LOG NO: 12-31 RD.
ACTION:

FILE NO:

# Geological and Geochemical Summary Report on the MacGold South Claim Group, Skeena Mining Division, British Columbia

N.T.S. 104 B/10E

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

For

Ecstall Mining Corporation
Omega Gold Corporation
#307-475 Howe St.
Vancouver, B.C.
V6C 2B3

SUB-RECORDER
RECEIVED
DEC 19 1990
M.R. # ........ $ ........
VANCOUVER, B.C.

December, 1990

Rick Walker M.Sc.
International Kodiak Resources Inc.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

.c:32690

20,736

## SUMMARY

The MacGold South claim block is located south of the Iskut River near the headwaters of Harrymel Creek. The property lies within the Skeena Mining Division on N.T.S. mapsheet 104 B/10E (longitude 131°36' West, latitude 56°37' North). The MacGold South claims are approximately 11 kilometres west of the Calpine Resources'/Stikine Resources' Eskay Creek gold discovery. The property can be accessed only by helicopter, either from Bronson airstrip, Bell II on Highway 37 or, more recently, from Kodiak Camp just east of the Iskut River. An access road from Highway 37 near Bob Quinn Lake will pass approximately 13 kilometres to the north of the property.

The MacGold South claim block consists of 55 units jointly held by Ecstall Mining Corp. (50%) and Omega Gold Corp. (50%). The property was staked for Ecstall/Omega in 1988 to cover prominent gossans and a known mineral occurrence, the Colagh Showing. The property was previously mapped at a reconnaissance scale by Grove (1971, 1986) who correlated strata in the claim block to the Lower Jurassic Betty Creek Formation of the Hazelton Group.

More recently, work was carried out in 1988 when B.C.M.E.M.P.R. field crews mapped the property on a regional basis (Open File Map 1989-10) and reported mineralization at the Colagh Showing. These initial results were published in the 1988 Geological Fieldwork (Paper 1989 - 1, pp. 241 - 250) and led to the ground being acquired by Chris Graf. Additional field work by B.C.M.E.M.P.R. in 1989 in the vicinity of the Colagh Showing resulted in several smaller showings being found.

An exploration program in 1989 by Nicholson and Associates led to the discovery of several massive sulphide showings and precious metal occurrences within a volcanogenic setting. The exploration work included soil sampling, mapping, blast trenching and 15 line kilometres of I.P. surveying. The 1990 program included 1:10000 geological mapping of the property, 1:2500 grid mapping of the southern glacial bowl (containing the High Grade and Ice Showings), a UTEM survey 11.375 km in length, and a legal land survey. A total of $105,883.80 was spent on the claims in 1990.

Additional work should consist of extensive resampling of the grid, blasting and trenching of sulphide showings and an exploratory drill program. Further sampling and mapping should be carried out on the gossans immediately north and south of the Copper King Glacier.

## TABLE OF CONTENTS

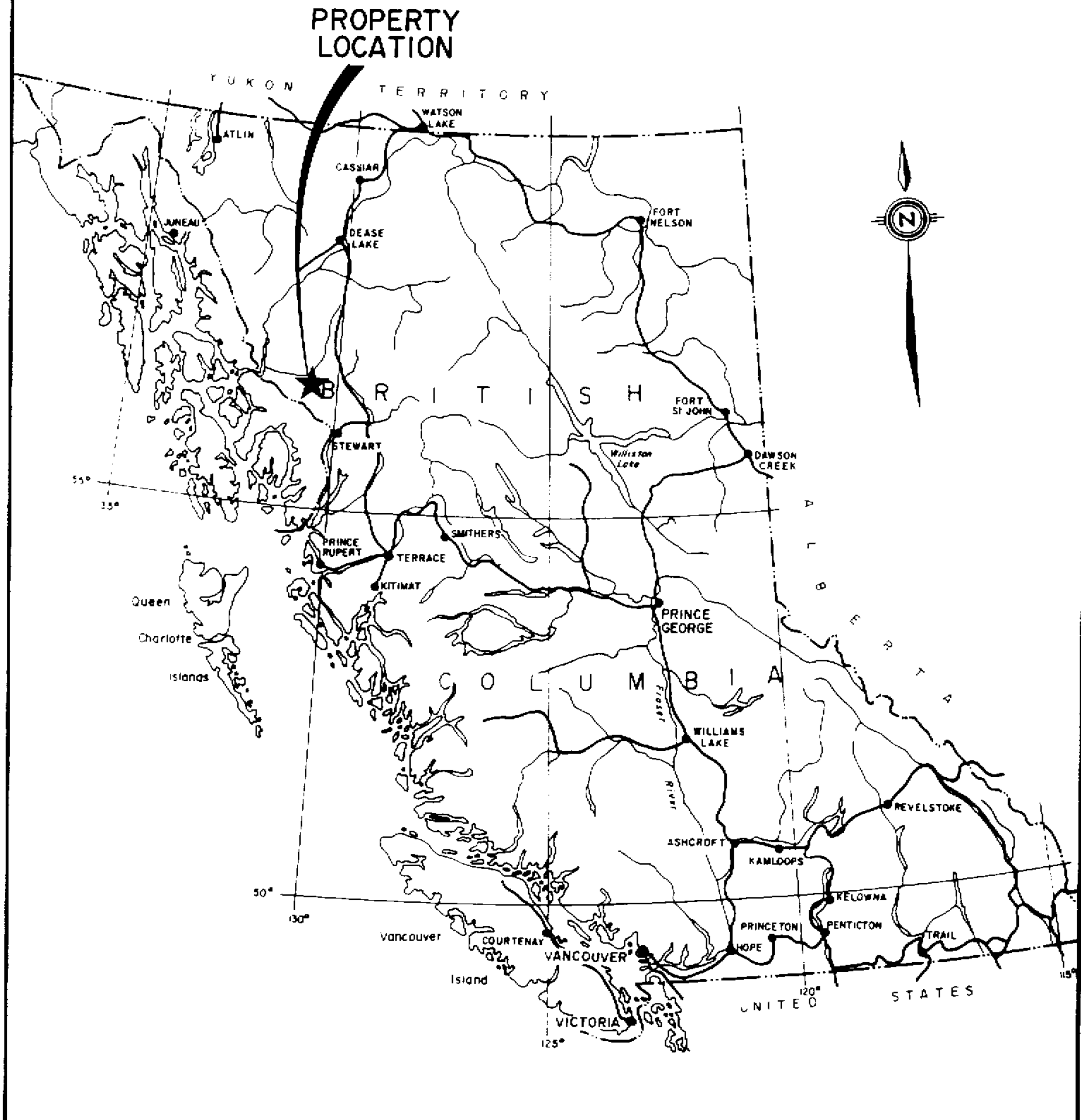
## LIST OF FIGURES

## INTRODUCTION

The MacGold South claim block is located in the Skeena Mining Division at longitude 131°36' West, latitude 56°37' North (Figure 1), on N.T.S. mapsheet 104 B/10E. The claim block consists of 55 units and is jointly held by Ecstall Mining Corp. and Omega Gold Corp. on a 50/50 basis.

Initial ground work in 1989 consisted of reconnaissance geochemical silt and soil surveys which were successful in locating several mineralized areas: the High Grade, Ice and J.R. Showings. A follow up program of I.P. geophysical surveying and blast trenching returned favourable results. The J.R. Showing returned silver values of 755.0 ppm (25 oz/t.); the Ice Showing returned 0.21 oz/t. gold over 2.5 metres and the High Grade Showing returned values of 0.007 oz/t. Au, 1.5 oz/t. Ag, 0.8% Zn and 5.7% Cu.

Field work in 1990 included 1:10,000 geological mapping of the property, 1:2500 grid mapping of the southern glacial bowl, a UTEM geophysical survey of the grid and a legal land survey of the property. Additional samples taken in close proximity to the J.R. Showing returned silver values up to 110.8 ppm, copper values up to 1.7% and zinc up to 4.61%. A nickel anomaly was also obtained from a mineralized shear in a diorite near the J.R. Showing of 1418 ppm. The Ice Showing returned gold values up to 0.189 oz/t., copper values up to 1.49% and weakly anomalous silver values up to 7.8 ppm. A selective grab sample of the mineralized zone in the High Grade Showing returned silver values up to 52.8 ppm, copper values up to 16.4% and zinc values up to 14.9%.




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 | |

## LOCATION AND ACCESS

The MacGold South claim block is situated at longitude 131°36' West, latitude 56°37' North. The property is south of the Iskut River, west of Harrymel Creek and 12 kilometres west of Calpine Resources'/Stikine Resources' Eskay Creek gold project. The property is located on N.T.S. mapsheet 104 B/10E in the Skeena Mining Division (see Fig 1). The property is accessible by helicopter from the Kodiak Camp just east of the Iskut River and 10km south of Bob Quinn Lake. It is approximately 30 kilometres southwest from Kodiak Camp to the MacGold South claim block.

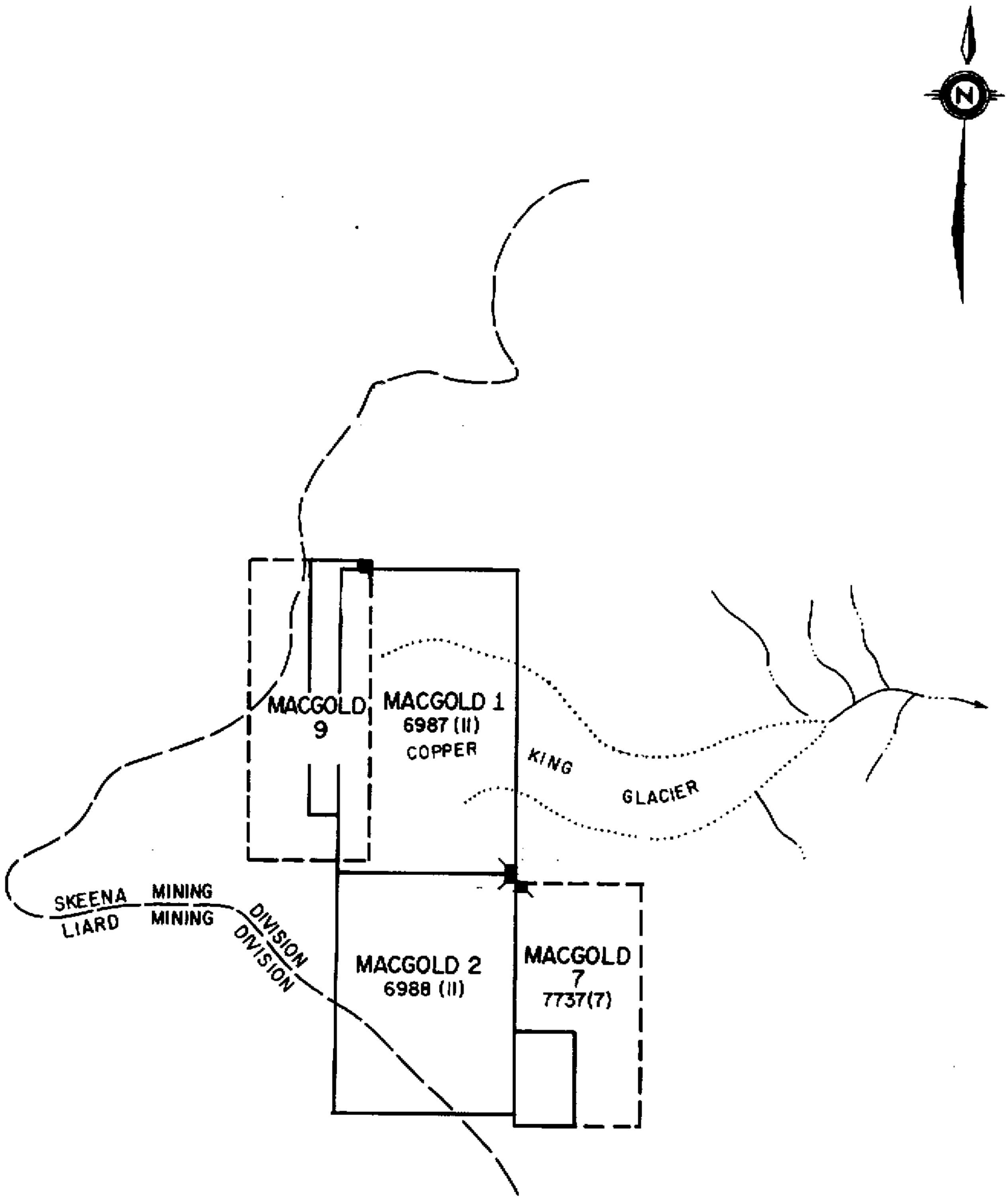
Initial construction has begun on an access road from Bob Quinn Lake into the Iskut - Unuk River area and will pass approximately 13 kilometres north of the MacGold South claim block.

## CLAIM STATUS

The initial MacGold claim block, which consisted of MacGold 1 - 4, was staked in November of 1988 for Chris Graf. These claims were staked in accordance to the new modified grid system. The original claims (MacGold 1 - 2) along with further claims staked later (MacGold 7, 9) were transferred to Ecstall Mining Corp. and Omega Gold Corp. which hold the claims on a 50/50 basis (see Appendix i). The claims have since been grouped and are known as the MACGOLD GROUP (Figure 2). The claim status is as follows:

| Claim | Units | Record # | M.D. | Expiry Date* |
|---|---|---|---|---|
| MacGold 1 | 15 | 6987 | Skeena | Nov. 14/1997 |
| MacGold 2 | 12 | 6988 | Skeena | Nov. 14/1997 |
| MacGold 7 | 8 | 7737 | Skeena | July 13/2000 |
| MacGold 9 | 10 | 8062 | Skeena | Oct. 1 /2000 |

* After filing the 1990 work for assessment purposes.




| | | |
|---|---|---|
| OMEGA/ECSTALL | | |
| MACGOLD CLAIM GROUP<br>**CLAIM MAP**<br>SKEENA M.D., B.C. | | |
| NICHOLSON & ASSOCIATES | | |
| Drawn. J.W. | Date. Oct. 1989 | FIGURE |
| Scale. 1:50,000 | N.T.S. 104B/10E. | 2 |

## PHYSIOGRAPHY AND CLIMATE

The MacGold South claim block is situated in the Boundary Ranges of the Coast Mountains. The property's elevation varies from 1000 m (3500 feet) along the Copper King Glacier to 1800 m (6000 feet). There is up to 50% ice cover in the form of permanent icefields and glaciers. In addition, 10% of the property is inaccessible due to steep cliff faces. The valley walls and the bowl of the southern cirque are covered in unconsolidated glacial detritus, from a few centimetres to several metres in thickness, which can make traverses hazardous.

Stream drainages are very immature and contain only minor amounts of detritus. Water is plentiful in the form of glacial meltwater streams and groundwater seeps. Vegetation consists of alpine vegetation and heather covered slopes.

Climatically the 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 area has, for the most part, seen sporadic mineral exploration activity. The first documented mineral discoveries occurred around the turn of the century. Mineralization was noted 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 producer was the Silbak Premier Mine which produced 41 million ounces silver and 1.8 million ounces gold between 1920 and 1985. After World War II, exploration was concentrated on large tonnage base metal deposits. Although several deposits were defined, only Granduc Mine attained commercial production with published reserves of 10.9 million tons grading 1.79% copper.

Exploration in the 1970's shifted to precious metals and several deposits have since been defined, including the Reg deposit (Skyline Gold Corp.) with 740,000 tons grading 0.52 ounces/ton gold, 0.67 ounces/ton silver; the Snip deposit (Cominco/Prime) with 1,032,000 tons grading 0.875 ounces/ton gold; the Eskay Creek deposit (Calpine/Stikine) with probable reserves of 4.36 million tons grading 0.77 ounces gold, 29.12 ounces silver at a cutoff grade of 0.10 oz. gold (Northern Miner, 6 Oct. 1990). Numerous companies are exploring for precious and base metal deposits in the area and some are at the feasibility and prefeasibility stages of production, i.e., the Sulphurets deposits (Newhawk/Granduc) with 715,400 tons of 0.431 ounces/ton gold and 19.7 ounces/ton silver; and the SB deposit (Tenajon) with 308,000 tons grading 0.51 ounces/ton gold.

The MacGold South area has received very little mineral exploration. No record of work is reported in Government publications prior to Grove's (1971) report. Previous to 1971, the only report of any work comes from local prospector John Lehto who reportedly found pieces of copper stained float at the toe of the Copper King Glacier.

Work likely occurred at some point in recent history on the southwest portion of the property where old wooden pickets were found. These pickets were probably a carryover from the 1960's work on old land holdings surrounding Consolidated Silver Standard's E and L Deposit.

More recently, work was carried out in 1988 when B.C.M.E.M.P.R. field crews mapped the property on a regional basis and reported mineralization at the Colagh Showing. These initial results were published in the 1988 Geological Fieldwork (Paper 1989 - 1, pp. 241-250) and led to the ground being acquired by Chris Graf. Additional field work by B.C.M.E.M.P.R. in 1989 in the vicinity of the Colagh Showing resulted in several smaller showings being found.

An exploration program by Nicholson and Associates in 1989 led to the discovery of several massive sulphide showings and precious metal occurrences within a volcanogenic setting. The exploration work included soil sampling, mapping, blast trenching and 15 line kilometres of I.P. surveying. The 1990 program included 1:10000 geological mapping of the property, 1:2500 grid mapping of the southern glacial bowl (containing the High Grade and Ice Showings), a UTEM geophysical survey 11.375 km in length and a legal land survey.

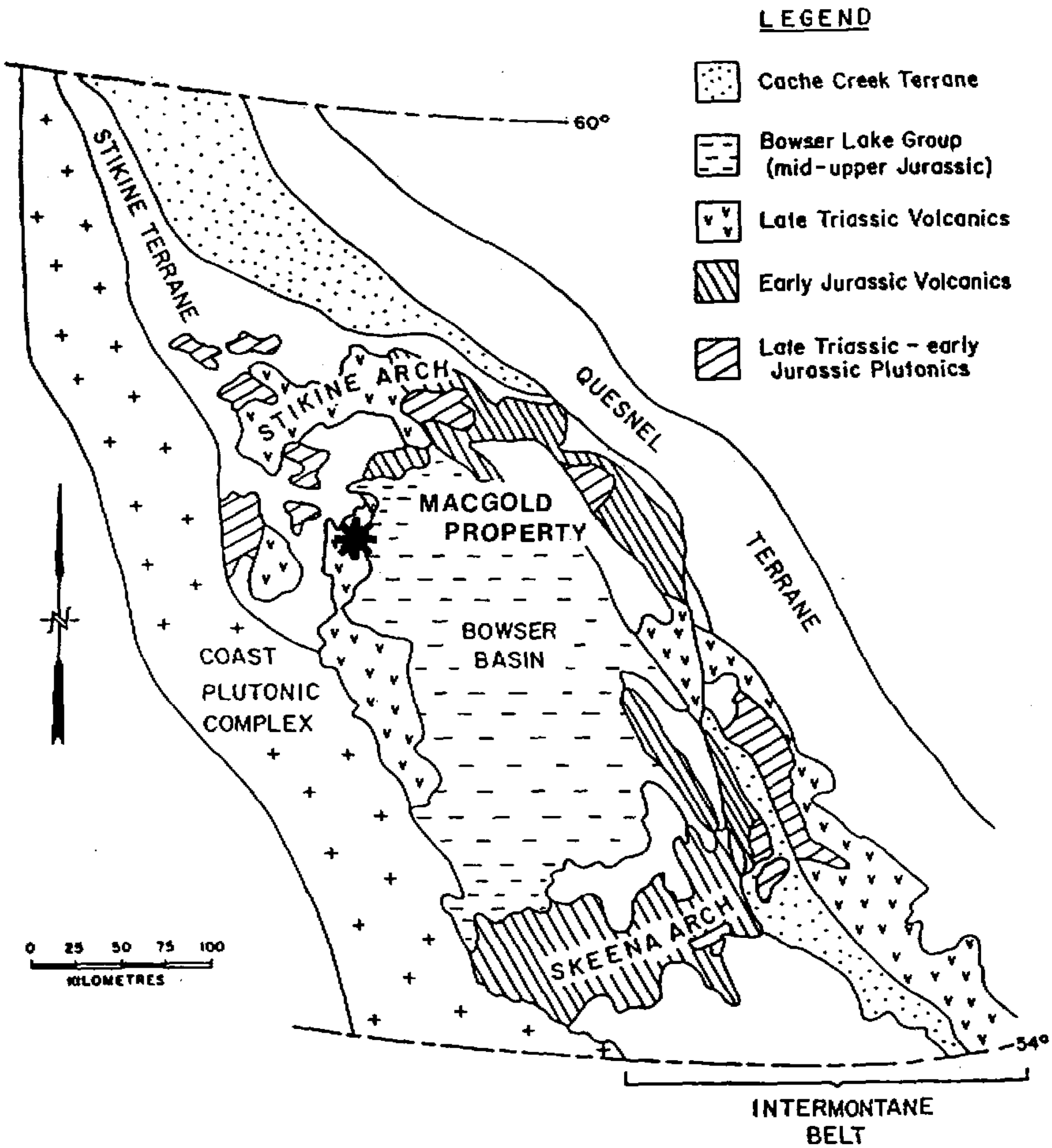
## REGIONAL GEOLOGY

The MacGold South claims are located near the boundary between the Intermontane Belt and the Coast Plutonic Complex. The area is underlain by the Stikine Terrane (Figure 3), a mid-Paleozoic to Mesozoic island arc succession. Mesozoic rocks are represented by volcanic rocks of the Upper Triassic Stuhini Group and the volcanic and subordinate sedimentary rocks of the Lower to Middle Jurassic Hazelton Group (Figure 4). This dominantly volcanic package is interfingered with, and overlain by, Middle to Late Jurassic successor basin sediments of the Bowser Basin.

Two facies have been identified in the Upper Triassic Stuhini Group (Anderson and Thorkelson, 1990): an eastern facies and a western facies. The western facies can be traced from the Stikine River eastward to at least Snippaker Mountain. It is characterized by coralline 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 the felsic tuff units. Orange and black weathering, thin bedded siltstone and fine grained feldspathic, locally calcareous greywacke distinguish this facies. Polymict pebble to boulder conglomerate and shale are subordinate. Intermediate to mafic volcanics, conglomerate and breccia are typical.

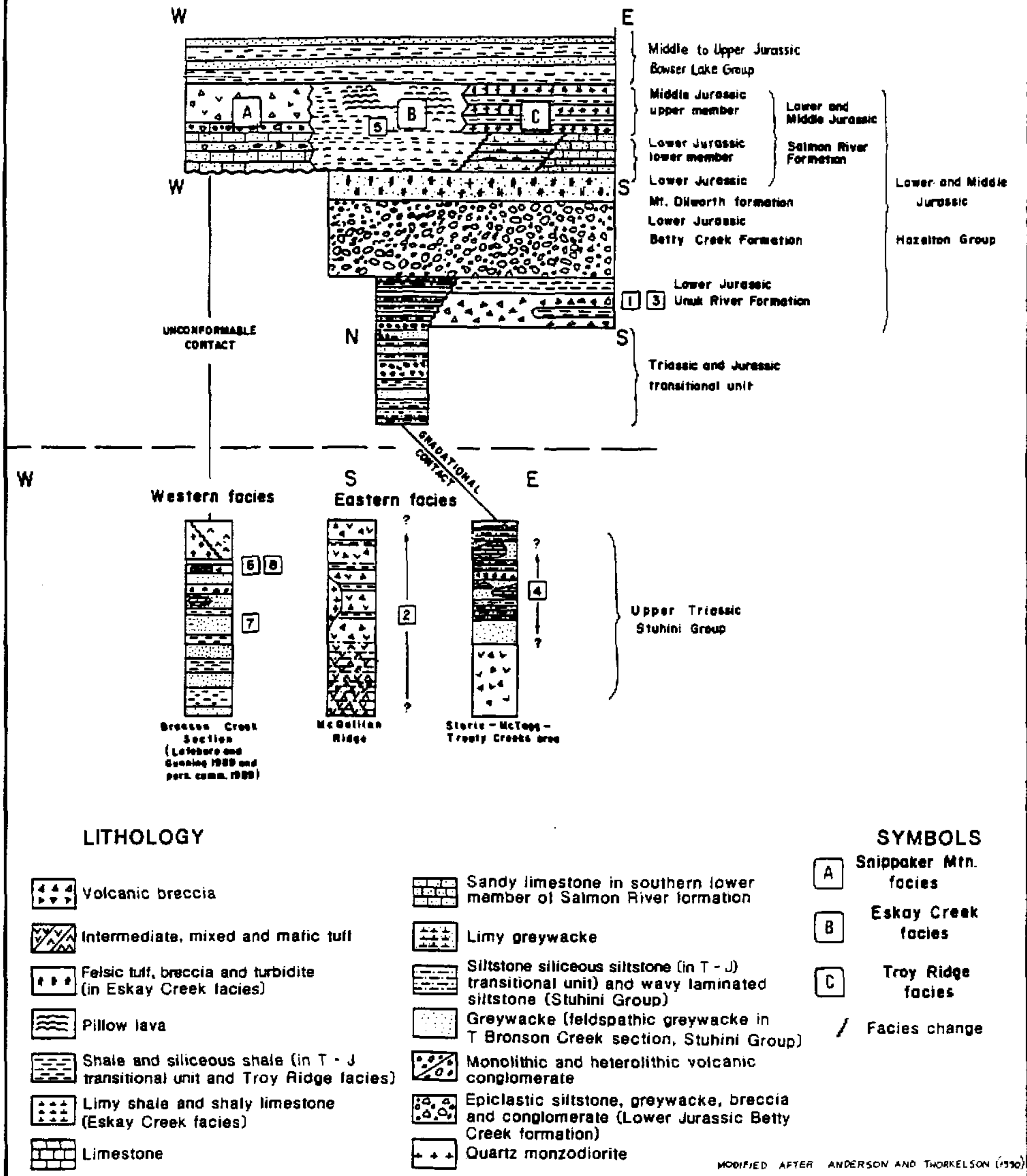
A gradational contact between the Upper Triassic Stuhini Group and the Lower to Middle Jurassic Hazelton Group has been mapped near the headwaters of Unuk River (Alldrick and Britton, 1988). Siltstone above the orange and black weathering siltstone and shale becomes more




REGIONAL GEOLOGY
BOWSER BASIN
NW BRITISH COLUMBIA

(Outline of terrane boundaries and major rock groups of the Jurassic and Triassic – modified from Thomson, 1985).

FIG. 3




[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.**

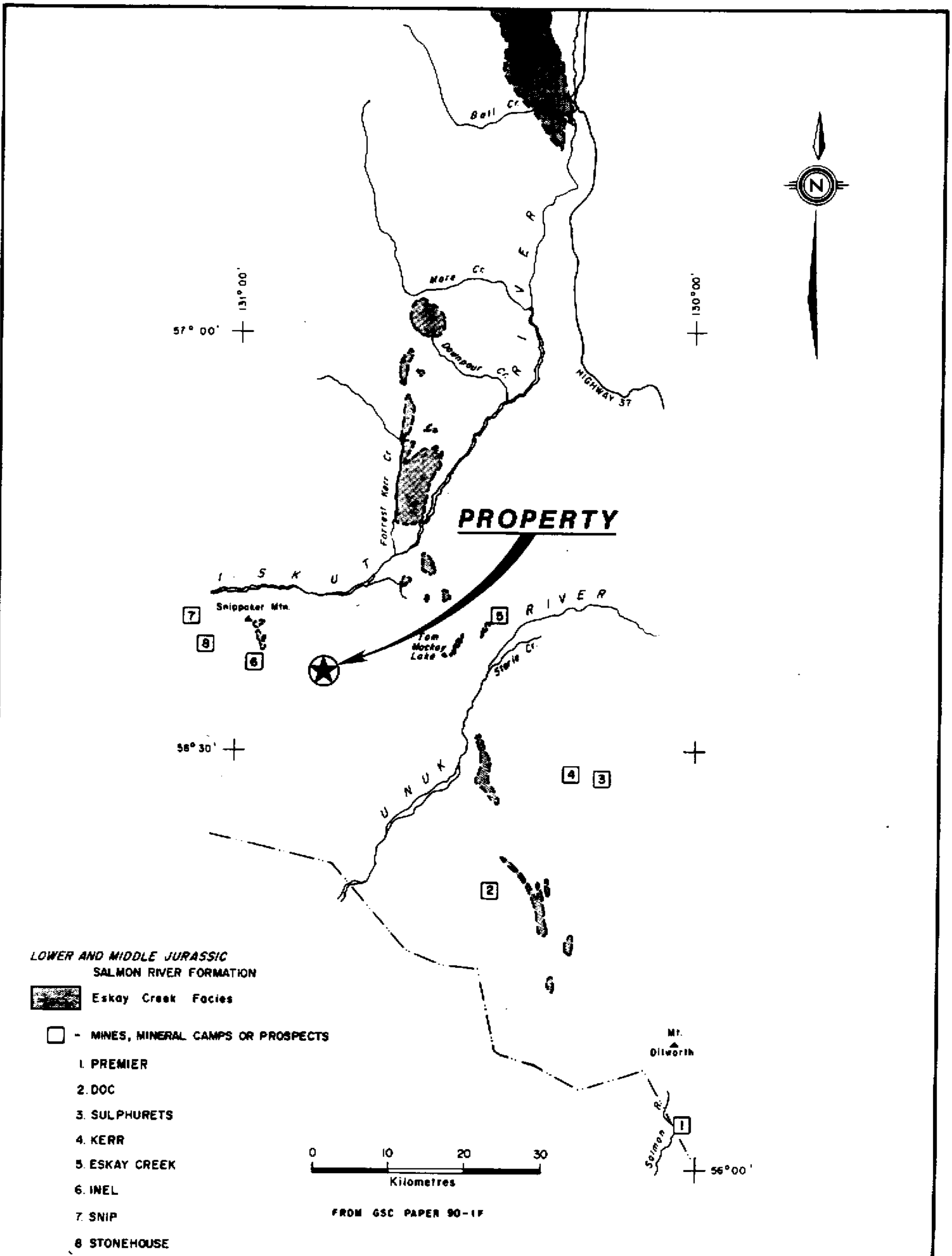
**Figure 4**

siliceous with increasingly abundant greywacke and conglomerate. The conglomerate is present as discontinuous lenses and consists of clast-supported porphyritic andesite and dacite clasts. The uppermost strata in this transitional zone consists of laminated siliceous siltstone, fine grained greywacke, minor coarser grained greywacke and matrix to clast supported conglomerate. Elsewhere, the Hazelton Group lies above an angular unconformity at the top of the Stuhini Group.

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 recognized in the Stuhini Group; including the Kerr, the Doc, the Inel and the Stonehouse (Figure 4 and 5).

The Hazelton Group has been divided into three heterogeneous formations (Figure 4): the Lower Jurassic Unuk River Formation and Betty Creek Formation and the Lower to Middle Jurassic Salmon River Formation (Anderson and Thorkelson, 1990). In addition, a regional marker unit, the Mt. Dilworth formation, has been identified between the Betty Creek Formation and the Salmon River Formation. Some workers (Grove, 1986) identify a fourth unit, the Nass Formation, overlying the Salmon River Formation. However, this package of rocks includes Bowser Basin sediments and should not be included in the Hazelton Group which is dominated by volcanic lithologies (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




Index map for localities mentioned in text and distribution of Troy Ridge, Eskay Creek and Snippaker Mountain facies of Middle Jurassic Salmon River Formation.

**Figure 6**

maroon to green volcanic siltstone, greywacke, conglomerate, breccia, basaltic pillow lavas and andesitic flows. The conglomerate/breccia units consist of matrix-supported, pebble to boulder size clasts of aphanitic to porphyritic andesite fragments. This is overlain by the Mt. Dilworth formation (Alldrick and Britton, 1989; Anderson and Thorkelson, 1990) a regional marker unit consisting of tuff breccia, felsic tuff and dust tuff. These tuffs are welded to unwelded 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 toward the north and northwest to at least 1500 m of siltstones, greywacke and rare fossiliferous limestones south of Telegraph Creek.

The upper member of the Middle Jurassic Salmon River Formation displays three distinct facies from east to west; the Snippaker Mountain facies, the Eskay Creek facies, and the Troy Ridge facies (Figure 4). The gold deposit presently being defined at Eskay Creek (Figure 6) is apparently stratabound in the Eskay Creek facies. This medial facies extends 45-60 kilometres north and south along strike from the deposit. The Eskay Creek facies is composed of aphyric to augite phyric (pillow) basalt 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. Detritus shed from the exposed Stikine Arch was deposited in the adjacent Bowser Basin, resulting in the Middle and Late Jurassic Bowser Lake Group sedimentary sequences.

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

## LOCAL GEOLOGY

### Stratigraphy

Grove (1971, 1986) correlated the strata of MacGold South to the Lower Jurassic Unuk River and Betty Creek Formations. The lithologies encountered are believed correlatable to the Betty Creek Formation as described by Anderson and Thorkelson (1990), consisting primarily of green weathering crystal tuff, heterolithic lapilli tuff and volcanic breccia. These are probably equivalent to the green volcanic siltstone, greywacke and conglomerate, reworked crystal and/or lithic tuffs described by Anderson and Thorkelson (1990). The characteristic features of the Betty Creek Formation are the maroon (and green) colour, abundant ferruginous jasper veining and the epiclastic nature of the deposits (Anderson and Thorkelson, 1990). The structurally overlying units may be correlatable to the Mt. Dilworth formation, but such a correlation is tenuous at present.

The layered succession has been cross-cut and intruded by several intrusive bodies, including hypabyssal basalts, diorites and heterogenous granitoids. The intrusive phases have had the dominant effect on mineralization of the MacGold property. Fluids associated with the hot intrusive bodies probably controlled alteration and associated mineralization of the host lithologies.

#### South of the Copper King Glacier

**Lower Jurassic Betty Creek Formation**

The lowest unit exposed in the MacGold South property is a yellow-green weathering crystal tuff having white weathering feldspar phenocrysts up to 3 mm in diameter in a very fine grained ash matrix. Phenocrysts comprise up to 5% of the outcrop by volume and include a minor (<1%) mafic component. This unit is up to 5 m thick, laterally discontinuous, locally cross-cut and overlain by basalt. The felsic crystal tuff is overlain by a medium green weathering crystal tuff with local horizons of heterolithic lapilli tuff. The crystals consist of rounded quartz and feldspar laths up to 2 mm in length in a fine grained matrix. The lapilli consist of leucocratic inclusions up to 6 cm in diameter and include fine to medium grained tonalite, granular quartz and feldspar. In addition, mafic lapilli are present in some localities and comprise up to 30% by volume. Continuity of the lapilli tuff horizons could not be determined due to glacial overburden.

Two exposures of volcanic breccia were identified consisting of heterolithic angular blocks up to 50cm across. The blocks consist of igneous lithologies similar to the lapilli described above. The exposed thicknesses are up to 20 m and the unit can be traced for up to 40 m along strike. The total exposed apparent thickness of the crystal tuff dominated succession is between 90-120 m (300 and 400 feet). This unit can be traced for 2 km to the southern property boundary.

The overlying and partially equivalent basaltic succession is up to 90 metres (300 feet) thick and homogeneous, consisting of a medium green to dark grey weathering, fine grained to aphanitic groundmass with plagioclase phenocrysts up to 2 mm in length. Local horizons contain olivine and pyroxene phenocrysts.

The steep ridge northeast of the cirque and south of the Copper King Glacier hosts northeast striking sediments and volcanics that overlie the basaltic succession. These are correlative with the upper Betty Creek Formation, or possibly the lowermost Salmon River Formation.

The sediments consist of dark grey and black, fissile slates and argillites. Thin (<1 cm) bands of fine grained arenite are also present but are a minor component. The argillaceous sediments are rusty weathering and have a pervasive foliation which obscures bedding.

In contact with the argillite is a fine to medium grained plagioclase porphyritic dacite or dacite crystal tuff. This unit often weathers a rusty colour and has shear planes trending west, north-west. The northern contact of the dacite/dacite tuff unit is marked by a thin band of black slate, which gives way to a distinctive white weathering volcanic unit. Lithologies include interbedded ash tuffs, plagioclase crystal tuffs, lapilli tuffs and a volcanic breccia with blocks up to 20 cm of rhyolitic felsic tuffs and rare chert.

The bedding strikes west with a steep north dip and is on a scale of centimetres to metres. The unit is strongly jointed in a north to south direction and has a strong rusty weathering colour in many areas.

### North of the Copper King Glacier

#### Lower Jurassic Betty Creek Formation

The region north of the Copper King Glacier is dominated by maroon to dark grey weathering basalts, locally coarsening to andesite. The basalts overly a crystal to lapilli tuff, are fine-grained and homogeneous with local interfingered dark grey banded cherts and argillites (up to 4 m in thickness). The andesite consists of 1-2 mm anhedral pyroxene phenocrysts in a plagioclase lath matrix.

The lowermost exposures consist of a heterogeneous crystal to lapilli tuff in a medium green weathering, aphanitic to fine-grained matrix. Plagioclase laths and pyroxene phenocrysts are up to 3 mm in diameter. There are xenoliths of basalt, argillite, banded chert and amphibolitized gabbro, in places comprising up to 50% of the exposure by volume.

**Middle Cretaceous to Early Tertiary Intrusives**

The layered succession of mixed volcanic and sedimentary lithologies were affected by subsequent intrusive activity. The relative timing has been tentatively ascertained from contact relationships and type of alteration.

The earliest intrusions appear to be the dioritic bodies. These intrusions are variably hydrated and range from quartz diorite to hornblende diorite in composition. The quartz diorite varies from fine-grained to coarse-grained while the hornblende diorite is porphyritic, having hornblende crystals up to 1.5 cm in length.

The diorites were intruded in several pulses and can be separated on the basis of grain size and compositional differences. The early phases are fine grained and more mafic in composition relative to later phases. The margins of the dioritic intrusions are typically chilled against the host lithologies. Heterogeneous granitoids have been mapped in the southern portion of the property (see Figure 6 and 8). The granitoids vary from leucocratic to burgundy coloured banded rhyolites, plagioclase and alkali feldspar porphyritic granite and leucogranite. The margins of the granitoid have abundant xenoliths of the host crystal and lapilli tuff. The southernmost granites examined have argillaceous xenoliths and rafts, as well as crystal and lapilli tuff inclusions.

There are abundant andesitic dikes that trend approximately 010-060 degrees. These dikes have been observed to cross-cut all of the layered succession lithologies and some of the intrusive bodies. The dikes have chilled basaltic margins and coarsen toward the cores. The cores of the dikes consist of plagioclase laths (up to 8 mm in length) and/or pyroxene phenocrysts (locally glomeroporphyritic) up to 3 mm in diameter in a plagioclase lath matrix. The dikes range from 0.4-2 m in thickness.

Aplite dikes are also evident in the strata and have no apparent preferred orientation. Aplite dikes examined are up to 2.5 m thick and can be traced for up to 90 metres in a sub-vertical direction. The aplites are creamy white, fine grained to aphanitic and homogeneous.

## Structure

An extensive report on the structure in the MacGold South property cannot be made due to the reconnaissance scale mapping carried out. Many faults have been identified on the property (see figure 6), however, their displacement and sense of motion are undetermined. Tracing faults for any distance is very difficult due to glacial ice and associated overburden as well as steep topography.

The contact between argillites and dacite on the ridge northwest of the southern cirque is offset by a north-west trending, east side down normal fault. Several other north and north-west trending faults are present in this area but the sense of movement could not be determined.

## Alteration

Alteration of many types was observed on the MacGold South property. Most of the alteration is closely associated with the intrusive bodies identified. Alteration products include quartz, chlorite, sericite and epidote.

### Quartz

Silica enrichment was noted along fractures and at lithological contacts. Two lithologies showed considerable silica enrichment; the crystal to lapilli tuff and the basalt.

In many localities in the southern cirque, the crystal to lapilli tuff has been extensively bleached and can be recognized only by relic, ghost textures. Silica enrichment is highly variable and was probably dependent on proximity to the main granitic intrusion and/or related dikes, sills and apophyses.

Silicification of basalt is reflected in extensive quartz filled fractures (in some localities up to 60% of the outcrop) and a light blue-grey weathering colour. The basaltic nature of the outcrops can still be recognized.

### Chlorite/Sericite

Mafic phases throughout the property show highly variable chloritization. Crystal and lapilli tuff xenoliths have a thin (<1 cm) chlorite rind, hornblende crystals in the diorite are partially to wholly chloritized and the margins of some of the andesite dikes have been chloritized. Basaltic exposures are variably chloritized, reflected in the green weathering colour. Close examination reveals a partially chloritized matrix. Olivine and pyroxene phenocrysts in the basalts are chloritized. In addition, plagioclase phenocrysts in many lithologies take on a greenish cast which is interpreted to result from partial sericitic alteration.

**Epidote**

Epidote alteration is not as extensive as other types of alteration. Minor epidote was noted along fractures and shears and as rinds on lapilli and xenoliths. Several areas within the grid showed very extensive epidote alteration and will be discussed later.

## Mineralization

Sulphide mineralization north of the Copper King Glacier consists of pyrite, minor arsenopyrite, pyrrhotite and chalcopyrite. The presence of sulphides in the diorite is evident by the orange weathering colour with local, intensely iron stained horizons.

The basalts and crystal tuffs are poorly mineralized, containing only minor disseminated sulphides. Disseminated pyrite is present as small cubes (<1 mm) within host lithologies. Weathered surfaces are weakly to moderately iron-stained.

There are a series of fractures and veins that are oriented approximately 200 degrees dip 50 degrees to the west and host local concentrations of sulphides. Many of the fracture sets have associated stockworks of quartz and/or carbonate veins and epidote coatings.

**Pyrite**

Pyrite is ubiquitous throughout the MacGold South property and is present as disseminations, local concentrations along fractures, and in thin sulphide-rich horizons. It was found in association with pyrrhotite and chalcopyrite and is the dominant sulphide present on the property.

**Chalcopyrite**

Chalcopyrite is highly subordinate to pyrite and appears to be localized in the southern half of the property. Several localized concentrations of chalcopyrite along fractures and shears were sampled. Malachite staining and local azurite were noted as well. Significant malachite staining was previously identified at the High Grade and Ice Showings in 1989. Additional localities with concentrated chalcopyrite were identified and sampled in the course of this season's work (see Grid Geology).

**Pyrrhotite**

Pyrrhotite was noted in very few localities and all on the north side of the Copper King Glacier. The most impressive pyrrhotite mineralization was along a quartz/carbonate vein where pyrrhotite concentrations are up to 4 cm in thickness. The other localities where pyrrhotite was noted are proximal to the hornblende diorite underlying and to the west of the basalt exposure north of the Copper King Glacier. It is present as disseminated crystals and small aggregate masses less than 0.5 cm across.

**Barite**

Barite is present in several localities within the grid (see Grid Geology). No occurrences of barite were noted elsewhere.

**Quartz/Calcite**

Quartz and/or calcite veins are present throughout the property but are, with a few exceptions, thin and not very extensive. The most notable exception is the quartz - calcite vein mapped north of the Copper King Glacier, east of the hanging glacier. It is up to 1.5 m thick, trends north and can be traced at least 70 m in a sub-vertical direction.

## Geochemical Assay Results

A total of 378 samples were taken from the MacGold South claim block for geochemical analysis. The samples taken included 358 rock samples, 3 stream sediment samples, and 17 soil samples. All samples were coded using a four part alphanumeric system. The first letter designates the property (D - MacGold South), the second and third letter are the collector's initials, the fourth for the type of sample (R - rock, S-silt, M - moss) and the remainder denote the sample number.

Stream sediment samples were taken from every drainage at 100 m intervals as measured with a hipchain. At every station a stream sediment sample was taken and placed in a plastic sample bag. If insufficient sediment was present a moss sample was taken instead. In either case, the station was identified with orange flagging tape upon which the sample number was recorded.

Rock samples were taken from mineralogically promising zones. Additional samples were taken at structural breaks (faults, unconformities, some fractures). Chip samples were taken over an area up to 0.5 square metres to obtain a representative sample. Rock samples taken over a greater area have been identified with a "T" in the code, rather than an "R". Samples were placed in numbered plastic sample bags. The sample location was flagged with orange flagging tape and an aluminum tag with the pertinent information was fixed to the outcrop.

Samples taken were sent to Min-En Laboratories in Smithers, B.C.. All samples were analysed for 30 elements by Inductively Coupled Plasma analysis (I.C.P.) with an Atomic Absorption finish for gold (Appendix iv). Each sample was also analysed for gold content by digestion with aquaregia solution, extraction with methyl isobutyl ketone and analysis with an Atomic Absorption (AA) instrument (Appendix iv).

**Gold**

A total of five anomalous gold values (> 20 ppb) were obtained from samples taken from the MacGold property. Four of the samples were only weakly anomalous, having values between 25 and 95 ppb. One highly anomalous value was obtained from a massive sulphide boulder lying just north of the northeast margin of the property and originating from the bowl to the north.

**Silver**

Twenty six anomalous silver values (>3.0 ppm) were taken from the MacGold. Anomalous silver values were obtained both north and south of the Copper King Glacier, and from all of the major lithologies. A moderately anomalous value of 28.2 ppm was obtained from just outside the grid in the southern bowl.

**Arsenic**

A total of 22 anomalous arsenic values (> 20 ppm) were obtained from the property, ten of which were taken from within the grid. Nineteen of the samples were taken south of the Copper King Glacier.

**Copper**

Twenty six anomalous copper values (> 1000 ppm) were obtained from the MacGold property. Anomalous copper values are evident in all major lithological types, both north and south of the Copper King Glacier. Only one highly anomalous sample (greater than 10,000 ppm) was returned from the northeast boundary of the grid.

**Lead**

Twelve anomalous lead values (> 50 ppm) were returned from the property, all from samples taken south of the Copper King Glacier. Five highly anomalous values (> 1000 ppm) were returned from samples immediately south of the Copper King Glacier and east of the icefield.

**Zinc**

Anomalous zinc values (> 500 ppm) were returned from the MacGold South, mainly from the prominent gossan north of the Copper King Glacier (nine samples) and from the eastern margin of the bowl immediately south of the Copper King Glacier (seven samples). One highly anomalous value was returned from each area, 38352 ppm (MMR090) and 27663 ppm (CCR099), respectively.

**Antimony**

Seven anomalous antimony values (> 5 ppm) were returned from the property, all from within the southern half of the property. Four of the values were obtained from the vicinity of the grid and three in the southern valley wall of the Copper King Glacier. The values returned were all only weakly anomalous.

**Barium**

Six anomalous values (> 500 ppm) were returned from samples taken south of the Copper King Glacier and six from north of the glacier. Three of the anomalous values returned from north of the Copper King Glacier are from samples taken in the prominent gossan. Five of the anomalous values to the south were from samples taken within or proximal to the grid.

## Discussion

The bulk of the anomalous values in precious and base metals are found in a zone centered in the eastern half of the property, from just south of the grid to the northern property boundary. Anomalous values in arsenic, antimony and barium are also coincident within this zone.

Geological mapping of the grid has led to the discussion that mineralization is a result of the emplacement of a granitic intrusions. Hot fluids associated with the intrusion altered the host lithologies.

The presence of dioritic intrusive bodies west of the "anomalous zone" may indicate the western boundary of a coeval suite of diorite intrusive bodies. Furthermore, a granitoid laccolith or sill is exposed in the southern bowl of the MacGold property which may be part of a north trending plutonic body, coincident with the "anomalous zone". Variable alteration and mineralization may have occured above such a dike and be reflected in the anomalous values returned from samples taken along this zone. The above may explain observed zonation of anomalous values returned from the MacGold property. Further work on the MacGold should attempt to test this model.

## Grid Geology

Almost the entire stratigraphic succession described above is exposed within the grid. The grid covers the southern cirque and portions of the ridges to the north and south (Figures 6 and 8). The stratigraphy extends from the basal felsic crystal tuff, exposed above glacial overburden, to the alternating argillite and basalt near the presumed top of the Betty Creek Formation. This exposed volcanic and sedimentary succession has been subsequently intruded and cross-cut by several igneous bodies.

The lowermost unit of the Betty Creek Formation exposed in the grid (Figure 8) is a yellow-green weathering crystal ash tuff having white weathering feldspar phenocrysts up to 3 mm in diameter in a very fine grained ash matrix. Phenocrysts comprise up to 5% of the outcrop by volume and are primarily feldspar crystals but include a minor (<1%) mafic component. This unit is up to 5 m thick, laterally discontinuous, locally cross-cut and overlain by basalt.

A 2 m wide basaltic dike cross-cuts the felsic ash tuff at the base of line 9+00 East and appears to be the source of the sill lying immediately above the tuff. There is a zone up to 1.5 m thick of silica enriched basalt. It is believed that the hot basaltic sill has partially assimilated the upper layers of the felsic ash tuff. An additional effect of the intrusion of the hot sill is pyrite enrichment of the tuff. There are massive sulphide horizons 1-2 mm thick and spaced 1 to 6 cm apart laterally, proximal to the basalt but within the felsic ash tuff. It is interpreted that these horizons represent discontinuities within the felsic ash tuff that served as precipitation sites for sulphides carried in fluids accompanying the basalt. The basalt itself has relatively abundant disseminated, coarse pyrite crystals and small pyritic aggregates. On line 3+00 East, 4+00 North a chilled basaltic contact is exposed where the basalt is in contact with an underlying argillite. It is uncertain whether this represents a chilled intrusive contact or the chilled base of an extrusive flow.

The overlying basaltic succession is up to 90 metres (300 feet) thick and homogeneous, consisting of a medium green to dark grey weathering, fine grained to aphanitic groundmass with plagioclase phenocrysts up to 2 mm in length. Local horizons contain olivine and pyroxene phenocrysts.

No examples, other than described above, were noted of intrusive relationships of the basalt against other lithologies. Therefore, the bulk of the overlying basaltic succession is interpreted to be extrusive in origin. However, there are no indications of columnar jointing or pillow structures to verify this interpretation.

The basalt appears to be partially equivalent to and interfingered with a light to medium green weathering crystal tuff with local horizons of heterolithic lapilli tuff. No intrusive relationships were observed between the tuff and basalt and so they are interpreted to be facies equivalents.

