

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 90.04.12

ASSESSMENT REPORT 18637

MINING DIVISION: Omineca

PROPERTY: Loon  
LOCATION: LAT 53 38 00 LONG 125 59 00  
UTM 10 5946647 302748  
NTS 093F12W  
CLAIM(S): Loon 1-5, Loon 8  
OPERATOR(S): Mingold Res.  
AUTHOR(S): Taylor, K.J.  
REPORT YEAR: 1989, 39 Pages  
COMMODITIES  
SEARCHED FOR: Silver, Gold  
KEYWORDS: Eocene, Ootsa Lake Formation, Rhyolite, Quartz Veins  
WORK  
DONE: Geochemical, Geophysical, Physical  
EMGR 9.2 km; VLF  
Map(s) - 1; Scale(s) - 1:2500  
LINE 1.5 km  
ROCK 42 sample(s) ; ME  
SOIL 161 sample(s) ; ME  
Map(s) - 1; Scale(s) - 1:2500  
TREN 27.2 m 7 trench(es)

Geochemical and Geophysical Surveys  
Mapping, Rock Sampling, Trenching  
and Linecutting

-on the-

Loon 1-5 and Loon 8 Claims

Omineca Mining Division  
British Columbia

N.T.S. 93E/9 and F/12

Lat. 53° 38'N Long. 125° 59'W

-for-

Mingold Resources Inc.  
709-837 W. Hastings St.  
Vancouver, B.C.  
V6C 1B6

FILMED

-by-

K.J. Taylor, B.Sc., F.G.A.C.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

March 1989

18,637

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## INTRODUCTION

The Loon claims were staked July and August of 1988 as a result of a reconnaissance prospecting/sampling program in the Ootsa Lake area. The focus of attention was the Ootsa Lake Volcanics, a sequence of Lower Tertiary felsic flows and pyroclastics of subaerial origin. The target was a Nevadan type epithermal gold deposit of which the Loon appears to be a noteworthy candidate.

A modest program of linecutting, soil geochemistry, VLF-EM, trenching and rock sampling was carried out September 4 and September 27 to October 11, 1988. The surveys were done over an area where initial prospecting and sampling indicated gold and silver bearing epithermal veins and breccias. The results of these surveys are the subject of this report.

## LOCATION & ACCESS

The Loon property is located 70 kilometers south of Burns Lake and 216 kilometers west of Prince George (see Fig.1). The claims occur in the Windfall Hills area north and east of Uduk Lake near the eastern boundary of Tweedsmuir Provincial Park (see Fig.2). Latitude 53°38'N; longitude 125°59'W. The claims straddle the boundary between NTS mapsheets 93E/9 (Ghitezli Lake) and 93F/12 (Marilla). The camp was located on the east side of an unnamed lake referred to in the field as Loon Lake.

Access to the claims is by fixed-wing aircraft from Burns Lake to Loon Lake. Logging roads pass within 7 kilometers of both the northeastern and southeastern claim boundaries. These are seasonal roads used by West Fraser's Eurocan Division based out of their East Ootsa Camp. Ferry transportation across Ootsa Lake is on an availability basis only.

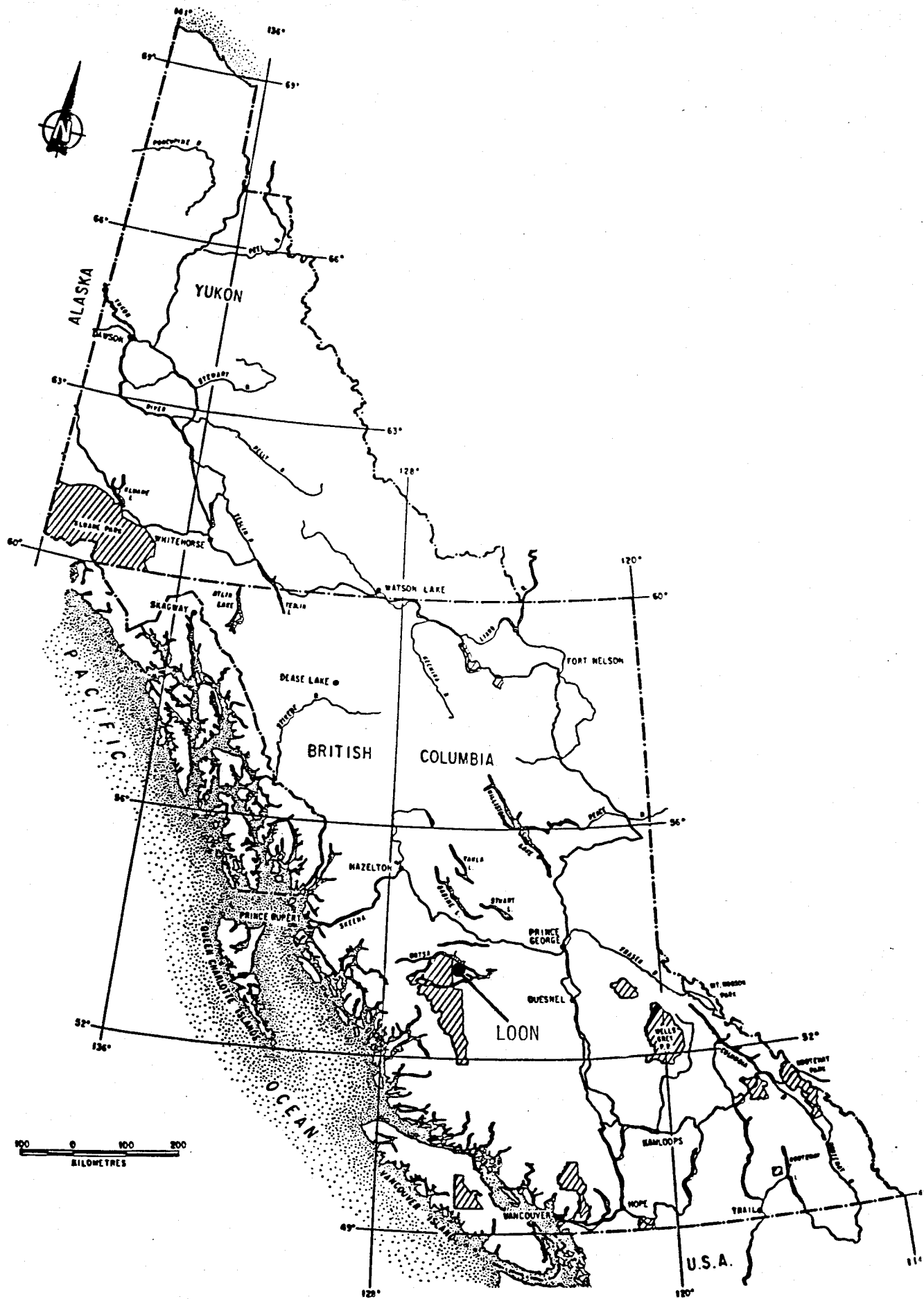
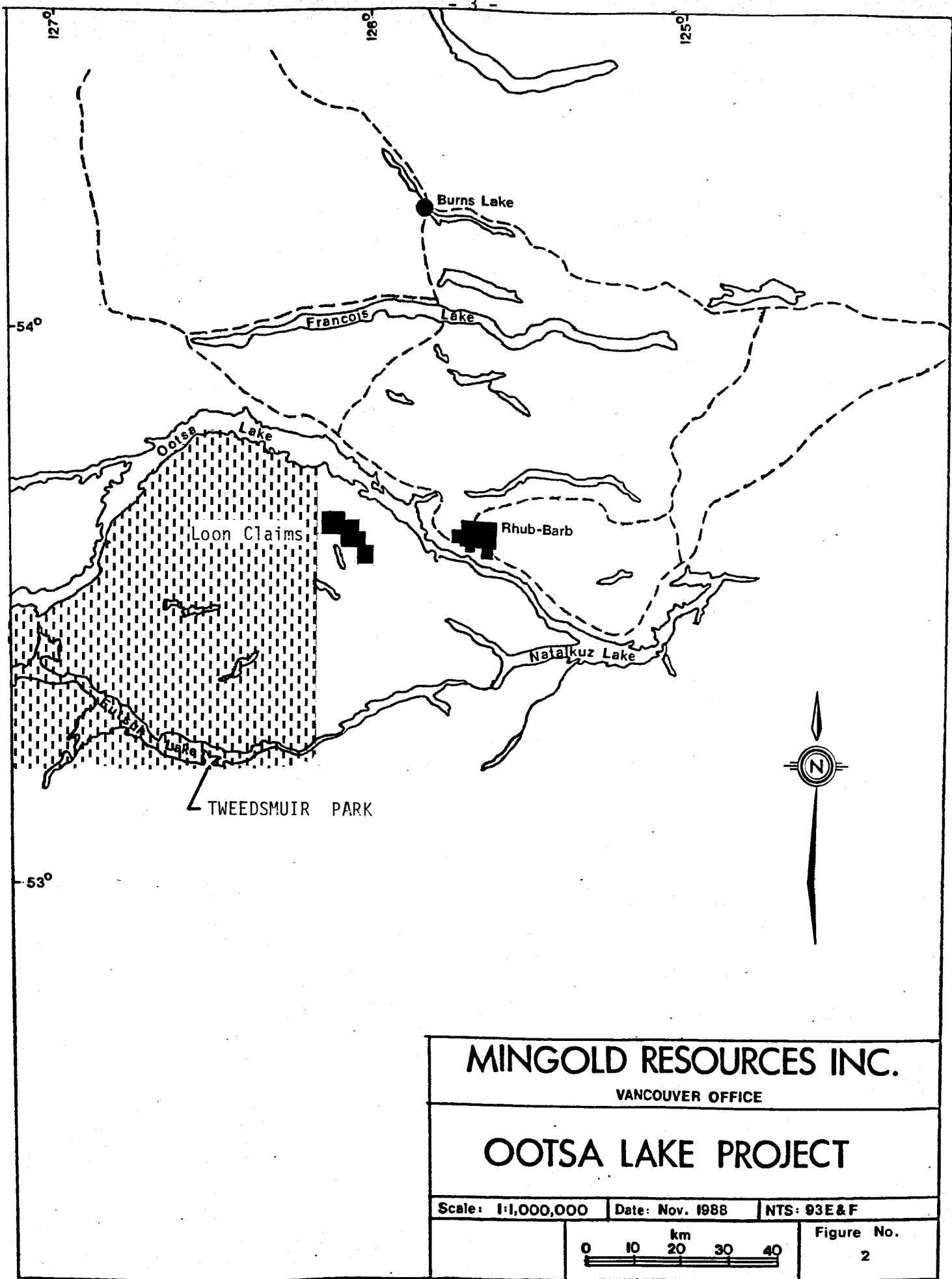


Figure 1. General Location Map (1:10,000,000)



**MINGOLD RESOURCES INC.**

VANCOUVER OFFICE

**OOTSA LAKE PROJECT**

Scale: 1:1,000,000

Date: Nov. 1988

NTS: 93E&F



Figure No.

2

## CLAIMS

The Loon property consists of a contiguous block of 9 claims totalling 152 units in the Omineca Mining Division. The claims are wholly owned by Mingold Resources Inc. A breakdown of the claim information is shown in Table 1 and the location of the claims in Fig. 3.

Table 1. Loon Claims Summary

<u>Claim</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Record Date</u>	<u>Expiry Date*</u>
Loon 1	18	9568	July 19/88	July 19/91
Loon 2	18	9569	July 19/88	July 19/91
Loon 3	20	9570	July 19/88	July 19/91
Loon 4	12	9661	Aug. 17/88	Aug. 17/91
Loon 5	20	9662	Aug. 17/88	Aug. 17/91
Loon 6	20	9719	Aug. 18/88	Aug. 18/89
Loon 7	12	9720	Aug. 18/88	Aug. 18/89
Loon 8	12	9721	Aug. 18/88	Aug. 18/91
Loon 9	20	9722	Aug. 18/88	Aug. 18/89

