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IP GEOPHYSICAL SURVEYS AND TRENCHING INCLUDING REVIEW OF PREVIOUS EXPLORATION RHUB 1-13 AND BARB 1 MINERAL CLAIMS OOTSA LAKE, INTATA REACH AREA, B.C. OMINECA MINING DIVISION NTS 93F/11 W & 12 E LATITUDE 53°37'NORTH, LONGITUDE 125°30'WEST

Prepared for

ALTA VENTURES INC.

ARCTEX ENGINEERING SERVICES

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July 29, 1989

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INCLUDING REVIEW OF PREVIOUS EXPLORATION
RHUB 1-13 AND BARB 1 MINERAL CLAIMS
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OMINECA MINING DIVISION

SUMMARY

The Rhub and Barb claim groups are located in west-central British Columbia, 70 kilometres south of Burns Lake. Previous exploration for precious metals by Mingold Resources Inc. discovered gold-bearing boulders and subsequently delineated several zones of silica flooding and argillic alteration within rhyolite and rhyolite tuff units of the Tertiary Ootsa Lake volcanics. An epithermal-type mineralizing system had been proposed, and significant zones of quartz veining and pyrite mineralization had been trenched and drilled. Rock chip sampling of backhoe trenches has returned up to 4.71 oz Ag/ton and 0.170 oz Au/ton over 7.0 metres. Values up to 0.81 oz Ag/ton and 0.209 oz Au/ton had been recovered from up to 1.52 m of drill core in the Silver Discovery Zone. Numerous areas of silicification and/or mineralization have been identified on the large block of claims; some 10 km separate the Barb zone where a drill hole intersected 0.063 oz Au/ton over 1.52 m and the Discovery Boulder area where float of silicified rhyolite breccia with chalcedonic quartz contains 70 ppb Au. Subsequent acquisition by Alta Ventures Inc. and implementation of IP geophysical surveys has discovered a north extension of the Silver Zone mineralization.

A programme of diamond drilling is recommended to test the Silver Discovery Zone IP anomaly along 600 metres of length. Continued IP and trenching are also recommended on other targets at the property. A Phase 1 programme will require a budget of $75,600. If results are encouraging, further drilling and peripheral surveys would require $250,000 in Phase 2. Total of Phases 1 and 2 would require expenditure of $325,600.

PROPERTY, LOCATION, ACCESS

The Rhub 1-13 and Barb 1 mineral claims are located 70 kilometres south of Burns Lake, British Columbia, on the north shore of Intata Reach within the watershed of the Nechako Reservoir. Davidson Lake is situated in the north-central part of the claim group. The property spans the boundary between NTS mapsheets 93 F/11 W and 93 F/12 E within the Omineca Mining Division. Latitude 53°37'N and longitude 125°30'W cross the centre of the claims. Glaciation has formed a subdued topography with elevations ranging from 900 metres (2950 feet) to 1370 metres (4500 feet).

Access to the property is made by paved and gravel road from Vanderhoof, 100 km to the northeast, or from Burns Lake, via the Francois Lake ferry, 70 km to the north. Numerous logging roads lead to clear-cut areas within the claim group.

The Rhub-Barb property consists of 283 units within 15 mineral claims totalling approximately 7075 hectares. The claims are held by Alta Ventures Inc. under option from Mingold Resources Inc. Statistics of the claims and dates of expiry are as follows:

Claim Name	*Record Date*	*Record Number*	*Number of Units*	*Expiry Date*
Barb 1	Sept. 22, 1986	7930	20	Sept. 22, 1993
Rhub 1	Sept. 24, 1986	7933	20	Sept. 24, 1994
Rhub 2	Sept. 24, 1986	7934	20	Sept. 24, 1990
Rhub 3	Sept. 23, 1986	7935	20	Sept. 24, 1994
Rhub 4	Sept. 23, 1986	7936	20	Sept. 24, 1990
Rhub 5	Oct. 23, 1986	8041	20	Oct. 23, 1990
Rhub 6	Oct. 23, 1986	8042	12	Oct. 23, 1990
Rhub 7	Oct. 23, 1986	8043	20	Oct. 23, 1998
Rhub 8	Oct. 23, 1986	8044	20	Oct. 23, 1998
Rhub 9	Oct. 23, 1986	8045	20	Oct. 23, 1998
Rhub 10	Oct. 23, 1986	8046	20	Oct. 23, 1993
Rhub 11	Oct. 23, 1986	8047	20	Oct. 23, 1993
Rhub 12	Oct. 23, 1986	8048	20	Oct. 23, 1993
Rhub 13	Oct. 23, 1986	8049	16	Oct. 23, 1993

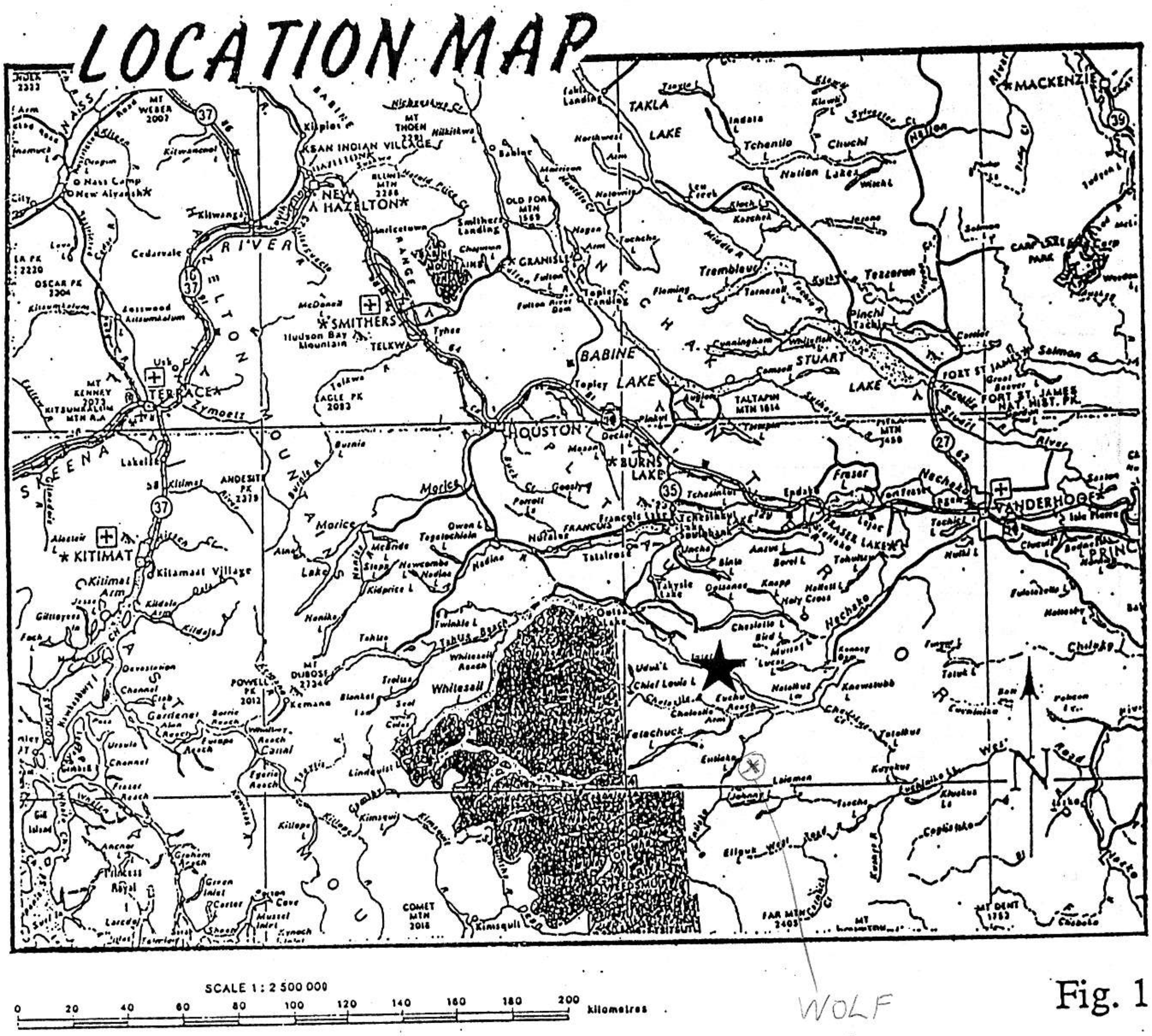

Fig. 1

ALTA VENTURES INC.

RHUB AND BARB CLAIM GROUP
INTATA REACH AREA, B.C.
OMINECA MINING DIVISION
93 F/11 W & 12 E

To accompany report by

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ARCTEX ENGINEERING SERVICES

June 1989

CLAIM MAP

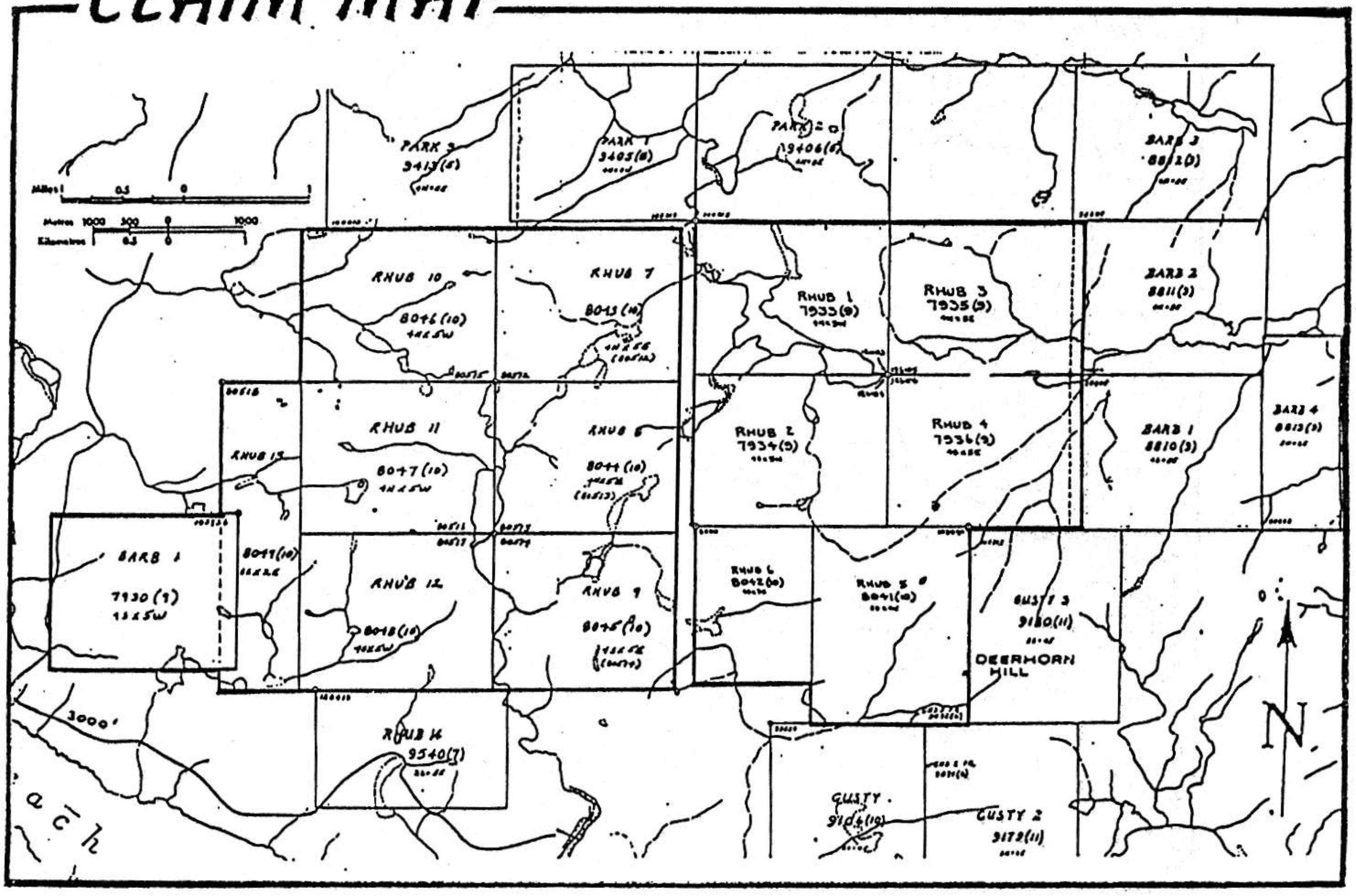

Fig. 2

ALTA VENTURES INC.

RHUB AND BARB CLAIM GROUP
INTATA REACH AREA, B.C.
OMINECA MINING DIVISION
93 F/11 W & 12 E

To accompany report by

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HISTORY

The first recorded exploration in the Rhub-Barb claim area occurred in 1980 when Guichon Explorco Ltd. staked the Mar claims after recognizing the epithermal nature of mineralization. Silt and soil sampling was not encouraging but rock chip geochemistry outlined two zones of epithermal mineralization with elevated levels of arsenic, mercury and to a lesser extent gold. Evidently, no further exploration was undertaken until 1985 when Hudson Bay Exploration (Mingold Resources) discovered several chalcedonic quartz boulders containing up to 70 ppb gold. In 1986 the Rhub and Barb claims were staked by Mingold Resources Inc. Extensive soil sampling and VLF-EM geophysical surveys were undertaken and several mineralized zones were indicated. On the Barb and Silver Zones 1189.3 metres of reverse circulation drilling were completed in the fall of 1987. In 1988 more detailed grid was established on previously discovered geophysical targets and an additional 1036.9 metres of diamond drilling was carried out on the Silver Zone.

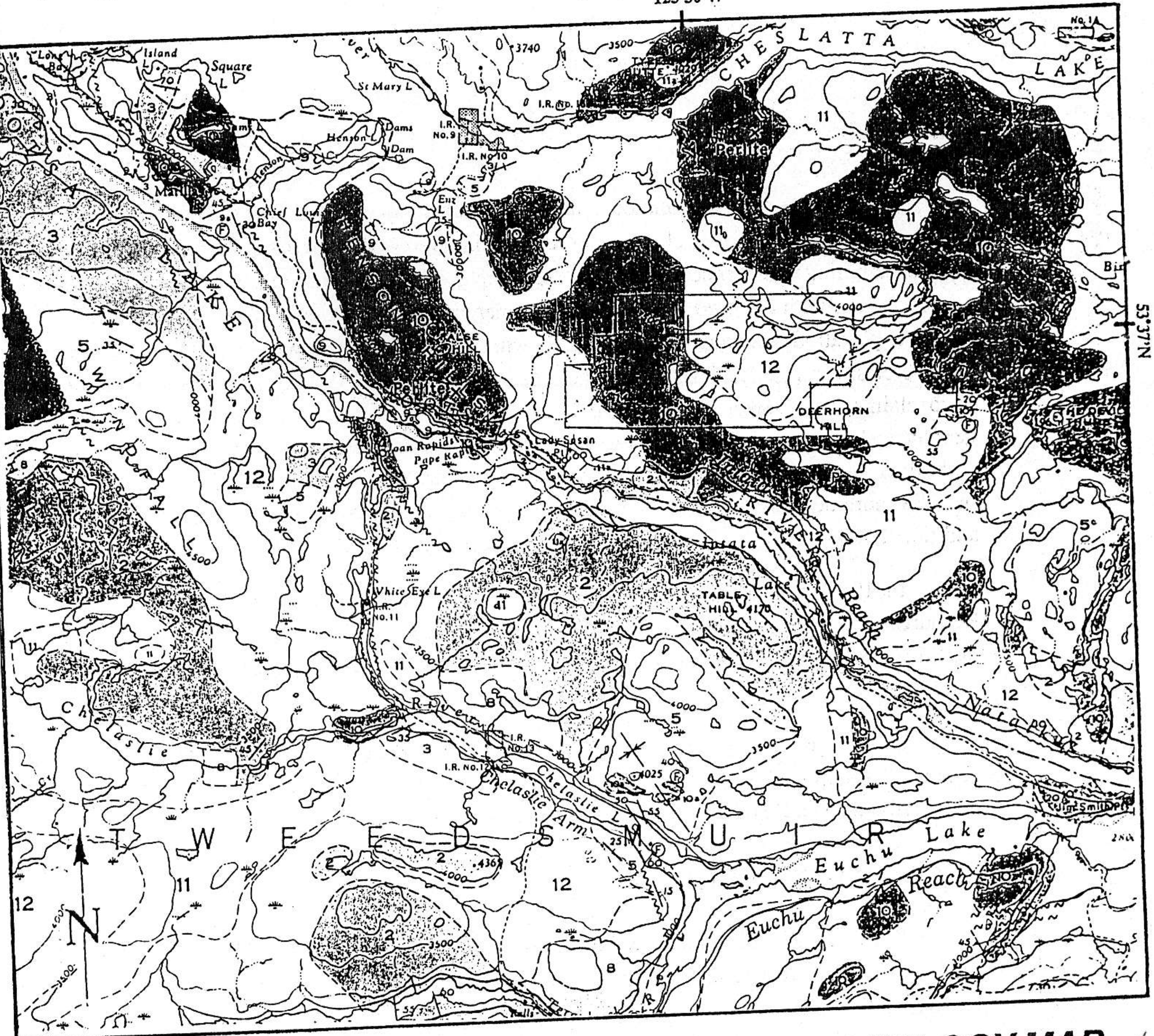
In 1989, Alta Ventures Inc. optioned the Rhub and Barb claim group from Mingold Resources Inc. An Induced Polarization survey was conducted over the Silver Zone, to the north of the Silver Zone, and also along numerous roads. In addition, 128 metres of backhoe trenches were excavated.

