | 9270 | 628 | 2 | 730 | 1 | 530 | 29 | 1 | 19 | 1 | 1 | 55.0 | 32 | 1 | 1 | 1 | 18 | 5 |
| | 2.0 | 24770 | 1 | 1 | 74 | .2 | 7 | 18890 | .1 | 10 | 163 | 33140 | 840 | 3 | 11500 | 440 | 1 | 700 | 1 | 1030 | 30 | 1 | 107 | 1 | 1 | 71.8 | 32 | 2 | 1 | 3 | 97 | 5 |
| | .4 | 8690 | 1 | 1 | 127 | .5 | 1 | 2310 | .1 | 117 | 29 | 63770 | 4330 | 1 | 760 | 2 | 29 | 600 | 1 | 290 | 27 | 1 | 12 | 2 | 1 | 7.1 | 1 | 1 | 1 | 1 | 40 | 5 |
| | 2.3 | 28920 | 1 | 3 | 54 | .1 | 10 | 11440 | .1 | 85 | 120 | 81540 | 660 | 2 | 27990 | 947 | 143 | 1410 | 88 | 1390 | 76 | 1 | 17 | 1 | 1 | 137.9 | 124 | 1 | 1 | 3 | 82 | 10 |
| | .5 | 8650 | 10 | 1 | 375 | .2 | 2 | 7990 | .1 | 30 | 7 | 17780 | 460 | 1 | 5740 | 182 | 3 | 560 | 5 | 2040 | 24 | 1 | 12 | 1 | 1 | 31.1 | 16 | 1 | 1 | 2 | 93 | 5 |
| | .1 | 18960 | 1 | 1 | 292 | .6 | 2 | 2130 | .1 | 7 | 20 | 25940 | 2480 | 3 | 13650 | 173 | 1 | 1180 | 10 | 750 | 30 | 1 | 12 | 1 | 1 | 93.9 | 10 | 2 | 1 | 1 | 31 | 5 |
| | 2.7 | 23950 | 1 | 1 | 125 | .1 | 13 | 11210 | .1 | 21 | 12 | 63660 | 950 | 3 | 25720 | 1253 | 1 | 950 | 1 | 1770 | 25 | 1 | 21 | 1 | 1 | 153.3 | 84 | 1 | 2 | 2 | 29 | 5 |
| | .1 | 12400 | 44 | 1 | 96 | .4 | 2 | 2230 | .1 | 5 | 15 | 20980 | 3840 | 1 | 8880 | 536 | 25 | 330 | 6 | 740 | 60 | 1 | 4 | 1 | 1 | 37.9 | 73 | 1 | 1 | 2 | 69 | 5 |
| | 5.8 | 22210 | 1 | 1 | 27 | .4 | 10 | 14590 | 275.7 | 22 | 1823 | 42890 | 550 | 3 | 26920 | 2233 | 7 | 440 | 38 | 1330 | 17270 | 19 | 29 | 1 | 1 | 95.6 | 27663 | 1 | 7 | 1 | 74 | 10 |
| E CC R 100 | 1.9 | 12260 | 11 | 1 | 37 | .2 | 4 | 40740 | .1 | 6 | 1672 | 20190 | 1310 | 6 | 7320 | 581 | 1 | 440 | 10 | 600 | 82 | 1 | 2 | 1 | 1 | 53.2 | 84 | 2 | 1 | 3 | 97 | 5 |
| E CC R 101 | 1.7 | 17870 | 6 | 1 | 89 | .4 | 4 | 22780 | .1 | 11 | 1426 | 30620 | 1860 | 8 | 12240 | 635 | 1 | 790 | 14 | 680 | 95 | 1 | 10 | 1 | 1 | 68.1 | 96 | 2 | 1 | 2 | 72 | 5 |
| E CC R 102 | 1.9 | 14100 | 7 | 1 | 129 | .5 | 4 | 18840 | .1 | 5 | 1638 | 20170 | 860 | 5 | 5500 | 667 | 1 | 390 | 3 | 800 | 35 | 1 | 131 | 1 | 3 | 90.3 | 27 | 2 | 1 | 4 | 102 | 5 |
| E CC R 103 | 1.3 | 18930 | 3 | 1 | 89 | .4 | 5 | 6260 | .1 | 10 | 54 | 36670 | 3650 | 7 | 8400 | 326 | 2 | 1450 | 25 | 700 | 58 | 1 | 14 | 1 | 1 | 53.3 | 47 | 2 | 1 | 1 | 49 | 5 |
| E CC R 104 | 2.2 | 29080 | 29 | 1 | 18 | .7 | 8 | 26830 | .1 | 22 | 250 | 49470 | 940 | 10 | 13570 | 796 | 1 | 650 | 1 | 1870 | 36 | 1 | 2 | 1 | 1 | 156.0 | 54 | 2 | 1 | 1 | 18 | 5 |
| | .1 | 7000 | 22 | 9 | 374 | .7 | 2 | 41310 | .1 | 18 | 113 | 62330 | 1330 | 7 | 14230 | 2033 | 1 | 720 | 1 | 890 | 39 | 1 | 42 | 1 | 1 | 142.0 | 54 | 2 | 1 | 1 | 12 | 5 |
| | 2.2 | 3700 | 1 | 1 | 323 | .9 | 3 | 81910 | 2.3 | 5 | 18 | 21320 | 1290 | 3 | 69520 | 2323 | 1 | 670 | 11 | 270 | 16 | 3 | 288 | 1 | 1 | 59.8 | 394 | 1 | 2 | 1 | 25 | 5 |
| | .1 | 21940 | 3 | 13 | 282 | 1.0 | 2 | 5760 | .1 | 15 | 71 | 40650 | 3910 | 28 | 11190 | 706 | 4 | 760 | 73 | 680 | 38 | 1 | 10 | 1 | 1 | 110.0 | 338 | 2 | 1 | 1 | 45 | 10 |
| | 3.4 | 30180 | 1 | 1 | 16 | .1 | 12 | 40720 | .1 | 30 | 42 | 60260 | 340 | 9 | 41500 | 1241 | 1 | 670 | 69 | 1610 | 21 | 1 | 3 | 1 | 1 | 173.2 | 74 | 1 | 1 | 5 | 124 | 5 |
| | .3 | 17070 | 20 | 6 | 110 | .8 | 2 | 37370 | .1 | 19 | 144 | 48380 | 3490 | 28 | 14920 | 1439 | 1 | 360 | 28 | 1180 | 39 | 1 | 34 | 1 | 1 | 110.4 | 77 | 2 | 1 | 1 | 46 | 5 |
| | 3.1 | 24170 | 1 | 3 | 13 | .1 | 4 | 5640 | .1 | 162 | 3346 | 179020 | 180 | 5 | 20350 | 832 | 5 | 460 | 339 | 350 | 30 | 1 | 2 | 1 | 1 | 131.7 | 489 | 1 | 1 | 4 | 147 | 5 |
| | 1.4 | 24440 | 1 | 1 | 16 | .1 | 6 | 25740 | .1 | 41 | 280 | 47170 | 250 | 7 | 21580 | 586 | 4 | 1290 | 105 | 420 | 31 | 1 | 6 | 1 | 1 | 87.7 | 55 | 1 | 1 | 4 | 126 | 5 |
| | 2.2 | 22410 | 1 | 1 | 31 | .1 | 7 | 51010 | .1 | 43 | 322 | 48850 | 640 | 4 | 11070 | 459 | 1 | 1000 | 132 | 400 | 29 | 1 | 11 | 1 | 1 | 76.4 | 89 | 1 | 1 | 4 | 116 | 5 |