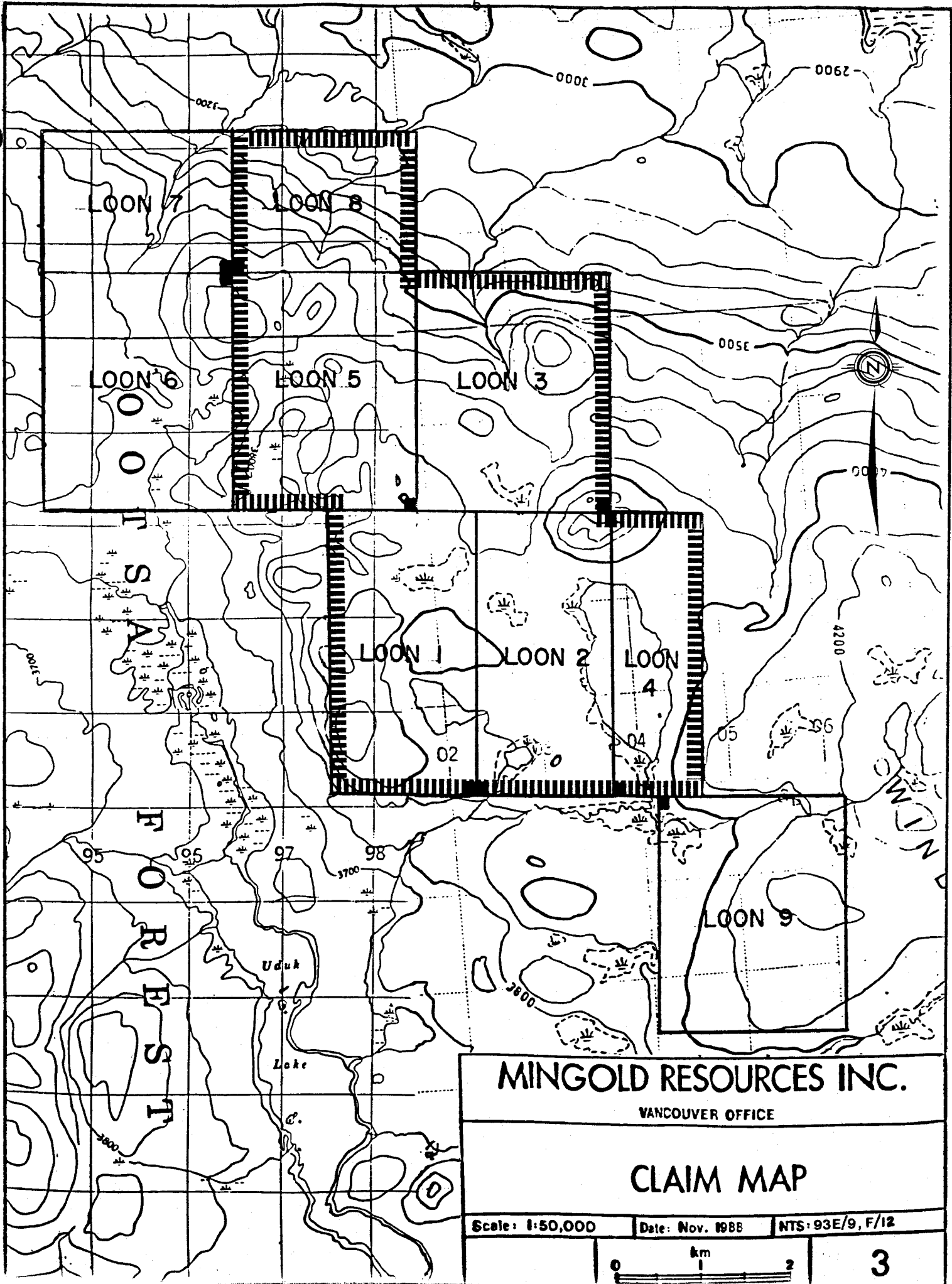
\*Note the expiry dates shown include the assessment credits for work presently being applied.

The claims for which assessment is being applied have been grouped into a 100 unit contiguous block which includes Loon 1 - 5 and Loon 8. No work is presently being applied to Loon 6, 7 and 9.

## PROPERTY HISTORY

The first known work in the area was by H.W. Tipper of the Geological Survey of Canada in 1949. At that time, he carried out the initial government mapping of the area which was later published in G.S.C.





**MINGOLD RESOURCES INC.**

VANCOUVER OFFICE

**CLAIM MAP**

Scale: 1:50,000      Date: Nov. 1988      NTS: 93E/9, F/12



**3**

Memoir 324. Since that time no further work is indicated until 1980 at which time Amax Exploration staked claims in the Uduk Lake area just south of the Loon property. The claims were allowed to lapse by Amax and were subsequently restaked by A & M Exploration as the Duk claims. These claims are presently still in good standing and held by Comox Resources.

In 1985, Mingold Resources did an initial pass through the area just north and east of the Loon property. In 1986, Mingold staked 268 units due east of the Loon area as the Rhub and Barb claims. The claims covered epithermal gold and silver bearing rhyolites of the Ootsa Lake Volcanic package. In 1987, work was confined to the Rhub-Barb area with Newmont Exploration staking the Barb and Gusty claims along the eastern and southern boundaries of these claims. In 1988, Mingold extended their exploration to areas of Ootsa Lake Volcanics outside the Rhub-Barb and found an accumulation of mineralized epithermal veins and breccia boulders south of Ootsa Lake. These boulders were subsequently traced "up ice" to outcrops of similar material on what is now the Loon 1 and 2 claims. In the course of staking, additional material was found in float or outcrop resulting in the expansion of the claim block to cover a total of 152 units. The claims tie onto the northern boundary of the Duk claims where similar material is found.

#### GEOLOGY

The Loon claims occur in the south-central part of the Intermontane Geological Belt of the Northern Cordillera.

Lithologies range in age from late Triassic through Miocene with

intermediate to felsic volcanics being the dominant rock types.

The oldest rocks exposed in the area are the U.Triassic Takla Group Volcanics which consist of island arc sequences of intermediate to basic volcanics. These were superceded by the Hazelton Group Volcanics in early to mid-Jurassic time. This package of dominantly calc-alkaline basaltic to rhyolitic volcanics is prevalent in the area surrounding the Loon claims but only occurs on Loon 9 within the claim block.

The lower Mesozoic rocks are overlain unconformably by an extensive volcanic sequence known as the Ootsa Lake Volcanics. Recent work on the Whitesail (93E) mapsheet further west suggests this package is entirely Eocene in age (Drobe, 1988). These rocks occur over most of the claim area and consist typically of flows and tuffs of felsic to intermediate composition. The evolution of the rocks is believed to be related to a series of dome complexes within a collapsed cauldера setting. These rocks commonly host epithermal gold-silver mineralization in the area.

The Ootsa Lake Group is in turn overlain and intruded by andesitic to basaltic flows, dykes and plugs of the Oligocene to Miocene Endako Group. These rocks are typically in the basalt range and have likely resulted from "plateau-type" extrusion into the area. Alteration prevalent in the Ootsa Lake rocks seldom extends into the Endako sequence suggesting that the epithermal mineralizing event occurred prior to or contemporaneous with the emplacement of the Endako volcanics.

The region is structurally complex with the complexity becoming all the more evident with the more intensive work in the area. Heavy glaciation has precluded the G.S.C. extrapolating the faulting evident both north and south of the area into the Ootsa Lake region. Our detailed work along with airphoto

interpretation is indicating that the northwesterly and northeasterly trending faults do in fact continue into this area along with a strong northerly trending system.

#### LINECUTTING AND GRID PREPARATION

Linecutting was confined to a 1.5 kilometer baseline (50+00E) running north-south from 45N to 60N. The baseline occurs totally within the Loon 2 claim. Linecutting was done by three Mingold personnel over the period of September 28 to 29, 1988. Lines were cleared of all brush over a width of one meter.

East-west section lines were flagged in every 300 meters beginning at line 45N. A location line running through the trenched areas was put in 120 meters north of line 54N - that is at 55+20N. Stations were flagged in every 25 meters along the lines for a distance of one kilometer east and 500 meters west of the 50+00E baseline. A total of 8.83 kilometers of section line was established (see also under Soil Geochemistry below).

#### GEOCHEMISTRY

##### SOIL GEOCHEMISTRY

A total of 161 soil samples were collected over the Loon 1 and 2 claims during the period of September 30 to October 1, 1988.

Soil sampling was carried out on lines 300 meters apart from 45N to 60N with 50 meter stations (see Plate No.1). The section lines were flagged in concurrent with the sampling. In addition, soils were taken every 25 meters peripheral to the trenches along the 55+20N location line.

Samples were collected from a depth of 15 to 25 cm. using a grubhoe and then placed in a Kraft soil bag. The entire area has been glaciated however a rusty brown to grey brown soil has been developed within the till which represents a false "B" horizon. It is believed that sampling of this horizon yields a measure of the in-situ metal content however values may be somewhat suppressed due to the relatively impervious nature of the till. Overburden depths do not appear to be excessive in this area however further work may indicate otherwise.

Samples were air-dried and sent to Acme Analytical Labs in Vancouver for analysis. All samples were run for a 30 element ICP package plus A.A. for gold and mercury.

#### ANALYTICAL PROCEDURE

In the lab, the soils are sieved to -80 mesh and then a 0.5 gram sample is digested with 3 ml. of 3-1-2 HCl-HNO<sub>3</sub>- H<sub>2</sub>O at 95°C. for one hour. This is then diluted to 10 ml. with water and analysed by an ICP unit. Gold detection limit by ICP is only 3 ppm so separate analysis was done for gold by AA. This method used a 10 gram sample which is ignited at 600°C, digested with hot aqua regia and extracted by MIBK. This is then analysed using a graphite furnace AA unit. Mercury analysis used the solution extracted during the ICP digestion. The aliquots of the extract are added to a stannous chloride-hydrochloric acid solution. The reduced mercury is swept out of solution and passed into the mercury cell of a cold vapor AA using a F & J scientific mercury assembly.

#### DISCUSSION OF RESULTS

The samples taken over areas of known mineralization along line

55+20N are probably the best to gauge the effectiveness of the soil geochem survey. In all cases, the soils detected a gold and/or silver anomaly in the trenched areas. However, overburden depths are minor in these areas so we may be looking at a special case scenario. In addition, the mineralization is associated with major structures which often occur as swampy depressions. These areas are not normally sampled so some of the main areas of mineralization may not have been tested.

The interrelationship between gold and silver in the soils is complex. In some areas, silver and gold anomalies coincide while in others they are distinctly separate. This may be due to zoning within the associated source or possibly a difference in mobility of the two elements in this geochemical environment.

No distinct lineal trends are obvious in either gold or silver anomalies. Two clusters of anomalies occur around the two areas of trenching and known mineralization. Another broad area of anomalies occurs along line 45N from 55E to 60E. The best silver anomalies occur in the western part of this area while the higher gold anomalies are to the east. A silver-only anomalous area occurs south of Boot Lake and may be traceable to the north where some single station anomalies occur.

Normal trace elements such as arsenic, antimony, mercury and molybdenum thus far appear to be erratic. Correlation between gold and silver and any one trace element is quite low and between the whole trace element group it falls into the realm of chance. The only sample which shows good correlation with all the elements is R20 (55+20N, 51+75E) which has both the highest gold and silver values (67ppb and 5.5 ppm respectively) obtained in soils.

## ROCK GEOCHEMISTRY

A total of 29 rock geochem samples were collected in the areas trenched in 1988 (see Plate No.1). All the samples were continuous chip samples generally over 1.0 meter intervals across silica breccia and vein material and adjacent wallrocks as shown in the 1:50 detailed trench maps (Fig. 4 to 10).

An additional 13 rock (grab) samples were taken of various silica veined and brecciated rhyolite as shown on Plate No. 1 (in pocket).

All samples were analysed by Acme Analytical Labs in Vancouver. Samples are first pulverized then analysed by the same methods described above for the soil sample analysis.

## DISCUSSION OF RESULTS

Although nearly all the samples showed elevated levels in gold and silver, only trench #4 contained significant mineralization (2365 ppb Au). This coincides with the heaviest concentration of silica veins and breccia. Sampling was not done on a geological basis so it is difficult to relate where the silver and gold occurs in the system. There is a suggestion that silver is concentrated in the black chalcedonic veins while gold is dispersed into the adjacent wallrocks however this is definitely not clearcut.

The highest gold value obtained was 2365 ppb (.069 oz/t.) while the highest silver value was 25.0 ppm (0.74 oz/t).

ROCK SAMPLE DESCRIPTION

The locations and descriptions of the trench samples are shown diagrammatically in the 1:50 trench maps. The samples described below were taken in various areas of Loon 1 and 2 claims and are shown on Plate No. 1

<u>Sample No.</u>	<u>Type</u>	<u>Description</u>
24902	Grab	Brecciated and silicified rhyolite. Tr-1% pyrite. 0.5 to 2 cm quartz veins.
24980	Grab	Brecciated and silicified rhyolite. Tr-1% pyrite 1 - 3 cm quartz veins.
24992	Grab	Sheared rhyolite with silica flooding. Tr-1% pyrite
24993	Grab	Same as above
24994	Grab	Same as above
24995	Grab	Brecciated and silicified rhyolite. Tr-1% pyrite. 0.5 to 2 cm. quartz veins
51187	Grab	Altered rhyolite with 1-15 cm black chalcedonic quartz veins. Tr-2%
51188	Grab	Same as above
51189	Grab	Brecciated and silicified rhyolite. Tr-1% pyrite 0.5 - 2 cm. quartz veins.
51190	Grab	Same as above
51191	Grab	Same as above
51192	Grab	Same as above
51193	Grab	Same as above



## TRENCHING

### Trenching (Physical Work)

A total of 27.2 meters of blast trenching was done in seven trenches. The dimensions of the trenches are summarized in Table 2 below. Blasting was done under contract by Hewitt Co. and Assoc. of Smithers, B.C. A total of seven mandays were spent drilling, blasting and cleaning out the trenches prior to sampling. This work was carried out from October 2 to October 7, 1988.

