

LOG NO: 02 15	RD.
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**GEOLOGICAL, GEOCHEMICAL  
AND TRENCHING  
REPORT ON THE  
MACGOLD CLAIM GROUP  
SKEENA MINING DIVISION, B.C.**

LOG NO: 0725	RD. 1
ACTION: Date received back from amendment	
FILE NO:	

**N.T.S. 104 B/10E**

**LONGITUDE: 131°36' West  
LATITUDE: 56°37' North**

**SUB-RECORDER  
RECEIVED  
FEB 12 1990  
M.R. # \_\_\_\_\_ \$ \_\_\_\_\_  
VANCOUVER, B.C.**

**FOR**

**ECSTALL MINING CORPORATION  
OMEGA GOLD CORPORATION**

**JANUARY, 1990**

**JOHN A. NICHOLSON B.Sc.**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**19,657**

## SUMMARY

The Macgold Claim Block is located near the Unuk River in the Skeena Mining Division on N.T.S. 104 B/10 with a longitude of 131°36' West and a latitude of 56°37' North. The Macgold 1 - 9 claims, which consist of 88 units are presently held by Ecstall Mining Corp. (50%) and Omega Gold Corp. (50%). The property is located 12 kilometers southwest of Calpine Resources' and Stikine Resources' Eskay Creek gold discovery. The property was staked by Ecstall/Omega in 1988 to cover prominent gossans and a known B.C.D.M. mineral occurrence.

At present the property is accessible only by helicopter, however, future plans by the provincial government to construct a road from Highway 37 are being evaluated.

An exploration program costing \$50,000 in 1989 led to the discovery of several massive sulfide showings and precious metal occurrences within a volcanogenic setting. The exploration work included soil sampling (300 samples), mapping, blast trenching and 15 line kilometers of I.P. surveying. Together they outlined a mineralized and altered zone 200 meters wide and open on strike.

A follow-up exploration program consisting of further geophysical surveying, blast trenching and drilling is being recommended for the 1990 field season at a projected cost of \$220,000.

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### INTRODUCTION

The Macgold property is in the Skeena Mining Division longitude 131°36' West, latitude 56°37' North, on N.T.S. map sheet 104 B/10. The claim block consists of 88 units and is held jointly by Ecstall Mining Corp. and Omega Gold Corp. on a 50/50 basis.

Initial ground work carried out by crews on the claims this season consisted mainly of reconnaissance geochemical silt and soil surveys. The initial results were successful in locating mineralization in several areas and a more detailed prospecting program was undertaken which led to the discovery of a stockwork epithermal system from which grab samples returned up to .58 oz/t. Au.

The follow-up program consisting of I.P. geophysical surveying and blast trenching returned very favourable results. Notable was the newly discovered J.R. Showing which had silver values of 755.0 ppm (25 oz/t.), the Ice Showing which returned .21 oz/t. gold over 2.5 meters, and the High Grade Showing which returned values of 0.007 oz/t. Au, 1.5 oz/t. Ag, 0.8% Zn, and 5.7% Cu. Subsequent soil geochemistry was undertaken to cover the anomalous zones but, because of poor soil development, the results were inconclusive.

A total of \$50,754.75 was expended during the 1989 field season.

LOCATION AND ACCESS

The Macgold claim group is located 12 kilometers southwest of Calpine Resources'-Stikine Resources' Eskay Creek Project. The property is situated at a longitude of 131°36' West and a latitude of 56°37' North on N.T.S. map sheet 104 B/10 within the Skeena Mining Division (figure 1). The property at present is accessed only by helicopter from either Bell 2 along the Stewart - Cassiar Highway or from Stewart B.C. Other means of access can be obtained by flying on regular scheduled flights from Smithers or Terrace, B.C. to the Bronson airstrip located on the Iskut River and then by helicopter 25 kilometers to the Macgold property. At present no roads access the property. Future road proposals to the Unuk River area do come to within 4 to 5 kilometers of the property.

# PROPERTY LOCATION



55°  
139°

50°  
130°

125°

120°  
UNITED STATES

OMEGA/ECSTALL

## MACGOLD PROPERTY LOCATION MAP

SKEENA M.D., B.C.

NICHOLSON & ASSOCIATES

Drawn. J.W.

Date. Nov. 1989

FIGURE

Scale.

N.T.S. 104 B10

1



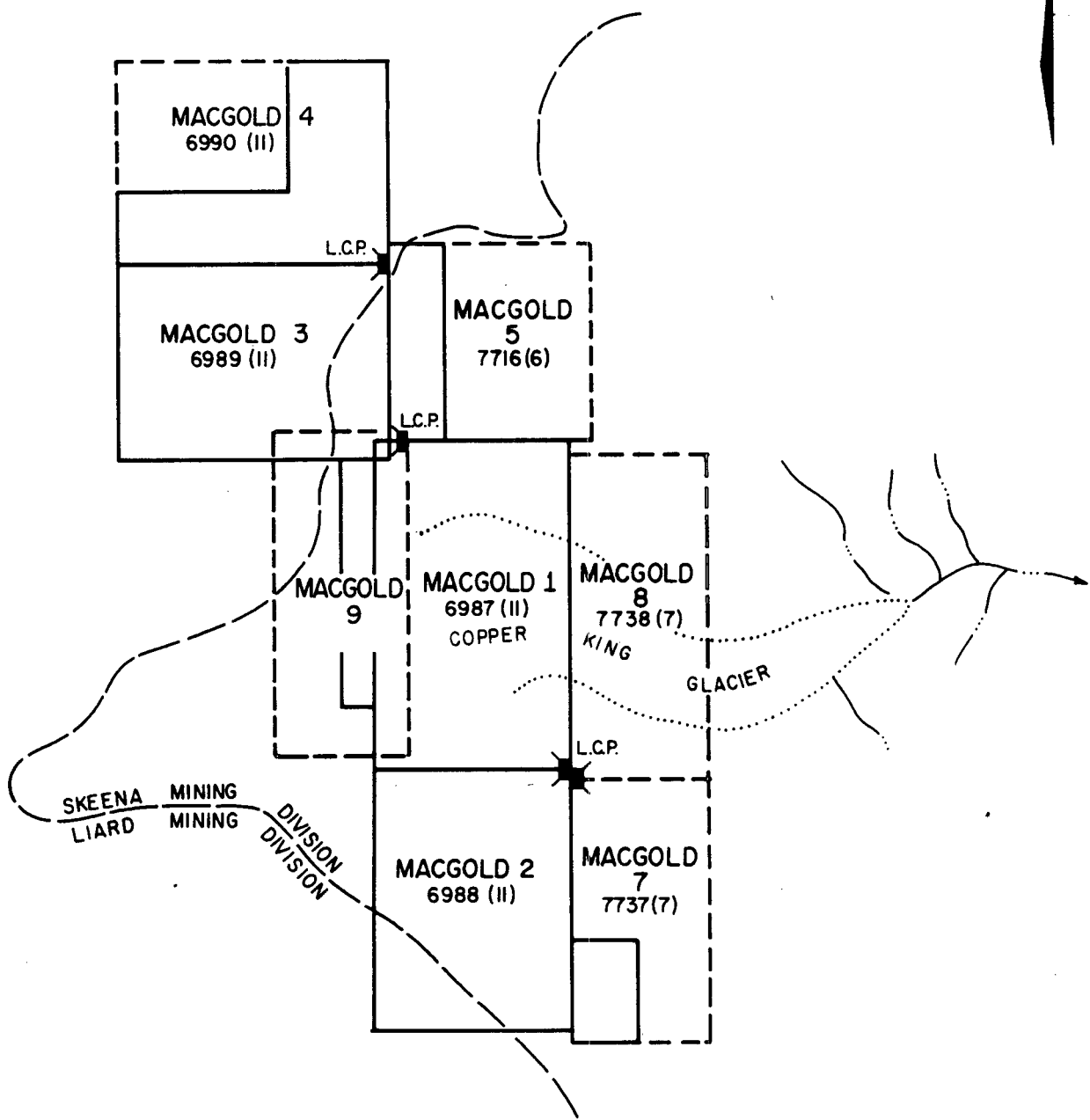
CLAIM STATUS

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 - 4) along with further claims staked later (Macgold 5 - 9) were later 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.

<u>Claim</u>	<u>Record #</u>	<u>M.D.</u>	<u>Expiry date*</u>
Macgold 1	6987	Skeena	Nov. 14/93
Macgold 2	6988	Skeena	Nov. 14/93
Macgold 3	6989	Skeena	Nov. 14/93
Macgold 4	6990	Skeena	Nov. 14/93
Macgold 5	7716	Skeena	June 30/94
Macgold 6	7717	Skeena	June 30/90
Macgold 7	7737	Skeena	July 13/94
Macgold 8	7738	Skeena	July 13/94
Macgold 9	8801	Skeena	Oct. 1/94

\* After filing the 1989 work for assessment purposes.





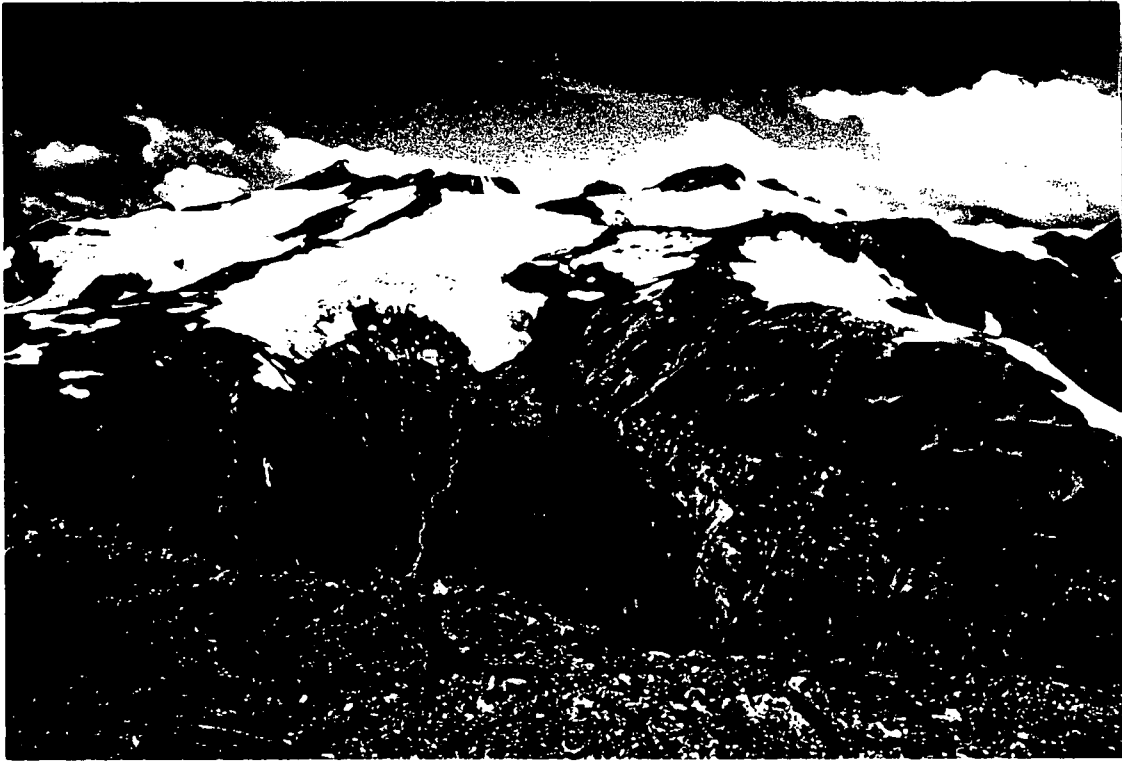
OMEGA/ECSTALL			
MACGOLD CLAIM GROUP			
CLAIM MAP			
SKEENA M.D., B.C.			
NICHOLSON & ASSOCIATES			
Drawn.	J.W.	Date.	Oct. 1989
Scale.	1:50,000	N.T.S.	1048/10E.
			FIGURE
			2

PHYSIOGRAPHY AND CLIMATE

The Macgold Group is situated within the inter coastal mountain belt of the Coast Mountain Batholith complex. The property elevation varies from 3500 ft. in the valleys to 6000 ft. along the ridges and has a varying degree of ice coverage. The valley walls are very steep and hazardous to traverse. The valley bottoms, as well as the valley walls, are generally covered in a veneer of unconsolidated glacial debris ranging from a few centimeters to several meters in thickness.

Water is plentiful in the form of glacial melt and ground water seepage. Vegetation is limited to the occasional grassy slope and alpine vegetation. No trees of any sort exist.

Climatically the property is under the influence of coastal weather patterns. As a result, the weather varies from warm summer days to cool wet fall conditions to that of 15 meters of snow in the winter months. Because of these weather changes the property is workable only from June to the latter part of September.



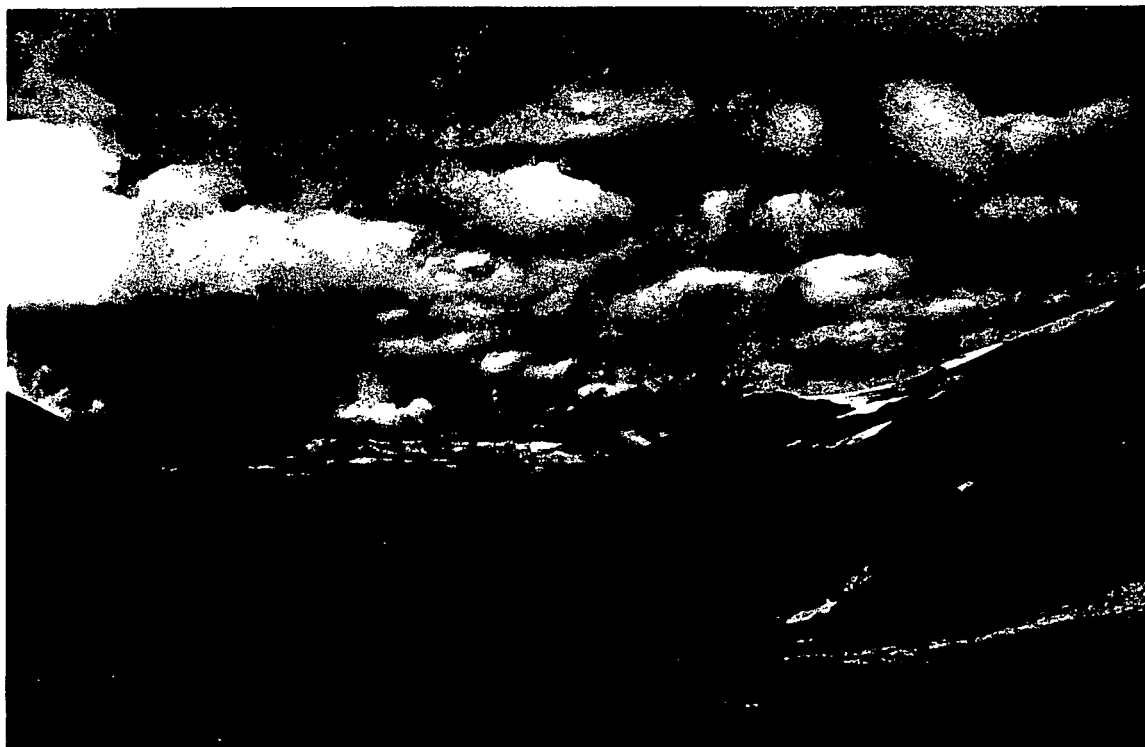
*Looking west up Copper King South*



*Copper King South (Mineralized Zone)*



*Looking west showing humucky topography of Mineralized Zone*



*Looking east down Copper King South (Calpine in background)*

HISTORY

The Macgold - Copper King Glacier area has for the most part seen very little mineral exploration. No record of work is reported in Government publications. The only report of any work comes from local prospectors (John Lehto) who reportedly found pieces of copper stained float coming from the toe of Copper King Glacier. This is the first reported indication of work in the area.

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 & L Deposit.

The most recent report of any work on the ground was in 1988 when B.C.D.M. field crews mapped the property on a regional basis and reported finding mineralization with base metal credits (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. Further field work was undertaken in 1989 by B.C.D.M. in the vicinity of the Colagh Showing and resulted in several smaller showings being found.