# APPENDIX V

# SAMPLE DESCRIPTIONS

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MALGOLD NORTH | Location: | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| EccR-100 | | Intense quartz-carbonate veining in matic-intermediate volcanic host. Calcareous serpentinite surfaces host mineralization (cpy 1%, py 2%, mal, hem). Sulphides are concentrated along vuggy qtz veins. slickensides also noted | 5 | 1.9 | 82 | 84 | | |
| EccR-101 | | Serpentinite rich silicified basalt/andesite. Calcareous with qtz veins containing some mineralization py 1%, cpy, tr. mal. Float but on top of ridge (ie. close to source) | 5 | 1.7 | 95 | 96 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH | Location: | | | Operator: | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results All Au (ppb) others (ppm) | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| EccR-102 | | Pale green siliceous rhyolite - small irregular qtz veining py - cpy - mal. mineralization rusty limonitic stain. | 5 | 1.9 | 35 | 27 | | |
| EccR-103 | | float boulder (1.5 m dia) primarily black argillite/shale pod of graphite. siliceous. trace fg. py. | 5 | 1.3 | 58 | 47 | | |
| EccR-104 | | Gossanous, qtz veining in med to dark green volcanics. trace fg. py. | 5 | 2.2 | 36 | 54 | | |
| EccR-~~137~~ | | Qtz vein in granitoid. width 6 cm, containing mal, cpy, py 2-5% Vein mostly bull white qtz. orientation: 164/10W | 1850 | 17.5 | 70 | 51 | (Cu) ~~223~~ 48, 889 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH | Location: | | | | | Operator: |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Cu ppm | Other |
| ECCR-~~138~~ 133 | | Qtz vein with diorite. Brecciated qtz with inclusions of diorite host. Sulphide minerals cpy 1%, py 1% malachite azurite, thin veinlets of cpy. | 235 | 5.1 | 20 | ~~27~~ | 12 475 | |
| ECCR-~~139~~ 134 | | Wall rock (diorite) of the vein described above in ECCR-138. Sulphide poor but heavy mal and azurite ~~stain~~ epidote veining. | 15 | 2.8 | 21 | 47 | 10 836 | |
| ECCR-140 | | Fine grained mafic volcanic (andesite?) - ±calcite, ±epidote veinlets, dark green. Bedding: 110/80S. | 5 | 2.3 | 10 | 113 | 204 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH | Location: | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| EccR-141 | | Grab - Pegmatite - dk area 10m² contains 5-15% sulphides py-ga-sph. Gangue minerals Quartz, calcite, epidote, chlorite | 75 | 7.1 | 29 | 15 | Cu 25,146 | |
| EccR-142 | | same as above (EccR 141) | 25 | 3.2 | 8 | 1 | 1039 | |
| EccR-143 | | Pale green - dk. green siliceous volcanic (andesite?). Surrounded by exposures of diorite. limonite on weathered surfaces. diss. py. | 40 | 1.7 | 8 | 5 | 469 | |
| EccR-144 | | same as above. same % | 50 | 3.1 | 8 | 3 | 216 | |
| EccR-145 | | gossanous intermediate volcanic disseminated py. trace. trace galena. Chip (1m) | 35 | 3.1 | 923 | 555 | 191 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH | Location: | | | | | Operator: |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other Cu ppm | |
| EccR-146 | | Fine grained green siliceous volcanic (probably andesite tuff) py 5%, arsenopy 2-3% | 10 | 2.4 | 11 | 32 | 186 | |
| EccR-147 | | Same as above | 20 | 2.2 | 5 | 9 | 680 | |
| EccR-148 | | Float - granodiorite (K spar rich) in contact with grey siliceous volc. py 2-3% | 5 | 2.4 | 5 | 22 | 283 | |
| EccR-149 | | Chip (2m) - Quartz carbonate stockwork sulphide mineralization along fractures or siliceous veinlets within the stockwork (vein). py 3-5%, hem 1-3% trace cpy. | 50 | 2.2 | 309 | 131 | 1798 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH | Location: | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| ECCR-150 | | Chip (1m) - Dark green siliceous volcanic. Wall rock of previous samples' stockwork veining. Mostly contains specular hem. 5%. | 20 | 1.2 | 14 | 43 | | |
| ECCR-151 | | Quartz carbonate veining same vein as in ECCR 149 but further north along strike. vein orientation: 162/steeply east. | 15 | 3.4 | 2509 | 1791 | | |
| ECCR-152 | | Quartz-carbonate veining Fault gouge, kaolinite alt'n, very rusty, limonitic, contains small py pod. py 1-3% | 190 | 16.8 | 154 | 396 | Cu (ppm) 2861 | As 1041 |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH | Location: | | | | | Operator: |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other (Cu) | |
| ECCR-153 | | Dark green fg. andesitic tuff. silicified py 1-2%. | 5 | 2.6 | 38 | 60 | | |
| ECCR-155 | | Dark green serpentinite interbedded with grey white marble (meta-limestone) sulphides mainly in darker serpentine: py 1%, trace cpy epidote in veinlets, ± calcite | 1850 | 4.6 | 11 | 19 | 3072 | |
| ECCR-156 | | similar to ECCR-155 contains significant fg. garnet (dk. brown) | 170 | 2.1 | 16 | 36 | 1024 | |
| ECCR 157 | | massive sulphide vein (py, arsenopy) in dark green siliceous andesite. vein 4cm. ± hem. | 10 | 0.3 | 2 | 4 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: | Location: | Operator: |
|---|---|---|---|