The crystal tuff consists of rounded quartz, euhedral feldspar laths and dark green to black pyroxene phenocrysts up to 2 mm in diameter in a fine grained matrix. Local crystal rich horizons in the crystal tuff contain up to 70% phenocrysts. Lapilli-bearing horizons are up to 10 metres thick and contain inclusions up to 6 cm in diameter which include fine to medium grained tonalite, granular quartz and feldspar phenocrysts. In addition, mafic lapilli are present in some localities and comprise up to 30% by volume. Continuity of the lapilli tuff horizons could not be determined due to glacial overburden. Two exposures of mafic crystal tuff were noted consisting of pyroxene phenocrysts up to 3 mm in diameter in a medium green (chloritized) matrix.

These crystal tuffs are probably equivalent to the reworked crystal and lithic tuffs described by Anderson and Thorkelson (1990). Two exposures of volcanic breccia were identified consisting of heterolithic angular blocks up to 50cm across. The blocks consist of igneous lithologies similar to the lapilli described above. The exposed thickness is up to 20 m and the unit can be traced for up to 40 m along strike. The crystal tuff dominated sequence is up to 120 metres (400 feet) thick and can be traced for approximately 3 kilometres to the southern boundary of the property. The upper contact is poorly exposed and complicated by a granitoid intrusion. The crystal to lapilli tuff is overlain by a dark grey to black argillite.

The sediments consist of dark grey and black, fissile slates and argillites. Thin (<1 cm) bands of fine grained arenite are also present but are a minor component. The argillaceous sediments are rusty weathering and have a pervasive foliation which obscures bedding. The arenitic intervals within the argillites are highly disrupted and discontinuous, interpreted to reflect plastic deformation of the sediments during intrusion of the granitoid.

**Late Cretaceous to Early Tertiary Intrusives**

The earliest of the intrusive bodies appears to be a dioritic body proximal to the J.R. Showing. It is a hornblende bearing diorite with highly chloritized margins. The chloritized zone is up to 8 metres thick and extends inward from the contact with the host argillite. In addition, there is a well developed quartz stockwork throughout the diorite. It constitutes up to 30% of the volume of the diorite.

Heterogeneous granitoids are present in the north-eastern portion of the cirque and at the southern boundary. The geometry of the granitoid intrusion suggests it is a sill or laccolith intruded into the crystal tuff. The intrusion is broadly granitic in composition and varies from leucocratic to burgundy coloured banded rhyolites, plagioclase and alkali feldspar porphyritic granite and leucogranite. The rhyolites are very fine grained to aphanitic and consist of alternating 1-2 mm layers of quartz and feldspar, roughly parallel to the margins of the plutonic body. The rhyolite bearing interval is variable and between 2 and 10 m in thickness. The porphyritic phase shows crystal settling effects, having cyclic variations of phenocrysts from 0.4 to 1.5 cm in diameter.

The margins of the granitoid have abundant xenoliths of host crystal and lapilli tuff. This zone is up to 10 m thick and contains xenoliths up to 1.5 m across. The xenoliths have a thin chloritized rind and the granitoid matrix adjacent to the xenoliths is also chloritized. The southernmost granites examined have argillaceous xenoliths and rafts as well as crystal and lapilli tuff inclusions.

Aplite dikes are also evident in the strata and have no apparent preferred orientation. Aplite dikes examined are up to 2.5 m thick and can be traced for several hundred feet in a sub-vertical direction. The aplites are creamy white, fine grained to aphanitic and homogeneous.

## Grid Structure

Time constraints on grid mapping did not allow for substanstial structural analysis of the grid area. However, all structures encountered were briefly examined and recorded.

In general, areas proximal to the granitoid intrusion show a variety of structural features. There are abundant fractures, having no apparent preferred orientation. The fractures are generally filled with quartz and/or calcite +/- hematite +/- barite.

Some of the fractures show evidence of movement. In addition, there are many small faults with relatively minor displacement (as they juxtapose similar lithologies). Some of the faults may have up to 100-150 m of displacement. The displacement and vergence of the faults remain uncertain.

The crystal and lapilli tuff is generally homogeneous and shows little evidence of deformation. The lateral continuity of lapilli tuff horizons may be used to identify folds and other structural features but overburden prevents these attempts.

The argillite immediately above the granitoid shows evidence of deformation in the form of rootless folds and disrupted laminations. However, this is interpreted to reflect plastic deformation due to intrusion of the granitoid rather than a more regional deformation.

## Alteration

### Silicification

The crystal tuff immediately above the granitoid intrusion is variably silicified and intruded by small granitic apophyses. The silicification varies from weak to pervasive with the most intense silica alteration indicated by bleached crystal tuff exposures, recognizable by the relic texture of blocky feldspars in a fine grained to aphanitic matrix.

Basalts north of the tie-line on lines 1+00-3+00 East are intensely silicified and differ from the silicification of the crystal tuff in that the basalt is weakly to intensely fractured and quartz is present as fracture fillings. Locally, basaltic exposures have up to 50% quartz (by volume) in fractures and as fine network veinlets.

### Epidote

The crystal to lapilli tuff has variable epidote alteration along fractures, patchy epidote on weathered surfaces and epidotized lapilli. Epidote alteration and/or replacement ranges from absent to extensive and is strongest adjacent to the granitoid intrusives.

### Chlorite

Chlorite alteration is evident in the granite, occurring along dendritic fractures and in the matrix of the crystal tuff. The alteration of the crystal tuff matrix to chlorite is evident in the dark green colour of the tuff on fresh surfaces. In the tuff, chloritization is pervasive whereas in the granite it is restricted to thin veinlets forming a network system throughout the granite. Chlorite veins in the granite are present in the xenolith rich border zone. The chlorite veins are interpreted to reflect iron contamination of the granitoid by intermediate inclusions.

**Calcite/Hematite**

Calcite-hematite veins are present at the base of the granitoid intrusion and in the granitic apophyses into the crystal tuff. They are present as medium orange weathering veins and surface coatings on the granitoid.

## Discussion

All the alteration types described above are believed to reflect the influence of hot magmatic fluids associated with the granitoid. The specific type of alteration is dependent upon the host lithology. In units rich in calcium, epidote is the dominant alteration product. Units rich in iron and phyllosilicates have chlorite as the dominant alteration product. The fluids associated with the granitoid were silica-rich and altered (silicified) host units adjacent to fractures, faults and other fluid conduits. Therefore, the basalts have abundant quartz-rich fractures above the granitoid. The crystal tuff has been pervasively infiltrated in some localities and almost completely silicified, having a light tan to grey colour on fresh surface and having a "ghost" crystal tuff texture. Silicification of the crystal tuff is evident in a light green to white-grey weathering colour, depending on the intensity of the alteration.

Exposures of patchy maroon to purple coloured crystal tuff are interpreted to reflect pervasive hematite staining associated with hot granitic fluids. The hematite staining is not ubiquitous in these patches, affecting the matrix and lapilli but leaving crystal tuff xenoliths and inclusions unaffected. One important factor controlling the extent of staining is the permeability of the host unit.

The calcite-hematite veins and stringers observed at the base of the granitoid and in the apophyses into the crystal tuff are probably a result of contamination of the granitic intrusion by the tuff. Calcium, leached from the host crystal tuff xenoliths, was probably precipitated (with iron) in late stage fractures within the granitoid as it crystallized. Subsequent weathering of the iron has resulted in the limonite/hematite content of the veins observed.

**Mineralization**

Mineralization is variable throughout the grid, ranging from minor disseminated pyrite to the sphalerite, pyrite, chalcopyrite, malachite and azurite deposits at the High Grade and Ice showings. Three showings had been identified, sampled and trenched prior to this summer; the Ice, High Grade and J.R. showings. Two more showings have been identified; on the baseline between 0+00 and 1+00 East and at the base of line 9+00 East.

At the base of line 9+00 East, a basaltic feeder dike to a sill was identified cross-cutting a felsic ash layer. The felsic ash unit is intensely iron-stained on either side of the dike and immediately below the basaltic sill. Pyrite and chalcopyrite are present in the felsic ash and a yellow stain associated with the sulphide-rich zone suggests arsenopyrite may also be present. The sulphide rich layers are parallel to the felsic/basalt contact, 2-3 mm thick and spaced between 1 and 6 cm apart.

A large gossan was examined between lines 0+00 and 1+00 East on the baseline which is up to 50 metres wide and almost 100 metres long. It is intensely iron-stained near line 0+00 and has a strong yellow stain (arsenopyrite) associated with it toward line 1+00 East. It is interpreted to be a mineralized brittle fault zone of unknown displacement. The lithology on both sides of the intensely fractured zone is crystal tuff which minimizes the extent of displacement possible.

Three large (>10 cm) barite veins have been located on the grid. Two are side by side at 4+50 East, 4+10 North, crosscuting a fine to medium grained granite and are up to 20 cm thick. A third is present just below the J.R. Showing and has malachite staining associated with it. It is located at the contact between argillite and crystal tuff at this location. Other, smaller barite veins were examined on the northeast portion of the grid (north of the baseline and east of line 4+00 East).

**UTEM Geophysical Survey Results**

The UTEM geophysical survey (Appendix vi) indicated two possible mineralized conducting zones, both broadly parallel and north of the tie line on lines 1+00 - 3+00 East. One is thought to be a shallowly west dipping feature, the other steeply to vertically inclined, possibly a fault (see Appendix vi). All other responses were interpreted to be related to geological contacts. Such a survey minimizes the possibility of a large massive sulphide horizon or lens in the MacGold South grid area.

The weak conductor north of the tie-line is broadly correlatable with a fault mapped in the grid. However, the strong conductor corrrelates poorly with any geological contact. It may reflect an irregular contact with the granitoid intrusive at depth. None of the layers within the argillite examined at the surface are laterally continuous so it is unlikely that the UTEM response is due to a laterally continuous graphitic layer within the argillite.

The other UTEM responses obtained are thought to be due to geological contacts, however, with the exception of the pair on 1+00 and 2+00 West, 1+75-2+75 North which do not correlate with any contacts mapped on the surface. It is possible that the response is due to a conductivity contrast between the granitoid intrusion and the host lithologies at depth.

A pair of postulated UTEM cross-structures evident on lines 1+00 and 2+00 West between 1+75 and 2+75 North may correlate to a lapilli tuff interval within the crystal tuff mapped at the surface, however, the layered succession is believed to be shallowly dipping. It is more likely that the response obtained is due to a granitic dike or sill intruded into the host lithologies and resulted in the associated conductivity contrast.

The UTEM survey depends upon conductivity contrasts between units. The lack of strong UTEM conductors in the grid area when massive sulphide lenses and pods have been sampled indicates that such mineralization is: 1) restricted to shallow depths (< 25m) and/or surface or 2) characteristic of that at depth and that the host lithologies are homogeneous enough that few conductivity contrasts are present.

Of the two possibilities, the latter is thought to be more likely. Evidence of alteration ranging from weak to extreme was noted throughout the grid and is interpreted to be a direct result of fluids related to the granitic intrusion. Pervasive infiltration of host lithologies by granitic fluids may have obscured or obliterated conductivity contrasts.

## Geochemical Assay Results

A total of 378 samples were taken from the MacGold South claim block for geochemical analysis. The samples taken included 358 rock samples, 3 stream sediment samples, and 17 soil samples. All samples were coded using a four part alphanumeric system. The first letter designates the property (D - MacGold South), the second and third letter are the collector's initials, the fourth for the type of sample (R - rock, S- silt, M - moss) and the remainder denote the sample number.

Stream sediment samples were taken from every drainage at 100 m intervals as measured with a hipchain. At every station a stream sediment sample was taken and placed in a plastic sample bag. If insufficient sediment was present a moss sample was taken instead. In either case, the station was identified with orange flagging tape upon which the sample number was recorded.

Rock samples were taken from mineralogically promising zones. Additional samples were taken at structural breaks (faults, unconformities, some fractures). Chip samples were taken over an area up to 0.5 square metres to obtain a representative sample. Rock samples taken over a greater area have been identified with a "T" in the code, rather than an "R". Samples were placed in numbered plastic sample bags.

The sample location was flagged with orange flagging tape and an aluminum tag with the pertinent information was at fixed to the outcrop.

Samples taken were sent to Min-En Laboratories in Smithers, B.C.. All samples were analysed for 30 elements by Inductively Coupled Plasma analysis (I.C.P.) with an Atomic Absorption finish for gold (Appendix iv). Each sample was also analysed for gold content by digestion with aquaregia solution, extraction with methyl isobutyl ketone and analysis by Atomic Analysis (AA) (Appendix iv).

**Gold**

Only four anomalous gold values (>10 ppb) were found in the grid, three of them on the outcrop containing the High Grade and Ice Showings. The High Grade Showing returned a weakly anomalous value of 30 ppb while the Ice Showing returned two highly anomalous values of 5000 and 6000 ppb (0.168 (MMT258), and 0.189 (MMT259) ounces per ton respectively).

The fourth, weakly anomalous value, was taken from a crystal tuff exposure proximal to a granitic apophyse or sill, north of the tie line between line 1+00 and 2+00 East.

**Silver**

Slightly elevated silver values (>2.5 ppm) are present throughout the grid. Weakly to moderately anomalous silver values range between 2.6 and 37.8 ppm and are found in the crystal to lapilli tuff and basaltic unit. A value of 110.8 ppm was obtained from sample RWR315 near the J.R Showing. Silver values in the granitoid, the diorite, and the argillites are generally low.

**Arsenic**

Most of the anomalous arsenic values (>15 ppm) were obtained from samples in the crystal tuff adjacent to the southern granitoid intrusion. Values up to 406 ppm were obtained.

Another zone of anomalous arsenic values is located in a possible fault zone north of the baseline between lines 0+00 and 1+00 East. Four anomalous values were obtained, ranging from 47 to 105 ppm.

Four anomalous arsenic values were obtained from the northern basaltic succession. The values ranged from 130 ppm to highly anomalous 3128 ppm (CCR132).

Finally, two weakly anomalous arsenic values were obtained proximal to the J.R Showing. Two samples returned values of 32 and 57 ppm.

**Copper**

Weakly to highly anomalous copper values (>200 ppm) were returned from samples taken throughout the MacGold South grid. One sample from the High Grade Showing returned a value of 123270 ppm (RWT278) and three anomalous samples were taken from the Ice Showing of 262 ppm (MMR257), 614 ppm (MMR259) and 11809 ppm (MMT258).

Eight anomalous samples were obtained from basaltic samples, five having values greater than 10,000 ppm.

**Lead**

Weakly anomalous lead values (>50 ppm) were obtained throughout the grid area. One highly anomalous sample was taken from the High Grade Showing and returned a value of 1640 ppm (RWT278). Three weakly anomalous values were returned from the Ice Showing, ranging between 70 and 86 ppm. Two anomalous samples were taken from a xenolith-rich zone accompanying the southern granitoid intrusion.

An anomalous value of 159 ppm was obtained from a sample taken just below the J.R Showing.

**Zinc**

Several anomalous zinc values (> 300 ppm) and four highly anomalous values (> 10,000 ppm) were taken from the grid area. Three anomalous values (667 ppm (MMT259), 831 ppm (MMR257) and 3335 ppm (MMR258)) were taken from the Ice Showing and one highly anomalous value of 96113 ppm (RWT278) was taken from the High Grade Showing. Two anomalous values were obtained near the south-eastern portion of the grid, one in the xenolith-rich zone accompanying the granitoid (1502 ppm (RWR287)) and one near a dike (545 ppm (RWR281)).

Three anomalous values were obtained from samples taken from the basalts. One highly anomalous sample (29736 ppm (RWR315)) was taken from just below the J.R Showing.

**Antimony**

Ten anomalous antimony values (>10 ppm) were returned from the grid. One highly anomalous sample was obtained from a sample taken just below the J.R Showing (RWR315). Five anomalous (one highly anomalous) values were obtained from the basaltic exposure, ranging from 16 to 555 ppm. One anomalous sample was returned from each of the High Grade and Ice Showings (97 and 70 ppm respectively).

**Mercury**

Although mercury values were not determined for most of the samples, eight anomalous values (>1000 ppm) were returned. One highly anomalous value of 9625 ppm (RWR315) was obtained from just below the J.R Showing.

Two weakly anomalous values were obtained from a possible fault zone just north of the baseline between lines 0+00 and 1+00 East.

**Barium**

A total of twenty seven anomalous barium values (> 500 ppm) were returned from the grid. Several of the anomalous values are associated with barite veins (eg. RWR315, MMR155, CCR135). However, many come from samples taken from altered lithologies (MMR147-150). One highly anomalous value was taken from the J.R. Showing and three from the basaltic exposures.

## Discussion

There are four areas in which an association between elements is apparent. The granitoids on the southern boundary of the grid (lines 5+00 and 6+00 West), the basalts on lines 4+00 to 6+00 East, the High Grade and Ice Showings and the outcrop north of the tie-line from which samples MMR232-235 were taken. They are all characterized by the presence of anomalous values in Ag, Cu, Pb and Zn. In addition most have As (with the exception of MMR234), Hg (except the basalts, which have antimony) and Ba (except MMR234). The lack of Hg in the basalts is due to a lack of analyses and is therefore non-quantitative. However, the presence of antimony is a notable difference.

The outcrop containing MMR234 lacks both As and Ba but contains slightly anomalous gold, as do the High Grade and Ice Showings. The fault zone north of the baseline on lines 0+00 and 1+00 East lacks Cu, Pb and Zn.

It is interesting to note that anomalous values returned in precious and base metals are closely associated with anomalous As, Hg, Sb and Ba. The presence of anomalous As, Hg, Sb and Ba values suggests an epithermal control on mineralization. The variable alteration in the lithologies above the granitoid intrusion also suggests epithermal activity.

## CONCLUSIONS AND RECOMMENDATIONS

### MacGold South

The bulk of the anomalous values in precious and base metals are found in a zone comprising the eastern half of the property, from just south of the grid to the northern property boundary. Anomalous values in arsenic, antimony and barium are also coincident with this zone.

Geological mapping of the grid has led to the proposal that mineralization is a result of the emplacement of a granitoid intrusion. Hot fluids associated with the intrusion altered the host lithologies.

The presence of dioritic intrusive bodies west of the "anomalous zone" may indicate the western boundary of a coeval suite of diorite intrusive bodies. Furthermore, a granitoid laccolith or sill is exposed in the southern bowl of the MacGold property which may be part of a north trending plutonic body, coincident with the "anomalous zone". Variable alteration and mineralization may have occurred above such a dike and be reflected in the anomalous values returned from samples taken along this zone.

Follow up work should consist of an extensive sampling program of the anomalous zone that transects the MacGold South. Careful attention should be paid to host lithologies, alteration and any intrusive bodies. If the "anomalous zone" is verified and consistently returns anomalous values, a geophysical program should be considered to try to identify and delineate the extent and nature of the zone.

In addition, further sampling of the ridge north and northwest of the grid should be carried out. An effort should be made to sample the steep, heavily gossaned cliff face immediately south of the Copper King Glacier.

**Grid**

The occurrence of anomalous values in precious metals, base metals and epithermal related elements is an exciting relationship, apparent throughout the grid. All of the host lithologies show localized zones of mineral enrichment. The geology of the grid has been thoroughly mapped in terms of lithologies, coarse mineralization and alteration. Several additional mineralized zones were identified which should be followed up with a program of extensive sampling, blasting and trenching.

Known mineralized zones should be resampled and extensive sampling around these zones should be carried out to identify the type of mineralization and areal extent. Much of the mineralization appears to be associated with structural discontinuities (fractures, faults and shears) having a wide range of orientations. The chalcopyrite in the grid area is generally associated with barite veins or barite-bearing calcite (quartz) veins.

The lithologies exposed in the MacGold grid are weakly to highly altered dependent upon proximity to a granitoid intrusion. It is interpreted that mineralization present in the grid (eg. High Grade, Ice and J.R Showings) is related to fluid movement during emplacement of the granitoid. The presence of anomalous gold, silver, copper, lead and zinc values with anomalous arsenic, mercury, barium and antimony values tends to support an epithermal origin proposed to explain mineralizaion.

An extensive, rigorous sampling program should be carried out on the MacGold South grid to identify any additional mineralized localities and to determine the extent of mineralization on the grid. In addition, the grid should be extended northwest to the crest of the ridge. Blasting and trenching should be done on the most promising mineralized localities to sample fresh exposures.

Three showings have been idenitfied to date which have returned significant anomalous base and precious metal values. Follow up sampling of the Ice, High Grade and J.R Showings and the immediate vicinity has, in part, replicated anomalous values. A brief follow up program of diamond drilling is proposed to determine the extent of mineralization at depth. A total of 12 holes, drilled in a fence or fan pattern to maximum depths of 250 feet are proposed for the Ice, High Grade and J.R Showings. In addition, should the other anomalous zones identified in 1990 be replicated, additional drilling on these zones would be warranted.

## UTEM Geophysical Survey

The UTEM geophysical survey resulted in the identification of two subparallel conductors (see Appendix vi). The strong conductor was interpreted to reflect either: 1) a graphitic zone in argillites, 2) the granitoid/argillite contact at depth or 3) a mineralized zone in the subsurface (Sid Visser, pers. Comm. 1990).

The third possibility is believed more likely because the contact appears to be too regular for the upper contact of the granitoid (as compared to exposed contacts examined in the field). Argillite exposures examined in the field are characterized by a highly disrupted layering. Therefore, a continuous graphitic horizon appearing on the UTEM survey does not seem likely. However, disrupted graphitic pods lying in the subsurface below or proximal to the lines is a possibility.

It is believed that a mineralized layer within the argillites or located at the argillite/granitoid contact may be a reasonable alternative. Such mineralization could have been produced by fluids accompanying the granitoid precipitating sulphides in permeable argillites.

The weak conductor was interpreted to be associated with a steeply dipping fault or shear (Appendix vi). There are two faults mapped in the field that are proximal to the axis of the UTEM conductor. It is quite possible that they are in fact a single fault, continuous under the glacial overburden, and a conductor zone. It is also possible that mineralization has increased the conductiveness of this structural discontinuity.

The remainder of the anomalies were interpreted to be due to geological contacts. These contacts, however, generally correlate poorly with contacts mapped at the surface. It is possible that they are due to geological contacts in the subsurface.

In summary, the author believes the overall lack of strongly UTEM responses, particularily adjacent to known mineralization, reflects a lack of conductivity contrasts due to alteration rather than a lack of sulphides. To test such a proposal, extensive sampling of the grid together with blasting and trenching of known mineralized zones should be carried out.

## STATEMENT OF QUALIFICATIONS

I, Rick Walker, of 3373 West 7th, Vancouver, B.C., do hereby certify that:

1) I am a consulting geologist working for International Kodiak Resources from offices at #606 - 675 West Hastings Street, Vancouver, British Columbia.
2) I am a graduate of the University of Calgary with a Bachelor of Science, Geology.
3) I am a graduate of the University of Calgary with a Masters of Science, Structural Geology.
4) I have worked in geology in B.C. and the N.W.T. since 1983.
5) I am the author of this report and my findings are based on work undertaken on the property between June 16 and October 6, 1990.
6) I have no interest, direct or indirect in Ecstall Mining Corp., or Omega Gold Corp., nor in any of their properties, nor do I expect to receive any such interest.
7) This report may be used by Ecstall Mining Corp. and/or Omega Gold Corp., in whole or in part, as they so require.

Dated at Vancouver, British Columbia this 14th day of December, 1990.

Rick Walker, B.Sc., M.Sc.

## REFERENCES

Alldrick, D.J. (1988): Volcanic centres in the Stewart Complex. (103P and 104A,B). B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1988, Paper 1989-1, pages 233-240.

Alldrick, D.J., Britton, J.M., Webster, I.C.L and Russell, C.W.P. (1989): Geology and Mineral deposits of the Unuk Area. B.C. Ministry of Energy, Mines and Petroleum Resources, Open File Map 1989-10.

Anderson, R.G. (1989): A Stratigraphic, plutonic, and structural framework for the Iskut River Map Area, northwestern British Columbia; in Current Research, Part E, Geological Survey of Canada, Paper 89-1E, pages 145-154.

Anderson, R.G., Thorkelson, D.G. (1990): Mesozoic stratigraphy and setting for some mineral deposits in Iskut River Map Area, Northwestern British Columbia; in Current Research, Part E, Geological Survey of Canada, Paper 90-IF, pages 131-139.

Britton, J.M., Webster, I.C.L., and Alldrick, D.J. (1989): Unuk Map Area (104B/7E, 8W, 9W, 10E). B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1988, Paper 1989-1, pages 241-250.

Britton, J.M., and Alldrick, D.J. (1988): Sulphurets Map Area (104A/05W, 12W,: 104B/08E, 09E). B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1987, Paper 1988-1, pages 199-209.

Drobe, J.R., Koyanagi, V.M., and Logan, J.M. (1990): Geology of the Forrest - Kerr Creek Area, Northwestern British Columbia (104 B/15); in B.C. Ministry of Energy, Mines and Petroleum Resources Geological Fieldwork 1989, Paper 1990-1, pages 127-139.

Franklin, J.M., Lyndon, J.W. and Sangster, D.M. (1982): Volcanic-associated massive sulphide deposits; in Economic Geology Seventy-Fifth Anniversary Volume, pages 485-627.

Grove, E.W. (1971): Geology and mineral deposits of the Stewart Area, British Columbia. B.C. Ministry of Energy, Mines and Petroleum Resources Bulletin 53, 219 pages.

Grove, E.W. (1986): Geology and mineral deposits of the Unuk River-Salmon River - Anyox Area. B.C. Ministry of Energy, Mines and Petroleum Resources Bulletin 63, 152 pages.

Kerr, F.A. (1982): Lower Stikine and Western Iskut River Areas, British Columbia. Geological Survey of Canada Memoir 246, pages 31-34.

Nicholson, J.A., Robb, W.D. and Sampson, C. (1990): Summary Report on the 1989 Geological, Geochemical and Trenching Programmes on the MacGold

South Claim Group, Skeena Mining Division, B.C. for Ecstall Mining Corp. and Omega Gold Corp.

Panteleyev, A. (1986): A Canadian Cordilleran Model for Epithermal Gold -Silver Deposits; reprinted in Ore Deposit Models, Geological Association of Canada Reprint Series 3, pages 31-44.

# APPENDIX II

## STATEMENT OF COSTS

**INTERNATIONAL KODIAK RESOURCES INC.**

Mineral Exploration Services

## STATEMENT OF COSTS

PROJECT: MACGOLD SOUTH for OMEGA-ECSTALL

PERIOD: June to October 1990

| | |
|---|---|
| **Personnel** | |
| 27.7 man days @ $275/day | $7,617.50 |
| 18.25 man days @ $240/day | $4,380.00 |
| 30.7 man days @ $225/day | $6,907.50 |
| 26.5 man days @ $200/day | $5,300.00 |
| **Helicopter** | |
| 29.4 hours @ $725 /hour (fuel included) | $21,315.00 |
| **Room and Board** | |
| 109.15 man days @ $125/day | $13,643.75 |
| 16 man days @ $40/day (fly camp) | $640.00 |
| **Vehicle** | |
| @ $1,350/month | $1,500.00 |
| **Field Supplies** | |
| 103.15 days @ $20/man/day | $2,063.00 |
| **Samples** | |
| 250 Rock @ $20/sample | $5,000.00 |
| 17 Soil @ $20/sample | $340.00 |
| 31 Silt @ $20/sample | $620.00 |
| **Mob./Demob.** | |
| **Office** | $5,000.00 |
| **Miscellaneous** | |
| 1. Travel | $5,000.00 |
| 2. Geophysical Survey | $13,012.50 |
| 3. Shelter | $1,500.00 |
| 4. Shipping | $333.30 |
| **Subtotal** | |
| Surveying Program | $11,711.25 |
| **Contingency** | |
| **TOTAL TO DATE** | $105,883.80 |

E. & O.E.

# APPENDIX IV

## ASSAY TECHNIQUES AND RESULTS

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.

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.

·FICE AND LABORATORIES:
5 WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C.
CANADA V7M 1T2

PHONE: (604) 980-5814 (604) 988-4524
TELEX: VIA USA 7601067
FAX: (604) 980-9621

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.

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

PHONE: (604) 980-5814 (604) 988-4524

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.

## 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 $HNO_3$ - $KClO_4$ 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:
705 WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C.
CANADA V7M 1T2

PHONE: (604) 980-5814 (604) 988-4524
TELEX: VIA USA [illegible]

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: 0S-5153-RJ1
DATE: 90/07/
* 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D LG R 076 | .5 | 7280 | 448 | 1 | 51 | .4 | 3 | 2790 | 1.6 | 13 | 75 | 66730 | 290 |
| D LG R 077 | 4.2 | 13210 | 92 | 1 | 140 | .1 | 10 | 7340 | .1 | 19 | 44 | 46880 | 4670 |
| D LG R 078 | .1 | 4860 | 23 | 1 | 551 | .3 | 1 | 2930 | .1 | 7 | 11 | 30460 | 3080 |
| D LG R 079 | 3.5 | 13150 | 18 | 1 | 117 | .1 | 11 | 7850 | .1 | 13 | 33 | 46360 | 1900 |
| D LG R 080 | 1.5 | 30580 | 1 | 1 | 225 | .5 | 8 | 5850 | .1 | 14 | 40 | 48280 | 6820 |
| D LG R 081 | .6 | 11190 | 1 | 1 | 13 | .1 | 5 | 17770 | .1 | 6 | 112 | 37090 | 190 |
| D LG R 082 | 1.5 | 20940 | 1 | 1 | 58 | .4 | 8 | 17430 | .1 | 13 | 548 | 74770 | 930 |
| D LG R 083 | .6 | 4350 | 1 | 7 | 33 | .1 | 1 | 2590 | .1 | 225 | 6737 | 263920 | 610 |
| D LG R 084 | .8 | 23460 | 29 | 2 | 858 | 1.0 | 2 | 43570 | .1 | 33 | 163 | 57910 | 2140 |
| D LG R 085 | .1 | 11920 | 24 | 1 | 350 | .4 | 2 | 3070 | .1 | 13 | 97 | 42610 | 2780 |
| D LG R 086 | 4.2 | 37290 | 1 | 1 | 111 | .1 | 16 | 8420 | .1 | 34 | 1070 | 107270 | 610 |
| D LG R 087 | 2.7 | 22330 | 1 | 1 | 71 | .1 | 8 | 15810 | .1 | 14 | 2074 | 40530 | 750 |
| D LG R 088 | 1.3 | 25370 | 1 | 1 | 68 | .1 | 8 | 11950 | .1 | 20 | 294 | 50950 | 780 |
| D LG R 089 | 5.0 | 40510 | 1 | 1 | 82 | .1 | 18 | 11920 | .1 | 33 | 2300 | 113540 | 460 |
| D LG R 090 | 2.2 | 31450 | 1 | 1 | 31 | .1 | 12 | 10090 | .1 | 20 | 243 | 78470 | 500 |
| D LG R 091 | 1.7 | 28740 | 1 | 1 | 158 | .2 | 8 | 6050 | .1 | 21 | 712 | 68110 | 1370 |
| D LG 4 091B | 2.8 | 25320 | 1 | 1 | 99 | .1 | 14 | 11050 | .1 | 69 | 444 | 83660 | 2110 |
| D LG 4 092 | 3.1 | 27740 | 1 | 2 | 105 | .1 | 13 | 8150 | 124.6 | 62 | 1615 | 111040 | 770 |
| D LG 4 093 | 4.0 | 43940 | 1 | 1 | 159 | .1 | 18 | 15430 | .1 | 43 | 1475 | 116130 | 640 |
| D LG 4 094 | 1.6 | 25980 | 1 | 1 | 56 | .1 | 9 | 13570 | .1 | 20 | 321 | 54850 | 540 |
| D LG 4 095 | 1.9 | 26320 | 1 | 1 | 604 | .1 | 11 | 9490 | .1 | 28 | 376 | 82610 | 2890 |
| D RW R 166 | .9 | 16390 | 14 | 1 | 150 | .1 | 6 | 8970 | .1 | 13 | 61 | 32600 | 680 |
| D RW R 169 | 2.4 | 18610 | 1 | 1 | 56 | .1 | 12 | 13610 | .1 | 85 | 502 | 94080 | 690 |
| D RW R 172 | 2.7 | 26130 | 1 | 1 | 48 | .1 | 12 | 14910 | .1 | 35 | 141 | 62290 | 810 |
| D RW R 176 | 4.1 | 27860 | 1 | 1 | 67 | .1 | 17 | 15390 | .1 | 30 | 647 | 81650 | 500 |
| D RW R 180 | 2.8 | 12720 | 1 | 10 | 17 | .1 | 12 | 3480 | .1 | 123 | 2499 | 348200 | 420 |
| D RW R 181 | .8 | 10990 | 24 | 1 | 196 | .4 | 3 | 78880 | .1 | 27 | 127 | 52660 | 870 |
| D RW R 182 | .9 | 17020 | 1 | 1 | 100 | .2 | 5 | 11050 | .1 | 18 | 214 | 36130 | 1050 |
| D RW T 167 | 2.2 | 39050 | 1 | 1 | 14 | .1 | 12 | 15670 | .1 | 27 | 236 | 76560 | 150 |
| D RW T 168 | 3.2 | 27270 | 1 | 1 | 18 | .1 | 8 | 7900 | .1 | 30 | 3941 | 66880 | 300 |
| D RW T 170 | 2.5 | 23480 | 1 | 1 | 36 | .1 | 13 | 15670 | .1 | 38 | 272 | 60140 | 150 |
| D RW T 171 | 2.7 | 38720 | 1 | 1 | 542 | .1 | 12 | 36250 | .1 | 50 | 873 | 64430 | 290 |
| D RW T 173 | 3.0 | 22240 | 1 | 1 | 22 | .1 | 14 | 15720 | .1 | 49 | 791 | 68720 | 200 |
| D RW T 174 | 3.8 | 40930 | 1 | 1 | 18 | .1 | 14 | 40190 | .1 | 45 | 1942 | 72910 | 140 |
| D RW T 175 | 3.3 | 26230 | 1 | 1 | 40 | .1 | 15 | 13320 | .1 | 32 | 1152 | 71180 | 570 |
| D RW T 177 | 3.7 | 22220 | 1 | 5 | 102 | .1 | 16 | 18740 | .1 | 21 | 300 | 54900 | 730 |
| D RW T 179 | 2.8 | 23930 | 1 | 2 | 178 | .1 | 14 | 9540 | .1 | 21 | 316 | 104790 | 390 |
| D RW T 183 | 2.1 | 37220 | 1 | 1 | 73 | .1 | 12 | 9000 | .1 | 22 | 132 | 67400 | 990 |
| D RW T 186 | 2.6 | 26490 | 1 | 1 | 69 | .1 | 13 | 13690 | .1 | 108 | 613 | 99600 | 480 |
| D RW T 187 | 1.1 | 14110 | 1 | 1 | 42 | .1 | 7 | 11110 | .1 | 27 | 275 | 54050 | 890 |
| D RW T 188 | 1.9 | 32610 | 1 | 1 | 300 | .1 | 9 | 17420 | .1 | 45 | 126 | 59510 | 280 |
| D RW T 189 | 2.1 | 22990 | 1 | 1 | 96 | .2 | 8 | 7570 | .1 | 32 | 1745 | 67980 | 950 |
| D RW T 190 | 2.4 | 31650 | 1 | 1 | 42 | .1 | 11 | 15620 | 11.8 | 41 | 303 | 72470 | 200 |
| D TT R 061 | 1.4 | 29610 | 1 | 1 | 19 | .1 | 8 | 14660 | .1 | 33 | 93 | 45460 | 430 |
| D TT R 062 | 2.3 | 21810 | 51 | 1 | 265 | .8 | 6 | 2440 | .1 | 10 | 202 | 49730 | 6930 |
| D TT R 063 | .1 | 31830 | 1 | 1 | 109 | .8 | 4 | 2570 | .1 | 17 | 79 | 57000 | 2700 |
| D TT R 064 | .7 | 16880 | 4 | 1 | 168 | .4 | 5 | 5730 | .1 | 9 | 14 | 41450 | 2340 |
| D TT R 065 | 1.6 | 9370 | 95 | 1 | 209 | .1 | 5 | 260 | .1 | 9 | 10 | 38410 | 5450 |
| D TT R 066 | 4.2 | 4960 | 105 | 1 | 668 | .3 | 3 | 490 | .1 | 13 | 17 | 29800 | 4470 |
| D MM R 074 | .9 | 16370 | 24 | 1 | 98 | .2 | 6 | 7180 | .1 | 16 | 48 | 27490 | 880 |
| D MM R 075 | 1.4 | 23220 | 1 | 1 | 197 | .6 | 7 | 11660 | .1 | 28 | 272 | 41240 | 2930 |
| D MM R 076 | .5 | 16440 | 1 | 1 | 369 | .5 | 3 | 9940 | .1 | 5 | 18 | 14070 | 2930 |
| D MM R 077 | 3.4 | 21290 | 1 | 1 | 33 | .1 | 15 | 16610 | .1 | 26 | 89 | 50210 | 450 |
| D MM R 078 | .1 | 2960 | 35 | 1 | 7 | .1 | 1 | 5750 | .1 | 20 | 262 | 17870 | 80 |
| D MM R 080 | 1.6 | 31410 | 1 | 1 | 859 | .1 | 9 | 6350 | .1 | 17 | 287 | 62120 | 450 |
| D MM R 081 | 1.3 | 14480 | 6 | 1 | 35 | .1 | 7 | 9170 | .1 | 18 | 192 | 36790 | 240 |
| D MM R 082 | 3.1 | 28610 | 1 | 1 | 72 | .1 | 14 | 17380 | .1 | 27 | 704 | 56930 | 540 |
| D MM R 083 | 2.5 | 21490 | 1 | 1 | 74 | .1 | 12 | 9990 | .1 | 19 | 217 | 57970 | 330 |
| D MM R 084 | 3.1 | 15310 | 1 | 1 | 16 | .1 | 6 | 4760 | .1 | 13 | 3790 | 47550 | 200 |
| D MM R 085 | 3.5 | 24500 | 1 | 1 | 111 | .1 | 15 | 19300 | .1 | 22 | 211 | 45680 | 740 |

| SAMPLE NUMBER | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D LG R 076 | 2 | 6400 | 376 | 7 | 40 | 1 | 850 | 50 | 6 | 3 | 1 | 1 | 64.6 | 22 | 1 | 1 | 3 | 134 | 5 |
| D LG R 077 | 2 | 6520 | 321 | 28 | 40 | 1 | 1890 | 40 | 1 | 4 | 1 | 1 | 75.7 | 16 | 1 | 1 | 1 | 30 | 5 |
| D LG R 078 | 1 | 1190 | 87 | 6 | 310 | 1 | 1310 | 29 | 1 | 12 | 1 | 1 | 17.2 | 6 | 1 | 1 | 1 | 86 | 5 |
| D LG R 079 | 3 | 12350 | 510 | 7 | 610 | 1 | 1260 | 46 | 1 | 7 | 1 | 1 | 118.7 | 42 | 2 | 1 | 1 | 44 | 5 |
| D LG R 080 | 7 | 10660 | 655 | 1 | 380 | 1 | 770 | 32 | 1 | 7 | 1 | 1 | 60.0 | 44 | 2 | 1 | 1 | 16 | 10 |
| D LG R 081 | 1 | 600 | 1731 | 29 | 50 | 1 | 540 | 25 | 1 | 59 | 1 | 1 | 34.1 | 45 | 1 | 1 | 1 | 38 | 5 |
| D LG R 082 | 2 | 4220 | 469 | 1 | 1140 | 1 | 1040 | 33 | 1 | 63 | 1 | 1 | 24.6 | 14 | 1 | 1 | 1 | 62 | 5 |
| D LG R 083 | 1 | 1140 | 12 | 33 | 90 | 1 | 160 | 16 | 1 | 7 | 1 | 1 | 8.2 | 1 | 1 | 1 | 1 | 1 | 5 |
| D LG R 084 | 12 | 26600 | 1136 | 1 | 420 | 44 | 750 | 41 | 2 | 14 | 1 | 1 | 147.6 | 81 | 2 | 1 | 2 | 95 | 5 |
| D LG R 085 | 3 | 10430 | 653 | 6 | 70 | 3 | 1170 | 42 | 1 | 7 | 1 | 1 | 66.3 | 58 | 2 | 1 | 2 | 91 | 5 |
| D LG R 086 | 11 | 29200 | 1535 | 1 | 150 | 1 | 650 | 28 | 1 | 7 | 1 | 1 | 253.1 | 77 | 1 | 1 | 2 | 22 | 10 |
| D LG R 087 | 2 | 9800 | 491 | 1 | 1070 | 1 | 750 | 24 | 1 | 24 | 1 | 1 | 95.2 | 28 | 1 | 1 | 2 | 68 | 5 |
| D LG R 088 | 4 | 14580 | 678 | 1 | 840 | 3 | 1110 | 26 | 1 | 28 | 1 | 1 | 129.9 | 36 | 2 | 1 | 1 | 36 | 5 |
| D LG R 089 | 10 | 31180 | 1208 | 1 | 320 | 1 | 650 | 26 | 1 | 5 | 1 | 1 | 297.7 | 78 | 1 | 1 | 4 | 54 | 5 |
| D LG R 090 | 7 | 25010 | 889 | 1 | 800 | 1 | 620 | 25 | 1 | 8 | 1 | 1 | 214.8 | 48 | 1 | 1 | 1 | 24 | 5 |
| D LG R 091 | 13 | 16740 | 916 | 1 | 70 | 1 | 830 | 36 | 1 | 5 | 1 | 1 | 137.9 | 27 | 1 | 1 | 2 | 56 | 10 |
| D LG 4 091B | 7 | 23260 | 552 | 1 | 930 | 84 | 820 | 22 | 1 | 14 | 1 | 1 | 209.9 | 55 | 1 | 1 | 3 | 47 | 5 |
| D LG 4 092 | 6 | 24700 | 1367 | 1 | 260 | 1 | 680 | 32 | 1 | 6 | 1 | 1 | 225.7 | 11033 | 1 | 1 | 1 | 24 | 5 |
| D LG 4 093 | 8 | 30440 | 1461 | 1 | 1510 | 36 | 1340 | 22 | 1 | 40 | 1 | 1 | 211.6 | 139 | 1 | 1 | 5 | 113 | 5 |
| D LG 4 094 | 5 | 20070 | 790 | 1 | 1240 | 79 | 470 | 28 | 1 | 9 | 1 | 1 | 100.9 | 233 | 1 | 1 | 5 | 152 | 5 |
| D LG 4 095 | 5 | 12070 | 1119 | 1 | 340 | 1 | 1180 | 35 | 1 | 16 | 1 | 1 | 200.4 | 34 | 1 | 1 | 1 | 14 | 5 |
| D RW R 166 | 4 | 11470 | 443 | 1 | 570 | 67 | 1070 | 26 | 1 | 10 | 1 | 1 | 92.4 | 47 | 2 | 1 | 8 | 222 | 10 |
| D RW R 169 | 3 | 13100 | 610 | 1 | 800 | 6 | 720 | 21 | 1 | 14 | 1 | 1 | 133.5 | 35 | 1 | 1 | 1 | 37 | 5 |
| D RW R 172 | 6 | 22780 | 733 | 1 | 1480 | 13 | 1260 | 27 | 1 | 35 | 1 | 1 | 184.9 | 36 | 2 | 1 | 3 | 52 | 5 |
| D RW R 176 | 6 | 20200 | 730 | 1 | 1300 | 2 | 630 | 16 | 1 | 10 | 1 | 1 | 202.1 | 40 | 1 | 1 | 2 | 39 | 5 |
| D RW R 180 | 3 | 7920 | 596 | 1 | 930 | 3 | 90 | 16 | 1 | 1 | 1 | 1 | 75.1 | 440 | 1 | 1 | 1 | 1 | 1850 |
| D RW R 181 | 5 | 3560 | 1750 | 1 | 70 | 39 | 570 | 49 | 3 | 1 | 1 | 1 | 165.1 | 85 | 2 | 1 | 1 | 54 | 30 |
| D RW R 182 | 2 | 7270 | 563 | 3 | 1190 | 1 | 680 | 29 | 1 | 32 | 1 | 1 | 55.8 | 51 | 2 | 1 | 1 | 69 | 5 |
| D RW T 167 | 11 | 30990 | 1148 | 1 | 310 | 1 | 670 | 22 | 1 | 1 | 1 | 1 | 227.9 | 61 | 1 | 1 | 1 | 32 | 5 |
| D RW T 168 | 5 | 24640 | 1071 | 1 | 580 | 34 | 470 | 39 | 1 | 3 | 1 | 1 | 127.6 | 401 | 1 | 1 | 7 | 195 | 5 |
| D RW T 170 | 5 | 18770 | 675 | 1 | 450 | 16 | 660 | 29 | 1 | 29 | 1 | 1 | 150.1 | 41 | 1 | 1 | 2 | 43 | 5 |
| D RW T 171 | 4 | 12850 | 503 | 1 | 460 | 20 | 540 | 33 | 1 | 10 | 1 | 1 | 147.6 | 67 | 1 | 1 | 3 | 58 | 10 |
| D RW T 173 | 4 | 14690 | 480 | 1 | 420 | 1 | 610 | 28 | 1 | 8 | 1 | 1 | 141.0 | 37 | 1 | 1 | 1 | 15 | 5 |
| D RW T 174 | 5 | 14440 | 569 | 2 | 830 | 42 | 610 | 33 | 1 | 1 | 1 | 1 | 180.9 | 36 | 1 | 1 | 4 | 60 | 5 |
| D RW T 175 | 5 | 16860 | 635 | 1 | 1150 | 2 | 630 | 23 | 1 | 14 | 1 | 1 | 168.0 | 45 | 1 | 1 | 3 | 32 | 5 |
| D RW T 177 | 12 | 13170 | 485 | 1 | 1340 | 5 | 690 | 151 | 1 | 9 | 1 | 1 | 145.0 | 30 | 1 | 50 | 3 | 52 | 5 |
| D RW T 179 | 5 | 17260 | 590 | 1 | 480 | 1 | 550 | 24 | 1 | 5 | 1 | 1 | 198.4 | 24 | 1 | 1 | 2 | 25 | 5 |
| D RW T 183 | 9 | 35110 | 1147 | 2 | 1420 | 60 | 1080 | 27 | 1 | 10 | 1 | 1 | 174.3 | 99 | 1 | 1 | 8 | 183 | 5 |
| D RW T 186 | 4 | 18510 | 1040 | 1 | 900 | 35 | 510 | 28 | 1 | 14 | 1 | 1 | 176.4 | 267 | 1 | 1 | 2 | 41 | 5 |
| D RW T 187 | 3 | 12730 | 324 | 113 | 1280 | 133 | 1220 | 34 | 1 | 6 | 1 | 1 | 308.7 | 36 | 1 | 1 | 8 | 132 | 5 |
| D RW T 188 | 7 | 34410 | 941 | 1 | 1080 | 97 | 460 | 26 | 1 | 12 | 1 | 1 | 129.3 | 59 | 1 | 1 | 6 | 148 | 5 |
| D RW T 189 | 6 | 16350 | 971 | 1 | 990 | 26 | 720 | 32 | 1 | 9 | 1 | 1 | 115.8 | 165 | 1 | 1 | 5 | 116 | 10 |
| D RW T 190 | 7 | 24410 | 982 | 30 | 1090 | 138 | 730 | 40 | 1 | 45 | 1 | 1 | 141.6 | 1406 | 1 | 1 | 9 | 237 | 5 |
| D TT R 061 | 5 | 29520 | 621 | 1 | 2460 | 112 | 350 | 27 | 1 | 14 | 1 | 1 | 120.2 | 47 | 1 | 1 | 6 | 166 | 5 |
| D TT R 062 | 3 | 13220 | 497 | 42 | 90 | 2 | 680 | 49 | 1 | 6 | 1 | 1 | 55.7 | 128 | 2 | 1 | 1 | 52 | 5 |
| D TT R 063 | 9 | 30580 | 1673 | 4 | 250 | 14 | 1210 | 51 | 1 | 37 | 1 | 1 | 116.8 | 298 | 1 | 1 | 2 | 62 | 10 |
| D TT R 064 | 5 | 15340 | 715 | 11 | 810 | 11 | 1440 | 48 | 1 | 8 | 1 | 1 | 80.3 | 71 | 2 | 2 | 1 | 36 | 5 |
| D TT R 065 | 1 | 1500 | 50 | 8 | 50 | 1 | 310 | 33 | 5 | 3 | 1 | 1 | 16.3 | 13 | 1 | 1 | 1 | 41 | 5 |
| D TT R 066 | 1 | 770 | 41 | 13 | 80 | 6 | 600 | 78 | 1 | 7 | 1 | 1 | 13.9 | 21 | 1 | 1 | 1 | 45 | 5 |
| D MM R 074 | 4 | 12670 | 470 | 4 | 1020 | 104 | 360 | 34 | 1 | 13 | 1 | 1 | 89.7 | 37 | 2 | 2 | 12 | 275 | 5 |
| D MM R 075 | 9 | 15570 | 239 | 13 | 1890 | 54 | 2390 | 37 | 1 | 22 | 1 | 1 | 130.3 | 47 | 2 | 1 | 5 | 111 | 5 |
| D MM R 076 | 2 | 3460 | 270 | 1 | 1470 | 7 | 280 | 24 | 1 | 32 | 2 | 1 | 23.1 | 29 | 1 | 1 | 3 | 123 | 5 |
| D MM R 077 | 3 | 14600 | 661 | 1 | 1420 | 5 | 790 | 23 | 1 | 42 | 1 | 1 | 139.6 | 28 | 1 | 1 | 3 | 47 | 5 |
| D MM R 078 | 1 | 1350 | 76 | 1 | 30 | 15 | 10 | 22 | 1 | 1 | 1 | 1 | 11.8 | 17 | 1 | 1 | 10 | 290 | 5 |
| D MM R 080 | 8 | 19030 | 740 | 1 | 470 | 2 | 440 | 33 | 1 | 17 | 1 | 1 | 153.0 | 42 | 2 | 1 | 3 | 72 | 5 |
| D MM R 081 | 4 | 9040 | 315 | 2 | 550 | 30 | 500 | 27 | 1 | 4 | 1 | 1 | 77.1 | 24 | 1 | 1 | 8 | 216 | 5 |
| D MM R 082 | 4 | 13580 | 564 | 1 | 2420 | 12 | 650 | 23 | 1 | 28 | 1 | 1 | 138.5 | 35 | 1 | 1 | 2 | 28 | 5 |
| D MM R 083 | 4 | 16410 | 568 | 1 | 1140 | 7 | 450 | 26 | 1 | 2 | 1 | 1 | 162.3 | 20 | 1 | 1 | 5 | 89 | 5 |
| D MM R 084 | 5 | 9620 | 450 | 2 | 310 | 5 | 470 | 33 | 1 | 4 | 1 | 1 | 83.6 | 53 | 1 | 1 | 7 | 166 | 5 |
| D MM R 085 | 3 | 10520 | 421 | 1 | 2790 | 21 | 640 | 23 | 1 | 20 | 1 | 1 | 122.4 | 24 | 1 | 1 | 1 | 22 | 5 |