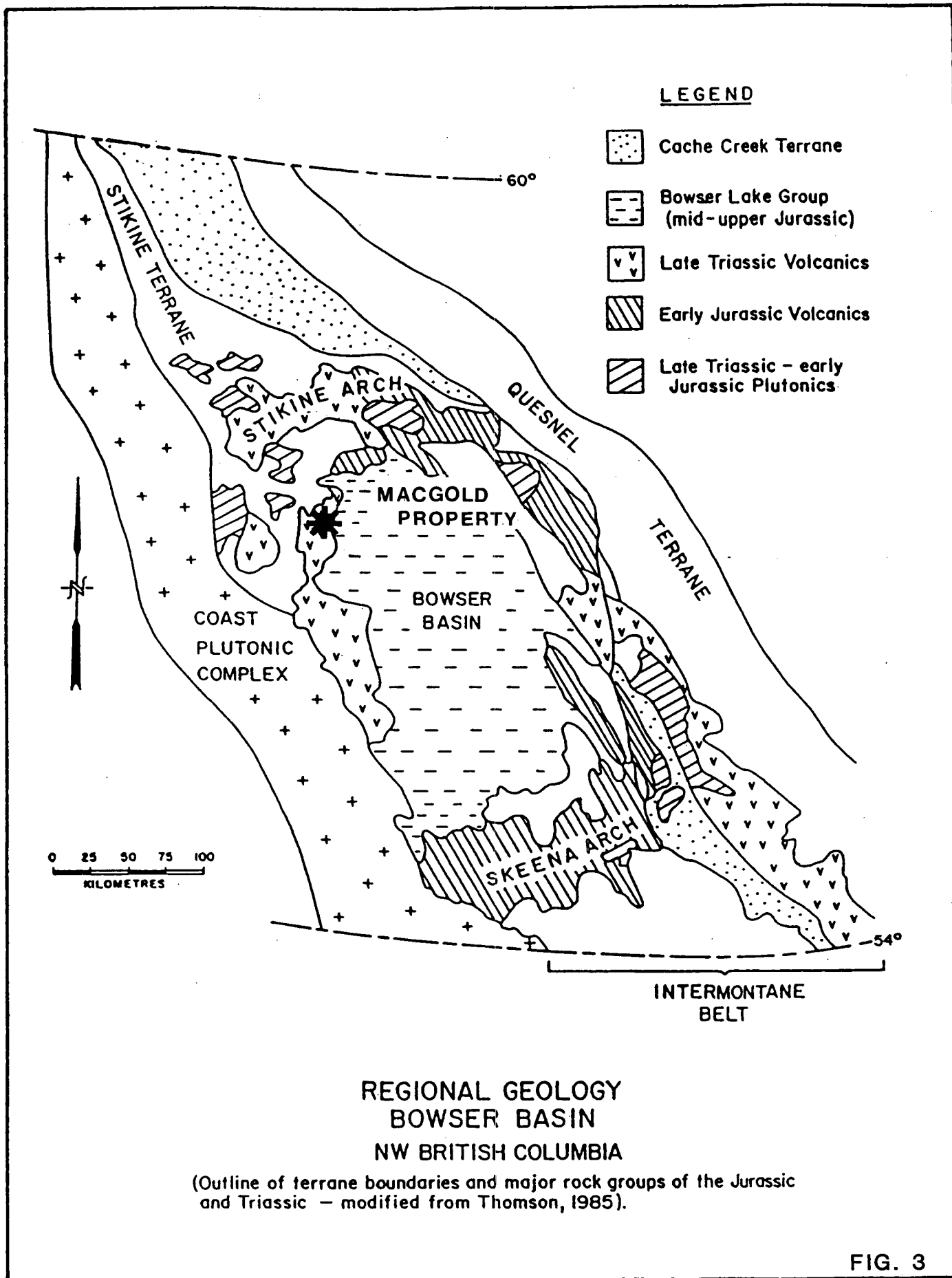
### REGIONAL GEOLOGY

The Unuk River area is underlain by thick, weakly metamorphosed Upper Triassic to Lower Jurassic volcanic and sedimentary arc-related units overlain by Middle Jurassic successor basin sedimentary units (Bowser Basin). Large scale northeast plunging vertical folds and major north trending cataclastic and fault zones are thought to be related to early Cretaceous plutonism and orogenesis (Figure 3).

Details regarding the genesis and geological setting of the Unuk River area are continually being revised. The first geologic map which included the area now covered by the Macgold Group was included in a report by Grove (1971) on the Stewart area. A 1986 report by Grove dealing with the Stewart and Iskut River region included an updated map.

The Stewart Complex, as defined by Grove, lies south of the Iskut River and north of Alice Arm. It is bounded by the Coast Plutonic Complex on the west and the Bowser Basin to the east. It is composed of Late Paleozoic and Mesozoic volcanics and sediments which were intruded during Mesozoic and Tertiary times.

The B.C.D.M. has conducted enough testing to permit broad correlation of rocks in the Unuk River area with the main Mesozoic groups of Northwestern B.C.: namely Stuhini, Hazelton and Bowser Lake. Grove (1986) presented a table of relationships between plutonism, volcanism and mineralization (Figure 4).



Most of the Unuk River map area is underlain by rocks of the Hazelton Group. The Hazelton Group has been subdivided (Grove, 1986) into the early Jurassic Unuk River Formation, the Middle Jurassic Betty Creek and Salmon River Formations, and the Upper Jurassic Nass Formation. The Hazelton Group rocks form an angular nonconformity with the underlying Upper Triassic rocks of the Takla Group. The andesite and basalt flows of the Takla Group were formed during a period of very active calc - alkaline volcanism. The volcanic sequences of the Unuk River Formation are characterized by basal pyroclastic flows that are overlain by tuffs and argillites, and finally by some volcanic breccia and conglomerates with interbedded tuffs, greywackes and siltstones. At the end of the Early Jurassic the volcanic complex present was uplifted to form the Stikine Arch. During Middle to Late Jurassic, sedimentary sequences were formed from detritus that was coming off the uplifted arch and being deposited in the Bowser Basin. This sedimentary assemblage is present in the Betty Creek, Salmon River and Nass Formations.

These volcanic and sedimentary sequences were intruded by various phases of the Coast Plutonic Complex from Middle Cretaceous to Early Tertiary.



PERIOD	EPOCH	TECTONIC EVENT	PLUTONS	VOLCANICS	FORMATIONS	MINERALIZATION	
QUAT.	Recent to Miocene	Uplift & Erosion Faulting		Basalt dykes	Flows		
	1 m.y.						
TERTIARY	Oligocene	?		Dykes, sills		Vein deposits; silver, lead, zinc	
	Eocene Paleocene	Folding & Faulting		Hyder plutons, etc. Alice Arm intrusions	(SUSTUT)	Vein deposits; silver, lead, zinc Prophyry deposits; molybdenite	
CRETACEOUS	Upper	?	?		(SKEENA)	?	
	Lower	? Erosion	?	Satellite plutons		Vein deposits; silver, lead, zinc	
JURASSIC	Upper	Erosion ? Faulting & Folding		Satellite plutons	NASS		
	Middle	Erosion ± Faulting Erosion Faulting		Texas Creek pluton, etc. Unuk River intrusions	Rhyolite and andesitic pillow lavas	SALMON RIVER	? Silbak Premier deposit; gold, silver Anyox deposits; massive sulphides Mitchell Creek; hydrothermal deposits, chalcopyrite, molybdenite
				(Satellite plutons)	Andesite and pillow lavas	BETTY CREEK	
Lower	Erosion Faulting Cataclasis Folding	?	Satellite plutons	Andesites, basalts and rhyolite flows, pillow lavas	UNUK RIVER FM.	Granduc deposit, massive sulphides, chalcopyrite pyrite phyrrotite; minor gold quartz veins	
TRIASSIC	Upper	Erosion Faulting Folding	?	Satellite plutons	Andesite and basalt flows	TAKLA GRP.	Max deposits; magnetite and chalcopyrite
	230	Erosion	?				

FIGURE 4. Table of Formations and Relationship Between Plutonism, Volcanism and Mineralization, Stewart Complex. (from Grove, 1986)

### LOCAL GEOLOGY

The Macgold - Copper King south area, which was the focus for most of the work undertaken on the property during 1989, appears to be a volcanogenic setting. This setting is very favourable for massive sulfide occurrences similar to those found in the Adams Plateau area of south central B.C. and for shear related gold occurrences similar to those found at Johnny Mtn., 30 kilometers to the southeast.

The rocks were mapped originally by B.C.D.M. personnel as dacite lapilli tuff and andesitic lapilli tuffs with minor black bedded siltstone/shales of the Betty Creek Formation (Lower Jurassic) within the Hazelton Group. A large portion of the property was covered by glacial debris which made mapping somewhat difficult especially in the lower elevations (Figure 5a).

The Copper King South area is underlain by several volcanic successions which are recognized by the composite nature of the rocks. The andesites throughout much of the sequence are interbedded and conformable with the dacites. The units are flows and appear to thicken towards the west. The dacitic tops and bottoms are marked by dacitic breccia units which have been kaolinized and may be lahars. These two units are intermixed with one another and in many instances are one formation. Occasional areas of flow banded lithic tuffs and lithic tuff units were found to be interlaminated within the andesites and dacites. Underlying the

*dacite/andesite units and the lithic tuffs is a rhyolitic unit which occurs as fragments within the dacite breccia and as a basement rock lying conformable to the dacites and andesites. Distinctive quartz carbonate units and diabase dykes cut through these units as a purple maroon basaltic unit. These units are thought to be feeders for mineralization and in most instances areas surrounding them were weakly to moderately mineralized. Below is listed the rock units in order of age from the youngest to the oldest.*

*UNIT 1: Gravels, alluvium, glacial outwash poorly sorted.*

*UNIT 2: Andesite, grey, siliceous, minor inclusions of tuffaceous material. 2A: Andesite Breccia, grey, siliceous, clasts of unconsolidated material subhedral to euhedral. Unit 2 is interbedded with that of Unit 7.*

*UNIT 3: Diabase Dykes, dark, aphanitic, inclusions of augite present; inclusions of chalcopyrite disseminated throughout.*

*UNIT 4: Maroon Andesite (Basalt) purplish in colour and contains inclusions of black unknown material. 4A: Maroon Basalt: purplish in colour and contains large brecciated clasts of altered dacitic material.*

*UNIT 5: Lithic Tuff, greyish in colour, fine grained with lithic fragments of ash. 5A: Flow banded lithic tuff, greyish.*

- UNIT 6:** *Quartz Carbonate, orange brown, fizzes with acid, predominant unit infilling fracture sets.*
- UNIT 7:** *Dacite, light to dark green in colour, weak to moderately siliceous, inclusions of tuffaceous material within matrix. 7A: Dacite Breccia, light to dark green in colour, moderately siliceous, inclusions of andesite breccia clasts, disseminated pyrite throughout. 7B: Gossanous Dacite, bright orange, heavy oxidation, occasional breccia clasts. 7C: Kaolinized Dacite Breccia, Brecciated Dacite which contains kaolinized clasts of feldspar within a brecciated matrix.*
- UNIT 8:** *Rhyolite, light to medium grey in colour, moderately silicified, 8A: Flow Banded Rhyolite, light grey to grey in colour contains flow banding throughout.*

STRUCTURAL FEATURES

On the Macgold property, structural features were not recognized and if they existed, they would appear to be masked in alluvium and gravel. Structures noted were high angle fracture sets and high angled shears. The fracture sets were trending 030° - 040° north and had dips in the range of 65-70 degrees. The high angle faulting and shearing noticed on the property varied in strike but in all noted locations they were dipping 60 - 90 degrees to the west. This feature of high angle faulting was also verified by a geophysical I.P. survey undertaken on the property by Delta Geophysical Ltd. The geophysical report and maps will be appended to this report upon receipt.

MINERALIZATION

Sulfide mineralization on the Macgold claim group occurs in several forms. The most prominent of these mineralized areas are the bright red gossanous zones that one sees at the head of both Copper King Glacier and Copper King South. The sulfides found on the property are listed below in order of abundance.

PYRITE: Pyrite is the most widespread sulfide on the property. The pyrite occurs in two forms, either massive or disseminated. The massive pyrite appears to be diagenetic and for the better part carries no gold or precious metal values. The other forms that pyrite occurs in are either fine grained disseminations or the occasional radial section. Some vuggy sections with pyrite selvages were also noted.

CHALCOPYRITE: This is the second most abundant sulfide found on the property. Like pyrite, chalcopyrite is widespread and occurs in several forms. The most common occurrence being fine grained disseminations, which occur either as discrete grains or as inclusions within galena or pyrite. Chalcopyrite also occurs as a coarse grained and massive variety intergrown with coarse grained sphalerite as seen at the HIGH GRADE showing.

GALENA: Galena occurs on the property in many forms and is usually found with chalcopyrite and sphalerite in quartz carbonate veins. The most common occurring form is of

massive, coarse grained galena in veinlets which are typically no more than 10 cm. wide. The veinlets generally pinch and swell and can be traced on surface for 3 to 5 meters. The other form that galena occurs in is of a fine grained disseminated nature which generally contains more chalcopyrite and always carries better gold values.

SPHALERITE: Like chalcopyrite, sphalerite occurs in several forms, the most spectacular being massive. This can be seen at the High Grade showing where the sphalerite is coarse grained and is intergrown with chalcopyrite. The other forms which the sphalerite occurs is as fine grained bands or as coarse grained disseminated globules in the rock. The sphalerite is generally associated with galena and in some instances will contain fine grained inclusions of chalcopyrite.

ARSENOPYRITE: Arsenopyrite was generally associated with pyrite. The arsenopyrite would occur either as fine grained disseminations or inclusions within the pyrite. Scorodite staining was usually present and acted as a pathfinder for the arsenopyrite.

OXIDES: The most common occurring oxides on the property were malachite staining, azurite staining, and to a lesser amount scorodite and hydrozincite staining.

GOLD/SILVER: No visible gold or silver was found on the property. However, the presence of gold and silver in assays from the various showings does indicate that these two

elements are present. The most likely correlation for the gold would be with the chalcopyrite. This corresponds with the higher than usual copper values that are associated with the gold assays. The silver values are associated with tetrahedrite. The tetrahedrite may be contained within the galena and hence would result in the elevated silver values.



ALTERATION

The alteration that is recognized on the Macgold claim group consists primarily of propylitic and argillic alteration.

Propylitic alteration was noticed within the dacites and andesites in the form of chlorite and epidote stringers infilling along fracture planes and as inclusions.

Argillic alteration was found in the dacite breccia unit in which inclusions of feldspar had been argillically altered.

Mineralization within the altered zone was primarily pyrite that was usually associated with propylitic zonation. The massive sulfide and gold related mineralization was also coincidental with propylitic alteration and in some instances the mineralization was bound by minor amounts of argillically altered rocks.

The dimensions of the altered zone was coincidental to the outlined geophysical I.P. anomaly which had dimensions of up to 200 meters wide with an open ended strike length. Other less prominent zones were scattered throughout the property and had similar mineralized zonations.

GEOCHEMICAL SAMPLING RESULTS

During the months of August through September, a total of 103 soil samples, 10 silt samples and 108 rock samples were collected by crews of Nicholson and Associates on the Macgold Group.

A soil geochemical survey was carried out over the southwestern corner of the property on a grid which measured 1000 meters by 600 meters. An 800 meter east-west picketed and tight chained baseline was placed along the ridge between Copper King South and Copper King Glaciers. This baseline had stations every 100 meters on a bearing of 080° true north. The cross lines were run at 100° east-west with sample stations every 50 meters and were marked with orange flagging tape. Soil samples were obtained by using both shovels and mattocks to dig through the humous and gravels. B horizon samples were collected when possible, however, most samples obtained were C horizon material. Silt samples were randomly taken from creeks on the property. All samples were placed in numbered kraft bags and shipped to Min-En Laboratories Ltd. in North Vancouver, B.C.

The samples were analysed for 6 elements - silver, copper, lead, zinc, arsenic, barite, and for some samples also antimony by inductively coupled plasma analyser (ICP) (See Appendix II for sample technique). Each sample was also analysed for gold content by digestion with aquaregia

solution, extraction with methyl isobutyl ketone and analysis by an atomic absorption instrument.

Results for each soil sample were plotted on two map sheets. The results are shown on Figures 6 and 7. The geochemical results show very little elevated geochemical response. This was due largely to a thick, continuous veneer blanket of glacial gravel and poor soil development. The weakly anomalous areas that do show up coincide with areas of mineralization such as the J.R. and the Ice Showings.

**ANOMALY A:** This yielded anomalous values in silver, zinc and copper values which coincide with a smear from the J.R. Showing on the ridge top near the baseline. The smear covers an area of 300 meters by 50 meters with an easterly trend and had values up to 3.4 ppm silver, 336 ppm zinc and 120 ppm copper.

**ANOMALY B:** This anomaly displays weak association between copper and silver which coincides with those of the High Grade and Ice Showings. The zone was up to 50 meters long by 25 meters wide with copper values peaking out at 106 ppm and silver values peaking out at 2.5 ppm.