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| EccR-158 | | Float - volcanic breccia w intense qtz-carbonate alt$^{n}$. pale to dark green color. limonite. trace py. | 10 | 2.3 | 2 | 3 | | |
| EccR-159 | | Black chert / argillaceous seds - calcite veinlets 1-2mm throughout. Disseminated euhedral py 1%, probably diagenetic. very siliceous Bedding: 092/86 S | 5 | 1.4 | 16 | 95 | | |
| EccR-160 | | Dark green siliceous Lapilli tuff, minor limonite. disseminated py <1% | 10 | 0.4 | 9 | 24 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH | Location: | | | | | Operator: |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| EccR-161 | | Similar to EccR160. qtz-sericite alt$^{n}$, limonite stained on weathered surfaces. | 980 | 0.5 | 16 | 53 | | |
| EccR-162 | | Quartz veins containing veinlets and blebs of sulphides ga 1-2% py 1-2%. | 750 | 2.3 | 4296 | 1367 | Cu (ppm) 509 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH (E) | Location: | | | Operator: KODIAK | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| EGMR001 | | RUSTY FRACTURE ZONE IN WHITE AND GREEN TUFFS. | 5 | 0.1 | 9 | 27 | | |
| EGMR002 | | 2m WIDE ZONE OF RUSTY VOLCANIC WITH FRACTURE FILLS AND DISS-EMINATED SULPHIDE ADJACENT TO GRANITE | 5 | 0.1 | 9 | 29 | | |
| EGMR003 | | PLAGIOCLASE PORPHYRYTIC ANDESITE WITH DISSEMINATED AND FRACTURE FILLING PYRITE + CHALCOPYRITE (?) | 5 | 0.2 | 9 | 9 | | |
| EGMR004 | | THIN QUARTZITE LAYER WITHIN MARBLE UNIT. CLASTIC IS RICH IN PYRITE AND PYRRHOTITE ± ARSENOPYRITE | 5 | 5.3 | 9 | 71 | | |
| EGMR005 | | RUSTY WEATHERING PYRITIC ANDESITE SLIVER (FAULT BOUNDED) WITHIN GRANITE | 5 | 0.4 | 13 | 27 | | |
| EGMR006 | | RUSTY ANDESITE CUT BY QUARTZ CARBONATE VEINS WITH MASSIVE PODS OF PYRITE | 5 | 0.1 | 9 | 30 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: Macgold North | Location: | Operator: |
|---|---|---|---|