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: 0V-1032-S41
DATE: 90/08/11
* SOIL * (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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-RW-D-207 | 4.8 | 83170 | 1 | 5 | 20 | .1 | 24 | 2850 | .1 | 62 | 49 | 116530 | 280 | 2 | 7360 | 1814 | 1 | 1910 | 1 | 1610 | 1 | 1 | 3 | 1 | 1 | 237.7 | 57 | 1 | 1 | 1 | 1 | 5 |
| D-RW-D-250 | 3.0 | 59400 | 1 | 4 | 57 | .7 | 16 | 4290 | .1 | 39 | 44 | 90260 | 870 | 7 | 6740 | 1670 | 1 | 1260 | 1 | 1420 | 114 | 1 | 6 | 1 | 1 | 155.6 | 132 | 1 | 2 | 1 | 1 | 10 |

-2

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: 0S-0161-PJ1+2
DATE: 90/07/2
* PULP * (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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-CC-R 105 | 1.9 | 8900 | 29 | 1 | 358 | .1 | 7 | 6190 | .1 | 7 | 1003 | 23500 | 680 | 3 |
| D-CC-R 106 | 11.1 | 1840 | 32 | 1 | 184 | .3 | 6 | 1860 | 70.8 | 6 | 2057 | 34880 | 180 | 1 |
| D-CC-R 107 | 2.9 | 16300 | 12 | 2 | 47 | .7 | 5 | 2580 | 79.9 | 33 | 1240 | 69740 | 180 | 4 |
| D-CC-R 108 | 1.7 | 37160 | 1 | 1 | 59 | .6 | 11 | 8340 | .1 | 22 | 49 | 60130 | 1340 | 10 |
| D-CC-R 109 | 2.3 | 33200 | 1 | 27 | 92 | .8 | 8 | 5770 | .1 | 14 | 263 | 58360 | 800 | 8 |
| D-CC-R 110 | 2.0 | 7300 | 53 | 22 | 241 | .4 | 3 | 1960 | 18.4 | 10 | 291 | 39160 | 520 | 2 |
| D-CC-R 111 | 2.9 | 15660 | 25 | 28 | 116 | .6 | 5 | 2140 | 1.1 | 10 | 351 | 32050 | 340 | 4 |
| [redacted] | .8 | 15770 | 82 | 19 | 169 | 1.1 | 3 | 57580 | .1 | 43 | 47 | 68950 | 6040 | 12 |
| [redacted] | .9 | 26690 | 26 | 27 | 26 | .9 | 3 | 51570 | .1 | 31 | 35 | 63970 | 2190 | 31 |
| [redacted] | 2.3 | 12450 | 28 | 1 | 49 | .5 | 8 | 10450 | .1 | 11 | 27 | 34160 | 810 | 6 |

| SAMPLE NUMBER | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-CC-R 105 | 7670 | 463 | 2 | 390 | 4 | 760 | 46 | 1 | 7 | 1 | 1 | 36.7 | 54 | 2 | 1 | 2 | 170 | 5 |
| D-CC-R 106 | 1110 | 52 | 4 | 150 | 1 | 120 | 7611 | 8 | 8 | 1 | 1 | 16.9 | 8994 | 1 | 1 | 1 | 134 | 95 |
| D-CC-R 107 | 20700 | 1153 | 17 | 30 | 2 | 340 | 2577 | 6 | 6 | 1 | 1 | 81.3 | 9545 | 2 | 1 | 1 | 141 | 65 |
| D-CC-R 108 | 42120 | 2702 | 1 | 370 | 1 | 1210 | 122 | 2 | 13 | 1 | 1 | 71.9 | 382 | 1 | 1 | 1 | 49 | 5 |
| D-CC-R 109 | 39270 | 3543 | 1 | 230 | 3 | 1370 | 1300 | 4 | 12 | 1 | 1 | 129.1 | 710 | 2 | 1 | 1 | 54 | 10 |
| D-CC-R 110 | 8850 | 733 | 5 | 130 | 7 | 340 | 1605 | 1 | 5 | 1 | 1 | 40.6 | 2166 | 2 | 1 | 2 | 265 | 5 |
| D-CC-R 111 | 24170 | 2316 | 3 | 160 | 16 | 370 | 934 | 1 | 5 | 1 | 1 | 76.4 | 594 | 2 | 2 | 2 | 151 | 5 |
| [redacted] | 29580 | 1269 | 1 | 150 | 53 | 980 | 62 | 28 | 9 | 1 | 1 | 95.5 | 64 | 2 | 1 | 1 | 93 | 5 |
| [redacted] | 26400 | 951 | 1 | 160 | 53 | 790 | 53 | 25 | 1 | 1 | 1 | 131.5 | 61 | 2 | 1 | 1 | 85 | 5 |
| [redacted] | 5700 | 302 | 8 | 810 | 19 | 2580 | 46 | 1 | 7 | 1 | 1 | 115.5 | 121 | 2 | 1 | 2 | 159 | 5 |

7

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: 05-0161-PJ1+2
DATE: 90/07/72
* PULP * (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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-RW-T 195 | .4 | 13470 | 21 | 1 | 529 | .6 | 2 | 19530 | .1 | 14 | 40 | 36390 | 1360 | 5 | 18200 | 1275 | 3 | 240 | 6 | 1790 | 48 | 1 | 12 | 1 | 1 | 54.6 | 88 | 2 | 1 | 1 | 11 | 5 |
| D-RW-T 196 | .7 | 20910 | 19 | 1 | 105 | .9 | 2 | 4420 | .1 | 10 | 19 | 46270 | 890 | 10 | 32550 | 967 | 1 | 160 | 1 | 2220 | 85 | 2 | 8 | 1 | 1 | 110.8 | 126 | 2 | 2 | 1 | 23 | 5 |
| D-RW-T 197 | 1.0 | 13590 | 10 | 1 | 197 | 1.1 | 3 | 48490 | .1 | 18 | 3 | 37830 | 4290 | 4 | 17960 | 901 | 1 | 140 | 19 | 1080 | 47 | 1 | 1 | 1 | 1 | 24.5 | 46 | 2 | 1 | 1 | 29 | 5 |
| D-RW-T 198 | 1.3 | 13530 | 32 | 18 | 163 | .9 | 2 | 55640 | .4 | 14 | 48 | 36770 | 1750 | 9 | 12410 | 761 | 3 | 290 | 24 | 1600 | 49 | 2 | 11 | 1 | 1 | 84.7 | 113 | 2 | 1 | 1 | 24 | 5 |
| D-RW-T 199 | 8.5 | 36620 | 1 | 2 | 11 | .3 | 14 | 23010 | .1 | 41 | 6594 | 124360 | 370 | 6 | 26710 | 667 | 1 | 240 | 1418 | 1700 | 59 | 8 | 1 | 1 | 1 | 119.4 | 66 | 1 | 1 | 1 | 67 | 10 |
| D-MM-R 107 | 5.5 | 15370 | 1 | 1 | 17 | .3 | 19 | 18390 | .1 | 30 | 1409 | 86670 | 700 | 8 | 18450 | 1246 | 1 | 510 | 415 | 4410 | 34 | 1 | 17 | 1 | 1 | 65.5 | 110 | 1 | 1 | 1 | 12 | 5 |
| D-MM-R 108 | 4.6 | 7650 | 1 | 1 | 19 | .4 | 18 | 14880 | .1 | 27 | 946 | 80780 | 960 | 7 | 13730 | 1254 | 1 | 860 | 174 | 4630 | 37 | 1 | 22 | 1 | 1 | 49.4 | 110 | 1 | 1 | 1 | 1 | 5 |
| D-MM-R 109 | 3.8 | 4930 | 1 | 1 | 24 | .6 | 16 | 13830 | .1 | 24 | 191 | 76130 | 760 | 5 | 11800 | 1211 | 1 | 770 | 55 | 4620 | 27 | 1 | 23 | 1 | 1 | 46.9 | 114 | 1 | 1 | 1 | 1 | 5 |
| D-MM-R 110 | 1.3 | 22100 | 1 | 1 | 71 | .3 | 8 | 4190 | .1 | 19 | 61 | 59830 | 300 | 5 | 33950 | 836 | 1 | 360 | 20 | 700 | 40 | 1 | 14 | 1 | 1 | 140.5 | 53 | 1 | 1 | 1 | 59 | 5 |
| D-MM-R 111 | 1.3 | 33300 | 1 | 1 | 69 | .6 | 6 | 5280 | .1 | 20 | 142 | 53790 | 470 | 10 | 49750 | 938 | 1 | 190 | 51 | 2110 | 40 | 3 | 30 | 1 | 1 | 148.2 | 66 | 1 | 1 | 1 | 63 | 5 |
| [redacted] | .8 | 20330 | 23 | 1 | 39 | .6 | 4 | 4170 | .1 | 11 | 97 | 38980 | 600 | 11 | 21570 | 579 | 2 | 410 | 22 | 1080 | 45 | 3 | 10 | 1 | 1 | 77.7 | 52 | 3 | 1 | 1 | 34 | 5 |
| | 1.2 | 13400 | 14 | 1 | 162 | .7 | 2 | 6940 | .1 | 8 | 62 | 30260 | 630 | 8 | 8350 | 535 | 1 | 590 | 6 | 920 | 37 | 1 | 7 | 1 | 1 | 41.5 | 48 | 3 | 1 | 1 | 25 | 5 |
| | .5 | 12900 | 29 | 1 | 121 | .7 | 2 | 6280 | .1 | 10 | 51 | 31050 | 740 | 11 | 9810 | 560 | 3 | 520 | 9 | 790 | 42 | 1 | 5 | 1 | 1 | 52.2 | 47 | 2 | 1 | 1 | 72 | 5 |
| | 1.2 | 11430 | 34 | 2 | 257 | .7 | 2 | 2300 | 1.1 | 3 | 46 | 18330 | 2570 | 9 | 4000 | 120 | 27 | 170 | 10 | 650 | 42 | 8 | 6 | 1 | 1 | 118.9 | 204 | 1 | 1 | 1 | 22 | 5 |
| | 1.4 | 16860 | 40 | 1 | 179 | .6 | 3 | 8070 | .1 | 10 | 129 | 38620 | 400 | 9 | 14900 | 705 | 2 | 260 | 1 | 1260 | 77 | 6 | 12 | 2 | 1 | 83.4 | 375 | 3 | 1 | 1 | 10 | 5 |
| D-CD-R 030 | .9 | 12360 | 26 | 1 | 87 | .5 | 3 | 3920 | .1 | 6 | 6 | 27590 | 1090 | 3 | 11050 | 687 | 5 | 250 | 1 | 1310 | 49 | 2 | 4 | 1 | 1 | 52.4 | 52 | 3 | 1 | 1 | 27 | 10 |
| D-CD-R 031 | 1.6 | 14190 | 10 | 1 | 41 | .1 | 8 | 4910 | .1 | 8 | 10 | 49290 | 800 | 5 | 14330 | 732 | 13 | 200 | 1 | 1240 | 59 | 1 | 2 | 1 | 1 | 73.0 | 49 | 2 | 1 | 1 | 20 | 5 |
| D-CD-R 032 | 3.6 | 4470 | 174 | 1 | 102 | .4 | 2 | 3400 | 1.1 | 13 | 14 | 35210 | 1850 | 1 | 2920 | 187 | 116 | 50 | 4 | 1260 | 59 | 5 | 5 | 1 | 1 | 16.1 | 22 | 1 | 1 | 1 | 69 | 5 |
| [redacted] | 1.5 | 8680 | 34 | 4 | 56 | 1.0 | 3 | 59570 | .1 | 30 | 34 | 52220 | 680 | 8 | 32430 | 1136 | 1 | 130 | 72 | 770 | 42 | 7 | 47 | 1 | 1 | 184.9 | 68 | 2 | 1 | 2 | 113 | 5 |
| D-MW-R 058 | 1.9 | 19030 | 29 | 1 | 58 | .4 | 7 | 5810 | .1 | 8 | 7 | 39470 | 1060 | 5 | 19560 | 1116 | 9 | 210 | 1 | 1550 | 54 | 1 | 5 | 1 | 1 | 80.1 | 68 | 3 | 2 | 1 | 37 | 5 |
| D-MW-R 059 | .1 | 4350 | 43 | 22 | 53 | .4 | 2 | 870 | .1 | 7 | 19 | 44130 | 240 | 2 | 3730 | 248 | 5 | 90 | 1 | 230 | 45 | 1 | 2 | 1 | 1 | 23.7 | 18 | 1 | 1 | 2 | 176 | 5 |
| D-MW-R 061 | 1.6 | 2040 | 60 | 25 | 65 | .1 | 4 | 3520 | .6 | 8 | 8 | 22210 | 1670 | 1 | 820 | 51 | 16 | 80 | 3 | 890 | 40 | 1 | 2 | 1 | 1 | 10.7 | 31 | 1 | 1 | 1 | 106 | 5 |
| D-MW-R 062 | 3.1 | 10530 | 106 | 1 | 130 | .2 | 8 | 7080 | .1 | 21 | 15 | 38060 | 2960 | 3 | 7100 | 314 | 36 | 110 | 2 | 2180 | 51 | 1 | 4 | 1 | 1 | 47.3 | 18 | 2 | 1 | 1 | 32 | 5 |
| D-MW-R 063 | 2.6 | 25940 | 1 | 1 | 12 | .1 | 10 | 17600 | .1 | 25 | 65 | 42700 | 630 | 13 | 13480 | 348 | 1 | 2300 | 35 | 640 | 33 | 1 | 6 | 1 | 1 | 118.7 | 50 | 2 | 1 | 1 | 16 | 10 |

COMP: INTERNATIONAL KODIAK
PROJ: MARGE/BELL
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: 0S-0421-RJ
DATE: 90/09/1
* ROCK * (ACT:F31

| SAMPLE NUMBER | AG PPM | AL PPM | AS PPM | B PPM | BA PPM | BE PPM | BI PPM | CA PPM | CO 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 | HG PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [redacted] | 1.2 | 8840 | 37 | 1 | 122 | .5 | 2 | 8330 | .1 | 16 | 59 | 29460 | 2480 | 8 | 7750 | 471 | 2 | 70 | 102 | 420 | 28 | 2 | 19 | 1 | 1 | 39.3 | 81 | 1 | 1 | 1 | 37 | 5 | 275 |
| [redacted] | 1.0 | 14750 | 49 | 1 | 48 | .3 | 3 | 7140 | .1 | 8 | 13 | 23600 | 910 | 26 | 14230 | 521 | 1 | 110 | 47 | 240 | 25 | 1 | 25 | 1 | 1 | 34.8 | 45 | 1 | 1 | 1 | 115 | 5 | 55 |
| [redacted] | .3 | 9990 | 22 | 1 | 145 | .3 | 1 | 1000 | .1 | 17 | 49 | 37180 | 2220 | 7 | 1370 | 1331 | 2 | 40 | 123 | 270 | 22 | 1 | 9 | 1 | 1 | 33.2 | 92 | 1 | 1 | 1 | 90 | 5 | 645 |
| [redacted] | .3 | 3560 | 51 | 1 | 39 | .1 | 1 | 1790 | .1 | 4 | 10 | 11940 | 690 | 2 | 1280 | 330 | 1 | 100 | 26 | 60 | 16 | 1 | 5 | 1 | 1 | 15.1 | 27 | 1 | 1 | 3 | 309 | 5 | 110 |
| [redacted] | .3 | 2250 | 41 | 1 | 30 | .1 | 1 | 500 | .1 | 3 | 22 | 8440 | 520 | 1 | 490 | 186 | 1 | 60 | 16 | 100 | 31 | 1 | 7 | 1 | 1 | 7.5 | 58 | 1 | 1 | 3 | 304 | 5 | 90 |
| [redacted] | .2 | 39480 | 15 | 1 | 19 | .3 | 3 | 600 | .1 | 17 | 5 | 65670 | 360 | 88 | 37210 | 847 | 1 | 30 | 101 | 170 | 10 | 1 | 4 | 1 | 1 | 91.1 | 104 | 1 | 2 | 1 | 44 | 5 | 60 |
| [redacted] | 1.5 | 1330 | 283 | 1 | 24 | .2 | 1 | 34220 | 3.1 | 3 | 5 | 20430 | 180 | 1 | 19940 | 1281 | 1 | 160 | 6 | 100 | 21 | 3 | 102 | 1 | 1 | 13.4 | 21 | 1 | 1 | 1 | 120 | 35 | 160 |
| [redacted] | .4 | 3270 | 50 | 1 | 27 | .1 | 1 | 1710 | .1 | 5 | 5 | 8520 | 340 | 4 | 2220 | 421 | 1 | 140 | 19 | 120 | 25 | 1 | 5 | 1 | 1 | 7.8 | 19 | 1 | 1 | 2 | 239 | 5 | 70 |
| [redacted] | 1.6 | 2710 | 50 | 1 | 22 | .1 | 2 | 43030 | .1 | 3 | 7 | 9620 | 220 | 6 | 2800 | 704 | 1 | 40 | 15 | 140 | 23 | 3 | 349 | 1 | 1 | 8.5 | 13 | 1 | 1 | 1 | 117 | 5 | 85 |
| [redacted] | .4 | 2530 | 70 | 1 | 12 | .2 | 1 | 1320 | .1 | 3 | 5 | 6330 | 210 | 4 | 980 | 337 | 1 | 100 | 15 | 80 | 18 | 1 | 6 | 1 | 1 | 5.2 | 20 | 1 | 1 | 2 | 241 | 5 | 150 |
| [redacted] | 1.9 | 380 | 39 | 1 | 10 | .1 | 3 | 54930 | .1 | 2 | 4 | 4960 | 80 | 1 | 660 | 1682 | 1 | 20 | 8 | 70 | 27 | 2 | 570 | 1 | 2 | 5.0 | 1 | 1 | 1 | 1 | 119 | 5 | 55 |
| [redacted] | 1.1 | 4070 | 63 | 1 | 66 | .1 | 1 | 13060 | .1 | 5 | 11 | 9270 | 940 | 7 | 1950 | 414 | 1 | 220 | 29 | 250 | 19 | 2 | 86 | 1 | 1 | 9.9 | 19 | 1 | 1 | 2 | 237 | 5 | 60 |
| [redacted] | 1.1 | 21700 | 55 | 3 | 144 | .4 | 4 | 5490 | .1 | 8 | 48 | 43190 | 2680 | 39 | 15680 | 588 | 2 | 130 | 75 | 430 | 29 | 1 | 28 | 1 | 1 | 42.0 | 80 | 1 | 1 | 1 | 79 | 10 | 490 |
| [redacted] | 1.1 | 25610 | 53 | 3 | 131 | .6 | 4 | 620 | .1 | 7 | 36 | 44220 | 2490 | 50 | 18830 | 528 | 2 | 170 | 59 | 520 | 23 | 1 | 9 | 1 | 1 | 62.0 | 61 | 1 | 1 | 1 | 47 | 5 | 375 |
| D-RW-R-257 | 1.4 | 1970 | 1 | 4 | 14 | .1 | 2 | 2750 | .1 | 47 | 8 | 127600 | 1220 | 1 | 810 | 6 | 1 | 70 | 1 | 130 | 13 | 1 | 8 | 1 | 1 | 5.4 | 1 | 1 | 2 | 1 | 8 | 5 | 65 |

COPY

COMP: INTERNATIONAL KODIAK RESOURCES
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: 0V-1106-RJ3+4
DATE: 90/08/1
* ROCK * (ACT:F31) 

| SAMPLE NUMBER | HG PPB |
|---|---|
| D-RW-R-269 | 130 |
| D-RW-R-270 | 100 |
| D-RW-T-271 | 5215 |
| D-RW-T-272 | 1465 |
| D-RW-T-273 | 955 |
| D-RW-T-274 | 1610 |
| D-RW-T-275 | 1700 |
| D-RW-R-276 | 775 |
| D-RW-R-277 | 205 |
| D-RW-T-278 | 110 |
| D-RW-T-279 | 1785 |
| D-RW-R-281 | 185 |
| D-RW-R-282 | 175 |
| D-RW-R-283 | 180 |
| D-RW-R-284 | 235 |
| D-RW-R-285 | 110 |
| D-RW-R-286 | 245 |
| D-RW-R-287 | 450 |
| D-RW-R-288 | 125 |
| D-RW-R-289 | 140 |
| D-RW-R-290 | 130 |
| D-RW-R-291 | 145 |
| D-RW-R-292 | 125 |
| [redacted] | 120 |
| [redacted] | 145 |
| D-MM-T-258 | 215 |
| D-MM-T-259 | 95 |

25

COMP: INTERNATIONAL KODIAK RESOURCES
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: 0V-1106-RJ3
DATE: 90/08/
* ROCK * (ACT:F31) PAGE 1 OF

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-RW-R-269 | .7 | 14640 | 1 | 17 | 116 | .6 | 1 | 28810 | .1 | 26 | 38 | 42870 | 1620 | 10 | 23020 | 1040 | 1 | 660 | 40 | 600 | 20 | 1 | 15 | 1 | 1 | 103.4 | 54 | 1 | 4 | 1 | 105 | 5 |
| D-RW-R-270 | 2.0 | 23050 | 1 | 1 | 86 | .1 | 6 | 10250 | .1 | 14 | 8 | 41900 | 990 | 6 | 23040 | 1181 | 1 | 570 | 1 | 1620 | 9 | 1 | 10 | 1 | 1 | 79.0 | 86 | 1 | 4 | 1 | 33 | 5 |
| D-RW-T-271 | 4.0 | 14810 | 1 | 1 | 90 | .1 | 10 | 10520 | .1 | 12 | 7 | 28310 | 4500 | 2 | 7150 | 352 | 8 | 410 | 1 | 1170 | 10 | 1 | 2 | 1 | 1 | 83.6 | 19 | 1 | 1 | 1 | 19 | 5 |
| D-RW-T-272 | 2.8 | 26190 | 1 | 3 | 95 | .1 | 16 | 13420 | .1 | 89 | 27 | 93540 | 1040 | 6 | 24600 | 971 | 11 | 500 | 299 | 1710 | 12 | 1 | 19 | 1 | 1 | 194.5 | 48 | 1 | 2 | 1 | 112 | 5 |
| D-RW-T-273 | 2.0 | 32200 | 1 | 4 | 185 | .1 | 11 | 13060 | .1 | 60 | 20 | 78020 | 1640 | 7 | 31210 | 1213 | 1 | 320 | 358 | 1730 | 9 | 1 | 20 | 1 | 1 | 192.0 | 63 | 1 | 6 | 1 | 119 | 5 |
| D-RW-T-274 | .7 | 24970 | 1 | 3 | 104 | .5 | 8 | 5370 | .1 | 54 | 17 | 82470 | 1870 | 7 | 26030 | 956 | 12 | 430 | 207 | 1560 | 29 | 1 | 9 | 1 | 1 | 179.4 | 54 | 1 | 1 | 1 | 130 | 10 |
| D-RW-T-275 | 2.1 | 18220 | 47 | 1 | 49 | .5 | 6 | 7190 | .1 | 20 | 19 | 59830 | 4860 | 3 | 12170 | 475 | 2 | 400 | 43 | 1580 | 24 | 1 | 16 | 1 | 1 | 114.9 | 48 | 1 | 1 | 1 | 116 | 5 |
| D-RW-R-276 | 1.1 | 22430 | 1 | 2 | 610 | .8 | 3 | 2670 | .1 | 11 | 18 | 35940 | 8660 | 2 | 9190 | 352 | 4 | 210 | 3 | 640 | 16 | 1 | 2 | 1 | 1 | 38.6 | 76 | 1 | 1 | 1 | 53 | 5 |
| D-RW-R-277 | .3 | 9380 | 1 | 7 | 4654 | 1.1 | 1 | 11030 | .1 | 7 | 50 | 30670 | 5160 | 1 | 4520 | 1173 | 5 | 170 | 1 | 1090 | 19 | 1 | 40 | 1 | 1 | 15.5 | 161 | 1 | 1 | 1 | 52 | 5 |
| D-RW-T-278 | 52.8 | 5900 | 1 | 21 | 87 | .1 | 1 | 700 | 1031.9 | 95 | 123270 | 216260 | 830 | 1 | 4880 | 294 | 7 | 10 | 1 | 10 | 1640 | 97 | 15 | 1 | 1 | 19.3 | 96113 | 1 | 11 | 4 | 1 | 30 |
| D-RW-T-279 | 4.0 | 8860 | 146 | 2 | 138 | .1 | 3 | 3860 | 12.0 | 9 | 1272 | 42560 | 2800 | 2 | 6600 | 382 | 123 | 110 | 1 | 1720 | 81 | 7 | 7 | 1 | 1 | 67.2 | 1257 | 2 | 1 | 1 | 53 | 5 |
| D-RW-R-281 | 1.5 | 14750 | 1 | 4 | 248 | 1.4 | 1 | 41630 | 2.6 | 17 | 610 | 41380 | 5750 | 2 | 11450 | 1404 | 3 | 180 | 21 | 1800 | 61 | 1 | 1 | 1 | 1 | 52.2 | 545 | 1 | 1 | 1 | 39 | 10 |
| D-RW-R-282 | 1.7 | 7310 | 1 | 3 | 3360 | .4 | 1 | 88980 | .1 | 19 | 209 | 56730 | 3200 | 1 | 27510 | 2292 | 1 | 70 | 7 | 550 | 35 | 1 | 1 | 1 | 1 | 78.3 | 177 | 1 | 6 | 1 | 1 | 10 |
| D-RW-R-283 | .1 | 24480 | 1 | 2 | 126 | .7 | 1 | 5700 | .1 | 9 | 101 | 63030 | 900 | 5 | 21630 | 1785 | 8 | 410 | 1 | 1770 | 22 | 1 | 2 | 1 | 1 | 100.8 | 167 | 1 | 1 | 1 | 9 | 5 |
| D-RW-R-284 | .5 | 7100 | 88 | 2 | 74 | .4 | 2 | 2020 | .1 | 10 | 133 | 67220 | 160 | 2 | 6730 | 458 | 11 | 50 | 1 | 310 | 47 | 1 | 3 | 1 | 1 | 46.3 | 58 | 1 | 1 | 2 | 205 | 5 |
| D-RW-R-285 | .1 | 4930 | 14 | 1 | 50 | .4 | 1 | 430 | .1 | 9 | 39 | 50360 | 130 | 1 | 3900 | 266 | 5 | 20 | 1 | 210 | 30 | 1 | 2 | 1 | 1 | 24.5 | 40 | 1 | 2 | 2 | 199 | 5 |
| D-RW-R-286 | 1.0 | 14790 | 1 | 2 | 45 | .6 | 4 | 46640 | 7.1 | 16 | 42 | 52450 | 110 | 2 | 8760 | 6367 | 24 | 30 | 11 | 650 | 183 | 1 | 7 | 1 | 1 | 57.2 | 1502 | 1 | 2 | 1 | 72 | 5 |
| D-RW-R-287 | 2.1 | 11120 | 67 | 1 | 54 | .1 | 4 | 3290 | .1 | 13 | 22 | 40380 | 1820 | 3 | 8590 | 454 | 17 | 370 | 1 | 2400 | 30 | 1 | 3 | 1 | 1 | 127.9 | 48 | 2 | 2 | 1 | 61 | 5 |
| D-RW-R-288 | .1 | 27920 | 1 | 2 | 372 | .6 | 1 | 10040 | .1 | 24 | 18 | 54980 | 2410 | 12 | 36930 | 2390 | 1 | 290 | 17 | 1750 | 17 | 1 | 10 | 1 | 1 | 120.0 | 212 | 1 | 1 | 1 | 81 | 10 |
| D-RW-R-289 | 4.5 | 12080 | 55 | 8 | 50 | .8 | 1 | 41430 | .2 | 19 | 91 | 33020 | 3750 | 2 | 18290 | 1046 | 1 | 350 | 29 | 1580 | 22 | 1 | 10 | 1 | 1 | 61.6 | 263 | 1 | 2 | 1 | 75 | 5 |
| D-RW-R-290 | 2.6 | 23850 | 1 | 1 | 17 | .5 | 6 | 33790 | .1 | 14 | 66 | 42320 | 340 | 2 | 9100 | 366 | 1 | 600 | 10 | 1390 | 9 | 1 | 1 | 1 | 1 | 103.8 | 50 | 2 | 6 | 1 | 57 | 5 |
| D-RW-R-291 | .1 | 15150 | 1 | 1 | 178 | 1.6 | 1 | 8080 | .1 | 8 | 54 | 32130 | 3080 | 5 | 4230 | 1330 | 1 | 500 | 5 | 1520 | 16 | 1 | 3 | 1 | 1 | 72.1 | 65 | 1 | 1 | 1 | 36 | 5 |
| D-RW-R-292 | .4 | 11150 | 1 | 1 | 55 | .8 | 1 | 3940 | .1 | 5 | 13 | 19600 | 1470 | 4 | 5460 | 419 | 2 | 560 | 3 | 760 | 18 | 1 | 3 | 1 | 1 | 29.5 | 62 | 2 | 1 | 1 | 57 | 5 |
| [redacted] | 1.7 | 19820 | 1 | 1 | 59 | .1 | 3 | 18740 | .1 | 10 | 70 | 20300 | 2900 | 8 | 5560 | 497 | 1 | 810 | 1 | 680 | 27 | 1 | 15 | 1 | 1 | 52.3 | 150 | 1 | 1 | 1 | 85 | 5 |
| | 2.2 | 18300 | 1 | 1 | 136 | .1 | 6 | 12800 | .1 | 21 | 92 | 40010 | 3560 | 11 | 13240 | 640 | 4 | 770 | 2 | 930 | 10 | 1 | 4 | 1 | 1 | 133.8 | 58 | 1 | 1 | 1 | 53 | 5 |
| D-MM-T-258 | 7.8 | 3430 | 18 | 2 | 321 | .1 | 1 | 1500 | 38.8 | 9 | 11809 | 33240 | 2680 | 1 | 890 | 75 | 22 | 40 | 1 | 10 | 73 | 10 | 8 | 1 | 1 | 12.0 | 3335 | 1 | 3 | 2 | 170 | 5000 |
| D-MM-T-259 | 2.2 | 2420 | 4 | 4 | 48 | .3 | 1 | 1450 | 5.0 | 29 | 614 | 70560 | 1840 | 1 | 1500 | 309 | 7 | 40 | 1 | 270 | 86 | 1 | 3 | 1 | 1 | 6.9 | 667 | 1 | 3 | 1 | 116 | 6000 |

25

COMP: INTERNATIONAL KODIAK RESOURCES
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: 0V-1106-LJ
DATE: 90/08/1
* SILT * (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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-SM-D-031 | 2.4 | 73730 | 1 | 1 | 7 | .1 | 14 | 850 | .1 | 36 | 30 | 68660 | 120 | 3 |
| D-SM-D-032 | 1.4 | 52940 | 1 | 1 | 36 | 1.1 | 10 | 1160 | .1 | 30 | 26 | 63730 | 500 | 6 |
| D-SM-D-033 | 1.0 | 41070 | 1 | 1 | 84 | .7 | 7 | 3410 | .1 | 29 | 53 | 62740 | 1190 | 8 |
| D-SM-D-034 | 2.4 | 62180 | 1 | 1 | 36 | 1.6 | 11 | 820 | .1 | 31 | 64 | 68150 | 260 | 4 |
| D-SM-D-035 | 3.8 | 73670 | 1 | 1 | 20 | .1 | 20 | 1970 | .1 | 43 | 41 | 97920 | 360 | 3 |
| D-SM-D-036 | 3.3 | 47680 | 1 | 1 | 45 | .1 | 13 | 3940 | .1 | 30 | 87 | 74930 | 840 | 7 |
| D-SM-D-037 | 2.8 | 58040 | 1 | 1 | 38 | .8 | 12 | 1840 | .1 | 36 | 32 | 76360 | 770 | 6 |
| D-SM-D-038 | 1.3 | 39390 | 1 | 1 | 75 | 3.8 | 7 | 2540 | .1 | 19 | 82 | 55010 | 1070 | 9 |
| D-SM-D-039 | 3.5 | 58500 | 1 | 1 | 52 | 2.8 | 13 | 2190 | .1 | 25 | 98 | 77390 | 760 | 9 |
| D-SM-D-040 | 4.5 | 66350 | 1 | 1 | 29 | .1 | 21 | 4080 | .1 | 42 | 46 | 103710 | 610 | 5 |
| D-SM-D-041 | 3.3 | 60330 | 1 | 1 | 33 | .1 | 18 | 2480 | .1 | 42 | 51 | 86480 | 400 | 5 |
| D-SM-S-042 | .9 | 29700 | 1 | 1 | 109 | .3 | 6 | 17570 | .1 | 25 | 50 | 54490 | 1470 | 12 |
| D-RW-D-280 | 4.7 | 64070 | 1 | 1 | 221 | .1 | 22 | 13700 | .1 | 68 | 45 | 104000 | 2030 | 7 |
| D-RW-D-268 | 3.1 | 49840 | 1 | 1 | 40 | .1 | 16 | 4990 | .1 | 31 | 33 | 77450 | 850 | 6 |

| SAMPLE NUMBER | 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 | HG PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-SM-D-031 | 3350 | 2016 | 1 | 210 | 1 | 1210 | 7 | 1 | 1 | 1 | 1 | 131.3 | 20 | 1 | 1 | 1 | 1 | 5 | 155 |
| D-SM-D-032 | 4040 | 1425 | 1 | 430 | 1 | 1070 | 7 | 1 | 1 | 1 | 1 | 97.2 | 74 | 1 | 1 | 1 | 1 | 5 | 110 |
| D-SM-D-033 | 12570 | 1585 | 1 | 690 | 8 | 1180 | 19 | 1 | 8 | 1 | 1 | 113.2 | 147 | 1 | 1 | 1 | 1 | 10 | 185 |
| D-SM-D-034 | 5440 | 1527 | 1 | 110 | 1 | 1600 | 7 | 1 | 1 | 1 | 1 | 128.5 | 108 | 1 | 1 | 1 | 1 | 5 | 195 |
| D-SM-D-035 | 9090 | 1360 | 1 | 390 | 1 | 1840 | 7 | 1 | 1 | 1 | 1 | 195.2 | 54 | 1 | 1 | 1 | 1 | 10 | 130 |
| D-SM-D-036 | 9490 | 1192 | 1 | 530 | 1 | 2230 | 31 | 1 | 6 | 1 | 1 | 151.2 | 151 | 1 | 1 | 2 | 1 | 5 | 145 |
| D-SM-D-037 | 5000 | 1624 | 1 | 810 | 1 | 1090 | 7 | 1 | 1 | 1 | 1 | 106.4 | 92 | 1 | 1 | 1 | 1 | 5 | 105 |
| D-SM-D-038 | 4610 | 1641 | 1 | 950 | 4 | 960 | 155 | 1 | 1 | 5 | 1 | 51.7 | 324 | 2 | 1 | 1 | 1 | 10 | 135 |
| D-SM-D-039 | 4730 | 943 | 1 | 710 | 1 | 1230 | 109 | 1 | 1 | 1 | 1 | 122.4 | 345 | 1 | 1 | 1 | 1 | 10 | 115 |
| D-SM-D-040 | 6980 | 718 | 1 | 1390 | 1 | 1850 | 7 | 1 | 5 | 1 | 1 | 212.6 | 71 | 1 | 1 | 3 | 1 | 5 | 335 |
| D-SM-D-041 | 5720 | 1157 | 1 | 1110 | 1 | 1510 | 7 | 1 | 1 | 1 | 1 | 178.4 | 108 | 1 | 1 | 2 | 1 | 5 | 435 |
| D-SM-S-042 | 17640 | 1450 | 1 | 1950 | 20 | 900 | 16 | 1 | 17 | 1 | 1 | 80.8 | 87 | 1 | 1 | 1 | 1 | 5 | 105 |
| D-RW-D-280 | 13600 | 2392 | 1 | 4630 | 1 | 1900 | 7 | 1 | 48 | 1 | 1 | 181.8 | 126 | 1 | 1 | 2 | 1 | 10 | 80 |
| D-RW-D-268 | 5950 | 680 | 1 | 1690 | 1 | 1370 | 7 | 1 | 6 | 1 | 1 | 142.4 | 59 | 1 | 1 | 1 | 1 | 5 | 350 |

19

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: 0V-1032-LJ1
DATE: 90/08/13
* SILT * (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] | 2.2 | 20720 | 1 | 5 | 239 | 1.1 | 7 | 10650 | .1 | 21 | 66 | 52250 | 1820 | 17 | 12620 | 1069 | 1 | 350 | 26 | 1650 | 34 | 6 | 11 | 2 | 1 | 93.5 | 223 | 1 | 1 | 1 | 11 | 5 |
| | 1.5 | 23130 | 1 | 7 | 211 | .4 | 8 | 12100 | .1 | 23 | 63 | 53860 | 1990 | 18 | 13860 | 1055 | 1 | 340 | 26 | 1520 | 20 | 1 | 5 | 1 | 1 | 106.2 | 194 | 1 | 1 | 1 | 14 | 5 |
| | 1.3 | 25900 | 1 | 7 | 251 | .5 | 9 | 12280 | .1 | 24 | 67 | 57790 | 2950 | 17 | 14590 | 1185 | 1 | 340 | 27 | 1670 | 16 | 1 | 5 | 1 | 1 | 116.9 | 213 | 1 | 1 | 1 | 13 | 5 |
| | 1.2 | 24570 | 1 | 9 | 194 | .1 | 9 | 12280 | .1 | 24 | 63 | 56830 | 1960 | 19 | 14980 | 1098 | 1 | 320 | 25 | 1560 | 14 | 1 | 3 | 1 | 1 | 112.1 | 184 | 1 | 1 | 1 | 14 | 5 |
| | 1.0 | 25470 | 1 | 11 | 217 | .2 | 9 | 12180 | .1 | 23 | 63 | 55340 | 2720 | 18 | 14310 | 1137 | 1 | 340 | 24 | 1530 | 8 | 1 | 3 | 1 | 1 | 114.4 | 192 | 1 | 1 | 1 | 14 | 5 |
| | .8 | 23640 | 1 | 11 | 198 | .2 | 8 | 10450 | .1 | 22 | 68 | 52840 | 1560 | 21 | 14810 | 1094 | 1 | 220 | 24 | 1430 | 11 | 1 | 4 | 1 | 1 | 101.8 | 163 | 1 | 1 | 1 | 8 | 10 |
| | 1.4 | 25550 | 1 | 15 | 244 | .1 | 11 | 12840 | .1 | 24 | 59 | 56700 | 2310 | 20 | 14500 | 990 | 1 | 380 | 29 | 1380 | 10 | 1 | 4 | 1 | 1 | 128.9 | 307 | 1 | 1 | 1 | 26 | 5 |
| D-RW-S-200 | .9 | 22690 | 1 | 11 | 403 | .4 | 10 | 9950 | .1 | 27 | 139 | 55430 | 1300 | 8 | 14490 | 1151 | 1 | 330 | 13 | 1120 | 20 | 1 | 18 | 1 | 1 | 90.0 | 188 | 1 | 1 | 1 | 1 | 5 |
| D-RW-S-254 | 1.1 | 30310 | 1 | 11 | 149 | .1 | 10 | 15960 | .1 | 25 | 64 | 60620 | 1480 | 13 | 18510 | 1542 | 1 | 940 | 23 | 990 | 22 | 1 | 13 | 1 | 1 | 84.8 | 128 | 1 | 1 | 1 | 1 | 5 |

2

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: 0V-1032-RJ1+2
DATE: 90/08/0?
* 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-CC-R-118 | 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 |
| D-CC-R-119 | 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 |
| D-RW-T-201 | 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 |
| D-RW-T-210 | 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 |
| D-RW-R-202 | 2.3 | 22980 | 1 | 3 | 134 | .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 |
| D-RW-R-203 | 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 |
| D-RW-R-204 | .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 |
| D-RW-R-205 | .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 |
| D-RW-R-206 | .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 |
| D-RW-R-207 | NO SAMPLE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D-RW-R-208 | 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 |
| D-RW-R-209 | 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 |
| D-BC-R-043 | 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 |
| D-RW-R-251 | 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 |
| D-RW-T-247 | 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 |
| D-RW-T-248 | .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 |
| D-RW-T-249 | .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 |
| D-RW-T-252 | 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 |
| [redacted] | 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 |
| [redacted] | 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 |
| [redacted] | 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 |
| [redacted] | 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 |
| [redacted] | 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 |
| [redacted] | 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 |
| [redacted] | 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 |
| D-MM-R-144 | 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 |
| D-MM-R-145 | .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 |
| D-MM-R-146 | 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 |
| D-MM-R-147 | 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 |
| D-MM-R-148 | .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 |
| D-MM-R-149 | 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 | 34 | 3 | 1 | 1 | 28 | 5 |
| D-MM-R-150 | .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 |
| D-MM-R-151 | 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 |
| D-MM-R-152 | 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 |
| D-MM-R-153 | .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 |
| D-MM-R-154 | .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 |
| D-MM-R-155 | .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 |
| D-MM-R-156 | 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 |
| D-MM-R-157 | 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 |
| D-RW-T-253 | 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 |
| D-RW-R-255 | 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 |
| D-RW-R-256 | 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 |
| [redacted] | 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 |
| [redacted] | .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 |
| [redacted] | 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 |
| [redacted] | 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 |
| [redacted] | .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 |
| [redacted] | .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 |
| [redacted] | .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 |
| [redacted] | 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 |
| [redacted] | .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 |
| [redacted] | .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 |
| [redacted] | .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 |
| [redacted] | .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 |
| D-CC-R-132 | 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 |
| D-CC-R-133 | 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 |
| D-CC-R-134 | 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 |
| D-CC-R-135 | 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 |
| D-CC-R-136 | 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 |

• EN LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS

NORTH VANCOUVER B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
FAX (604) 980-9621

THUNDER BAY LAB.:
TELEPHONE (807) 622-8958
FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

# *Assay Certificate*

0V-1032-RA1

Company: INTERNATIONAL KODIAK
Project: [illegible]
Attn: G. NICHOLSON

Date: AUG-06-90
Copy 1. INTERNATIONAL KODIAK, VANCOUVER, B.C.
2. INTERNATIONAL KODIAK, C/O [illegible]

*We hereby certify* the following Assay of 9 ROCK samples submitted JUL-31-90 by MIKE BROW.

| Sample Number | AU g/tonne | AU oz/ton | CU % | ZN % |
|---|---|---|---|---|
| [illegible]-043 | | | 1.820 | |
| [illegible]-247 | | | 1.150 | |
| [illegible] | | | 4.500 | |
| [illegible]-134 | | | 1.510 | |
| [illegible] | | | | .85 |

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

F[redacted]: 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 |
| [redacted] | .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 |
| [redacted] | .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 |
| D CC R 082 | .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 |
| D CC R 086 | 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 |
| D CC R 087 | 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 |
| D CC R 088 | 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 |
| D CC R 089 | .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 |
| D CC R 090 | .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 |
| D CC R 091 | .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 |
| D CC R 092 | 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 |
| D CC R 093 | .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 |
| D CC R 094 | 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 |
| D CC R 095 | .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 |
| D CC R 096 | .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 |
| D CC R 097 | 2.7 | 23950 | 1 | 1 | 125 | .1 | 13 | 11210 | .1 | 21 | 12 | 63650 | 950 | 3 | 25720 | 1253 | 1 | 950 | 1 | 1770 | 25 | 1 | 21 | 1 | 1 | 153.3 | 84 | 1 | 2 | 2 | 29 | 5 |
| D CC R 098 | .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 |
| D CC R 099 | 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 |
| [redacted] | 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 |
| [redacted] | 1.7 | 17870 | 6 | 1 | 89 | .4 | 4 | 22780 | .1 | 11 | 1424 | 30620 | 1860 | 8 | 12240 | 635 | 1 | 790 | 14 | 680 | 95 | 1 | 10 | 1 | 1 | 68.1 | 96 | 2 | 1 | 2 | 72 | 5 |
| [redacted] | 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 |
| [redacted] | 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 |
| [redacted] | 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 |
| [redacted] | .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 |
| [redacted] | 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 |
| [redacted] | .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 |
| [redacted] | 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 |
| [redacted] | .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 |
| D MM T 094 | 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 |
| D MM T 095 | 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 |
| D MM T 096 | 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 |

18

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: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D MM R 086 | .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 |
| D MM R 087 | 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 |
| D MM R 088 | 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 |
| D MM R 089 | 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 |
| D MM R 090 | 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 |
| D MM R 091 | .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 |
| D MM R 092 | 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 |
| D MM R 093 | 2.4 | 36740 | 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 |
| D MM T 079 | 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 |
| [redacted] | 2.0 | 22840 | 1 | 1 | 78 | .1 | 9 | 7940 | .1 | 18 | 50 | 54660 | 1570 | 16 | 18000 | 905 | 1 | 860 | 1 | 1280 | 39 | 1 | 5 | 1 | 1 | 112.0 | 102 | 2 | 1 | 2 | 46 | 10 |
| | .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 |
| | 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 |
| | 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 |
| | 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 |
| | .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 |
| | 1.8 | 11260 | 1 | 1 | 74 | .1 | 4 | 11430 | .1 | 11 | 2069 | 25570 | 1730 | 5 | 5840 | 469 | 1 | 540 | 32 | 1160 | 33 | 1 | 28 | 1 | 1 | 75.6 | 101 | 1 | 1 | 1 | 23 | 30 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 042 | 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 |