On June 6, 1989 the property was examined by Locke B. Goldsmith, P.Eng. Rock chip geochemical samples were collected from 15.24 metres of the most recent excavations in "C" trench on the Silver Zone. Results are included in this report.

REGIONAL GEOLOGY

The Rhub and Barb claim group is located in the south-central part of the Intermontane Geological Belt in west-central British Columbia. The oldest rocks in the area are the Upper Triassic Takla Group Volcanics which consist of an island arc sequence of intermediate to basic volcanics. These were followed by the Hazelton Group Volcanics in early to mid-Jurassic time. The lower Mesozoic rocks are overlain unconformably by an extensive sequence known as the Ootsa Lake Volcanics. These are the dominant rocks in the area and are the host to the mineralization discovered to date. They consist of Upper Cretaceous to Eocene subaerial flows and pyroclastics mainly of felsic to intermediate composition. They are widespread, occupying depressions in the eroded pre-Tertiary surface.

The Ootsa Lake Volcanics are in turn overlain unconformably by andesitic to basaltic flows of the Oligocene to Miocene Endako Group. They are relatively flat lying and believed to have resulted from "plateau-type" extrusion into the area.



REGIONAL GEOLOGY MAP

Scale 1:253,440

Miles 0 4 8 12

5 10 15 Kilometres

ALTA VENTURES INC.

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July 29, 1989

Fig. 5

REGIONAL GEOLOGY MAP

LEGEND

CENOZOIC

QUATERNARY

PLEISTOCENE AND RECENT

12	*Till, gravel, sand, clay, and silt*

TERTIARY

MIOCENE AND (?) LATER

ENDAKO GROUP

11	*Vesicular and amygdaloidal andesite and basalt; flow breccia, tuff, conglomerate, greywacke, and lignite; 11a, necks, plugs and dykes*

PALEOCENE (?), EOCENE, AND OLIGOCENE

OOTSA LAKE GROUP (In Part)

10	*Rhyolite, dacite, and associated tuffs and breccias; minor andesite, basalt, and conglomerate; 10a, rhyolitic and dacitic dykes, necks, and stocks*

CRETACEOUS AND (?) TERTIARY

UPPER CRETACEOUS AND (?) PALEOCENE

OOTSA LAKE GROUP (In Part)

9	*Basalt, andesite, and related tuffs and breccias; minor rhyolite and dacite; 9a, conglomerate and greywacke*

MESOZOIC

JURASSIC AND/OR CRETACEOUS

UPPER JURASSIC AND/OR CRETACEOUS

8	*Granite, quartz diorite, granodiorite, and diorite*

JURASSIC

UPPER JURASSIC

7	*Argillite and argillaceous limestone*

MIDDLE JURASSIC

HAZELTON GROUP (In Part)

6	*Greywacke, argillite, conglomerate, tuff, breccia, andesite, and arkose; minor rhyolite*

MIDDLE AND (?) LOWER JURASSIC

HAZELTON GROUP (In Part)

5	*Andesite, related tuffs and breccias, chert pebble conglomerate, shale, and sandstone; 5a, mainly volcanic rocks; 5b, mainly sedimentary rocks*

LOWER JURASSIC

TOPLEY INTRUSIONS

4	*4a, granite and granodiorite; 4b, diorite and quartz diorite*

TRIASSIC AND JURASSIC

UPPER TRIASSIC AND LOWER JURASSIC

TAKLA GROUP (2,3)

3	*Red and brown shale, conglomerate, and greywacke*
2	*Andesitic and basaltic flows, tuffs, and breccias; interbedded argillite and minor limestone*

PALÆOZOIC

PENNSYLVANIAN (?) AND PERMIAN

CACHE CREEK GROUP

1	*Limestone*

	Serpentinized peridotite. Probably Mesozoic

Bedding, tops not indicated (inclined, vertical) . . . .
Fault (defined, approximate, assumed) . . . .
Anticline . . . .
Syncline . . . .
Fossil locality . . . .
Mineral occurrence . . . . x Fe

MINERAL OCCURRENCES

Iron	Fe	*Silver*	Ag
Perlite . .	Perlite	*Zinc*	Zn

Regional northwest-trending fault zones are present in the area. In addition, northeasterly trending and northerly trending faults have also been developed and may be associated with a collapsed cauldera system (Taylor, 1988).

PROPERTY GEOLOGY

Most of the surface area at the Rhub-Barb claim group is eovered with glacially transported material. Outcrops are scarce, generally restricted to higher elevations and road cuts. The property geology map, which is included in this report along with trench descriptions, and drill logs suggest that most of the claim is underlain by felsic volcanics of the Upper Cretaceous to Eocene Ootsa Lake Group. Reconnaissance mapping by Mingold Resources Inc. geologists has distinguished three units within the Ootsa Lake Group. Felsic tuffs are overlain by dacite flows. A felsic flow unit distinguished by the presence of perlite may be the youngest of the three units.

In the western part of the claim group at the Barb grid, brecciated rhyolite with strong silicification is present. Petrographic descriptions of two samples from the Barb grid, three from the Silver Discovery trenches and one from the Discovery Boulder (?) grid in the western part of the claims, have been completed by Vancouver Petrographics and are included in the Appendix.

From the Silver Discovery grid the petrographic samples reveal a porphyritic latite with strong siliceous and argillic alteration and local brecciation. Trenching and diamond drilling in this area suggest that the volcanics also include rhyodacite, dacite, lapilli and tuff breccias. Mingold Resources Inc. found that the complex geology and structure in the Silver Zone area hindered interpretation of rock types and mineralization from hole to hole. Changing intensities and varying alteration (including argillic and siliceous alteration) could result in considerably different colours and textures within the same rock unit. Adding complex faulting and associated lahars and/or tectonic breccias has resulted in dramatic thickness and rock type changes over short intervals (as seen in the drill core).

Geological outcrop and float sample analysis along with the major faults inferred from aerial photos are shown on the Compilation Map of the Silver Discovery Zone. The last petrographic sample, "Discovery #1", is believed to have been collected from a float boulder in the Discovery Grid area in the eastern part of the claim group. It was a non-porphyritic latite with strong silicification including abundant pyrite and sericite. It was reported to carry 4300 ppb (0.126 oz/t) gold. The source of the boulder was not found.

The youngest rocks at the claim are basalts of the Endako Group which are Miocene or younger in age. They often occupy the tops of hills and form rocky bluffs. For the most part they are unmineralized.

TABLE 1 - SUMMARY OF REVERSE CIRCULATION DRILLING

Hole No.	Angle	Direction	Depth	Interval From-To Significant Intersections	Location
BARB ZONE					
BRH-1	-60	220	36.58	19.81-21.34m of 0.18 oz/t Ag, 0.063 oz/t Au	19+90W, 20+70N
BRH-2	-50	220	85.34	70.10-71.62m of 0.08 oz/t Ag, 0.026 oz/t Au	19+65W, 21+75N
BRH-3	-50	225	85.34	- No significant values	19+30W, 21+80N
BRH-4	-60	225	70.10	-	20+15W, 22+00N
BRH-5	-50	225	95.10	-	19+25W, 20+75N
BRH-6	-50	225	67.06	- "	19+20W, 20+25N
BRH-7	-50	135	91.44	- "	19+55W, 22+55N
BRH-8	-60	225	79.25	32.00-33.53m of 0.08 oz/t Ag, 0.022 oz/t Au	19+95W, 21+55N
SILVER ZONE					
SRH-1	-50	300	91.44	- No significant values	30+95E, 9+00N
SRH-2	-50	340	91.44	- "	30+35E, 38+40N
SRH-3	-50	340	143.26	- "	30+65E, 38+60N
SRH-4	-50	070	70.10	6.10-7.62m of 1.23 oz/t Ag, 0.009 oz/t Au	29+75E, 39+10N
				7.62-9.14m of 0.94 oz/t Ag, 0.011 oz/t Au	
				36.58-38.10m of 0.74 oz/t Ag, 0.123 oz/t Au	
				38.10-39.62m of 1.36 oz/t Ag, 0.061 oz/t Au	
				39.62-41.15m of 1.04 oz/t Ag, 0.019 oz/t Au	
SRH-5	-50	160	91.44	- No significant values	29+80E, 39+45N
SRH-6	-50	160	91.44	25.91-27.43m of 0.87 oz/t Ag, 0.008 oz/t Au	30+50E, 39+70N
4417 GRID					
4417 RH-1	-50	160	18.90	- No significant values	36+60E, 42+40N
4417 RH-2	-60	340	6.71	- "	36+60E 42+40N

Reject chip samples are stored on each drill site.

TABLE 2 - SUMMARY OF DIAMOND DRILLING AT SILVER DISCOVERY ZONE

Hole. No.	Angle	Direction	Depth	Interval From-To Significant Intersections	Location
SDH-7	-62	072	114.60	40.52-41.88m of 1.17 oz/t Ag, 0.013 oz/t Au	29+60E, 39+05N
SDH-8	-65	160	123.75	59.74-61.26m of 1.45 oz/t Ag, 0.001 oz/t Au	29+75E, 39+55N
				73.45-74.98m of 1.23 oz/t Ag, 0.002 oz/t Au	
				79.55-81.07m of 5.92 oz/t Ag, 0.001 oz/t Au	
				85.65-87.17m of 3.10 oz/t Ag, 0.002 oz/t Au	
				96.31-97.84m of 4.61 oz/t Ag, 0.001 oz/t Au	
SDH-9	-60	070	154.23	63.09-64.62m of 0.81 oz/t Ag, 0.209 oz/t Au	29+75E, 39+55N
				64.62-65.84m of 0.17 oz/t Ag, 0.039 oz/t Au	
SDH-10	-50	260	186.54	-No significant values	30+85E, 40+55N
SDH-11	-50	260	215.19	165.84-166.42m of 1.33 oz/t Ag, 0.012 oz/t Au	30+90E, 41+00N
SDH-12	-50	260	242.62	-No significant values	30+90E, 41+30N

All core is stored on the Silver Zone near the intersection of the M-17 and M-19 roads.

SILVER DISCOVERY ZONE (RHUB 7, 8 & 11 CLAIMS)

Most exploration has been directed to the Silver Discovery Zone (also referred to as the Silver Zone) which lies in the northeast part of the Rhub 11 and northwest part of the Rhub 8 claims. In addition to soil sampling and VLF-EM geophysics, 196 metres of trenching and 579.1 metres of reverse circulation drilling were carried out on the Silver Zone in 1987 by Mingold. Values up to 1.05 oz Ag/ton and 0.068 oz Au/ton over 4.57 metres were obtained. Reverse circulation drilling did not provide enough interpretable geological information. The following year Mingold conducted 1036.9 m of diamond drilling on the Silver Zone. Table 1 summarizes the reverse circulation drilling at the Rhub and Barb claim group. Table 2 summarizes the diamond drill programme which Mingold Resources Inc. conducted at the Silver Discovery Zone.

Five of the six diamond drill holes tested a north-south fault zone exposed in surface trenches which had been found to contain 4.71 oz Ag/ton and 0.17 oz Au/ton over 7.0 metres. Drill hole 9 assayed 0.81 oz Ag/ton and 0.209 oz Au/ton over 1.52 metres with an adjacent sample assaying 0.17 oz Ag/ton and 0.039 oz Au/ton over 1.22 metres. In drill hole 11, a 1.52 metre section contained 1.33 oz Ag/ton and 0.012 oz Au/ton.

One drill hole, SDH-8, was drilled to test an east-west trending vein. Five separate mineralized sections were intersected which varied from 1.23 oz Ag/ton and 0.002 oz Au/ton to 5.92 oz Ag/ton and 0.001 oz Au/ton over 1.52 metres.

The mineralization at the Silver Zone was found to be associated with pyrite-marcasite and possibly native gold and silver within argillically altered (kaolinized) and silicified Ootsa Lake rhyolite flows and tuffs. Zones either consist of brecciated rhyolite healed by grey to black amorphous silica or as a series of stockwork veins or veinlets of amorphous silica with varying amounts of pyrite and marcasite. All mineralization is microscopic in nature and not directly proportional to silica or sulphide content. Main controls for mineralization appear to be fracture intensity and porosity of host rock, rhyolite flows and tuffs being preferable (Taylor, 1988).

Since acquisition of the Rhub-Barb claims by Alta Ventures Inc. in 1989, an IP survey directed by Target Surveys was conducted over the Silver Zone. Favourable response over the known mineralization led to the discovery of a northerly extension of the zone. Backhoe trenching in an area 600 metres north of the previous diamond drilling revealed additional argillic altered and silicified rhyolite containing abundant disseminated and fracture filling pyrite. Over 128 metres of backhoe trenching were subsequently excavated, most of which contains silicification, argillic alteration, and pyritization. Rock chip sampling of the most recent trenching was undertaken on June 6, 1989. Five continuous 10-foot-long (3.045 m) rock chip samples were collected from trench

C as shown on the accompanying grid map. Samples were analysed by Chemex Labs of Vancouver, B.C. Certificates of analysis and analytical procedures, as well as rock sample descriptions are included in the Appendix. Sample results are also plotted on the accompanying grid map. High values of silver and gold in trench C are 0.2 ppm Ag and 55 ppb Au over 3.05 metres. A total of 15.24 metres (50 ft) of trench was sampled.

IP Geophysical Survey

The layout of the IP survey is also shown on the accompanying map. Fifteen grid lines totaling 10.02 km were run at the Silver Zone and 14.39 km of reconnaissance line were run along roads by Target Surveys with a time domain, Phoenix IPT-1 transmitter and a Huntec Mark IV receiver. At the Silver Zone six north-south lines, 100 metres apart and nine east-west lines 90 metres apart used a spread of 30 metres between readings. In addition to profile lines, computer generated plan maps of each of five levels (representing 30, 45, 60, 75, and 90 metres below surface) help depict anomalous chargeability and apparent resistivity. The voluminous geophysical data are not reproduced for this report. One contour (chargeability value 12) from the n=3 level is show to provide a general location of the conductor. It stretches from 40+90N 30+00E to 49+00N 32+25E, a distance over 800 metres in length and 100 metres in width. In this geological environment, chargeability may be directly proportional to sulphide content and apparent resistivity may be directly proportional to silica flooding.

Within the chargeability anomaly, areas of high resistivity are present. When metal factor (Chargeability times Apparent Resistivity divided by 100) is plotted, the anomalous values are very close to the chargeability plot.

Anomalous IP response continues to be strong below level 5 (90 m below surface). The mineralization has an undulating lower limit which appears to dip 45°-50° westerly (Target Surveys Inc., July 1989, p. 8). Perhaps mineralization reflects stratigraphy or manifests a mushroom-shaped blanket with a narrow neck or tabular fissure which is yet unrecognized. This configuration would approximate the shape of a fissure-controlled epithermal system. A broader electrode spacing could be expected to provide a more satisfactory resolution of IP conditions below level 5.