Table 2     Summary of Trenching

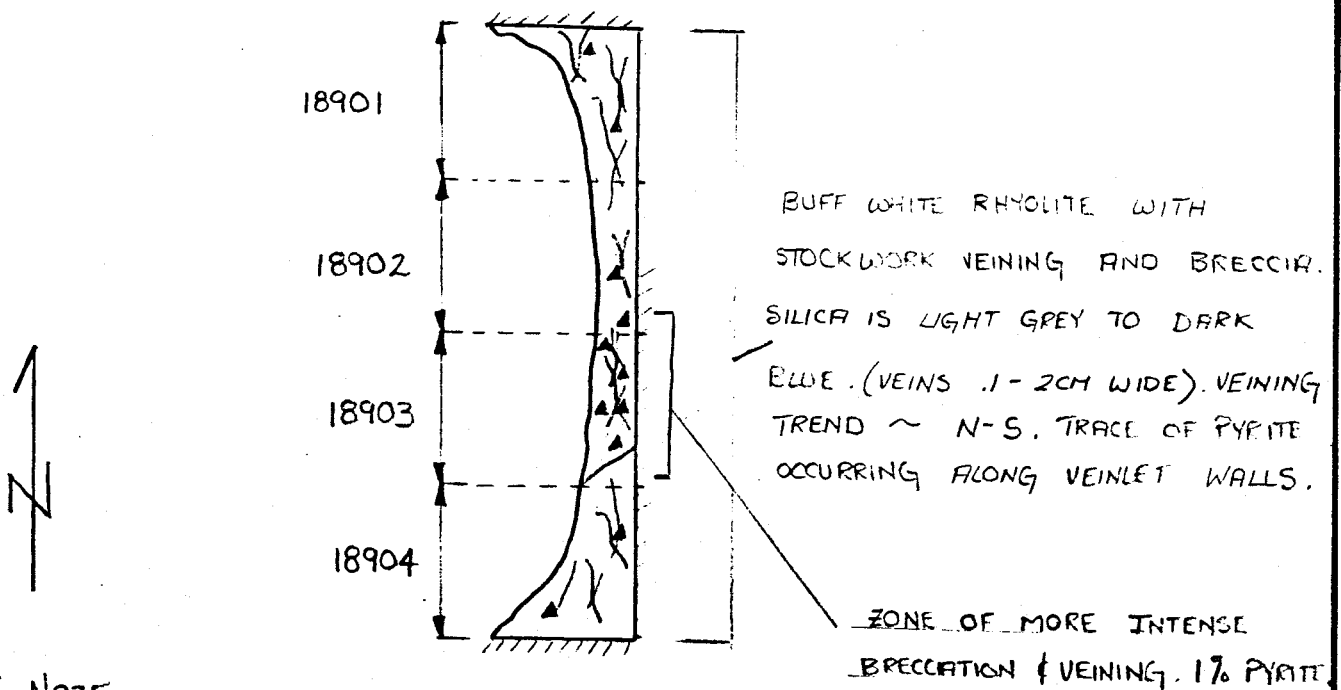
<u>Trench #</u>	<u>Length</u>	<u>Width</u>	<u>Depth</u>
1	4.0M	0.5M	0.4M
2	5.2M	1.0M	0.4M
3	3.0M	1.0M	0.4M
4	5.0M	1.0M	0.4M
5	6.0M	1.0M	0.4M
6	1.0M	0.8M	0.4M
7	3.0M	1.0M	0.4M

### Trench Mapping

From October 9 to 10, 1988, two Mingold geologists detail mapped the seven trenches described above. The location of the rock sampling is shown on Figures 4 to 10 along with the geology.

All the trenches occur in argillically altered (kaolinized; sericitized) Ootsa Lake rhyolite which is a cream to orange colour. The rhyolite has been selectively silicified, brecciated and resilicified with

SAMPLE	Au	Ag	Hg	WIDTH (m.)	TYPE
18901	8	2.2	100	1.0	CHIP
18902	18	1.1	240	1.0	CHIP
18903	20	1.5	280	1.0	CHIP
18904	7	.7	110	1.0	CHIP



NOTE

CHIP SAMPLING WAS DONE OFF A VERTICAL FACE OF LARGE FRACTURED SLABS.

88RT01

BEARING ~ 000°

TRENCH LENGTH 4M

TRENCH WIDTH .5M

SCALE 1:50

MINGOLD RESOURCES INC.

VANCOUVER OFFICE

LOON CLAIMS TRENCH # 1

DRAWN BY: R.D.

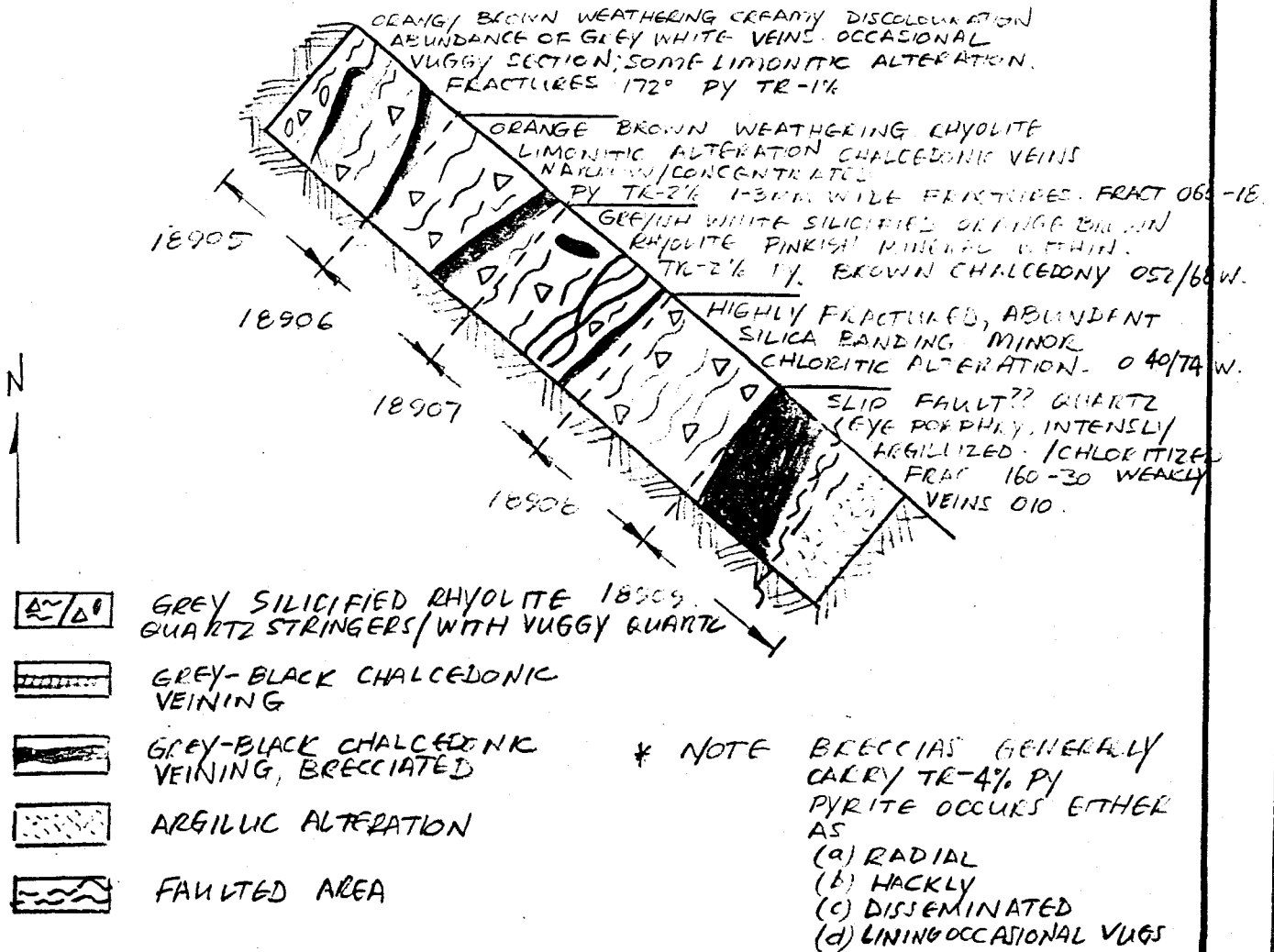
DATE:

APPROVED BY:

BRITISH COLUMBIA

Fig. 4

SAMPLE	AU	Ag	Hg	WIDTH (m.)	TYPE
18905	14	0.7	200	1.0	CHIP
18906	11	0.4	160	1.0	CHIP
18907	55	0.7	200	1.0	CHIP
18908	64	1.0	130	1.0	CHIP
18909	36	1.7	290	1.2	CHIP
18910	41	1.3	500	-	GRAB

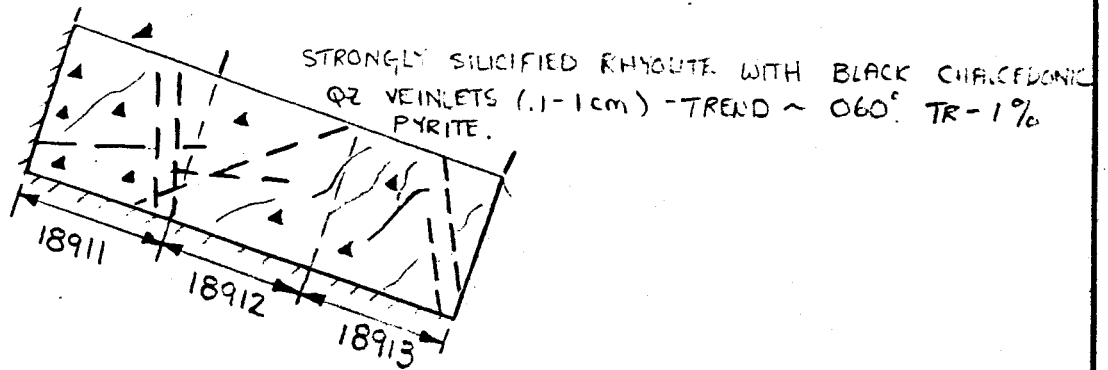


BETROZ  
 BEARING 130°  
 TRENCH LENGTH ≈ 5.2M  
 TRENCH WIDTH ≈ 1M  
 SCALE 1:50

<b>MINGOLD RESOURCES INC.</b>		
VANCOUVER OFFICE		
<b>LOON CLAIMS TRENCH #2</b>		
DRAWN BY: J.N.	DATE:	APPROVED BY:
BRITISH COLUMBIA		Fig. 5

SAMPLE	Au	Ag	Hg	WIDTH (m)	TYPE
18911	28	1.9	190	1.0	CHIP
18912	20	1.5	480	1.0	CHIP
18913	27	7.5	300	1.0	CHIP

MORE INTENSE SILICIFICATION WITH BLUE-GREY SILICA. 1-2% PYRITE LINING VEINLETS.



- FRACTURE
- ▲ BRECCIA
- ~ VEINING

88 TRO3

BEARING ~ 110°

TRENCH LENGTH ~ 3 M

TRENCH WIDTH ~ 1 M

SCALE 1:50

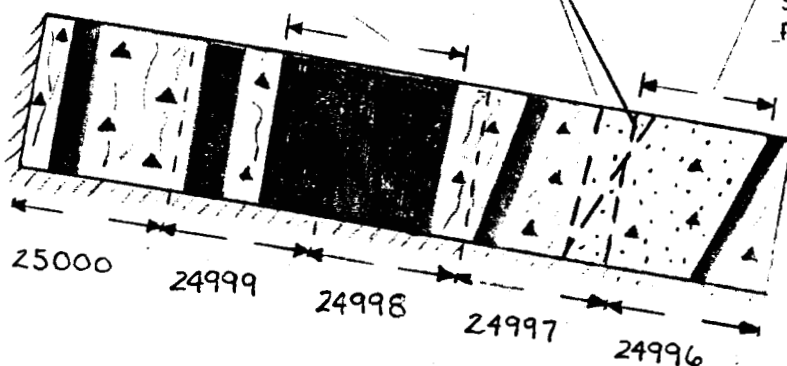
<b>MINGOLD RESOURCES INC.</b>		
VANCOUVER OFFICE		
LOON CLAIMS TRENCH # 3		
DRAWN BY: R.D.	DATE:	APPROVED BY:
BRITISH COLUMBIA		Fig. 6

SAMPLE	Au	Ag	Hg	WIDTH (m.)	TYPE
24996	2365	10.2	280	1.0	CHIP
24997	1375	7.3	300	1.0	CHIP
24998	1325	25.0	930	1.0	CHIP
24999	385	10.4	250	1.0	CHIP
25000	24	1.4	70	1.0	CHIP

BLACK CHALCEDONIC QUARTZ VEIN 010°/90°. 1-3% PYRITE OCCURRING ALONG FRACTURES OR AS SCATTERED PATCHES


FRACTURES 030° & 010°

INTENSE ARGILLIC ALTERATION - FAULT GOUGE, WITH SILICIFIED BRECCIATED FRAGMENTS. TR - 2% PYRITE



 BLACK CHALCEDONIC QUARTZ VEINING, BRECCIATED. TR - 1% PYRITE

 STOCKWORK VEINING (1-1 cm) WITH ASSOCIATED BRECCIA

 ARGILLIC ALTERATION FAULT GOUGE

--- FRACTURE

88TR04

BEARING 100°  
TRENCH LENGTH ≈ 5M  
TRENCH WIDTH ≈ 1M

SCALE 1:50

**MINGOLD RESOURCES INC.**

VANCOUVER OFFICE

LOON CLAIMS TRENCH # 4

DRAWN BY: R.D.