| Sample No. | Location | Description | Analytical Results | | | | |
|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other |
| EGMR007 | | Float to subcrop of massive to semi massive pyrite ± pyrrhotite and magnetite, perhaps a skarn | 10 | 0.1 | 9 | 17 | |
| EGMR008 | | same as 007 | 5 | 0.1 | 9 | 1 | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold North | Location: South Ridge | Operator: G. MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-GM-R-009 | South Ridge | Fault breccia granite<br>- Fragments chloritized<br>- pervasive epidote alteration<br>- Fault trend 070°/90° | 5 | 1.9 | 13 | 60 | | |
| E-GM-R-010 | South Ridge | Pyrite vug ± Dacite dyke<br>- vug is part of a splay off a main fault => 095°/vert.<br>- vug 5->10 cm wide 30 cm long | 10 | 1.5 | 14 | 14 | | |
| E-GM-R-011 | South Ridge | Marble pod (calcite?)<br>- 5 x 15 m<br>- grey white; fine grained | 5 | 2.6 | 23 | 4 | | |
| E-GM-R-012 | South Ridge | Mafic Xenolith (1m²) in granite<br>- pervasive chlorite alteration<br>- massive to dissem. pyrrhotite-pyrite (10-15%) | 5 | 1.7 | 11 | 1 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold North | Location: South Ridge | Operator: G MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-GM-R-013 | South Ridge | dark green, f. grained granodiorite<br>- gossanous alteration<br>- sparse malachite<br>- 2-3% dissem. pyrite<br>- sample taken from small fault (North trending) | 10 | 0.4 | 7 | 39 | | |
| E-GM-R-014 | South Ridge | Fine grained granodiorite<br>- malachite along fractures<br>- red-brown oxide<br>- trace pyrite | 10 | 3.3 | 7 | 73 | | |
| E-GM-R-015 | South Ridge | Altered Granite<br>- strong chlorite/epidote alteration<br>- yellow-brown stain<br>- 5% dissem. pyrite | 5 | 2.6 | 31 | 50 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold North | Location: South Ridge | Operator: G. MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-GM-R-016 | South Ridge | Granodiorite<br>- dissem-pyrite 5%<br>- pyrrhotite <1% | 25 | 2.9 | 6 | 52 | | |
| E-GM-R-017 | South Ridge | Altered Granodiorite<br>- "baked", dark red-brown oxide xenolith (10x25cm)<br>- Granite host<br>- mod. chlorite alteration<br>- slightly brecciated<br>- 2-3% dissem. pyrite | 10 | 2.6 | 6 | 34 | | |
| E-GM-R-019 | NE Ridge | Grey lapilli Tuff<br>- rounded to subangular Fragments (0.1 → 5.0cm)<br>- no sulfides evident | 5 | 0.7 | 6 | 35 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold North | Location: South ridge | Operator: M. MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-MM-R-096 | South ridge | Faulted granite<br>- malachite along fractures<br>- epidote along fractures and minor through rock<br>- fault trend 000°/80°W | 30 | 1.8 | 33 | 101 | (Cu) 2069 | |
| E-MM-R-097 | South ridge | Pyritic Qtz veins in granite<br>- massive euhedral pyrite crystals infilling vugs<br>- width - 0.5 → 5.0cm<br>- trace malachite staining | 2900 | 76.5 | 67 | 697 | (Cu) 53.79B | |
| E-MM-R-098 | South ridge | Fractured Granodiorite<br>- dissem (2-3%) and fracture coating malachite<br>- trace pyrite | 5 | 1.4 | 28 | 28 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold North | Location: South ridge | Operator: M. MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-MM-R-099 | South ridge | Altered dacite dyke<br>- dark brown colour<br>- very fine grained<br>- epidote overprint?<br>- 1-2% dissem pyrite | 5 | 1.4 | 54 | 9 | | |
| E-MM-R-100 | South ridge | Epidote altered granite<br>- strong pervasive epidote<br>- moderate Potassic alterat.<br>- trace dissem. pyrite | 5 | 1.5 | 28 | 25 | | |
| E-MM-T-101 | South ridge | Qtz pod in sheared granite<br>- moderate Fe staining<br>- malachite staining<br>- 1-2% dissem. pyrite<br>- sample taken over 0.5m (chip) | 400 | 0.3 | 25 | 9 | (W) 1125 | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold North | Location: South Ridge | Operator: M. MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-MM-R-102 | South Ridge | Fine grained granite<br>- minor epidote alteration<br>- mod Fe staining<br>- 1-3% diss. pyrite<br>- fracture set<br>=> 039°/20°E<br>=> 110°/20°N | 5 | 1.9 | 26 | 37 | | |
| E-MM-R-103 | South Ridge | Biotitic dacite<br>- v. fine grained<br>- 10% biotite crystals<br>- 2-3% dissem. pyrite<br>- lt. red-brown stain | 5 | 1.6 | 31 | 66 | | |
| E-MM-R-104 | South Ridge | Same as E-MM-R-103 | 5 | 1.6 | 26 | 18 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD NORTH | Location: | | | Operator: | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| ERWR 191 | EAST RIDGE | Crystal Ash Tuff - minor disseminated pyrite. | 10 | 2.0 | 39 | 102 | | |
| E-RWT192 | " " | Basalt - Iron stained Local concentrations of pyrite along fracture surfaces. | 5 | 2.4 | 33 | 53 | | |
| E-RWT193 | " " | Crystal Ash Tuff/Basalt - Iron stained, Disseminated pyrite and local concentrations along fractures. | 5 | 1.9 | 28 | 54 | | |
| E-RWT 194 | " " | Silicified pod in leuco-granite. Iron stained, minor disseminated pyrite. | 5 | 0.7 | 31 | 65 | | |
| E-RWT 195 | " " | Basaltic(?) layer in leuco-granite. minor disseminated pyrite and concentrations along fractures | 35 | 1.0 | 29 | 52 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Magdd North | Location: South Ridge | Operator: M. MOORE

| Sample No. | Location | Description | Analytical Results | | | | |
|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other |
| E-MM-R-158 | South Ridge | Fine grained Dacite<br>- 1-2% diss. pyrite<br>- sample taken on North side of fault | 5 | 1.1 | 2 | 27 | |
| E-MM-R-159 | South Ridge | Qtz - Feldspar Crystal Tuff<br>- brown - red oxide<br>- V. fine grained<br>- 2-3% dissem pyrite | 10 | 1.2 | 21 | 57 | |
| E-MM-R-160 | South Ridge | Qtz - flooded Dacite<br>- red to yellow - green oxide<br>- highly Fractured<br>- calcite along fractures<br>- 1-2% dissem. pyrite<br>- arsenopyrite stain (?) | 5 | 1.7 | 9 | 25 | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold North | Location: South Ridge | Operator: M. MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-MM-R-161 | South Ridge | Siliceous Dacite<br>- peacock blue alteration<br>- possible xenolith (?)<br>- 5-10% diss. pyrite | 5 | 1.7 | 8 | 27 | | |
| E-MM-R-162 | South Ridge | Silica flooded Qtz-Fld Tuff<br>- deep red-brown oxide<br>- mod. epidote alteration<br>- dissem & blebs of pyrrhotite 5-10%<br>- trace pyrite | 70 | 1.3 | 3 | 15 | | |
| E-MM-R-163 | South Ridge | white Qtz-Fld Tuff<br>- red brown oxide<br>- dissem. pyrite (2-3%) | 380 | 0.9 | 6 | 1 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold North | Location: South Ridge | Operator: M. MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-MM-R-164 | South Ridge | Qtz-Feldspar Tuff<br>- 2-3% dissem. pyrrhotite<br>- 2-3% dissem pyrite<br>- peacock blue alteration | 70 | 1.3 | 3 | 27 | | |
| E-MM-R-165 | South Ridge | Friable, red-brown dacite<br>- 2-3% dissem. pyrite | 5 | 1.0 | 10 | 32 | | |
| E-MM-R-166 | South Ridge | same as E-MM-R-165 | 40 | 2.2 | 5 | 22 | (Cu) 2192 | |
| E-MM-R-167 | South Ridge | Fault breccia<br>- malachite (± Azurite) stain<br>- Fault trend 035°/90°<br>- red brown oxide | 220 | 5.0 | 2 | 26 | (Cu) 5447 | |
| E-MM-R-168 | South Ridge | Siliceous greywacke<br>- red brown oxide<br>- 2-3% diss. pyrite | 5 | 1.7 | 2 | 461 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Mocgold North | Location: NE ridge | Operator: M. MOORE