If a north-south fault as suggested by mapping and diamond drilling is present, it may help to explain the north extension of mineralization as defined by the IP survey. Mineralization may have spread laterally from the upper portions of this fault. Broad outlines of the IP chargeability contours may represent multiple zones which trend north-northeasterly, perhaps splaying from a north-trending structure. Drilling is expected to provide the correct interpretation.

The following interpretations and recommendations are excerpted from the July 1989 Geophysical Report on the IP-Resistivity survey conducted over the Rhub and Barb claim group by Target Surveys Inc.

IP INTERPRETATION AND RECOMMENDATIONS
(C.A. Ager, PhD, PEng)

The intent of the IP Survey was to identify targets with the potential to host epithermal gold and silver mineralization. These targets are expected to be enriched in silica and/or carbonates as well as iron sulphides (pyrite, marcasite, etc.). Hence resistivity and chargeability highs which are proximal and/or co-incident are considered prime targets. The chargeability times resistivity (ChùPa)/100) map enhances these search parameters.

A major fault system striking N 15°-20°E has been interpreted on the geological map. This system extends through the Silver Discovery grid. Anomalies H, I, and J occur along this favorable structure. By far the most important, Anomaly J, should be drilled immediately. Follow up IP survey work is also recommended to the north and south along the fault zone to further delineate targets, followed by drilling Anomaly G and H if warranted.

A more detailed interpretation follows:

LINE R1

No anomalies.

LINE R2 (Anomaly A)

Line R-2 is of minimal interest except for perhaps the beginnings of a chargeability anomaly (Anomaly A) at 12+00 and 75 meters depth (see Fig 1b, Fig 22). This is not a drill target at this time.

LINE R3

No anomalies.

LINE R4 (Anomaly B)

Anomaly B is a moderate resistivity high zone (500-900 Q-m) between 7+80 and 10+20 corresponding to an outcropping of felsic tuffs and is of no economic interest (see Fig 1b, Fig 26). There are no chargeability anomalies.

LINE R5 (Anomalies C, D, & E)

Three resistivity anomalies occur along Line R-5 as follows:

Anomaly	Location	Depth	Peak Values
C	2+40-2+70	50-75+m	750-900 Q-m
D	4+60-5+30	30-75+m	750-1150 Q-m
E	6+00-6+60	45-75+m	750-2500 Q-m

(See Fig 1b, Fig 27)

Each anomaly is open to depth. Anomalies C and E are associated with very weak (8-11 msec) chargeability anomalies. Anomaly E starts 45 meters below an outcrop of felsic tuffs. Further field prospecting is needed to access their importance.

LINE R6 (Anomaly F)

A resistivity high anomaly (F) is situated between stns 0+90 and 1+50 with values ranging from 200-1200 Q-m (see Fig 1a, Fig 30). This corresponds to an outcrop of felsic flow with perlite and sample sites 4121-23, and 4140-41 on the Barb Grid. It is of no economic interest at this time.

LINE R7 (Anomalies G, H)

There are two anomalous targets (G & H) of potential interest along reconnaissance IP line R7. These are discussed below:

ANOMALY G (R7: 40+00-42+50) See Fig 1a, Fig 36

This is a broad weak (12 msec average) chargeability anomaly located between stations 40+00 and 42+50 at a depth of 45 to over 90 meters with a peak value of 21 msec centered at 40+50 and at depth 75 meters. Associated resistivity values vary from 100 Q-m to over 1000 Q-m and average about 30-0 Q-m. The 500-1000 Q-m zone is centered at 40+95 from 45 to over 90 m depth (n=5) is on the east flank of the IP anomaly. This is a drill target.

ANOMALY H (R7: 46+00-49+00) See Fig 1a, Fig 37

A chargeability anomaly (30 msec) centered at 47+10 and depth of 75 m (n=4) is closely associated with resistivity gradient (75-150 Q-m) and an interpreted west dipping fault zone (48+30). This anomaly appears to be increasing with depth. This is on strike with the Silver Grid Anomaly. This is a prime drill target.

SILVER DISCOVERY GRID (Anomalies I & J)

The most detailed IP survey work was conducted over the Silver Discovery Grid. The anomalous zones are further discussed as follows:

ANOMALY I (See Fig 1a, Fig 2)

Silver and gold values of limited extent have been delineated by trenching and drilling in altered volcanics in the vicinity of 39+00N, 29+00E (Silver Zone). This zone corresponds to a resistivity and chargeability anomaly (I) of limited area and depth extent. It has no economic significance and no further work is recommended.

ANOMALY J (See Fig 1a-1b, Fig 2-18, Fig 39-59)

By far the most important target of the entire survey is Anomaly J. It is an elongated feature striking about N 16°E and dipping 45-50° Westerly. It envelopes an area some 900 meters long by 100 to 200 meters wide. (See Fig 1, 2 & 3.) The core of the anomaly starts at about 1000 meters elevation (45-60 m depth) and extends through the 950 m elevation level (90 m depth) and beyond the depth limits of the elevation survey. The core zone extends between 42+00N, 30+00E and 46+50N, 31+50E — covering an area some 480 meters long by 50-150 meters wide. The anomaly gets stronger and more concentrated at depth. It should be drilled in the core zone using vertical or 60°E drill holes to penetrate the zone through the 950 meter elevation.

A prospecting trench at 48+00N, 32+00E has indicated altered volcanics containing pyrite, marcasite, and calcite with minor gold and silver values (50 ppb Au, 30 ppb Ag). It is also on strike with a major fault system and Anomaly H (see Fig 1).

This adds ground truth to the importance of the anomaly as a potential epithermal gold/silver bearing system.

Please note that anomaly H is 2.5 km southwest of the Silver Discovery Zone along the projected strike of the major N15-20°E fault zone. Anomaly G is 400 m west of anomaly H. The other anomalies (A-F) are of minimal interest at this time; furthermore they are dispersed throughout the property and therefore are not depicted in this report.

BARB ZONE

Mingold Resources Inc. drilled 8 reverse circulation holes on the Barb Zone which lies at the west end of the property. The main vein system here trends 140° and a secondary set trends 045°. Siliceous rhyolite breccia with pyrite and black silica was encountered in several of the holes but only three holes contained precious metal values greater than 0.025 oz Au/ton. The best intersection was in the first drill hole which contained 0.063 oz Au/ton over 1.52 m.

QUARRY ZONE

Mingold Resources Inc. also trenched and sampled in the eastern part of the property at the Quarry Zone where highly kaolinized Ootsa Lake rhyolite is brecciated and filled by medium grey amorphous silica. Rock chip sampling of trenches revealed values of gold and silver slightly above background.

OTHER ZONES

Several other grid areas were examined by Mingold Resources Inc. At the Discovery Boulder area, float of silicified rhyolite breccia with chalcedonic quartz was found. No source was discovered. At the Silica Grid, south of the map area, banded, crustified, silicified rhyolite does not host appreciable precious metal values. The Rain Zone is an area of hematitic stained rhyolite which contained up to 147,225 ppm arsenic. No precious metal trends were found in the soils nearby.

At the 4410 Grid area a cobble of silicified rhyolite contained 1400 ppb Au. It was thought that overburden was prohibitively deep and no further work was done.

The 4417 Grid, which is located east of the Silver Zone, returned anomalous values of silver and gold. Prospecting had revealed mineralized float; trenching and two reverse circulation drill holes which penetrated to 18.9 metres of depth failed to reach bedrock. It was assumed that the float originated in the Silver Zone and was glacially transported.

IP ROAD TRAVERSES

Reconnaissance IP surveys totalling 14.39 km along the roads, labeled R-1 through R-7, displayed several anomalies. As expected, a strong response was found at the Silver Zone, R-2, station 360 m. Here the north-south fault zone as mapped by Mingold Resources Inc. appears to display a moderate easterly dip. Also on the R-2 road traverse, a moderately strong response was found at station 1200 m.

Other areas of interest include:

- R-3 at 560 m with moderate chargeability and metal factor;
- R-5 at 630 m, high apparent resistivity adjacent to high metal factor;
- R-6 at 120 m, an east-dipping structure with high resistivity and high metal factor;
- R-7 at 4050 m, and 4710 m, high chargeability and moderately high resistivity.

SOIL GEOCHEMICAL SURVEY

Mingold Resources Inc. collected 1500 soil geochemical samples form the Rhub and Barb claim groups in 1988. Samples were collected from large reconnaissance lines and then concentrated within detailed grid areas. Their results show that soil geochemistry is apparently severely hindered by the generally thick (1-5+ metres) overburden comprised of glacial gravel and dense compact till. Apart from scattered single station anomalies in gold and silver, most values vary only slightly from background levels. Gold or silver anomalies were only considered valid if they have coincident trace element backup. On this basis, the only gold-silver anomalies of significance were on the 4417 grid. Subsequent trenching of these anomalies indicated that glacially transported float boulders form the Silver Zone were incorporated into the upper till layer causing the anomalies.

It appears that glacial till affects geochemical response in the areas surveyed and soil sampling is probably not an effective tool for locating buries mineralized zones. As the results of the 4417 sampling indicate however, the soil response from transported mineralized float could aid in tracing the float back to its source.

Soil sample locations and geochemical values for the 4417 grid are shown on the compilation map of the Silver discovery Zone. The remainder of Mingold Resources Inc. soil geochemical values and locations are not significant and therefore have not been reproduced for this report.

CONCLUSIONS

Encouraging IP geophysical response has been received from the Silver Zone (Anomaly J; Target Surveys Inc., July 1989), the southern end of which had previously been drilled by Mingold Resources Inc. and found to contain silver and gold values up to 5.92 oz Ag/ton and 0.209 oz Au/ton. Pyritic rhyolite flows, tuffs, and breccias have been altered with kaolin and silica. Main controls of mineralization appear to be fracture intensity and porosity. The IP survey has been successful in delineating a northerly extension of the Silver Zone where recent trenching has encountered pyrite-bearing silicified rhyolite. Rock chip samples have returned up to 0.2 ppm Ag and 55 ppb Au across 3.05 metres in an area 600 metres north of the previous drilling. These values should not be interpreted as discouraging results because a typical epithermal system may have more than one pulse of mineralizing solutions, all of which do not necessarily contain appreciable precious metal values. The large extent of the IP anomaly (+800 metres in length) provides an attractive target to probe for bonanza-type shoots.

Work on the property by Mingold Resources Inc. in 1987 and 1988 has shown that soil geochemical sampling is of limited value at the Rhub-Barb claim are due to masking effect of glacial till. VLF-EM surveys were effective in delineating fault zones but gave no indication of the presence of mineralization. Trenching in combination with prospecting were their preferred tools of exploration.

Following the determination by Alta Ventures Inc. that IP is another useful tool, several of the previously indicated target areas should be re-examined.

The precious metals at the Rhub-Barb property appear to be associated with a low-temperature (epithermal) system similar to the volcanic hosted gold-silver deposits found in the southwestern U.S. and elsewhere in B.C. The host rocks are Tertiary in age and may be part of a collapsed caldera-type environment.

RECOMMENDATIONS

A programme of diamond drilling at the Silver Zone should be undertaken to test the new IP target and the area beneath the recent trenches. Two drill fences consisting of three holes each should provide an initial test for mineralization. Average length of each hole could be in the order of 100 metres.

A continuing programme of prospecting, geological mapping and backhoe trenching combined with IP should also be directed to areas such as Mingold's Quarry Zone, Ram Zone, etc. The Barb Zone should be re-examined in conjunction with an IP survey grid. Similar examinations of the anomalous IP zones on the road traverses should also be completed.

COST ESTIMATE

Phase 1

Diamond drilling of the IP anomaly associated with the Silver Zone is the objective of the next programme.

Diamond drilling, 600 m at $75/m	$ 45,000	
Road construction, trenching	2,500	
Analyses	5,000	
Food, lodging	2,000	
Transportation	2,000	
Supervision	4,000	
Report	2,500	
	63,000	
Contingencies at 20%	12,600	
Total, Phase 1	75,600	$ 75,600

Phase 2

IP surveys, backhoe trenching, contoured diamond drilling, allow	250,000	250,000
Total, Phases 1 and 2		$325,600

Results of Phase 1 should be compiled into an engineering report; continuance to Phase 2 should be contingent upon favourable conclusions and recommendations from an engineer.

Respectfully submitted,

Locke B. Goldsmith, P.Eng.
Consulting Geologist

REGISTERED PROFESSIONAL ENGINEER
L. B GOLDSMITH
PROVINCE OF ONTARIO

Paul Kallock
Consulting Geologist

GEOLOGICAL ASSOCIATION OF CANADA
PAUL KALLOCK
FELLOW

Vancouver, B.C.
July 29, 1989; amended September 25, 1989

ENGINEER'S CERTIFICATE
LOCKE B. GOLDSMITH

1. I, Locke B. Goldsmith, am a registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.

2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.

3. I have been engaged in mining exploration for the past 30 years.

4. I have co-authored the report entitled, "Geophysical Survey and Trenching, including Review of Previous Exploration, Rhub 1-13 and Barb 1 Mineral Claims, Ootsa Lake, Intata Reach Area, B.C., Omineca Mining Division", dated July 29, 1989 and amended September 25, 1989. The report is based upon fieldwork by Mingold Resources Inc., Alta Ventures Inc., and a property examination on June 6, 1989.

5. I have no ownership in the property, nor in the stocks of Alta Ventures Inc. or Mingold Resources Inc.

6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds. Sheets of analyses in the Appendix could be omitted from a prospectus because all values are plotted on maps.

Respectfully submitted,

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Vancouver, B.C.
July 29, 1989; amended September 25, 1989

GEOLOGIST'S CERTIFICATE
PAUL KALLOCK

I, Paul Kallock, do state: that I am a Geologist with Arctex Engineering Services, 301 - 1855 Balsam Street, Vancouver, B.C.

I Further State That:

1. I have a B.Sc. degree in Geology from Washington State University, 1970. I am a Fellow of the Geological Association of Canada.

2. I have engaged in mineral exploration since 1970, both for major mining and exploration companies and as an independent geologist.

3. I have co-authored the report entitled, "Geophysical Survey and Trenching, including Review of Previous Exploration, Rhub 1-13 and Barb 1 Mineral Claims, Ootsa Lake, Intata Reach Area, B.C., Omineca Mining Division." The report is based on previously accumulated geologic data and on a site visit.

4. I have no direct or indirect interest in any manner in either the property or securities of Alta Ventures Inc., Mingold Resources Inc., or their affiliates, nor do I anticipate to receive any such interest.

5. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds. Sheets of analyses in the Appendix could be omitted from a prospectus because all values are plotted on maps.

GEOLOGICAL ASSOCIATION OF CANADA
PAUL KALLOCK
FELLOW

Paul Kallock
Consulting Geologist

Vancouver, B.C.
July 29, 1989; amended September 25, 1989

REFERENCES

Mitchell, T. June 1989. Geophysical report on the IP-Resistivity survey, Rhub & Barb claim group near Ootsa Lake, B.C. Private report for Alta Ventures Inc. by Target Surveys Inc.

Taylor, K.J. 1987. Geochemical survey and trenching report on the Barb 1 and Rhub 1-13 claims, Private report for Mingold Resources Inc.

Taylor, K.J. 1988. Geochemical and geophysical surveying, trenching and drilling report on the Barb 1 and Rhub 1-13 claims. Private report for Mingold Resources Inc.

Tipper, H.W. 1963. Nechako River Map-area, B.C. GSC memoir 324.