9

GEOCHEMICAL ANALYSIS CERTIFICATE

Loring Laboratories Ltd. PROJECT 33533 File # 90-2721 Page 1

629 Beaverdam Road N.E., Calgary AB T2K 4W7

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-GB-R 025 | 1 | 212 | 14 | 75 | .3 | 23 | 32 | 1044 | 9.88 | 12 | 5 | ND | 3 | 23 | 1.3 | 2 | 2 | 159 | .93 | .130 | 6 | 117 | 2.97 | 49 | .27 | 2 | 4.56 | .02 | .05 |
| D-GB-R 026 | 1 | 408 | 10 | 68 | .6 | 45 | 21 | 853 | 7.30 | 8 | 5 | ND | 3 | 34 | .8 | 2 | 2 | 115 | .95 | .107 | 8 | 118 | 2.65 | 86 | .22 | 2 | 4.17 | .04 | .04 |
| D-GB-R 027 | 4 | 336 | 12 | 53 | .4 | 31 | 13 | 681 | 6.72 | 11 | 5 | ND | 2 | 103 | .4 | 2 | 2 | 63 | 2.29 | .126 | 5 | 101 | 1.06 | 41 | .26 | 2 | 2.50 | .11 | .03 |
| D-GB-R 028 | 1 | 240 | 13 | 81 | .4 | 40 | 36 | 786 | 6.91 | 2 | 5 | ND | 2 | 123 | .8 | 2 | 2 | 113 | 1.28 | .088 | 4 | 85 | 2.11 | 90 | .26 | 2 | 4.52 | .29 | .04 |
| D-LR-R 069 | 1 | 1464 | 8 | 67 | 3.6 | 34 | 10 | 618 | 9.78 | 9 | 5 | ND | 1 | 28 | 1.4 | 2 | 2 | 114 | .87 | .112 | 4 | 138 | 2.78 | 113 | .27 | 2 | 4.45 | .01 | .03 |
| D-LR-R 070 | 4 | 475 | 5 | 135 | .3 | 40 | 15 | 383 | 4.71 | 3 | 5 | ND | 1 | 85 | .5 | 2 | 2 | 239 | .44 | .189 | 11 | 248 | 1.00 | 162 | .07 | 2 | 1.94 | .01 | .05 |
| D-LR-R 071 | 1 | 1573 | 10 | 26 | 3.8 | 9 | 34 | 176 | 41.34 | 11 | 5 | ND | 4 | 4 | 2.7 | 2 | 6 | 11 | .12 | .053 | 2 | 45 | .49 | 10 | .03 | 2 | .78 | .01 | .01 |
| D-LR-R 073 | 1 | 273 | 10 | 65 | .4 | 29 | 17 | 766 | 7.38 | 6 | 5 | ND | 2 | 96 | .5 | 2 | 2 | 88 | .93 | .070 | 5 | 109 | 2.38 | 171 | .34 | 2 | 3.62 | .02 | .02 |
| D-LR-R 074 | 1 | 95 | 5 | 63 | .1 | 15 | 11 | 1022 | 5.86 | 2 | 5 | ND | 1 | 50 | .2 | 2 | 2 | 55 | .70 | .082 | 4 | 61 | 1.44 | 134 | .25 | 2 | 3.29 | .14 | .17 |
| D-LR-R 075 | 1 | 64 | 13 | 189 | .2 | 17 | 14 | 743 | 5.35 | 2 | 5 | ND | 3 | 10 | .7 | 2 | 2 | 43 | 1.37 | .057 | 4 | 68 | 1.06 | 61 | .31 | 2 | 2.86 | .02 | .24 |
| D-MM-R 065 | 1 | 199 | 5 | 23 | .1 | 23 | 37 | 283 | 3.73 | 2 | 5 | ND | 9 | 86 | .2 | 2 | 2 | 75 | 1.31 | .141 | 12 | 75 | .77 | 48 | .25 | 2 | 1.81 | .12 | .04 |
| D-MM-R 066 | 1 | 597 | 11 | 41 | .5 | 3 | 15 | 601 | 8.87 | 5 | 5 | ND | 3 | 133 | .9 | 2 | 2 | 137 | 1.07 | .088 | 5 | 87 | 2.16 | 393 | .19 | 2 | 4.55 | .01 | .01 |
| D-MM-R 067 | 1 | 95 | 6 | 37 | .1 | 16 | 22 | 504 | 3.90 | 2 | 5 | ND | 5 | 40 | .2 | 2 | 2 | 108 | 1.84 | .117 | 10 | 75 | 1.29 | 203 | .27 | 2 | 2.25 | .11 | .11 |
| D-MM-R 068 | 1 | 145 | 8 | 11 | 2.6 | 4 | 2 | 50 | 3.66 | 2 | 5 | ND | 1 | 3 | .2 | 2 | 6 | 19 | .01 | .005 | 2 | 240 | .02 | 19 | .01 | 3 | .29 | .01 | .03 |
| D-MM-R 069 | 1 | 106 | 5 | 34 | .1 | 21 | 11 | 319 | 3.16 | 2 | 5 | ND | 1 | 7 | .2 | 2 | 2 | 99 | 3.69 | .060 | 2 | 66 | .83 | 6 | .48 | 2 | 3.28 | .04 | .01 |
| D-MM-R 070 | 1 | 437 | 6 | 39 | .3 | 21 | 39 | 490 | 7.48 | 6 | 5 | ND | 1 | 78 | 1.0 | 2 | 2 | 129 | 1.34 | .308 | 12 | 106 | 2.61 | 72 | .43 | 2 | 3.16 | .05 | .04 |
| D-MM-R 071 | 1 | 451 | 6 | 116 | .2 | 57 | 28 | 1671 | 15.31 | 3 | 5 | ND | 1 | 39 | 2.2 | 2 | 2 | 217 | .91 | .333 | 8 | 157 | 4.39 | 101 | .20 | 2 | 7.50 | .03 | .02 |
| D-MM-R 072 | 1 | 878 | 10 | 47 | .6 | 6 | 10 | 647 | 11.99 | 2 | 5 | ND | 1 | 35 | 1.6 | 2 | 2 | 203 | .85 | .047 | 2 | 88 | 2.71 | 1160 | .47 | 2 | 4.95 | .01 | .01 |
| D-MM-R 073 | 1 | 271 | 10 | 126 | .4 | 80 | 18 | 728 | 12.24 | 11 | 5 | ND | 2 | 30 | 1.6 | 2 | 2 | 110 | .68 | .065 | 4 | 182 | 2.58 | 74 | .27 | 2 | 3.51 | .07 | .07 |
| D-RW-R 160 | 1 | 81 | 3 | 33 | .1 | 20 | 23 | 382 | 4.51 | 3 | 5 | ND | 4 | 112 | .2 | 3 | 2 | 81 | 1.31 | .118 | 7 | 107 | 1.62 | 54 | .22 | 2 | 2.72 | .14 | .04 |
| D-RW-R 161 | 1 | 81 | 3 | 35 | .1 | 13 | 20 | 440 | 4.74 | 7 | 5 | ND | 3 | 58 | .2 | 2 | 2 | 134 | 1.38 | .186 | 12 | 63 | 1.62 | 130 | .30 | 2 | 2.55 | .11 | .05 |
| D-RW-R 162 | 53 | 291 | 13 | 304 | .4 | 74 | 19 | 318 | 4.58 | 5 | 5 | ND | 4 | 18 | 4.4 | 3 | 2 | 259 | 1.26 | .122 | 7 | 223 | 1.65 | 58 | .21 | 2 | 2.24 | .09 | .10 |
| D-RW-R 163 | 1 | 158 | 4 | 32 | .1 | 46 | 16 | 354 | 3.95 | 4 | 5 | ND | 1 | 38 | .2 | 2 | 2 | 96 | 1.45 | .074 | 2 | 53 | 1.23 | 23 | .44 | 2 | 2.04 | .18 | .02 |
| D-RW-R 164 | 1 | 3403 | 3 | 80 | 1.2 | 22 | 19 | 346 | 4.44 | 14 | 5 | ND | 1 | 30 | .9 | 2 | 2 | 94 | 2.06 | .069 | 2 | 66 | 1.14 | 125 | .46 | 2 | 2.41 | .10 | .02 |
| D-RW-R 165 | 1 | 449 | 10 | 62 | .2 | 17 | 15 | 1047 | 12.51 | 6 | 5 | ND | 1 | 23 | 1.6 | 2 | 2 | 302 | .63 | .064 | 2 | 71 | 3.78 | 341 | .38 | 2 | 6.44 | .06 | .03 |
| D-RW-R 166 | 1 | 598 | 10 | 87 | .5 | 44 | 18 | 935 | 12.19 | 9 | 5 | ND | 1 | 27 | 1.6 | 2 | 2 | 205 | .88 | .075 | 4 | 102 | 3.28 | 54 | .35 | 2 | 4.86 | .04 | .03 |
| [redacted] | 1 | 79 | 6 | 104 | .1 | 10 | 31 | 1175 | 8.24 | 9 | 5 | ND | 1 | 39 | .9 | 2 | 2 | 202 | 4.10 | .022 | 2 | 32 | 3.26 | 74 | .01 | 2 | 4.25 | .04 | .11 |
| | 1 | 49 | 5 | 64 | .1 | 5 | 22 | 746 | 5.88 | 8 | 5 | ND | 1 | 81 | .2 | 2 | 2 | 222 | 3.29 | .034 | 3 | 38 | 1.74 | 93 | .08 | 3 | 3.53 | .18 | .09 |
| | 1 | 4 | 2 | 14 | .1 | 5 | 3 | 246 | 1.24 | 2 | 5 | ND | 4 | 30 | .2 | 2 | 2 | 19 | 1.98 | .009 | 8 | 125 | .22 | 26 | .01 | 3 | .41 | .07 | .02 |
| | 33 | 103 | 554 | 165 | .1 | 25 | 18 | 1760 | 4.44 | 21 | 4255 | ND | 1 | 35 | .5 | 2 | 11 | 72 | .56 | .112 | 13 | 30 | 1.13 | 213 | .05 | 6 | 2.63 | .02 | .13 |
| | 1 | 313 | 6 | 51 | .1 | 12 | 25 | 664 | 5.95 | 8 | 5 | ND | 1 | 51 | .2 | 2 | 2 | 178 | 4.54 | .061 | 5 | 43 | 1.70 | 41 | .01 | 3 | 2.82 | .05 | .11 |
| | 1 | 32 | 2 | 70 | .1 | 14 | 20 | 1038 | 6.56 | 4 | 5 | ND | 1 | 45 | .2 | 2 | 2 | 143 | 3.39 | .050 | 2 | 37 | 1.78 | 16 | .01 | 2 | .78 | .04 | .01 |
| -LG-R 072 | 1 | 174 | 3 | 43 | .2 | 38 | 23 | 423 | 4.42 | 5 | 5 | ND | 1 | 84 | .2 | 2 | 2 | 78 | 1.29 | .042 | 2 | 58 | 1.19 | 101 | .29 | 2 | 2.10 | .13 | .05 |
| [redacted] | 12 | 120 | 160 | 110 | .1 | 26 | 13 | 782 | 3.46 | 15 | 1095 | ND | 1 | 77 | .6 | 3 | 2 | 91 | 1.68 | .122 | 7 | 58 | 1.08 | 136 | .12 | 12 | 1.79 | .03 | .41 |
| | 7 | 76 | 97 | 158 | .1 | 46 | 22 | 1108 | 5.61 | 23 | 640 | ND | 1 | 32 | .7 | 2 | 3 | 97 | .91 | .104 | 16 | 40 | 1.75 | 165 | .12 | 6 | 2.77 | .03 | .17 |
| | 2 | 82 | 31 | 175 | .1 | 58 | 26 | 1359 | 5.51 | 24 | 35 | ND | 1 | 65 | 1.0 | 2 | 2 | 94 | 1.28 | .139 | 23 | 67 | 1.60 | 260 | .15 | 6 | 3.08 | .02 | .16 |
| STANDARD C | 18 | 57 | 40 | 132 | 7.3 | 65 | 29 | 1001 | 3.96 | 41 | 19 | 7 | 38 | 53 | 17.9 | 16 | 19 | 57 | .51 | .094 | 38 | 57 | .93 | 181 | .09 | 34 | 1.93 | .06 | .14 |

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Pulp

LG

D

27

To: INTERNATIONAL KODIAK,
606, 675 West Hastings Street,
Vancouver, B.C. V6B 1N2

ATTN: John Nicholson
cc: S. Jaycox -Smithers

File No. 33533-SM
Date July 20, 1990
Samples Rock
Ref. # 0011 Smithers

# Certificate of Assay
# LORING LABORATORIES LTD.

Page # 5

| SAMPLE NO. | PPB Au |
|---|---|
| Geochemical Analysis | |
| D-GB-R-025 | NIL |
| 026 | NIL |
| 027 | NIL |
| 028 | NIL |
| D-LG-R-069 | NIL |
| 070 | NIL |
| 071 | 10 |
| 072 | NIL |
| 073 | NIL |
| 074 | NIL |
| 075 | NIL |
| D-MM-R-065 | NIL |
| 066 | NIL |
| 067 | NIL |
| 068 | NIL |
| 069 | NIL |
| 070 | NIL |
| 071 | NIL |
| 072 | NIL |
| 073 | NIL |
| D-RW-R-160 | NIL |
| 161 | NIL |
| 162 | NIL |
| 163 | NIL |
| 164 | NIL |
| 165 | NIL |
| 166 | NIL |
| [redacted]-036 | NIL |
| 037 | NIL |
| 038 | NIL |

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

MIN-EN LABORATORIES
(DIVISION OF ASSAYERS CORP.)
SPECIALISTS IN MINERAL ENVIRONMENTS

NORTH VANCOUVER B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
FAX (604) 980-9621

THUNDER BAY LAB.:
TELEPHONE (807) 622-8958
FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

Copy

# *Assay Certificate*

0S-0153-RA1

Company: INTERNATIONAL KODIAK
Project: UNUK
Attn: G.NICHOLSON

Date: JUL-24-90
Copy 1. INTERNATIONAL KODIAK, VANCOUVER, B.C.
2. INTERNATIONAL KODIAK, C/O JAYCO

***We hereby certify*** the following Assay of 8 ROCK samples submitted JUL-18-90 by MIKE BROWN.

| Sample Number | AU g/tonne | AU oz/ton | CU % | PB % | ZN % |
|---|---|---|---|---|---|
| D LG R 083 | | | .695 | | |
| D LG 4 092 | | | | | 1.30 |
| D RW R 180 | 2.40 | .070 | | | |
| D MM R 089 | | | | | 1.04 |
| D MM R 090 | | | | | 4.92 |
| [redacted] | 4.00 | .117 | [illegible] | | |
| D BC R 042 | | | [illegible] | | |
| D CC R 095 | | | | 2.16 | 3.80 |

*Certified by* [signature]

MIN-EN LABORATORIES

• EN
LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS

NORTH VANCOUVER, B.C. CANADA
TELEPHONE (604) 980-5814 OR (604) 986-4524
TELEX. VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

## *Assay Certificate*

0S-0161-PA1

Company: INTERNATIONAL KODIAK
Project: UNUK
Attn: G.NICHOLSON

Date: JUL-27-90

***We hereby certify*** the following Assay of PULP samples submitted MMM-DD-YY by .

| Sample Number | CU % | PB % | ZN % |
|---|---|---|---|
| D-RW-T 199 | .725 | | |
| D-CC-R 106 | | .78 | .99 |
| D-CC-R 107 | | | 1.05 |

***Certified by***

MIN-EN LABORATORIES

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: 0S-0153-S
DATE: 90/07/
* SOIL * (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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D RW D 181 | .9 | 20600 | 1 | 1 | 166 | 1.1 | 5 | 7390 | .1 | 9 | 24 | 46410 | 6470 | 4 | 2190 | 688 |
| D RW D 182 | .9 | 20140 | 1 | 1 | 180 | 1.2 | 5 | 6430 | .1 | 12 | 28 | 50800 | 8310 | 6 | 2450 | 625 |

| SAMPLE NUMBER | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D RW D 181 | 1 | 1850 | 1 | 730 | 26 | 1 | 12 | 1 | 1 | 14.7 | 106 | 2 | 1 | 1 | 1 | 5 |
| D RW D 182 | 1 | 2440 | 1 | 780 | 28 | 1 | 18 | 1 | 1 | 18.7 | 120 | 3 | 1 | 1 | 1 | 5 |

2

MIN-EN LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS

NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
FAX (604) 980-9621

**THUNDER BAY LAB.:**
TELEPHONE (807) 622-8958
FAX (807) 623-5931

**SMITHERS LAB.:**
TELEPHONE/FAX (604) 847-3004

## *Assay Certificate*

0V-1106-RA1

Company: INTERNATIONAL KODIAK RESOURCES
Project: [illegible]
Attn: [illegible]

Date: AUG-18-90
Copy 1. INTERNATIONAL KODIAK, VANCOUVER, B.C.
2. INTERNATIONAL KODIAK, [illegible]

***We hereby certify*** the following Assay of 4 ROCK samples submitted AUG-10-90 by M.BROWN.

| Sample Number | AU g/tonne | AU oz/ton | CU % | ZN % |
|---|---|---|---|---|
| [illegible] | | | | 1.69 |
| [illegible] | | | [illegible] | 14.50 |
| [illegible] | 5.[illegible] | .1[illegible] | 1.2[illegible] | |
| [illegible] | [illegible] | .09 | | |

*Certified by* ______________________

MIN-EN LABORATORIES

COMP: INTERNATIONAL KODIAK RESOURCES
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: 0V-1106-RJ1
DATE: 90/08/1
* 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 | HG PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [redacted] | .7 | 26940 | 1 | 7 | 144 | 1.3 | 1 | 1340 | .1 | 16 | 131 | 40090 | 3460 | 34 | 16350 | 332 | 1 | 180 | 102 | 580 | 29 | 1 | 5 | 3 | 1 | 55.2 | 106 | 1 | 1 | 1 | 72 | 5 | 315 |
| | .3 | 27630 | 1 | 2 | 133 | 1.0 | 1 | 1410 | .1 | 18 | 59 | 34340 | 1470 | 41 | 34940 | 272 | 1 | 1300 | 227 | 340 | 10 | 1 | 7 | 1 | 1 | 125.4 | 68 | 1 | 1 | 12 | 356 | 5 | 220 |
| | .2 | 29330 | 1 | 6 | 151 | 1.0 | 1 | 2170 | .1 | 11 | 47 | 39810 | 3750 | 35 | 18610 | 358 | 1 | 170 | 109 | 1030 | 14 | 1 | 7 | 1 | 1 | 76.4 | 69 | 1 | 2 | 2 | 101 | 5 | 200 |
| | 1.5 | 16890 | 1 | 1 | 55 | .1 | 6 | 9890 | .1 | 13 | 56 | 31260 | 1250 | 10 | 11980 | 608 | 4 | 1010 | 4 | 560 | 9 | 1 | 7 | 2 | 1 | 111.9 | 178 | 1 | 1 | 3 | 71 | 20 | 120 |
| | 1.3 | 21440 | 1 | 1 | 28 | .1 | 6 | 8380 | .1 | 19 | 78 | 48080 | 910 | 14 | 17740 | 2503 | 1 | 860 | 2 | 710 | 16 | 1 | 3 | 1 | 1 | 137.0 | 551 | 1 | 1 | 1 | 38 | 5 | 140 |
| | 2.0 | 18260 | 1 | 1 | 27 | .1 | 7 | 9900 | .1 | 16 | 117 | 41930 | 760 | 11 | 14650 | 649 | 1 | 850 | 1 | 870 | 9 | 1 | 4 | 1 | 1 | 144.9 | 137 | 1 | 1 | 2 | 52 | 5 | 115 |
| D-MM-R-230 | 1.4 | 27080 | 1 | 1 | 210 | .2 | 3 | 24000 | .1 | 6 | 16 | 16490 | 250 | 3 | 6300 | 480 | 1 | 360 | 4 | 190 | 9 | 1 | 1 | 1 | 1 | 22.4 | 33 | 1 | 1 | 2 | 112 | 10 | 100 |
| D-MM-R-231 | 1.9 | 28130 | 1 | 1 | 267 | .1 | 7 | 9520 | .1 | 16 | 30 | 45340 | 5670 | 4 | 8720 | 877 | 1 | 740 | 5 | 1250 | 10 | 1 | 5 | 1 | 1 | 62.7 | 34 | 1 | 1 | 1 | 6 | 5 | 130 |
| D-MM-R-232 | 1.2 | 9380 | 4 | 3 | 521 | .8 | 1 | 52350 | .1 | 14 | 38 | 38560 | 3340 | 1 | 21790 | 971 | 1 | 180 | 21 | 1090 | 20 | 1 | 44 | 1 | 1 | 34.5 | 58 | 1 | 3 | 1 | 33 | 5 | 135 |
| D-MM-R-233 | .7 | 26500 | 1 | 4 | 48 | .7 | 1 | 32810 | .1 | 29 | 61 | 51730 | 1270 | 14 | 38580 | 1218 | 1 | 470 | 37 | 600 | 9 | 1 | 16 | 1 | 1 | 150.2 | 59 | 1 | 2 | 1 | 108 | 5 | 105 |
| D-MM-R-234 | 3.6 | 46350 | 1 | 4 | 893 | 1.0 | 7 | 29100 | 150.3 | 31 | 710 | 62540 | 4110 | 15 | 39110 | 2908 | 1 | 150 | 99 | 1500 | 82 | 1 | 47 | 1 | 1 | 155.4 | 13973 | 1 | 1 | 3 | 124 | 35 | 1050 |
| D-MM-R-235 | .6 | 4170 | 7 | 1 | 65 | .2 | 1 | 10840 | .7 | 4 | 16 | 10760 | 1940 | 1 | 3000 | 347 | 6 | 470 | 4 | 350 | 20 | 1 | 11 | 2 | 1 | 10.7 | 207 | 1 | 2 | 3 | 114 | 10 | 145 |
| D-MM-R-236 | .8 | 6680 | 1 | 2 | 187 | .8 | 1 | 16230 | .1 | 6 | 9 | 17450 | 3820 | 1 | 8540 | 706 | 1 | 250 | 3 | 500 | 15 | 1 | 5 | 1 | 1 | 12.0 | 130 | 2 | 2 | 1 | 35 | 5 | 115 |
| D-MM-R-237 | .4 | 19330 | 1 | 5 | 46 | 1.0 | 1 | 13580 | .1 | 22 | 63 | 45700 | 3180 | 10 | 31250 | 1710 | 1 | 430 | 26 | 1940 | 9 | 1 | 10 | 1 | 1 | 88.1 | 129 | 1 | 1 | 1 | 29 | 5 | 125 |
| D-MM-R-238 | 13.5 | 3910 | 222 | 5 | 575 | .6 | 1 | 8540 | 1.4 | 14 | 2401 | 34630 | 2020 | 1 | 19590 | 1494 | 4 | 80 | 7 | 650 | 30 | 70 | 31 | 1 | 1 | 21.9 | 194 | 1 | 3 | 2 | 90 | 5 | 1640 |
| D-MM-R-239 | 3.4 | 6160 | 12 | 3 | 172 | .4 | 1 | 3780 | .1 | 9 | 3369 | 28060 | 2160 | 1 | 4080 | 312 | 9 | 270 | 1 | 490 | 29 | 2 | 3 | 1 | 1 | 15.3 | 39 | 3 | 1 | 3 | 94 | 10 | 165 |
| D-MM-R-240 | 3.6 | 3550 | 110 | 1 | 230 | .1 | 3 | 3740 | .1 | 17 | 411 | 40170 | 1370 | 1 | 2830 | 148 | 28 | 80 | 1 | 760 | 29 | 6 | 4 | 1 | 1 | 37.0 | 17 | 1 | 1 | 5 | 152 | 5 | 530 |
| D-MM-R-241 | 2.5 | 29530 | 1 | 2 | 129 | .1 | 10 | 11590 | .1 | 45 | 46 | 85980 | 1090 | 8 | 29130 | 1152 | 1 | 340 | 67 | 1630 | 9 | 1 | 15 | 1 | 1 | 154.0 | 70 | 1 | 1 | 2 | 108 | 10 | 335 |
| D-MM-R-242 | .2 | 11580 | 1 | 1 | 465 | .6 | 2 | 3170 | .1 | 7 | 15 | 37450 | 1290 | 3 | 10760 | 569 | 2 | 680 | 1 | 1400 | 26 | 1 | 7 | 1 | 1 | 43.8 | 70 | 2 | 1 | 1 | 68 | 5 | 125 |
| D-MM-R-243 | 3.5 | 7470 | 38 | 1 | 264 | .1 | 7 | 6310 | .1 | 11 | 14 | 25180 | 4310 | 1 | 1460 | 47 | 8 | 50 | 1 | 1240 | 30 | 1 | 2 | 1 | 2 | 27.3 | 5 | 1 | 1 | 1 | 54 | 5 | 650 |
| D-MM-R-244 | 2.1 | 5670 | 90 | 1 | 236 | .1 | 2 | 1280 | .1 | 7 | 13 | 24810 | 4300 | 1 | 1000 | 30 | 7 | 180 | 1 | 610 | 41 | 3 | 19 | 1 | 1 | 18.8 | 13 | 1 | 1 | 2 | 82 | 10 | 955 |
| D-MM-R-245 | 1.1 | 13420 | 265 | 1 | 196 | .8 | 2 | 2940 | .1 | 10 | 12 | 45050 | 5640 | 2 | 7490 | 197 | 1 | 30 | 1 | 1160 | 27 | 4 | 3 | 1 | 1 | 28.3 | 18 | 2 | 1 | 1 | 33 | 5 | 610 |
| D-MM-R-246 | 3.1 | 13680 | 1 | 1 | 240 | .1 | 9 | 5600 | .1 | 16 | 31 | 58370 | 4440 | 1 | 4770 | 263 | 4 | 320 | 1 | 1100 | 48 | 1 | 6 | 1 | 1 | 83.5 | 28 | 1 | 1 | 1 | 20 | 5 | 520 |
| D-MM-R-247 | 2.8 | 29560 | 1 | 2 | 154 | .9 | 11 | 10960 | .1 | 25 | 9 | 69880 | 8080 | 5 | 18510 | 988 | 1 | 80 | 1 | 1900 | 9 | 1 | 1 | 1 | 1 | 114.8 | 74 | 1 | 1 | 1 | 1 | 10 | 140 |
| D-MM-R-248 | 4.1 | 6420 | 86 | 1 | 87 | .1 | 11 | 8470 | .1 | 17 | 19 | 45000 | 2210 | 2 | 4530 | 223 | 37 | 250 | 1 | 2110 | 29 | 1 | 1 | 1 | 1 | 120.6 | 11 | 1 | 3 | 3 | 38 | 5 | 2045 |
| D-MM-R-249 | 2.6 | 8760 | 407 | 1 | 152 | .1 | 8 | 5570 | .1 | 10 | 11 | 29870 | 6120 | 1 | 1110 | 27 | 9 | 50 | 1 | 1490 | 21 | 1 | 1 | 1 | 1 | 34.0 | 1 | 1 | 1 | 1 | 20 | 5 | 185 |
| D-MM-R-250 | 2.8 | 28160 | 1 | 2 | 67 | .1 | 8 | 28250 | .1 | 27 | 6 | 52060 | 6700 | 8 | 30580 | 910 | 1 | 280 | 39 | 1250 | 9 | 1 | 1 | 1 | 1 | 90.2 | 49 | 1 | 1 | 1 | 80 | 5 | 115 |
| D-MM-R-251 | 2.5 | 25770 | 1 | 1 | 75 | .2 | 8 | 18220 | .1 | 25 | 20 | 50980 | 1410 | 10 | 28960 | 1191 | 1 | 800 | 33 | 1450 | 9 | 1 | 5 | 1 | 1 | 148.9 | 74 | 1 | 1 | 1 | 51 | 5 | 110 |
| D-MM-R-252 | 2.9 | 8590 | 1 | 1 | 244 | .1 | 6 | 6460 | .1 | 14 | 12 | 29360 | 1680 | 4 | 6120 | 332 | 3 | 360 | 1 | 860 | 22 | 1 | 1 | 1 | 1 | 27.4 | 24 | 1 | 1 | 1 | 24 | 10 | 195 |
| D-MM-R-253 | 1.9 | 12390 | 1 | 1 | 69 | .1 | 7 | 9030 | .1 | 9 | 6 | 28500 | 1070 | 4 | 8490 | 752 | 1 | 520 | 1 | 770 | 9 | 1 | 10 | 1 | 1 | 31.0 | 45 | 1 | 2 | 1 | 30 | 5 | 105 |
| D-MM-R-254 | 1.9 | 18780 | 1 | 1 | 75 | .1 | 6 | 8060 | .1 | 12 | 163 | 43450 | 570 | 6 | 14880 | 1979 | 1 | 590 | 1 | 960 | 26 | 1 | 5 | 1 | 1 | 44.7 | 109 | 1 | 1 | 1 | 6 | 5 | 240 |
| D-MM-R-255 | 1.1 | 20190 | 1 | 1 | 131 | .7 | 4 | 7880 | .1 | 20 | 10 | 37630 | 730 | 7 | 19450 | 1012 | 1 | 190 | 1 | 980 | 12 | 1 | 12 | 1 | 1 | 62.6 | 69 | 1 | 1 | 1 | 16 | 10 | 140 |
| D-MM-R-256 | .8 | 8120 | 1 | 1 | 107 | .1 | 3 | 4690 | .1 | 6 | 8 | 14200 | 1240 | 2 | 6040 | 420 | 2 | 250 | 1 | 320 | 11 | 1 | 6 | 1 | 1 | 18.8 | 25 | 1 | 1 | 1 | 57 | 5 | 85 |
| D-MM-R-257 | .8 | 3020 | 12 | 1 | 521 | .3 | 1 | 1770 | 8.5 | 5 | 262 | 12530 | 1790 | 1 | 1470 | 113 | 14 | 100 | 1 | 480 | 70 | 1 | 5 | 1 | 1 | 7.4 | 831 | 2 | 1 | 2 | 105 | 5 | 365 |
| D-MM-T-261 | 1.3 | 3180 | 1 | 2 | 84 | .1 | 3 | 3580 | .1 | 35 | 43 | 68360 | 1540 | 1 | 2020 | 170 | 30 | 30 | 1 | 650 | 36 | 1 | 1 | 1 | 1 | 18.9 | 23 | 1 | 2 | 1 | 33 | 5 | 100 |
| D-MM-R-260 | 1.7 | 2900 | 1 | 1 | 134 | .1 | 4 | 5810 | .1 | 12 | 12 | 31650 | 1680 | 1 | 1670 | 136 | 20 | 200 | 1 | 820 | 23 | 1 | 1 | 1 | 1 | 21.0 | 21 | 1 | 1 | 2 | 58 | 5 | 105 |
| D-MM-R-262 | 2.9 | 42800 | 1 | 3 | 11 | .2 | 7 | 31440 | .1 | 33 | 49 | 53910 | 130 | 8 | 36630 | 790 | 1 | 280 | 35 | 480 | 8 | 1 | 1 | 1 | 1 | 138.4 | 39 | 1 | 1 | 1 | 80 | 5 | 90 |
| D-MM-R-263 | .8 | 16020 | 1 | 3 | 26 | 1.3 | 1 | 31330 | .1 | 18 | 39 | 44660 | 1630 | 7 | 21440 | 1103 | 1 | 200 | 27 | 2070 | 26 | 1 | 11 | 1 | 1 | 109.9 | 54 | 1 | 1 | 1 | 13 | 10 | 105 |
| D-SM-R-020 | 6.3 | 34990 | 1 | 5 | 67 | .3 | 4 | 2500 | 18.6 | 55 | 998 | 126390 | 1430 | 13 | 23970 | 1374 | 1 | 60 | 7 | 300 | 290 | 1 | 1 | 1 | 1 | 133.6 | 2734 | 1 | 1 | 1 | 60 | 5 | 345 |
| D-SM-R-021 | 3.5 | 30250 | 1 | 3 | 75 | .1 | 9 | 22950 | .1 | 36 | 62 | 66770 | 250 | 12 | 39180 | 1064 | 1 | 720 | 71 | 1030 | 8 | 1 | 1 | 1 | 1 | 186.4 | 100 | 1 | 1 | 3 | 122 | 5 | 95 |
| D-SM-R-022 | 2.4 | 40360 | 1 | 1 | 79 | .1 | 7 | 22910 | .1 | 38 | 54 | 69370 | 1450 | 11 | 35320 | 1128 | 1 | 1990 | 14 | 1170 | 8 | 1 | 16 | 1 | 1 | 224.7 | 75 | 1 | 1 | 1 | 28 | 5 | 90 |
| D-SM-R-023 | 4.1 | 3010 | 27 | 1 | 135 | .3 | 1 | 1840 | .1 | 4 | 12 | 21240 | 2470 | 1 | 930 | 42 | 14 | 110 | 1 | 470 | 35 | 1 | 3 | 1 | 3 | 7.3 | 11 | 2 | 1 | 1 | 56 | 5 | 715 |
| D-SM-R-024 | 1.2 | 7280 | 1 | 8 | 108 | .9 | 1 | 14900 | .1 | 17 | 14 | 48210 | 4400 | 1 | 6800 | 414 | 12 | 40 | 1 | 1460 | 28 | 1 | 11 | 1 | 1 | 22.1 | 38 | 1 | 1 | 1 | 31 | 5 | 195 |
| D-SM-R-025 | 1.4 | 27000 | 1 | 1 | 82 | .4 | 4 | 9110 | .1 | 20 | 792 | 62890 | 1020 | 6 | 25210 | 1922 | 1 | 70 | 1 | 1210 | 14 | 1 | 17 | 1 | 1 | 104.0 | 89 | 1 | 1 | 1 | 27 | 5 | 95 |
| D-SM-R-026 | .3 | 13680 | 1 | 1 | 144 | .7 | 1 | 3130 | .1 | 6 | 12 | 28220 | 1790 | 3 | 10550 | 662 | 3 | 290 | 1 | 1320 | 18 | 1 | 3 | 1 | 1 | 48.7 | 42 | 2 | 1 | 1 | 48 | 10 | 105 |
| D-SM-R-027 | 1.7 | 10820 | 1 | 1 | 89 | .2 | 4 | 5130 | .1 | 7 | 22 | 29360 | 1840 | 3 | 9400 | 553 | 9 | 270 | 1 | 1250 | 30 | 1 | 2 | 1 | 1 | 57.2 | 32 | 3 | 1 | 3 | 94 | 5 | 420 |
| D-SM-R-028 | 1.3 | 17470 | 1 | 1 | 189 | .4 | 5 | 7690 | .1 | 13 | 41 | 39220 | 1250 | 5 | 14420 | 1344 | 1 | 670 | 1 | 1360 | 21 | 1 | 9 | 1 | 1 | 83.7 | 92 | 1 | 1 | 1 | 44 | 5 | 100 |
| D-SM-R-029 | 2.3 | 25380 | 1 | 1 | 36 | .1 | 8 | 13600 | .1 | 20 | 16 | 56940 | 250 | 5 | 19050 | 1307 | 1 | 440 | 20 | 1470 | 8 | 1 | 38 | 1 | 1 | 109.3 | 62 | 1 | 1 | 3 | 85 | 5 | 85 |
| D-SM-R-030 | 4.4 | 18920 | 1 | 2 | 16 | .3 | 3 | 13040 | .1 | 32 | 830 | 83100 | 470 | 3 | 8380 | 715 | 4 | 40 | 1 | 410 | 16 | 1 | 57 | 1 | 1 | 82.5 | 26 | 1 | 1 | 3 | 94 | 5 | 95 |
| D-MW-R-060 | .4 | 14680 | 1 | 1 | 95 | .7 | 3 | 3220 | .1 | 11 | 32 | 42250 | 1250 | 4 | 12030 | 870 | 4 | 280 | 1 | 850 | 16 | 1 | 2 | 1 | 1 | 54.8 | 38 | 2 | 1 | 3 | 103 | 5 | 85 |
| D-RW-R-258 | .5 | 40850 | 1 | 3 | 132 | .5 | 1 | 10100 | .1 | 22 | 151 | 92450 | 2130 | 15 | 19400 | 1326 | 1 | 240 | 1 | 4260 | 33 | 1 | 12 | 1 | 1 | 83.3 | 181 | 1 | 1 | 1 | 1 | 5 | 140 |
| D-RW-T-259 | 1.1 | 33330 | 1 | 7 | 167 | .1 | 3 | 11090 | .1 | 29 | 92 | 138830 | 3220 | 9 | 12090 | 763 | 1 | 150 | 1 | 5380 | 53 | 1 | 29 | 1 | 1 | 68.1 | 62 | 1 | 1 | 1 | 1 | 5 | 120 |
| D-RW-R-260 | 1.7 | 32370 | 1 | 2 | 231 | .3 | 7 | 8020 | .1 | 19 | 40 | 50340 | 6020 | 14 | 12500 | 735 | 1 | 480 | 3 | 620 | 8 | 1 | 2 | 1 | 1 | 75.1 | 74 | 1 | 1 | 1 | 22 | 5 | 100 |
| D-RW-R-261 | 1.1 | 8520 | 16 | 3 | 126 | .6 | 1 | 67660 | .1 | 19 | 35 | 50050 | 1290 | 3 | 24320 | 1183 | 1 | 810 | 22 | 520 | 17 | 1 | 15 | 1 | 1 | 74.9 | 33 | 1 | 3 | 1 | 58 | 5 | 75 |
| D-RW-T-262 | .1 | 37190 | 1 | 4 | 57 | .3 | 1 | 12970 | .1 | 30 | 75 | 108760 | 1560 | 11 | 16900 | 1092 | 1 | 130 | 1 | 6260 | 36 | 1 | 18 | 1 | 1 | 85.5 | 83 | 1 | 1 | 1 | 1 | 5 | 140 |
| D-RW-T-263 | .3 | 12240 | 1 | 1 | 105 | .8 | 1 | 15720 | .1 | 10 | 19 | 28540 | 3500 | 3 | 9170 | 1187 | 1 | 330 | 5 | 1070 | 19 | 1 | 7 | 1 | 1 | 27.8 | 109 | 1 | 1 | 1 | 30 | 5 | 85 |
| D-RW-T-264 | 1.9 | 33460 | 1 | 1 | 506 | .4 | 6 | 10480 | .1 | 12 | 45 | 47260 | 4280 | 3 | 11090 | 421 | 1 | 820 | 1 | 740 | 8 | 1 | 8 | 1 | 1 | 51.9 | 37 | 1 | 1 | 1 | 7 | 5 | 70 |
| D-RW-R-265 | 2.1 | 21190 | 1 | 1 | 271 | .1 | 7 | 8480 | .1 | 16 | 45 | 42150 | 3110 | 3 | 10980 | 253 | 1 | 700 | 3 | 600 | 16 | 1 | 4 | 1 | 1 | 57.2 | 52 | 1 | 1 | 1 | 24 | 10 | 90 |
| D-RW-R-266 | 2.0 | 28170 | 1 | 1 | 149 | .2 | 6 | 8020 | .1 | 16 | 84 | 48290 | 3790 | 3 | 10350 | 700 | 1 | 2280 | 1 | 1000 | 23 | 1 | 4 | 1 | 1 | 40.4 | 34 | 1 | 1 | 1 | 1 | 5 | 70 |
| D-RW-R-267 | 1.2 | 27240 | 1 | 1 | 129 | .1 | 4 | 12450 | .1 | 17 | 65 | 48330 | 2990 | 3 | 11750 | 655 | 1 | 2720 | 1 | 840 | 15 | 1 | 1 | 1 | 1 | 57.4 | 28 | 1 | 2 | 1 | 48 | 5 | 80 |

COMP: INTERNATIONAL KODIAK RESOURCES
PROJ: UNUK
ATTN: MIKE BROWN

# 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-0307-RJ1+
DATE: 90/08/2
* 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] | .9 | 10220 | 1 | 10 | 610 | .3 | 1 | 31360 | .1 | 13 | 43 | 38590 | 2530 | 28 | 16780 | 1105 | 1 | 570 | 1 | 840 | 20 | 1 | 24 | 1 | 1 | 65.9 | 55 | 1 | 1 | 1 | 17 | 5 |
| | 1.1 | 31560 | 1 | 4 | 703 | .1 | 2 | 14820 | .1 | 20 | 103 | 56580 | 1530 | 28 | 25080 | 1086 | 1 | 950 | 1 | 1470 | 7 | 1 | 29 | 1 | 1 | 206.5 | 60 | 1 | 1 | 1 | 11 | 5 |
| | .1 | 6160 | 1 | 12 | 38 | .1 | 1 | 1400 | .1 | 28 | 30 | 160340 | 3080 | 1 | 1060 | 1 | 1 | 250 | 1 | 350 | 27 | 1 | 4 | 1 | 1 | 72.0 | 77 | 1 | 1 | 1 | 1 | 5 |
| | 3.5 | 18670 | 1 | 4 | 31 | .1 | 6 | 16920 | .1 | 12 | 65 | 44900 | 430 | 6 | 6670 | 246 | 4 | 870 | 2 | 790 | 25 | 1 | 1 | 1 | 1 | 299.7 | 85 | 1 | 1 | 2 | 112 | 10 |
| | .1 | 20960 | 1 | 6 | 339 | .8 | 1 | 2270 | .1 | 7 | 7 | 49820 | 3470 | 14 | 6850 | 824 | 15 | 290 | 1 | 460 | 24 | 1 | 4 | 1 | 1 | 11.2 | 141 | 2 | 1 | 1 | 6 | 5 |
| | 1.0 | 7310 | 15 | 7 | 287 | .4 | 1 | 15240 | .1 | 12 | 19 | 31890 | 2450 | 7 | 2430 | 425 | 1 | 240 | 2 | 750 | 24 | 1 | 32 | 1 | 1 | 42.0 | 75 | 2 | 1 | 1 | 58 | 10 |
| | 1.1 | 24900 | 1 | 7 | 281 | .4 | 1 | 21370 | .1 | 12 | 26 | 45480 | 2670 | 30 | 8330 | 694 | 1 | 240 | 4 | 1100 | 20 | 1 | 77 | 1 | 1 | 65.3 | 81 | 2 | 1 | 1 | 31 | 5 |
| | 1.6 | 15820 | 1 | 5 | 228 | .3 | 1 | 48710 | .1 | 8 | 17 | 26740 | 2490 | 16 | 5450 | 1007 | 1 | 210 | 5 | 490 | 26 | 1 | 130 | 1 | 1 | 35.8 | 56 | 4 | 1 | 1 | 55 | 5 |
| | 2.8 | 9610 | 1 | 5 | 58 | .5 | 1 | 101100 | .1 | 14 | 8 | 47710 | 580 | 3 | 74560 | 1064 | 1 | 90 | 1 | 170 | 7 | 1 | 209 | 1 | 1 | 79.6 | 45 | 1 | 3 | 1 | 22 | 5 |
| | 1.0 | 23460 | 1 | 6 | 200 | .7 | 1 | 12040 | .1 | 13 | 26 | 38280 | 3050 | 25 | 7730 | 446 | 1 | 210 | 8 | 860 | 17 | 1 | 23 | 1 | 1 | 57.0 | 98 | 2 | 1 | 1 | 33 | 5 |
| | 2.9 | 6830 | 1 | 4 | 46 | .6 | 1 | 111170 | .1 | 9 | 8 | 29550 | 620 | 2 | 50320 | 1390 | 1 | 50 | 3 | 210 | 7 | 3 | 185 | 1 | 2 | 29.7 | 35 | 1 | 2 | 1 | 23 | 5 |
| | .8 | 32580 | 1 | 5 | 297 | .4 | 1 | 14540 | .1 | 31 | 54 | 55910 | 1370 | 22 | 30740 | 519 | 1 | 1030 | 89 | 1440 | 7 | 1 | 22 | 1 | 1 | 153.7 | 66 | 1 | 1 | 1 | 91 | 5 |
| | 2.3 | 2360 | 1 | 6 | 30 | .6 | 1 | 100830 | .1 | 10 | 9 | 23540 | 210 | 4 | 64060 | 2174 | 3 | 300 | 14 | 200 | 7 | 3 | 41 | 1 | 1 | 26.6 | 7 | 1 | 2 | 1 | 30 | 5 |
| | .5 | 14100 | 712 | 17 | 17 | .1 | 1 | 6660 | 25.2 | 34 | 186 | 237070 | 2310 | 14 | 4670 | 208 | 1 | 150 | 1 | 220 | 497 | 27 | 10 | 1 | 1 | 53.0 | 5991 | 1 | 1 | 1 | 1 | 5 |
| | 1.2 | 10950 | 96 | 8 | 79 | .1 | 1 | 34830 | .1 | 23 | 151 | 57250 | 2890 | 8 | 4830 | 609 | 1 | 760 | 10 | 1460 | 49 | 4 | 109 | 1 | 1 | 148.9 | 338 | 4 | 1 | 1 | 32 | 10 |
| | .1 | 2190 | 1 | 18 | 14 | .1 | 1 | 1030 | .1 | 25 | 40 | 311820 | 790 | 1 | 830 | 1 | 90 | 130 | 1 | 10 | 7 | 1 | 2 | 1 | 1 | 27.4 | 66 | 1 | 1 | 1 | 1 | 5 |
| | 3.2 | 14570 | 1 | 7 | 60 | .1 | 6 | 17820 | 10.3 | 14 | 100 | 45490 | 5720 | 4 | 5470 | 365 | 51 | 360 | 103 | 780 | 36 | 9 | 2 | 1 | 1 | 200.6 | 1113 | 1 | 1 | 1 | 18 | 5 |
| | 2.9 | 12750 | 1 | 6 | 39 | .1 | 4 | 11820 | 7.5 | 11 | 86 | 70310 | 2100 | 3 | 4660 | 275 | 63 | 250 | 37 | 580 | 38 | 13 | 1 | 1 | 1 | 463.7 | 757 | 1 | 1 | 3 | 98 | 5 |
| | 4.6 | 39580 | 1 | 5 | 42 | .1 | 13 | 21540 | .1 | 39 | 64 | 75830 | 590 | 12 | 21180 | 665 | 1 | 3690 | 29 | 1120 | 7 | 1 | 21 | 1 | 1 | 193.9 | 75 | 1 | 1 | 1 | 16 | 5 |
| | 3.2 | 12020 | 1 | 5 | 56 | .1 | 6 | 28340 | 2.9 | 17 | 98 | 49920 | 3940 | 4 | 4610 | 435 | 36 | 380 | 50 | 690 | 20 | 4 | 1 | 1 | 1 | 169.8 | 422 | 1 | 1 | 1 | 66 | 10 |
| | 3.1 | 30730 | 1 | 10 | 66 | .1 | 6 | 22660 | .1 | 36 | 41 | 55380 | 280 | 16 | 24920 | 858 | 1 | 800 | 41 | 960 | 7 | 1 | 8 | 1 | 1 | 165.2 | 60 | 1 | 1 | 1 | 34 | 5 |
| | 3.3 | 24200 | 1 | 6 | 93 | .1 | 7 | 48720 | .1 | 34 | 41 | 63950 | 1310 | 14 | 25130 | 1517 | 1 | 940 | 124 | 1520 | 7 | 1 | 24 | 1 | 1 | 165.7 | 51 | 1 | 1 | 1 | 118 | 5 |
| | 3.0 | 5140 | 1 | 5 | 79 | .5 | 1 | 111420 | .1 | 10 | 6 | 34430 | 520 | 1 | 51350 | 1636 | 1 | 70 | 3 | 190 | 7 | 4 | 71 | 1 | 2 | 24.4 | 28 | 1 | 2 | 1 | 19 | 5 |
| | 3.9 | 33650 | 1 | 5 | 264 | .1 | 8 | 14500 | .1 | 37 | 52 | 64040 | 1030 | 19 | 53560 | 1144 | 1 | 750 | 95 | 2070 | 7 | 1 | 15 | 1 | 1 | 178.7 | 57 | 1 | 1 | 1 | 133 | 10 |
| | .8 | 43560 | 1 | 11 | 354 | 1.2 | 1 | 11030 | .1 | 22 | 57 | 51030 | 5870 | 22 | 20450 | 943 | 1 | 150 | 45 | 1480 | 29 | 1 | 10 | 1 | 1 | 102.4 | 84 | 1 | 1 | 1 | 51 | 5 |
| | 3.6 | 42210 | 1 | 6 | 355 | .1 | 8 | 17710 | .1 | 34 | 49 | 68220 | 1300 | 28 | 44720 | 1264 | 1 | 1570 | 52 | 2790 | 7 | 1 | 44 | 1 | 1 | 167.1 | 67 | 1 | 1 | 1 | 93 | 5 |
| | 1.0 | 9430 | 346 | 5 | 816 | .1 | 1 | 1430 | 1.3 | 9 | 14 | 47460 | 2920 | 1 | 2450 | 90 | 1 | 380 | 1 | 1210 | 51 | 5 | 11 | 1 | 1 | 57.0 | 4 | 2 | 1 | 1 | 48 | 5 |
| | .1 | 5180 | 288 | 3 | 356 | .2 | 1 | 600 | .9 | 7 | 14 | 40580 | 1780 | 2 | 1590 | 66 | 2 | 340 | 1 | 940 | 41 | 4 | 6 | 1 | 1 | 41.9 | 5 | 1 | 2 | 1 | 56 | 5 |
| | 1.8 | 4690 | 22 | 4 | 99 | .7 | 1 | 95560 | .1 | 16 | 20 | 42490 | 1430 | 1 | 24750 | 1726 | 1 | 90 | 38 | 740 | 25 | 6 | 134 | 1 | 1 | 33.4 | 30 | 1 | 12 | 1 | 25 | 5 |
| | 1.0 | 19750 | 1 | 2 | 435 | .7 | 1 | 42270 | .1 | 24 | 38 | 47710 | 2330 | 12 | 28040 | 1821 | 1 | 130 | 77 | 1170 | 11 | 1 | 84 | 1 | 1 | 64.0 | 83 | 1 | 9 | 1 | 91 | 5 |
| | 2.8 | 34340 | 1 | 8 | 105 | .1 | 7 | 21030 | .1 | 36 | 53 | 62760 | 280 | 15 | 24940 | 819 | 1 | 320 | 44 | 860 | 7 | 1 | 1 | 1 | 1 | 174.1 | 71 | 1 | 1 | 1 | 40 | 5 |
| | 1.2 | 27570 | 1 | 6 | 359 | .1 | 3 | 14030 | .1 | 26 | 343 | 82060 | 2220 | 16 | 13980 | 1170 | 1 | 1290 | 1 | 1700 | 25 | 1 | 27 | 1 | 1 | 376.2 | 90 | 1 | 6 | 1 | 22 | 5 |
| | .3 | 4340 | 8 | 1 | 790 | .4 | 1 | 13730 | .1 | 2 | 14 | 5500 | 2300 | 1 | 1560 | 790 | 3 | 330 | 4 | 150 | 9 | 1 | 42 | 3 | 1 | 6.3 | 13 | 1 | 2 | 1 | 100 | 5 |
| D-RW-R-314 | 1.5 | 24420 | 1 | 1 | 50 | .1 | 5 | 7180 | .1 | 14 | 45 | 55260 | 100 | 4 | 15960 | 933 | 1 | 760 | 12 | 1740 | 22 | 1 | 9 | 1 | 1 | 211.1 | 50 | 1 | 2 | 1 | 36 | 5 |
| D-RW-R-315 | 110.8 | 560 | 57 | 2 | 1341 | .1 | 1 | 10020 | 810.0 | 4 | 506 | 8640 | 140 | 1 | 3470 | 358 | 6 | 20 | 2 | 110 | 159 | 242 | 321 | 1 | 2 | 8.9 | 29736 | 1 | 5 | 1 | 21 | 5 |

2

COMP: INTERNATIONAL KODIAK RESOURCES
PROJ: UNUK
ATTN: MIKE BROWN

# 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-0307-RJ1-
DATE: 90/08/2
* ROCK * (ACT:F31) 

| SAMPLE NUMBER | HG PPB |
|---|---|
| [redacted] | 180 |
| | 185 |
| | 560 |
| | 285 |
| | 120 |
| | 155 |
| | 165 |
| | 75 |
| | 50 |
| | 120 |
| | 80 |
| | 55 |
| | 105 |
| | 12750 |
| | 665 |
| | 945 |
| | 605 |
| | 600 |
| | 80 |
| | 450 |
| | 85 |
| | 180 |
| | 55 |
| | 45 |
| | 270 |
| | 85 |
| | 150 |
| | 140 |
| | 105 |
| | 65 |
| | 80 |
| | 185 |
| | 70 |
| D-RW-R-314 | 115 |
| D-RW-R-315 | 9625 |

# APPENDIX V

## SAMPLE DESCRIPTIONS

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: | Location: | | | Operator: | | |
|---|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** | |
| RW-R-160 | MACGOLD | MINERALIZED GRANODIORITE W̄ CPY, GL AND POSSIBLE ASP, DENDRITIC PY | NIL | .1 | 3 | 33 | | |
| RW-R-161 | " | TONALITE W̄ INTENSE IRON STAINING → SURFACE SHOWS ABUNDANT METALLIC SILVER, F.G DISSEMINATIONS AROUND THE PYROXENE XSTALS | NIL | .1 | 3 | 35 | | |
| RW-R-162 | " | PYRITE VEINS UP TO 2mm THICK AND RELATIVELY ABUNDANT DISSEM PY. | NIL | 0.4 | 13 | 304 | | |
| RW-R-164 | " | PHANERITIC DARK GREY BASALT W̄ CONC VEIN PY AND DISSEM PY | NIL | 1.2 | 3 | 80 | Cu 3403 | |
| RW-R-168 | " | MASSIVE SULPHIDE BOULDER IN FLOAT. WITH PY, CPY, PØ AND POSSIBLY ASP. CONC ALONG FRACTS. | 5ppb | 3.2 | 39 | 401 | Cu 3941 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: | Location: | | | Operator: | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| RW-R-170 | MACGOLD | MED GREY WEATHERING PLAGIODACITE W ABUNDANT DISSEM. SULPHIDES. SOME PHENOS. ALIGNED SUB-PARALLEL | 5 | 2.5 | 29 | 41 | | |
| RW-R-171 | " | INTENSE IRON STAINED PLAGIODACITE W PY AND PO DENDRITIC PYITE VEINS WITHIN PO. | 10 | 2.7 | 33 | 67 | | |
| RW-R-172 | " | IRON STAINED, PY AND PO BEARING BANDED CHERT | 5 | 2.7 | 27 | 36 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page:

Project:

Location: MACGOLD

Operator: WALKER

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| RW-T-173 | MACGOLD S | SULPHIDE MINERALIZATION IN A PLAGIODACITE | 5 | 3.0 | 28 | 37 | | |
| RW-T-174 | " | HIGHLY WEATHERED SULPHIDE LENS, CONTAINING CPY, PY, PØ | 5 | 3.8 | 33 | 36 | | |
| RW-R-175 | " | IRON STAINED BASALT WITH PY | 5 | 3.3 | 23 | 45 | | |
| RW-R-176 | " | INTENSELY IRON STAINED SILICIFIED BASALT. | 5 | 4.1 | 16 | 40 | | |
| RW-R-177 | " | INTENSELY IRON STAINED CHERT AND PLAGIODACITE | 5 | 3.7 | 151 | 30 | | |
| RW-R-178 | " | IRON STAINED PLAGIODACITE. | | | | | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: | Location: MACGOLD | Operator: WALKER

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| RW-R-179 | MACGOLDS | IRON STAINED BLACK CHERT | 5 | 2.8 | 24 | 24 | | |
| RW-R-180 | " | MASSIVE PYRRHOTITE IN FLOAT IN GLACIAL DEBRIS | 1850 | 2.8 | 16 | 440 | | |
| RW-T-183 | " | PY, PØ AND CPY IN ANDESITE | 5 | 2.1 | 27 | 99 | | |
| RW-T-184 | " | LIMONITE STAINED QTZ VEIN WITH CARBONATE CORE | | | | | | |
| RW-T-185 | " | PØ AND PY BEARING PLAGIODACITE | | | | | | |
| RW-T-186 | " | CALCAREOUS SHALE, IRON STAINED WITH MINOR PY. | 5 | 2.6 | 28 | 267 | | |
| RW-T-187 | " | MINERALIZED PLAGIODACITE W PY, PØ | 5 | 1.1 | 34 | 36 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: | Location: MACGOLD | | Operator: WALKER | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** | |
| RW-T-188 | MACGOLDS | ANDESITE WITH PY, PO AND CPY | 5 | 1.9 | 26 | 54 | | |
| RW-T-189 | " | INTEN IRON STAINED ZONE IN PLAGIODACITE | 10 | 2.1 | 32 | 165 | | |
| RW-R-190 | " | IRON STAINED ANDESITE W PYRITE | 5 | 2.4 | 40 | 1406 | | |
| RW-T-195B | " | CRYSTAL ASH TUFF WITH LIMONITE STAINING | 5 | 0.4 | 48 | 88 | | |
| RW-T-196 | " | DEEP RED STAINED PLAGIODACITE WITH MINOR 1-2mm PY CUBES AND DISSEM PY | 5 | 0.7 | 85 | 126 | | |
| RW-R-197 | " | HEMATITE STAINED CRYSTAL ASH TUFF | 5 | 1.0 | 47 | 46 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page:

Project:

Location: MACGOLD

Operator: WALKER

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| RW-R-198 | MACGOLD S | LIMONITE STAINED BRECCIA | 5 | 1.3 | 49 | 113 | | |
| RW-R-199 | " | DEEP RED STAINED HORIZON IN DIORITE WITH MAL, AZURITE AND CPY | 10 | 9.5 | 59 | 66 | | |
| RW-T-201 | " | SAMPLE OF WHITE FELSIC ASH TUFF WITH PYRITE CUBES AND IRON STAINS | 5 | 1.2 | 17 | 24 | | |
| RW-R-202 | " | IRON STAINED CRYSTAL ASH TUFF | 10 | 2.3 | 7 | 26 | | |
| RW-R-203 | " | IRON STAINED SULPHIDE HORIZON, PY. | 5 | 1.1 | 17 | 14 | | |
| RW-R-205 | " | FELSIC ASH LAYER, FRIABLE, WHITE GREY WITH ABUNDANT PY | 25 | 0.3 | 7 | 1 | | |
| RW-R-206 | " | DEEP RED OXIDIZED LAYER | 15 | 0.6 | 11 | 54 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: | Location: MACGOLD | | Operator: WALKER | | |
|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | |
| | | | Au | Ag | Pb | Zn | Other |
| RW-R-208 | MACGOLD S | PLAGIODACITE WITH LIMONITE ALONG FRACTURES. MINOR PY | 5 | 2.9 | 7 | 519 | |
| RW-R-209 | " | BASALT ADJACENT TO PLAGIODACITE | 5 | 1.8 | 8 | 87 | |
| RW-R-210 | " | PYRITE IN BASALT | 5 | 2.3 | 7 | 87 | |
| RW-R-247 | " | BASALT WITH PY, CPY | 5 | 37.8 | 26 | 46 | |
| RW-R-248 | " | PYRITE BEARING APLITE DYKE. | 5 | 0.8 | 17 | 68 | |
| RW-R-249 | " | IRON STAINED, PYRITE BEARING TRONDJHEMITE | 5 | 0.7 | 16 | 4 | |
| RW-R-251 | " | FELSIC ASH TUFF W 60% PY ± ASP | 10 | 3.6 | 37 | 65 | |
| RW-R-252 | " | SAME | 5 | 3.6 | 27 | 47 | |

## ROCK SAMPLE DESCRIPTION RECORD

Page:

Project:

Location: MACGOLD

Operator: WALKER

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| RW-T-253 | MACGOLD S | INTERMEDIATE CRYSTAL ASH TUFF WITH ABUNDANT CUBIC PYRITE (<1mm) | 5 | 2.4 | 14 | 67 | | |
| RW-R-255 | " | INTERMED. CRYSTAL ASH TUFF WITH PY ALONG FRACTS. AND RIMMING MAFIC MINERALS | 5 | 3.5 | 21 | 96 | | |
| RW-R-256 | " | LIMONITE STAINED RHYOLITE WITH MINOR PY AND HEMATITE STAINING | 5 | 1.6 | 11 | 92 | | |
| RW-R-257 | " | SILICEOUS LAPILLI TUFF WITH DISSEM PY, HEM, SPH (<1%) | 5 | 1.4 | 13 | 1 | | |
| RW-R-258 | " | DEEP RED WEATHERED PY VUG IN BASALT | 5 | 0.5 | 33 | 181 | | |
| RW-R-259 | " | SAME | 5 | 1.1 | 53 | 62 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page:

Project:

Location: MACGOLD

Operator: WALKER

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| RW-R-260 | MACGOLD S | MANGANESE COATING FRACTS IN SILICIFIED BASALT | 5 | 1.7 | 8 | 74 | | |
| RW-R-261 | " | LIMONITE STAINED, INTENSELY SILICIFIED BASALT | 5 | 1.1 | 17 | 33 | | |
| RW-R-262 | " | MN COATED, WEATHERED BASALT | 5 | 0.1 | 36 | 83 | | |
| RW-R-263 | " | LIMONITE STAINED DACITE | 5 | 0.3 | 19 | 109 | | |
| RW-R-264 | " | IRON STAINED, SILICA FLOODED BASALT | 5 | 1.9 | 8 | 37 | | |
| RW-R-265 | " | IRON STAINED BASALT, 30% APLITE PODS | 10 | 2.1 | 16 | 52 | | |
| RW-R-266 | " | IRON STAINED, FOLIATED BASALT WITH TRACE ASP(?) | 5 | 2.0 | 23 | 34 | | |
| RW-R-267 | " | IRON STAINED, SILIC BASALT | 5 | 1.2 | 15 | 28 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: | Location: MACGOLD | Operator: WALKER

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| RW-R-264 | MACGOLD 5 | LIMONITE STAINED GRANITOID | 5 | 0.7 | 20 | 54 | | |
| RW-R-270 | " | INTERMED. CRYSTAL ASH TUFF DISSEM PY CUBES | 5 | 2.0 | 4 | 36 | | |
| RW-R-271 | " | HEAVILY, RED AND YELLOW STAINED BOULDER WITH PY AND ASP | 5 | 4.0 | 10 | 19 | | |
| RW-R-272 | " | PY RICH SHEAR ZONE. PY VUGS UP TO 6cm LONG, LOCALIZED ALONG FRACT ZONE | 5 | 2.8 | 12 | 49 | | |
| RW-R-273 | " | SAME ZONE, INTENSE IRON STAINING, WITH ASP STAINS | 5 | 2.0 | 9 | 63 | | |
| RW-R-274 | " | SAME, DISSEM PY AND ASP. | 10 | 0.7 | 29 | 54 | | |
| RW-R-275 | " | DISSEM PY, ASP IN PLAGIODACITE | 5 | 2.1 | 24 | 43 | | |

ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: | Location: MALGOLDS | Operator: WALKER

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other |
|---|---|---|---|---|---|---|---|
| RW-R-276 | MALGOLDS | IRON STAINED, WEATHERED SULPHIDE BEARING CRYSTAL ASH TUFF | 5 | 1.1 | 76 | 76 | Cu PPM 18 |
| RW-R-277 | " | APHANITIC APLITE DYKE WITH CHILLED MARGIN AND DISSEM PY, ASPY(?) | 5 | 0.3 | 19 | 161 | 50 |
| RW-R-278 | " | MALACHITE STAINED FRACT IN CRYSTAL ASH TUFF | 30 | 52.8 | 1640 | 96113 | 123270 |
| RW-R-279 | " | SILICIFIED ASH TUFF BOULDER TRAIN, WITH WEATHERED PY | 5 | 4.0 | 81 | 1257 | 1272 |
| RW-R-281 | " | LIMONITE CRYSTAL - ASH TUFF | 10 | 1.5 | 61 | 545 | 610 |
| RW-R-282 | " | HEMATITE STAINED CALCITE VEINS. | 10 | 1.7 | 35 | 177 | 209 |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: | Location: MACGOLD | | Operator: WALKER | | |
|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** |
| RW-R-283 | MACGOLD S | PY BEARING, IRON STAINED, CRYSTAL ASH TUFF | 5 | 0.1 | 22 | 167 | |
| RW-R-284 | " | FINE GRAINED RHYOLITE W DISSEM PY | 5 | 0.5 | 47 | 56 | |
| RW-R-285 | " | SYENITE/RHYOLITE STRINGER WITH DISSEM PY | 5 | 0.1 | 30 | 40 | |
| RW-R-286 | " | HEAVILY IRON STAINED CRYSTAL ASH TUFF | 5 | 1.0 | 183 | 1502 | |
| RW-R-287 | " | SED XENOLITHS IN ALTERED, SILICIFIED TRONDHJEMITE | 5 | 2.1 | 30 | 48 | |
| RW-R-288 | " | DISSEM PY IN MAFIC CRYSTAL TUFF | 10 | 0.1 | 17 | 212 | |
| RW-R-289 | " | IRON STAINED SILICIFIED ARGILLITE | 5 | 4.5 | 22 | 263 | |
| RW-R-290 | | IRON STAIN ARG/PY POD IN CRYSTAL TUFF | 5 | 2.6 | 9 | 50 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: | Location: MACGOLD | Operator: WALKER |
|---|---|---|---|

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| RW-R-291 | MACGOLD S | LIMONITE STAINED FRACTURE IN CRYSTAL TUFF | 5 | 0.1 | 18 | 62 | | |
| RW-R-292 | " | SAME | 5 | 0.4 | 27 | 150 | | |
| RW-R-314 | " | IRON STAINED ARILLACEOUS INCLUSIONS IN QTZ DIORITE | 1.5 | 5 | 22 | 50 | Ba 50 | |
| RW-R-315 | " | BARITE VEIN | 110.8 | 5 | 154 | 24736 | 1341 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: Marigold South | Location: | Operator: M. MOORE |
|---|---|---|---|

| Sample No. | Location | Description | Au (ppb) | Ag (ppm) | Pb (ppm) | Zn (ppm) | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-065 | North of Copper King Glacier | V. fine grained tonalite<br>- iron; K-spar alteration<br>- 2% diss. pyrite<br>- 1-2% molybendite | ND | 0.1 | 5 | 23 | | |
| D-MM-R-066 | North of Copper King Glacier | Siliceous Andesite<br>- strong velvet Fe stain<br>- 3-5% diss. pyrite | ND | 0.5 | 11 | 41 | | |
| D-MM-R067 | North of Copper King Glacier | med. grained granodiorite<br>- moderate Fe stain<br>- Kspar alteration (?)<br>- trace pyrite | ND | 0.1 | 6 | 37 | | |
| D-MM-R-068 | North of Copper King Glacier | Andesite Fault breccia<br>- Quartz - calcite infilling<br>- strong iron stain | ND | 2.6 | 8 | 11 | | |
| D-MM-R-069 | North of Copper King Glacier | Qtz - stringer stockwork in andesite<br>- sericite alteration<br>- moderate iron alteration<br>- ~2% v. fine PY | ND | 0.1 | 5 | 34 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: Macgold South | Location: | Operator: M. MOORE |
|---|---|---|---|

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-070 | North of Copper King Glacier | Andesite<br>- chlorite alteration<br>- minor Fe stain<br>- 2-3% pyrite | ND | 0.3 | 6 | 39 | | |
| D-MM-R-071 | North of Copper King Glacier | siliceous Andesite<br>- Chlorite alteration (?)<br>- 5% diss. pyrite<br>- massive pyrite along hair line fractures | ND | 0.2 | 6 | 116 | | |
| D-MM-R-072 | " | Silica flooded basalt<br>- Quartz and Fuchsite alteration<br>- trace pyrite | ND | 0.6 | 10 | 47 | Ba 1160 ppm | |
| D-MM-R-073 | " | Silica flooded basalt<br>- Very highly oxidized | ND | 0.4 | 10 | 126 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: Mocgold South | Location: | Operator: M. MOORE |
|---|---|---|---|

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other |
|---|---|---|---|---|---|---|---|
| D-MM-R-074 | North of Copper King Glacier | unaltered basalt<br>- minor Qtz stringers<br>- trace pyrite | 5 | 0.9 | 34 | 37 | As - 24 ppm |
| D-MM-R075 | " | Fe altered basalt<br>- felty appearence<br>- ~5% disseminated and fracture infilling pyrite | 5 | 1.4 | 37 | 47 | |
| D-MM-R-076 | " | Apalite dyke<br>- cross-cuts basalt<br>- small angular basaltic xenoliths<br>- 3-4 m wide<br>- 1-2% diss pyrite | 5 | 0.5 | 24 | 29 | |

## ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Marigold South | Location: | Operator: M. MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-077 | North of Copper King Glacier | red-brown iron stained crystal tuff<br>- moderate sericite alteration<br>- disseminated pyrite (1-2%)<br>- 2-3% pyrrhotite disseminated and along hairline fractures<br>- trace chalcopyrite | 5 | 3.4 | 23 | 28 | | |
| D-MM-R-078 | North of Copper King Glacier | Qtz vein<br>- 1.0 → 30 cm wide<br>- trend 140°, truncated by small splay faults<br>- disseminations and blebs of pyrrohite (10-12%), pyrite (2%), chalcopyrite (2-5%) | 5 | 0.1 | 22 | 17 | | |
| D-MM-T-079 | North of Copper King Glacier | Granodiorite<br>- slight red brown oxide<br>- slight mylonitic fabric<br>- foliation 315°/vert.<br>- 1-2% pyrrhotite dissem.<br>- trace pyrite, chalcopyrite (?) | 5 | 1.5 | 22 | 43 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Marigold South | Location: | | | | Operator: M. MOORE | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| D-MM-R-080 | North of Copper King Glacier | Silicified Basalt<br>- moderate red brown stain<br>- Qtz stringers<br>- disseminated pyrite 2-3% | 5 | 1.6 | 33 | 42 | Ba 859ppm | |
| D-MM-R-081 | North of Copper King Glacier | Silicified Basalt<br>- moderate iron alteration<br>- 5% disseminated pyrite<br>- trace pyrrhotite<br>- chalcopyrite | 5 | 1.3 | 27 | 24 | | |
| D-MM-R-082 | North of Copper King Glacier | Silicified Basalt<br>- strong red orange stain<br>- dissem. and blebs of pyrite (~5%)<br>- slightly magnetic | 5 | 3.1 | 23 | 35 | | |
| D-MM-R-083 | North of Copper King Glacier | - Same as D-MM-R-082 | 5 | 2.5 | 26 | 20 | | |

## ROCK SAMPLE DESCRIPTION RECORD

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

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-084 | North of Copper King Glacier | Quartz flooded basalt<br>- moderate red-orange stain<br>- dissem. pyrite (5-10%)<br>- encrusting malachite/azurite (1-2%)<br>- trace chalcopyrite<br>- pyrrhotite (?) | 5 | 3.1 | 33 | 53 | Cu 3790 ppm | |

ROCK SAMPLE DESCRIPTION RECORD

Page:

Project: Macgold South

Location: Macgold 2

Operator: M MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-085 | Macgold south | Slightly siliceous basalt<br>- minor anastomozing Quartz stringers<br>- minor sericite alteration<br>- <5% disseminated pyrite | 5 | 3.5 | 23 | 24 | | |
| D-MM-R-086 | Macgold South | Quartzolite dike<br>- cream-grey massive aphanitic Quartz<br>- trace pyrite | 5 | 0.2 | 21 | 12 | | |
| D-MM-R-087 | Macgold South | Sheared Basalt<br>- strong red orange iron stain<br>- disseminated, Fracture coated pyrite 5-10% | 5 | 1.2 | 29 | 50 | Ba 1484 ppm | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: Macgold Z | | | Operator: M. MOORE | |
|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** |
| D-MM-R-088 | Macgold South | Siliceous basalt ± fault gouge<br>- hairline quartz stringers<br>- strong red-brown stain<br>- disseminations and veinlets of pyrite (5-10%)<br>- trace pyrrhotite; chalcopyrite? | 5 | 4.6 | 27 | 849 | Cu -1297 ppm |
| D-MM-R-089 | Macgold South | Silica flooded basalt<br>- disseminated pyrite (5%)<br>- sphalerite blebs (2-3%) | 5 | 3.5 | 36 | 8076 | Cu -1774 ppm |
| D-MM-R-090 | Macgold South | Massive sulfide lens within fault - trend 008°<br>- very magnetic<br>- ~20% pyrrhotite<br>- ~50% pyrite<br>- ~5% sphalerite<br>- 20-30% Qtz<br>- peacock blue gossan stain | 10 | 2.9 | 43 | 38353 | Cu 209 ppm |

## ROCK SAMPLE DESCRIPTION RECORD

Page:

Project: Macgold South

Location: Macgold Z

Operator: M. MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-091 | Macgold South | Massive, coarse grained Qtz vein - trace pyrite - veins pinch and swell (width 4-60cm) - truncated & displaced by 054° trending Faults | 5 | 0.3 | 26 | 308 | | |
| D-MM-R-092 | Macgold South | Siliceous argillite xenolith with massive sulfide lenses (1-2 cm wide) - peacock blue gossan stain - andesite host - sulfide lenses contain - Qtz - 20% pyrrhotite - 20% pyrite - 2-3% chalcopyrite ; sphalerite (?) | 60 | 7.9 | 28 | 352 | Cu 4265ppm | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: Macgold Z | | | Operator: M. MOORE | | |
|---|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** | |
| D-MM-R-093 | Macgold South | siliceous, fractured andesite<br>- massive sulfide fracture infilling<br>— massive and disseminated<br>- pyrrhotite (20-30%)<br>- pyrite (10-20%)<br>- sphalerite (5%)<br>- Chalcopyrite (5%)<br>- some calcite alteration and infilling | 5 | 2.4 | 30 | 891 | | |
| D-MM-R-094 | Macgold South | Same as D-MM-R-093 | 5 | 3.1 | 30 | 489 | Cu 3346ppm | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macnd South | Location: | Operator: M. MOORE |
|---|---|---|---|---|

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-095 | North of Copper King Glacier | Faulted [illegible] [illegible]ite<br>- sheared argillite xenoliths<br>- calcite blebs, Qtz infill<br>- 1-2% pyrite, pyrrhotite<br>minor graphitic gouge | 5 | 1.4 | 31 | 55 | | |
| D-MM-R-096 | North of Copper King Glacier (30m East of R-095) | Slightly serpentinized Andesite<br>- minor Qtz flooding<br>- ± argillite xenoliths<br>- 1-3% disseminated pyrite | 5 | 2.2 | 29 | 84 | | |

## ROCK SAMPLE DESCRIPTION RECORD

**Page:** | **Project:** Macgold South | **Location:** | **Operator:** M. MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-107 | SE corner of Macgold 1 | black grey to greenish columnar basalt<br>- unaltered<br>- trace pyrite | 5 | 5.5 | 34 | 110 | Cu 1409 ppm | |
| D-MM-R-108 | SE Corner of Macgold 1 | Same as D-MM-R-107 | 5 | 4.6 | 37 | 110 | | |
| D-MM-R-109 | SE Corner of Macgold 1 | Vesicular basalt<br>- vesicules vary from 0.2 → 4.0 cm<br>- massive<br>- no alteration/mineralized | 5 | 3.8 | 27 | 114 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: | | Operator: M MOORE | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** | |
| D-MM-R-110 | SE corner of Macgold 1 | fine grained fractured dacite<br>- strong red brown oxide<br>- grey-white fresh surface<br>- 5-8% disseminated pyrite | 5 | 1.3 | 40 | 53 | | |
| D-MM-R-111 | SE corner of Macgold I | Orange-brown "clay" contact<br>- baked contact zone (~5cm width) between volcanic agglomerate and white-grey tuff | 5 | 1.3 | 40 | 66 | | |

**ROCK SAMPLE DESCRIPTION RECORD**

| Page: | Project: Macgold South | Location: Main Grid | Operator: M MOORE |
|---|---|---|---|

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-144 | 4+20E/0+85N | green-grey crystal Ash-Tuff<br>- epidote/Qtz along fracture<br>- minor chlorite/sericite<br>- red brown oxide<br>- v. fine diss. pyrite ~5% | 10 | 1.8 | 10 | 74 | | |
| D-MM-R-145 | 4+35E/1+00N | tan green crystal tuff<br>- pervasive epidote/chlorite alteration<br>- moderate silica flooding<br>- diss. pyrite (<5%) | 5 | 0.8 | 17 | 98 | | |
| D-MM-R-146 | 3+90E/1+45N | pyritic, green-grey tuff<br>- brown-red oxide surface<br>- coarse to fine grained euhedral pyrite disseminated - 10-20%<br>- minor sericite alteration. | 5 | 2.4 | 9 | 58 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: Main Grid | | Operator: M MOORE | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** | |
| D-MM-R-147 | 4+20E/1+65N | Crystal tuff breccia<br>- coarse grained calcite matrix<br>- tuff fragments range 0.2-25cm<br>- No visibles sulfides | 5 | 1.7 | 7 | 167 | Ba 2276ppm | |
| D-MM-R-148 | 3+70E/1+60N | Carbonatized crystal tuff<br>- hairline veins of Qtz calcite, specular hematite<br>- dissem. euhedral pyrite (<5%) | 5 | 0.5 | 12 | 35 | Ba 1810ppm | |
| D-MM-R-149 | 4+90E/1+65N | Qtz-Calcite Dacite breccia<br>- No visible sulfide<br>(same as D-MM-R-147) | 5 | 11 | 18 | 54 | Ba 819ppm | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: Main Grid | | | Operator: M. MOORE | |
|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | |
| | | | Au | Ag | Pb | Zn | Other |
| D-MM-R-150 | 4+66E/1+66N | brick red altered Dacite<br>- highly fractured<br>- Qtz-calcite stringers<br>- No visible sulfides. | 5 | 0.7 | .5 | 6 | Ba 811 |
| D-MM-R-151 | 3+97E/1+80N | massive pyrite-Qtz vein<br>- 1-2 cm wide,<br>- traceable over 5 m<br>(053°/vert)<br>- fracture infill<br>- Dacite host | .0 | 1.7 | 17 | 20 | |
| D-MM-R-152 | 3+65E/1+82N | massive pyrite-Qtz vein<br>- vein pinch & swells<br>- traceable over 10 m<br>- 1-5 cm wide<br>- 025°/vertical<br>- Dacite host | - | 1.0 | 39 | 27 | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: Main Grid | | | | Operator: M. MOORE | |
|---|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** | |
| D-MM-R-153 | 4+30E/2+25N | Silica flooded Dacite<br>- minor calcite<br>- moderate red oxide<br>- fine diss. pyrite (~5%) | 5 | 0.3 | 25 | 29 | | |
| D-MM-R-154 | 4+30E/3+15N | leucocratic Granitoid<br>- very fine grained (rhyolitic)<br>- Qtz-calcite stringers<br>- No visible sulfides | 5 | 0.1 | 12 | 51 | Ba 1008 ppm | |
| D-MM-R-155 | 4+50E/4+10N (1m East of Barite vein) | Siliceous lapilli tuff<br>- disseminated pyrite 2-3%<br>- barite vein (± Qtz)<br>- 338°/90°<br>- 10-20cm wide<br>(note: barite vein not included in sample) | 5 | 0.7 | 16 | 29 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: Main Grid | | Operator: M. MOORE | | |
|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** |
| D-MM-R-156 | 3+10E/4+45N | Dark green andesite<br>- aphanitic<br>- calcite blebs & veinlets<br>- trace pyrite | 10 | 1.5 | 9 | 76 | |
| D-MM-R-157 | 3+10E/4+50N | Chloritic argillite<br>- calcite pods and veinlets<br>- bedding 052°/85°N | 5 | 1.9 | 20 | 42 | |
| D-MM-R-230 | 1+25E/6+50N | Siliceous basalt<br>- pervasive Qtz stockwork<br>- talc (kalonite (?)) alteration along fractures<br>- some brecciation<br>- minor calcite<br>- trace pyrite | 10 | 1.4 | 9 | 33 | |

## ROCK SAMPLE DESCRIPTION RECORD

**Page:** 

**Project:** Macgold South

**Location:** Main Grid

**Operator:** M. MOORE

| Sample No. | Location | Description | Analytical Results: Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-231 | 1+25E/6+15N | Siliceous, chloritic basalt<br>- pyrite along fractures<br>- moderate red oxide | 5 | 1.9 | 10 | 34 | | |
| D-MM-R-232 | 1+35E/5+00N | Sheared argillite xenolith in granite intrusive<br>- Qtz flooded<br>- trace pyrite | 5 | 1.2 | 20 | 58 | Ba 521ppm | |
| D-MM-R-233 | 1+35E/4+90N | Altered crystal tuff<br>- orange tan oxide<br>- bleached white fresh surface<br>- 1-2% dissem. pyrite | 5 | 0.7 | 9 | 59 | | |

| ROCK SAMPLE DESCRIPTION RECORD | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Page: | | Project: Marigold South | Location: Main Grid | | | Operator: M MOORE | | |
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| D-MM-R-234 | 1420E/4480N | chloritic crystal tuff<br>- moderate chlorite overprint<br>- plagioclase phenos. highly altered<br>- 1-2% diss. pyrite | 55 | 3.6 | 42 | 1345 | Ba 893 | Hg 1050ppm |
| D-MM-R-235 | 1400E/4440N | Intermediate crystal tuff<br>- no visible sulfides. | 10 | 0.6 | 20 | 207 | | |
| D-MM-R-236 | 1150E/3435N | Granitoid breccia<br>- strong tan red oxide<br>- 1-2% dissem. pyrite<br>- some tuff/Ash fragments. | 5 | 0.8 | 15 | 100 | | |

# ROCK SAMPLE DESCRIPTION RECORD

**Page:** | **Project:** Magold South | **Location:** Main Grid | **Operator:** M. MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-237 | 1+20E/2+35N | tan lapilli tuff<br>- 10cm away from rhyolite/granitoid contact.<br>- 5-10% dissem pyrite | 5 | 0.4 | 7 | 129 | | |
| D-MM-R-238 | 1+00E/2+75N | Granitoid intrusive<br>- 2-5% dissem pyrite<br>- trace cpy (?)<br>- minor qtz stringers. | 5 | 13.5 | 30 | 194 | Cu 2401 ppm<br>Ba 575 ppm | Hg 1640 ppm<br>Sb 70 ppm |
| D-MM-R-239 | 0+50E/1+10N | Malachite stained Granitoid<br>- disseminated to massive pyrite (5 -> 20%)<br>- 2-3% dissem. chalcopyrite | 10 | 3.4 | 27 | 39 | Cu 3369 ppm | |
| D-MM-R-240 | 0+75E/1+75N | Silicified, fractured lapilli tuff<br>- blebs & dissem. pyrite (~5%)<br>- minor malachite staining<br>- fracture orientation => 031°/72°E | 5 | 3.6 | 29 | 14 | | |

# ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold South | Location: Main Grid | Operator: M. MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-241 | 15m E of RW-7 273 | Felsic crystal tuff<br>- slight "felty" gossan alteration<br>- minor Arsenopyrite staining (yellow)<br>- dissem. pyrite (~5%); chalcoprite (2-3%)<br>- small shear (10cm wide) ⇒ 280°/vertical | 10 | 2.5 | 9 | 70 | | |
| D-MM-R-242 | 1+00E/0+35N | Altered crystal tuff<br>- dissem. & blebs of pyrite (5-10%)<br>- some arsenopyrite staining (yellow)<br>- moderate silica flooding and oxidization. | 5 | 0.2 | 26 | 70 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: Main Grid | | | Operator: M. MOORE | |
|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | |
| | | | Au | Ag | Pb | Zn | Other |
| D-MM-R-243 | 0+50E/0+20N | Strongly silicified crystal tuff<br>- gossan alteration<br>- some arsenopyrite stain (yellow)<br>- dissem pyrite ~2-3% | 5 | 3.5 | 30 | 5 | |
| D-MM-R-244 | | same as D-MM-R-243 | 10 | 2.1 | 41 | 13 | |
| D-MM-R-245 | | Same as D-MM-R-243<br>- strong arsenopyrite stain<br>- dissem. pyrite 15-20% | 5 | 1.1 | 24 | 18 | |
| D-MM-R-246 | 1+20W/1+00N | Siliceous crystal tuff<br>- slight gossan alteration<br>- moderate arsenopyrite alteration<br>- dissem. pyrite ~5% | 5 | 3.1 | 48 | 28 | |

**ROCK SAMPLE DESCRIPTION RECORD**

Page:

Project: Macgold South

Location: Main Grid

Operator: M. MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-247 | 0+75W/1+80N | very highly altered tuff<br>- complete hematitic overprint - brick red<br>- totally amorphous<br>- Jasperoidal (?) | 10 | 2.8 | 9 | 74 | | |
| D-MM-R-248 | 6+00W/0+75N | lapilli tuff xenolith<br>- granitoid host<br>- silica flooded<br>- very angular<br>- dissemination of pyrite to 10% | 5 | 4.1 | 29 | 11 | Hg 2045ppm | |
| D-MM-R-249 | | highly altered xenolith<br>- brick red - friable<br>- silicified crystal tuff<br>- minor arsenopyrite stain<br>- dissem. pyrite 2-3% | 5 | 2.6 | 21 | 1 | | |

## ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Marigold South | Location: Main Grid | | | | Operator: M. MOORE | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| D-MM-R-250 | 6+00W/3+00N | hematitic lapilli tuff<br>- purple black colour<br>- amorphous<br>- no visible sulfides. | 5 | 2.8 | 9 | 49 | | |
| D-MM-R-251 | | Chloritic crystall tuff<br>- 1m away from granitoid contact<br>- no visible sulfides | 5 | 2.5 | 9 | 74 | | |
| D-MM-R-252 | 1+80W/2+50N | siliceous lapilli tuff<br>- tan brown oxide<br>- moderate fractures<br>- 10-15% v. fine arsenopyrite<br>- 2-3% diss. pyrite<br>- trace chalcopyrite | 10 | 2.9 | 22 | 24 | | |

## ROCK SAMPLE DESCRIPTION RECORD

Page:

Project: Macgold South

Location: Main Grid

Operator: M. MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-253 | 0+30W/2+05N | Siliceous lapilli tuff<br>- moderate epidote alteration<br>- some hematite alteration<br>- dissem. & blebs of pyrite 2-3% | 5 | 1.7 | 9 | 45 | | |
| D-MM-R-254 | 0+30W/2+60N | lapilli tuff breccia<br>- Qtz - epidote matrix<br>- angular fragments bleached and silica flooded<br>- matrix - dissem pyrite to 10%<br>- fragments - dissem. pyrite 1-2% | 5 | 1.9 | 26 | 109 | | |
| D-MM-R-255 | 0+75W/2+30N | Epidotized Lapilli tuff<br>- strong pervasive epidote alterat.<br>- disseminated pyrite ~5% | 10 | 1.1 | 12 | 69 | | |

ROCK SAMPLE DESCRIPTION RECORD

Page: | Project: Macgold South | Location: Main Grid | Operator: M. MOORE

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| D-MM-R-256 | 0+75W/2130N | leucocratic granitoid breccia - trace pyrite | 5 | 0.8 | 11 | 25 | | |
| D-MM-R-257 | Ice Showing Trench | Siliceous Lapilli tuff -dissem-pyrite 2-3% - chalcopyrite 1-2% - Arsenopyrite ? | 5 | 0.8 | 70 | 831 | Ba 521 ppm | |
| D-MM-R-258 | Ice Showing Trench | Siliceous Lapilli tuff - massive/diss. pyrite and chalcopyrite ~10% + galena (?); Arsenopyrite (?) - malachite staining | 5000 | 7.8 | 73 | 3335 | Cu 11809 ppm | |
| D-MM-R-259 | Ice Showing Trench | Siliceous Lapilli tuff - malachite staining - massive/diss. pyrite 10-15% - 5% chalcopyrite - galena (?) | 6000 | 2.2 | 86 | 667 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Marigold South | Location: Main Grid | | | Operator: M. MOORE | |
|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** |
| D-MM-R-260 | 1+30W/2+80N | Pyritic leucocratic granitoid<br>- diss. pyrite ~10%<br>- (Siliceous crystal tuff breccia?) | 5 | 1.7 | 23 | 21 | |
| D-MM-R-261 | M$^2$ showing | Silicified Crystal tuff<br>- "felty" gossan alteration<br>- very hard; smooth o/c<br>- massive pyrite pods (~5cm) | 5 | 1.3 | 36 | 23 | |
| D-MM-R-262 | 1+00W/5+00N | Chloritic Crystal tuff<br>- small (<1.0cm) Qtz veins and pods common<br>- fractured (trend 116°/82°S)<br>- diss. pyrite 2-3% | 5 | 2.9 | 8 | 39 | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South | Location: Main Grid | | Operator: M. MOORE | | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| D-MM-R-263 | 2+20W/4+40N | Faulted Lapilli tuff<br>- tan-brown alteration<br>- argillite fragments common<br>- fault trend 048°/80°S<br>- trace pyrite | 10 | 0.8 | 26 | 54 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South (D) | Location: Iskut | | | Operator: Tim Termuende | |
|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results Gold/mercury (ppb) All Others (ppm) | | | | |
| | | | Au | Ag | Pb | Zn | Other |
| TT-R-061 | Main draw, near shelter | Quartz stockwork within dacitic lapilli? (Quartz feldspar porphry?) Narrow (~10cm) widths; 10-15% fine disseminated pyrite as mm-scale euhedral crystals | 5 | 1.4 | 27 | 47 | |
| TT-R-062 | " | As above, with trace arsenopyrite. Host rock becoming hornfelsed, with porphyritic textures still visible | 5 | 2.3 | 49 | 128 | As 51 |
| TT-R-063 | " | Fault gouge material from 0.5m wide leached, altered structure oriented 078/90. Contains 5% fine disseminated pyrite. Non-calcareous, non-magnetic | 10 | 0.1 | 51 | 298 | |
| TT-R-064 | 4600' | Narrow, mineralized qtz stringer-veins within rusty red, fine grained volcanic fragmental. Somewhat leached, altered around stringers. Pyrite euhedral, probably secondary in origin | 5 | 0.7 | 48 | 71 | |
| TT-R-065 | 4660' | Leached, silicified pyrite mineralized stringers and lenses within rusty felsic volcanic. Numerous shears of various orientations. Weak arsenopyrite smell on fresh surface. | 5 | 1.6 | 33 | 13 | As 95 |
| TT-R-066 | 4660' | As above | 5 | 4.2 | 78 | 21 | As 105 |

## ROCK SAMPLE DESCRIPTION RECORD

Page:

Project: Macgold South (D)

Location: Iskut

Operator: Cal Church

Analytical Results: Gold/mercury (ppb), All others (ppm)

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| CC-R-086 | | Chip (10-15 cm) - Quartz vein stockwork in quartz-feldspar porphry. Purplish sulfide contained in blebs, fine grained, could be Cu mineral; bornite, chalcopyrite | 5 | 2.8 | 40 | 4606 | Cu 1051 | |
| CC-R-087 | | Blue-green andesite - contains 2-3% disseminated euhedral pyrite | 5 | 2.6 | 41 | 124 | Ba 1117 | |
| CC-R-088 | | Felsic volcanic - chip (1m) breccia texture, sulphides arsenopyrite 3-10%; pyrite 5% | 5 | 1.9 | 43 | 12 | As 110 | Ba 279 |
| CC-R-089 | | Rhyolite - kaolinite altered, possible fault evidenced by fault gouge (clay). Pale white to buff colour. Fine grained grey sulphide probably pyrite 5% | 5 | 0.7 | 45 | 123 | Ba 696 | |
| CC-R-090 | | Float - Grey siliceous andesite evenly textured, fine grained, disseminated pyrite throughout wispy stringers of fine grained sphalerite, brown-red (trace) pyrite (1-2%) | 5 | 0.1 | 42 | 58 | As 75 | Ba 346 |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: Macgold South (D) | Location: Iskut | Operator: Cal Church |
|---|---|---|---|

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Analytical Results Gold/Mercury (ppb) All Others (ppm) | |
| CC-R-094 | | Grab - near margin of a diabase dike, light green; host rock pale to medium green volcanic, silica flooding, trace galena, chalcopyrite + pyrite 2%, generally along 2-3mm veinlets | 10 | 2.3 | 76 | 124 | | |
| CC-R-097 | | Fine grained felsic volcanic, greenish (rhyolite?). Deep red-orange gossanous outcrop fine-grained disseminated pyrite throughout, pyrite 3-4% | 5 | 2.7 | 25 | 84 | | |
| CC-R-098 | | Quartz flooded Dacite/Andesite pale green, extremely siliceous disseminated pyrite (trace), rare reddish hue (hematite?) | 5 | 0.1 | 60 | 73 | As 44 | |
| CC-R-099 | | Epidote - quartz vein stockwork vein widths 1-3 cm oriented approximately 085°. Contains chalcopyrite + sphalerite + hematite + jasper mineral assemblage | 10 | 5.8 | 17270 | 27663 | Cu 1823 | Sb 19 |

| ROCK SAMPLE DESCRIPTION RECORD | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Page: | | Project: Macgold South (D) | Location: Iskut | | | Operator: Cal Church | | |
| Sample No. | Location | Description | Analytical Results Gold/Mercury (ppb) All Others (ppm) | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| CC-R-105 | | Float – quartz vein stockwork in highly silicified pale green andesite. Sulphide mineralization; pyrite 4%, chalcopyrite 1-2%, bornite (trace)-1%. Pyrite is often disseminated in host whereas chalcopyrite and bornite are vein minerals. Quartz veins are 5-15mm. | 5 | 1.9 | 46 | 54 | Cu 1003 | |
| CC-R-106 | | Float boulder (30cm diam.) mostly white quartz, possible vein source. Some vugginess apparent, limonitic stain, iron oxides. Sulphide mineralization: pyrite 5%, trace chalcopyrite, galena 2%, possible sphalerite, remainder gangue quartz | 95 | 11.1 | 7611 | 8994 | Cu 2057 | |
| CC-R-107 | | Chip (1.5m) - Dark green andesite qtz breccia stringers. Sulphides concentrated along stringers pyrite 5%, galena 1-2%, trace chalcopyrite, ± hematite. Angular breccia clasts of quartz | 65 | 2.9 | 2577 | 9545 | Cu 1240 | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: Macgold South (D) | Location: Iskut | | | Operator: Cal Church | | |
|---|---|---|---|---|---|---|---|---|
| Sample No. | Location | Description | Analytical Results Gold/mercury (ppb) All others (ppm) | | | | | |
| | | | Au | Ag | Pb | Zn | Other | |
| CC-R-108 | | Similar to CC-R-107, less silicification and minor quartz stringers, maroon andesite fragments | 5 | 1.7 | 122 | 382 | Cu 49 | |
| CC-R-109 | | Pale green Dacite lapilli tuff, siliceous, with pyrite 1% ± hematite (reddish hue) | 10 | 2.3 | 1300 | 710 | Cu 263 | |
| CC-R-110 | | Blue green andesite - quartz - jasper veining, trace black sulphide? | 5 | 2.0 | 1605 | 2166 | Cu 291 | As 53 |
| CC-R-111 | | Quartz veining - multiple fracture filling in Dacite tuff host. Sample composed of 90% quartz, 5% carbonate, pyrite 2%, chalcopyrite 1-2% covellite 1% | 5 | 2.9 | 934 | 594 | Cu 351 | |
| CC-R-118 | | Quartz breccia veining in silicified dacite tuff. Fine grained pyrite 3% | 5 | 3.0 | 7 | 44 | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | Project: Macgold South (O) | Location: Iskut | Operator: Cal Church |
|---|---|---|---|

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other | |
|---|---|---|---|---|---|---|---|---|
| | | | Analytical Results Gold/mercury (ppb) All others (ppm) | | | | | |
| CC-R-119 | | Silicified basalt - black to deep red (maroon). Calcite veinlets 2-3 mm containing trace chalcopyrite, malachite on fracture surfaces. | 10 | 1.6 | 15 | 108 | Cu 86 | |
| CC-R-131 | | Silicified dacite - feldspar phenocrysts masked by silicification. Glassy clasts pale to dark green ~1mm occur throughout, some whitish quartz flooding, trace malachite, pyrite <1% | 5 | 2.8 | 374 | 871 | Cu 155 | |

## ROCK SAMPLE DESCRIPTION RECORD

Page:
Project: MACGOLD SOUTH (D)
Location: Iskut
Operator: Cal Church

| Sample No. | Location | Description | Au | Ag | Pb | Zn | Other: Cu | Other: As/Ba |
|---|---|---|---|---|---|---|---|---|
| | | | Analytical Results Gold/Mercury (ppb) All others (ppm) | | | | | |
| DCCR-132 | | Grab - qtz-carbonate veining in brecciated maroon andesite. Sulphide mineralization: py-cpy 1-2%, malachite and azurite stained. Some veins of barite containing sulphides as well (1-5cm). Zone of mineralization varies 5-50cm. | 5 | 132.7 | 51 | 475 | Cu 37407 | As 3128 |
| DCCR133 | | Grab from o/c similar to R132. | 5 | 13.7 | 23 | 311 | Cu 1182 | Ba 4655 |
| DCCR134 | | Float boulder - similar to DCCR-132 50m downslope from that o/c. | 5 | 6.2 | 26 | 168 | Cu 13875 | Ba 1579 |
| | | | | | | | | |

# ROCK SAMPLE DESCRIPTION RECORD

| Page: | | Project: MACGOLD SOUTH (D) | Location: Iskut | | | Operator: Cal Church | |
|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | |
| | | | **Au** ppb | **Ag** ppm | **Pb** ppm | **Zn** ppm | Cu ppm **Other** |
| DCCR-135 | L 44+50E 44+00N | Chip (20cm) - Barite veins, 5-25cm, Breccia texture of vein contacts. Limonite stain, malachite, trace cpy, tetrahedrite. vein outcrops 25 m on surface. | 5 | 281.2 | 15 | 282 | 2527 |
| DCCR-136 | | Float - probable uphill source. Siliceous Lapilli Tuff. disseminated py, hem, sph (tr.-1%). | 5 | 3.5 | 25 | 6455 | 445 |

**ROCK SAMPLE DESCRIPTION RECORD**

| Page: | | Project: | Location: MAC SOUTH | | | | Operator: WHIST | |
|---|---|---|---|---|---|---|---|---|
| **Sample No.** | **Location** | **Description** | **Analytical Results** | | | | | |
| | | | **Au** | **Ag** | **Pb** | **Zn** | **Other** | |
| MW-R-057 | MACGOLD S | PYRITE, DISSEM + CUBES IN ARGILLITE | | | | | | |
| MW-R-058 | " | — | 5 | 1.9 | 54 | 68 | | |
| MW-R-059 | " | RED QTZ, LOADED w̄ PY | 5 | 0.1 | 45 | 18 | | |
| MW-R-060 | " | PY, RED QTZ IN RED/BROWN STAINED TUFF | 5 | 0.4 | 16 | 38 | | |
| MW-R-61 | " | HIGHLY, SILICIFIED ARG. w̄ DISSEM PY IN CRYSTAL ASH TUFF | 5 | 1.6 | 40 | 31 | | |
| MW-R-062 | " | SILICIFIED ARG. w̄ DISSEM PY IRON STAINED CRYSTAL ASH TUFF | 5 | 3.1 | 51 | 18 | | |

# ROCK SAMPLE DESCRIPTION RECORD

**Page:** 1 of 1 | **Project:** MacGold South | **Location:** | **Operator:**

| Sample No. | Location | Description | Au (ppb) | Ag (ppm) | Pb | Zn | Cu (%) | As (ppm) |
|---|---|---|---|---|---|---|---|---|
| D-BC-R-042 | MacGold South L-8400E 3+50N | Malachite staining in a shear zone<br>Chalcopyrite: < 1% in small pods<br>Pyrite: 3-4% in small pods + fracture filling mineralization located in a 1-4cm wide shear zone with approximately 1m of the zone visible at surface<br>Host Rock: volcanic tuff | 25 | 28.2 | 52 | 164 | 3.380 | 1 |
| D-BC-R-043 | MacGold South | Malachite staining in a shear zone<br>Pyrite: 2-3% in small pods + fracture filling mineralization located in a 3cm wide shear zone visible at surface for approximately 2m.<br>Host rock: volcanic | 5 | 7.8 | 41 | 125 | 2.830 | 1 |

# APPENDIX VI

# UTEM GEOPHYSICAL SURVEY REPORT

# UTEM SURVEY

ON

# COLAGH PROSPECT - MACGOLD CLAIMS

FOR

ECSTALL MINING CORP.

AND

OMEGA GOLD CORP.

BY

SJ GEOPHYSICS LTD.

AND

LAMONTAGNE GEOPHYSICS LTD.

SKEENA M.D. N.T.S. 104 B/10E

NOVEMBER 1990

Report By
Syd J. Visser
SJ GEOPHYSICS LTD.

# TABLE OF CONTENTS

## INTRODUCTION

A UTEM survey was conducted on the Colagh prospect, Macgold claims, by SJ Geophysics Ltd. and Lamontagne Geophysics Ltd., at the request of George Nicholson (International Kodiak) , for Ecstall Mining Corp. and Omega Gold Corp., during the period of July 19, to July 29, 1990. The survey grid is located in the Iskut Area of northern B.C. approximately 7 Km, east of the Snippaker airstrip. (N.T.S. 104B/10E).

The purpose of the UTEM survey was to search for massive sulfides and mineralized structures such as shear zones which may contain gold. The advantages of the UTEM system is its ability to detect conductors over a wide range of conductivities at large depths and its ease of use in surveying areas of rugged topography.

## DESCRIPTION OF UTEM SYSTEM

UTEM is an acronym for "University of Toronto ElectroMagnetometer". The system was developed by Dr. Y. Lamontagne (1975) while he was a graduate student of that University.

The field procedure consists of first laying out a large loop, which can vary in size from less than 100M X 100M to more than 2Km X 2Km, of single strand insulated wire and energizing it with current from a transmitter which is powered by a 2.2 kW motor generator. Survey lines are generally oriented perpendicular to one side of the loop and surveying can be performed both inside and outside the loop.

The transmitter loop is energized with a precise triangular current waveform at a carefully controlled frequency (47 Hz for this survey). The receiver system includes a sensor coil and backpack portable receiver module which has a digital recording facility on cassette magnetic tape. The time synchronization between transmitter and receiver is achieved through quartz crystal clocks in both units which are accurate to about one second in 50 years.

The receiver sensor coil measures the vertical or horizontal magnetic component of the electromagnetic field and responds to its time derivative. Since the transmitter current waveform is triangular, the receiver coil will sense a perfect square wave in the absence of geologic conductors. Deviations from a perfect square wave are caused by electrical conductors which may be geologic or cultural in origin. The receiver stacks any pre-set number of cycles in order to increase the signal to noise ratio.

The UTEM receiver gathers and records 10 channels of data at each station. The higher number channels (7-8-9-10) correspond to short time or high frequency while the lower number channels (1-2-3) correspond to long time or low frequency. Therefore, poor or weak conductors will respond on channels 10, 9, 8, 7 and 6. Progressively better conductors will give responses on progressively lower number channels as well. For example, massive, highly conducting sulfides or graphite will produce a response on all ten channels.

It was mentioned above that the UTEM receiver records data digitally on a cassette. This tape is played back into a computer at the base camp. The computer processes the data and controls the plotting on an 11" x 17" graphics printer. Data are portrayed on data sections as profiles of each of the first nine or ten channels, one section for each survey line.

## FIELD WORK AND DISCUSSION OF FIELD PARAMETERS

Rolf Krawinkel, (Geophysicist) and Andrew Ryboltowski (Geophysicist), both with SJ Geophysics Ltd., and the equipment were mobilized from Vancouver through Smithers and trucked to Bobquin, from there they took a helicopter to Kodiak camp on July 11, 1990. The survey area was accessed by helicopter from the Kodiak camp. A helicopter was employed to move the transmitter setups and to access the westerly part of the grid. The field parameters and local geology were discussed in the Vancouver office and in the field with the project geologist before commencing the survey and during the survey period.