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| E-MM-R-169 | NE Ridge | Qtz vein in shear<br>- shear trend 037°/38°E<br>- yellow-brown Fe stain<br>- host rock siliceous agrillite<br>- trace pyrite | 10 | 2.3 | 36 | 37 | | |
| E-MM-R-170 | NE Ridge | Migmatitic volcanic<br>- volcanic beds highly contorted<br>- calcite injection (v. fine grains)<br>- no visible sulfides. | 5 | 3.0 | 29 | 24 | | |

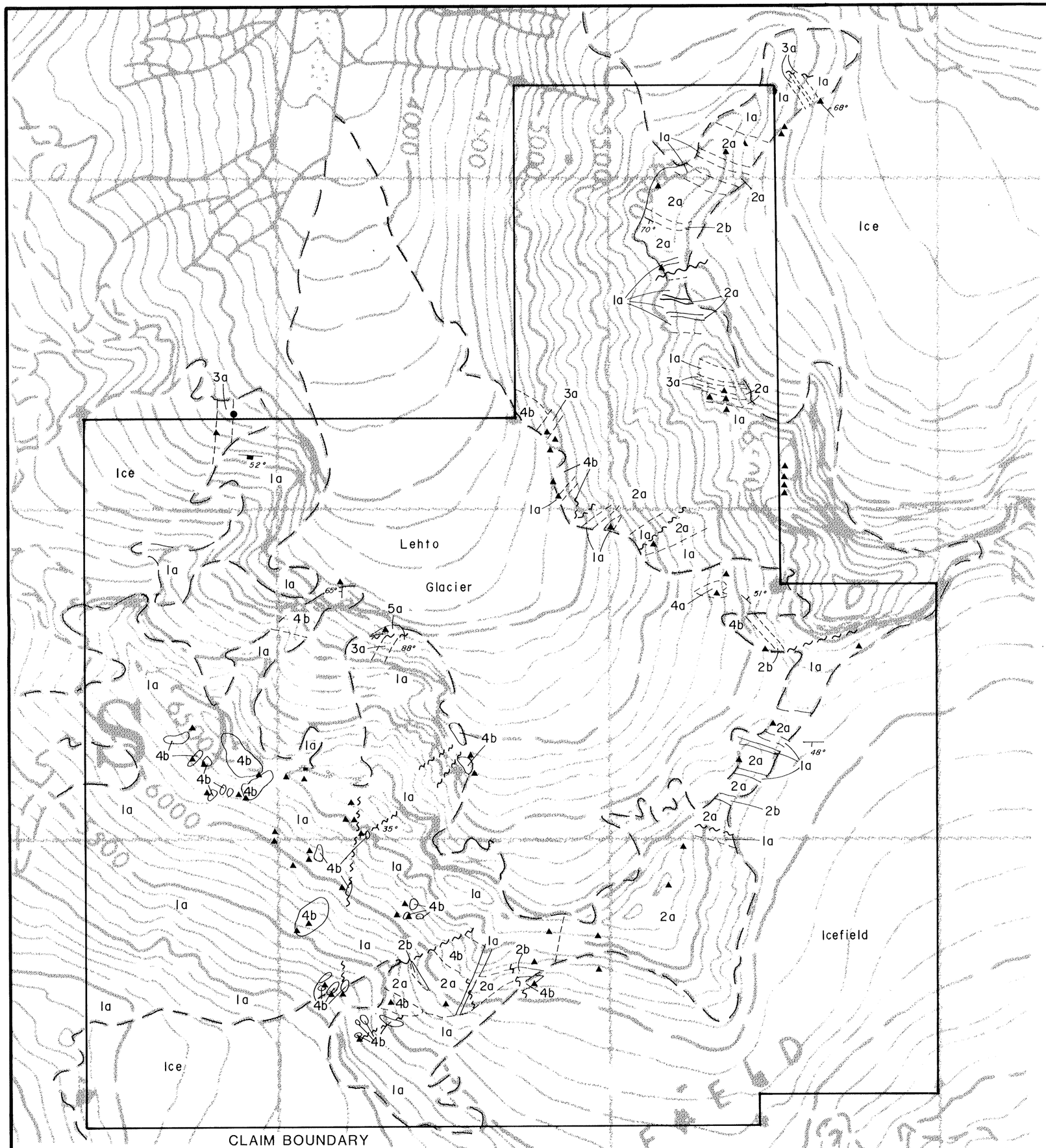
## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACCOLD NORTH (E) | Location: | | | Operator: | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| ELGR153 | | RUSTY VOLCANIC WITH PYRITE STRINGERS. XENOLITH IN GRANITE | 5 | 0.3 | 49 | 99 | | |
| ELGR154 | | RUSTY-ORANGE LAPILLI TUFF | 10 | 0.6 | 11 | 68 | | |
| ELGR155 | | RUSTY ANDESITE CUT BY LOTS OF QUARTZ-CARBONATE VEINS WITH PYRITE IN THIN FRACTURES. | 10 | 1.1 | 11 | 49 | | |
| ELGR156 | | VERY RUSTY CARBONATE VEIN IN VOLCANIC WITH BLEBS AND LENSES OF PYRITE | 10 | 0.7 | 9 | 12 | | |
| ELGR157 | | XENOLITH OF GREEN ANDESITE WITH VEINS OF PYRITE + MAGNETITE + PO. AND QUARTZ. MASSIVE AND DISSEMINATED EUHEDRAL PYRITE | 25 | 0.1 | 2 | 43 | | |
| ELGR158 | | 60cm WIDE QUARTZ-CARBONATE VEIN IN GREEN FOLIATED CRYSTAL TUFF. | 10 | 2.3 | 10 | 27 | | |
| ELGR159 | | RUSTY VOLCANIC WITH QUARTZ PYRITE + ARSENOPYRITE IN VEIN. HOST IS ALTERED PORPHYRITIC ANDESITE/DACITE | 5 | 1.4 | 11 | 67 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: MACCOLD NORTH (E) | Location: | Operator: |
|---|---|---|---|