The results of the rock samples that were collected proved much more conclusive than did those of the soil

geochemical survey. The rock geochem was able to target in on certain rock types and hence lead to numerous encouraging results being obtained. The most promising values were initially obtained in grab sample 89JMR034 (Ice Showing) which ran 0.58 oz/t. Au over 2.5 meters within a greenish, brecciated, silicified stockwork which contained tr. - 2% pyrite, tr. - 3% spalerite, tr. - 1% galena, and trace amounts of malachite staining. Sample locations for the rocks appear on Figure 5b. Follow-up work consisting of an I.P. survey and blast trenching resulted in several more significant gold assays being obtained (See trenching figures 8 and 9). The silicified and mineralized breccia stockwork system, from which these gold assays were obtained, has an observed strike length of 15 meters (outlined in trenches) with inferred potential of +100 meters. This strike length is inferred due to the vast amount of glacial debris and ice coverage that is present in the area and by a geophysical I.P. anomaly of high chargeability over the area of mineralization. Encouraging float with good geochemical assay results were also obtained in the area of inferred strike length.

The most notable of these float samples are 89GMR012 which returned values of 8.7 ppm Ag, 12287 ppm Pb and 13855 ppm Zn within a pale green dacitic breccia which contained euhedral pyrite, sphalerite and galena; and 89JMR057 which contained 6.0 ppm Ag, 1327 ppm Pb, 4400 ppm Zn and 3846 ppm Cu within a greenish grey, dacite tuff stockwork matrix with

trace - 2% covellite, trace - 1% disseminated pyrite and chalcopyrite with minor chloritic fragments.

Outcroppings located 70 to 100 meters to the east of the Ice Showing contain massive sulfide (copper + zinc) lenses and stringers which measure up to 3 meters in length and up to .5 meters in width. A sample taken from a massive sulfide lense within a brecciated dacite (High Grade showing) assayed 0.007 oz/ton Au, 1.5 oz/ton Ag, 0.8% Zn and 5.7% Cu. Sample 89LMR038, which was located 25 meters north of the High Grade, had values of 7.5 ppm Ag, 10016 ppm Zn, and 2666 ppm Cu in a quartz carbonate vein 10 cm wide which contained semi-massive sulfides in the form of pyrite, chalcopyrite, spalerite and galena.

An independent study undertaken on rock samples supplied from the Ice Showing and the High Grade Showing by Chamberlin Geological Associates Inc. for Omega Gold Corporation indicates that the two areas of interest are from the same volcanogenic system of mineralization in which the brecciated ore (Ice Showing) represents that of the hanging wall or upper zone of the system.

### TRENCHING RESULTS

During the period from October 1 to October 8, 1989 the services of Falcon Drilling Ltd. were used to excavate a series of four blast trenches situated on the Ice and High Grade Showings. The blast trenches also coincided with those areas of high chargeability which were outlined by the I.P. survey.

The four trenches 1MTR - 4MTR were blasted to a depth of 0.5 - 1.0 meters with a width of 1.0 meter and lengths varied from 3 meters to that of 8 meters. Continuous chip samples were taken every 1 meter and marked by orange spray paint. The most encouraging results were obtained from trench 1MTR and 2MTR (See Figures 8, 9). Assays of 0.254, 0.172 and 0.321 oz Au/ton over widths of 1 meter each were obtained from trench 1MTR and 2MTR.

The samples not only had encouraging gold results but also contained several good base metal values up to 8205 ppm copper and 9.5 ppm silver over 1 meter continuous chip samples. Samples like the original chip sample that yielded .58 oz Au/ton over 2.5 meters were taken within a greenish, brecciated, silicified stockwork system containing varying degrees of sulfide content. Breccia clasts within the matrix were primarily dacitic.



*Preparing blast/sampling Ice Showings*



*High Grade showing blast trench*

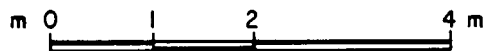
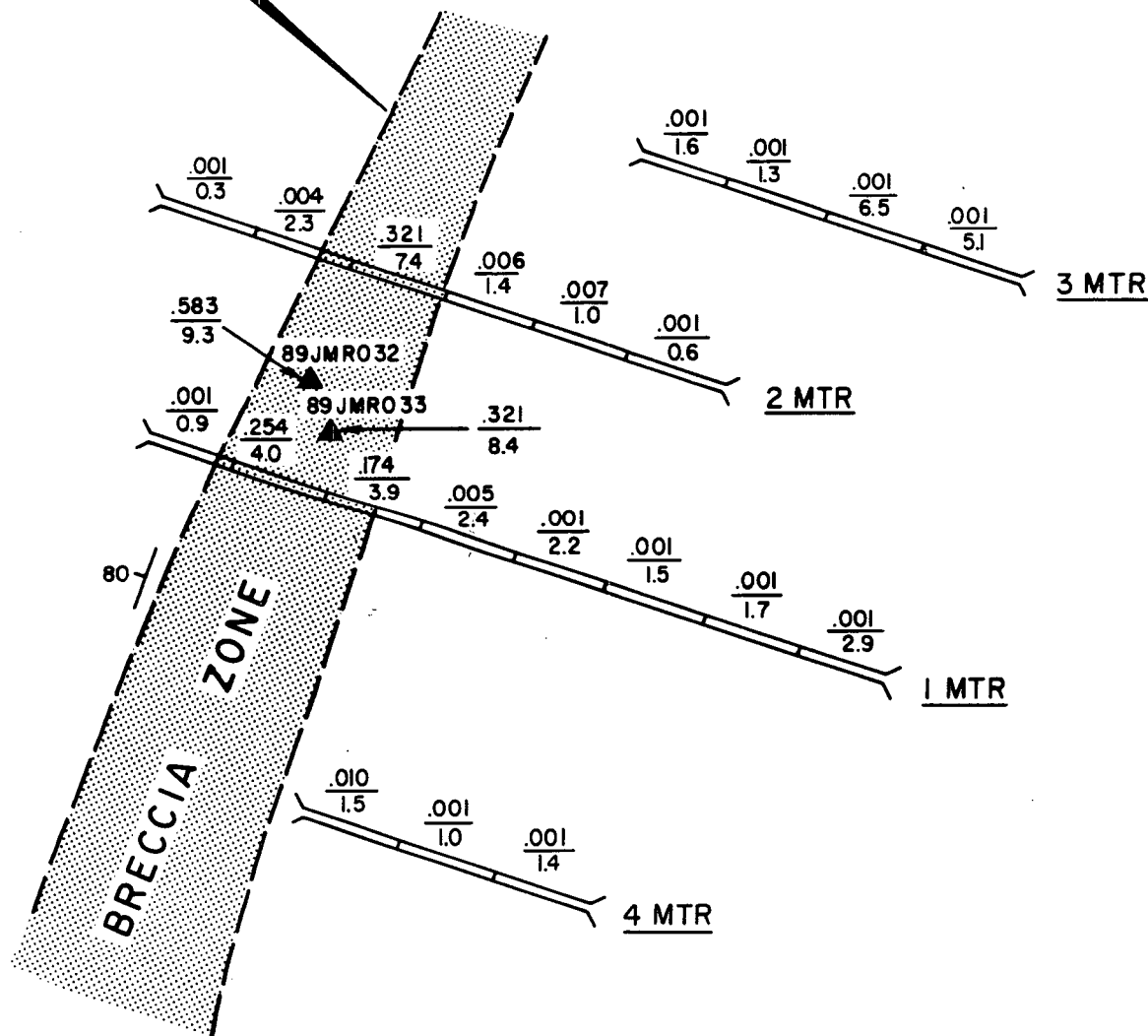


*Washing IMTR (Ice Showing)*





TRACE OF GOLD BEARING STRUCTURE



$\frac{.005}{2.4}$  GOLD oz./t.  
SILVER ppm  
▲ ROCK SAMPLE

OMEGA/ECSTALL

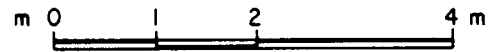
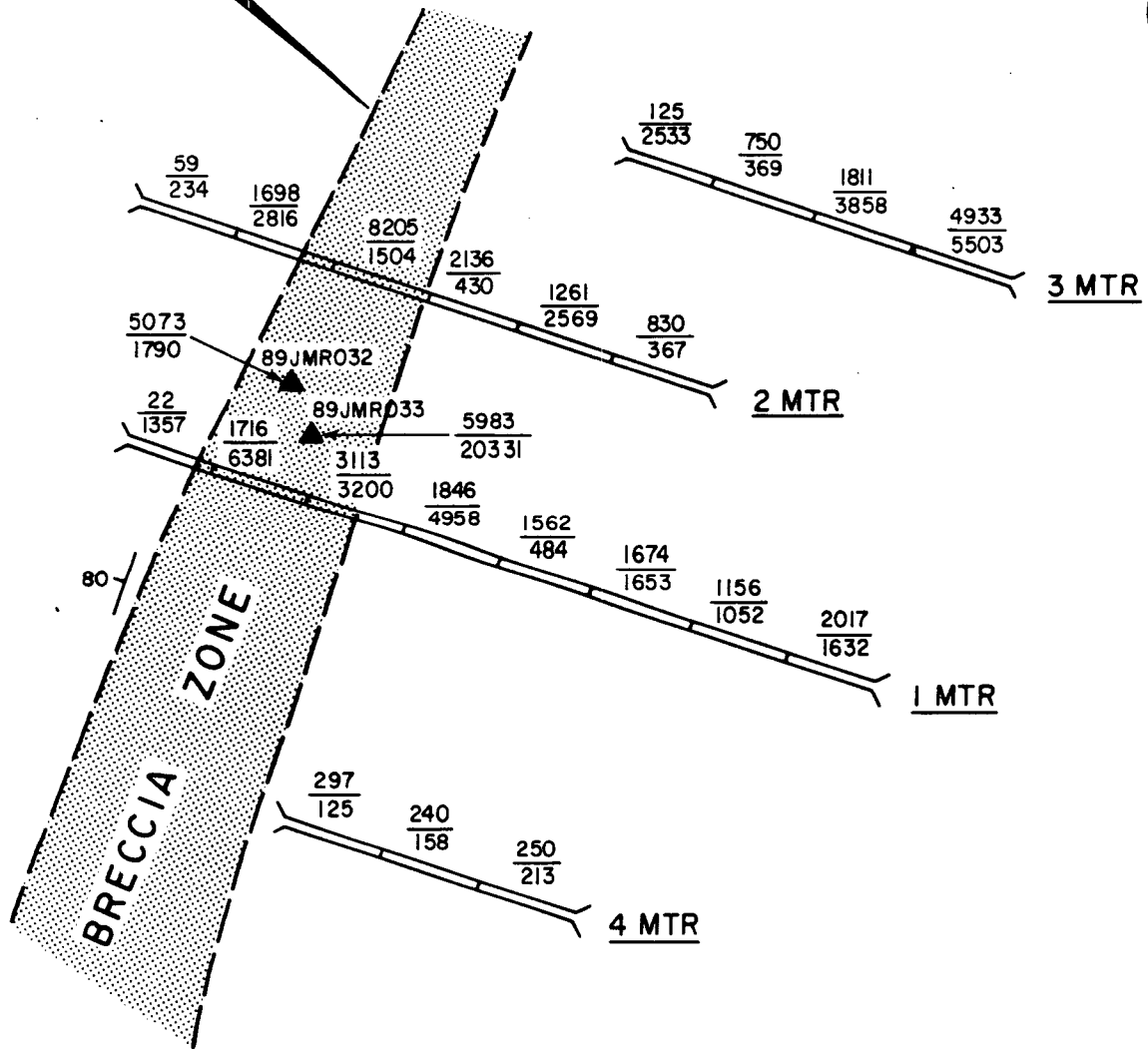
MACGOLD CLAIM GROUP  
Ice Showings  
TRENCH PLAN  
SKEENA M.D., B.C.

NICHOLSON & ASSOCIATES

Drawn. J.W.	Date. Nov. 1989	FIGURE 8
Scale. 1:75	N.T.S. 104B/10E.	



TRACE OF GOLD BEARING STRUCTURE



$\frac{1846}{4958}$  Cu ppm  
 $\frac{1846}{4958}$  Zn ppm  
 ▲ ROCK SAMPLE

OMEGA/ECSTALL			
MACGOLD CLAIM GROUP			
Ice Showings			
TRENCH PLAN			
SKEENA M.D., B.C.			
NICHOLSON & ASSOCIATES			
Drawn.	J.W.	Date.	Nov. 1989
Scale.	1:75	N.T.S.	1048/10E.
FIGURE			9

CONCLUSIONS AND RECOMMENDATIONS

The Macgold Copper King South area is contained within a volcanic succession of rocks and could be the host to either a volcanogenic massive sulfide occurrence or a shear hosted gold deposit. Initial geochemical results and I.P. findings are indicative of a gold bearing massive sulfide occurrence.

The mineralized zone, outlined using I.P. geophysical methods, is ellipsoidal in nature. The I.P. anomaly has a dimension of 200 meters wide with a strike length yet to be determined because of ice coverage to the south. The zone is steeply dipping to the west and appears to be a tube shaped brecciated stockwork system containing a gold ore shoot. This is found within a widespread area of disseminated mineralization. This stockwork zone coincides with those mineralized showings known as the Ice Showing and the High Grade Showing which were tested with blast trenches. These showings, like similar smaller occurrences that were found in the vicinity (i.e., J.R. Showing), may be feeder veinlets from a much larger occurrence at depth. The mineralized zone trends under ice to the southwest and the I.P. geophysical anomaly is open in that direction. Geochemical results obtained from sulfide mineralized glacial float also indicates that mineralization occurs under the ice to an as yet undetermined extent. It is recommended that a two phase program estimated to cost \$220,000 in total be undertaken to

test the Macgold claims for gold and copper - zinc mineralization.

The first phase would constitute the establishment of a base camp near the Ice and High Grade Showings, re-establishing the 1989 grids, and carrying out detailed trenching, mapping, rock sampling and an E.M. geophysical program. Prospecting on the unexplored northern portion of the property would also be undertaken. The prospecting would target in on similar rock types as those found in the Copper King area in an attempt to find similar gold massive sulfide occurrences such as the Ice and High Grade showings.

A second phase drilling program of 2500 to 3000 feet in 4 to 8 holes would be initiated to test drill targets outlined by the I.P. geophysical survey (1989) and the blast trenching. There is abundant local water for drilling from June through October.

The following is a projected cost breakdown for the Phase 1 and Phase 2 programs.

PHASE ONE

PERSONNEL

Senior Geologist	(35 days @ \$275/day)	\$9625.00
Geologist	(30 days @ \$225/day)	6750.00
Geological Technician	(30 days @ \$175/day)	5250.00

ROOM AND BOARD

95 man days @ \$80/day		7600.00
------------------------	--	---------

TRANSPORTATION

Helicopter	(25 hrs/\$755 hr.)	18875.00
------------	--------------------	----------

ASSAYS

500 Rock Geochem @ \$16/sample		8000.00
--------------------------------	--	---------

RENTALS

Truck Rental	(\$1325/month)	1325.00
Radio Rentals (4 hand helds @ \$85/month)		340.00
S.B.X. Rental (100 watt; \$100/wk x 4 weeks)		400.00
Camp Rental/Generator		1800.00

EQUIPMENT PURCHASES

Lumber		1200.00
Miscellaneous		1500.00

REPORT WRITING AND DRAFTING

6400.00

TRAVEL

1500.00

EXPEDITING

500.00

TOTAL

\$71065.00

10% CONTINGENCY

7000.00

TOTAL EXPENDITURES

\$78065.00

PHASE TWO

PERSONNEL

Senior Geologist	(21 days @ \$275 /day)	\$5775.00
Geological Technician	(15 days @ \$175/day)	2625.00

ROOM AND BOARD

36 man days @ \$80/day)	2880.00
-------------------------	---------

TRANSPORTATION

Helicopter	(25 hours @ \$755/hr.)	18875.00
------------	------------------------	----------

DRILLING

2500 feet @ \$30/foot all in	75000.00
------------------------------	----------

ASSAYS

500 Rock Samples @ \$16/sample	8000.00
--------------------------------	---------

RENTALS

Camp Rental/Generator	1800.00
-----------------------	---------

Radio Rentals	700.00
---------------	--------

EQUIPMENT PURCHASE

1000.00

MISCELLANEOUS

1500.00

EXPEDITING

500.00

TRAVEL

1500.00

REPORT WRITING/DRAFTING

10000.00

CONTINGENCY

12000.00

TOTAL EXPENDITURES

\$142155.00

TOTAL PHASE ONE AND TWO . . . . . \$220,220.00

STATEMENT OF QUALIFICATIONS

I, John A. Nicholson, do hereby certify that:

1. I am a consulting geologist with offices at #606 - 675 West Hastings Street, Vancouver, British Columbia.
2. I am a graduate of the University of British Columbia with a Bachelor of Science, Geology.
3. I have worked in geology in B.C., Manitoba, Saskatchewan, Ontario, Yukon and Idaho, U.S.A. since 1981.
4. I am the author of this report and my findings are based on work undertaken on the property between August 15 and October 8, 1989.
5. I have no interest in the property or the companies involved nor do I anticipate any.