Approximately 10 Km using a station spacing of 25M were surveyed from 1 loop in a period of 7 production days. The location of the survey loop is shown on Plate G1.

## DATA PRESENTATION

The results of the 1990 UTEM survey are presented on 36 data sections representing 18 lines of data (Appendix III) and one compilation map.

The map is listed as follows:

Plate G1 UTEM Survey Compilation Map
Scale 1:2,500

Legends for the UTEM data sections are also attached (Appendix II).

In order to reduce the field data, the theoretical primary field of the loop must be computed at each station. The normalization of the data is a follows:

a) For Channel 1:

$$\% \text{ Ch.1 anomaly} = \frac{\text{Ch.1} - \text{PC}}{/\text{PT}/} \times 100$$

Where:

PC is the calculated primary field in the direction of the component from the loop at the occupied station

Ch.1 is the observed amplitude of Channel 1

PT is the calculated total field

b) For remaining channels (n = 2 to 9)

$$\% \text{ Ch.n anomaly} = \frac{(\text{Ch.n} - \text{Ch.1})}{\text{Ni}} \times 100$$

where Ch.n is the observed amplitude of Channel n (2 to 9)

N = Ch.1 for Ch1 normalized

N = PT for primary field normalized

i is the data station for continuous normalized (each reading normalized by different primary field)

i is the station below the arrow on the data sections for point normalized (each reading normalized by the same primary field)

Subtracting channel 1 from the remaining channels eliminates the topographic errors from all the data except ch.1.

If there is a response in channel 1 from a conductor then this value must be added to do a proper conductivity determination from the decay curves. Therefore channel 1 should not be subtracted indiscriminately.

The data from each line is plotted on at least 2 separate sections consisting of a continuous normalized section to which interpretation was added and a point normalized section. Additional point normalized data sections were produced where more than one conductor is present on the same line. Point normalization data is the absolute secondary field at a "gain setting" related to the normalization point. The data is usually point normalize over the central part of the crossover anomaly to aid in interpretation.

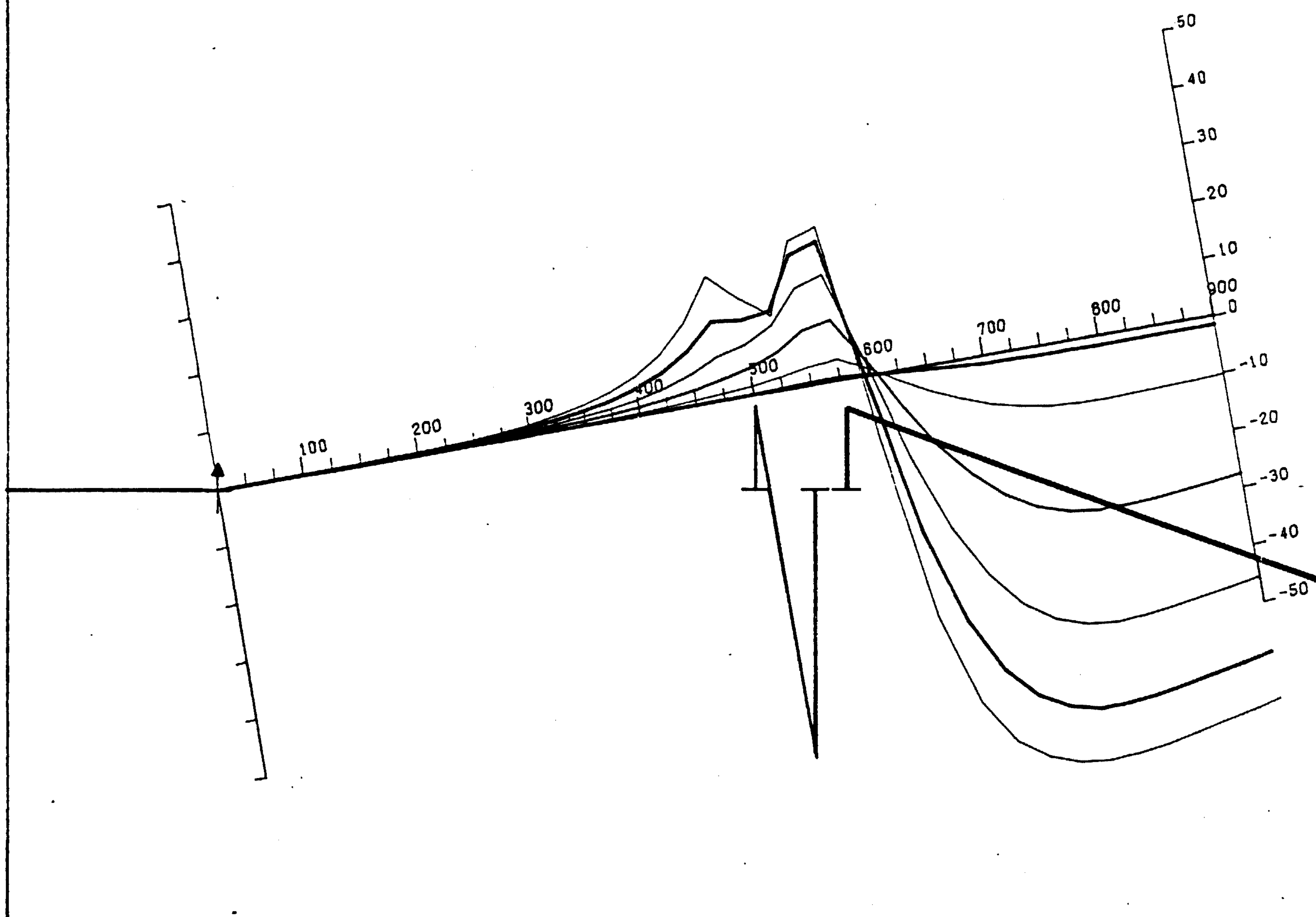
INTERPRETATION

The UTEM survey indicated one medium strength, one parallel weaker conductor striking across the north central part of the grid, a number of very weak anomalies as shown on the UTEM compilation map Plate G1.

The medium strength conductor which appears to be shallow (<25m) on line 100E and deepens considerably to the east, strikes across the grid from line 0 to 300E between 500N and 650N. The conductor appears to be a shallow dipping conductive layer with a long depth extend, as shown by the computer generated model Fig 1. The strike length of this conductor is open to the east but does not appear to continue west of line 0, although the survey lines 100w and 200W, do not extend as far north as the conductor axis.

The weaker conductor located approximately 80M south of the better conductor and striking across the same lines appears to be dipping steeply and has a depth to the top, of the conductor, close to surface. This conductor is likely due to a conductive fault or shear zone.

The remainder of the anomalies, located on the southern part of the grid are likely due to conductivity (geological) contacts.




ECSTALL MINING CORP
COLAGH MACGOLD PROJECT

| PLATE 1 | | PLATE 2 | | PLATE 3 | |
|---|---|---|---|---|---|
| X LOC | 500. | X LOC | 580.0 | X LOC | |
| DEPTH | 70.00 | DEPTH | 70.00 | DEPTH | |
| DIP | 80.00 | DIP | 20.00 | DIP | |
| DEPTH EXTENT | 300.0 | DEPTH EXTENT | 1000.0 | DEPTH EXTENT | |
| CONDUCTIVITY | 1.00 | CONDUCTIVITY | 3.00 | CONDUCTIVITY | |

POINT NORMALIZED

MODEL OF UTEM REPONSE

MODEL BY: SYD VISSER SJ GEOPHYSICS LTD.

FIG 1

REGISTERED USER
SJV C/.35,41.43

MultiLoop
© LAMONTAGNE GEOPHYSICS LTD

## RECOMMENDATIONS AND DISCUSSION

It is recommended that the UTEM results be closely correlated to any known geological or geochemical information before proceeding to the next phase.

It is then recommended to trench or very closely examine the area of the medium and weak conductor on the northern part of the grid, especially on line 100E as indicated on the compilation map, before drilling.

The weak near vertical fault or shear zone may be geologically more interesting than the stronger conductor since the stronger conductor appears to be more extensive and may be due to a graphitic argillite layer.

## CONCLUSION

Two conductors, one shallow dipping conductor with a moderate conductivity and one steeply dipping with a weak conductivity, were located on the north central part of the UTEM survey area. Both of these conductors should be investigated by trenching or drilling for possible mineralization.

A number of weaker conductors which are likely due to geological contacts were located on the southern part of the grid.

Syd Visser F.G.A.C.
Geophysicist

SJ Geophysics LTD.

# APPENDIX I

## STATEMENT OF QUALIFICATIONS

I, Syd J. Visser, of 11762 94th Avenue, Delta, British Columbia, hereby certify that,

1) I am a graduate from the University of British Columbia, 1981, where I obtained a B.Sc. (Hon.) Degree in Geology and Geophysics.

2) I am a graduate from Haileybury School of Mines, 1971.

3) I have been engaged in mining exploration since 1968.

4) I am a Fellow of the Geological Association of Canada.

Syd J. Visser, B.Sc., F.G.A.C.
Geophysicist

# APPENDIX II

# LEGEND

| Channel | Mean delay time<br>Base Freq. 47 Hz | Plotting Symbol |
|---|---|---|
| 1 | 7.447 | 1 |
| 2 | 3.723 | / |
| 3 | 1.862 | \ |
| 4 | 0.931 | □ |
| 5 | 0.465 | Σ |
| 6 | 0.233 | ∡ |
| 7 | 0.016 | 7 |
| 8 | 0.058 | X |
| 9 | 0.029 | Δ |
| 10 | 0.015 | ◇ |

CONDUCTOR AXIS

(D= depth of conductor, D- deep, M- medium, S- shallow)
(CH= last channel on which conductor was seen)

D CH

STRONG

MEDIUM

WEAK

SHALLOW DIPPING CONDUCTOR

CONDUCTIVITY CONTACT

(arrow shows direction of increasing conductivity )

WELL DEFINED CONTACT

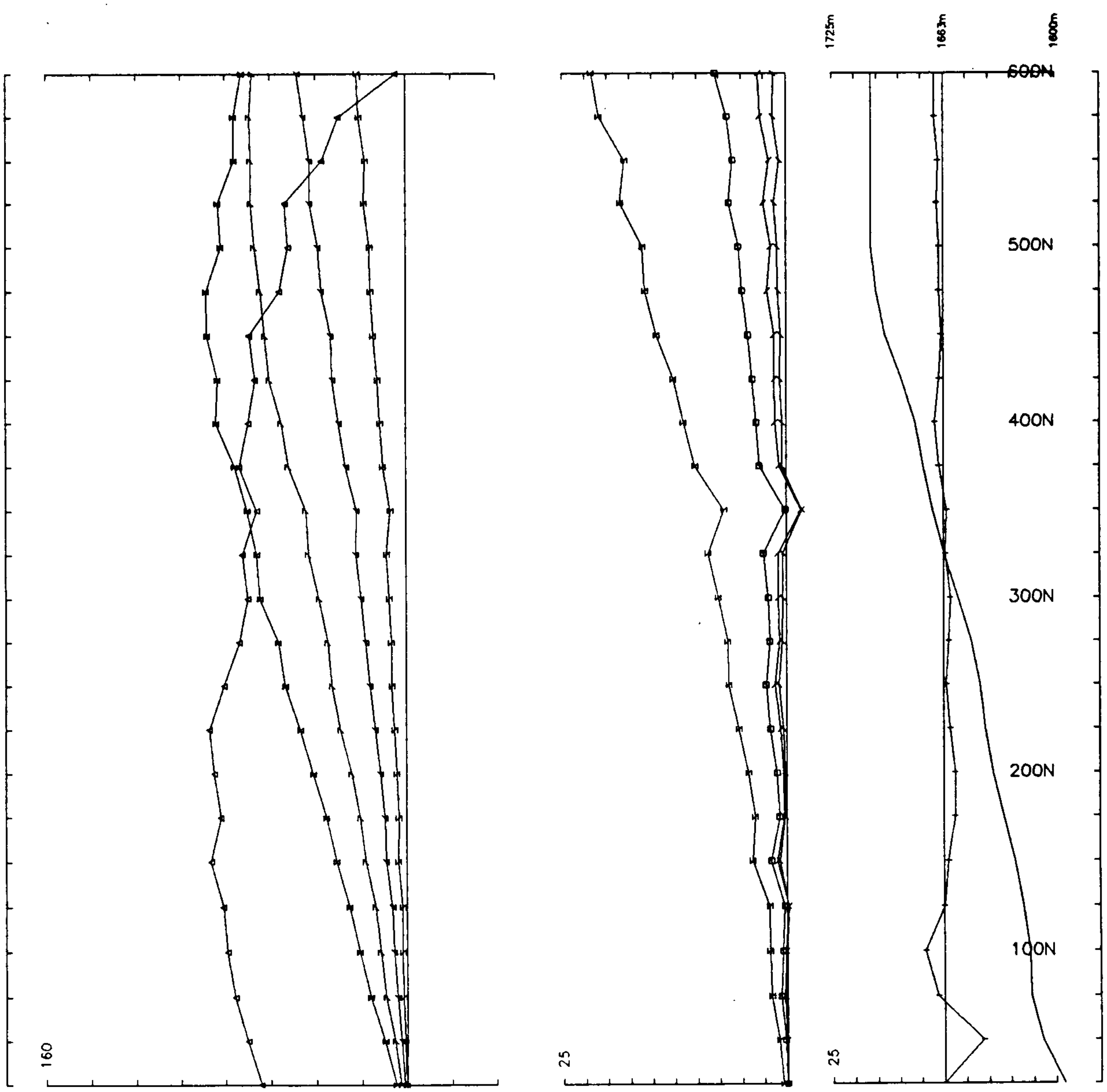
POORLY DEFINED CONTACT

POSSIBLE CROSSTRUCTURES

UTEM TRANSMITTER LOOP

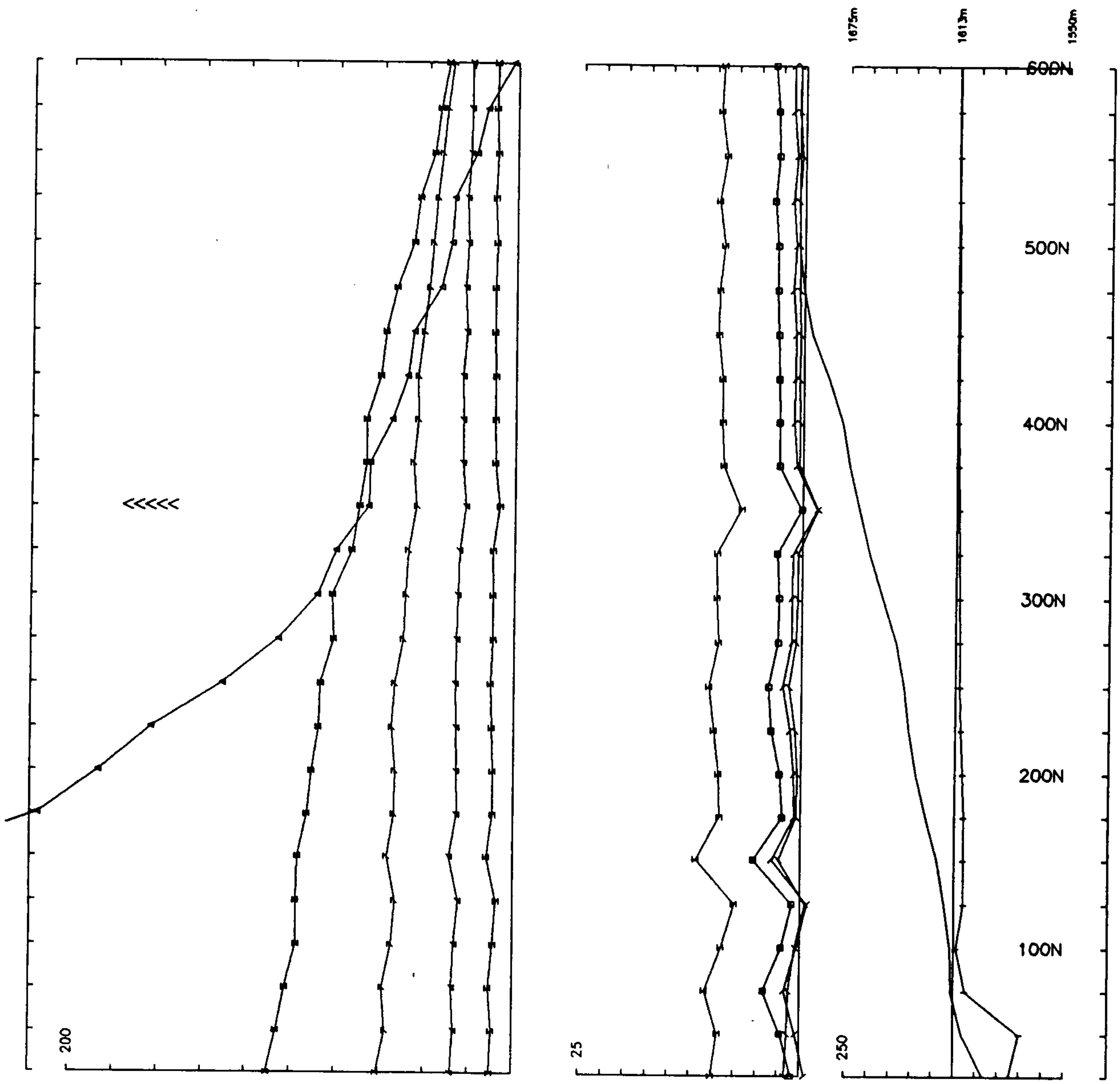
INSTRUMENTATION :
LAMONTAGNE GEOPHYSICS LTD.
UTEM 3, TIME DOMAIN EM

# APPENDIX III



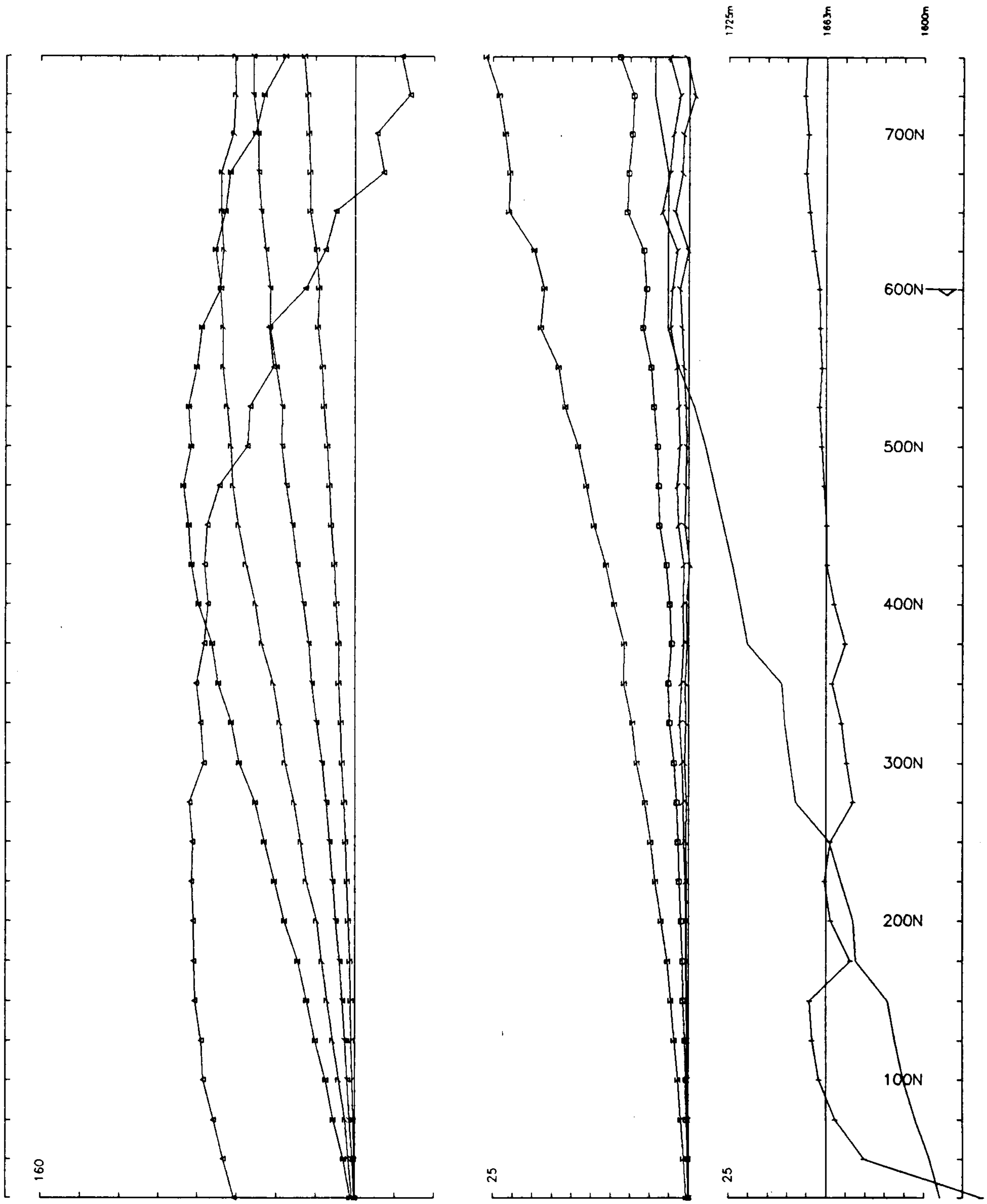

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 600W component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



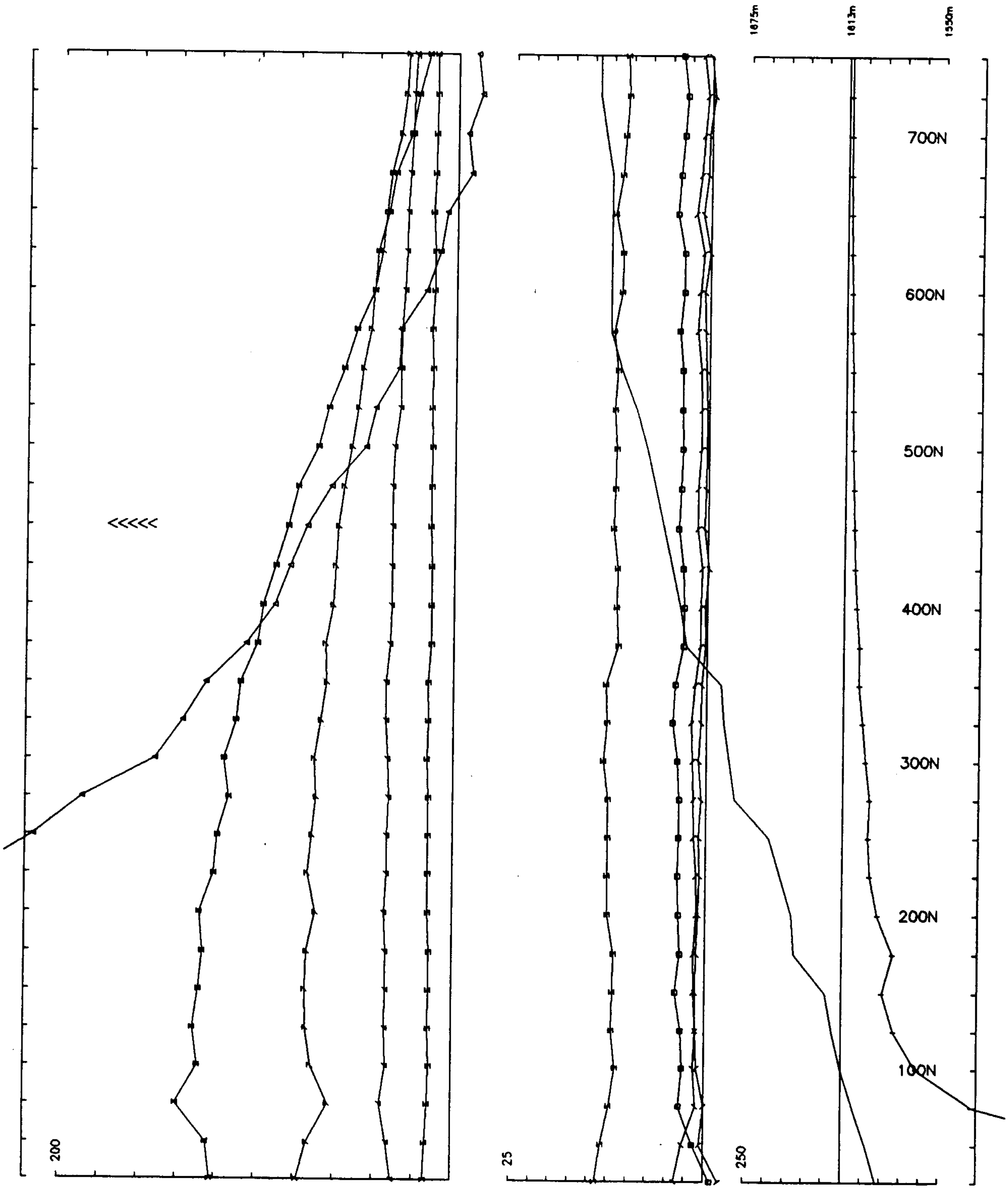

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 600W component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



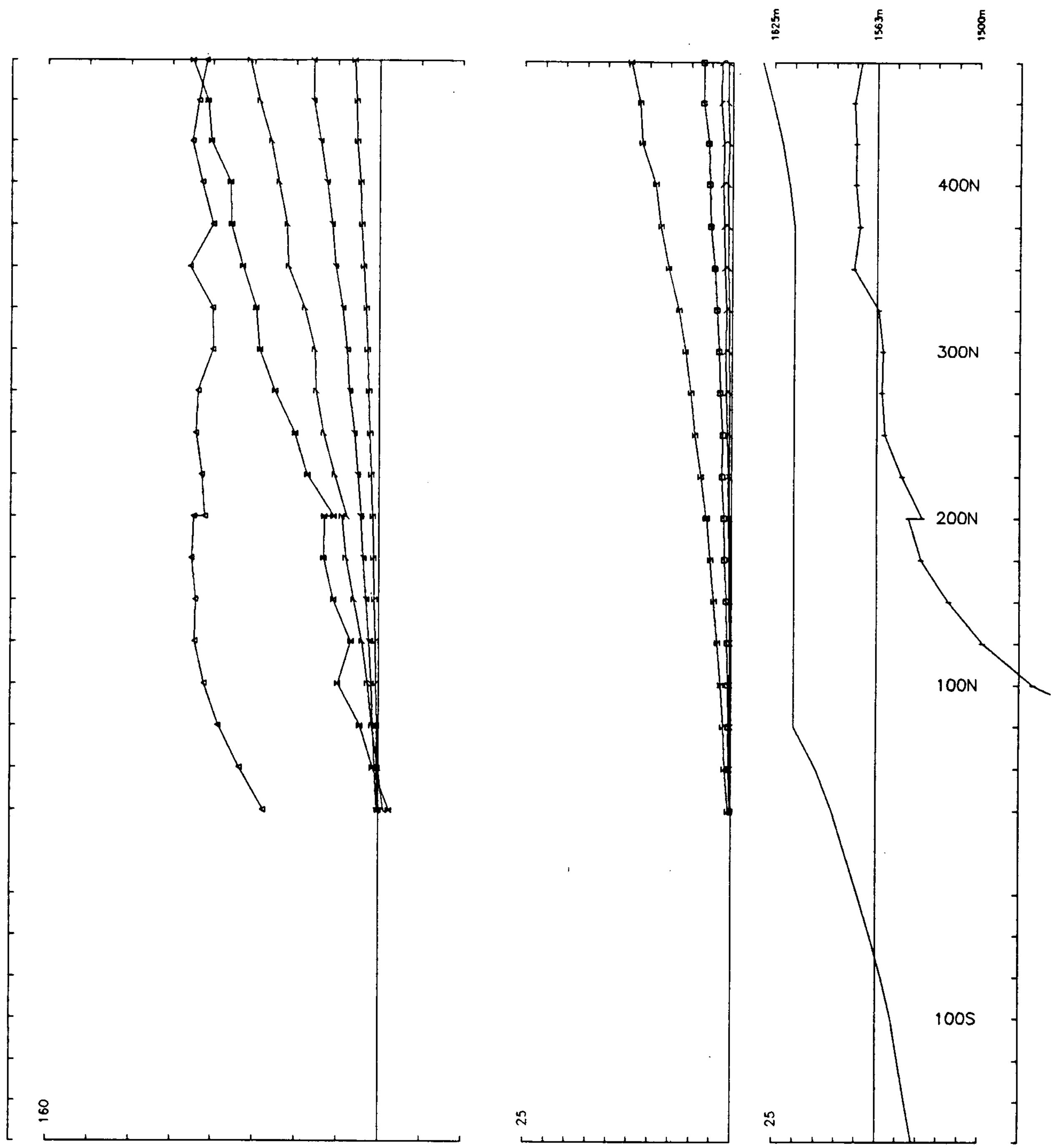

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 500W component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



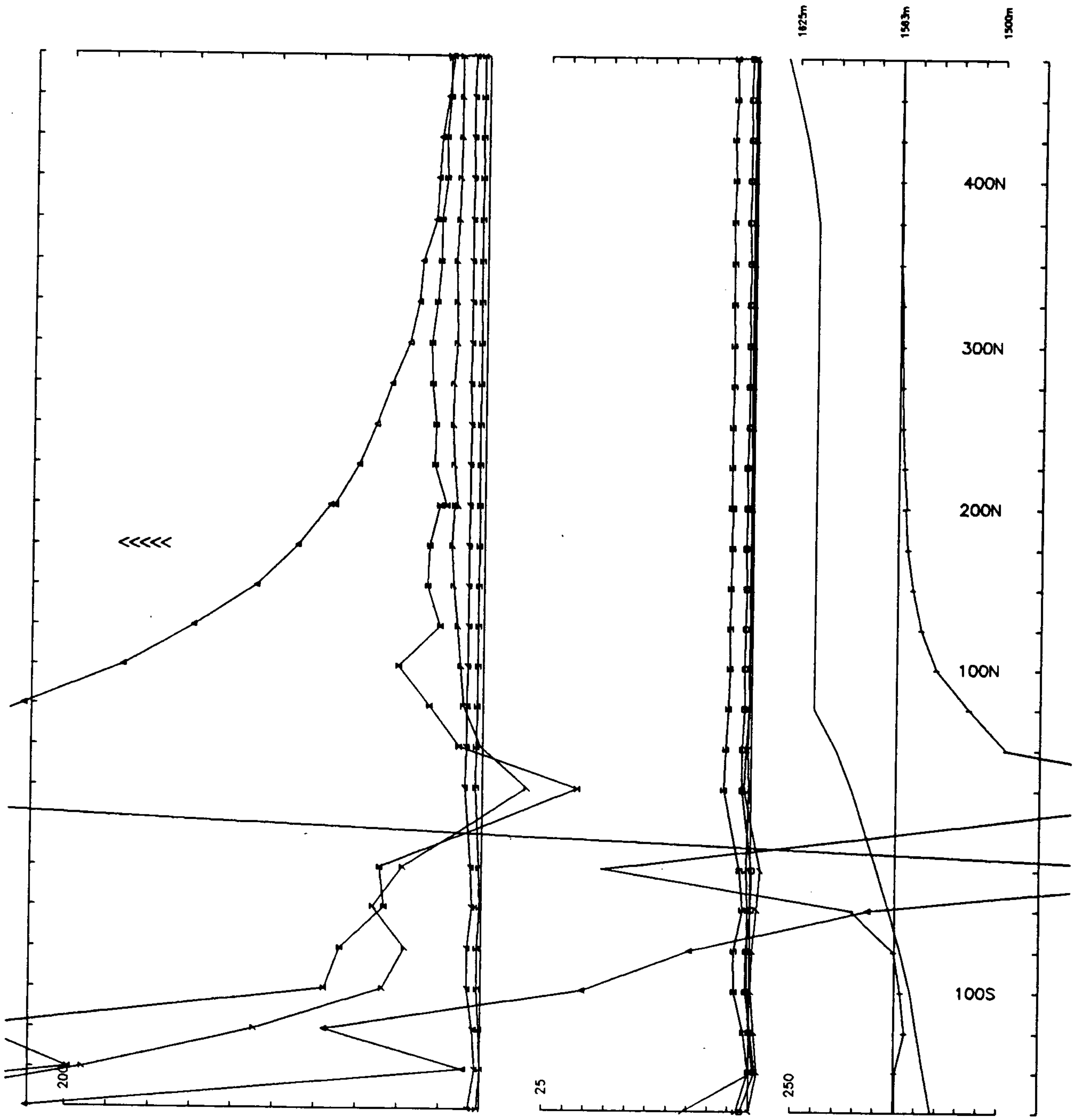

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 500W component Hz secondary Ch 1 normalized , Ch 1 reduced point norm.



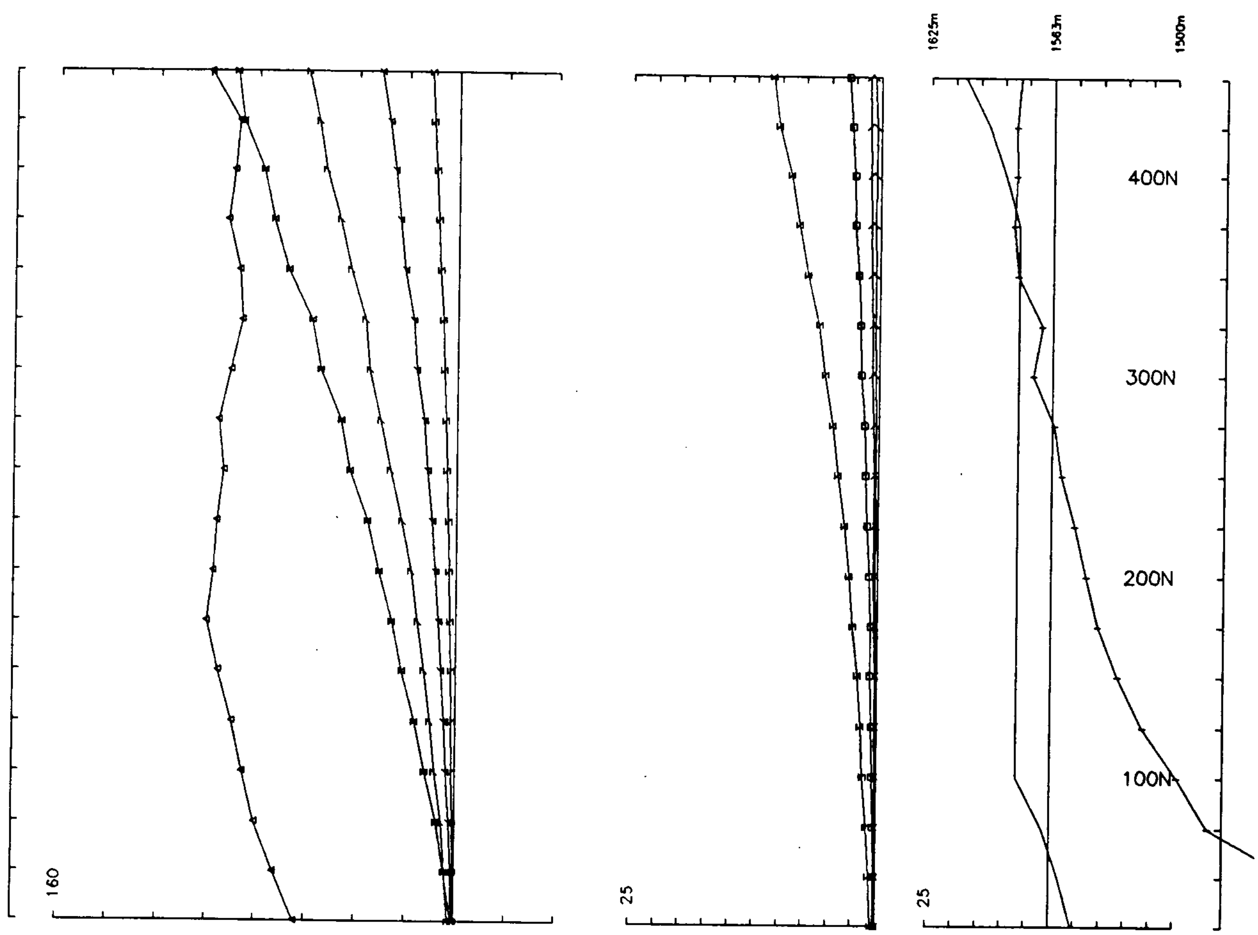

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 400W component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



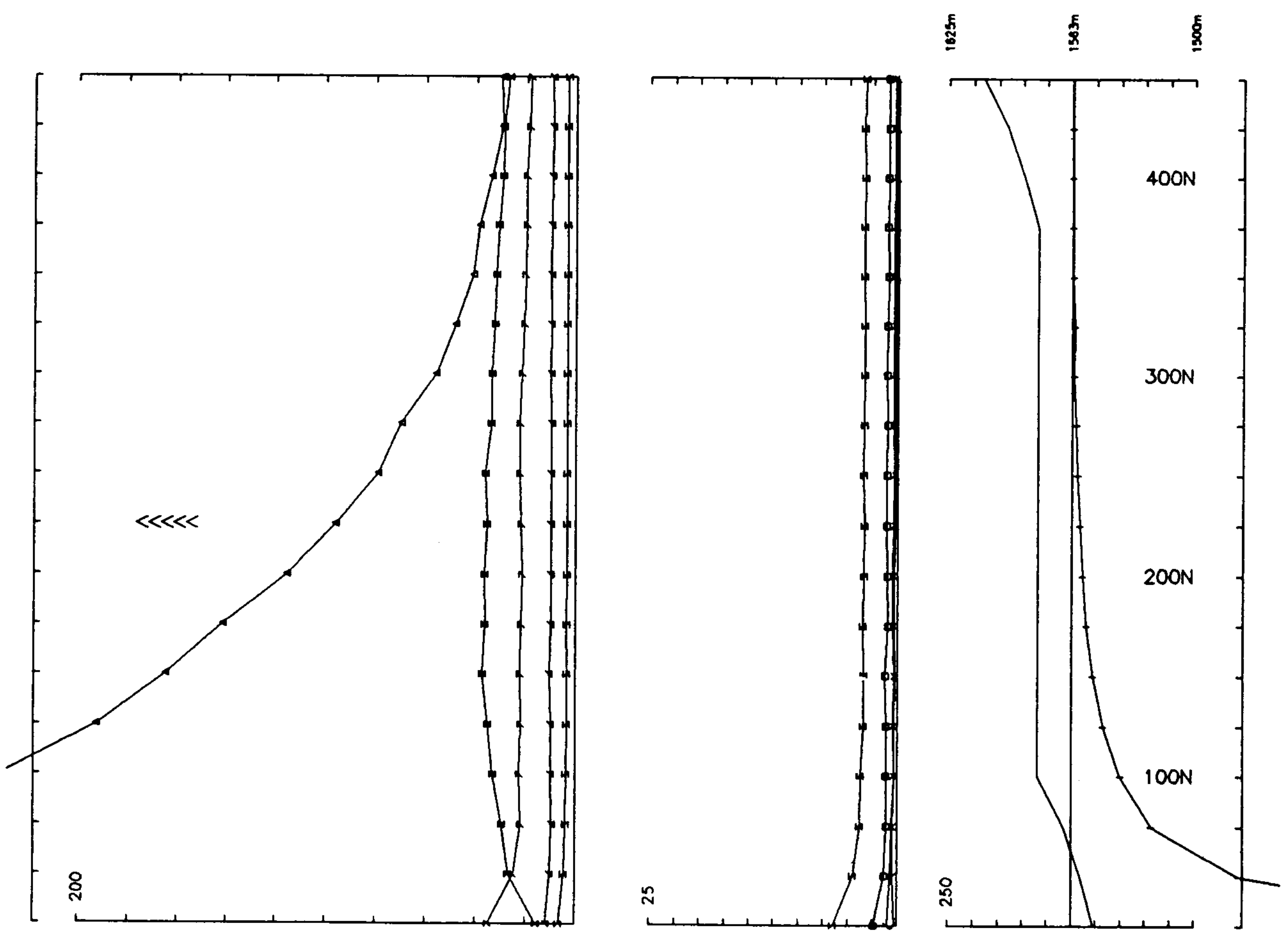

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 400W component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



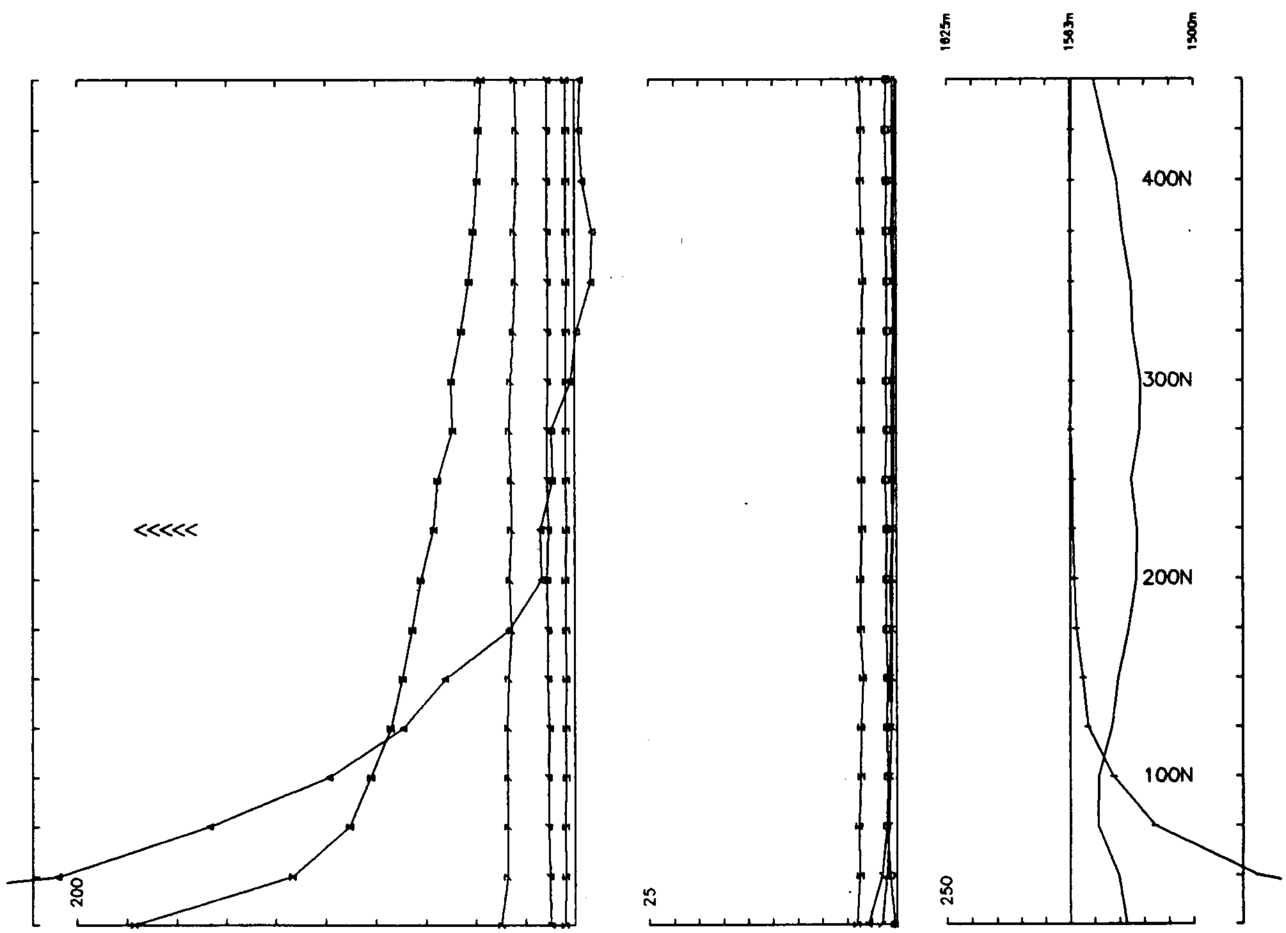

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 300W component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



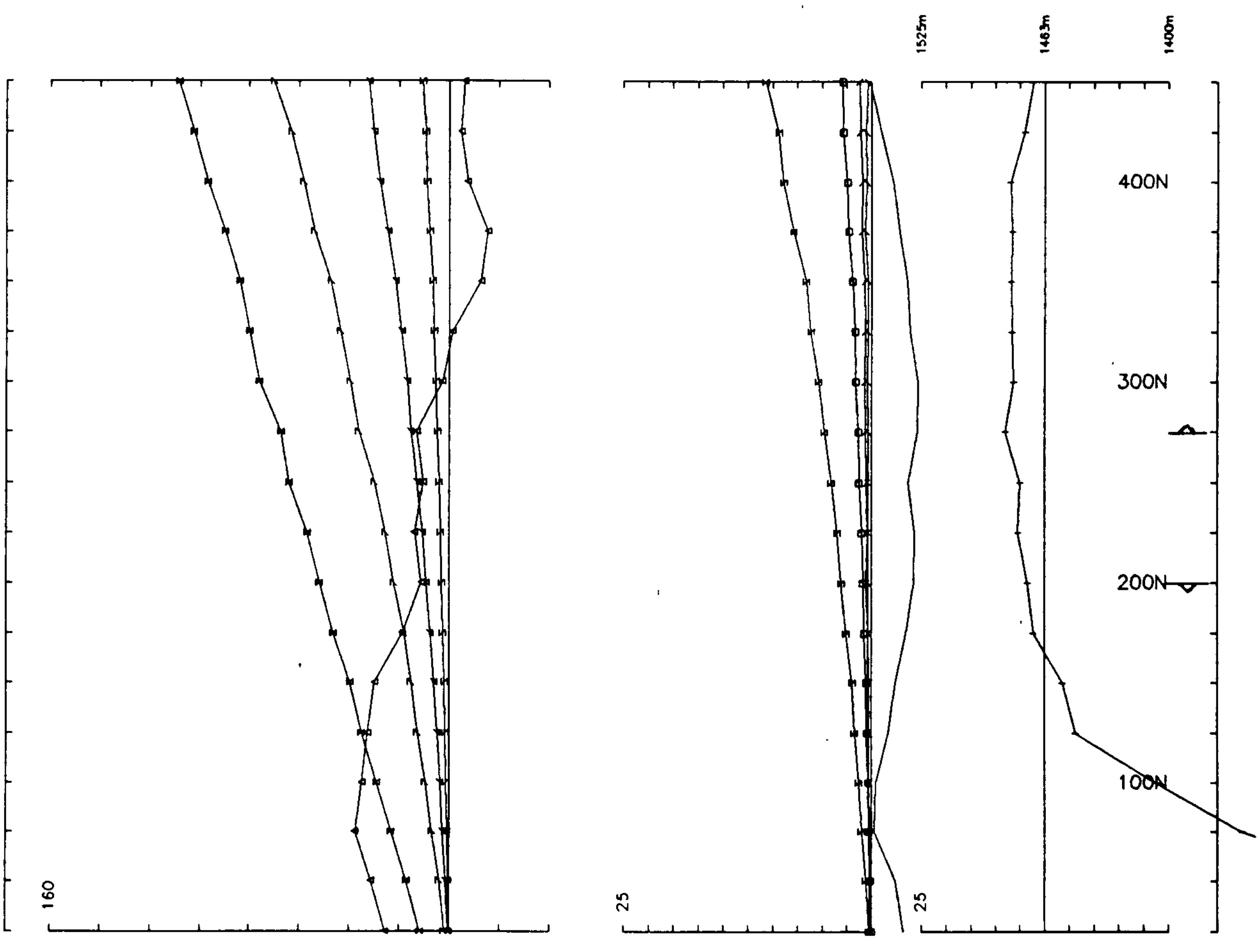

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 300W component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



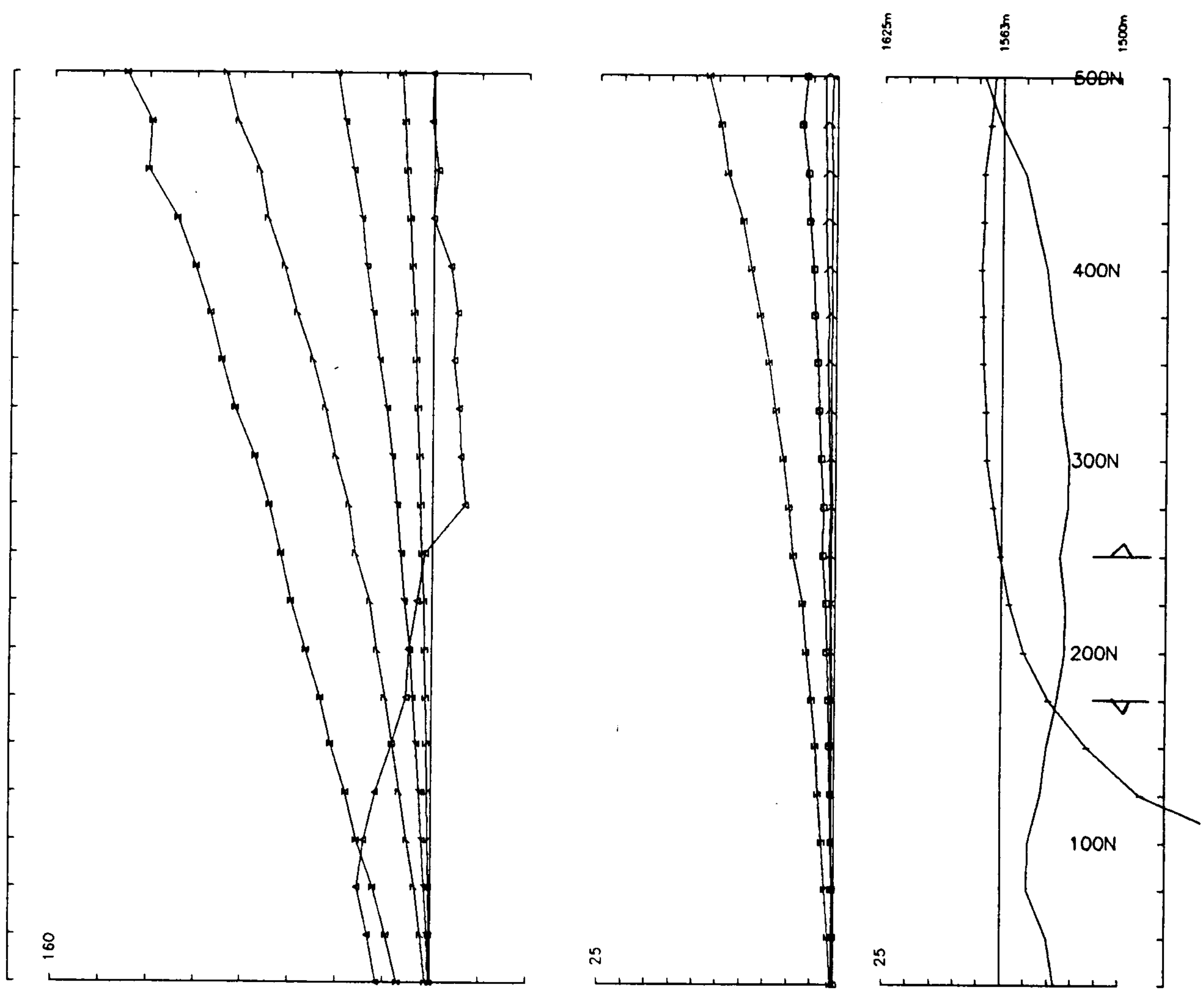

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 200W component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