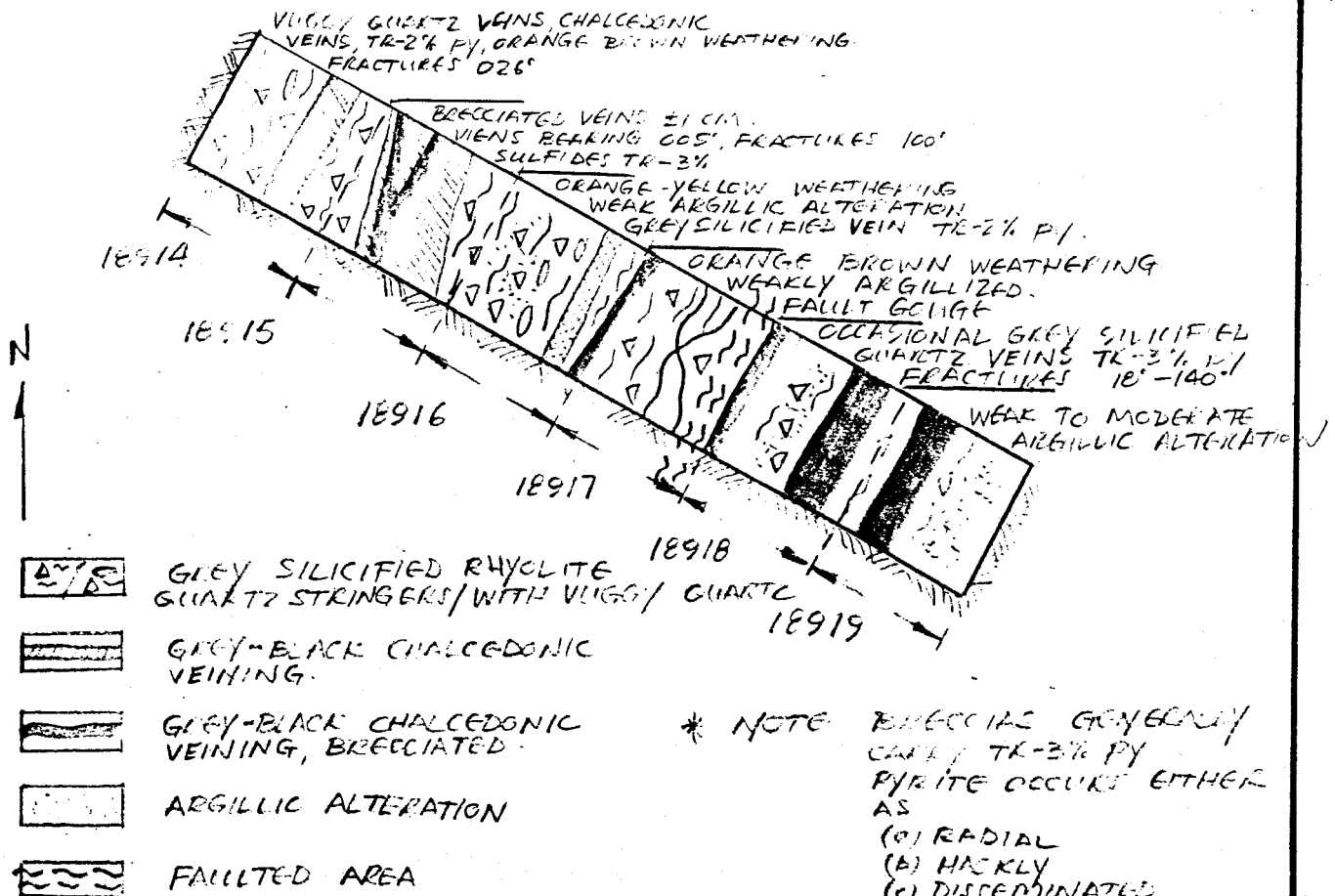
DATE:

APPROVED BY:

BRITISH COLUMBIA

Fig. 7

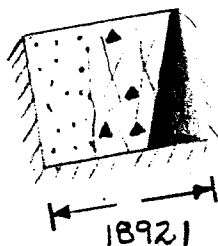
SAMPLE	Au	Ag	Hg	WIDTH (m)	TYPE
18914	128	6.4	460	1.0	CHIP
18915	87	2.3	190	1.0	CHIP
18916	42	1.1	90	1.0	CHIP
18917	69	2.4	170	1.0	CHIP
18918	34	0.8	80	1.0	CHIP
18919	191	3.9	130	1.0	CHIP
18920	184	5.3	80	-	GRAB






BEARING 120°  
 TRENCH LENGTH ≈ 6M  
 TRENCH WIDTH ≈ 1M  
 SCALE 1:50

<b>MINGOLD RESOURCES INC.</b>		
VANCOUVER OFFICE		
LOON CLAIMS TRENCH #5		
DRAWN BY: J.N.	DATE:	APPROVED BY:
BRITISH COLUMBIA		Fig. 8

SAMPLE	AU	Ag	Hg	WIDTH (m.)	TYPE
18921	184	5.3	80	1.0	CHIP

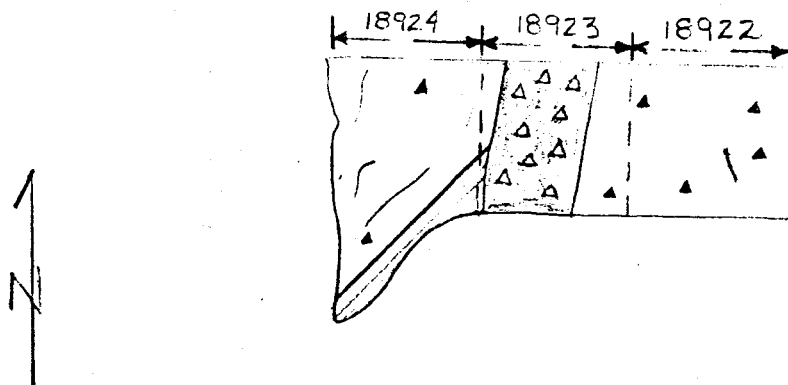






-  INTENSE ARGILLIC ALTERATION  
FAULT GOUGE WITH SILICIFIED - BRECCIATED FRAGMENTS
-  STOCKWORK VEINING (.1-1cm) LIGHT GREY  
- BLACK QUARTZ WITH ASSOCIATED BRECCIA.
-  BLACK CHALCEDONIC QUARTZ VEIN 010°/90°  
WITH TR-1% PYRITE

88 TRO 6  
 BEARING 080°  
 TRENCH LENGTH ~ 1M  
 TRENCH WIDTH ~ .8M  
 SCALE 1:50

<b>MINGOLD RESOURCES INC.</b>		
VANCOUVER OFFICE		
LOON CLAIMS TRENCH # 6		
DRAWN BY: R.D.	DATE:	APPROVED BY:
BRITISH COLUMBIA		Fig. 9

SAMPLE	AU	Ag	Hg	WIDTH (m)	TYPE
18922	54	2.0	1100	1.0	CHIP
18923	117	8.0	160	1.0	CHIP
18924	345	12.7	600	1.0	CHIP



-  STRONG ARGILLIC ALTERATION WITH LIGHT GREY SILICA BANDING, 048°. MINOR BLACK QZ AND BRECCIA
-  BRECCIA VEIN 010°/80 W. DARK BLUE TO BLACK CHALCEDONIC QUARTZ WITH BUFF WHITE RHYOLITE CLASTS. 1-2 % PYRITE, SPOTTY.
-  OPALESCENT QZ VEIN, LIGHT GREY TO BLUE SILICA (042°). TR. OF PYRITE
-  LIGHT GREY SILICA STOCK WORK VEINING, WITH MINOR BRECCIA, TR. OF PYRITE.

88TROT  
 BEARING ~ 90°  
 TRENCH LENGTH ~ 3M  
 TRENCH WIDTH ~ 1M  
 SCALE 1:50

<b>MINGOLD RESOURCES INC.</b>		
VANCOUVER OFFICE		
LOON CLAIMS TRENCH # 7		
DRAWN BY: R.D.	DATE:	APPROVED BY:
BRITISH COLUMBIA		Fig. 10



amorphous quartz. The silicified zones occur along major structural breaks as:

- (i) selective replacements in the more porous layers in the rhyolite
- (ii) discontinuous veinlets and vuggy fracture fills
- (iii) discrete veins or vein stockworks traceable over some distance
- (iv) silica healed tectonic and/or hydrothermal breccias which often show several stages of brecciation/silicification.

Overall the veins are oriented northerly to northeasterly however at any one location virtually any orientation is possible. The black chalcedonic veins and breccias are visually the most spectacular and often carry strong pyrite with anomalous to strong silver values. For gold mineralization however they can be a red herring. The tendency is to focus on the prominent veins and breccias however the best gold values often are associated with the argillically altered wallrock rhyolites especially where they show evidence of shearing. A good example of this is in trench #4 where the silver values are best in the vein while gold is highest in the gougy rhyolite wallrock. This "zoning" of silver and gold values may be responsible for the soil anomaly patterns in which gold is often adjacent to the silver values.

#### VLF-EM

A VLF-EM survey was carried out from October 2 to 4 over the same grid lines established for the soil geochem; the exception being that line 48N was not surveyed. In addition the 50E baseline was surveyed from 45N to 61N. A total of 9.21 kilometers of survey was completed.

A Geonics EM-16 unit was used for the survey. The operation of this instrument is well documented in the literature and will not be reiterated

in this report. The Seattle, Washington transmitting station (NLK-24.8 KHz.) was used for all east-west lines with the operator facing west. The Cutler, Maine transmitting station (NAA-24.0KHz) was used for the baseline survey with the operator facing south. The results of the survey are shown on Plate No. 2 (in pocket).

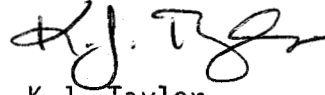
#### INTERPRETATION

The east-west survey indicates a series of northerly trending conductors which are probably delineating faults. The strongest of these can be traced over at least a kilometer in length. Two of these straddle the claim line (Loon 1 & 2) and are traceable from Line 60N to the south to 51N. Both appear to die out further south. A third conductor starts on line 55 + 20N at about 55E and is traceable to the south right to the claim boundary. Two weaker subparallel conductors occur about 200 meters east of this and are traceable over the same distance. Another conductor is present about 300 meters west of the 50E B.L. and can be traced south to Boot Lake and possibly to the southern claim boundary.

The single north-south line surveyed (50E B.L.) indicates one very major transverse conductor near the toe of Boot Lake. Several other strong conductors are also apparent from Lou's Puddle northward. With only one line surveyed no orientation can be given for any of these conductors.

There appears to be a complex interplay of faulting in this area which has resulted in considerable "noise" in the VLF-EM survey. Some of the multiple peak anomalies in the survey could be caused by "interference" from cross-faults. More detailed surveys using 100 meter spaced lines are necessary to properly interpret these anomalies. As well, additional

north-south lines will help delineate the cross-faults and indicate where "interference" might be expected.



K.J. Taylor

Senior Project Geologist

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- Wood, J.D. "General Geology of the Sleeper Gold Deposit, Humboldt County Nevada", Amax Exploration Paper, 1987.

BREAKDOWN OF COSTS

LOON GROUP I ( Loon 1,2,3,4,5,8) = 100 units

Personnel

J. Nicholson - Geologist/Supervisor	\$200/day
R. Diment - Geologist	\$200/day
W. Kowal - Geological Technician	\$150/day
Blaster - Contract from Hewitt Co. and Assoc.	\$375/day
J. Thomlinson - Fieldman	\$150/day

Linecutting (Physical Work) -1.5km., Sept. 28-29, 1988

4 mandays @ \$200/manday	\$800.00
2 mandays @ \$150/manday	\$300.00
Supplies - 60 1" x 1" x 48" pickets @ 75¢	45.00
- Flagging	20.00
Room/Board - 6 mandays @ \$35/manday	210.00
*Truck rental - 2 days @ \$50/day	100.00

Trenching (Physical Work) - 27.2 meters in 7 trenches Oct. 2-7, 1988

Drilling - 3 mandays @ \$375/manday	1125.00
Blasting - 2 mandays @ \$375/manday	750.00
Cleanout - 2 mandays @ \$150/manday	300.00
Powder, magazine rental	201.95
*Truck rental - 2/3 of 1 day @ \$50/day	33.33
Room/Board - 7 mandays @ \$35/manday	245.00

Rock Sampling - 42 samples; Sept. 4 & Oct. 7-8, 1988

Analysis - 29 trench samples @ \$12/sample	348.00
- 29 sample preps. @ \$3/sample	87.00
Analysis - 13 rock samples @ \$12/sample	156.00
- 13 sample preps @ \$3/sample	39.00
Trench Sampling - 2 mandays @ \$200/manday	400.00
Other rock sampling - 1 manday @ \$200/manday	200.00
Supplies - bags, tags, etc.	10.00
Room/Board - 3 mandays @ \$35/manday	105.00
*Truck rental - 1 day @ \$50/day	50.00
Shipping - 1 Cessna load @ \$158/load	158.00
- Bus from Burns Lake to Vancouver	27.00

Mapping Trenches - 7 trenches, Oct. 9-10, 1988

Mapping - 4 mandays @ \$200/manday	800.00
Room/Board - 4 mandays @ \$35/manday	140.00
*Truck Rental - 1 1/3 days @ \$50/day	66.67

Total page 1 = \$ 6716.95

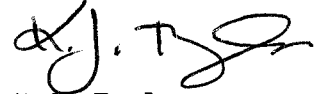
<u>Soil Geochem - 161 samples, Sept. 30 &amp; Oct. 1, 1988</u>	
Analysis - 161 samples @ \$12/sample	1932.00
- 161 sample preps @ 85¢/sample	136.85
Sampling - 4 mandays @ \$200/manday	800.00
- 2 mandays @ \$150/manday	300.00
Supplies - bags, flagging, etc.	25.00
Room/Board - 6 mandays @ \$35/manday	210.00
*Truck rental - 2 days @ \$50/day	100.00
Shipping - 1 Cessna load @ \$158/load	158.00
- Bus from Burns Lake to Vancouver	21.00
<u>VLF-EM - 9.21 km., Oct. 2-5, 1988</u>	
Surveying - 3 mandays @ \$150/manday	450.00
Plotting - 1 manday @ \$200/manday	200.00
Room/Board - 4 mandays @ \$35/manday	140.00
*Truck rental - 1 1/3 days @ \$50/day	66.67
<u>Mob-Demob (To/From Loon Claims) Sept. 27 &amp; Oct. 11, 1988</u>	
Mob into Loon - 2 Beaver loads @ \$256/load	512.00
Travelling/Camp Construction - 2 mandays @ \$200/manday	400.00
- 1 manday @ \$150/manday	150.00
Supply trip - 1 Beaver load @ \$256/load	256.00
Demob to Burns Lake - 2 Beaver loads @ \$256/load	512.00
Travelling/camp tear-down - 2 mandays @ \$200/manday	400.00
- 1 manday @ \$150/manday	150.00
Room/Board - 6 mandays @ \$35/manday	210.00
*Truck rental - 2 days @ \$50/day	100.00
<u>Mob-Demob (Burns Lake From/To Vancouver) Sept. 25-16, &amp; Oct. 12-13, 1988</u>	
Travelling - Vancouver to Burns Lake to Vancouver	
- 8 mandays @ \$200/manday	1600.00
- 4 mandays @ \$150/manday	600.00
Hotel/Meals - 12 mandays @ \$50/manday	600.00
Truck rental - 4 days @ \$50/day	200.00
<u>Report Preparation March 6-9, 1989</u>	
Writing - 4 days @ \$250/day	1000.00
Drafting - 15 hours @ \$20/hour	300.00
Total Pg. 2	<u>\$11529.52</u>
Total Pg. 1 & 2	\$18246.47
PAC Withdrawal	<u>1753.53</u>
Grand Total	<u><u>\$20,000.00</u></u>

\*Truck Rental apportioned by assuming one day rental for every 3 mandays of work.