| Sample No. | Location | Description | Analytical Results | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Au | Ag | Pb | Zn | Other | |
| ELGR160 | | SILICIFIED ANDESITE WITH DISSEMINATED PYRITE AND RARE STRINGERS. QUARTZ STOCKWORK. | 5 | 2.0 | 7 | 56 | | |
| ELGR161 | | MAROON AND GREEN VOLCANIC WITH RARE PYRITE IN FRACTURES. | 10 | 1.5 | 4 | 35 | | |
| ELGR162 | | GRANITE (MED. GR.) WITH BLEBS AND STRINGERS OF PYRITE | 5 | 0.7 | 8 | 17 | | |
| ELGR163 | | MAROON VOLCANIC XENOLITH WITH STRINGERS AND DISSEMINATED PYRITE | 5 | 1.8 | 3 | 70 | | |
| ELGR164 | | RUSTY SILICEOUS RHYOLITE WITH BLEBS AND STRINGERS OF PYRITE | 460 | 1.6 | 2 | 36 | | |




N

LEGEND

| | |
|---|---|
| 1a | Leucocractic granitoid |
| 2a | Dacite |
| 2b | Quartz-feldspar crystal tuff |
| 3a | Grey marble |
| 4a | Basalt |
| 4b | Andesite (dark green; fine-grained) |
| 5a | Argillite (metasediments) |

Contacts

Outcrop

Fault (defined, inferred)