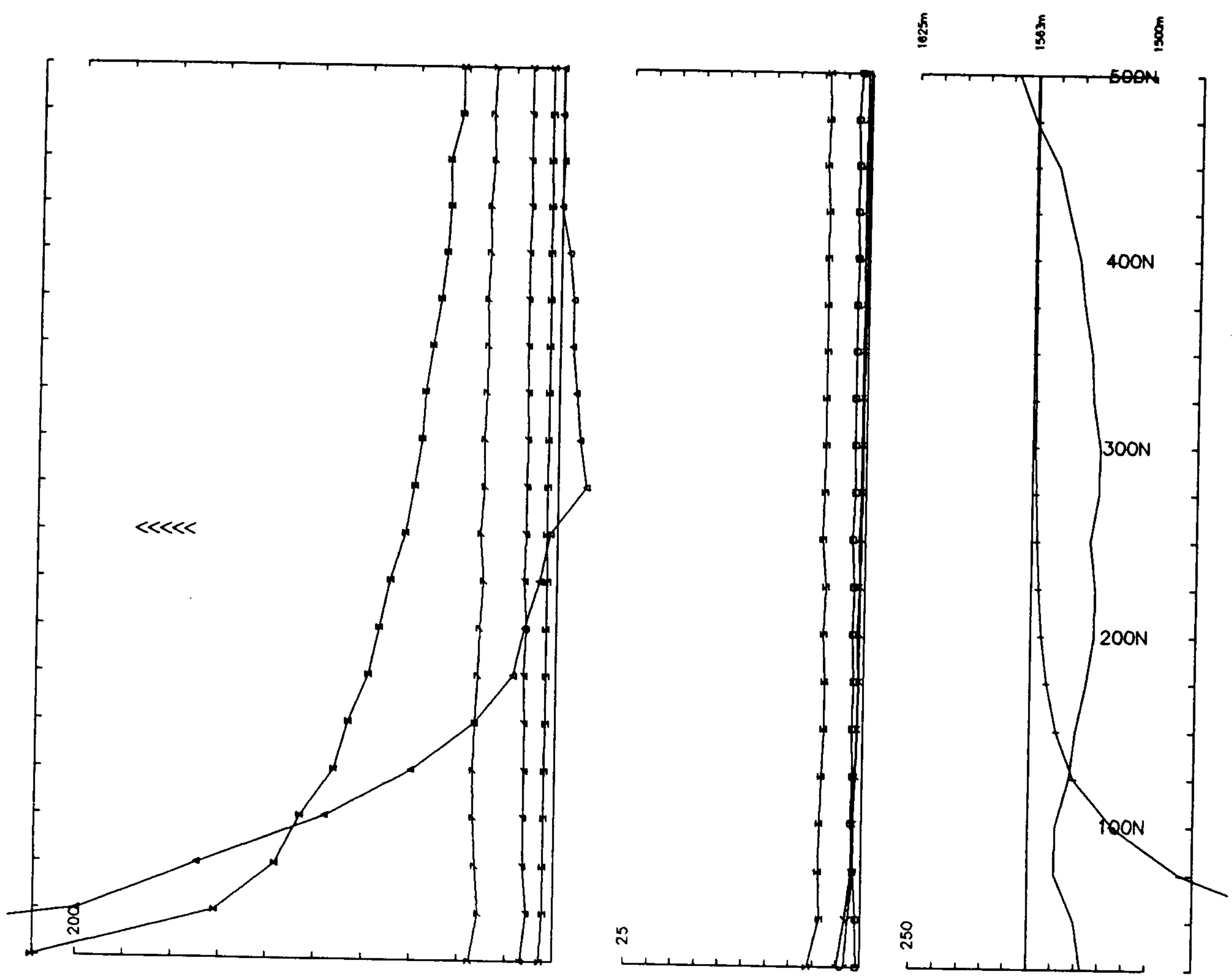

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 200W component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



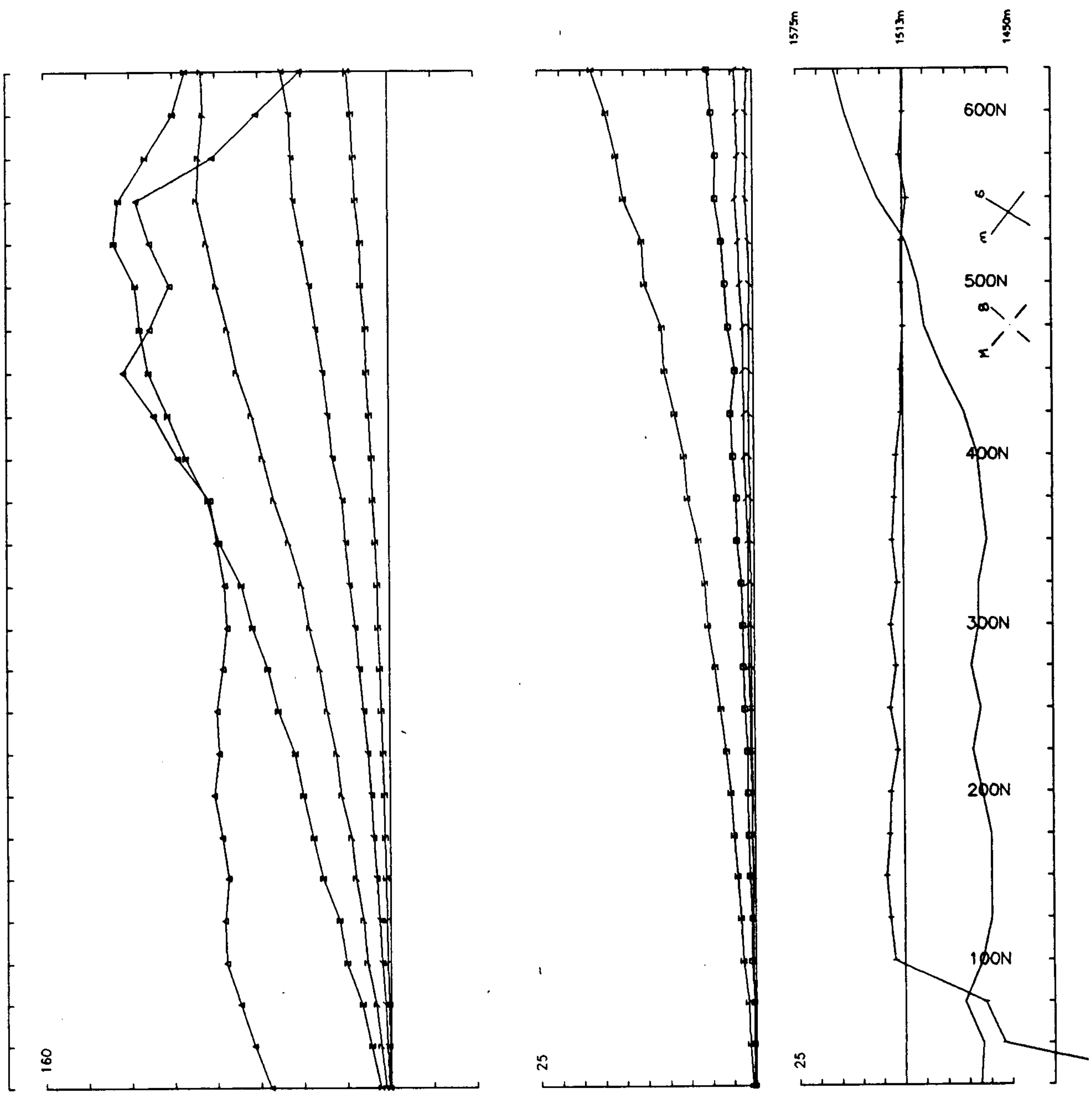

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 100W component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



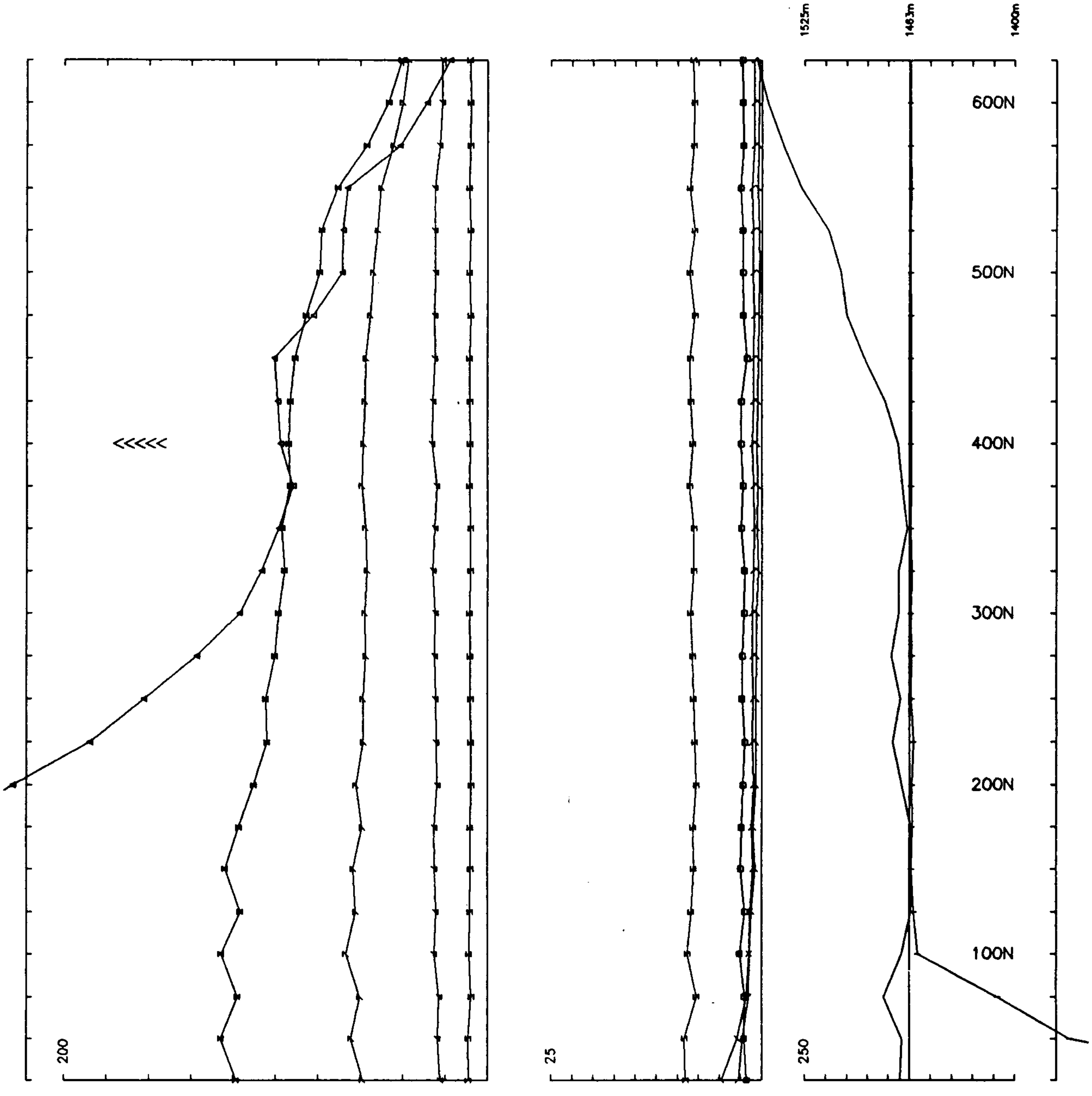

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1w Line 100W component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



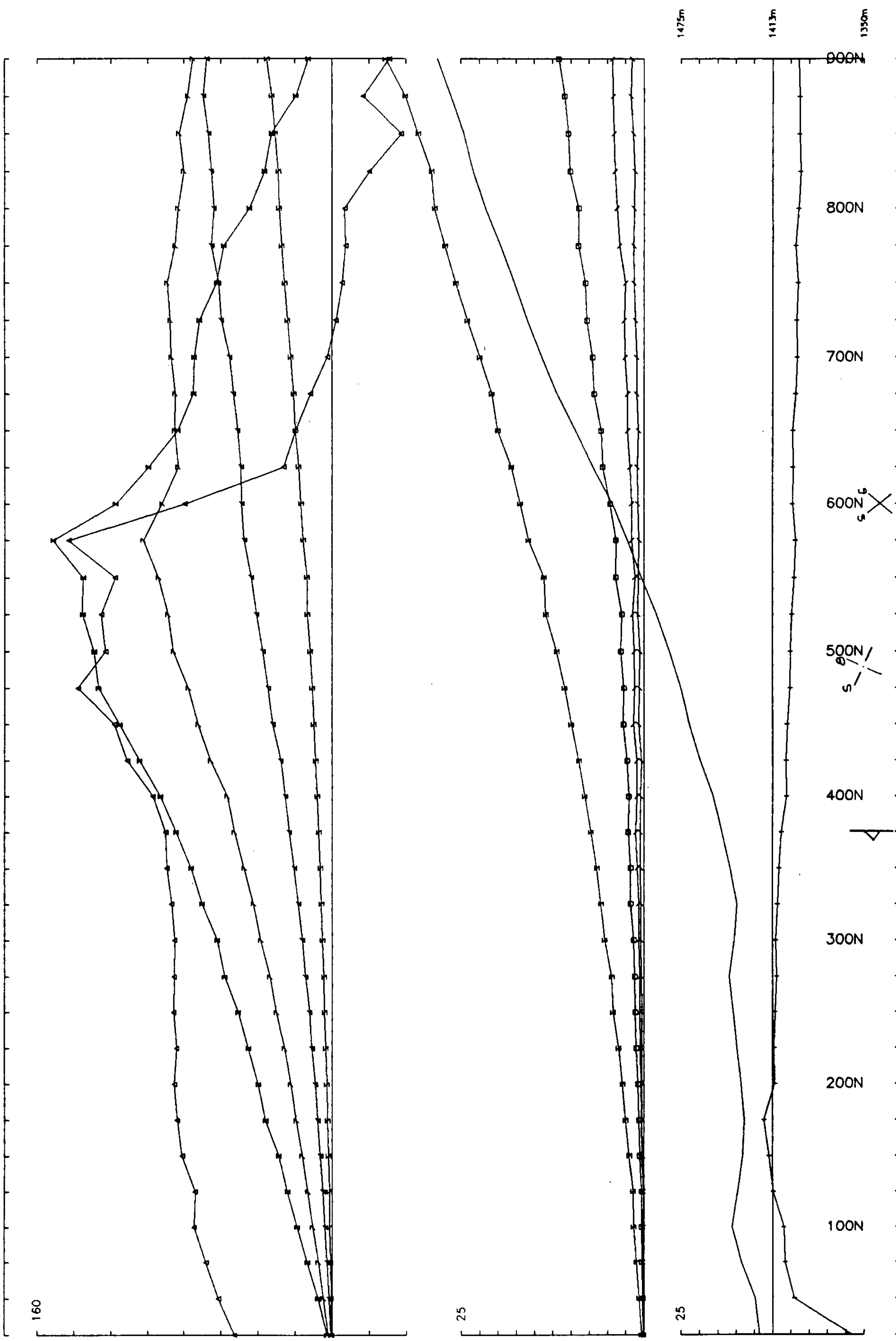

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line _ OW component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



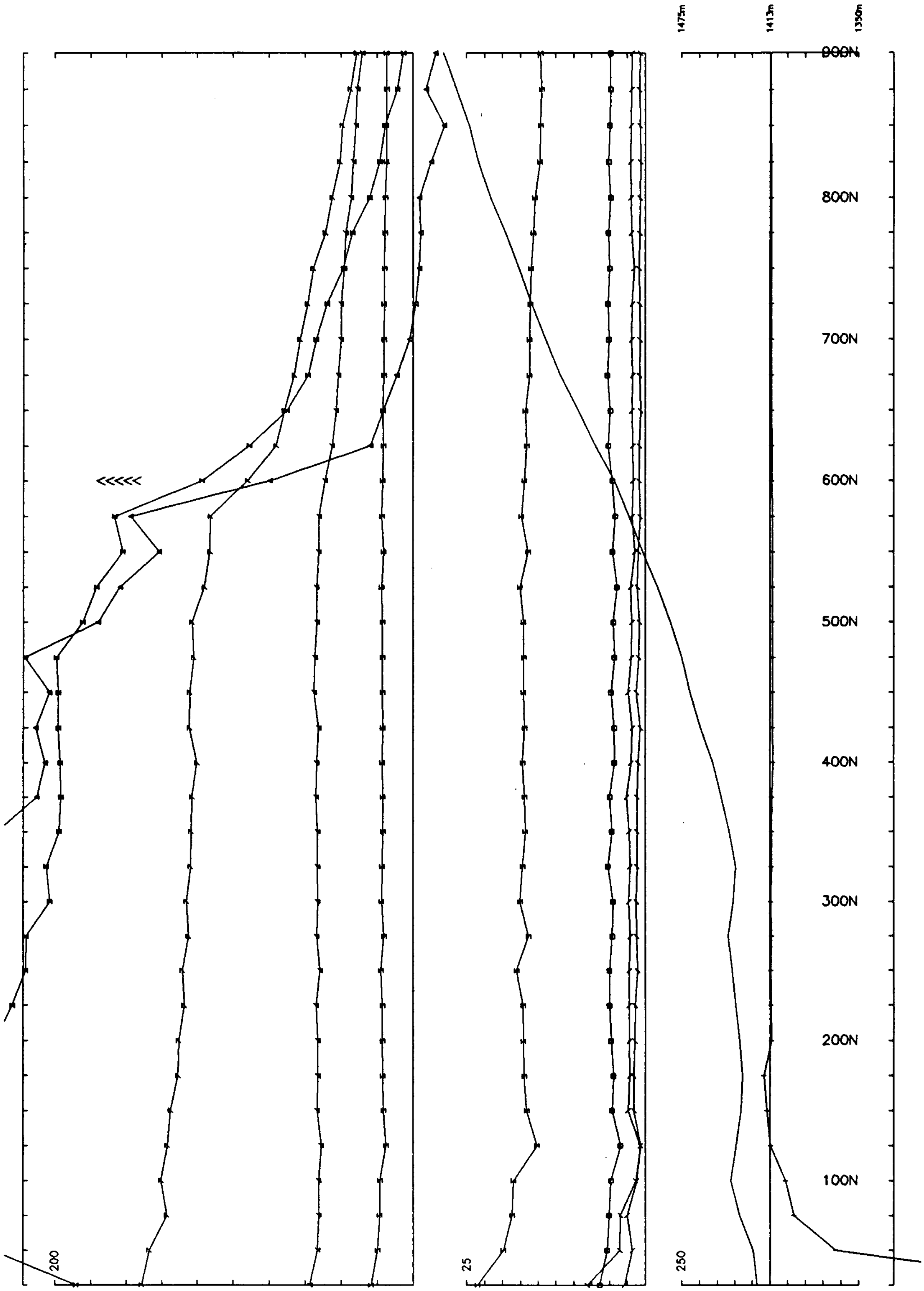

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line OW component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



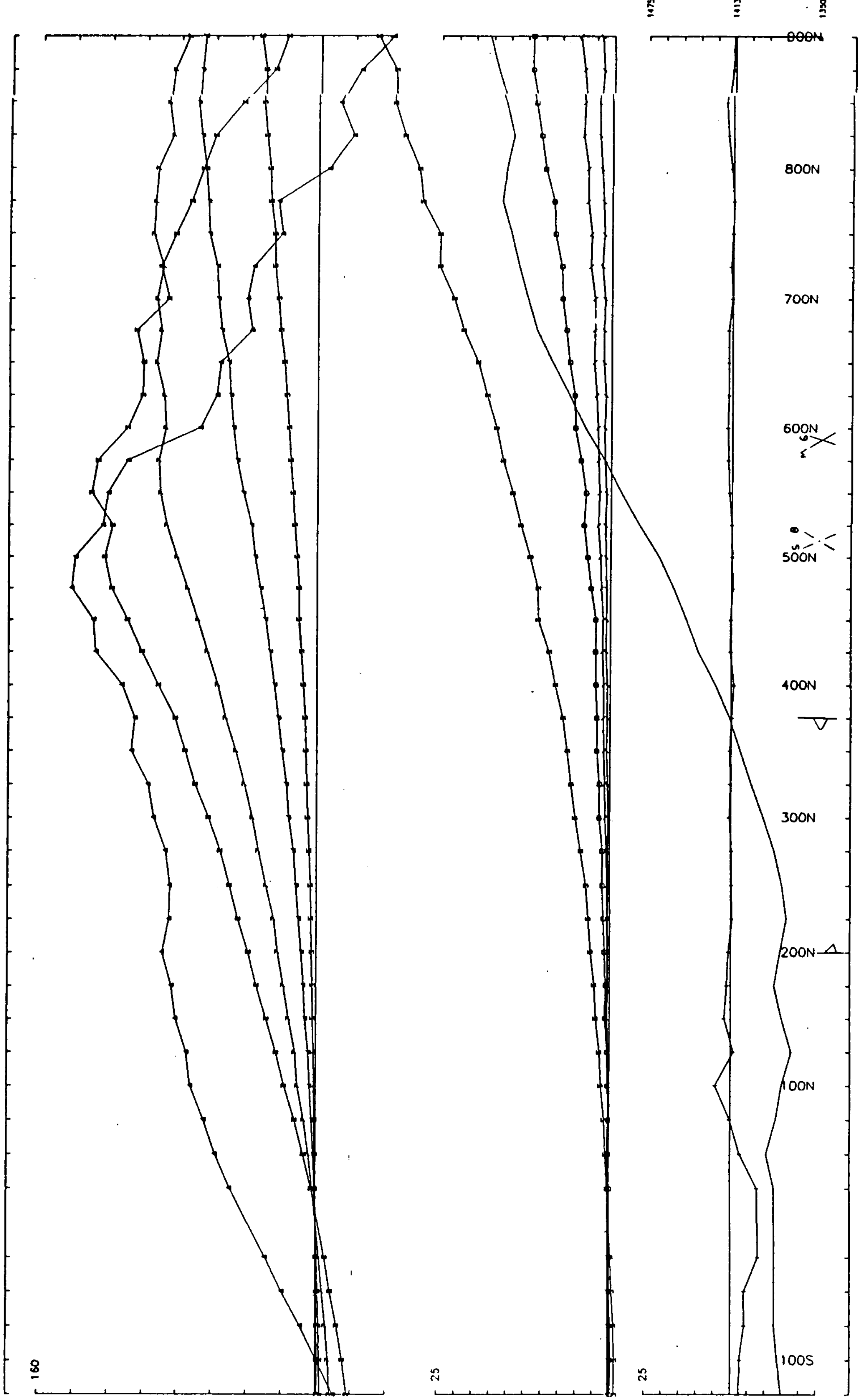

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 100E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



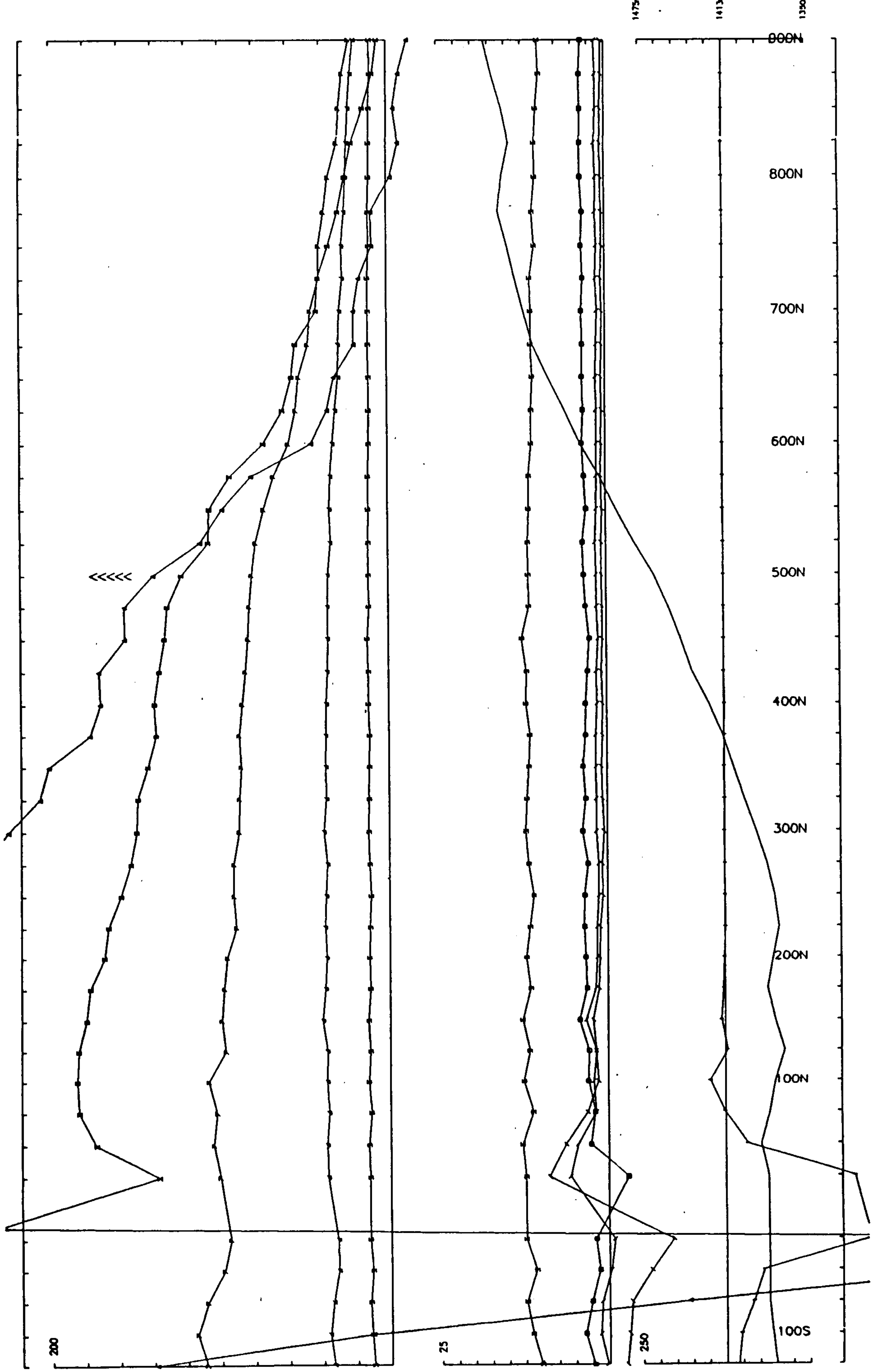

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 100E component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



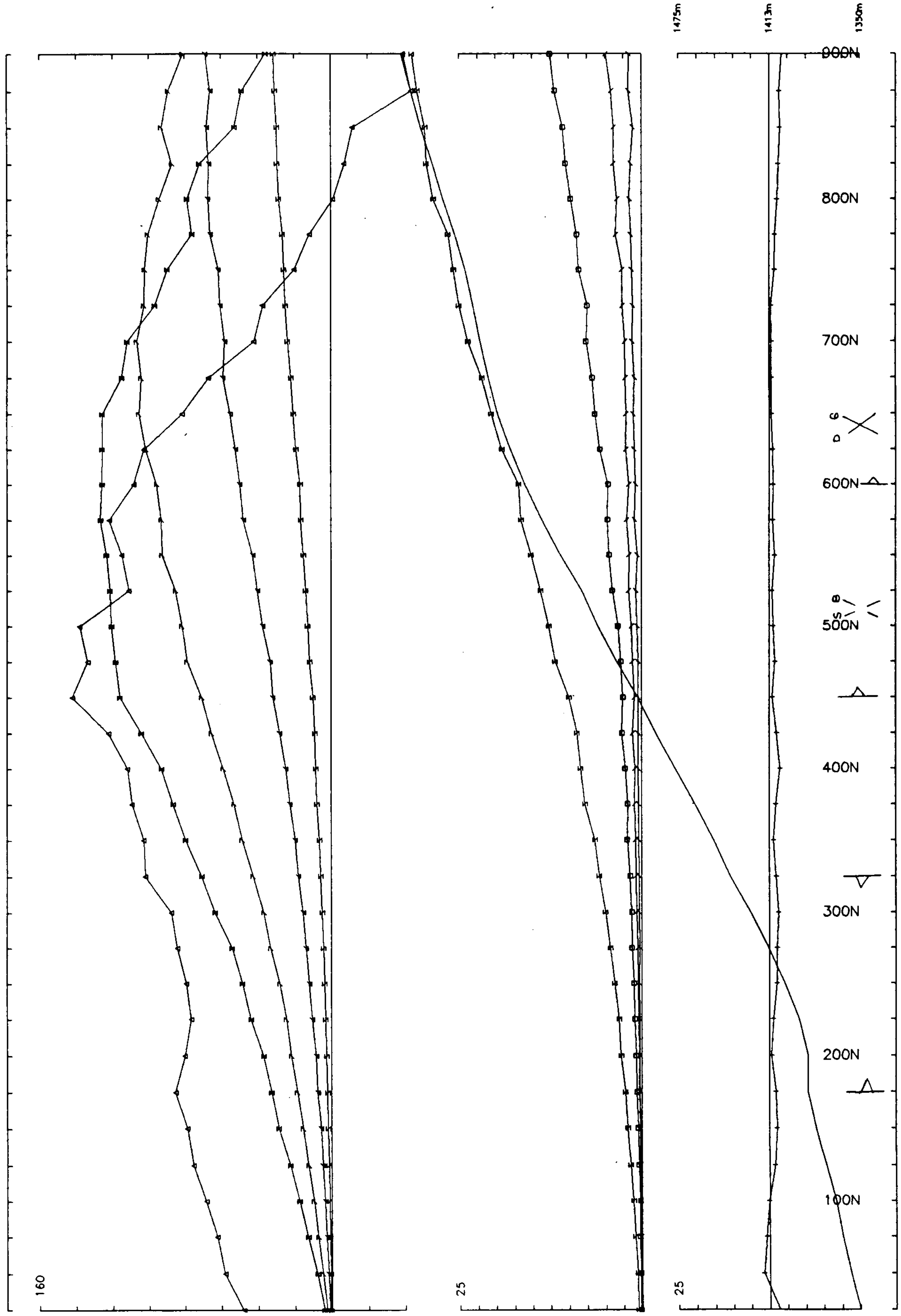

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 200E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



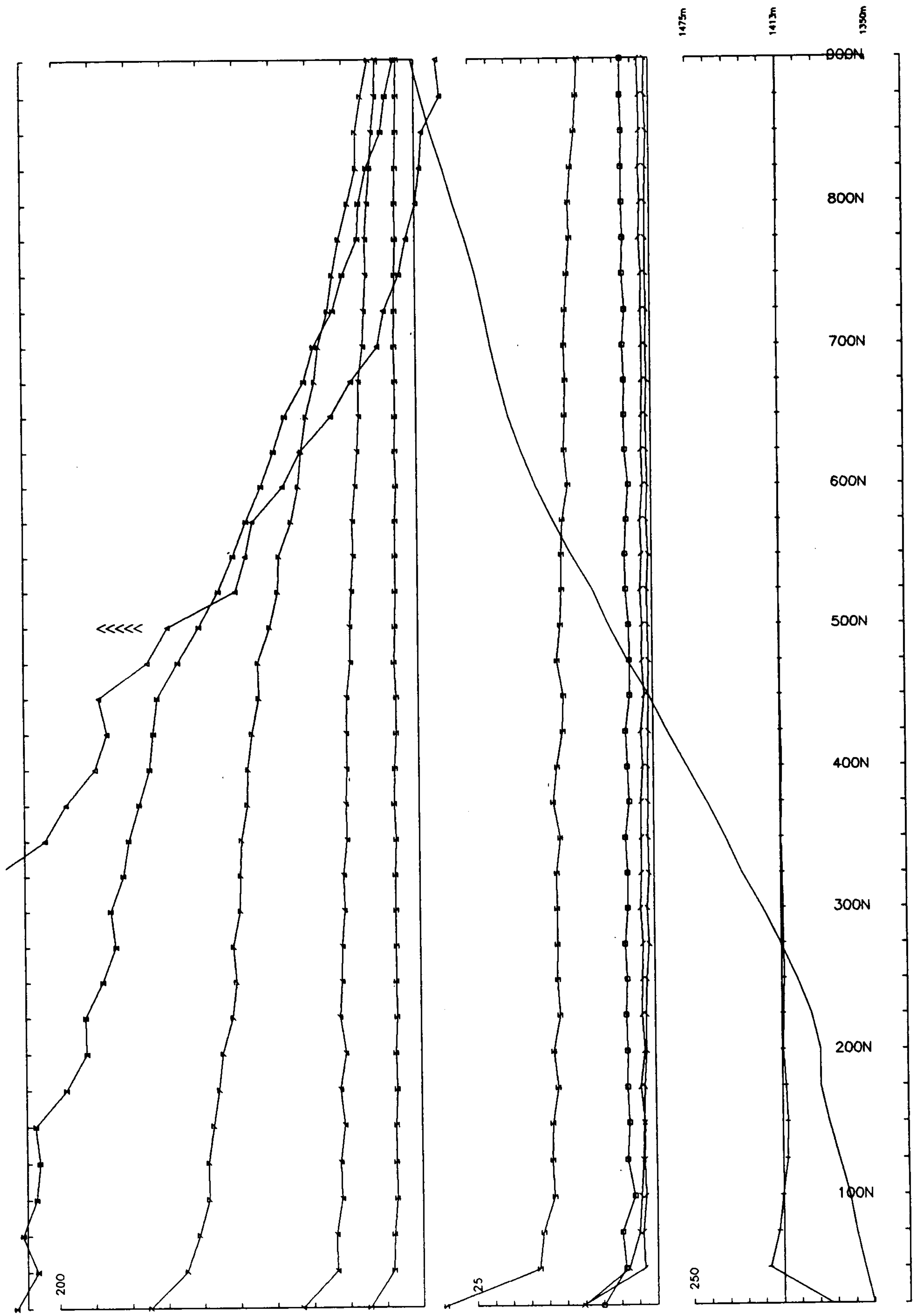

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 200E component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



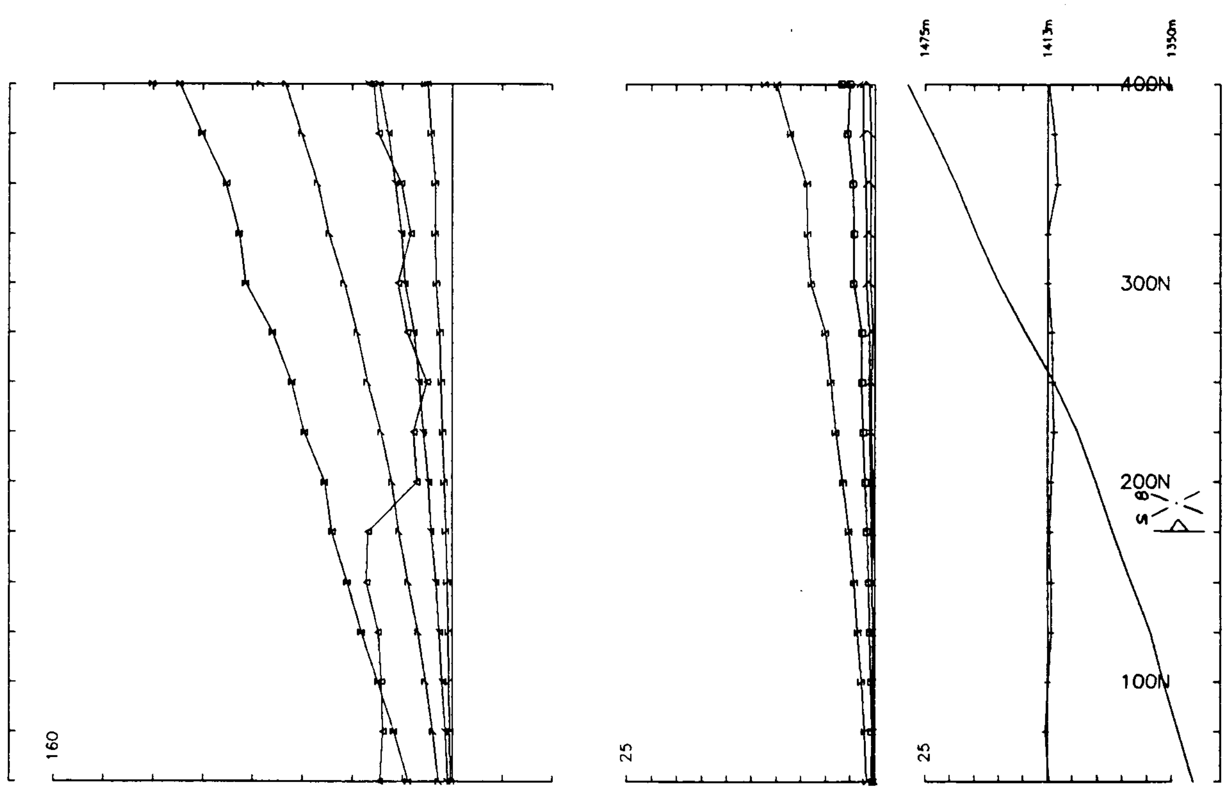

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 300E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



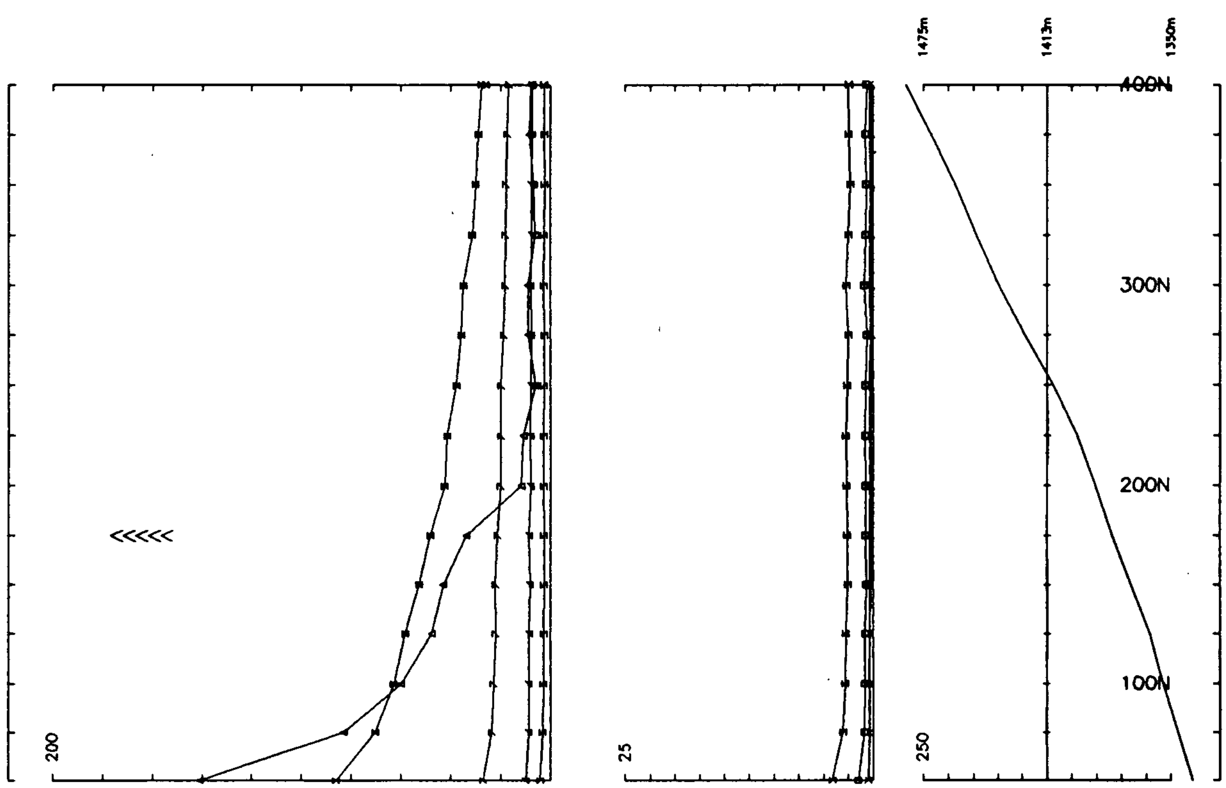

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 300E component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



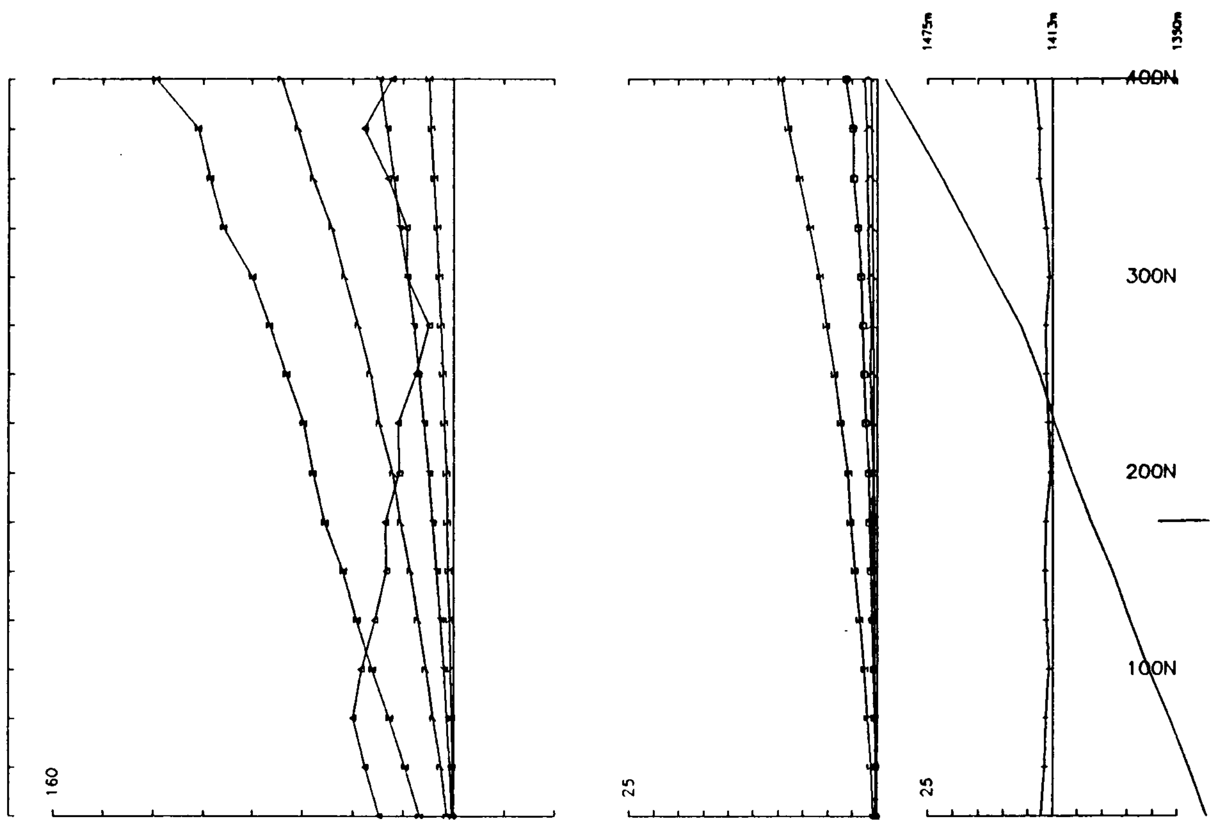

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 400E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



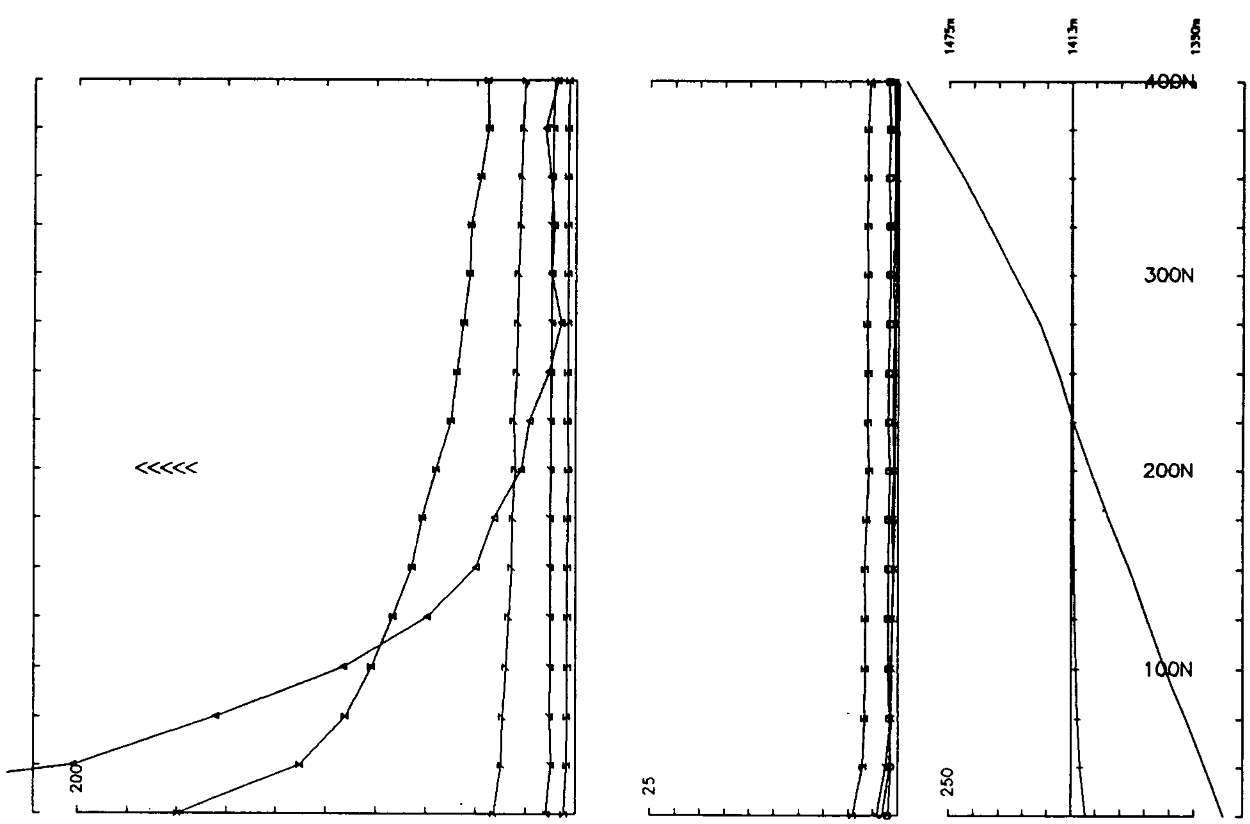

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 400E component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



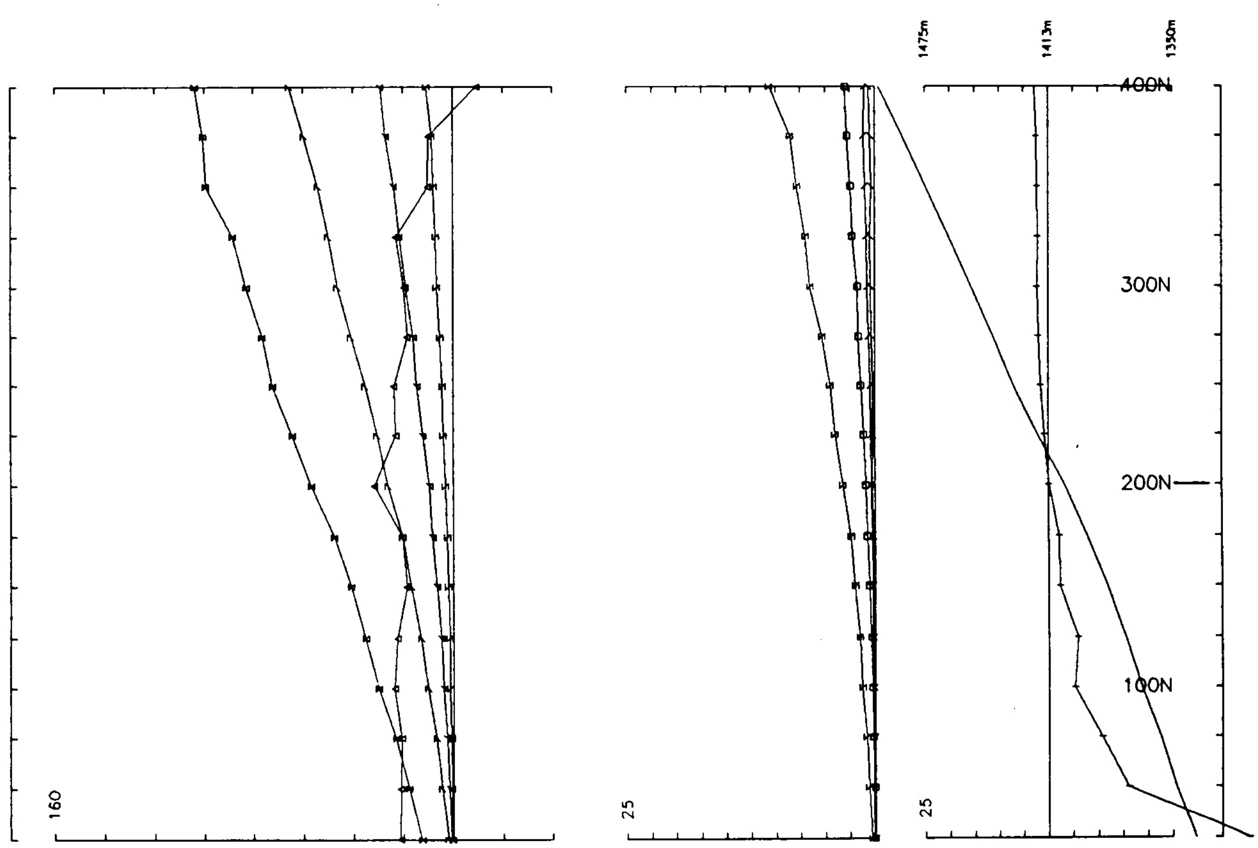

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 500E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