STATEMENT OF QUALIFICATIONS

I, Kenneth J. Taylor of 15732 - 92B Avenue, Surrey, British Columbia do hereby certify that:

1. I am a geologist with a B.Sc. in Geology from the University of British Columbia, 1973.
2. I have practised my profession continuously since 1973.
3. I supervised the work on the Loon 1 - 9 Claims in the Omineca Mining Division.
4. I have been involved with exploration in the Ootsa Lake area since 1985 to the present. During this time I have worked exclusively on epithermal gold/silver occurrences similar to that on the Loon.
5. I have examined the fieldwork on which this report is based and found it to conform to accepted standards within the mining industry.



K.J. Taylor  
Senior Project Geologist  
Mingold Resources Inc.  
March 15, 1989.

APPENDIX I

Geochemical Analysis Certificates



## GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO<sub>3</sub>-H<sub>2</sub>O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN PB 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: Soil -80 Mesh AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY FLAMELESS AA.  
*Pb-Rocks*

DATE RECEIVED: OCT 14 1988

DATE REPORT MAILED: Oct. 19, 1988

SIGNED BY *Bernard Chan* D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES PROJECT 603 File # 88-5215 Page 1

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 %	W PPM	Au* PPB	Hg PPB
L60N 4500E	1	15	10	152	.4	19	10	284	4.09	3	5	ND	2	24	1	2	2	57	.24	.082	10	33	.61	87	.18	2	3.02	.01	.05	1	1	40
L60N 4550E	1	17	15	86	.2	14	7	203	3.40	21	5	ND	1	35	1	2	2	43	.25	.055	16	23	.41	121	.05	2	2.34	.01	.08	1	4	30
L60N 4600E	1	11	12	107	.2	24	11	210	3.76	3	5	ND	2	20	1	2	2	56	.15	.101	8	27	.45	91	.13	2	2.87	.01	.06	1	1	30
L60N 4650E	1	15	11	139	.6	34	13	294	4.82	9	5	ND	2	30	1	2	2	73	.24	.142	9	33	.59	121	.13	2	3.68	.01	.07	2	1	20
L60N 4700E	1	8	13	69	.1	11	6	181	2.37	5	5	ND	2	20	1	2	2	42	.20	.054	11	18	.29	67	.10	2	1.39	.01	.04	1	1	20
L60N 4750E	1	8	11	60	.1	9	5	159	1.94	3	5	ND	1	18	1	2	2	35	.18	.027	12	17	.29	82	.07	2	1.87	.01	.05	1	1	10
L60N 4800E	1	8	13	83	.1	12	6	192	2.50	2	5	ND	1	20	1	2	2	43	.19	.053	10	23	.33	72	.15	2	1.65	.01	.04	1	1	20
L60N 4850E	2	7	8	71	.1	11	5	145	2.66	5	5	ND	1	15	1	2	3	46	.13	.048	11	22	.18	71	.07	2	1.51	.01	.04	1	1	10
L60N 4900E	1	7	10	53	.1	11	5	203	2.50	8	5	ND	2	12	1	2	2	47	.12	.030	15	18	.27	52	.10	2	1.30	.01	.05	1	1	10
L60N 4950E	1	8	10	73	.1	12	6	253	2.63	7	5	ND	2	13	1	2	2	44	.14	.081	15	19	.24	71	.08	2	1.87	.01	.04	1	1	20
L60N 5000E	1	12	17	85	.1	15	7	269	2.73	11	5	ND	1	18	1	2	2	38	.19	.058	17	21	.42	82	.05	2	2.30	.01	.06	1	1	30
L60N 5050E	1	9	14	68	.1	11	5	170	2.04	5	5	ND	2	15	1	2	2	32	.14	.036	15	18	.27	74	.07	3	1.73	.01	.04	1	1	20
L60N 5100E	1	7	11	57	.1	8	3	158	1.56	5	5	ND	1	17	1	2	2	30	.18	.023	16	15	.26	57	.09	2	.96	.01	.04	1	1	10
L60N 5150E	1	4	9	39	.1	6	3	126	1.13	3	5	ND	2	12	1	2	3	22	.12	.018	16	12	.15	41	.08	2	.88	.01	.04	1	2	10
L60N 5200E	1	5	15	39	.1	7	3	125	1.28	5	5	ND	1	14	1	2	2	23	.13	.021	17	14	.17	47	.06	2	1.04	.01	.05	1	1	20
L60N 5250E	1	5	10	45	.1	7	3	142	1.46	6	5	ND	2	14	1	2	2	27	.13	.023	16	13	.20	52	.08	2	.92	.01	.05	2	1	5
L60N 5300E	1	7	10	110	.1	15	7	360	2.56	11	5	ND	1	19	1	2	2	39	.19	.050	15	20	.37	73	.06	3	1.73	.01	.06	1	1	10
L60N 5350E	1	6	10	69	.1	6	4	181	1.73	4	5	ND	2	15	1	2	2	32	.14	.029	17	14	.18	61	.09	2	1.01	.01	.04	1	12	5
L60N 5400E	2	11	11	127	.1	16	7	266	3.53	9	5	ND	1	19	1	2	2	57	.20	.093	12	23	.30	100	.08	2	2.48	.01	.05	1	1	30
L60N 5450E	3	21	17	116	.4	17	9	373	3.51	21	5	ND	2	38	1	2	2	38	.30	.097	27	21	.47	177	.01	2	3.82	.01	.14	1	2	30
L60N 5500E	2	19	15	95	.2	19	12	653	3.42	20	5	ND	2	28	1	2	2	44	.28	.075	18	21	.54	126	.02	2	2.80	.01	.11	1	1	20
L60N 5550E	1	5	18	57	.1	4	3	179	1.57	5	5	ND	1	12	1	2	2	34	.11	.024	19	13	.14	50	.12	2	.80	.01	.05	1	1	10
L60N 5600E	2	12	9	93	.1	15	9	1127	2.92	16	5	ND	1	29	1	2	2	38	.28	.048	23	18	.52	95	.06	2	1.54	.02	.11	1	1	20
L60N 5800E	1	8	13	58	.1	10	5	223	2.64	11	5	ND	3	18	1	2	2	47	.19	.069	16	19	.20	68	.07	2	1.33	.01	.05	1	1	10
L60N 5900E	1	8	12	59	.1	10	4	188	1.74	5	5	ND	1	20	1	2	2	30	.20	.040	15	15	.24	74	.06	3	1.24	.01	.04	1	1	30
L57N 4550E	2	29	22	137	.3	25	15	819	4.78	62	5	ND	3	49	1	2	2	59	.45	.088	24	29	.80	174	.04	2	3.29	.01	.17	1	4	20
L57N 4600E	1	20	13	106	.1	18	10	669	3.49	19	5	ND	1	36	1	2	2	48	.34	.075	23	26	.51	138	.04	2	2.78	.01	.11	1	1	30
L57N 4650E	1	8	8	76	.2	9	5	247	2.16	8	5	ND	2	13	1	2	2	36	.13	.033	15	18	.24	56	.08	2	1.27	.01	.04	2	1	10
L57N 4700E	4	13	15	157	.7	15	8	398	3.70	87	5	ND	3	16	1	2	2	49	.12	.132	17	22	.24	109	.04	2	2.53	.01	.08	1	18	40
L57N 4750E	3	11	18	70	.2	11	9	506	3.25	50	5	ND	3	20	1	2	2	56	.15	.055	25	18	.28	103	.03	2	1.91	.01	.12	1	4	20
L57N 4800E	2	10	9	73	.2	10	8	401	2.61	32	5	ND	2	14	1	2	2	35	.14	.058	21	13	.33	58	.03	2	1.39	.01	.11	1	3	30
L57N 4850E	4	19	22	95	.2	18	9	317	4.56	70	5	ND	2	20	1	2	2	61	.15	.101	20	27	.45	126	.01	2	3.22	.01	.14	1	2	30
L57N 4900E	2	9	17	65	.1	11	7	336	2.64	20	5	ND	1	16	1	2	2	39	.16	.058	21	19	.35	61	.04	2	1.65	.01	.10	2	2	10
L57N 4950E	1	6	9	55	.1	5	2	104	1.03	5	5	ND	1	11	1	2	2	19	.10	.020	16	12	.12	44	.04	2	1.02	.01	.05	1	1	20
L57N 5000E	2	5	12	72	.2	5	4	208	1.97	10	5	ND	1	15	1	2	2	34	.16	.106	17	13	.13	59	.07	3	.97	.01	.05	1	1	10
L57N 5100E	2	8	13	82	.1	10	5	179	2.65	13	5	ND	3	16	1	2	2	43	.16	.070	16	19	.24	57	.06	2	1.63	.01	.05	1	1	10
STD C/AU-5	18	61	42	132	6.7	67	30	1018	4.14	40	20	7	38	48	18	20	21	59	.49	.090	40	56	.95	175	.07	33	1.88	.06	.14	12	53	1400