Dated at Vancouver, B.C., this 26th day of January 1990.

John A. Nicholson, B.Sc.

REFERENCES

- Alldrick, D.J., Britton J.M. and Webster I.C.L. (1989): Unuk Map Area (104 B/7E, 8W, 9W, 10E). B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1989, Paper 1989 - 1, pages 241 - 250.
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- Grove, E.W. (1971): Geology and Mineral Deposits of the Stewart area, British Columbia, B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 63, 152 pages.
- (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.



MACGOLD GEOLOGICAL/GEOCHEMICAL SURVEY

STATEMENT OF COSTS

PERSONNEL

Project Geologist	(7 days @ \$275/day)	\$1925.00
Geologist	(7 days @ \$225/day)	1575.00
Field Technician	(9 days @ \$175/day)	1575.00

TRANSPORTATION

Helicopter	(6.3 hrs @ \$755/hr)	4756.50
------------	----------------------	---------

ASSAYS

Rocks	(108 samples @ \$15.25)	1647.00
Soils	(103 samples @ \$10.75)	1107.25
Silts	(10 samples @ \$10.75)	107.50

CAMP COSTS

Room and Board	(25 man days @ \$115/day)	2875.00
----------------	---------------------------	---------

MISCELLANEOUS

Equipment		300.00
Expediting		200.00

REPORT WRITING/DRAFTING

1500.00

TOTAL EXPENDITURES

\$17568.25

MACGOLD BLASTING

STATEMENT OF COSTS

PERSONNEL

Project Geologist	(4 days @ \$275/day)	\$1100.00
Geologist	(6 days @ \$225/day)	1350.00
Field Technician	(12 days @ \$175/day)	2100.00

TRANSPORTATION

Helicopter	(2.9 hrs @ \$755/hr)	2189.50
------------	----------------------	---------

ASSAYS

Rocks	(24 samples @ \$15.25)	366.00
-------	------------------------	--------

CAMP COSTS

Room and Board	(28 man days @ \$115/day)	3220.00
----------------	---------------------------	---------

MISCELLANEOUS

Blaster & Equipment		3200.00
---------------------	--	---------

REPORT WRITING/DRAFTING

1500.00

TOTAL EXPENDITURES

\$15025.50

MACGOLD GEOPHYSICAL SURVEY

STATEMENT OF COSTS

PERSONNEL

2 Geophysicists (9 days @ \$600/day) \$ 5,400.00

EQUIPMENT RENTAL (9 days @ \$1,400/day) \$12,600.00

MISCELLANEOUS \$ ~~161.00~~

TOTAL EXPENDITURES \$18,161.00

Not approved - results presented  
in illegible format

T.K.

**APPENDIX 1**  
**GEOPHYSICAL REPORT**

**GEOPHYSICAL REPORT**

**ON THE**

**COLAGH PROSPECT**

**MACGOLD CLAIMS**

**SKEENA MINING DISTRICT, B.C.**

**NTS SHEET 104B/10E**

**BY**

**DELTA GEOSCIENCE LTD.**

**MARCH 1, 1990.**

**G.A. HENDRICKSON, P. GEOPH.**

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## INTRODUCTION

At the request of Omega Gold Corporation and Ecstall Mining Corporation, Delta Geoscience Ltd conducted an Induced Polarization and Resistivity survey of the Colagh prospect on the Macgold Claims. This prospect is a polymetallic occurrence located in the Iskut-Sulphurets areas of northern British Columbia, approximately 7 kilometers east of the Snippaker airstrip. The showing lies in a glacial cirque thus problems with the topography and ice cap made it difficult to survey a regular grid.

The showing is hosted by andesitic ash and lapilli tuff that are correlated with the Betty Creek formation of the lower Jurassic Hazelton Group.

The purpose of the geophysical work was to evaluate the showing and surrounding area for concentrations of sulphide mineralization and to assist in geological mapping.

The geophysical work described in this report took place during the period October 4 to 13, 1989.

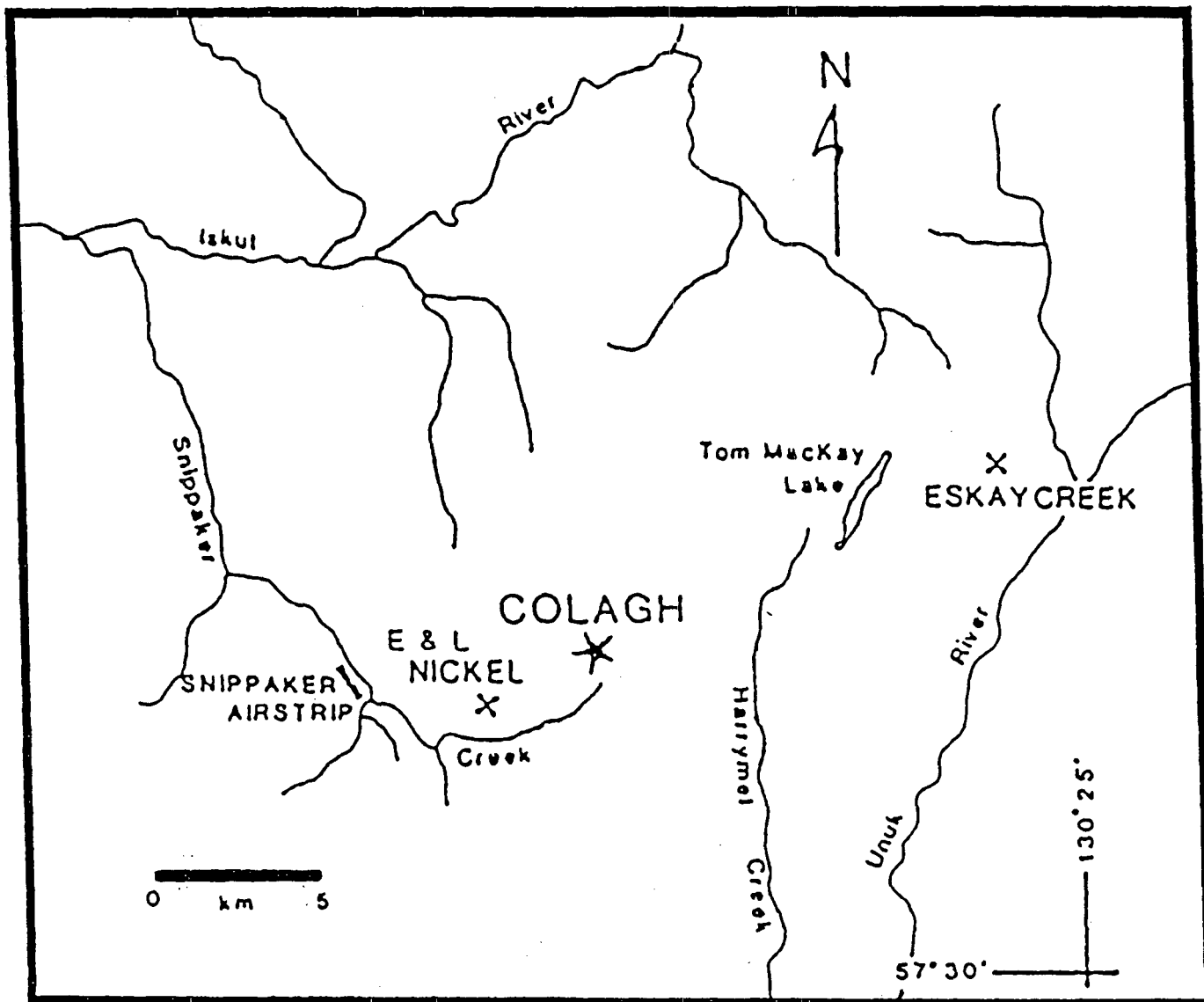
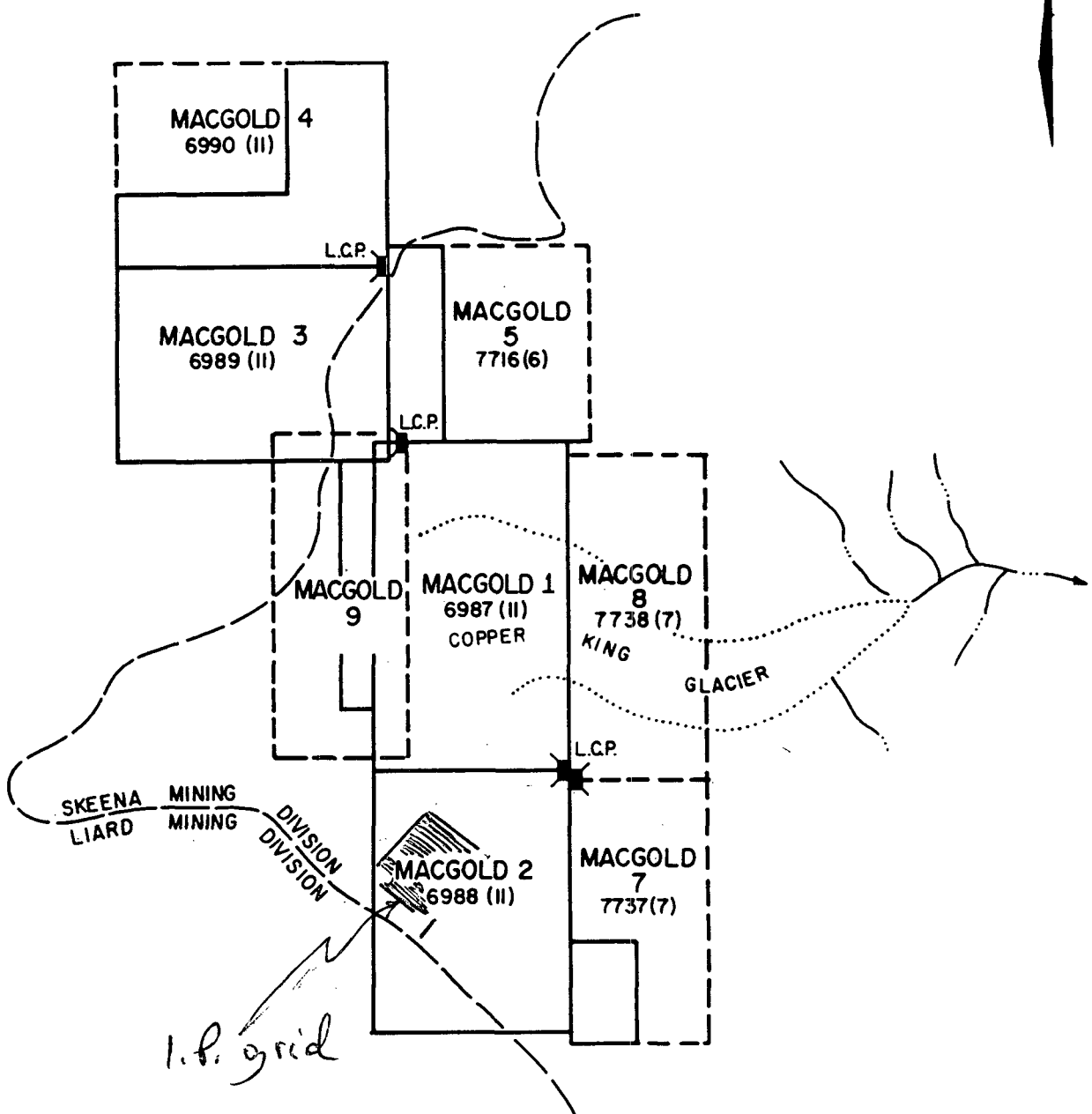


Figure 1 Location of Colagh prospect and nearby properties in Iskut River area.





*l.p. grid*



OMEGA/ECSTALL		
MACGOLD CLAIM GROUP		
<b>CLAIM MAP</b>		
SKEENA M.D., B.C.		
NICHOLSON & ASSOCIATES		
Drawn. J.W.	Date. Oct. 1989	FIGURE
Scale. 1:50,000	N.T.S. 1048/10E.	2

PERSONNEL

Scott Cosman - Crew Chief/Geophysicist  
Tom Bokenfohr - Geophysical Technologist  
Grant Hendrickson - Senior Geophysicist/Supervisor  
Note: Helpers were provided (when available) from the  
client's crew on the project.

EQUIPMENT

- 1 Huntec 2.5kva Induced Polarization Transmitter.
- 2 BRGM IP-6 Induced Polarization Receivers.
- 3 Motorola VHF Portable Radios.
- 1 Toshiba T3100 Field Computer.
- 1 Fujitsu DL2400 Printer.

DATA PRESENTATION

The chargeability and resistivity data is presented as stacked profiles and contour plans at a scale of 1:2000.

Profiles aid in interpretation since the profile shape (the wavelength) is directly related to the depth, attitude and width of anomalous areas.

Contoured plans generally give a good spatial view of the data's intensity and continuity, although some contouring bias is inevitable in any contouring process.

Profile data is presented increasing to the right (grid north) from a base level (value at line position). Stacked profiles give an overall view of the data prior to any contouring bias.

### SURVEY PROCEDURE

The client's crew had established a small grid on the showing prior to the arrival of the Delta Geoscience crew. Line separation varied from 50 meters to 100 meters, depending on the amount of detail needed and topography restraints. Station separation was 20 meters. Induced Polarization and Resistivity readings were generally taken every 20 meters, except in the detail work where readings were every 10 meters.

For the Induced Polarization work the gradient array was selected. The relative operational ease of this array is an important factor in reduced survey cost per kilometer, since the topography and ice cap create difficult survey conditions.

The current electrode separation "AB" was set at 800 meters, while the potential electrode separation "MN" was 40 meters. Overlap on each reading was 50%, i.e. 20 meters between reading points. This array size gives excellent horizontal resolution, with the prime depth of investigation focused in the 80 to 100 meter range. Some detail measurements were taken with an "AB" of 400 meters and an "MN" of 20 meters to improve resolution. This array was focused around the 40 meters depth. The length of the survey lines required surveying with a series of gradient blocks. Each gradient block allows us to read a distance of 400 meters along the line and a width of 5 lines or 400 meters. The data from the different blocks were joined together by overlapping three stations and comparing the data for the current electrode positions. Generally the overlaps were close, however at times the placement of one of the remote current electrodes on a chargeability or resistivity anomaly elevates the background at the edge of a block. This elevated background requires adjustment prior to joining the blocks together. For this grid, very little adjustment had to be made to the data.

The I.P. survey was designed to have good lateral resolution, good signal to noise response and excellent mobility, to help solve four main exploration problems:

- a) spatial position and strength of subsurface sulphide zones.

- b) spatial position of structures, both along strike and cross-cutting.
- c) to respond to the different lithologies to aid in geological mapping.
- d) cost effective surveying in rough terrain.

The Induced Polarization (chargeability) was expected to respond primarily to sulphide zones and/or graphitic, pyritic argillites. Often the I.P. response (background) of the different lithologies (volcanics) is sufficient to assist in the geological mapping.

The Resistivity survey was expected to respond primarily to the geology since overburden is negligible. Structures would likely show up as thin linear resistivity lows. Tuffaceous volcanic rocks are normally in the 1000 to 1500 ohm-m range.

The correlation of high chargeability with resistivity lows would be important massive sulphide exploration targets. High chargeability readings with correlating high resistivity may be indicating silicified structures containing disseminated sulphides which are often good gold exploration targets.

## DISCUSSION OF THE DATA

### Chargeability:

This survey has revealed two areas of anomalous chargeability that are probably related to sulphide mineralization.

The first area is a small body located at 0+00, 4+00N that is highly chargeable. The response over this body from the two current electrode positions (AB = 800m and AB = 400m) suggests depth extent is good, however the target is likely a narrow pipe-shaped body dipping very steeply to the west.

The second and probably more interesting target is a large area on the extreme west side of the grid centered at approx. 3+00W on L.4+00N. The chargeability response suggests 3 to 4% sulphide disseminated over a large area. The data clearly suggests the centre of sulphide mineralization is likely located west and south of the present grid. Since this area is under the ice cap, it is not possible to do much more I.P. Ground Electromagnetic work should be contemplated if there is a lot of geological encouragement from this area. If any airborne E.M. data is available, this area should be examined closely.

The data also suggests a large fault running E-W from 6+50N, 5+00W to 2+00N, 4+50E.

### Resistivity:

There is support in the resistivity data for the E-W fault mentioned above. Offsets along this fault could be substantial.