APPENDIX

ROCK GEOCHEMICAL ANALYSIS AND ANALYTICAL PROCEDURES

Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To : ARCTEX ENGINEERING SERVICES

2390 - 1055 W. HASTINGS ST.
VANCOUVER, B.C.
V6E 2E9

Project : BARB
Comments: CC: P. KALLOCK

Page No. : 1
Tot. Pages: 1
Date : 15-JUN-89
Invoice # : I-8917606
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8917606

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm Aqua R
SIL-Z-C 30-40	205	--	5	0.2
SIL-Z-C 40-50	205	--	< 5	0.2
SIL-Z-C 50-60	205	--	< 5	0.2
SIL-Z-C 60-70	205	--	55	0.2
SIL-Z-C 70-80	205	--	10	< 0.2
TRENCH C 45'	205	--	< 5	< 0.2
TRENCH C 55'	205	--	< 5	< 0.2

CERTIFICATION : Hart Bichler

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

To: ARCTEX ENGINEERING SERVICES

2390 - 1055 W. HASTINGS ST.
VANCOUVER, B.C.
V6E 2E9

A8917606

Comments: CC: P. KALLOCK

CERTIFICATE A8917606

ARCTEX ENGINEERING SERVICES
PROJECT : BARB
P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 15-JUN-89.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	7	Rock Geochem: Crush,split,ring

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	7	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
6	7	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0

ROCK SAMPLE DESCRIPTIONS

ROCK SAMPLE DESCRIPTIONS

TRENCH "C" AT 32+00E 47+86N

(Trench extends 95' westerly and 20' easterly of 32+00E 47+86N)

Sample *From*	*To*	*Description*	*Analyses* *Au ppb*	*Ag ppm*
30'W	40'W	Bleached and silicified rhyolite. Some banding of silica at 38'-40'. Patches of silica flooding.	5	0.2
40'W	50'W	As above. Patches of silicification with pyrite in argillic alteration.	<5	0.2
50'W	60'W	As above. 55'-58'. Silicified zone with much disseminated + fracture filling + patchy pyrite.	<5	0.2
60'W	70'W	Bleached rhyolite. Argillic alt'n. Clay developed.	55	0.2
70'W	80'W	As above.	10	<0.2

ASSAY CERTIFICATES
REVERSE CIRCULATION DRILLING

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604)253-3158 FAX (604)253-1716

DATE RECEIVED: DEC 2 1987
DATE REPORT MAILED: Dec. 8/87

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 MN FE 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: CUTTING AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

MINGOLD RESOURCES File # 87-5984 Page 1

SAMPLE#	AG PPM	AU* PPB
SRH-1 20-25	.7	29
SRH-1 25-30	.5	9
SRH-1 30-35	.2	11
SRH-1 35-40	.5	9
SRH-1 40-45	.5	19
SRH-1 45-50	.1	4
SRH-1 50-55	.2	12
SRH-1 55-60	.2	22
SRH-1 60-65	.1	8
SRH-1 65-70	.1	3
SRH-1 75-80	.2	7
SRH-1 80-85	.2	3
SRH-1 85-90	.2	1
SRH-1 90-95	.2	11
SRH-1 95-100	.2	8
SRH-1 100-105	.5	10
SRH-1 105-110	.2	7
SRH-1 110-115	.1	9
SRH-1 115-120	.1	11
SRH-1 120-125	.2	13
SRH-1 125-130	.3	2
SRH-1 135-140	.1	9
SRH-1 140-145	.2	1
SRH-1 150-155	.1	2
SRH-1 155-160	.1	2
SRH-1 160-165	.1	3
SRH-1 165-170	.1	4
SRH-1 170-175	.1	2
SRH-1 175-180	.3	3
SRH-1 180-185	.2	1
SRH-1 185-190	.5	2
SRH-1 195-200	.1	4
SRH-1 200-205	.1	6
SRH-1 210-215	.1	3
SRH-1 215-220	.3	4
SRH-1 220-225	.1	2
STD C/AU-R	7.3	520

MINGOLD RESOURCES FILE # 87-5984 Page 2

SAMPLE#	AG PPM	AU* PPB
SRH-1 225-230	.1	1
SRH-1 230-235	.1	1
SRH-1 235-240	.1	1
SRH-1 240-245	.5	17
SRH-1 245-250	.1	1
SRH-1 250-255	.1	4
SRH-1 255-260	.1	1
SRH-1 260-265	.4	3
SRH-1 265-270	.2	1
SRH-1 270-275	.3	3
SRH-1 275-280	.7	1
SRH-1 280-285	.5	1
SRH-1 285-290	.6	4
SRH-1 290-295	.4	3
SRH-1 295-300	.3	1
SRH-2 25-30	.4	4
SRH-2 30-35	.2	3
SRH-2 35-40	.1	1
SRH-2 40-45	.1	1
SRH-2 45-50	.1	1
SRH-2 50-55	.2	1
SRH-2 65-70	.2	1
SRH-2 70-75	.2	1
SRH-2 80-85	.1	1
SRH-2 90-95	.1	2
SRH-2 95-100	.1	1
SRH-2 100-105	.2	1
SRH-2 105-110	.1	1
SRH-2 110-115	.1	1
SRH-2 115-120	.2	1
SRH-2 120-125	.2	27
SRH-2 135-140	.2	1
SRH-2 140-145	.2	48
SRH-2 150-155	.2	3
SRH-2 160-165	.1	1
SRH-2 165-170	.4	3
STD C/AU-R	7.6	490

MINGOLD RESOURCES FILE # 87-5984 Page 3

SAMPLE#	AG PPM	AU* PPB
SRH-2 170-175	.3	1
SRH-2 190-195	.1	1
SRH-2 195-200	.4	1
SRH-2 200-205	.3	5
SRH-2 205-210	.5	10
SRH-2 210-215	.1	11
SRH-2 220-225	.4	1
SRH-2 225-230	.3	1
SRH-2 230-235	.1	1
SRH-2 235-240	.1	1
SRH-2 240-245	.2	6
SRH-2 245-250	.1	3
SRH-2 260-265	.6	1
SRH-2 265-270	.1	1
SRH-2 270-275	.1	3
SRH-2 275-280	.1	6
SRH-2 280-285	.1	5
SRH-2 285-290	.1	1
SRH-3 50-55	.9	23
SRH-3 55-60	.3	8
SRH-3 60-65	.2	27
SRH-3 65-70	.3	9
SRH-3 70-75	.5	10
SRH-3 75-80	.1	4
SRH-3 80-85	.1	6
SRH-3 85-90	.4	1
SRH-3 90-95	.1	1
SRH-3 95-100	.2	1
SRH-3 100-105	.1	5
SRH-3 105-110	.7	39
SRH-3 110-115	.6	10
SRH-3 115-120	.5	28
SRH-3 120-125	.1	4
SRH-3 125-130	.1	3
SRH-3 130-135	.1	1
SRH-3 135-140	.1	1
STD C/AU-R	7.5	490

MINGOLD RESOURCES FILE # 87-5984 Page 4

SAMPLE#	AG PPM	AU* PPB
SRH-3140-145	.1	1
SRH-3 145-150	.1	1
SRH-3 150-155	.2	6
SRH-3 155-160	.1	1
SRH-3 160-165	.1	1
SRH-3 165-170	.1	1
SRH-3 170-175	.2	4
SRH-3 175-180	.1	1
SRH-3 180-185	.1	2
SRH-3 190-195	.1	1
SRH-3 195-200	.2	1
SRH-3 200-205	.1	1
SRH-3 205-210	.4	1
SRH-3 210-215	.2	1
SRH-3 215-220	1.0	1
SRH-3 220-225	.3	2
SRH-3 225-230	.5	1
SRH-3 230-235	.1	1
SRH-3 235-240	.3	1
SRH-3 240-245	.2	1
SRH-3 245-250	.1	2
SRH-3 250-255	.1	6
SRH-3 265-270	.1	1
SRH-3 270-275	.2	1
SRH-3 280-285	.2	1
SRH-3 285-290	.1	1
SRH-3 290-295	.2	4
SRH-3 295-300	.1	2
SRH-3 300-305	.3	1
SRH-3 305-310	.1	3
SRH-3 310-315	.4	6
SRH-3 315-320	.5	7
SRH-3 325-330	.2	6
SRH-3 330-335	.6	2
STD C/AU-R	7.5	505
SRH-3 335-340	.7	1
SRH-3 340-345	.9	1

MINGOLD RESOURCES FILE # 87-5984 Page 5

SAMPLE#	AG PPM	AU* PPB
SRH-3 345-350	.1	1
SRH-3 355-360	.1	1
SRH-3 360-365	.1	1
SRH-3 365-370	.1	2
SRH-3 370-375	.1	1
SRH-3 375-380	.1	1
SRH-3 380-385	.1	2
SRH-3 385-390	.1	1
SRH-3 390-395	.1	1
SRH-3 395-400	.1	1
SRH-3 400-405	.1	3
SRH-3 405-410	.1	1
SRH-3 410-415	.2	1
SRH-3 415-420	.1	1
SRH-3 420-425	.1	1
SRH-3 425-430	.1	1
SRH-3 430-435	.2	2
SRH-3 435-440	.2	11
SRH-3 440-445	.5	7
SRH-3 445-450	.4	2
SRH-3 450-455	.1	1
SRH-3 455-460	.1	3
SRH-3 460-465	.2	2
SRH-3 465-470	.2	5
SRH-4 10-15	.1	1
SRH-4 15-20	6.3	120
SRH-4 20-25	41.9	300
SRH-4 25-30	31.9	380
SRH-4 30-35	4.8	89
SRH-4 35-40	.6	12
SRH-4 40-45	.4	21
SRH-4 45-50	.1	1
SRH-4 50-55	.3	2
SRH-4 55-60	.3	5
SRH-4 60-65	.4	7
SRH-4 65-70	1.5	45
STD C/AU-R	7.3	520

MINGOLD RESOURCES FILE # 87-5984 Page 6

SAMPLE#	AG PPM	AU* PPB
SRH-4 70-75	.5	13
SRH-4 75-80	.4	8
SRH-4 80-85	.7	18
SRH-4 85-90	.9	15
SRH-4 90-95	.7	22
SRH-4 95-100	1.1	29
SRH-4 100-105	.4	11
SRH-4 105-110	.5	9
SRH-4 110-115	.6	10
SRH-4 115-120	.4	14
SRH-4 120-125	25.3	4170
SRH-4 125-130	46.2	2090
SRH-4 130-135	35.4	650
SRH-4 135-140	8.0	440
SRH-4 140-145	6.1	187
SRH-4 145-150	3.5	113
SRH-4 150-155	2.3	74
SRH-4 155-160	2.0	31
SRH-4 160-165	3.7	58
SRH-4 165-170	5.2	34
SRH-4 170-175	5.1	86
SRH-4 175-180	3.7	128
SRH-4 180-185	3.6	89
SRH-4 185-190	4.3	38
SRH-4 190-195	4.6	93
SRH-4 195-200	1.9	43
SRH-4 200-205	1.9	46
SRH-4 205-210	1.1	27
SRH-4 210-215	.8	33
SRH-4 215-220	.2	9
SRH-4 220-225	.6	18
SRH-4 225-230	.7	16
SRH-5 20-25	1.0	45
SRH-5 25-30	12.5	219
SRH-5 30-35	1.5	12
SRH-5 35-40	.2	6
STD C/AU-R	7.5	510

SAMPLE#	AG PPM	AU* PPB
SRH-5 40-45	3.9	29
SRH-5 45-50	3.4	48
SRH-5 50-55	2.8	26
SRH-5 55-60	4.7	220
SRH-5 60-65	2.2	95
SRH-5 65-70	1.3	41
SRH-5 70-75	8.6	54
SRH-5 75-80	9.0	121
SRH-5 80-85	12.0	87
SRH-5 85-90	6.7	83
SRH-5 90-95	.9	12
SRH-5 95-100	.4	3
SRH-5 100-105	.3	11
SRH-5 105-110	.2	1
SRH-5 110-115	.1	1
SRH-5 115-120	.1	1
SRH-5 120-125	.2	13
SRH-5 125-130	.1	1
SRH-5 130-135	.1	1
SRH-5 135-140	1.1	33
STD C/AU-R	[illegible]	510
SRH-5 140-145	1.0	49
SRH-5 145-150	.8	20
SRH-5 150-155	1.5	29
SRH-5 155-160	1.4	25
SRH-5 160-165	4.7	148
SRH-5 165-170	7.6	139
SRH-5 170-175	7.2	230
SRH-5 175-180	4.1	159
SRH-5 180-185	19.6	187
SRH-5 185-190	8.5	270
SRH-5 190-195	7.5	136
SRH-5 195-200	4.5	101
SRH-5 200-205	.7	19
SRH-5 205-210	.1	1
SRH-5 210-215	1.3	29
SRH-5 215-220	.1	3

SAMPLE#	AG PPM	AU* PPB
SRH-5 220-225	1.0	19
SRH-5 225-230	.8	33
SRH-5 230-235	1.4	79
SRH-5 235-240	2.3	87
SRH-5 240-245	1.6	54
SRH-5 245-250	1.8	83
SRH-5 250-255	.7	32
SRH-5 255-260	1.9	87
SRH-5 260-265	1.6	33
SRH-5 265-270	1.1	43
SRH-5 270-275	1.5	44
SRH-5 275-280	.8	36
SRH-5 280-285	1.8	47
SRH-5 285-290	1.0	34
SRH-5 290-295	.6	25
SRH-5 295-300	.5	17
SRH-6 35-40	2.5	27
SRH-6 40-45	7.8	101
SRH-6 45-50	5.8	105
SRH-6 50-55	2.7	75
SRH-6 55-60	9.0	102
SRH-6 60-65	3.5	101
SRH-6 65-70	4.1	38
SRH-6 70-75	5.3	43
SRH-6 75-80	9.2	83
SRH-6 80-85	18.1	92
SRH-6 85-90	29.7	280
SRH-6 90-95	5.8	24
SRH-6 95-100	2.3	10
SRH-6 100-105	1.2	6
SRH-6 105-110	.3	3
SRH-6 110-115	.8	29
SRH-6 115-120	.3	15
SRH-6 120-125	.3	7
SRH-6 125-130	.1	6
SRH-6 130-135	.1	2
STD C/AU-R	7.4	510

MINGOLD RESOURCES FILE # 87-5984 Page 9

SAMPLE#	AG PPM	AU* PPB
SRH-6 135-140	.1	1
SRH-6 140-145	.3	1
SRH-6 145-150	.3	1
SRH-6 150-155	.7	1
SRH-6 155-160	.4	3
SRH-6 160-165	1.7	8
SRH-6 165-170	1.0	7
SRH-6 170-175	.9	16
SRH-6 175-180	1.4	17
SRH-6 180-185	1.4	13
SRH-6 185-190	2.1	12
STD C/AU-R	7.3	500
SRH-6 190-195	1.4	15
SRH-6 195-200	2.4	19
SRH-6 200-205	1.5	7
SRH-6 205-210	.6	27
SRH-6 210-215	.8	17
SRH-6 215-220	.5	16
SRH-6 220-225	.5	12
SRH-6 225-230	.1	8
SRH-6 230-235	.5	18
SRH-6 235-240	.2	13
SRH-6 240-245	.8	9
SRH-6 245-250	.3	5
SRH-6 250-255	.7	4
SRH-6 255-260	.3	1
SRH-6 260-265	.6	1
SRH-6 265-270	.2	1
SRH-6 270-275	.8	2
SRH-6 275-280	.3	3
SRH-6 280-285	.5	1
SRH-6 285-290	.3	1
SRH-6 290-295	.3	3
SRH-6 295-300	.2	1

MINGOLD RESOURCES FILE # 87-5984 Page 10

SAMPLE#	AG PPM	AU* PPB
54130	.6	17
54142	.3	20
54144	.1	1
54157	.3	3
54160	.1	6
54182	.4	14
54183	.1	1
54186	1.0	1
54188	.1	1
54195	.2	5
54196	.2	10
54200	.1	1
54202	.2	7
54206	.3	1
54207	.1	7
54208	.5	8
54214	.2	7
54218	.2	1
54222	.1	4
54229	.1	8
54230	.2	35
54258	.1	1
54272	.1	1
54273	.1	1
54277	.1	1
54291	.3	1
STD C/AU-R	7.4	470

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716
DATE RECEIVED: DEC 1 1987
DATE REPORT MAILED: Dec. 8/87.