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 %	W PPM	Au* PPB	Hg PPB
L57N 5150E	2	9	17	90	.1	11	6	203	2.20	8	5	ND	3	16	1	2	3	40	.14	.044	17	18	.26	85	.08	3	1.71	.01	.05	1	1	40
L57N 5200E	2	7	15	56	.1	6	3	137	1.38	9	5	ND	3	12	1	2	2	26	.10	.014	20	13	.17	49	.08	2	.90	.01	.04	1	1	10
L57N 5250E	3	10	18	79	.1	11	7	180	3.28	22	5	ND	3	18	1	2	2	47	.18	.106	18	18	.30	98	.05	2	2.54	.01	.06	1	1	30
L57N 5300E	2	6	21	54	.4	4	3	118	1.31	5	5	ND	1	14	1	2	2	25	.12	.027	18	11	.13	60	.06	2	1.35	.01	.04	1	1	20
L57N 5350E	1	5	14	36	.1	4	3	125	1.13	6	5	ND	3	10	1	2	2	24	.10	.021	17	10	.13	42	.09	3	.89	.01	.04	1	2	10
L57N 5400E	1	5	13	42	.1	5	3	137	1.35	4	5	ND	3	11	1	2	2	26	.11	.021	17	12	.16	44	.10	3	1.06	.01	.04	2	1	20
L57N 5450E	3	16	11	105	.1	16	10	595	3.36	14	5	ND	2	27	1	3	2	45	.23	.081	23	21	.48	120	.05	3	2.71	.01	.10	1	1	40
L57N 5500E	2	7	7	53	.1	5	4	120	1.30	3	5	ND	1	16	1	2	3	25	.13	.026	13	12	.18	72	.07	2	1.33	.01	.03	1	7	30
L57N 5550E	1	7	8	76	.1	8	4	168	1.69	2	5	ND	3	15	1	2	2	32	.14	.023	15	13	.23	67	.11	4	1.31	.01	.03	1	2	20
L57N 5600E	2	9	16	73	.1	12	6	168	2.45	11	5	ND	3	15	1	2	2	38	.12	.068	15	16	.26	95	.06	3	2.36	.01	.05	1	2	30
L57N 5650E	4	9	20	141	.1	10	7	159	3.55	34	5	ND	4	12	1	5	2	47	.12	.151	17	16	.16	75	.03	3	2.48	.01	.06	1	1	30
L57N 5700E	4	8	15	96	.2	7	5	228	2.35	28	5	ND	2	17	1	2	2	39	.12	.040	18	16	.16	87	.06	3	1.32	.01	.05	1	8	20
L57N 5750E	2	9	13	101	.1	14	9	301	2.96	19	5	ND	2	12	1	2	2	44	.12	.139	13	17	.23	81	.08	2	1.91	.01	.05	1	1	30
L57N 5800E	2	11	14	93	.1	15	9	399	3.68	5	5	ND	3	16	1	2	2	63	.15	.106	12	23	.26	89	.14	3	2.32	.01	.04	1	2	30
L57N 5850E	1	16	17	124	.1	21	9	239	2.74	6	5	ND	1	28	1	2	3	38	.23	.046	13	24	.56	156	.08	2	3.61	.01	.06	1	1	40
L57N 5900E	1	10	11	81	.1	11	5	168	1.99	3	5	ND	1	26	1	2	2	31	.22	.041	17	15	.28	96	.04	2	2.10	.01	.05	1	1	30
L54N 5050E	1	13	10	159	.3	22	12	551	3.87	5	5	ND	3	19	1	2	2	60	.20	.137	11	23	.41	130	.13	2	3.05	.01	.05	2	1	20
L54N 5100E	2	14	19	156	.1	27	12	244	4.16	13	5	ND	2	20	1	4	2	50	.21	.150	14	26	.55	132	.09	2	4.28	.01	.05	1	1	50
L54N 5250E	2	13	12	76	.1	18	10	326	3.54	8	5	ND	2	17	1	2	2	61	.17	.056	10	23	.45	69	.15	3	2.24	.01	.04	2	1	20
L54N 5300E	1	11	13	89	.1	13	7	535	2.66	2	5	ND	3	18	1	2	3	47	.18	.054	12	17	.37	100	.13	2	1.94	.01	.03	1	1	20
L54N 5350E	1	15	15	83	.1	27	12	231	3.43	2	5	ND	3	17	1	3	2	52	.14	.108	11	22	.39	160	.13	2	3.51	.01	.04	1	2	20
L54N 5400E	2	11	13	93	.1	15	8	205	3.10	6	5	ND	3	20	1	2	2	52	.17	.072	13	20	.28	87	.11	5	2.12	.01	.04	1	1	30
L54N 5450E	1	10	12	194	.1	19	11	398	3.69	7	5	ND	2	18	1	2	2	56	.25	.139	14	23	.31	86	.08	2	2.64	.01	.04	1	1	30
L54N 5500E	1	13	9	71	.1	13	7	249	2.44	6	5	ND	1	23	1	2	3	36	.23	.045	16	17	.43	94	.08	3	1.99	.01	.04	1	1	20
L54N 5550E	1	10	12	64	.1	11	6	209	2.34	4	5	ND	3	18	1	2	2	41	.20	.046	14	17	.34	84	.12	3	1.70	.01	.03	1	1	20
L54N 5600E	2	11	15	115	.1	19	10	205	3.79	5	5	ND	3	18	1	2	2	59	.15	.111	10	25	.32	98	.13	2	3.30	.01	.04	1	1	20
L54N 5650E	1	9	12	65	.1	8	4	164	1.82	6	5	ND	3	14	1	2	3	39	.13	.042	13	16	.17	64	.13	2	1.29	.01	.03	1	2	20
L54N 5700E	1	13	16	90	.1	17	8	207	2.86	12	5	ND	2	21	1	2	2	42	.20	.073	19	22	.40	125	.07	2	3.02	.01	.04	1	1	40
L54N 5750E	1	12	13	77	.1	14	7	165	2.61	7	5	ND	3	13	1	2	2	39	.12	.078	14	20	.25	82	.07	2	2.64	.01	.04	1	1	30
L54N 5800E	3	26	15	129	.1	42	27	2338	5.07	20	5	ND	3	48	1	2	2	72	.38	.096	20	32	.91	186	.05	2	4.46	.02	.06	1	1	30
L54N 5850E	1	13	14	69	.1	15	7	225	2.04	4	5	ND	1	28	1	2	2	40	.27	.037	15	16	.33	80	.09	2	1.46	.02	.03	1	1	10
L54N 5900E	1	6	13	50	.1	8	4	173	1.69	2	5	ND	2	18	1	2	3	31	.18	.028	16	13	.27	68	.09	2	1.24	.01	.03	1	1	10
L54N 5950E	1	11	15	117	.1	14	7	198	2.64	7	5	ND	2	14	1	2	2	42	.13	.117	15	20	.25	87	.09	2	2.92	.01	.04	1	1	30
L54N 6000E	1	8	13	54	.1	9	4	170	1.83	7	5	ND	2	21	1	2	2	32	.16	.035	16	14	.26	94	.09	2	1.63	.01	.03	1	1	20
L51N 4500E	6	8	38	71	.1	3	5	695	3.48	66	5	ND	4	14	1	2	2	23	.05	.082	41	7	.12	195	.02	2	1.55	.01	.18	1	1	20
L51N 4550E	3	14	21	131	.2	17	9	273	3.90	31	5	ND	3	15	1	4	2	52	.09	.137	18	19	.23	115	.07	2	3.11	.01	.05	2	1	50
STD C/AU-5	18	61	43	132	6.7	70	31	1023	4.11	40	18	7	39	49	18	16	22	60	.49	.097	40	55	.95	181	.07	33	1.96	.06	.13	12	51	1300

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	Hg
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	PPM	PPB	PPB	
L51N 4600E	1	16	12	91	.4	13	7	348	2.99	14	5	ND	3	15	1	2	2	47	.11	.088	12	20	.20	76	.10	2	2.10	.01	.04	1	1	20
L51N 4650E	7	6	17	55	.6	8	4	171	2.10	4	5	ND	2	17	1	2	2	38	.14	.040	12	17	.18	62	.11	3	1.30	.01	.04	1	1	20
L51N 4700E	8	21	24	85	.1	22	11	510	3.98	22	5	ND	1	36	1	2	2	61	.36	.055	15	23	.55	117	.05	2	2.77	.01	.09	1	1	10
L51N 4750E	1	4	10	47	.1	6	3	153	1.37	3	5	ND	1	13	1	2	2	27	.15	.019	11	12	.18	40	.10	2	.91	.01	.02	2	1	10
L51N 4800E	14	13	17	106	1.2	20	11	247	4.28	24	5	ND	3	14	1	2	2	60	.09	.107	15	28	.30	124	.10	2	3.31	.01	.05	1	1	30
L51N 4850E	1	10	17	120	.3	19	11	396	3.86	7	5	ND	2	19	1	2	2	61	.14	.090	10	26	.29	90	.14	2	2.90	.01	.04	2	1	30
L51N 4900E	1	16	18	66	.1	15	7	213	3.13	7	5	ND	2	31	1	2	3	53	.26	.041	16	21	.47	106	.10	2	2.60	.01	.05	1	1	10
L51N 4950E	1	11	11	101	.1	18	9	246	3.68	5	5	ND	3	18	1	2	2	58	.20	.127	10	25	.35	110	.12	2	2.91	.01	.04	1	1	20
L51N 5000E	1	10	11	74	.1	14	8	514	2.71	2	5	ND	1	28	1	2	2	45	.27	.047	14	20	.42	95	.12	2	1.86	.01	.04	1	1	10
L51N 5300E	4	33	19	82	.1	22	12	639	5.73	14	5	ND	1	56	1	2	2	103	.54	.083	23	32	.55	202	.04	2	3.86	.01	.07	1	1	30
L51N 5550E	1	13	15	63	.1	12	6	233	2.35	4	5	ND	1	27	1	2	2	39	.26	.039	16	21	.37	94	.11	2	2.05	.01	.05	1	1	20
L51N 5600E	1	20	17	97	.1	19	10	446	3.75	9	5	ND	2	35	1	2	2	55	.33	.063	18	25	.61	133	.10	3	2.90	.01	.08	1	1	20
L51N 5650E	2	19	21	122	.2	18	13	633	4.16	12	5	ND	3	33	1	2	2	61	.28	.081	19	26	.54	156	.06	2	3.50	.01	.07	1	2	30
L51N 5700E	1	13	9	112	.1	20	10	252	3.67	7	5	ND	3	21	1	2	2	55	.19	.101	13	26	.40	163	.12	2	3.35	.01	.04	1	1	10
L51N 5750E	2	16	15	112	.1	28	14	245	4.31	4	5	ND	3	18	1	2	2	63	.14	.136	11	33	.43	170	.14	2	4.19	.01	.04	1	1	20
L51N 5800E	1	12	13	112	.1	16	9	319	4.02	3	5	ND	2	17	1	2	2	64	.15	.164	10	29	.32	80	.13	3	2.61	.01	.04	1	1	20
L51N 5850E	1	19	12	97	.1	20	9	283	3.40	2	5	ND	2	43	1	2	2	51	.36	.042	18	27	.59	135	.09	2	3.08	.01	.05	1	1	30
L51N 5900E	1	11	11	69	.1	11	7	366	2.41	5	5	ND	1	29	1	2	2	41	.28	.045	18	18	.30	107	.08	2	1.67	.01	.05	1	4	30
L51N 5950E	1	8	15	63	.1	10	5	193	2.09	10	5	ND	1	16	1	2	2	36	.17	.042	14	18	.24	87	.07	2	1.60	.01	.03	1	5	20
L51N 6000E	1	6	15	65	.1	4	4	175	2.98	9	5	ND	1	9	1	2	2	52	.08	.091	12	19	.11	43	.08	2	1.43	.01	.03	1	1	30
L48N 4500E	1	10	13	70	.1	14	9	419	3.03	2	5	ND	2	28	1	2	2	55	.28	.046	12	24	.40	84	.15	3	1.90	.01	.04	1	1	10
L48N 4550E	1	9	10	58	.1	11	6	194	1.84	2	5	ND	1	33	1	2	2	34	.36	.029	16	17	.29	80	.11	2	1.39	.01	.03	1	1	20
L48N 4600E	1	6	12	57	.1	7	4	182	1.73	3	5	ND	1	21	1	2	2	33	.23	.025	13	16	.24	58	.13	3	1.11	.01	.03	1	1	10
L48N 4650E	1	10	12	72	.1	11	6	273	1.92	3	5	ND	2	24	1	2	2	30	.23	.046	15	18	.32	95	.10	2	1.75	.01	.04	1	1	20
L48N 4700E	1	8	14	65	.1	10	5	197	1.96	2	5	ND	2	17	1	2	2	33	.18	.035	12	17	.30	69	.13	2	1.61	.01	.04	1	2	10
L48N 4750E	1	8	14	61	.1	11	5	176	1.87	2	5	ND	1	16	1	2	2	31	.18	.032	13	17	.28	71	.12	2	1.65	.01	.03	1	1	10
L48N 4800E	1	9	7	68	.1	11	5	263	2.13	3	5	ND	2	18	1	2	2	37	.20	.046	15	19	.30	81	.13	3	1.61	.01	.03	1	1	20
L48N 4850E	1	11	14	95	.1	17	8	240	3.29	5	5	ND	2	20	1	2	2	48	.19	.087	15	24	.33	144	.10	3	2.83	.01	.04	1	1	30
L48N 4900E	1	6	13	71	.1	8	5	202	1.99	2	5	ND	2	15	1	2	3	37	.15	.040	12	17	.22	66	.15	3	1.22	.01	.03	1	1	10
L48N 4950E	2	18	16	132	.1	20	17	892	4.64	3	5	ND	1	32	1	2	2	70	.26	.085	16	27	.53	140	.06	4	4.01	.01	.06	1	1	40
L48N 5000E	1	10	15	66	.1	11	8	582	2.40	3	5	ND	1	27	1	2	2	39	.25	.047	18	20	.34	94	.09	2	1.98	.01	.04	1	1	20
L48N 5025E	1	8	11	57	.2	10	5	238	1.78	4	5	ND	1	20	1	2	3	33	.21	.022	15	18	.29	74	.13	2	1.51	.01	.03	1	1	5
L48N 5500E	1	10	14	63	.1	14	8	251	3.12	4	5	ND	2	21	1	2	2	56	.21	.055	12	23	.37	89	.14	2	1.83	.01	.03	1	8	10
L48N 5550E	1	8	11	49	.1	11	5	226	2.10	2	5	ND	2	24	1	2	2	39	.22	.028	16	18	.33	78	.12	2	1.38	.01	.03	1	1	5
L48N 5600E	1	9	14	63	.1	11	7	278	2.53	3	5	ND	2	22	1	2	2	45	.22	.049	14	20	.35	80	.14	2	1.56	.01	.03	1	1	20
L48N 5650E	1	9	12	59	.1	9	5	196	2.26	3	5	ND	2	16	1	2	2	41	.17	.049	13	17	.27	58	.11	3	1.45	.01	.03	1	1	10
STD C/AU-S	18	60	43	132	6.6	67	30	1019	4.10	36	17	7	38	47	18	16	25	58	.48	.089	39	55	.94	176	.07	32	1.95	.06	.13	11	42	1400