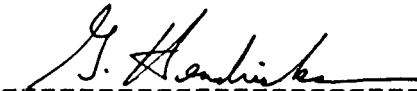
In general, the resistivity data suggests the area is underlain by tuffaceous rocks. The lower resistivity areas (approx. 500ohm-m) may be due to Greywacke, whereas the higher resistivity areas (1500ohm-m) are likely underlain by felsic tuffs. The absence of pronounced resistivity lows coincident with the high chargeability areas, suggests the mineralization is disseminated in a well cemented breccia and that massive sulphide mineralization is very local and not widespread.

CONCLUSION AND RECOMMENDATIONS

The geophysical data, although limited, helps in the understanding of the sulphide mineralization present on this interesting property and clearly points out where to look for more sulphide. Assuming gold mineralization is related to sulphide mineralization, this is an important exploration guide.

The detailed geology of this grid should be interfaced with the geophysical data to achieve a coherent picture of the geology and style of the mineralization prior to any drilling.

The postulated E-W fault is important for it may have truncated the showing on the baseline and may provide information on where to look for a northwest extension of the main I.P. anomaly.

  
-----  
Grant A. Hendrickson, P.Geoph.

REFERENCES

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STATEMENT OF QUALIFICATION

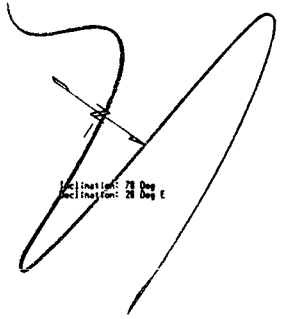
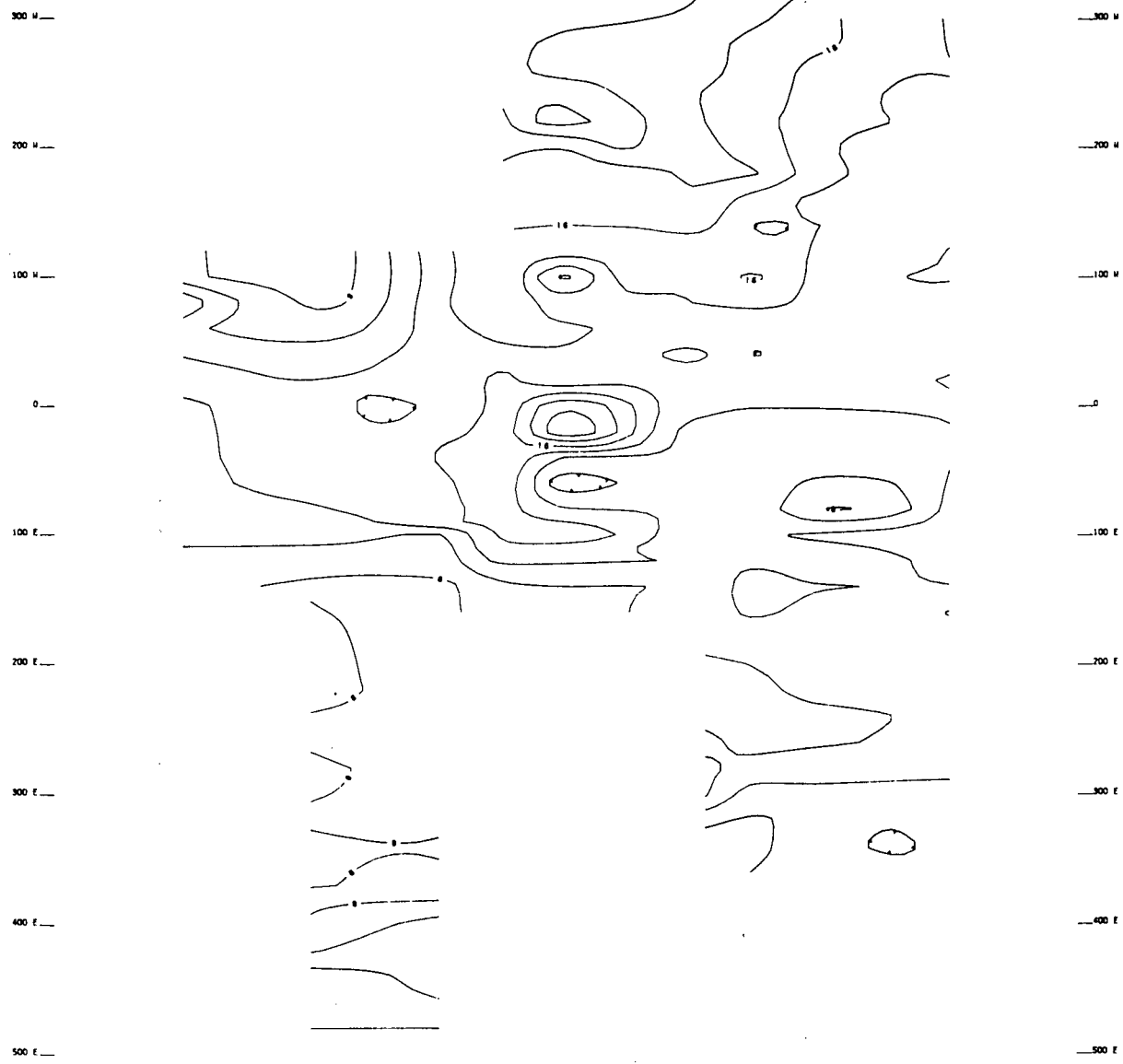
Grant A. Hendrickson

- B.Science, U.B.C. 1971, Geophysics option.
- For the past 19 years, I have been actively involved in mineral exploration projects throughout Canada, the United States, Europe and Central and South America.
- I am a registered Professional Geophysicist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- I am an active member of the S.E.G., E.A.E.G., and B.C.G.S.

Dated at Delta, British Columbia, this 3 day of  
MARCH, 1990.

  
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Grant A. Hendrickson, P.Geoph.

100 N 200 N 300 N 400 N 500 N 600 N 700 N

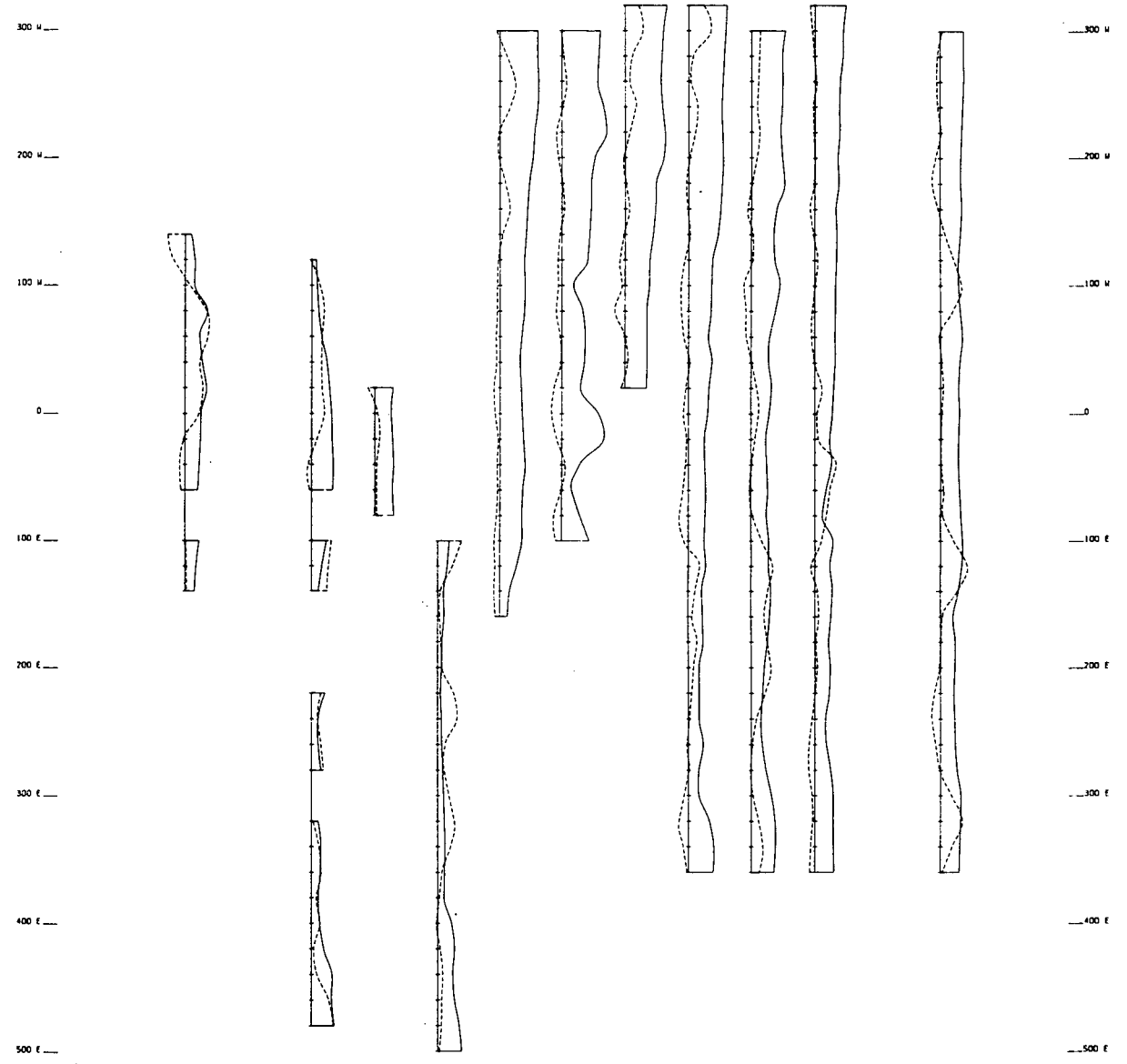


AB=800m  
MN=40m

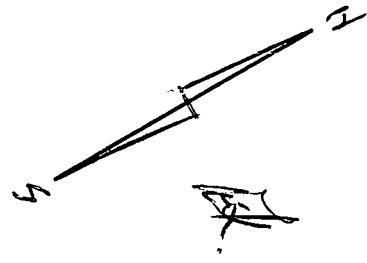
ECSTALL / OMEGA JOINT VENTURE  
MACGOLD PROJECT  
INDUCED POLARIZATION SURVEY  
Gradient array, AB=800m, MN=40m  
Chargeability Plan  
contour interval 2 ms  
DELTA GEOSCIENCE LTD

100 N 200 N 300 N 400 N 500 N 600 N 700 N

100 M 200 M 300 M 400 M 500 M 600 M 700 M



Inclination: 28 Deg  
Declination: 25 Deg E



ECSTALL / OMEGA JOINT VENTURE  
MACGOLD PROJECT  
INDUCED POLARIZATION SURVEY  
Gradient array, AB=800m, MN=40m  
Chargeability & Resistivity Profiles  
Ch.#1 cu=10as, base S, Re.#1 cu=1000ohm-m, base 1000  
DELTA GEOSCIENCE LTD

FIG. 3

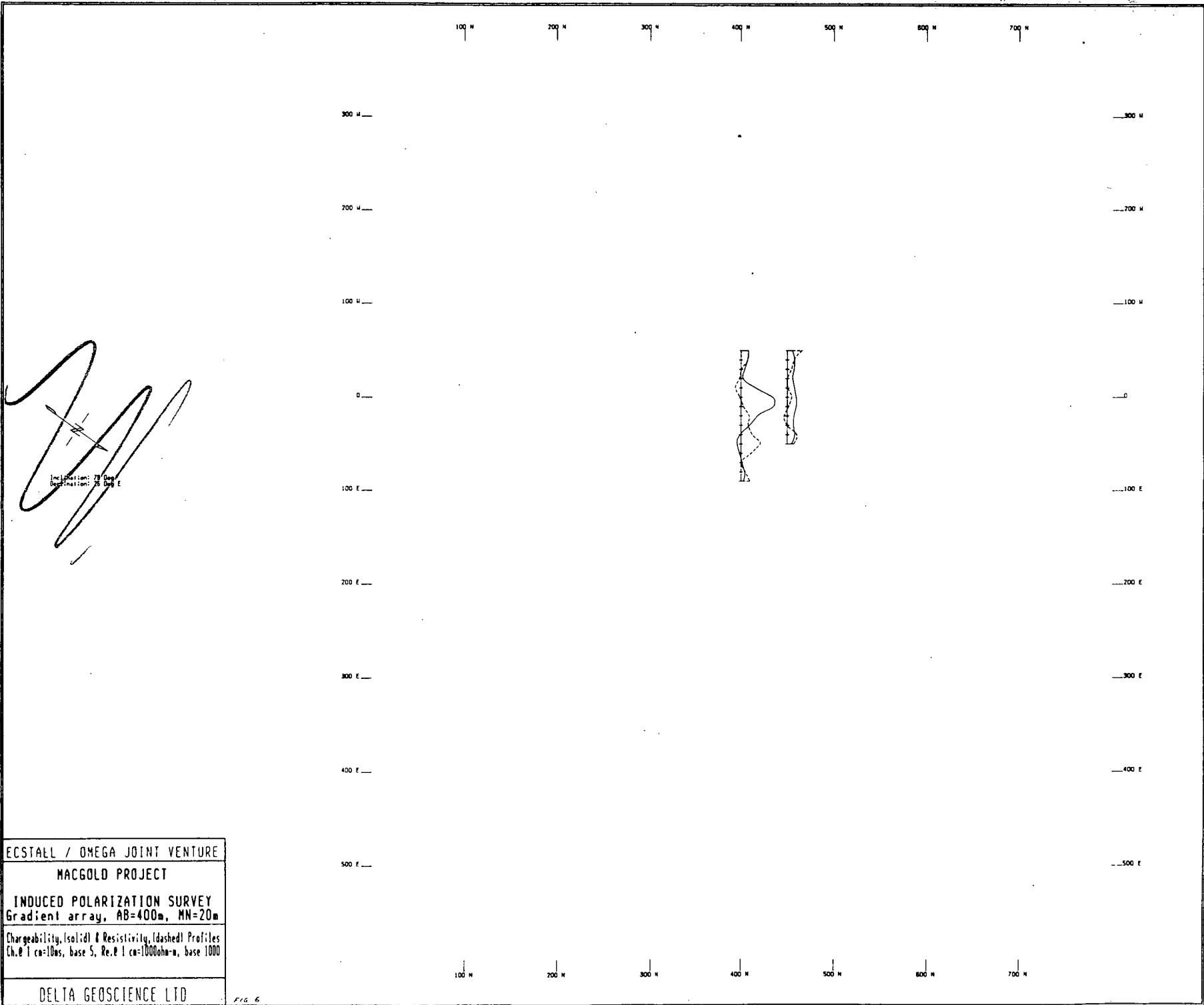


FIG 6

APPENDIX ii

**ASSAY TECHNIQUES AND RESULTS**

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc.			
Sample No.	Location	Description	Analytical Results					
			Au oz/t	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other
89JMR017	MacGold (Copper King South)	Float: orangy brown quartz carbonate which contains bands of calcite and disseminated pyrite +/- arsenopyrite along fractures.	0.001	10.6	105	48	62	
89JMR018	MacGold (Copper King South)	2m grab: rusty orangy brown andesite which contains tr-5% pyrite throughout as disseminations and bands.	0.001	2.3	35	45	1352	
89JMR021	MacGold (Copper King South)	grab: 6 inch wide quartz carbonate vein which contains tr-2% pyrite (M 5=00E, 37+00N).	0.001	1.1	37	241	173	
89JMR022	MacGold (Copper King South)	Talus grab 2m: orangy brown weathered andesite which has been silicified and shot through with diagenetic pyrite tr-2%.	0.001	2.7	38	64	35	
89JMR023	MacGold (Copper King South)	1.5m continuous chip across a brownish red-reddish brown weathered andesite argillically altered tr-2% throughout as dissemination.	0.001	0.6	25	154	92	
89JMR024	MacGold (Copper King South)	same as 89JMR023.	0.001	1.8	36	82	22	

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut	Operator: Nicholson & Assoc.				
Sample No.	Location	Description	Analytical Results					
			Au oz/t	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other
89JMR025	MacGold (Copper King South)	2m continuous chip, brown yellowish brown weathered andesite, tr-5% pyrite, +/- arsenopyrite as bands and disseminations throughout.	0.001	0.9	26	51	19	
89JMR026	MacGold (Copper King South)	1.5m continuous chip: orangy brown weathered andesite which has an abundance of pyrite, arsenopyrite disseminations throughout.	0.001	0.9	30	35	16	
89JMR027	MacGold (Copper King South)	1.0m chip: Same as 89JMR026.	0.001	1.3	25	36	17	
89JMR028	MacGold (Copper King South)	1.5m chip: same as 89JMR026	0.001	0.6	31	43		
89JMR030	MacGold (Copper King South)	Continuous chip over 150m wide shear within a granitic intrusive. Mineralization consists of pyrite +/- sphalerite +/- arsenopyrite.	0.001	2.9	37	77		