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEC. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE 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: CUTTING AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

MINGOLD RESOURCES File # 87-5970 Page 1

SAMPLE#	AG PPM	AU* PPB
BRH-1 19-25	.1	6
BRH-1 25-30	.1	1
BRH-1 30-35	.1	2
BRH-1 35-40	.1	1
BRH-1 40-45	.1	1
BRH-1 45-50	.1	2
BRH-1 50-55	.1	2
BRH-1 55-60	.2	1
BRH-1 60-65	4.4	910
BRH-1 65-70	6.1	2150
BRH-1 70-75	2.6	320
BRH-1 75-80	3.0	118
BRH-1 80-85	.5	51
BRH-1 85-90	1.3	76
BRH-1 90-95	.3	29
BRH-1 95-100	.8	50
BRH-1 100-105	.4	49
BRH-1 105-110	.4	29
BRH-1 110-115	.4	43
BRH-1 115-120	.4	300
BRH-2 10-15	.1	1
BRH-2 15-20	.1	4
BRH-2 20-25	.1	1
BRH-2 25-30	.2	1
BRH-2 30-35	.1	1
BRH-2 35-40	.1	1
BRH-2 40-45	.1	1
BRH-2 45-50	.1	1
BRH-2 50-55	.1	1
BRH-2 55-60	.1	1
BRH-2 60-65	.1	2
BRH-2 65-70	.1	1
BRH-2. 70-75	.2	1
BRH-2 75-80	.3	1
BRH-2 80-85	.1	3
BRH-2 85-90	.1	2
STD C/AU-R	7.3	485

MINGOLD RESOURCES FILE # 87-5970 Page 2

SAMPLE#	AG PPM	AU* PPB
BRH-2 90-95	.1	1
BRH-2 95-100	.1	3
BRH-2 100-105	.2	1
BRH-2 105-110	.1	1
BRH-2 110-115	.1	1
BRH-2 115-120	.2	1
BRH-2 120-125	.1	1
BRH-2 125-130	.1	2
BRH-2 130-135	.1	1
BRH-2 135-140	.1	2
BRH-2 140-145	.3	1
BRH-2 145-150	.1	1
BRH-2 150-155	.2	4
BRH-2 155-160	.1	1
BRH-2 160-165	.1	3
BRH-2 165-170	.1	1
BRH-2 170-175	.1	2
BRH-2 175-180	.2	3
BRH-2 180-185	.1	1
BRH-2 185-190	.1	1
BRH-2 190-195	.1	1
BRH-2 195-200	.1	2
BRH-2 200-205	.1	1
BRH-2 205-210	.1	3
BRH-2 210-215	.5	120
BRH-2 215-220	.1	48
BRH-2 220-225	1.5	320
BRH-2 225-230	.9	210
BRH-2 230-235	2.8	870
BRH-2 235-240	.7	97
BRH-2 240-245	.6	91
BRH-2 245-250	.4	97
BRH-2 250-255	.2	59
BRH-2 255-260	.3	32
BRH-2 260-265	.2	15
BRH-2 265-270	.4	13
STD C/AU-R	7.5	490

SAMPLE#	AG PPM	AU* PPB
BRH-2 270-275	.2	5
BRH-2 275-280	.1	3
BRH-3 10-15	.3	1
BRH-3 15-20	.1	1
BRH-3 20-25	.2	1
BRH-3 25-30	.3	6
BRH-3 30-35	.1	1
BRH-3 35-40	.1	1
BRH-3 40-45	.1	1
BRH-3 45-50	.2	1
BRH-3 50-55	.1	1
BRH-3 55-60	.2	1
BRH-3 60-65	.1	1
BRH-3 65-70	.1	1
BRH-3 70-75	.1	1
BRH-3 75-80	.1	1
BRH-3 80-85	.4	1
BRH-3 85-90	.1	1
BRH-3 90-95	.1	1
BRH-3 95-100	.1	1
BRH-3 100-105	.1	1
BRH-3 105-110	.1	1
BRH-3 110-115	.3	2
BRH-3 115-120	.2	1
BRH-3 120-125	.1	1
BRH-3 125-130	.2	1
BRH-3 130-135	.1	1
BRH-3 135-140	.1	1
BRH-3 140-145	.1	3
BRH-3 145-150	.2	1
BRH-3 150-155	.3	1
BRH-3 155-160	.2	1
STD C/AU-R	7.4	510
BRH-3 160-165	.1	1
BRH-3 165-170	.2	1
BRH-3 170-175	.3	1
BRH-3 175-180	.1	1

SAMPLE#	AG PPM	AU* PPB
BRH-3 180-185	.1	1
BRH-3 185-190	.1	1
BRH-3 190-195	.1	3
BRH-3 195-200	.1	1
BRH-3 200-205	.1	1
BRH-3 205-210	.1	1
BRH-3 210-215	.1	4
BRH-3 215-220	.1	1
BRH-3 220-225	.1	1
BRH-3 225-230	.1	1
BRH-3 230-235	.1	1
BRH-3 235-240	.1	8
BRH-3 240-245	.7	230
BRH-3 245-250	1.2	350
BRH-3 250-255	1.3	370
BRH-3 255-260	.2	43
BRH-3 260-265	.1	38
BRH-3 265-270	.4	26
BRH-3 270-275	.6	58
BRH-3 275-280	.3	21
BRH-4 15-20	.1	1
BRH-4 20-25	.1	1
BRH-4 25-30	.1	1
BRH-4 30-35	.1	1
BRH-4 35-40	.3	1
BRH-4 40-45	.3	1
BRH-4 45-50	.1	1
BRH-4 50-55	.1	1
BRH-4 55-60	.1	1
BRH-4 60-65	.1	2
BRH-4 65-70	.3	1
BRH-4 70-75	.1	1
BRH-4 75-80	.2	1
BRH-4 80-85	.2	1
BRH-4 85-90	.2	1
BRH-4 90-95	.2	1
STD C/AU-R	7.4	500

	SAMPLE#	AG PPM	AU* PPB
	BRH-4 95-100	.1	11
	BRH-4 100-105	.2	4
	BRH-4 105-110	.2	2
	BRH-4 110-115	.2	2
	BRH-4 115-120	.2	3
	BRH-4 120-125	.1	1
	BRH-4 125-130	.1	1
	BRH-4 130-135	.4	79
	BRH-4 135-140	.1	9
	BRH-4 140-145	.1	4
	BRH-4 145-150	.1	3
	BRH-4 150-155	.1	4
	BRH-4 155-160	.2	1
	BRH-4 160-165	.2	1
	BRH-4 165-170	.2	2
	BRH-4 170-175	.1	4
	BRH-4 175-180	.1	1
	BRH-4 180-185	.1	2
	BRH-4 185-190	.2	1
	BRH-4 190-195	.1	1
	BRH-4 195-200	.1	1
	BRH-4 200-205	.1	1
	BRH-4 205-210	.1	1
	BRH-4 210-215	.1	1
	BRH-4 215-220	.1	1
	BRH-4 220-225	.2	1
	BRH-4 225-230	.2	1
20-25→	BRH-5 25-30	.1	1
30-35→	BRH-5 35-40	.2	1
	BRH-5 40-45	.1	2
	BRH-5 45-50	.1	1
	BRH-5 50-55	.1	1
	BRH-5 55-60	.1	3
	BRH-5 60-65	.1	1
	BRH-5 65-70	.1	1
	BRH-5 70-75	.1	1
	STD C/AU-R	7.6	510

	SAMPLE#	AG PPM	AU* PPB
	BRH-5 75-80	.1	6
	BRH-5 80-85	.2	12
85-90→	BRH-5 90-95	.1	17
	BRH-5 95-100	.3	10
100-105→	BRH-5 105-110	.3	12
	BRH-5 110-115	.2	7
	BRH-5 115-120	.2	1
120-125→	BRH-5 125-130	.2	1
	BRH-5 130-135	.2	2
	BRH-5 135-140	.4	8
140-145→	BRH-5 145-150	.2	1
	BRH-5 150-155	.1	1
	BRH-5 155-160	.3	2
	BRH-5 160-165	.1	1
	BRH-5 165-170	.1	1
	BRH-5 170-175	.1	1
	BRH-5 175-180	.2	1
	BRH-5 180-185	.2	1
	BRH-5 185-190	.3	9
	BRH-5 190-195	.2	3
	BRH-5 195-200	.2	20
	BRH-5 200-205	.1	4
	BRH-5 205-210	.2	3
	BRH-5 210-215	.1	1
	BRH-5 215-220	.1	1
	BRH-5 220-225	.1	3
	BRH-5 225-230	.1	1
	BRH-5 230-235	.1	2
	BRH-5 235-240	.1	1
	BRH-5 240-245	.3	1
	BRH-5 245-250	.2	1
	BRH-5 250-255	.1	1
	BRH-5 255-260	.1	1
	BRH-5 260-265	.2	2
	BRH-5 265-270	.1	1
	BRH-5 270-275	.2	1
	STD C/AU-R	7.3	510

SAMPLE#	AG PPM	AU* PPB
BRH-5 275-280	1.1	6
BRH-5 280-285	.2	5
(285-290 →) BRH-5 290-295	.2	1
BRH-5 295-300	.1	3
BRH-5 300-305	.1	1
BRH-5 305-310	.1	5
(310-312 →) BRH-6 50-55	.1	3
BRH-6 55-60	.3	11
BRH-6 60-65	.2	40
BRH-6 65-70	.6	64
BRH-6 70-75	1.2	60
BRH-6 75-80	.3	18
BRH-6 80-85	.3	15
BRH-6 85-90	.3	11
BRH-6 90-95	.1	7
BRH-6 95-100	.3	5
BRH-6 100-105	.2	8
BRH-6 105-110	.1	1
BRH-6 110-115	.2	1
BRH-6 115-120	.1	1
BRH-6 120-125	.1	1
BRH-6 125-130	.1	1
BRH-6 130-135	.2	6
BRH-6 135-140	.1	1
BRH-6 140-145	.1	7
BRH-6 145-150	.1	12
BRH-6 150-155	.2	11
BRH-6 155-160	.3	1
BRH-6 160-165	.1	13
BRH-6 165-170	.1	1
BRH-6 170-175	.1	3
BRH-6 175-180	.1	1
BRH-6 180-185	.1	1
BRH-6 185-190	.1	1
BRH-6 190-195	.1	1
BRH-6 195-200	.1	4
STD C/AU-R	7.3	490

SAMPLE#	AG PPM	AU* PPB
BRH-6 200-205	.2	1
BRH-6 205-210	.3	1
BRH-6 210-215	.4	1
BRH-6 215-220	.5	1
BRH-7 20-25	.4	1
BRH-7 25-30	.2	1
BRH-7 30-35	.2	2
BRH-7 35-40	.1	1
BRH-7 40-45	.1	1
BRH-7 45-50	.1	2
BRH-7 50-55	.2	1
BRH-7 55-60	.1	1
BRH-7 60-65	.1	1
BRH-7 65-70	.2	1
BRH-7 70-75	.3	1
BRH-7 75-80	.2	1
BRH-7 80-85	.1	1
BRH-7 85-90	.1	2
BRH-7 90-95	.1	1
BRH-7 95-100	.2	1
BRH-7 100-105	.1	4
BRH-7 105-110	.1	1
BRH-7 110-115	.2	1
BRH-7 115-120	.1	1
BRH-7 120-125	.3	3
BRH-7 125-130	.2	1
BRH-7 130-135	.2	3
BRH-7 135-140	.1	1
BRH-7 140-145	.1	1
BRH-7 145-150	.2	1
BRH-7 150-155	.1	1
BRH-7 155-160	.1	1
BRH-7 160-165	.2	4
BRH-7 165-170	.3	1
BRH-7 170-175	.2	1
BRH-7 175-180	.1	1
STD C/AU-R	7.5	490

SAMPLE#	AG PPM	AU* PPB
BRH-7 180-185	.1	4
BRH-7 185-190	.1	1
BRH-7 190-195	.1	1
BRH-7 195-200	.2	1
BRH-7 200-205	.1	1
BRH-7 205-210	.1	5
BRH-7 210-215	.4	5
BRH-7 215-220	.2	3
BRH-7 220-225	.1	1
BRH-7 225-230	.1	1
BRH-7 230-235	.1	6
BRH-7 235-240	.1	1
BRH-7 240-245	.1	1
BRH-7 245-250	.1	4
BRH-7 250-255	.2	5
BRH-7 255-260	.1	5
BRH-7 260-265	.1	3
BRH-7 265-270	.4	1
BRH-7 270-275	.9	1
BRH-7 275-280	.4	2
BRH-7 280-285	.1	1
BRH-7 285-290	.2	1
BRH-7 290-295	.1	1
BRH-7 295-300	.1	2
BRH-8 30-35	.1	1
BRH-8 35-40	.1	1
BRH-8 40-45	.1	1
BRH-8 45-50	.1	1
BRH-8 50-55	.1	1
BRH-8 55-60	.3	4
BRH-8 60-65	.1	1
BRH-8 65-70	.1	1
BRH-8 70-75	.1	1
BRH-8 75-80	.2	7
BRH-8 80-85	.2	19
BRH-8 85-90	.1	43
STD C/AU-R	7.4	505

SAMPLE#	AG PPM	AU* PPB
BRH-8 90-95	.8	114
BRH-8 95-100	2.5	155
BRH-8 100-105	.5	61
BRH-8 105-110	2.6	740
BRH-8 110-115	.6	265
BRH-8 115-120	1.0	490
BRH-8 120-125	.3	91
BRH-8 125-130	.4	66
BRH-8 130-135	.2	19
BRH-8 135-140	.1	1
BRH-8 140-145	.1	1
BRH-8 145-150	.1	1
BRH-8 150-155	.1	1
BRH-8 155-160	.1	6
BRH-8 160-165	.1	1
BRH-8 165-170	.1	1
BRH-8 170-175	.1	2
BRH-8 175-180	.1	1
BRH-8 180-185	.3	1
BRH-8 185-190	.1	1
BRH-8 190-195	.2	15
BRH-8 195-200	.2	1
BRH-8 200-205	.3	6
BRH-8 205-210	.1	1
BRH-8 210-215	.1	1
BRH-8 215-220	.1	1
BRH-8 220-225	.1	1
BRH-8 225-230	.1	1
BRH-8 230-235	.1	1
BRH-8 235-240	.2	1
BRH-8 240-245	.1	1
BRH-8 245-250	.1	1
BRH-8 250-255	.1	1
BRH-8 255-260	.2	3
STD C/AU-R	7.6	530

SAMPLE#	AG PPM	AU* PPB
BRH-5 20-25	.2	2
BRH-5 30-35	.2	1
BRH-5 85-90	.4	25
BRH-5 100-105	.4	1
BRH-5 120-125	.1	3
BRH-5 140-145	.3	3
BRH-5 285-290	.2	2
BRH-5 310-315	.1	5
STD C/AU-R	7.6	480

DIAMOND DRILLING

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: JUL 18 1988
DATE REPORT MAILED: July 22/88

ASSAY CERTIFICATE

- SAMPLE TYPE: P1-P5 CORE P6-P8 ROCK CHIP

ASSAYER: C. Leong D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES PROJECT 620 RHUB-BARB FILE # 88-2802 Page 1

	SAMPLE#	Ag OZ/T	Au OZ/T
SDH-7	C-51301	.02	.001
	C-51302	.01	.001
	C-51303	.01	.001
	C-51304	.01	.001
	C-51305	.02	.001
	C-51306	.01	.002
SDH-8	C-51307	.04	.001
	C-51308	.23	.004
	C-51309	.08	.004
	C-51310	.89	.001
	C-51311	.01	.001
	C-51312	.12	.003
	C-51313	.02	.003
	C-51314	.65	.005
	C-51315	.02	.001
	C-51316	.01	.001
	C-51317	.03	.001
	C-51318	.01	.001
	C-51319	.01	.001
	C-51320	.06	.002
	C-51321	.03	.001
	C-51322	.11	.004
	C-51323	.04	.001
	C-51324	.02	.002
	C-51325	.02	.001
	C-51326	.02	.001
	C-51327	.04	.001
	C-51328	.01	.001
	C-51329	.01	.001
	C-51330	.02	.001
	C-51331	1.45	.001
	C-51332	.01	.001
	C-51333	.06	.001
	C-51334	.05	.001
	C-51335	.05	.002
	C-51336	.05	.002