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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 %	W PPM	Au* PPB	Hg PPB
L48N 570CE	1	9	16	75	.2	11	7	276	2.52	6	5	ND	3	19	1	2	2	46	.19	.056	16	19	.31	105	.11	2	1.84	.01	.04	1	2	20
L48N 575GE	1	6	12	61	.2	8	5	218	1.92	5	5	ND	2	15	1	2	2	42	.15	.030	11	15	.23	57	.15	2	1.32	.01	.04	1	1	30
L48N 580FE	1	8	15	48	.1	7	4	182	1.63	5	5	ND	3	15	1	2	2	32	.18	.045	17	13	.24	63	.09	2	1.24	.01	.04	1	1	30
L48N 585OE	1	10	19	59	.2	10	6	249	2.15	8	5	ND	5	16	1	2	2	40	.20	.050	14	16	.35	71	.10	2	1.75	.01	.04	1	1	20
L48N 590OE	3	21	18	94	.4	18	13	981	3.13	15	5	ND	1	62	1	2	2	47	.48	.095	33	20	.48	190	.03	2	3.13	.01	.08	1	2	100
L48N 595OE	2	12	18	73	.2	10	7	276	2.92	6	5	ND	2	19	1	2	2	51	.14	.056	11	18	.32	98	.11	2	2.19	.01	.04	1	1	30
L48N 600OE	1	7	15	42	.1	8	5	160	1.63	5	5	ND	2	12	1	2	3	32	.13	.036	14	13	.21	71	.09	2	1.35	.01	.03	1	1	20
L45N 4500E	1	11	9	75	.1	12	8	336	2.37	2	5	ND	2	35	1	2	2	45	.36	.043	15	19	.38	92	.14	2	1.61	.01	.05	1	1	40
L45N 4550E	1	31	23	140	.1	32	16	859	4.92	4	5	ND	3	60	1	2	2	65	.58	.093	29	35	.90	243	.04	2	5.71	.01	.10	4	1	50
L45N 4600E	1	15	13	81	.1	16	10	575	2.72	7	5	ND	2	40	1	2	2	46	.38	.076	25	20	.46	138	.07	2	2.48	.01	.07	1	1	40
L45N 4650E	2	21	22	119	.1	25	24	2327	3.86	8	5	ND	2	63	1	2	2	53	.57	.107	30	25	.59	202	.04	2	4.22	.01	.10	1	1	50
L45N 4700E	1	13	14	68	.1	19	8	326	2.77	2	5	ND	2	28	1	2	2	51	.28	.049	13	21	.46	103	.12	2	2.13	.01	.05	1	2	50
L45N 4750E	1	11	9	62	.1	13	6	263	2.10	2	5	ND	2	27	1	2	3	40	.27	.042	13	19	.41	80	.14	2	1.64	.01	.04	1	1	20
L45N 4800E	1	11	17	101	.2	16	8	235	2.80	3	5	ND	4	20	1	2	2	51	.18	.063	10	21	.31	121	.14	2	1.97	.01	.05	1	1	20
L45N 4850E	1	10	15	59	.1	13	8	418	2.51	2	5	ND	2	28	1	2	3	50	.29	.054	13	20	.43	82	.13	2	1.50	.01	.04	1	1	30
L45N 4900E	1	11	11	71	.1	14	7	288	2.55	2	5	ND	2	27	1	2	2	52	.30	.063	12	19	.39	82	.14	3	1.39	.01	.04	1	1	20
L45N 4950E	5	27	20	105	.1	24	18	3619	5.61	24	5	ND	1	61	1	3	3	73	.65	.126	31	28	.52	155	.03	3	3.46	.01	.07	2	1	60
L45N 5000E	1	15	18	96	.1	17	7	555	3.02	8	5	ND	1	61	1	3	2	42	.59	.086	27	23	.46	133	.05	3	2.26	.01	.07	1	1	40
L45N 5050E	1	12	15	86	.1	16	6	214	2.00	2	5	ND	1	38	1	2	2	31	.42	.062	24	22	.40	115	.07	2	2.42	.01	.05	1	2	40
L45N 5100E	2	13	14	66	.1	15	7	229	2.35	4	5	ND	1	34	1	2	3	36	.37	.058	26	20	.47	145	.07	3	2.35	.01	.07	1	1	30
L45N 5150E	1	11	15	52	.1	11	7	365	2.40	8	5	ND	3	45	1	2	2	44	.46	.058	23	20	.46	122	.11	3	1.56	.02	.07	1	1	20
L45N 5200E	1	12	13	77	.1	14	8	230	2.95	4	5	ND	3	23	1	2	5	51	.21	.077	11	20	.41	140	.11	3	2.40	.01	.04	1	1	30
L45N 5250E	1	10	16	63	.1	12	7	227	2.56	2	5	ND	2	23	1	2	3	51	.20	.074	13	20	.32	139	.14	2	1.87	.01	.04	1	1	20
L45N 5300E	1	9	16	68	.1	11	7	184	2.57	3	5	ND	1	17	1	2	2	48	.16	.088	10	19	.25	107	.13	2	1.97	.01	.04	1	2	30
L45N 5350E	1	10	15	75	.1	16	8	224	3.11	5	5	ND	2	23	1	2	2	58	.21	.077	11	22	.32	109	.14	3	2.14	.01	.04	1	1	20
L45N 5400E	1	10	17	83	.1	20	10	305	3.22	2	5	ND	1	29	1	2	2	62	.25	.072	11	23	.39	144	.14	2	2.21	.01	.05	1	2	20
L45N 5450E	1	9	18	94	.1	14	7	289	2.87	2	5	ND	2	20	1	2	2	53	.18	.055	13	21	.29	79	.12	3	1.81	.01	.05	1	2	30
L45N 5500E	1	15	21	97	.6	24	13	357	3.65	6	5	ND	3	23	1	2	3	64	.18	.094	11	24	.41	124	.14	2	2.87	.01	.05	1	1	30
L45N 5550E	1	10	15	33	.5	17	11	416	3.33	4	5	ND	2	18	1	3	2	61	.17	.146	10	22	.31	97	.14	2	2.59	.01	.04	1	1	30
L45N 5600E	1	6	13	161	.5	12	7	279	2.45	9	5	ND	3	10	1	2	2	42	.11	.127	15	17	.21	75	.09	2	1.88	.01	.04	1	1	40
L45N 5650E	1	7	13	<u>93</u>	.4	13	7	593	2.82	4	5	ND	1	16	1	2	<u>2</u>	52	.18	.115	12	18	.23	<u>78</u>	.11	2	1.56	.01	.05	1	<u>49</u>	30
L45N 5700E	1	11	15	88	.2	14	7	262	2.66	11	5	ND	3	12	1	2	<u>3</u>	45	.08	.067	16	18	.26	<u>82</u>	.07	2	2.45	.01	.04	1	<u>1</u>	60
L45N 5750E	1	6	13	55	.1	7	3	133	1.49	6	5	ND	2	11	1	2	4	25	.10	.047	20	10	.15	59	.05	2	1.38	.01	.04	1	8	20
L45N 5800E	1	4	12	<u>34</u>	.1	3	1	73	.72	2	5	ND	1	11	1	2	<u>2</u>	15	.09	.023	17	8	.07	<u>45</u>	.04	2	.84	.01	.03	1	<u>22</u>	30
L45N 5850E	1	9	15	60	.1	12	5	147	1.95	6	5	ND	1	16	1	2	<u>2</u>	35	.15	.040	14	17	.29	84	.06	3	2.01	.01	.04	1	<u>1</u>	30
L45N 5900E	2	5	15	43	.1	6	3	137	1.35	5	5	ND	2	13	1	2	3	26	.11	.035	22	11	.15	67	.07	2	1.17	.01	.04	1	1	20
STD C/AU-S	18	58	38	132	6.5	69	30	1021	3.97	40	18	7	37	47	18	19	21	59	.49	.091	39	55	.94	175	.07	33	1.91	.06	.13	11	50	1300

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 %	W PPM	Au* PPB	Hg PPB
L45N 5950E	1	3	11	37	.1	4	2	101	1.13	3	5	ND	2	10	1	2	2	20	.09	.031	17	9	.11	47	.05	2	1.08	.01	.03	1	6	60
L45N 6000E	1	3	10	31	.1	5	2	126	1.03	2	5	ND	1	12	1	2	2	22	.11	.016	13	10	.12	43	.10	2	.73	.01	.03	1	20	10
RD	1	7	11	49	.1	9	4	181	1.94	5	5	ND	3	25	1	2	3	35	.22	.044	16	16	.28	81	.09	2	1.23	.01	.03	1	5	30
R1 TAN 6"	1	12	18	79	.1	16	9	195	3.04	8	5	ND	2	26	1	2	2	49	.20	.058	12	23	.35	150	.12	2	2.77	.01	.04	1	1	20
R1 BR 7"	4	13	19	59	.3	14	6	162	2.28	13	5	ND	2	20	1	2	2	33	.14	.032	13	17	.34	87	.07	2	2.18	.01	.04	1	66	30
R2	1	9	11	82	.1	16	7	197	2.93	8	5	ND	2	21	1	2	3	45	.15	.082	13	20	.28	118	.08	2	2.41	.01	.05	1	1	30
R3	1	12	18	<u>104</u>	<u>2.9</u>	17	9	195	3.60	6	5	ND	2	13	1	<u>2</u>	2	56	.08	.107	11	23	.27	<u>98</u>	.12	2	2.85	.01	.04	1	1	80
R7	1	14	12	73	.1	18	8	183	2.68	5	5	ND	2	24	1	2	2	43	.24	.045	10	21	.42	98	.12	2	2.47	.01	.03	1	1	20
R14	1	9	9	85	.1	13	8	541	2.80	7	5	ND	1	23	1	2	2	50	.24	.044	12	21	.40	83	.13	3	1.60	.01	.04	1	1	50
R15	1	6	14	71	.1	9	5	226	2.00	2	5	ND	1	20	1	2	2	36	.18	.035	11	15	.23	73	.10	2	1.26	.01	.03	1	1	20
R16	1	6	13	56	.1	6	4	184	1.54	3	5	ND	2	17	1	2	2	28	.16	.032	14	13	.18	64	.08	2	1.03	.01	.04	1	1	40
R17	4	12	13	82	.2	11	8	419	2.62	21	5	ND	2	33	1	2	2	37	.22	.047	25	15	.27	113	.03	2	1.93	.01	.07	1	1	30
R18	3	7	14	51	.1	7	5	184	1.87	16	5	ND	3	18	1	3	2	32	.12	.021	20	13	.24	67	.07	2	1.15	.01	.05	1	1	50
R19	2	7	14	67	.1	9	5	218	2.05	9	5	ND	2	15	1	2	2	37	.14	.035	14	14	.21	65	.08	2	1.12	.01	.04	1	1	20
R20	<u>28</u>	12	31	<u>115</u>	<u>5.5</u>	11	6	209	3.15	95	5	ND	4	17	1	<u>7</u>	2	37	.07	.083	22	18	.23	<u>132</u>	.03	2	2.89	.01	.10	1	67	320
R21	4	11	20	84	.4	9	7	279	2.39	25	5	ND	1	21	1	2	3	32	.16	.053	20	17	.27	86	.03	2	1.84	.01	.06	1	1	70
R22	1	6	18	43	.1	6	4	155	1.50	6	5	ND	1	16	1	2	2	28	.15	.019	13	13	.22	65	.09	2	1.08	.01	.03	1	1	20
STD C/AU-S	17	57	41	132	7.1	68	31	1028	3.99	40	19	6	36	47	17	20	23	56	.46	.090	37	55	.88	174	.06	32	1.91	.06	.14	11	48	1400

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	Hg %	Ba PPM	Tl %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	Hg PPB
D 18901	4	6	15	6	2.2	2	1	54	.67	82	5	ND	6	4	1	7	2	1	.02	.003	25	3	.01	43	.01	2	.28	.01	.17	1	8	100
D 18902	6	7	9	7	1.1	1	1	38	.83	187	5	ND	6	7	1	13	2	1	.02	.004	29	2	.01	47	.01	2	.24	.01	.16	1	18	240
D 18903	10	7	11	11	1.5	3	1	58	.80	141	5	ND	6	6	1	10	2	1	.01	.004	26	4	.01	60	.01	2	.22	.01	.16	1	20	280
D 18904	7	3	10	7	.7	3	1	26	.42	59	5	ND	7	5	1	6	2	1	.01	.003	31	3	.01	43	.01	2	.21	.01	.15	1	7	110
D 18905	5	4	10	5	.7	4	1	55	.60	49	5	ND	5	6	1	5	2	1	.01	.005	23	5	.01	53	.01	2	.19	.01	.15	1	14	200
D 18906	4	1	11	4	.4	2	1	29	.44	43	5	ND	6	4	1	4	2	1	.01	.004	21	2	.01	51	.01	2	.14	.01	.15	1	11	160
D 18907	6	1	8	3	.7	2	1	26	.42	78	5	ND	5	5	1	5	2	1	.01	.004	20	6	.01	50	.01	3	.14	.01	.14	4	55	200
D 18908	7	1	10	3	1.0	2	1	25	.36	53	5	ND	5	5	1	5	2	1	.01	.005	18	1	.01	53	.01	2	.15	.01	.14	1	64	130
D 18909	5	3	12	6	1.7	1	1	35	.75	139	5	ND	5	10	1	16	2	1	.01	.005	26	6	.01	136	.01	2	.28	.01	.18	5	36	290
D 18910	8	3	10	4	1.3	1	1	31	.73	155	5	ND	5	6	1	14	2	1	.01	.005	17	2	.01	60	.01	2	.14	.01	.14	1	41	500
D 18911	11	2	9	9	1.9	2	1	27	.50	71	5	ND	6	5	1	5	2	1	.01	.005	26	6	.01	91	.01	2	.25	.01	.16	5	28	190
D 18912	9	1	11	3	1.5	1	1	29	.53	103	5	ND	5	4	1	10	2	1	.01	.003	27	2	.01	60	.01	2	.23	.01	.17	1	20	480
D 18913	9	1	9	3	7.5	2	1	24	.45	73	5	ND	5	4	1	8	2	1	.01	.005	24	6	.01	60	.01	2	.20	.01	.15	5	27	300
D 18914	60	1	10	5	2.4	1	1	21	.79	211	5	ND	5	3	1	15	2	1	.01	.003	23	1	.01	62	.01	2	.29	.01	.17	1	235	290
D 18915	198	1	27	8	6.4	1	1	16	1.57	522	5	ND	5	4	1	48	2	1	.01	.038	22	1	.01	96	.01	2	.17	.01	.25	1	128	460
D 18916	38	2	12	11	2.3	2	1	47	1.14	335	5	ND	6	9	1	17	2	2	.02	.043	24	6	.01	78	.01	2	.26	.01	.18	4	87	190
D 18917	22	1	10	4	1.1	1	1	40	.52	125	5	ND	6	3	1	9	2	1	.01	.010	26	2	.01	38	.01	2	.26	.01	.16	1	42	90
D 18918	142	3	15	11	2.4	1	1	39	.97	258	5	ND	6	4	1	17	2	1	.01	.005	23	3	.01	60	.01	3	.31	.01	.19	1	69	170
D 18919	27	2	10	5	.8	1	1	23	.55	123	5	ND	7	3	1	8	2	1	.01	.067	47	2	.01	35	.01	3	.31	.01	.18	1	34	80
D 18920	136	2	14	11	3.9	1	1	41	.88	224	5	ND	6	3	1	15	2	1	.01	.004	21	3	.01	53	.01	2	.25	.01	.17	1	191	130
D 18921	108	5	19	4	5.3	2	1	26	.72	156	5	ND	5	4	1	11	2	2	.01	.065	21	3	.01	62	.01	2	.29	.01	.16	1	184	80
D 18922	18	2	13	7	2.0	1	1	18	2.08	706	5	ND	6	3	1	45	2	1	.01	.004	25	2	.01	112	.01	2	.24	.01	.15	1	54	1100
D 18923	102	2	11	5	8.0	1	1	27	.75	170	5	ND	4	6	1	9	2	1	.01	.003	16	6	.01	49	.01	2	.24	.01	.17	6	117	160
D 18924	78	3	12	8	12.7	1	1	28	1.02	305	5	ND	3	5	1	22	2	1	.01	.003	14	2	.01	71	.01	2	.20	.01	.14	1	345	600
K 24992	14	2	14	5	2.1	1	1	34	.97	63	5	ND	7	8	1	4	2	1	.01	.005	29	2	.01	103	.01	2	.27	.01	.17	1	55	110
K 24993	29	1	14	6	.6	2	1	48	1.13	63	5	ND	4	6	1	4	2	1	.01	.005	21	5	.01	103	.01	2	.34	.01	.17	2	39	40
K 24994	21	5	11	6	1.0	1	1	66	1.58	90	5	ND	5	5	1	3	2	1	.01	.005	16	2	.01	96	.01	2	.45	.01	.16	1	48	50
K 24995	35	4	11	9	.6	3	2	67	2.44	51	5	ND	2	5	1	2	2	1	.01	.004	12	5	.01	58	.01	2	.28	.01	.17	2	15	20
K 24996	47	3	13	6	10.2	2	1	31	.77	158	5	8	6	3	1	13	2	1	.01	.007	28	1	.01	73	.01	2	.24	.01	.16	1	2365	280
K 24997	46	1	11	8	7.3	1	1	50	.79	216	5	ND	5	4	1	16	3	4	.01	.002	20	6	.01	75	.01	3	.30	.01	.20	5	1375	300
K 24998	262	4	22	6	25.0	1	2	27	1.90	657	5	ND	4	3	1	47	2	3	.01	.003	15	5	.01	95	.01	2	.24	.01	.21	4	1325	930
K 24999	293	5	18	8	10.4	1	1	39	1.13	339	5	ND	5	5	1	21	2	2	.01	.012	24	6	.01	93	.01	2	.31	.01	.18	5	385	250
K 25000	50	5	12	7	1.4	1	1	32	.75	133	5	ND	4	7	1	9	2	2	.02	.008	21	3	.01	48	.01	2	.27	.01	.16	1	24	70
STD C/AD-R	18	61	42	133	6.6	68	30	1021	4.08	39	18	8	40	49	18	18	18	59	.49	.094	40	58	.95	184	.07	33	1.98	.06	.13	13	525	1300