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc.		
Sample No.	Location	Description	Analytical Results				
			Au <sub>oz/t</sub>	Ag <sub>ppm</sub>	Pb <sub>ppm</sub>	Zn <sub>ppm</sub>	Cu <sub>ppm</sub> Other
89JMR031	MacGold (Copper King South)	2m continuous chip: across a silicified brecciated stockwork vein system which contains tr-2% galena as disseminations and globules throughout.	.237	6.0	97	6927	
89JMR032	MacGold (Copper King South)	2.5m continuous chip across stockwork veins system, some malachite staining present. Same as 89JMR031	.583	9.3	39	1790	5073
89JMR033	MacGold (Copper King South)	High grade grab of 89JMR031/32	.321	8.4	85	20331	5983
89JMR034	MacGold (Copper King South)	grab: boulder float of massive sulfide vein some 15-20 cm wide (pinches/swells) which contains tr-30% of chalcopyrite, pyrite sparlerite, galena as bands disseminations some malachite staining present.	.007	42.8	9165	50856	57401
89JMR057	MacGold (Copper King South)	float (talus) of a greenish grey dacite tuff which contains a stockwork configuration; contains tr-2% covellite, tr-1% disseminated pyrite, chalcopyrite, minor chloritic fragments throughout (3+00N 2+00W)	0.002	6.0	1327	4400	3846



**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold		Location: Iskut		Operator: Nicholson & Assoc			
Sample No.	Location	Description	Analytical Results						
			Au oz/t	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other	
MCR001	MacGold (Copper King South)	Float: silicious volcanic andesite which contains disseminated pyrite throughout, minor propylitic alteration.	0.001	4.6	114	8857	2064		
MCR003	MacGold (Copper King South)	grab: grey andesite weathered orange-brown with calcite veinlets throughout. Tr-1% disseminated pyrite throughout.	0.001	0.9	76	255	245		
MCR004	MacGold (Copper King South)	Felsic volcanic possible dacite with clusters of fine grained pyrite throughout.	0.001	0.9	76	225	245		
MCR005	MacGold (Copper King South)	Graphitic argillite sandwiched between silicified dacite with tr-% pyrite, chalcopyrite throughout	0.001	1.1	50	102	41		
MCR006	MacGold (Copper King South)	Silicified dacite with fine-grained pyrite disseminated throughout.	0.001	0.5	39	405	135		
MCR007	MacGold (Copper King South)	grab: silicified dacitic stockwork with finely disseminated pyrite throughout	0.001	0.8	33	74	22		

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc.			
Sample No.	Location	Description	Analytical Results					
			Au oz/T	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other
MCR011	MacGold (Copper King South)	.5m chip: 6cm quartz vein which contains tr-2% pyrite along edges as salvages.	0.001	2.9	188	2884	1016	
MCR012	MacGold (Copper King South)	Float: silicified dacite with veins (stringers) of euhedral pyrite throughout.	0.002	3.5	237	187	246	
MCR015	MacGold (Copper King South)	grab: highly altered dacite, small vuggy quartz veinlets +/- fuchsite.	0.001	14.0	89	124	9815	
MCR016	MacGold (Copper King South)	Chip: 4cm wide quartz vein with tr-1% pyrite chalcopryrite +/- galena.	0.001	5.8	15	31	232	
MCR017	MacGold (Copper King South)	Chip: 2cm wide quartz vein with pyritic salvages within a white-glassy quartz matrix.	0.001	3.1	8	14	54	
MCR018	MacGold (Copper King South)	grab: Brecciated zone enclosing veinlets, tr-1% pyrite disseminated throughout.	0.001	0.1	30	73	13	

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc.			
Sample No.	Location	Description	Analytical Results					
			Au <sub>oz/t</sub>	Ag <sub>ppm</sub>	Pb <sub>ppm</sub>	Zn <sub>ppm</sub>	Cu <sub>ppm</sub>	Other
MCR019	MacGold (Copper King South)	grab: rusty weathered 3cm quartz vein with manganese staining.	0.001	5.9	15	28	26	
MCR020	MacGold (Copper King North)	Float: minor blebs of disseminated pyrite occurs within a greyish dacite.	0.001	0.6	55	230	35	
MCR022	MacGold (Copper King North)	grab: Quartz-carbonate altered volcanics which contains calcite veinlets throughout.	0.001	1.0	131	186	8	
MCR023	MacGold (Copper King North)	grab: same as above	0.001	1.2	51	134	19	
MCR024	MacGold (Copper King North)	grab: 4cm wide quartz vein with minor amounts of muscovite and chlorite present.	0.001	0.1	4	50	94	
MCR025	MacGold (Copper King South)	Float: 2cm quartz vein with no visible sulfides.	0.001	2.4	59	213	19	



**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold		Location: Iskut		Operator: Nicholson & Assoc			
Sample No.	Location	Description	Analytical Results						
			Au oz/t	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other	
89TMR028	MacGold (Copper King South)	grab: limonitically stained chert with some ruinor quartz stringers	0.001	0.7	41	943	75		
89TMR029	MacGold (Copper King South)	grab: limonitically stained chert which contains small fragments	0.001	0.7	13	860	38		
89TMR030	MacGold (Copper King South)	grab: grey basalt with limonitic staining and carbonate fragments throughout, possible quartz veins.	0.001	1.2	18	159	16		
89TMR031	MacGold (Copper King South)	grab: quartz vein with massive limonitic staining.	0.001	2.2	35	267	17		
89TMR032	MacGold (Copper King South)	grab: J.R. Showing which contains tr-10% galena (cubic) and tr-2% sphalerite within a quartz matrix.	0.001	633.8	3730	475	3708		
89TMR033	MacGold (Copper King South)	grab: greyish dacite which contains carbonate veining and possible malachite staining	0.001	5.2	60	39	48		

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc.			
Sample No.	Location	Description	Analytical Results					
			Au oz/t	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other
89TMR034	MacGold (Copper King South)	grab: quartz swarm with some limonitic staining throughout	0.001	2.9	11	36	68	
89TMR034A	MacGold (Copper King South)	grab: greyish black argillite with stringers of carbonate veins	0.001	0.7	22	47	100	
89TMR035	MacGold (Copper King South)	Float: malachite stained andesite/dacite	.004	.6	40	148	481	
89TMR036	MacGold (Copper King South)	grab: quartz-carbonate with limonitic staining no visible sulfides.	.001	1.3	54	95	12	
89TMR037	MacGold (Copper King South)	grab: same as above	.001	0.2	27	93	23	
89TMR038	MacGold (Copper King South)	grab: quartz vein with heavy limonitic staining.	.001	1.2	59	65	4	
89TMR038A	MacGold (Copper King South)	grab: quartz carbonate vein with minor malachite staining throughout.	.001	1.5	32	23	8	

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc			
Sample No.	Location	Description	Analytical Results					
			Au ppb	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other
89GMR01	MacGold (Copper King South)	grab: pale green dacite tuff breccia with cherty breccia fragments less than 1 cm sporadic pyrite disseminated along fractures.	4	1.8	57	104	9	
89GMR02	MacGold (Copper King South)	grab: dacite breccia tuff which contains rhyolite and quartz fragment with flow banding +/- epidote, tr-1% pyrite disseminated throughout.	2	2.9	36	74	10	
89GMR03	MacGold (Copper King South)	grab: fine grained dark green andesite which contains quartz veinlets throughout.	1	1.8	37	143	10	
89GMR04	MacGold (Copper King South)	grab: same as 89GMR02	20	2.2	47	126	22	
89GMR05	MacGold (Copper King South)	grab: clay altered/chloritically altered dark green andesite tuff which has tr-1% pyrite disseminated throughout.	14	2.9	67	151		
89GMR06	MacGold (Copper King	grab: dark green andesite tuff with trace amounts of pyrite.	1	2.2	95	2141		

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc			
Sample No.	Location	Description	Analytical Results					
			Au <sub>ppb</sub>	Ag <sub>ppm</sub>	Pb <sub>ppm</sub>	Zn <sub>ppm</sub>	Cu <sub>ppm</sub>	Other
89GMR07	MacGold (Copper King South)	grab: dark green andesite +/- chlorite, sepeentine on some surfaces, minor slicks, trace pyrite.	2	0.3	30	120		
89GMR08	MacGold (Copper King South)	grab: missing						
89GMR09	MacGold (Copper King South)	grab: pale green dacite tuff +/- carbonate, disseminated fragments of pyrite (1%).	3	0.3	36	120	37	
89GMR10	MacGold (Copper King South)	grab: pale green dacite tuff which contains felsic clasts and tr-1% pyrite as disseminations	1	2.4	66	122	40	
89GMR11	MacGold (Copper King South)	grab: dacite which contains carbonate veining and euhedral	2	1.4	37	61	12	
89GMR12	MacGold (Copper King South)	grab: pale green dacite tuff breccia which contains euhedral pyrite crystals and felspar fragments throughout +/- galena.	16	8.7	12287	13855	242	



**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc.			
Sample No.	Location	Description	Analytical Results					
			Au ppb	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other
89GMR13	MacGold (Copper King South)	grab: dark green andesite with a trace of chalcopyrite.	138	4.3	142	309	1831	
89GMR13A	MacGold (Copper King South)	grab: dacite breccia pale green grey, quartz carbonate alteration with quartz veining and rhyolite breccia fragments tr-3% pyrite tr-1% galena, sphalerite.	6	3.4	3440	4945	184	
89GMR14	MacGold (Copper King South)	grab: same as 89GMR13A	141	2.4	70	118	40	
89GMR15	MacGold (Copper King South)	grab: dark green dacite tuff with quartz strings calcite stringers throughout, tr-2% disseminated pyrite.	2	2.3	64	108	12	
89GMR16	MacGold (Copper King South)	grab: andesite breccia tuff +/- chlorite +/- epidote +/- carbonate, angular breccia fragments containing fine grained pyrite, quartz infilling	1	1/6	56	106	11	
89GMR17	MacGold (Copper King South)	grab: same as 89GMR15	3	1.7	22	135	15	

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold		Location: Iskut		Operator: Nicholson & Assoc.			
Sample No.	Location	Description	Analytical Results						
			Au <sub>ppb</sub>	Ag <sub>ppm</sub>	Pb <sub>ppm</sub>	Zn <sub>ppm</sub>	Cu <sub>ppm</sub>	Other	
89GMR18	MacGold (Copper King South)	grab: pale green dacite with fragments of pyrite throughout	2	3.1	40	56	17		
89GMR19	MacGold (Copper King South)	grab: dacite/rhyolite with hydrozincite +/- quartz carbonate stringers tr+1% pyrite throughout.	4	1.9	45	81	11		
89GMR20	MacGold (Copper King South)	grab: same as 89GMR16 except hydrozincite present and tr-3% pyrite disseminated throughout.	1	2.3	32	61	10		
89GMR21	MacGold (Copper King South)	grab: same as 89GMR15	1	2.4	47	114	15		
89GMR22	MacGold (Copper King South)	grab: dark green andesite tuff, open space filling highly fractured hematite clasts tr-3% pyrite tr-1% arsenopyrite disseminated throughout.	2	1.5	40	71	48		
89GMR23	MacGold (Copper King South)	grab: Lithic volcanic tuff with graphitic stringers and carbonate veinlets trace of pyrite disseminated throughout.	3	2.3	41	136	9		

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut		Operator: Nicholson & Assoc.			
Sample No.	Location	Description	Analytical Results					
			Au ppb	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other
89GMR24	MacGold (Copper King South)	Grab: pale green dacite tuff silicious +/- chlorite, epidote +/- pyrite in blebs	1	3.1	47	71	9	
89 GMR25	MacGold (Copper King	grab: Same as above	2	5.6	554	794	46	

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold		Location: Iskut		Operator: Nicholson & Assoc.			
Sample No.	Location	Description	Analytical Results						
			Au <sub>oz/t</sub>	Ag <sub>ppm</sub>	Pb <sub>ppm</sub>	Zn <sub>ppm</sub>	Cu <sub>ppm</sub>	Other	
89LMR001	MacGold (Copper King South)	grab: quartz breccia in an andesite host, disseminated pyrite, tr-1% chalcopyrite, malachite staining throughout.	0.001	8.6	68	193	11347		
89LMR002	MacGold (Copper King South)	grab: silicified grey dacite breccia, weak malachite staining on weathered surface thin white quartz stringers, tr-1% pyrite, tr-1% chalcopyrite.	0.001	1.1	40	112	1309		
89LMR008	MacGold (Copper King South)	grab: hematitic brecciated andesite which contains tr-2% pyrite as disseminations and along quartz veinlets tr-1% chalcopyrite.	0.001	1.4	120	338	121		
89LMR009	MacGold (Copper King South)	grab: dark green andesite which contains irregular quartz veins/ jasper veins which contains tr-3% pyrite disseminated throughout.	0.001	1.4	53	319	142		
89LMR037	MacGold (Copper King South)	grab: silicified dacite, intense quartz stringer network +/- carbonate alteration.	12 ppb	4.4	71	343	2339		

**ROCK SAMPLE DESCRIPTION RECORD**

Page:		Project: MacGold	Location: Iskut	Operator: Nicholson & Assoc				
Sample No.	Location	Description	Analytical Results					
			Au ppb	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Other
89LMR038	MacGold (Copper King South)	grab: quartz jasper vein (10cm wide) with semi massive pyrite, chalcocopyrite, sphalerite and trace galena.	21	7.5	57	10016	2666	

COMP: OMEGA/ECSTALL  
 PROJ: UNUK/ISKUT  
 ATTN: CHRIS GRAF/J.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: 9V-1047-RJ3  
 DATE: SEP-09-89  
 • TYPE ROCK GEOCHEM • (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	BA PPM	CJ PPM	PB PPM	ZN PPM	
89MCR012	3.5	16	13	246	237	187	
89MCR015	14.0	1	9	9815	89	124	
89MCR016	5.8	16	257	232	15	31	
89MCR017	3.1	21	295	54	8	14	
89MCR018	.1	1	98	13	30	73	
89MCR019	5.9	25	70	26	15	28	
89MCR021	.6	17	21	35	55	230	
89MCR022	1.0	52	1561	8	131	186	
89MCR023	1.2	103	117	19	51	134	
89MCR024	.1	28	11	94	4	50	
89LMR001	8.6	10	90	11347	68	193	
89LMR002	1.1	1	96	1309	40	112	
89TMR025	.1	9	4698	252	25	242	
89TMR026	4.6	316	31	30	56	26	
NONUMBER	.3	1	144	39	40	211	
89JML019	1.1	23	149	62	47	137	5
89JML020	.7	23	358	64	103	242	5
89JML029	1.3	19	296	74	26	165	5
MCL002	.5	17	125	49	37	140	5
MCL008	1.0	28	128	52	36	116	5
MCL009	1.7	7	100	53	34	113	5
MCL010	.8	15	96	46	44	111	5
MCL013	.9	3	121	45	39	108	5
MCL014	1.3	18	120	49	57	147	5
MCL020	1.1	5	81	118	30	125	5
89TML023	.8	16	229	47	41	173	5
89TML024	.7	5	351	38	37	204	10
89TML026	3.4	1	49	44	27	137	5
89JMR017	10.6	6744	24	62	105	48	
89JMR018	2.3	73	131	1352	35	45	
89JMR021	1.1	108	4778	173	37	241	
89JMR022	2.7	1	146	35	38	64	
89JMR023	.6	1	208	92	25	154	
89JMR024	1.8	1	297	22	36	82	
89JMR025	.9	12	150	19	26	51	
89JMR026	.9	1	27	16	30	35	
89JMR027	1.3	1	80	17	25	36	
89JMR028	.6	1	357	22	31	43	
89JMR030	2.9	15	337	1192	37	77	
89JMR031	6.0	24	179	4433	97	6927	
89JMR032	9.3	27	339	5073	39	1790	
89JMR033	8.4	28	108	5983	85	20331	
89JMR034	42.8	38	21	57401	9165	50856	
89MCR001	4.6	1	80	2064	114	8857	
89MCR003	.9	1	55	245	76	255	
89MCR004	.9	28	72	44	35	88	
89MCR005	1.1	19	60	41	50	102	
89MCR006	.5	10	119	135	39	405	
89MCR007	.8	39	300	22	33	74	
89MCR011	2.9	23	27	1016	188	2884	
89TML039	2.0	1	106	52	40	120	5
89TML040	2.4	13	181	53	55	161	5
89TML041	2.0	10	111	49	42	127	5
89TML043	2.3	3	161	67	76	268	5