MINGOLD RESOURCES PROJECT 620 RHUB-BARB FILE # 88-2802 Page 2

	SAMPLE#	Ag OZ/T	Au OZ/T
SDH-8	C-51337	.07	.001
	C-51338	1.23	.002
	C-51339	.03	.001
	C-51340	.03	.001
	C-51341	.03	.001
	C-51342	5.92	.001
	C-51343	.05	.001
	C-51344	.06	.001
	C-51345	.04	.001
	C-51346	3.10	.002
	C-51347	.06	.001
	C-51348	.07	.001
	C-51349	.02	.001
	C-51350	.50	.001
	C-51351	.03	.001
	C-51352	.05	.001
	C-51353	4.61	.001
	C-51354	.06	.001
	C-51355	.04	.001
	C-51356	.03	.001
	C-51357	.05	.001
	C-51358	.01	.001
	C-51359	.03	.001
	C-51360	.01	.001
	C-51361	.01	.001
	C-51362	.01	.001
	C-51363	.03	.001
SDH-11	C-51364	.03	.001
	C-51365	.01	.001
	C-51366	.01	.001
	C-51367	.02	.001
	C-51368	.01	.001
	C-51369	.01	.001
	C-51370	.01	.001
	C-51371	.02	.001
	C-51372	.02	.001

ENGOLD RESOURCES PROJECT 620 RHUB-BARB FILE # 88-2802 Page 3

SAMPLE#	Ag OZ/T	Au OZ/T
C-51373	.01	.001
C-51374	.02	.001
C-51375	.01	.001
C-51376	.01	.001
C-51377	.02	.001
C-51378	.03	.001
C-51379	.01	.001
C-51380	.03	.001
C-51381	.02	.001
C-51382	.01	.001
C-51383	.01	.001
C-51384	.02	.001
C-51385	.01	.001
C-51386	.01	.001
C-51387	.01	.001
C-51388	.01	.001
C-51389	.01	.001
C-51390	.02	.001
C-51391	.01	.001
C-51392	.01	.001
C-51393	.01	.001
C-51394	.01	.001
C-51395	.01	.001
C-51396	.01	.001
E-54951	.10	.003
E-54952	.03	.001
E-54953	.01	.001
E-54954	.14	.002
E-54955	.04	.001
E-54956	.02	.001
E-54957	.03	.001
E-54958	.04	.001
E-54959	.08	.004
E-54960	.06	.003
E-54961	.07	.001
E-54962	1.17	.013

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ENGOLD RESOURCES PROJECT 620 RHUB-BARB FILE # 88-2802 Page 4

SAMPLE#	Ag OZ/T	Au OZ/T
E-54963	.16	.003
E-54964	.06	.002
E-54965	.27	.007
E-54966	.05	.001
E-54967	.01	.001
E-54968	.01	.001
E-54969	.09	.002
E-54970	.13	.006
E-54971	.02	.001
E-54972	.04	.001
E-54973	.02	.002
E-54974	.03	.002
E-54975	.05	.003
E-54976	.01	.001
E-54977	.02	.001
E-54978	.03	.001
E-54979	.01	.001
E-54980	.01	.001
E-54981	.01	.001
E-54982	.02	.001
E-54983	.04	.001
E-54984	.03	.001
E-54985	.04	.001
E-54986	.01	.001
E-54987	.01	.001
E-54988	.02	.001
E-54989	.03	.001
E-54990	.01	.001
E-54991	.01	.001
E-54992	.01	.001
E-54993	.02	.001
E-54994	.01	.001
E-54995	.01	.001
E-54996	.01	.001
E-54997	.01	.001
E-54998	.02	.001

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.INGOLD RESOURCES PROJECT 620 RHUB-BARB FILE # 88-2802 Page 5

SAMPLE#	Ag OZ/T	Au OZ/T
E-54999	.03	.001
E-55000	.03	.001

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: JUL 26 1988
DATE REPORT MAILED: July 30/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Core AU - 20 GM REGULAR ASSAY.

ASSAYER: C. Leong D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES PROJECT #620 RHUB-BARB FILE # 88-2967 Page 1

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SAMPLE#	Ag OZ/T	Au OZ/T
C 51397	.01	.001
C 51398	.01	.001
C 51399	.01	.001
C 51400	.01	.001
C 51401	.40	.001
C 51402	.99	.001
C 51403	.02	.001
C 51404	.04	.001
C 51405	.46	.001
C 51406	.04	.001
C 51407	.01	.001
C 51408	.01	.001
C 51409	.02	.001
C 51410	.02	.001
C 51411	.03	.001
C 51412	.01	.001
C 51413	.01	.001
C 51414	.01	.001
C 51415	.03	.001
C 51416	.01	.001
C 51417	.01	.001
C 51418	.01	.001
C 51419	.01	.001
C 51420	.03	.001
C 51421	.03	.001
C 51422	.03	.001
C 51423	.01	.001
C 51424	.01	.001
C 51425	.02	.001
C 51426	.01	.001
C 51427	.04	.001
C 51428	.05	.001
C 51429	.03	.001
C 51430	.05	.001
C 51431	.01	.001
C 51432	.03	.001

SAMPLE#	Ag OZ/T	Au OZ/T
C 51433	.01	.001
C 51434	.01	.001
C 51435	.06	.004
C 51436	.01	.001
C 51437	.06	.003
C 51438	.09	.002
C 51439	.05	.002
C 51440	.09	.004
C 51441	.07	.003
C 51442	.02	.001
C 51443	.05	.003
C 51444	.08	.002
C 51445	.21	.004
C 51446	.05	.002
C 51447	.04	.002
C 51448	.02	.001
C 51449	.02	.001
C 51450	.06	.001
C 51451	.05	.003
C 51452	.07	.001
C 51453	.10	.001
C 51454	.07	.001
C 51455	.09	.004
C 51456	.11	.003
C 51457	1.33	.012
C 51458	.09	.003
C 51459	.24	.002
C 51460	.03	.002
C 51461	.18	.002
C 51462	.01	.001
C 51463	.02	.001
C 51464	.03	.001
C 51465	.06	.001
C 51466	.09	.002
C 51467	.02	.002
C 51468	.08	.006

SDH-11

SAMPLE#	Ag OZ/T	Au OZ/T
C 51469	.07	.004
C 51470	.04	.003
C 51471	.01	.003
C 51472	.04	.002
C 51473	.01	.001
C 51474	.01	.001
C 51475	.03	.002
C 51476	.01	.001
C 51477	.03	.001
C 51478	.02	.001
C 51479	.02	.001
C 51480	.01	.001
C 51481	.01	.001
C 51482	.01	.001
C 51483	.01	.001
C 51484	.01	.001
C 51485	.03	.001
C 51486	.01	.001
C 51487	.03	.001
C 51488	.01	.001
C 51489	.01	.001
C 51490	.02	.001
C 51491	.01	.001
C 51492	.01	.001
C 51493	.01	.001
C 51494	.01	.001
C 51495	.01	.001
C 51496	.01	.001
C 51497	.01	.001
C 51498	.01	.001
C 51499	.01	.001
C 51500	.02	.001
E 54551	.02	.001
E 54552	.01	.001
E 54553	.02	.001
E 54554	.01	.001

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.NGOLD RESOURCES PROJECT #620 RHUB-BARB FILE # 88-2967 Page 4

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SAMPLE#	Ag OZ/T	Au OZ/T
E 54555	.03	.001
E 54556	.02	.001
E 54557	.01	.001
E 54558	.01	.001
E 54559	.01	.001
E 54560	.03	.001
E 54561	.01	.001
E 54562	.01	.001
E 54563	.02	.001
E 54564	.02	.001
E 54565	.02	.001
E 54566	.02	.001
E 54567	.03	.001
E 54568	.02	.001
E 54569	.01	.001
E 54570	.01	.001
E 54571	.01	.001
E 54572	.02	.001
E 54573	.03	.001
E 54574	.02	.001
E 54575	.04	.001
E 54576	.01	.001
E 54577	.02	.001
E 54578	.01	.001
E 54579	.01	.001
E 54580	.03	.001
E 54581	.05	.001
E 54582	.06	.001
E 54583	.02	.001
E 54584	.01	.001
E 54585	.04	.001
E 54586	.01	.001
E 54587	.03	.001
E 54588	.01	.001
E 54589	.04	.001
E 54590	.02	.001

MINGOLD RESOURCES PROJECT #620 RHUB-BARB FILE # 88-2967 Page 5

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SAMPLE#	AG oz/t	AU oz/t
E 54591	.01	.001
E 54592	.01	.001
E 54593	.01	.001
E 54594	.02	.001

ACME ANALYTICAL LABORATORIES LTD.
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PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: AUG 1 1988
DATE REPORT MAILED: Aug. 8/88.

ASSAY CERTIFICATE

- SAMPLE TYPE: Core AU - 20 GM REGULAR ASSAY.

ASSAYER: C. Leong. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES INC. PROJECT #620 RHUB-BARB FILE # 88-3134 Page 1

SAMPLE#	Ag OZ/T	Au OZ/T	Note
C 51501	.02	.001	
C 51502	.01	.001	
C 51503	.01	.001	
C 51504	.01	.001	
C 51505	.01	.001	
C 51506	.02	.001	SDH-9
C 51507	.01	.001	
C 51508	.02	.001	
C 51509	.01	.001	
C 51510	.01	.001	
C 51511	.01	.001	
C 51512	.04	.001	
C 51513	.03	.001	
C 51514	.03	.001	
C 51515	.01	.001	
C 51516	.01	.001	
C 51517	.01	.001	
C 51518	.03	.001	
C 51519	.02	.002	
C 51520	.13	.001	
C 51521	.02	.001	
C 51522	.07	.001	
C 51523	.10	.002	
C 51524	.07	.001	
C 51525	.10	.001	
C 51526	.10	.003	
C 51527	.07	.002	
C 51528	.81	.209	
C 51529	.17	.039	
C 51530	.25	.006	
C 51531	.22	.004	
C 51532	.11	.002	
C 51533	.23	.003	
C 51534	.13	.001	
C 51535	.93	.007	
C 51536	.08	.001	

,OLD RESOURCES INC. PROJECT #620 RHUB-BARB FILE # 88-3134 Page 2

SAMPLE#	Ag OZ/T	Au OZ/T	Note
C 51537	.02	.001	
C 51538	.02	.001	
C 51539	.02	.001	
C 51540	.04	.001	
C 51541	.03	.001	
C 51542	.01	.001	SDH-9
C 51543	.02	.001	
C 51544	.01	.001	
C 51545	.02	.001	
C 51546	.02	.001	
C 51547	.01	.001	
C 51548	.01	.001	
C 51549	.01	.001	
E 54595	.05	.001	
E 54596	.02	.001	
E 54597	.04	.002	
E 54598	.02	.001	
E 54599	.05	.002	
E 54600	.02	.001	
E 54601	.03	.001	
E 54602	.03	.001	
E 54603	.03	.002	
E 54604	.02	.001	SDH-12
E 54605	.02	.001	
E 54606	.01	.001	
E 54607	.01	.001	
E 54608	.06	.001	
E 54609	.02	.001	
E 54610	.05	.001	
E 54611	.03	.001	
E 54612	.01	.002	
E 54613	.01	.001	
E 54614	.02	.001	
E 54615	.03	.002	
E 54616	.03	.001	
E 54617	.03	.001	

.OLD RESOURCES INC. PROJECT #620 RHUB-BARB FILE # 88-3134 Page 3

SDH-12

SAMPLE#	Ag OZ/T	Au OZ/T
E 54618	.06	.001
E 54619	.04	.001
E 54620	.04	.001
E 54621	.03	.001
E 54622	.04	.002
E 54623	.04	.001
E 54624	.02	.001
E 54625	.01	.001
E 54626	.01	.001
E 54627	.01	.001
E 54628	.01	.001
E 54629	.01	.001
E 54630	.01	.001
E 54631	.01	.001
E 54632	.01	.001
E 54633	.01	.001
E 54634	.03	.001
E 54635	.02	.001
E 54636	.02	.001
E 54637	.01	.001
E 54638	.02	.007
E 54639	.01	.001
E 54640	.02	.001
E 54641	.02	.001
E 54642	.01	.001
E 54643	.01	.001
E 54644	.01	.001
E 54645	.01	.001
E 54646	.02	.001
E 54647	.01	.001
E 54648	.02	.001
E 54649	.03	.001
E 54650	.01	.001
E 54701	.01	.001
E 54702	.01	.001
E 54703	.01	.001

.GOLD RESOURCES INC. PROJECT #620 RHUB-BARB FILE # 88-3134 Page 4

SDH-12

SAMPLE#	Ag OZ/T	Au OZ/T
E 54704	.01	.001
E 54705	.01	.001
E 54706	.01	.001
E 54707	.01	.001
E 54708	.01	.001
E 54709	.01	.001
E 54710	.03	.001
E 54711	.01	.001
E 54712	.01	.001
E 54713	.02	.001

SDH-10

SAMPLE#	Ag OZ/T	Au OZ/T
E 54714	.01	.001
E 54715	.01	.001
E 54716	.01	.001
E 54717	.01	.001
E 54718	.01	.001
E 54719	.01	.001
E 54720	.01	.001
E 54721	.01	.001
E 54722	.01	.001
E 54723	.01	.001
E 54724	.01	.001
E 54725	.01	.001
E 54726	.01	.001
E 54727	.01	.001
E 54728	.01	.001
E 54729	.01	.001
E 54730	.01	.001
E 54731	.01	.001
E 54732	.01	.001
E 54733	.01	.001
E 54734	.01	.001
E 54735	.01	.001
E 54736	.01	.001
E 54737	.01	.001
E 54738	.01	.001
E 54739	.01	.001

Hole	SAMPLE#	Ag OZ/T	Au OZ/T
SDH-10	E 54740	.01	.001
	E 54741	.01	.001
	E 54742	.14	.001
	E 54743	.36	.002
	E 54744	.02	.001
	E 54745	.04	.001
	E 54746	.04	.001
	E 54747	.02	.001
	E 54748	.03	.001
	E 54749	.01	.001
	E 54750	.01	.001
	E 54751	.04	.001
	E 54752	.05	.001
	E 54753	.10	.001
	E 54754	.01	.001
	E 54755	.03	.001
	E 54756	.03	.001
	E 54757	.02	.001
	E 54758	.02	.001
	E 54759	.01	.001
	E 54760	.01	.001
	E 54761	.01	.001
	E 54762	.02	.001
	E 54763	.04	.001
	E 54764	.04	.001
	E 54765	.03	.001
	E 54766	.05	.002
	E 54767	.01	.001
	E 54768	.01	.001
	E 54769	.01	.001
	E 54770	.02	.001
	E 54771	.02	.001
	E 54772	.01	.001
	E 54773	.02	.001
	E 54774	.01	.001
	E 54775	.03	.001

Hole	SAMPLE#	Ag OZ/T	Au OZ/T
SDH-10	E 54776	.01	.001
	E 54777	.04	.001
	E 54778	.05	.002
	E 54779	.01	.001
	E 54780	.01	.001
	E 54781	.01	.001
	E 54782	.01	.001
	E 54783	.01	.001
	E 54784	.06	.001
	E 54785	.02	.001
	E 54786	.01	.001
SDH-9	E 54787	.02	.001
	E 54788	.01	.001
	E 54789	.01	.001
	E 54790	.02	.001
	E 54791	.01	.001
	E 54792	.01	.001
	E 54793	.01	.001
	E 54794	.04	.001
	E 54795	.03	.001
	E 54796	.01	.001
	E 54797	.01	.001
	E 54798	.01	.001
	E 54799	.03	.001
	E 54800	.01	.001

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: AUG 6 1988
DATE REPORT MAILED: Aug.11/88..

ASSAY CERTIFICATE

- SAMPLE TYPE: Core AU - 20 GM REGULAR ASSAY.