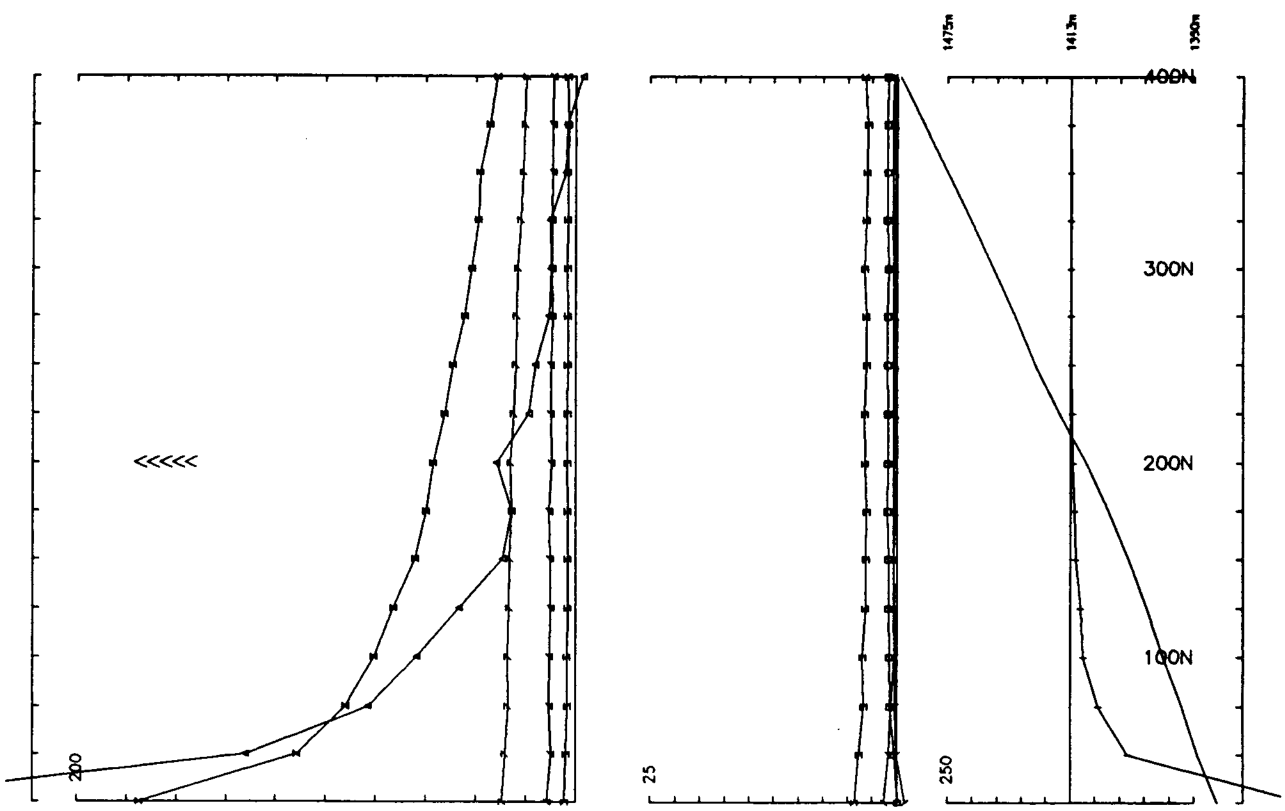

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 500E component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



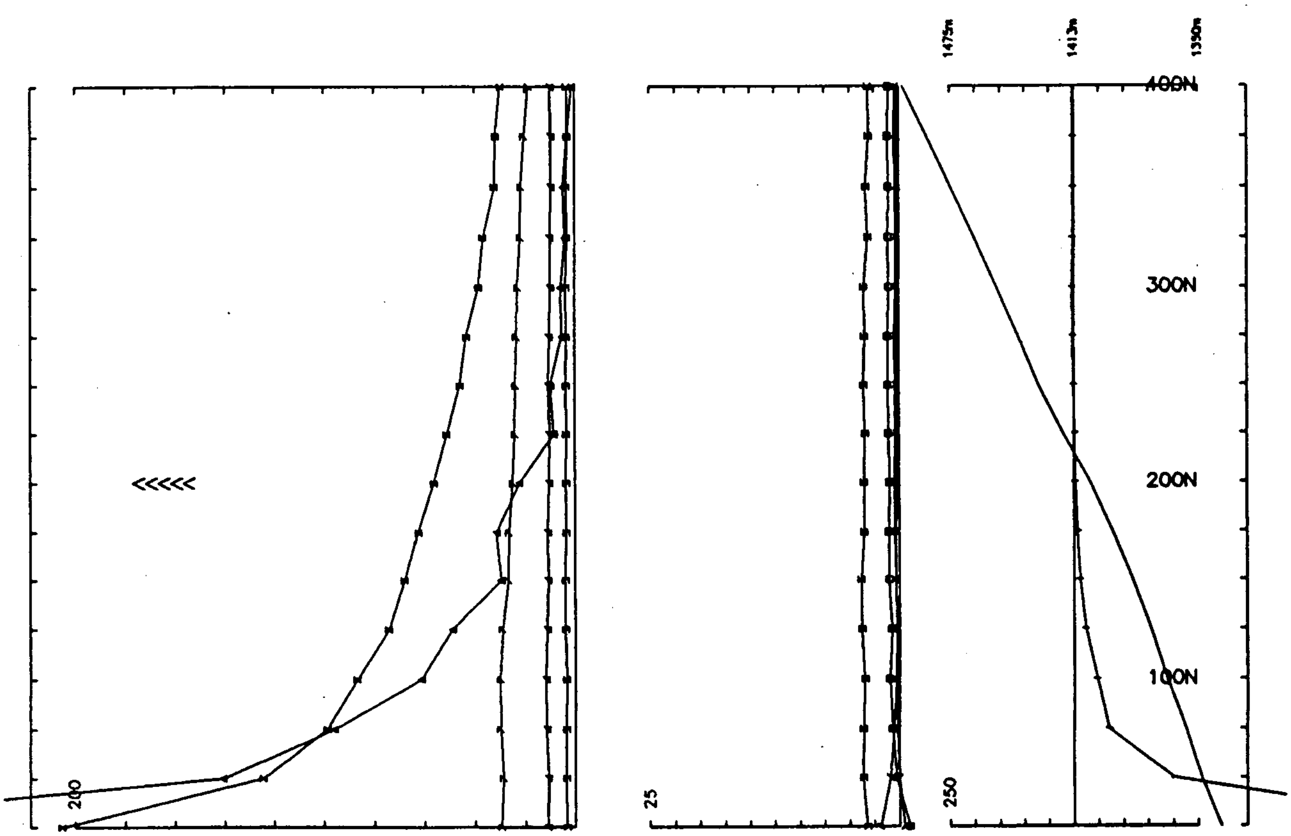

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator' SJ GEOPHYSICS LTD.

Loopno 1e Line 600E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



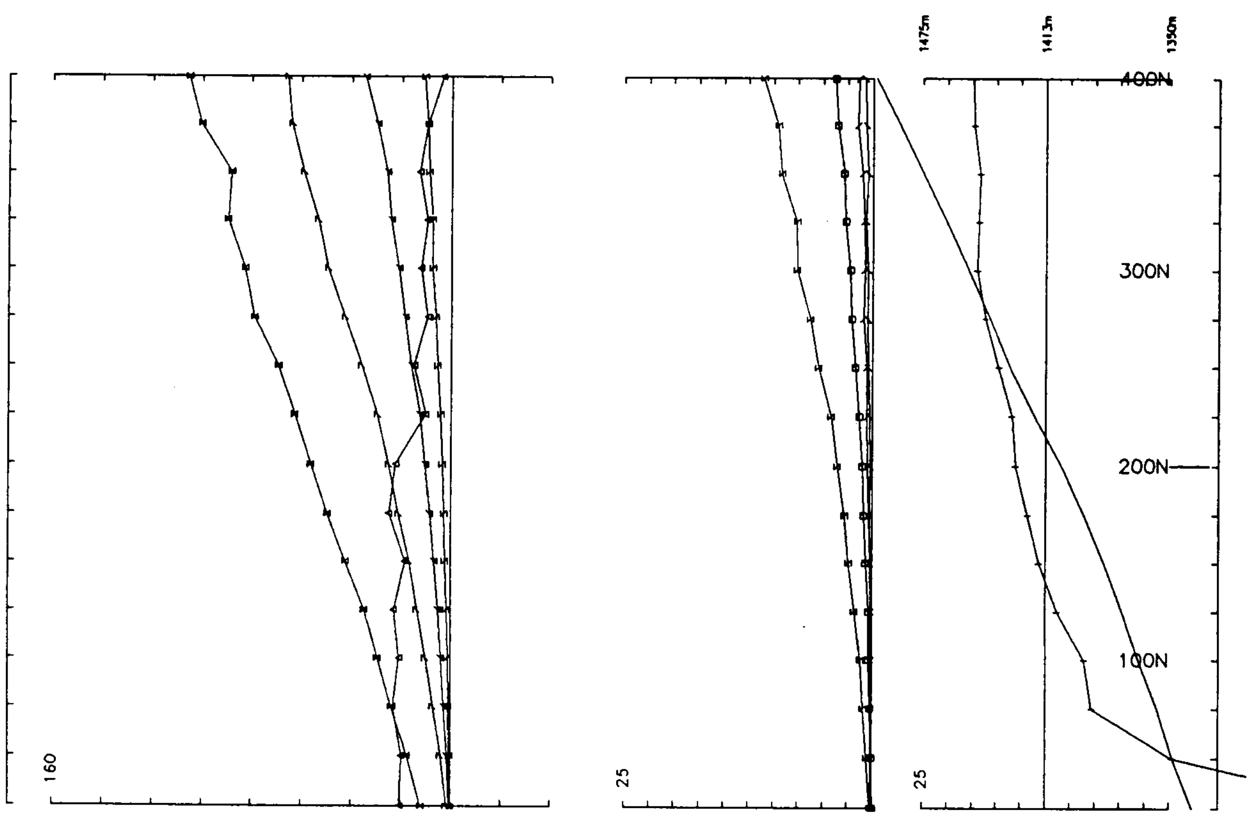

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 600E component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



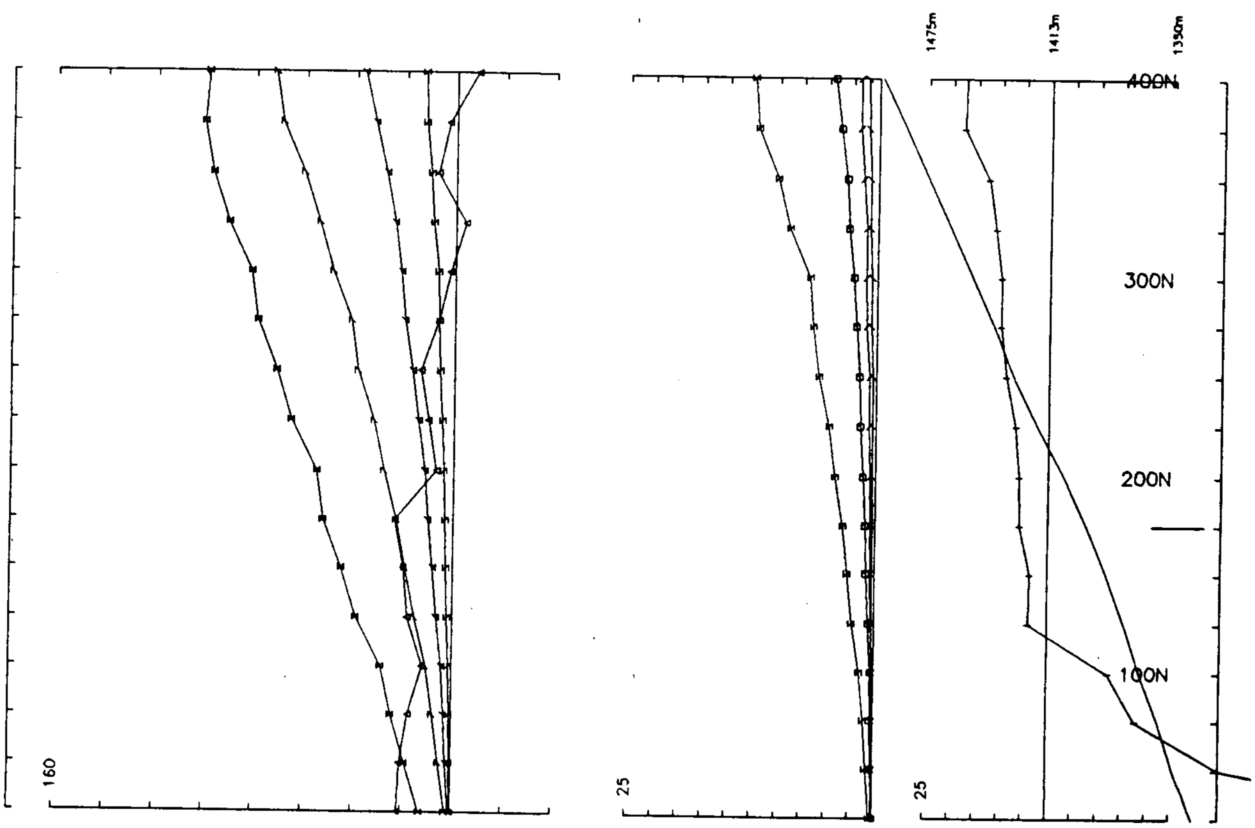

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 700E component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



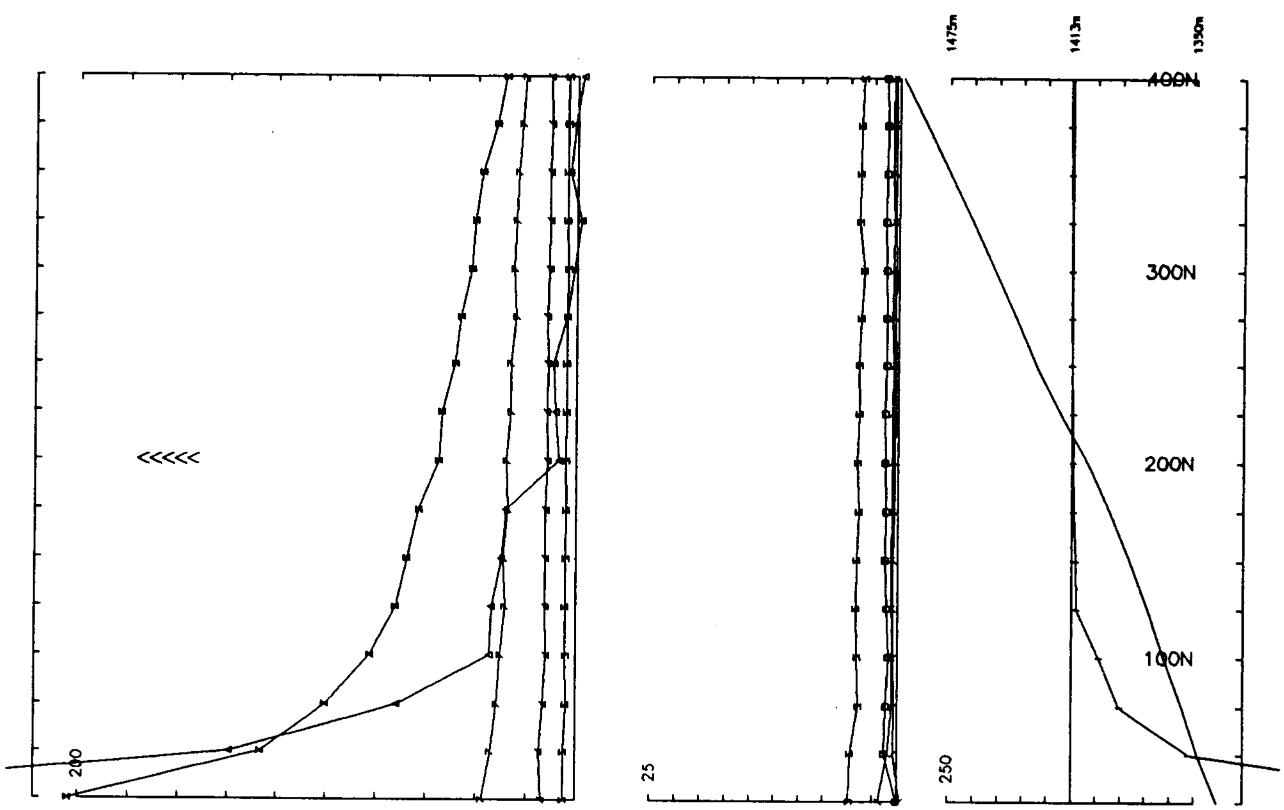

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 700E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



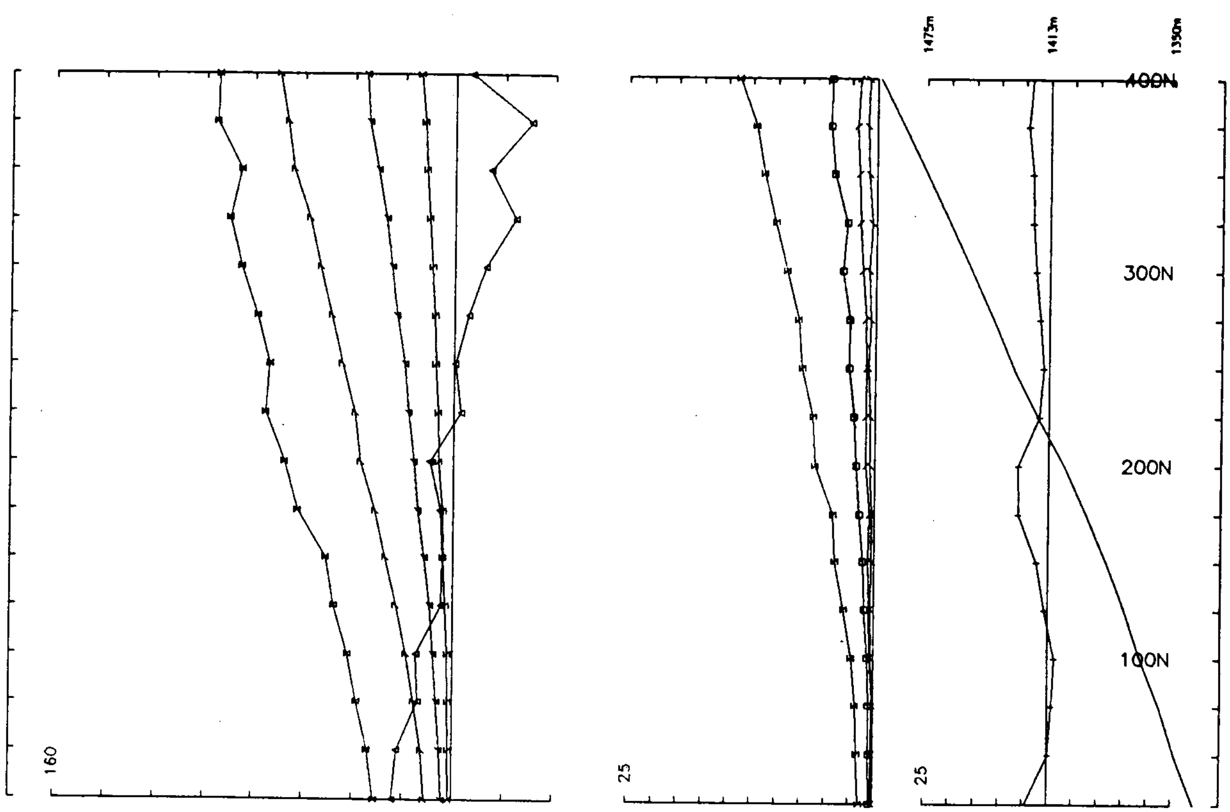

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 800E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.



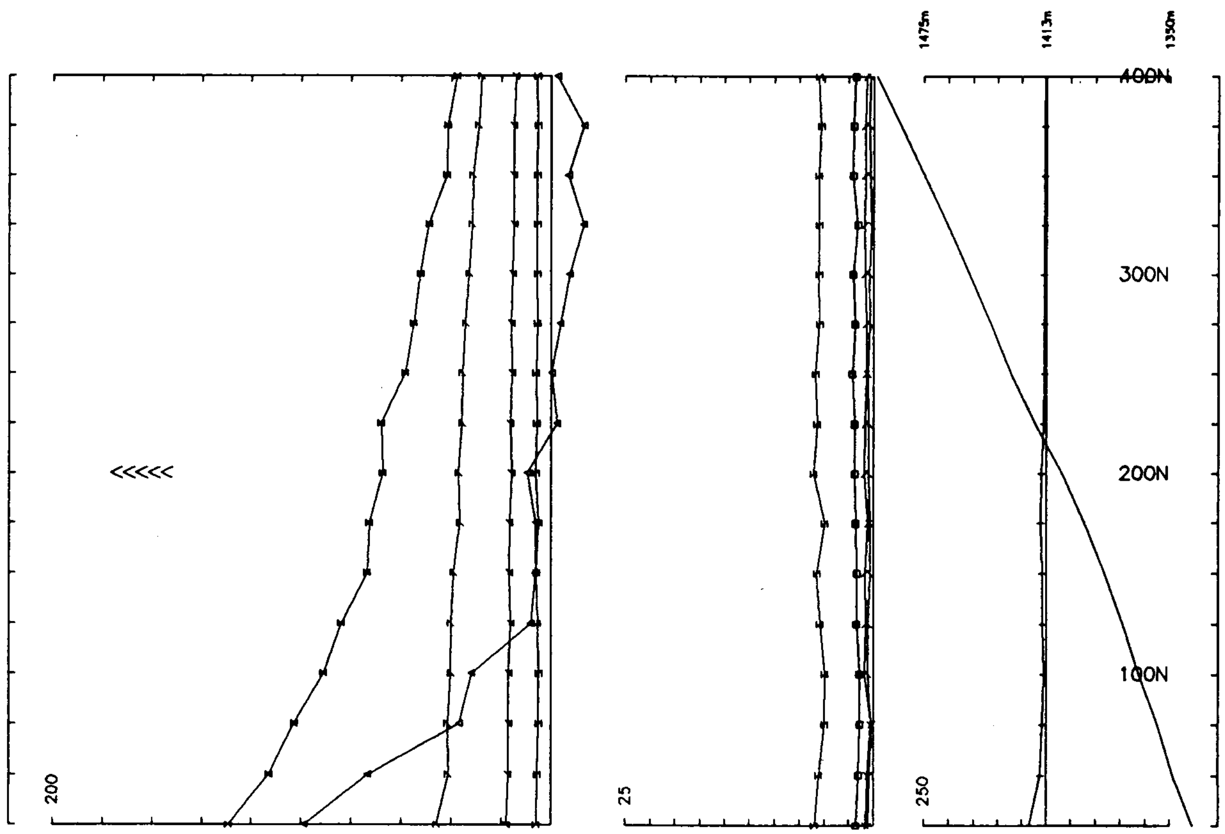

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 800E component Hz secondary Ch 1 normalized Ch 1 reduced point norm.



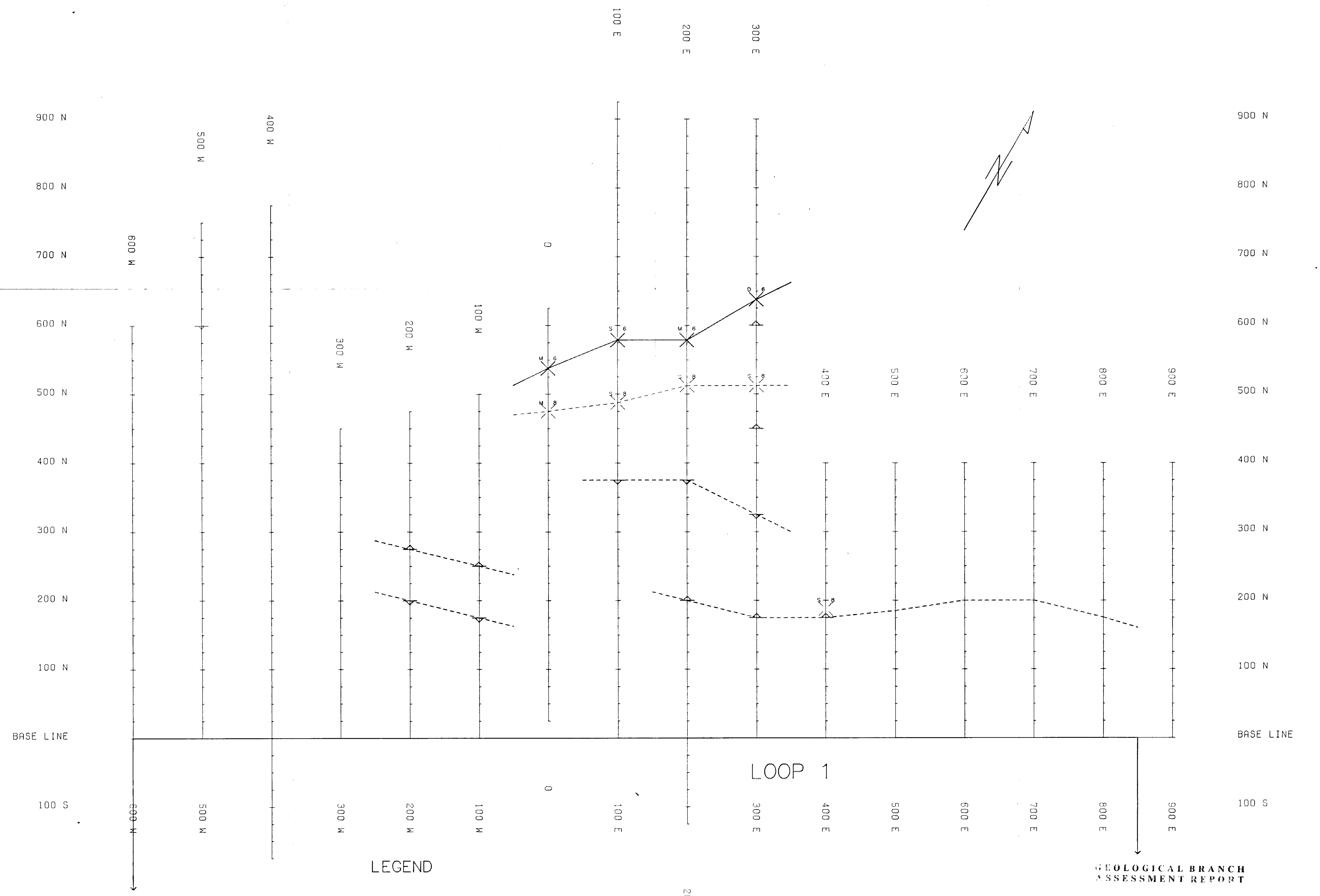

Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 900E component Hz secondary Ch 1 normalized Ch 1 reduced contin. norm.




Area MACGOLD SOUTH client INTERNATIONAL KODIAK operator SJ GEOPHYSICS LTD.

Loopno 1e Line 900E component Hz secondary Ch 1 normalized , Ch 1 reduced point norm.




## LEGEND

CONDUCTOR AXIS

(D= depth of conductor, D- deep, M- medium, S- shallow)
(CH= last channel on which conductor was seen)

- STRONG
- MEDIUM
- WEAK
- SHALLOW DIPPING CONDUCTOR

CONDUCTIVITY CONTACT

(arrow shows direction of increasing conductivity)

- WELL DEFINED CONTACT
- POORLY DEFINED CONTACT
- POSSIBLE CROSSTRUCTURES
- UTEM TRANSMITTER LOOP

INSTRUMENTATION :
LAMONTAGNE GEOPHYSICS LTD.
UTEM 3, TIME DOMAIN EM

SJ GEOPHYSICS LTD.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

# 20,736

ECSTALL MINING CORP.
OMEGA GOLD CORP.
COLAGH PROSPECT - MACGOLD CLAIMS
ISKUT - SULPHURETS AREA
SKEENA MINING DISTRICT, B.C.
N.T.S. : 104 B/10E

## UTEM SURVEY
## COMPILATION MAP

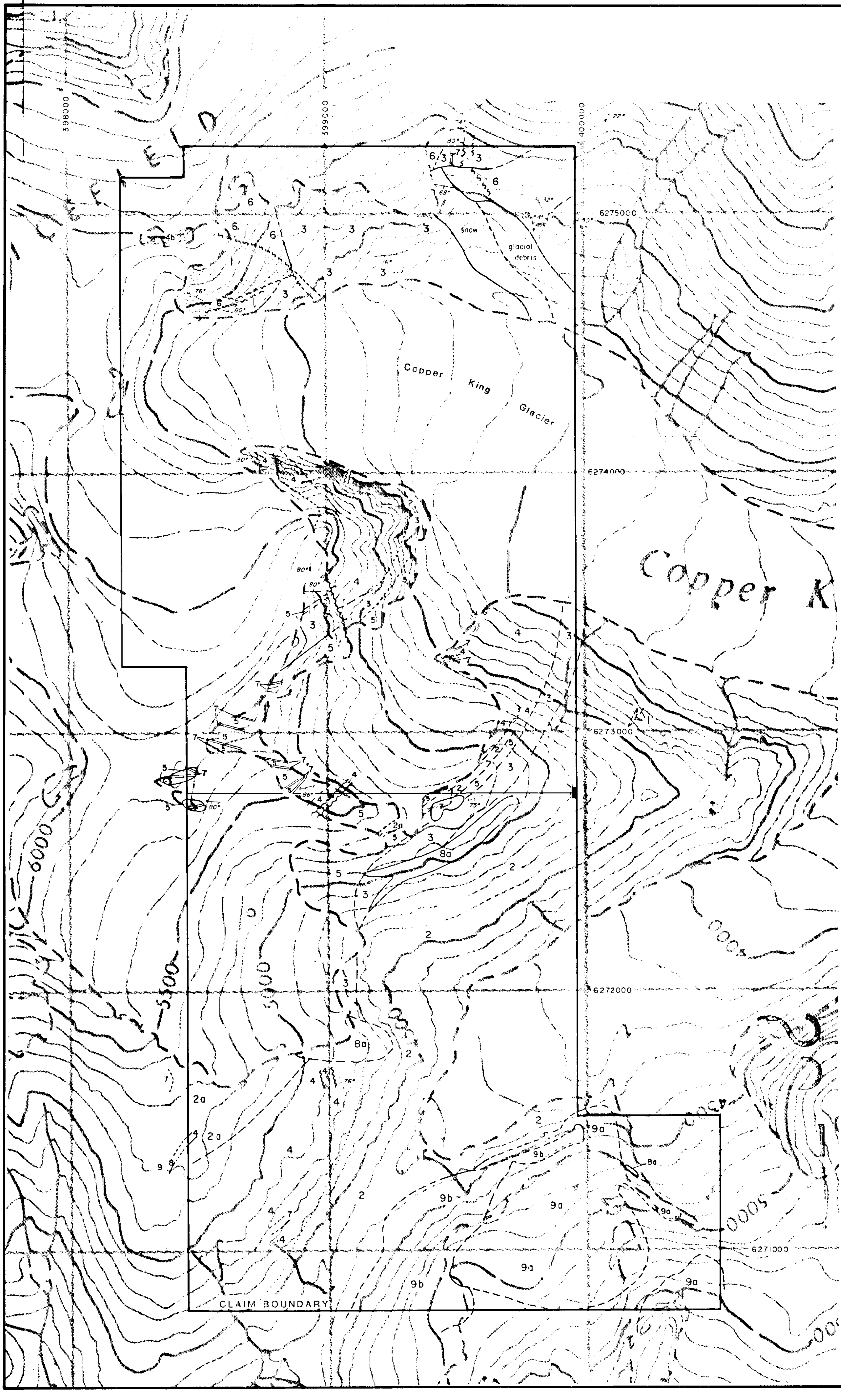
SCALE : 1:2500

50 0 50 100 150
METRES

SUMMER, 1990

PLATE : G1

(1)






**LEGEND**

Quaternary

9) (a) Interbedded, poorly lithified basaltic volcanic breccia, lapilli ± crystal tuff.

(b) Columnar to vesicular basalts ± interbedded lapilli tuff.

Late Cretaceous to Early Tertiary

8) (a) Heterogeneous Granitoids

(b) Tan brown dacite

7) Andesitic (basaltic) dikes

6) Plagioclase - hornblende or quartz diorite

Lower Jurassic Betty Creek Formation

5) Dark grey argillite and/or slate, locally cherty

4) White weathering felsic tuff/volcanic breccia

3) Fine grained, medium grey to black volcanic (andesite/basalt)

2) Intermediate, green weathering plagioclase phyric crystal tuff with heterolithic lapilli tuff to volcanic breccia horizons.

1) Greyish-green to grey-white weathering, locally plagioclase phyric banded tuffs with quartz and sulphide stockwork.

SYMBOLS

Gossans

Foliation

Bedding

Shear with dip

Faults

Geological Contacts: known, approx.

METRES
0 100 200 400 600

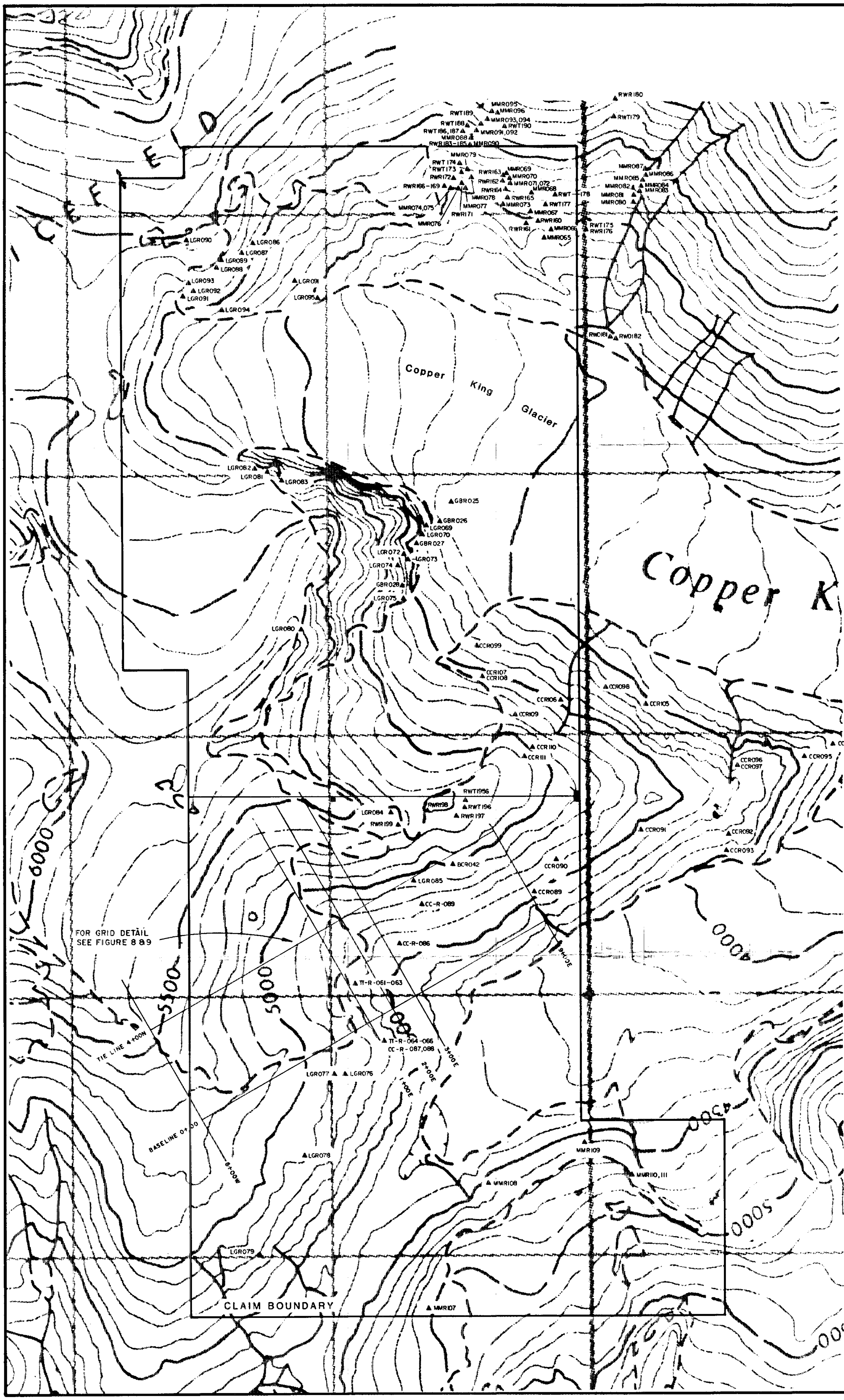
ECSTALL MINING CORPORATION
OMEGA GOLD CORPORATION

MACGOLD SOUTH
SKEENA MINING DIVISION, B. C.

GEOLOGY MAP (2)

INTERNATIONAL KODIAK RESOURCES INC.

| DATE: | NTS | SCALE: | FIGURE No. |
|---|---|---|---|
| NOV., 1990 | 104B/10E | 1:10000 | 6 |




▲ Rock samples

GEOLOGICAL BRANCH
ASSESSMENT REPORT

# 20,736

METRES

0 100 200 400 600

| |
|---|
| **ECSTALL MINING CORPORATION**<br>**OMEGA GOLD CORPORATION** |
| **MACGOLD SOUTH**<br>SKEENA MINING DIVISION, B. C. (3) |
| **SAMPLE LOCATION MAP** |
| INTERNATIONAL KODIAK RESOURCES INC. |

| DATE: | NTS: | SCALE: | FIGURE No. |
|---|---|---|---|
| NOV., 1990 | 104B/10E | 1:10000 | 7 |

<u>LEGEND</u>

**Quaternary**

8) Scoriaceous basalt surficial deposit. Red-brown weathering with vesicles partially filled with hematite.

**Late Cretaceous to Early Tertiary Intrusions**

7) Dikes - (a) Aplite and (b) Light blue-white to grey weathering dacite with blocky euhedral feldspar phenocrysts up to 3 mm in diameter. Chilled margins up to 30 cm thick with small apophyses into host lithologies.

6) Granitoid - (a) Orange weathering, iron stained, highly heterogeneous granitoids that include: red coloured banded rhyolite, plagioclase and alkali feldspar porphry and leucogranite, and (b) Granitoid with abundant xenoliths, rafts and/or screens of crystal and/or lapilli tuff, highly angular to angular with a dark chloritized rind less than 1 mm thick. The southern granitic intrusions have argillaceous xenoliths and rafts.

5) Red weathering, medium grained diorite with basalt xenoliths and an extensively chloritized contact with the host argillite.

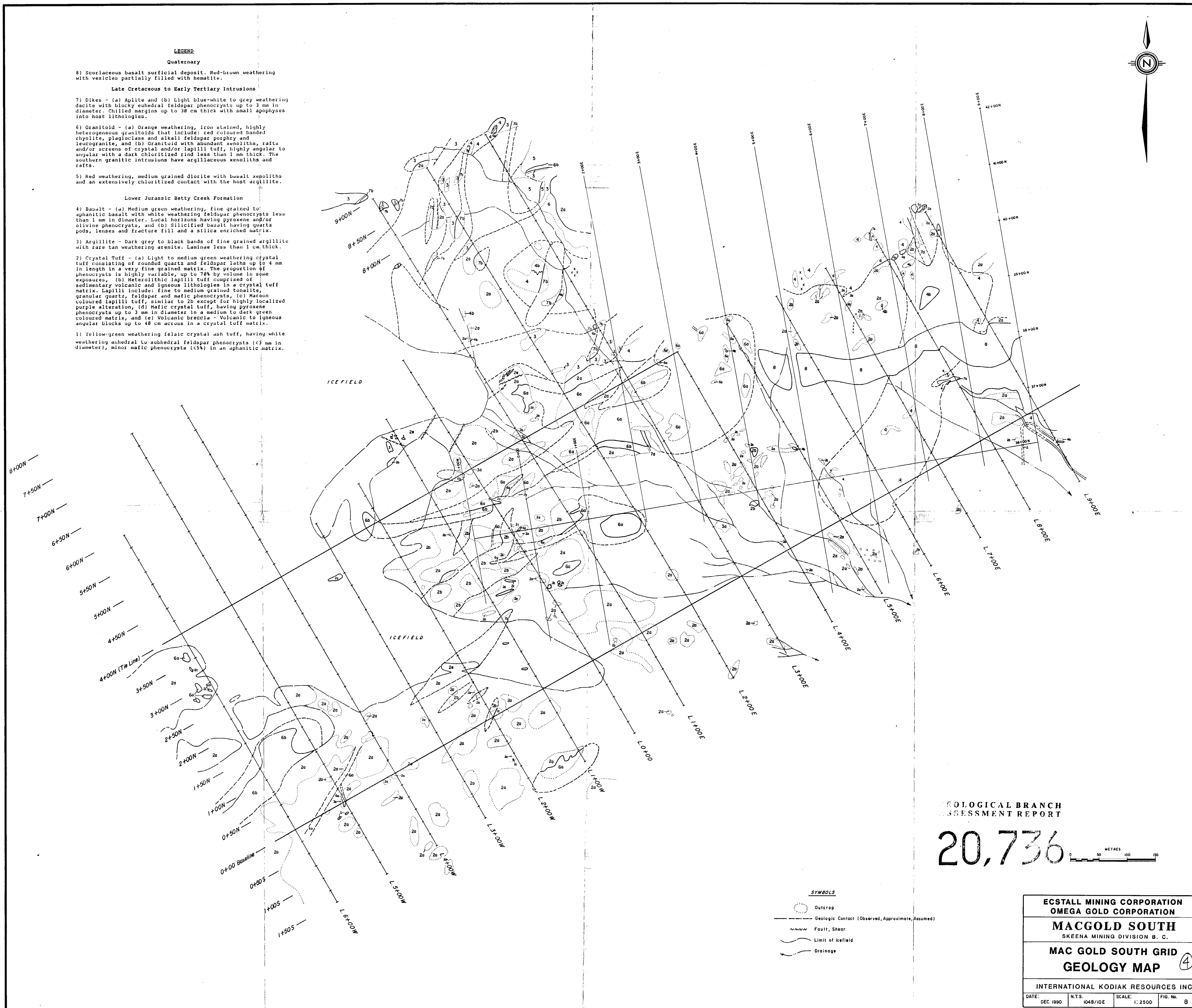
**Lower Jurassic Betty Creek Formation**

4) Basalt - (a) Medium green weathering, fine grained to aphanitic basalt with white weathering feldspar phenocrysts less than 1 mm in dimaeter. Local horizons having pyroxene and/or olivine phenocrysts, and (b) Silicified basalt having quartz pods, lenses and fracture fill and a silica enriched matrix.

3) Argillite - Dark grey to black bands of fine grained argillite with rare tan weathering arenite. Laminae less than 1 cm thick.

2) Crystal Tuff - (a) Light to medium green weathering crystal tuff consisting of rounded quartz and feldspar laths up to 4 mm in length in a very fine grained matrix. The proportion of phenocrysts is highly variable, up to 70% by volume in some exposures, (b) Heterolithic lapilli tuff comprised of sedimentary volcanic and igneous lithologies in a crystal tuff matrix. Lapilli include: fine to medium grained tonalite, granular quartz, feldspar and mafic phenocrysts, (c) Maroon coloured lapilli tuff, similar to 2b except for highly localized purple alteration, (d) Mafic crystal tuff, having pyroxene phenocrysts up to 3 mm in diameter in a medium to dark green coloured matrix, and (e) Volcanic breccia - Volcanic to igneous angular blocks up to 40 cm across in a crystal tuff matrix.

1) Yellow-green weathering felsic crystal ash tuff, having white weathering anhedral to subhedral feldspar phenocrysts (<3 mm in diameter), minor mafic phenocrysts (<5%) in an aphanitic matrix.




*SYMBOLS*

- Outcrop
- Geologic Contact (Observed, Approximate, Assumed)
- Fault, Shear
- Limit of Icefield
- Drainage

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,736

METRES 0 50 100 150

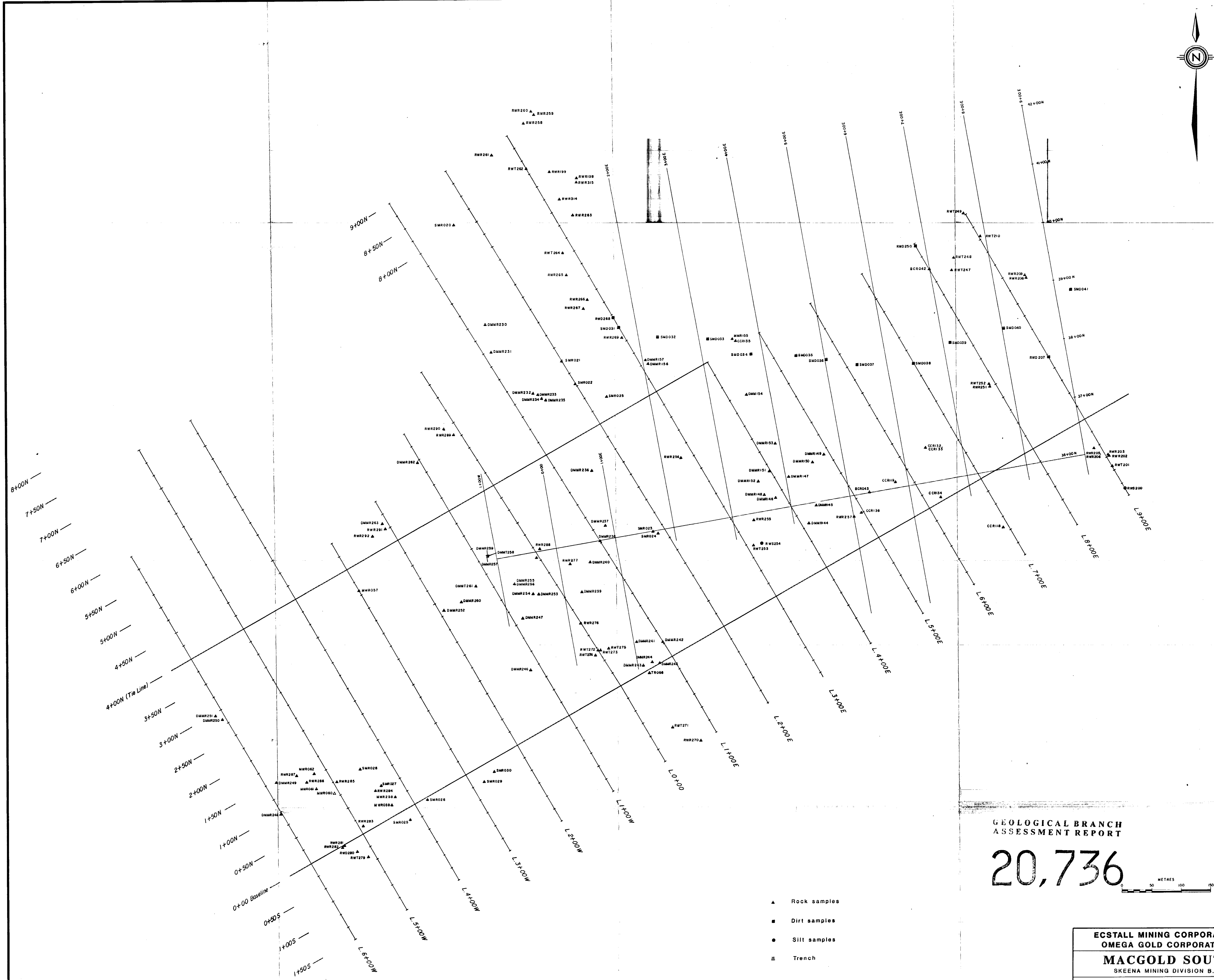
**ECSTALL MINING CORPORATION**
**OMEGA GOLD CORPORATION**

**MACGOLD SOUTH**
SKEENA MINING DIVISION B. C.

**MAC GOLD SOUTH GRID**
**GEOLOGY MAP** (4)

INTERNATIONAL KODIAK RESOURCES INC.

| DATE: | N.T.S. | SCALE: | FIG. No. |
|---|---|---|---|
| DEC. 1990 | 104B/10E | 1: 2500 | 8 |




GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,736

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

## MACGOLD SOUTH

SKEENA MINING DIVISION B. C.

**MAC GOLD SOUTH GRID** (5)

## SAMPLE LOCATION MAP

INTERNATIONAL KODIAK RESOURCES INC.

| DATE: | N.T.S. | SCALE: | FIG. No. |
|---|---|---|---|
| DEC. 1990 | 104B/10E | 1: 2500 | 9 |