COMP: OMEGA/ECSTALL  
 PROJ: UNUK/ISKJT  
 ATTN: CHRIS GRAF/J.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: 9V-1047-RJ3  
 DATE: SEP-09-89  
 • TYPE ROCK GEOCHEM • (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	BA PPM	CJ PPM	PB PPM	ZN PPM	
89MCR012	3.5	16	13	246	237	187	
89MCR015	14.0	1	9	9815	89	124	
89MCR016	5.8	16	257	232	15	31	
89MCR017	3.1	21	295	54	8	14	
89MCR018	.1	1	98	13	30	73	
89MCR019	5.9	25	70	26	15	28	
89MCR021	.6	17	21	35	55	230	
89MCR022	1.0	52	1561	8	131	186	
89MCR023	1.2	103	117	19	51	134	
89MCR024	.1	28	11	94	4	50	
89LNR001	8.6	10	90	11347	68	193	
89LNR002	1.1	1	96	1309	40	112	
89TNR025	.1	9	4698	252	25	242	
89TNR026	4.6	316	31	30	56	26	
NONUMBER	.3	1	144	39	40	211	
89JML020	.7	23	358	64	103	242	5
89JML029	1.3	19	296	74	26	165	5
MCL002	.5	17	125	49	37	140	5
MCL008	1.0	28	128	52	36	116	5
MCL009	1.7	7	100	53	34	113	5
MCL010	.8	15	96	46	44	111	5
MCL013	.9	3	121	45	39	108	5
MCL014	1.3	18	120	49	57	147	5
MCL020	1.1	5	81	118	30	125	5
89TML023	.8	16	229	47	41	173	5
89TML024	.7	5	351	38	37	204	10
89TML026	3.4	1	49	44	27	137	5
89TSS016	.2	1	66	15	1	102	5
M200E3750N	.6	11	142	46	34	139	5
M200E3800N	.5	18	122	46	37	139	5
M200E3850N	.5	16	141	47	42	143	5
M200E3900N	.6	7	160	65	77	249	5
M200E3950N	2.1	16	62	38	24	137	5
M200E4000N	1.5	14	98	51	62	187	5
M200E4050N	3.0	3	251	84	42	216	5
M200E4100N	2.9	5	195	41	33	160	5
M300E3700N	1.6	17	170	58	51	208	5
M300E3750N	2.1	10	126	35	42	125	5
M300E3800N	.5	10	192	52	37	158	5
M300E3850N	.5	2	174	59	51	188	5
M300E3900N	.5	12	202	87	107	329	10
M300E3950N	1.3	1	77	66	60	287	5
M300E4000N	2.6	1	42	44	27	149	5
M300E4050N	2.9	1	51	48	21	163	5
M300E4100N	2.8	1	69	27	22	123	5
M300E4150N	3.6	1	125	36	28	141	5
M300E4200N	1.3	16	263	117	41	178	5
M400E3700N	1.2	40	197	54	38	141	15
M400E3750N	1.2	25	150	46	36	144	5
M400E3800N	.5	13	136	49	45	159	5
89JML019	1.1	23	149	62	47	137	5

OMEGA ECSTALL  
 UNIK/1STUT PROJECT  
 TTN: C. GRAF/J. 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: 9V-1106-RJ1+2  
 DATE: SEP-15-89  
 \* TYPE ROCK GEOCHEM \* (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	BA PPM	CU PPM	PB PPM	ZN PPM
MCR025	2.4	7	763	19	59	213
MCR026	1.1	4	569	8	16	40
MCR027	1.6	26	3966	10	42	113
MCR028	757.1	239	646	5002	12230	614
MCR029	9.9	37	879	128	279	397
MCR030	4.1	32	140	850	93	101
89LMR008	1.4	6	44	121	120	338
89LMR009	1.4	16	87	142	53	319
89JTR040	11.3	33	47	5448	109	13889
89JTR050	4.5	1	69	1703	37	26362
89TMR028	.7	1	238	75	41	943
89TMR029	.7	9	736	38	13	860
89TMR030	1.2	36	4168	16	18	159
89TMR031	2.8	39	2845	17	35	267
19TMR032	633.8	158	1475	3708	3730	475
89TMR033	5.2	2	238	60	39	48
89TMR034	2.9	1	140	11	36	68
89TMR034A	.7	1	71	22	47	100
89TMR035	.6	1	73	481	40	148
89TMR036	1.3	19	156	12	54	95
89TMR037	.2	1	127	23	27	93
89TMR038	1.2	12	142	4	59	65
89TMR038A	1.5	36	23	8	32	23
89TMR042	.2	10	49	23	28	70
89TMR044	1.7	12	21	5	15	44
89TMR045	.9	1	113	3	36	90
HIGHGRADE	51.4	106	14	50807	38228	161832



COMP: OMEGA/ECSTALL  
 PROJ: UNUK/ISKUT PROJECT  
 ATTN: C.GRAF/J.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: 9V-1047-SJ1+2  
 DATE: SEP-14-89  
 • TYPE SOIL GEOCHEM • (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	BA PPM	CJ PPM	PB PPM	ZN PPM	AU PPB
GMR89 01	1.8	26	9	57	1	104	4
GMR89 02	2.9	34	10	36	1	74	2
GMR89 03	1.8	31	10	37	1	143	1
GMR89 04	2.2	37	22	47	1	126	20
GMR89 05	2.9	15	11	67	5	151	14
GMR89 06	2.2	1	141	95	1	2141	1
GMR89 07	.3	1	5	30	1	120	2
GMR89 09	.3	9	37	34	1	120	3
GMR89 10	2.4	9	40	66	1	122	1
GMR89 11	1.4	45	12	37	1	61	2
GMR89 12	8.7	30	242	12287	18	13855	16
GMR89 13	4.3	1	1831	142	11	309	138
GMR89 13DUPLICATE	3.4	64	184	3440	8	4945	6
GMR89 14	2.4	29	40	70	4	118	141
GMR89 15	2.3	48	12	64	1	108	2
GMR89 16	1.6	70	11	56	5	106	1
GMR89 17	1.7	67	15	22	1	135	3
GMR89 18	3.1	53	17	40	1	56	2
GMR89 19	1.9	76	11	45	2	81	4
GMR89 20	2.3	51	10	32	1	61	1
GMR89 21	2.4	75	15	47	2	114	1
GMR89 22	1.5	99	48	40	7	71	2
GMR89 23	2.3	50	9	41	2	136	3
GMR89 24	3.1	70	9	47	5	71	1
GMR89 25	5.6	131	46	554	13	794	2

COMP: OMEGA/ECSTALL  
 PROJ: UNUK/ISKUT PROJECT  
 ATTN: C.GRAF/J.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: 9V-1047-SJ3+4  
 DATE: SEP-14-89  
 \* TYPE SOIL GEOCHEM \* (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	BA PPM	CU PPM	PB PPM	ZN PPM	AU PPB
M400E3850N	.7	12	253	89	54	240	5
M400E3900N	.1	1	73	151	78	367	5
M400E3950N	2.3	1	32	24	6	117	5
M400E4000N	2.4	1	75	30	25	146	5
M400E4050N	2.8	4	90	38	21	136	5
M400E4100N	2.9	7	262	39	24	172	5
M400E4150N	2.9	17	269	46	36	141	5
M500E3600N	.3	11	294	60	32	162	5
M500E3650N	.9	21	852	88	39	150	5
M500E3700N	.4	11	176	57	31	136	5
M500E3750N	.7	23	207	64	49	170	5
M500E3800N	2.3	4	85	88	51	262	5
M500E3850N	3.3	1	30	45	8	115	5
M500E3900N	3.2	68	39	13	17	87	5
M500E3950N	3.6	1	57	91	29	157	5
M500E4000N	3.2	3	48	28	4	148	5
M500E4050N	3.5	1	49	41	12	157	5
M500E4100N	2.5	11	62	37	23	143	5
M500E4150N	2.6	15	230	120	191	366	5
M500E4200N	2.3	11	188	50	92	242	5
M600E3600N	.5	23	756	117	34	193	5
M600E3650N	.1	1	697	78	19	147	5
M600E3700N	.7	13	232	74	43	163	5
M600E3750N	1.8	21	105	116	58	247	10
M600E3800N	2.6	26	92	113	99	466	5
M600E3850N	3.1	1	46	73	82	403	5
M600E3900N	3.4	9	57	96	36	218	5
M600E3950N	2.6	1	51	99	45	253	5
M600E4000N	2.9	1	37	92	46	230	5
M600E4050N	3.6	2	55	65	36	207	5
M600E4100N	3.4	9	117	85	77	358	5
M600E4150N	2.9	14	192	90	197	492	5
M700E3800N	1.3	14	113	168	48	247	5
M700E3850N	6.9	4	18	39	39	119	5
M700E3900N	3.2	1	74	45	96	216	5
M700E3950N	1.7	1	91	38	46	266	5
M700E4000N	5.2	1	83	84	17	295	5
M700E4050N	2.8	7	68	127	92	281	5
M700E4100N	4.1	1	53	86	12	172	5
M700E4150N	2.8	23	147	65	55	309	5
M800E3700N	3.2	1	89	57	22	180	5
M800E3750N	1.3	32	215	150	52	223	5
M800E3800N	1.8	15	150	127	60	245	5
M800E3850N	2.1	12	66	88	58	289	5
M800E3900N	1.4	11	20	36	23	153	10
M800E3950N	3.1	18	96	93	54	263	5
M800E4000N	3.1	14	54	101	37	188	5
M800E4050N	2.9	18	70	647	63	188	5
M800E4100N	2.1	1	80	26	22	140	5
M800E4150N	2.0	12	137	68	51	305	5
M800E4200N	3.2	11	92	71	35	191	5
M900E3700N	.8	29	263	138	45	206	5
M900E3750N	1.9	18	148	161	44	265	5
M900E3800N	1.5	18	122	125	47	237	5
M900E3850N	1.8	8	44	59	21	216	5
M900E3900N	3.7	5	67	51	30	175	5
M900E3950N	2.9	9	31	36	14	157	5
M900E4000N	3.4	6	30	62	24	145	5
M900E4050N	3.2	10	33	27	16	100	5
M900E4100N	2.0	6	291	29	24	241	5









Assay Certificate

9V-1106-RA2

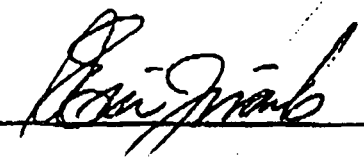
Company: OMEGA ECSTALL  
Project: UNIK & ISKUT  
Attn: C.GRAF/J.NICHOLSON

Date: SEP-15-89  
Copy 1. OMEGA ECSTALL, VANCOUVER, B.C.  
2. J.NICHOLSON, VANCOUVER, B.C.

We hereby certify the following Assay of 21 ROCK samples submitted SEP-12-89 by J.NICHOLSON.

Sample Number	AU G/TONNE	AU OZ/TON
89TMR 033	.01	.001
89TMR 034	.02	.001
89TMR 034A	.01	.001
89TMR 035	.15	.004
89TMR 036	.01	.001
-----		
89TMR 037	.05	.001
89TMR 038	.03	.001
89TMR 038A	.02	.001
89TMR 042	.01	.001
89TMR 044	.01	.001
-----		
89TMR 045	.01	.001
89 JMR 017	.02	.001
89 JMR 018	.01	.001
-----		
89 JMR 021	.01	.001
89 JMR 022	.01	.001
89 JMR 023	.01	.001
89 JMR 024	.01	.001
89 JMR 025	.01	.001
-----		
89 JMR 026	.01	.001
89 JMR 027	.04	.001
89 JMR 028	.01	.001
89 JMR 030	.01	.001
89 JMR 031	8.13	.237
-----		
89 JMR 032	20.00	.583
89 JMR 033	11.01	.321
89 JMR 034	.25	.007
89 MCR 001	.01	.001
89 MCR 003	.01	.001
-----		
89 MCR 004	.01	.001
89 MCR 005	.01	.001
89 MCR 006	.01	.001
89 MCR 007	.02	.001
89 MCR 011	.02	.001

Certified by



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• EN

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

9V-1106-PA1

Company: OMEGA ECSTALL  
Project: UNIK & ISKUT  
Attn: C.GRAF/J.NICHOLSON

Date: SEP-24-89  
Copy 1. OMEGA ECSTALL, VANCOUVER, B.C.  
2. J.NICHOLSON, VANCOUVER, B.C.

*We hereby certify* the following Assay of 3 PULP samples submitted SEP-12-89 by J.NICHOLSON.

Sample Number	AG	
	G/TONNE	OZ/TON
SCR 025	3810.0	111.13
MCR 028	1085.0	31.65
B9TMR 032	803.0	23.42

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TELEX: VIA U.S.A. 7801067 • FAX (604) 980-9

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

Assay Certificate

9V-1345-RA1

Company: OMEGA ECSTALL  
Project: UNIK ISKUT  
Attn: C. GRAF/J. NICHOLSON

Date: OCT-15-89  
Copy 1. OMEGA ECSTALL, VANCOUVER, B.C.  
2. NICHOLSON & ASSOC., VANCOUVER, B.C.

We hereby certify the following Assay of 18 ROCK samples submitted OCT-14-89 by J. NICHOLSON.

Sample Number	AU G/TONNE	AU OZ/TON
1MTR 01	.01	.001
1MTR 02	8.71	.254
1MTR 03	5.89	.172
1MTR 04	.17	.005
1MTR 05	.02	.001
1MTR 06	.04	.001
1MTR 07	.02	.001
1MTR 08	.01	.001
2MTR 01	.01	.001
2MTR 02	.14	.004
1MTR 03	11.00	.321
2MTR 04	.20	.006
2MTR 05	.24	.007
2MTR 06	.01	.001
3MTR 01	.01	.001
3MTR 02	.01	.001
3MTR 03	.01	.001
3MTR 04	.02	.001
89LMR 008	.03	.001
89LMR 009	.04	.001
MCR 025	.02	.001
MCR 026	.01	.001
MCR 027	.01	.001
MCR 028	.01	.001
MCR 029	.02	.001
MCR 030	.05	.001
89TMR 028	.01	.001
89TMR 029	.01	.001
89TMR 030	.03	.001
89TMR 031	.02	.001
89TMR 032	.03	.001

Certified by

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GLACIER

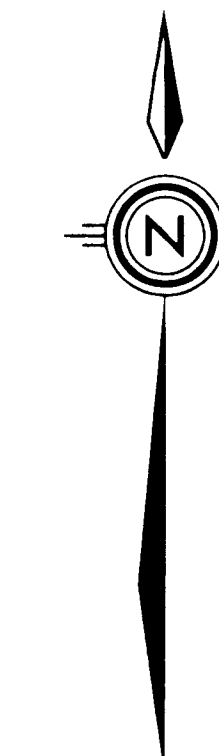
MACGOLD 1

MACGOLD 2

J.R. Showing

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LEGEND

- 1 Gravels, alluvium, glacial outwash poorly sorted
- 2 Andesite, grey, siliceous minor inclusions of tuffaceous material. 2a: Andesite Breccia, grey siliceous, clasts of unconsolidated material subhedral to euhedral. Unit 2 is interbedded with that of Unit 7
- 3 Diabase Dykes, dark, aphanitic, inclusions of augite? present, inclusions of chalcopyrite disseminated throughout
- 4 Maroon Andesite (Basalt) purplish in colour and contains inclusions of black unknown material. 4a: Maroon basalt: purplish in colour and contains large brecciated clasts of altered dacitic material.
- 5 Lithic Tuff, greyish in colour, fine grained with lithic fragments of ash. 5a: Flow banded lithic tuff, greyish.
- 6 Quartz Carbonate, orange brown, fizzes with acid, predominant unit infilling fracture sets.
- 7 Dacite, Light to dark green in colour, weak to moderately siliceous, inclusions of tuffaceous material within matrix. 7a: Dacite Breccia, Light to dark green in colour, moderately siliceous, inclusions of andesite breccia clasts, disseminated pyrite throughout. 7b: Gossanous Dacite, bright orange, heavy oxidation, occasional breccia clasts. 7c: Kaolinized clasts of feldspar within a brecciated matrix.
- 8 Rhyolite, Light to medium grey in colour, moderately fractured. 8a: Flow Banded Rhyolite, light grey to grey in colour, contains flow banding throughout.