ASSAYER: C.Leong D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES INC. PROJECT #620 FILE # 88-3330A Page 1

SDH-9

SAMPLE#	Ag OZ/T	Au OZ/T
C 51550	.07	.001
C 51551	.01	.001
C 51552	.03	.002
C 51553	.02	.002
C 51554	.01	.001
C 51555	.01	.001
C 51556	.01	.001
C 51557	.02	.001
C 51558	.01	.001
C 51559	.01	.001
C 51560	.01	.001
C 51561	.02	.001
C 51562	.01	.001
C 51563	.01	.002
C 51564	.01	.001
C 51565	.02	.001
C 51566	.01	.001
C 51567	.01	.001
C 51568	.01	.001
C 51569	.01	.001
C 51570	.01	.001
C 51571	.01	.001
C 51572	.02	.001
C 51573	.07	.001
C 51574	.01	.001
C 51575	.03	.001
C 51576	.03	.001
C 51577	.09	.001
C 51578	.02	.001
C 51579	.02	.001
C 51580	.08	.002
C 51581	.04	.001
C 51582	.01	.001
C 51583	.01	.001
C 51584	.01	.001
C 51585	.01	.001

MINGOLD RESOURCES INC. PROJECT #620 FILE # 88-3330A Page 2

SDH-10

SAMPLE#	Ag OZ/T	Au OZ/T
C 51586	.02	.001
C 51587	.02	.001
C 51588	.01	.001
C 51589	.03	.001
C 51590	.01	.001
C 51591	.01	.001
C 51592	.03	.001
C 51593	.02	.001
C 51594	.01	.001
C 51595	.01	.001
C 51596	.01	.001
C 51597	.02	.001
C 51598	.01	.001
C 51599	.05	.001
C 51600	.01	.001
C 51601	.01	.001
C 51602	.02	.001
C 51603	.03	.001
C 51604	.01	.001
C 51605	.03	.001
C 51606	.02	.001
C 51607	.01	.001
C 51608	.01	.001
C 51609	.01	.001
C 51610	.01	.001
C 51611	.01	.001
C 51612	.04	.001
C 51613	.01	.001
C 51614	.03	.001
C 51615	.14	.001
C 51616	.15	.002
C 51617	.22	.002
C 51618	.04	.001
C 51619	.03	.002
C 51620	.04	.002
C 51621	.78	.002

MINGOLD RESOURCES INC. PROJECT #620 FILE # 88-3330A Page 3

SAMPLE#	Ag OZ/T	Au OZ/T
C 51622	.03	.002
C 51623	.05	.002
C 51624	.04	.001
C 51625	.03	.001
C 51626	.02	.002
C 51627	.01	.001
C 51628	.04	.001
C 51629	.02	.001
C 51630	.01	.001
C 51631	.01	.001
C 51632	.02	.001
C 51633	.01	.001
C 51634	.02	.001
C 51635	.01	.001
C 51636	.01	.001
C 51637	.01	.001
C 51638	.01	.001
C 51639	.01	.001
C 51640	.01	.001
C 51641	.01	.001
C 51642	.01	.001
C 51643	.01	.001
C 51644	.01	.001
C 51645	.01	.001

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: AUG 17 1988
DATE REPORT MAILED: Aug 30/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Core

ASSAYER: C. Leong D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES INC. PROJECT 602 FILE # 88-3664A

	SAMPLE#	Ag OZ/T	Au OZ/T
SDH-10	C 51646	.01	.001
	C 51647	.01	.001

ASSAY CERTIFICATES

ROCK SAMPLING

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

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 MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-P5 CORE P6-P8 ROCK CHIP AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY FLAMLESS AA.

7,6

DATE RECEIVED: JUL 14 1988 DATE REPORT MAILED: July 22/88 ASSAYER. C. Leong .D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES PROJECT 620 RHUB-BARB File # 88-2802 Page 6

Hole	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
	R-54651 .5-2m	4	14	10	64	.2	3	2	178	3.39	199	5	ND	16	22	1	3	2	13	.22	.041	25	3	.20	104	.02	2	1.14	.03	.12	1	1	350
	R-54652 2-4	5	14	11	53	.4	2	2	171	3.69	317	5	ND	15	26	1	14	3	12	.22	.042	26	3	.19	105	.01	2	1.18	.04	.12	2	1	600
	R-54653 4-6	12	3	13	9	4.5	1	1	82	1.92	1290	5	ND	13	49	1	46	2	4	.27	.118	28	1	.08	122	.01	12	.54	.03	.24	1	105	1500
	R-54654 6-8	7	9	20	32	.2	2	1	190	2.51	308	6	ND	11	49	1	9	2	7	.46	.130	44	2	.17	74	.01	2	1.43	.02	.20	2	1	590
	R-54655 8-10	9	8	18	12	1.6	1	1	171	1.80	1182	5	ND	13	64	1	53	2	6	1.03	.422	38	2	.13	68	.01	12	1.56	.02	.32	1	31	1400
MBHT-7	R-54656 10-12	2	5	10	9	.8	1	1	64	1.29	314	5	ND	14	39	1	24	3	5	.39	.153	28	1	.15	105	.01	9	.95	.03	.21	1	24	2900
	R-54657 12-14	1	5	11	9	.2	1	1	42	1.23	195	6	ND	16	35	1	14	2	5	.19	.033	28	2	.16	137	.01	7	.78	.02	.20	1	1	1300
	R-54658 14-16	1	3	9	7	.1	1	1	120	1.24	152	5	ND	15	47	1	11	2	5	.17	.027	27	1	.12	152	.01	10	.64	.03	.23	1	1	2500
	R-54659 16-18	15	4	13	9	2.3	2	1	126	2.80	483	5	ND	13	93	1	37	2	3	.27	.144	28	3	.08	170	.01	12	.57	.02	.29	1	48	1900
	R-54660 18-20	3	10	12	66	.1	2	2	83	2.72	94	5	ND	17	14	1	2	2	10	.15	.029	21	2	.15	94	.01	17	1.08	.03	.12	1	1	610
	R-54661 20-22	5	8	12	17	.5	1	1	62	1.94	744	5	ND	16	32	1	30	2	9	.26	.090	30	2	.14	107	.01	4	.86	.01	.14	1	1	270
	R-54662 22-24	4	6	14	22	.2	1	1	115	1.18	281	5	ND	15	31	1	7	2	9	.29	.039	26	2	.18	89	.01	13	.91	.02	.11	1	1	340
	R-54663 0-2m	6	5	8	5	9.9	1	1	14	.82	1431	5	ND	14	25	1	40	2	2	.11	.033	24	1	.03	96	.01	4	.45	.04	.18	1	135	1200
	R-54664 2-4	3	4	7	7	2.4	1	1	25	1.07	560	5	ND	15	28	1	15	3	2	.13	.016	19	1	.04	93	.01	9	.48	.01	.22	1	16	1900
	R-54665 4-6	3	2	11	4	.1	1	1	24	.75	24	6	ND	9	22	1	2	3	2	.13	.019	30	1	.08	90	.01	6	.62	.01	.21	1	1	280
	R-54666 6-6.8	6	3	10	4	12.4	2	1	14	1.24	229	5	ND	12	13	1	28	2	2	.04	.010	16	5	.02	126	.01	4	.39	.01	.25	1	10	2200
	R-54667 6.8-7.6	33	13	20	9	239.1 (7.03)	1	1	6	6.05	3295	5	ND	8	21	1	352	2	3	.05	.041	11	1	.02	36	.01	2	.39	.13	.73	1	1125	9200
	R-54668 7.6-8.7	10	4	6	5	34.8 (1.02)	1	1	10	1.47	1306	5	ND	7	13	1	68	3	2	.06	.009	13	1	.02	127	.01	2	.51	.05	.23	1	117	12000
MBHT-6	R-54669 8.7-10.6	40	4	20	5	96.4 (2.84)	1	1	12	3.87	1629	5	ND	8	21	1	59	2	2	.08	.015	14	3	.02	84	.01	2	.52	.07	.45	1	114	9400
	R-54670 10.6-11.6	27	7	19	7	214.2 (6.3)	1	1	13	2.44	2960	5	ND	9	19	1	159	2	2	.06	.019	12	1	.02	82	.01	5	.43	.02	.37	1	915	3800
	R-54671 11.6-13.8	92	8	15	4	226.4 (6.66)	1	1	18	1.79	2561	5	ND	7	16	1	135	2	2	.09	.020	13	1	.03	67	.01	13	.40	.01	.27	1	855	3500
	R-54672 13.8-16.2	37	1	15	2	3.6	1	1	14	.97	426	5	ND	25	19	1	47	2	3	.10	.017	29	1	.04	191	.01	8	.54	.03	.23	1	31	760
	R-54673 16.2-17.6	31	4	16	6	6.7	1	1	38	2.92	1186	5	ND	17	44	1	160	2	6	.18	.036	29	2	.07	130	.01	5	.63	.02	.49	1	125	2700
	R-54674 17.6-18.45	13	3	11	4	.7	1	1	23	1.56	663	5	ND	12	33	1	28	2	4	.11	.030	24	3	.04	169	.01	11	.50	.01	.27	1	24	640
	R-54675 18.45-19.2	6	3	9	4	.4	1	1	24	1.05	808	6	ND	14	19	1	7	2	6	.08	.049	29	2	.09	141	.02	8	.67	.02	.23	1	5	360
	R-54676 19.2-21.2	14	4	11	4	.7	1	1	42	1.34	575	5	ND	13	32	1	23	2	6	.10	.033	27	1	.06	142	.01	9	.67	.02	.29	1	12	1050
	R-54677 21.2-21.7	8	3	9	4	.4	1	1	23	.89	398	5	ND	11	30	1	14	2	4	.12	.022	25	2	.06	119	.01	7	.53	.02	.22	1	1	630
	R-54678 21.7-23.6	14	7	12	8	1.2	2	1	78	1.34	582	5	ND	14	46	1	22	2	8	.12	.034	31	4	.08	202	.01	5	.78	.02	.29	1	26	1500
	R-54679 2-4m	3	13	7	40	.3	2	2	185	1.45	21	5	ND	19	22	1	2	2	14	.22	.023	28	2	.21	161	.01	5	1.10	.01	.11	1	3	110
	R-54680 4-6	4	8	6	24	.3	2	1	99	1.15	17	5	ND	18	28	1	2	2	11	.22	.018	27	3	.20	245	.01	14	1.01	.03	.11	1	1	60
	R-54681 8-10	3	9	7	45	.8	3	2	544	1.38	33	5	ND	17	65	1	2	2	12	.27	.020	28	2	.24	555	.01	8	1.07	.02	.11	2	1	140
MBHT-8	R-54682 10-12	2	10	8	67	.2	5	3	729	1.49	16	5	ND	16	32	1	2	2	14	.49	.021	30	3	.28	201	.01	3	1.16	.04	.10	1	1	90
	R-54683 12-14	3	8	7	50	.2	3	2	667	1.38	25	5	ND	17	36	1	2	2	10	.24	.020	30	1	.22	222	.01	6	1.16	.02	.12	2	2	150
	R-54684 14-16	2	9	6	35	.2	1	2	368	1.39	33	5	ND	17	20	1	2	2	9	.20	.022	28	2	.21	156	.01	3	1.07	.03	.12	1	1	70
	R-54685 16-18	2	8	9	34	.1	1	2	246	1.32	23	6	ND	18	31	1	2	2	8	.18	.023	30	2	.18	105	.01	4	.93	.03	.14	1	1	70
	R-54686 18-20	2	6	10	19	.2	1	1	159	1.26	23	5	ND	18	53	1	2	2	6	.14	.020	32	1	.13	286	.01	13	.78	.03	.17	1	1	90
	STD C/AU-R	17	58	38	132	6.8	68	28	1050	4.05	36	24	7	36	47	17	18	19	56	.49	.089	38	55	.93	172	.06	38	1.98	.05	.13	12	485	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
R-54687	20-22	2	11	11	55	.1	2	2	205	1.44	14	9	ND	21	14	1	2	2	12	.13	.029	34	3	.16	101	.01	2	.96	.03	.13	1	1	130
R-54688	-24	2	10	15	38	.1	3	2	161	1.39	17	7	ND	21	12	1	2	3	12	.10	.027	31	5	.16	110	.01	7	1.00	.03	.12	1	2	120
R-54689	-26	2	7	12	28	.1	1	1	183	1.32	17	5	ND	18	19	1	2	2	9	.11	.019	30	2	.16	110	.01	7	.85	.03	.12	1	1	400
R-54690	-28	2	11	14	66	.1	5	3	464	1.75	17	6	ND	17	29	1	3	3	14	.25	.023	32	3	.25	226	.01	4	.98	.02	.11	1	1	100
R-54691	-30	2	11	16	17	.1	1	1	29	1.23	31	8	ND	20	30	1	2	2	3	.08	.022	31	3	.12	119	.01	5	.62	.04	.13	1	1	50
R-54692	-32	1	7	19	13	.1	1	1	28	1.24	9	5	ND	17	58	1	2	2	3	.07	.021	33	1	.10	139	.01	15	.64	.03	.16	1	1	70
R-54693	-34	1	6	14	14	.1	1	1	37	1.59	5	5	ND	16	59	1	2	3	3	.12	.020	32	2	.10	169	.01	2	.64	.03	.22	1	1	60
R-54694	-36	1	6	11	9	.1	1	1	20	1.11	11	5	ND	16	64	1	2	2	2	.15	.017	32	3	.10	136	.01	3	.55	.03	.19	1	1	120
R-54695	-38	1	6	10	9	.1	1	1	32	.98	9	5	ND	16	82	1	2	2	3	.19	.015	32	1	.14	141	.01	5	.73	.03	.19	1	2	140
R-54696	-40	2	8	10	14	.1	1	1	51	1.52	9	7	ND	18	61	1	2	3	5	.17	.021	31	1	.15	177	.01	6	.83	.02	.14	1	1	90
R-54697	-42	2	6	10	9	.1	1	1	42	1.21	13	5	ND	16	92	1	2	2	6	.19	.018	31	3	.16	139	.01	12	.88	.02	.13	1	1	120
R-54698	-44	1	7	10	19	.1	1	1	719	1.46	10	5	ND	14	22	1	2	2	9	.20	.020	28	2	.21	111	.01	2	.93	.02	.11	2	1	90
R-54699	-46	1	10	10	15	.1	1	1	263	1.41	10	5	ND	15	44	1	2	2	6	.20	.019	28	2	.19	124	.01	7	.85	.03	.12	1	1	100
R-54700	46-48	2	18	9	9	.1	1	1	64	1.34	24	5	ND	15	69	1	2	3	5	.12	.020	29	2	.12	167	.01	3	.72	.04	.15	1	1	-110
R-54851	50	2	6	9	11	.1	1	1	54	1.10	18	5	ND	15	23	1	2	2	7	.15	.018	29	2	.14	108	.01	2	.79	.02	.11	1	1	130
R-54852	52	2	11	9	37	.1	1	2	693	1.68	14	5	ND	14	25	1	2	2	13	.23	.021	28	2	.31	133	.01	2	1.16	.03	.11	1	1	120
R-54853	54	3	7	9	17	.1	1	1	97	1.53	28	5	ND	14	15	1	3	3	7	.10	.021	29	2	.16	183	.01	2	.89	.02	.17	1	2	220
R-54854	56	3	6	12	28	.1	1	1	202	1.52	21	5	ND	13	17	1	2	2	14	.20	.023	29	2	.27	114	.01	6	1.23	.02	.13	1	1	120
R-54855	58	4	4	14	9	.1	1	1	42	.92	64	5	ND	9	25	1	2	2	2	.16	.015	37	1	.08	86	.01	4	.62	.02	.20	1	3	480
R-54856	60	6	5	13	10	.1	1	1	29	1.46	124	5	ND	16	34	1	5	2	4	.09	.020	34	1	.10	186	.01	7	.60	.03	.19	1	1	320
R-54857	62	4	2	17	5	.1	1	1	24	1.32	118	5	ND	18	33	1	8	2	2	.06	.014	39	2	.05	122	.01	4	.51	.02	.18	1	3	2300
R-54858	64	5	1	15	2	.1	1	1	23	.94	81	5	ND	16	18	1	4	2	1	.06	.008	39	1	.03	99	.01	3	.47	.02	.16	1	1	1100
R-54859	66	5	1	14	3	.1	1	1	15	1.11	72	5	ND	17	29	1	5	2	1	.05	.015	37	2	.03	120	.01	17	.43	.03	.17	1	1	1600
R-54860	68	4	3	14	5	.1	1	1	24	1.14	48	5	ND	14	55	1	4	3	2	.09	.017	37	1	.05	267	.01	2	.49	.03	.20	1	1	700
R-54861	70	2	4	11	5	.1	1	1	35	.91	48	5	ND	9	40	1	5	2	3	.12	.018	29	1	.08	159	.01	2	.55	.04	.16	1	1	2200
R-54862	72	3	3	11	8	.2	1	1	22	1.02	23	5	ND	11	30	1	3	3	4	.14	.020	31	2	.13	324	.01	4	.40	.02	.20	1	1	720
R-54863	74	2	1	10	4	.2	1	1	27	.84	23	5	ND	10	26	1	2	2	3	.10	.016	31	1	.06	118	.01	2	.48	.02	.17	1	1	500
R-54864	76	3	2	15	9	.1	1	1	44	.80	19	6	ND	11	30	1	2	2	3	.15	.019	34	1	.08	116	.01	3	.63	.03	.20	1	1	420
R-54865	78	3	3	7	4	4.8	1	1	4	1.10	661	5	ND	13	17	1	26	2	2	.07	.010	17	1	.02	78	.01	3	.34	.03	.19	1	93	3100
R-54866	80	4	4	13	9	.1	1	1	22	1.52	28	5	ND	10	37	1	3	2	3	.12	.045	31	2	.08	147	.01	2	.57	.02	.20	1	1	430
R-54867	82	3	2	11	5	.2	1	1	10	1.04	14	5	ND	10	26	1	2	2	2	.10	.028	30	2	.07	122	.01	5	.49	.03	.22	1	1	170
R-54868	84	4	6	16	20	.1	1	1	30	1.32	9	5	ND	10	17	1	2	3	2	.09	.022	30	1	.06	89	.01	3	.54	.01	.21	1	1	160
R-54869	86	4	4	16	9	.1	1	1	25	1.70	20	5	ND	10	30	1	3	2	2	.12	.040	34	2	.06	128	.01	2	.51	.02	.24	1	1	180
R-54870	88	3	3	13	4	.1	1	1	13	.77	10	5	ND	9	19	1	2	2	1	.09	.030	35	1	.04	104	.01	2	.46	.01	.21	1	1	140
R-54871	90	3	3	16	5	.1	1	1	24	.82	9	5	ND	10	17	1	2	3	1	.08	.025	37	1	.03	110	.01	2	.39	.02	.21	1	1	130
R-54872	92	4	3	19	5	.1	1	1	18	1.18	9	5	ND	10	36	1	3	2	1	.06	.021	38	2	.03	142	.01	3	.36	.02	.25	1	1	110
STD C/AU-R		18	57	41	132	6.7	67	28	1055	4.15	41	19	7	36	47	18	18	21	56	.49	.089	38	56	.94	176	.06	37	2.00	.06	.13	13	500	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
R-54873 92-94	4	3	20	5	.1	1	1	22	1.11	20	5	ND	8	24	1	2	2	1	.07	.025	36	1	.03	137	.01	2	.38	.01	.24	1	3	130
R-54874 96	4	2	32	4	.1	1	1	18	.69	20	5	ND	11	14	1	2	2	1	.07	.015	42	1	.02	68	.01	2	.37	.01	.20	1	112	100
R-54875 98	4	2	27	4	.1	1	1	15	1.07	7	5	ND	10	22	1	2	2	1	.06	.021	38	1	.02	97	.01	2	.35	.01	.22	1	2	90
R-54876 100	3	3	23	11	.1	1	1	28	.92	16	5	ND	8	29	1	2	2	1	.09	.030	41	1	.03	91	.01	2	.38	.01	.21	1	62	120
R-54877 102	4	5	18	14	.1	2	1	91	1.16	11	5	ND	11	39	1	2	2	2	.12	.040	39	1	.04	226	.01	2	.58	.01	.31	1	3	100
R-54878 104	4	8	22	24	.1	2	1	293	1.45	22	5	ND	12	38	1	3	2	1	.13	.029	40	1	.03	115	.01	2	.39	.01	.22	1	31	90
R-54879 106	3	4	12	16	.1	1	1	145	1.09	9	5	ND	13	55	1	2	2	1	.13	.023	38	1	.03	91	.01	4	.34	.01	.22	1	2	130
STD C/AU-R	17	57	38	132	6.8	68	28	1061	4.04	36	19	6	36	48	17	17	18	57	.49	.089	39	56	.93	172	.06	34	1.99	.06	.14	11	495	1400