Strike and dip

Rock sample

Silt, moss sample



METRES
0 100 200 400 600

**ECSTALL MINING CORPORATION**
**OMEGA GOLD CORPORATION**
**GOLDEN ARROW RESOURCES INC.**

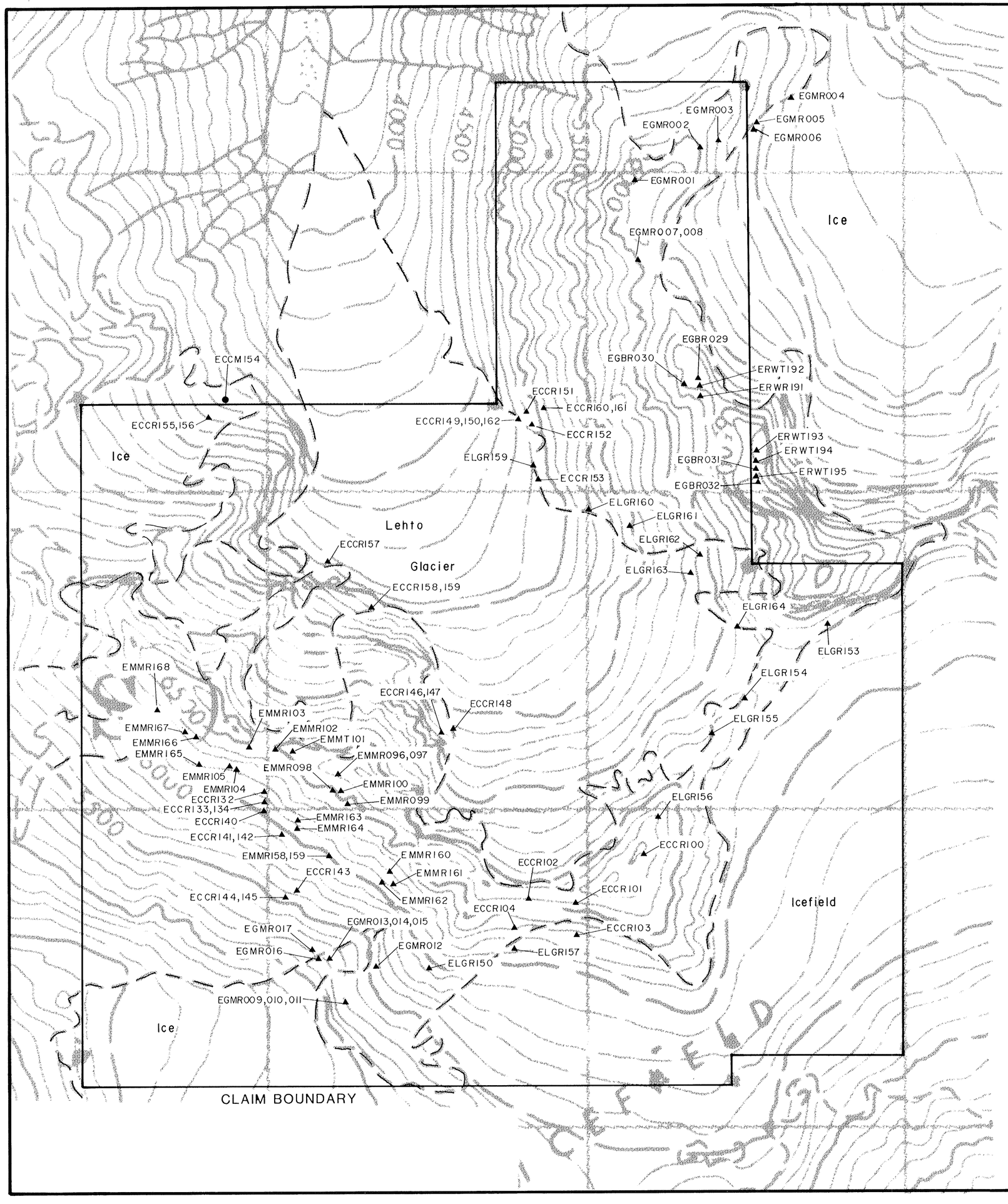
# MACGOLD NORTH

SKEENA MINING DIVISION, B. C.

## GEOLOGY MAP

INTERNATIONAL KODIAK RESOURCES INC.

| DATE: | N.T.S. | SCALE: | FIGURE NO. |
|---|---|---|---|
| OCT. 1990 | 104 B/10E | 1:10000 | 4 |




LEGEND

▲ Rock sample

Silt Geochem Sample



METRES

0 100 200 400 600

**ECSTALL MINING CORPORATION**
**OMEGA GOLD CORPORATION**
**GOLDEN ARROW RESOURCES INC.**

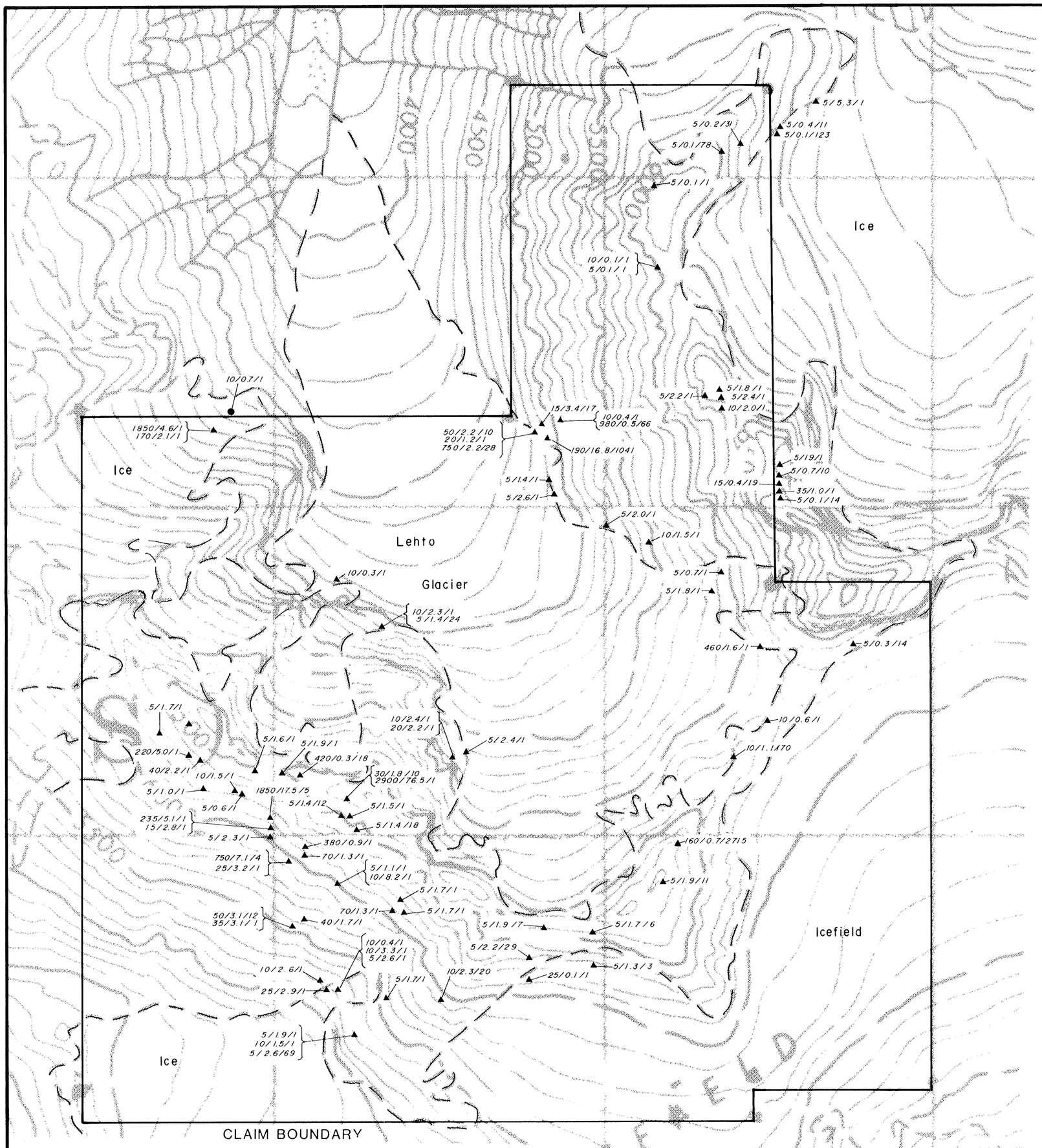
# MACGOLD NORTH

SKEENA MINING DIVISION, B.C.