**GEOCHEMICAL ANALYSIS CERTIFICATE**

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 NH FE SR CA P LA CR HG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: ROCK AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY PLAMLESS AA.

DATE RECEIVED: JUL 21 1988 DATE REPORT MAILED: *July 26/88* ASSAYER: *C. Leong* D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS  
 MINGOLD RESOURCES PROJECT 606 File # 88-2861

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tb	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	W	Au*	Hg
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB	PPB

K 24902	104	7	16	6	109.2	1	1	62	1.42	602	5	5	4	3	1	78	4	5	.01	.006	14	2	.02	107	.01	15	.19	.01	.21	1	5320	1300
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STD C/AU-R	18	60	40	133	6.8	69	30	1083	3.94	42	17	8	39	49	18	21	18	60	.46	.089	42	61	.91	183	.07	33	1.96	.06	.14	13	490	1400
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## GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH JML 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 NG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: ROCK AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GR SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: SEP 6 1988 DATE REPORT MAILED: *Sept 15/88* ASSAYER: *C. Leong* D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES PROJECT 603 File # 88-4235

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	Hg
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB	PPB
B 24980	10	6	15	18	1.0	4	1	37	.95	35	5	ND	3	7	1	2	2	1	.01	.008	25	5	.01	120	.01	2	.25	.01	.19	1	9	10
C																																
C																																
C 51187	80	9	10	6	1.5	5	1	53	.56	84	5	ND	3	3	1	2	2	3	.02	.006	14	5	.01	25	.01	2	.15	.01	.11	1	106	60
C 51188	7	6	12	8	.3	2	1	34	.68	61	5	ND	1	5	1	2	2	2	.01	.004	17	22	.01	86	.01	4	.24	.01	.20	1	29	70
C 51189	5	6	15	10	.6	3	1	36	1.38	147	5	ND	5	9	1	3	2	1	.01	.006	26	4	.01	154	.01	2	.25	.01	.20	1	11	20
C 51190	11	10	35	18	.3	5	1	127	.67	38	5	ND	2	7	1	2	2	1	.18	.006	21	27	.08	75	.01	2	.18	.01	.16	1	27	60
C 51191	5	4	10	10	.2	2	1	19	.55	45	5	ND	3	4	1	2	2	1	.01	.005	28	3	.01	37	.01	2	.27	.01	.19	1	5	20
C 51192	4	11	12	17	.3	4	1	35	.75	26	5	ND	3	10	1	2	2	1	.01	.003	25	28	.01	139	.01	2	.16	.01	.15	1	8	60
C 51193	5	6	12	12	.1	2	1	29	1.44	145	5	ND	3	8	1	2	2	1	.01	.005	22	3	.01	157	.01	2	.26	.01	.21	1	23	20
STD C/AU-R	17	58	45	132	7.1	67	30	1057	4.12	43	22	8	36	47	17	17	19	57	.48	.084	37	58	.92	174	.06	33	1.93	.06	.14	13	490	1400



45+00E

B.L. 50+00E

55+00E

60+00E

60+00N

57+00N

54+00N

51+00N

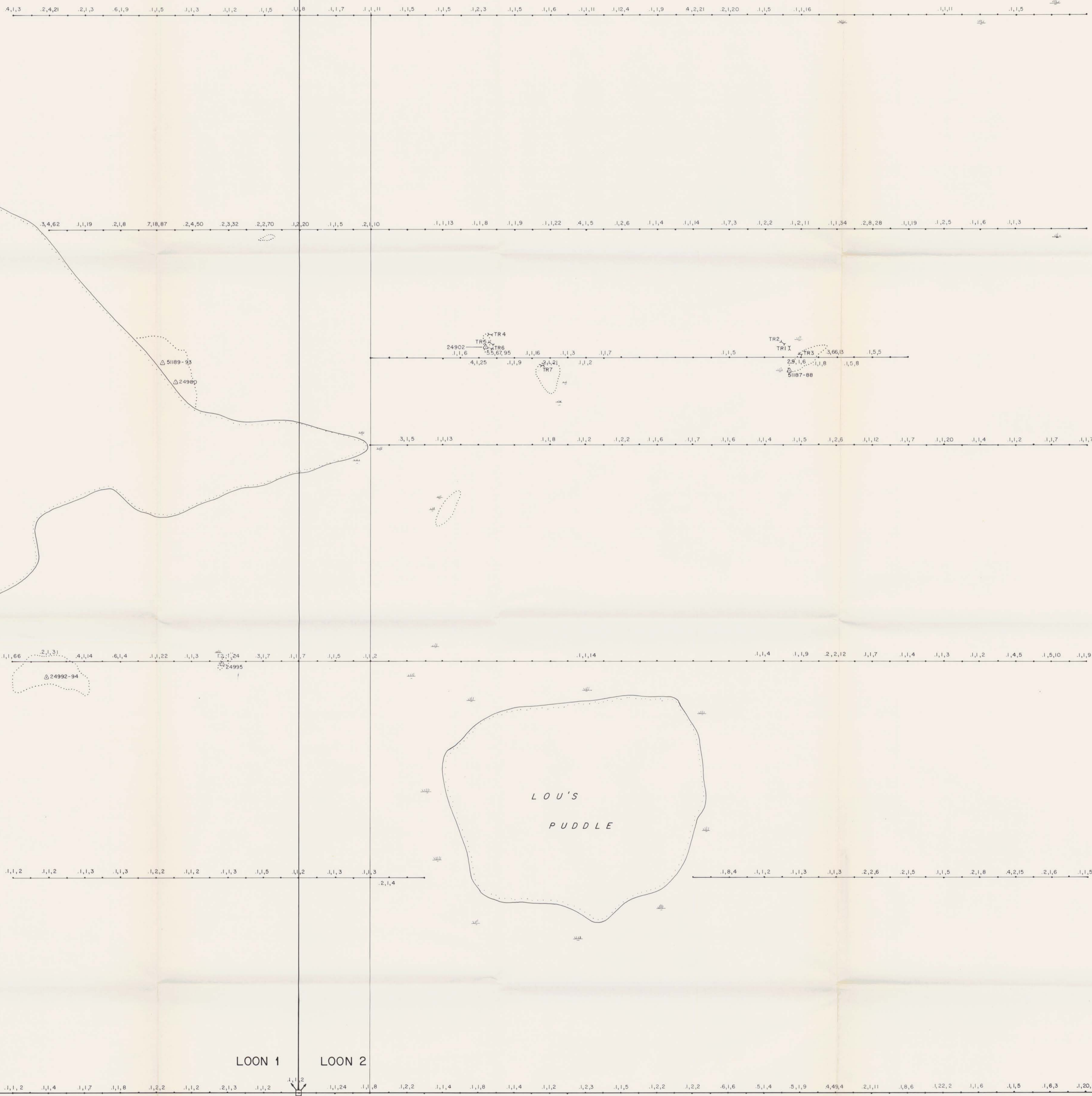
48+00N

TL. 45+00N

BOOT  
LAKE

LOU'S  
PUDDLE

LOON 1 LOON 2



LEGEND

- STATIONS
- OUTCROP (SILICIFIED)
- ≡ SWAMP
- △ SOIL SAMPLE — Ag ppm, Au ppb, As ppm
- △ ROCK SAMPLE
- TRENCH (see 1:50 maps for sampling)

RECONNAISSANCE ROCK SAMPLING

Sample No.	Type	Au(ppb)	Ag(ppm)	Hg(ppb)	As(ppm)
24902	Crab	5300	109.2	1200	602
24980	"	9	1.0	10	35
24992	"	55	2.1	110	63
24993	"	39	0.6	40	63
24994	"	48	1.0	50	90
24995	"	15	0.6	20	51
51187	"	106	1.5	60	24
51188	"	29	0.3	70	61
51189	"	11	0.6	20	147
51190	"	27	0.3	60	38
51191	"	5	0.2	20	45
51192	"	8	0.3	60	26
51193	"	23	0.1	70	145

NOTE: For trench sampling see Figures 4-10 in report.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

18,637

MINGOLD RESOURCES INC.  
VANCOUVER OFFICE

LOON CLAIMS  
SOIL GEOCHEMISTRY  
Ag, Au & As

DRAWN BY:	DATE: NOV. 1988	APPROVED BY:
SCALE 1:2500	0 50 100 200 METRES	PLATE NO. 1



45+00E

B.L. 50+00E

55+00E

60+00E

60+00N

57+00N

54+00N

51+00N

48+00N

T.L. 45+00N

BOOT  
LAKE

LOU'S  
PUDDLE

LOON 1

LOON 2




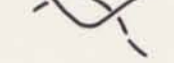
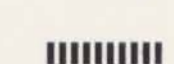
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

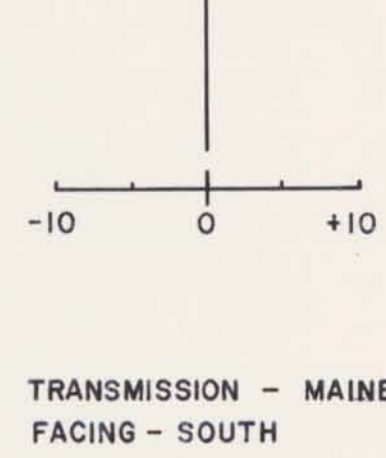
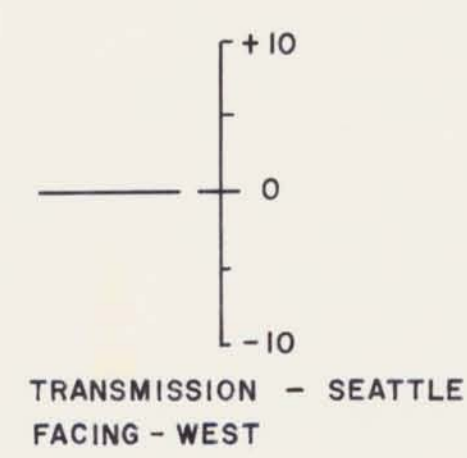
18,637  
MINGOLD RESOURCES INC.

VANCOUVER OFFICE

LOON CLAIMS

VLF-EM 16 PROFILES

- LEGEND**
-  STATIONS
  -  OUTCROP (SILICIFIED)
  -  SWAMP
  -  IN - PHASE  
QUADRATURE
  -  CONDUCTOR AXIS



DRAWN BY :	DATE : NOV. 1988	APPROVED BY :
SCALE 1 : 2500	0 50 100 200 METRES	PLATE N <sup>o</sup> . 2