- XXX Stockwork
- XX Chalcopyrite
- cpy Chalcopyrite
- py Pyrite
- ep Epidote
- sph Sphalerite
- chl Chlorite
- gal Galena
- Geologic contact
- Outcrop
- Jointing
- Attitude
- Fault

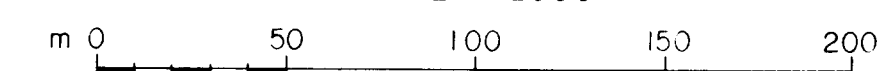
GLACIER

GLACIER

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,657

SCALE 1:2000



OMEGA/ECSTALL  
MACGOLD PROJECT  
LOCAL GEOLOGY  
SKEENA/LIARD MINING DIVISION  
BRITISH COLUMBIA

NICHOLSON & ASSOCIATES  
DRAWN: J.W. DATE: JAN 1990 FIGURE: 5a  
NTS: 104 B/10E

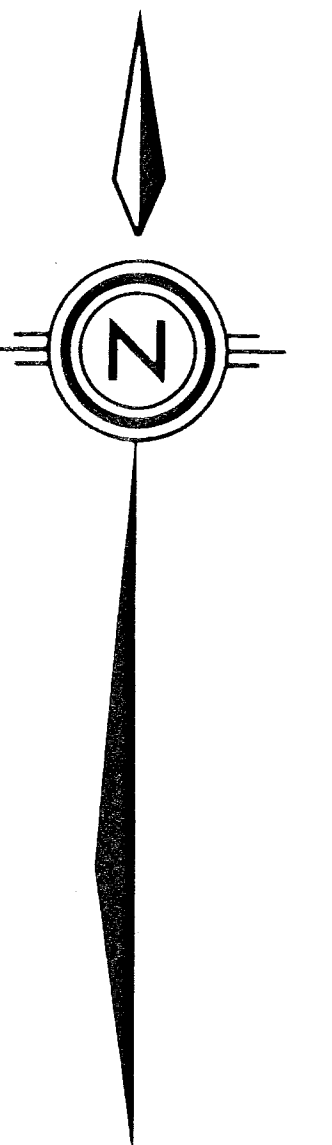
GLACIER

MACGOLD 1

MACGOLD 2

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LEGAL CORNER POST

GLACIER



1MTC01	CO-01-112/133/14
1MTC02	CO-01-112/133/14
1MTC03	CO-01-112/133/14
1MTC04	CO-01-112/133/14
1MTC05	CO-01-112/133/14
1MTC06	CO-01-112/133/14
1MTC07	CO-01-112/133/14
1MTC08	CO-01-112/133/14
2MTC01	CO-01-112/133/14
2MTC02	CO-01-112/133/14
2MTC03	CO-01-112/133/14
2MTC04	CO-01-112/133/14
2MTC05	CO-01-112/133/14
2MTC06	CO-01-112/133/14
2MTC07	CO-01-112/133/14
2MTC08	CO-01-112/133/14
3MTC01	CO-01-112/133/14
3MTC02	CO-01-112/133/14
3MTC03	CO-01-112/133/14
3MTC04	CO-01-112/133/14
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4MTC02	CO-01-112/133/14
4MTC03	CO-01-112/133/14
4MTC04	CO-01-112/133/14
4MTC05	CO-01-112/133/14
4MTC06	CO-01-112/133/14
4MTC07	CO-01-112/133/14
4MTC08	CO-01-112/133/14
4MTC09	CO-01-112/133/14
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4MTC11	CO-01-112/133/14
4MTC12	CO-01-112/133/14
4MTC13	CO-01-112/133/14
4MTC14	CO-01-112/133/14
4MTC15	CO-01-112/133/14
4MTC16	CO-01-112/133/14
4MTC17	CO-01-112/133/14
4MTC18	CO-01-112/133/14
4MTC19	CO-01-112/133/14
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4MTC23	CO-01-112/133/14
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4MTC25	CO-01-112/133/14
4MTC26	CO-01-112/133/14
4MTC27	CO-01-112/133/14
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4MTC29	CO-01-112/133/14
4MTC30	CO-01-112/133/14

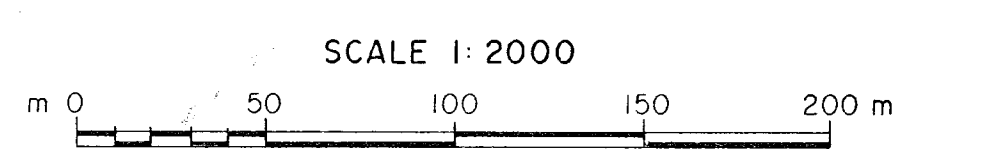
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GLACIER

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**LEGEND**

- SILT SAMPLE SITE
  - ▲ ROCK SAMPLE LOCATION
- 89JM001; SAMPLE NUMBER
- 0.01/5.5/85/1250/1990  
Au oz/t / Ag ppm / Pb ppm / Zn ppm / Cu ppm
- \*Rock sample descriptions in Appendix ii

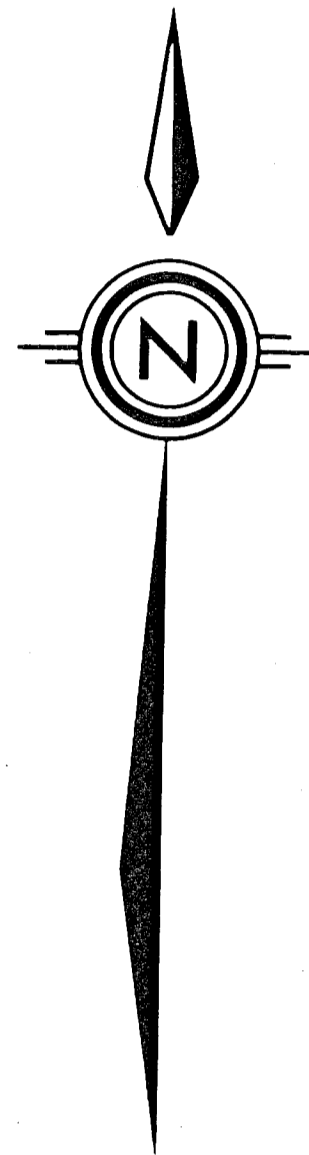
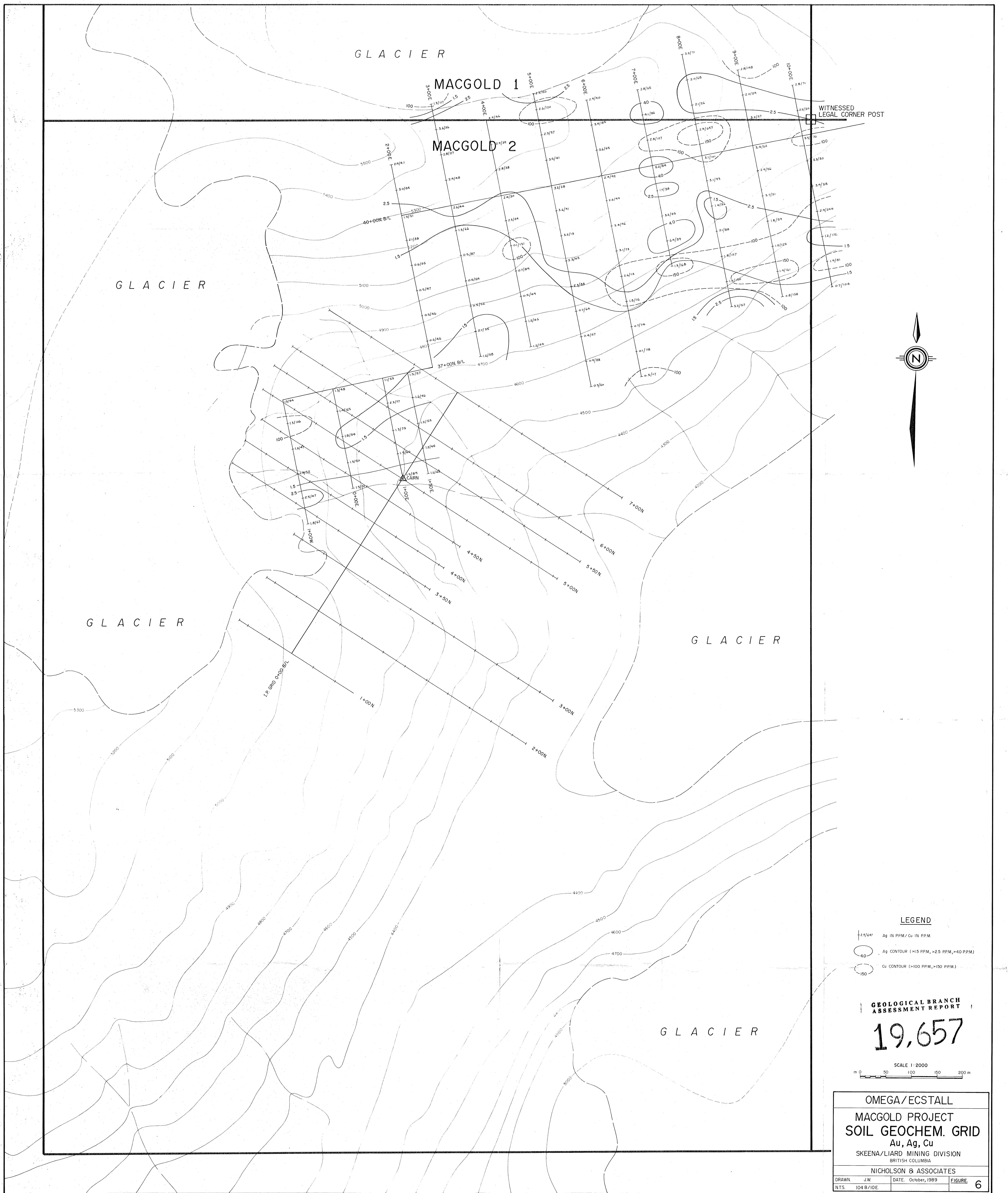


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,657

OMEGA/ECSTALL  
MACGOLD PROJECT  
GEOLOGY AND  
SAMPLE LOCATIONS  
SKEENA/LIARD MINING DIVISION  
BRITISH COLUMBIA

NICHOLSON & ASSOCIATES			
DRAWN	J.W.	DATE	DEC. 1989
NTS	104 B/10E	FIGURE	5b

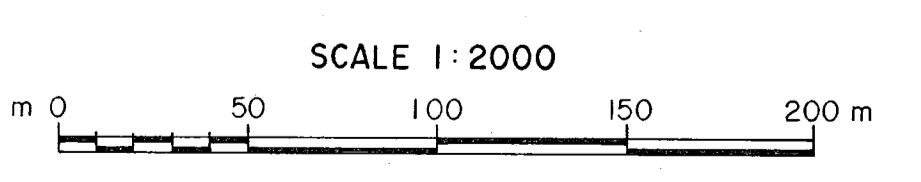


**LEGEND**

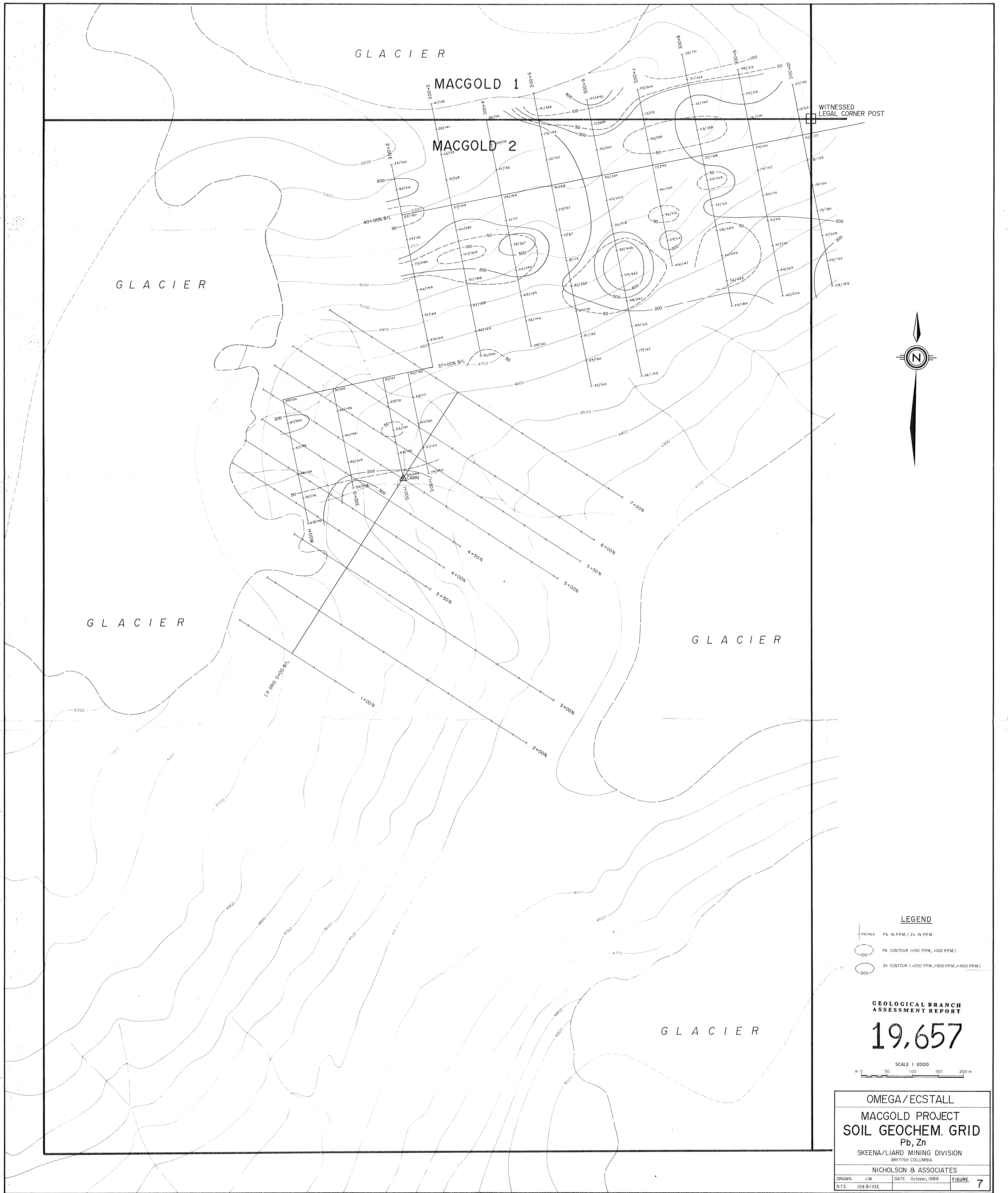
- 21/67 Ag IN PPM / Cu IN PPM
- 40 Ag CONTOUR (>15 PPM, >25 PPM, >40 PPM)
- 150 Cu CONTOUR (>100 PPM, >150 PPM)

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

**19,657**



OMEGA/ECSTALL	
MACGOLD PROJECT	
SOIL GEOCHEM. GRID	
Au, Ag, Cu	
SKEENA/LIARD MINING DIVISION	
BRITISH COLUMBIA	
NICHOLSON & ASSOCIATES	
DRAWN J.W.	DATE: October, 1989
NTS. 104 B/10E	FIGURE 6



GLACIER

MACGOLD 1

MACGOLD 2

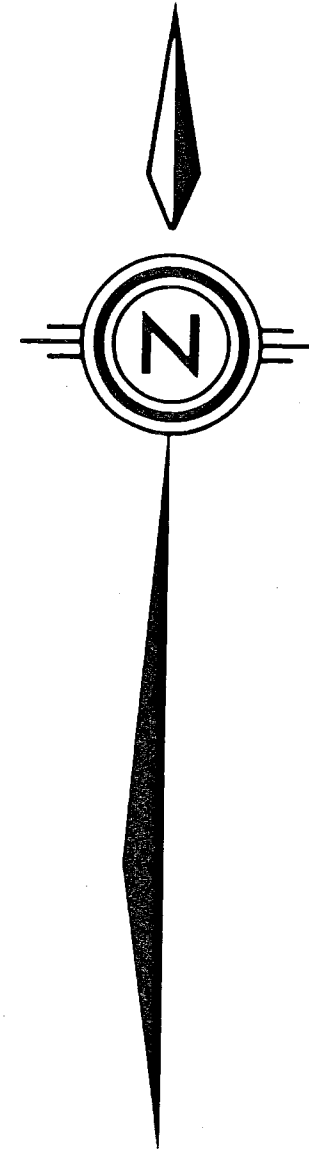
GLACIER

GLACIER

GLACIER

GLACIER

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**LEGEND**

- 99/466 Pb IN PPM / Zn IN PPM
- 100 Pb CONTOUR (>50 PPM, >100 PPM)
- 300 Zn CONTOUR (>200 PPM, >300 PPM, >400 PPM)

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**19,657**

SCALE 1:2000  
0 50 100 150 200 m

OMEGA/ECSTALL			
MACGOLD PROJECT			
SOIL GEOCHEM. GRID			
Pb, Zn			
SKEENA/LIARD MINING DIVISION			
BRITISH COLUMBIA			
NICHOLSON & ASSOCIATES			
DRAWN	J.W.	DATE	October, 1989
N.T.S.	104 B/10E	FIGURE	7