## SAMPLE LOCATION MAP

INTERNATIONAL KODIAK RESOURCES INC.

| DATE: | N.T.S. | SCALE: | FIGURE NO. |
|---|---|---|---|
| OCT. 1990 | 104 B/10E | 1:10000 | 5 |




LEGEND

▲ Rock sample

● Silt, moss sample

160/0.7/2715 = Au (ppb)/ Ag (ppm)/ As (ppm)



METRES

0 100 200 400 600

**ECSTALL MINING CORPORATION**
**OMEGA GOLD CORPORATION**
**GOLDEN ARROW RESOURCES INC.**

# MACGOLD NORTH

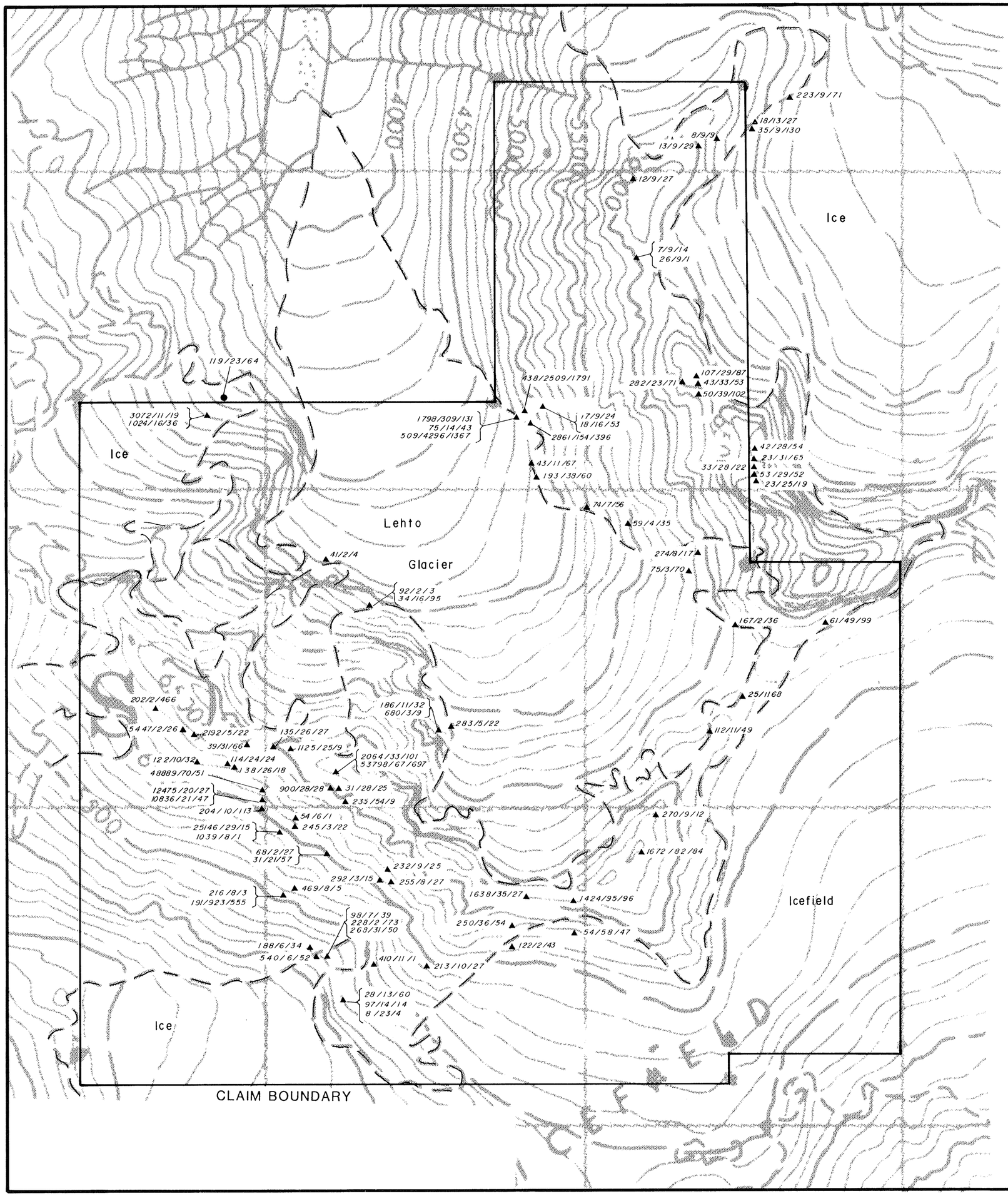
SKEENA MINING DIVISION, B.C.

## GEOCHEMISTRY

**Au (ppb)/ Ag (ppm)/ As (ppm)**

INTERNATIONAL KODIAK RESOURCES INC.

| DATE: | N.T.S. | SCALE: | FIGURE NO. |
|---|---|---|---|
| OCT. 1990 | 104 B/10E | 1: 10000 | 6 |




LEGEND

▲ Rock sample

● Silt, moss sample

Cu (ppm)/ Pb (ppm)/ Zn (ppm)



METRES

0 100 200 400 600

**ECSTALL MINING CORPORATION**
**OMEGA GOLD CORPORATION**
**GOLDEN ARROW RESOURCES INC.**

# MACGOLD NORTH

SKEENA MINING DIVISION, B. C.

## GEOCHEMISTRY

**Cu (ppm)/ Pb (ppm)/ Zn (ppm)**

INTERNATIONAL KODIAK RESOURCES INC.

| DATE: | N.T.S. | SCALE: | FIGURE NO. |
|---|---|---|---|
| OCT. 1990 | 104 B/10E | 1: 10000 | 7 |