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

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 MN FE 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: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: JUN 08 1988 DATE REPORT MAILED: June 14/88 ASSAYER. . . . . . .D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES PROJECT-620 File # 88-1833

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
60729	26	38	18	28	.1	1	1	47	.73	27	5	ND	6	9	1	2	2	1	.04	.010	11	1	.02	33	.01	2	.28	.01	.16	1	1	50
60730	45	4	25	27	.5	2	1	157	.86	39	5	ND	5	15	1	2	2	2	.10	.011	13	2	.05	43	.01	2	.27	.02	.13	1	57	5
60731	45	16	15	12	.1	1	1	33	.76	26	5	ND	6	12	1	2	2	1	.03	.010	13	1	.02	39	.01	2	.27	.02	.13	1	7	30
60732	57	4	17	9	.1	1	1	110	.82	22	5	ND	7	9	1	2	2	3	.04	.012	17	2	.03	42	.01	2	.34	.03	.13	1	54	5
60733	27	11	22	12	.4	1	1	59	.86	25	8	ND	8	12	1	2	2	1	.04	.012	16	1	.02	37	.01	2	.28	.01	.15	1	5	20
60734	19	4	13	5	.2	1	1	47	.75	31	5	ND	8	11	1	2	2	1	.03	.014	14	1	.02	38	.01	2	.26	.01	.18	1	10	10
60735	32	8	13	6	.1	1	1	24	.84	32	5	ND	5	14	1	2	2	1	.03	.013	14	1	.02	40	.01	2	.25	.03	.16	1	1	20
60736	41	6	15	5	.3	1	1	39	1.27	49	5	ND	6	16	1	2	2	2	.03	.017	14	2	.02	37	.01	2	.23	.02	.16	1	11	10
60737	35	7	13	5	.5	2	1	26	.82	33	5	ND	7	10	1	2	2	1	.02	.010	9	2	.01	31	.01	2	.24	.01	.18	1	2	20
60738	25	4	11	5	.5	1	1	39	.65	29	8	ND	9	14	1	2	2	1	.04	.012	15	1	.03	35	.01	2	.27	.02	.17	1	4	10
60739	28	5	12	4	.1	1	1	25	.54	27	5	ND	6	13	1	2	2	1	.03	.012	8	1	.02	45	.01	4	.25	.03	.13	1	3	40
60740	13	4	13	9	.1	2	1	81	.75	17	5	ND	4	9	1	2	2	4	.06	.011	9	3	.06	47	.01	2	.34	.02	.12	1	3	60
60741	11	5	15	15	.1	1	1	120	.83	17	5	ND	7	6	1	2	2	3	.03	.013	10	1	.03	37	.01	2	.02	.02	.16	1	1	20
STD C/AU-R	18	58	37	132	6.7	69	29	1071	4.05	40	21	6	36	49	17	17	19	58	.49	.083	39	56	.93	178	.07	33	1.76	.07	.13	11	500	1300

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

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

DATE RECEIVED: AUG 26 1988 DATE REPORT MAILED: Sept 1/88 ASSAYER. [signature] .D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES PROJECT 620 File # 88-3936

QUARRY TRENCH #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
E 24120	2	4	11	33	.1	3	1	221	1.21	10	5	ND	7	3	1	2	2	1	.09	.017	15	7	.07	36	.02	2	.58	.03	.15	1	2	5
E 54880	23	7	15	8	.1	4	1	6	1.39	41	5	ND	9	11	1	2	2	1	.02	.016	19	2	.01	42	.01	2	.28	.01	.18	1	5	40
E 54881	14	4	11	1	.1	4	1	2	.61	25	5	ND	7	8	1	2	2	1	.01	.008	17	18	.01	36	.01	2	.22	.01	.17	1	7	30
E 54882	28	5	12	2	.1	5	1	12	1.00	26	5	ND	7	10	1	2	2	1	.02	.010	16	4	.01	45	.01	2	.28	.01	.22	1	3	50
E 54883	66	5	14	6	.4	3	1	10	1.20	37	6	ND	6	16	1	4	2	1	.01	.018	41	28	.01	50	.01	3	.27	.01	.22	1	2	50
E 54884	22	6	12	3	.5	8	1	57	.92	29	5	ND	6	7	1	2	2	1	.02	.008	11	7	.01	26	.01	2	.23	.01	.16	1	6	70
E 54885	13	4	16	1	.3	1	1	8	.65	29	5	ND	6	5	1	2	2	1	.02	.005	7	30	.01	18	.01	2	.24	.01	.18	1	4	50
E 54886	11	6	11	3	.1	4	1	26	1.12	25	5	ND	7	7	1	2	2	1	.03	.009	9	5	.01	27	.01	2	.30	.01	.18	1	2	50
E 54887	49	2	16	2	.2	3	1	13	1.10	30	5	ND	6	8	1	2	2	1	.02	.012	10	10	.01	32	.01	7	.26	.01	.18	1	5	70
E 54888	90	2	36	1	.2	6	1	34	1.02	29	5	ND	5	13	1	4	2	1	.02	.011	21	4	.01	35	.01	2	.22	.01	.17	1	3	50
E 54889	74	6	19	1	.4	6	1	27	.75	16	5	ND	6	10	1	2	5	1	.03	.008	18	37	.01	28	.01	2	.25	.01	.18	1	2	60
E 54890	109	5	21	2	.5	5	1	35	.88	24	5	ND	6	10	1	3	2	1	.03	.010	22	42	.01	30	.01	2	.29	.01	.17	1	1	60
E 54891	126	6	17	2	.6	9	1	30	1.38	46	5	ND	6	7	1	4	2	1	.02	.016	16	8	.01	35	.01	4	.32	.01	.17	1	2	90
E 54892	93	5	24	3	1.0	4	1	29	1.22	37	5	ND	7	14	1	4	2	2	.03	.011	24	34	.01	46	.01	4	.34	.01	.18	1	2	60
E 54893	75	6	29	9	.6	2	1	35	1.29	32	5	ND	8	15	1	9	2	3	.03	.012	32	5	.01	52	.01	2	.39	.01	.18	1	1	50
E 54894	20	9	7	29	.2	5	1	79	1.47	36	5	ND	6	8	1	3	2	4	.04	.011	33	22	.03	34	.01	2	.56	.01	.14	1	2	60
E 54895	34	11	14	29	.2	4	1	69	1.50	38	9	ND	6	6	1	3	2	3	.04	.020	59	4	.02	28	.01	2	.48	.01	.15	1	1	10
E 54896	9	4	15	29	.1	4	1	93	1.15	21	5	ND	7	6	1	2	2	1	.05	.013	33	14	.03	28	.01	2	.44	.01	.17	1	1	30
E 54897	10	6	18	38	.1	2	1	244	1.57	21	5	ND	7	3	1	2	2	2	.05	.015	12	3	.05	31	.01	3	.57	.01	.14	1	1	20
E 54898	4	3	15	35	.1	3	2	269	1.23	14	5	ND	7	3	1	2	2	2	.05	.015	14	4	.06	37	.01	11	.58	.02	.14	1	1	10
E 54899	7	5	20	38	.1	2	1	275	1.38	20	5	ND	7	5	1	3	2	2	.06	.027	15	3	.06	41	.01	5	.54	.02	.12	1	3	10
E 54900	2	1	18	37	.1	4	4	299	1.33	12	5	ND	8	4	1	3	2	2	.08	.019	16	8	.08	34	.01	2	.59	.02	.14	1	1	5
STD C/AU-R	19	62	40	132	6.9	72	31	1169	4.18	43	18	8	38	49	19	16	18	58	.52	.085	41	60	.91	182	.07	37	2.00	.06	.14	13	495	1300

ROCK SAMPLE DESCRIPTIONS

SILVER DISCOVERY ZONE

ROCK SAMPLE DESCRIPTIONS (TRENCH #6)

SAMPLE NO.	TYPE	WIDTH (m)	DESCRIPTION
54663	CHANNEL	2	MODERATE TO STRONG ARGILLICALLY ALTERED RHYOLITE FLOW. MINOR STOCKWORK OF BLUE-GREY SILICA VEINS 1mm-1cm WIDE. AND ASSOCIATED. BRECCIA. Tr-3% PYRITE. FLOW BANDI 028°. FRACTURES 18-20°.
54664	CHANNEL	2	MODERATE TO STRONG ARGILLICALLY ALTERED RHYOLITE FLOW. LIGHT GREY HAIRLINE VEINLETS. NO VISIBLE SULPHIDES. BANDING 028°
54665	CHANNEL	2	SAME DESCRIPTION AS 54664
54666	CHANNEL	.8	INTENSLEY SILICIFIED RHYOLITE BRECCIA. DARK BLUE GREY SILICA MATRIX WITH 3% PYRITE. MINOR BLUE-GREY SILICA VEINS (1-2 cm) TRENDING 020°.
54667	CHANNEL	.8	SAME DESCRIPTION AS 54666
54668	CHANNEL	1.1	SAME DESCRIPTION AS 54666
54669	CHANNEL	1.9	SAME DESCRIPTION AS 54666
54670	CHANNEL	1	SAME DESCRIPTION AS 54666
54671	CHANNEL	2.2	SAME DESCRIPTION AS 54666
54672	CHANNEL	2.4	SHEAR ZONE 110°/VERTICAL LIGHT GREY, BLUE AND BROWN CLAY. NO VISIBLE SULPHIDES.
54673	CHANNEL	1.4	SAME DESCRIPTION AS 54672
54674	CHANNEL	.85	MODERATE TO STRONG ARGILLICALLY ALTERED RHYOLITE FLOW. MINOR BLUE-

ROCK SAMPLE DESCRIPTIONS (TRENCH # 7)

SAMPLE NO.	TYPE	WIDTH (m)	DESCRIPTION
54651	CHANNEL	1.5	CREAM COLOURED RHYOLITE WITH MODERATE ARGILLIC ALTERATION
54652	CHANNEL	2	CREAM COLOURED RHYOLITE WITH INTENSE ARGILLIC ALTERATION
54653	CHANNEL	2	HONEY TO REDDISH BROWN RHYOLITE WITH INTENSE ARGILLIC ALTERATION. MINOR SILICA HEALED BRECCIA.
54654	CHANNEL	2	HONEY TO REDDISH BROWN RHYOLITE WITH INTENSE ARGILLIC ALTERATION. SILICA HEALED BRECCIA AND STOCK-WORK VEINING.
54655	CHANNEL	2	HONEY TO REDDISH BROWN RHYOLITE WITH INTENSE ARGILLIC ALTERATION CONTAINS MAROON SILICA BRECCIA AND STOCKWORK VEINING.
54656	CHANNEL	2	SAME DESCRIPTION AS 54655
54657	CHANNEL	2	INTENSLEY ARGILICIZED REDDISH BROWN RHYOLITE WITH LIGHT GREY SILICA HEALED BRECCIA.
54658	CHANNEL	2	SAME DESCRIPTION AS 54657
54659	CHANNEL	2	SAME DESCRIPTION AS 54657
54660	CHANNEL	2	SAME DESCRIPTION AS 54657
54661	CHANNEL	2	SAME DESCRIPTION AS 54657
54662	CHANNEL	2	INTENSLEY ARGILLICIZED CREAM RHYOLITE WITH DARK GREY SILICA BRECCIA AND STOCK WORK VEI[illegible]

ROCK SAMPLE DESCRIPTIONS (TRENCH #6)

SAMPLE NO.	TYPE	WIDTH (m)	DESCRIPTION
54675	CHANNEL	.75	SAME DESCRIPTION AS 54674
54676	CHANNEL	2	SAME DESCRIPTION AS 54674
54677	CHANNEL	.5	SAME DESCRIPTION AS 54674
54678	CHANNEL	1.9	SAME DESCRIPTION AS 54674

ROCK SAMPLE DESCRIPTIONS (TRENCH - 8)

SAMPLE No	TYPE	WIDTH (m)	DESCRIPTION
54679	CHANNEL	2	BLEACHED RHYODACITE FLOW WEAK ARGILLIC ALTERATION 002/37E
54680	CHANNEL	2	SAME DESCRIPTION AS 54679
54681	CHANNEL	2	SAME DESCRIPTION AS 54679
54682	CHANNEL	2	WEAKLY SILICIFIED GREYISH BROWN RHYODACITE 012/48E
54683	CHANNEL	2	WEAK TO MODERATELY SILICIFIED LIGHT BROWN RHYOLITE WITH MINOR BRECCIATION
54684	CHANNEL	2	WEAK TO MODERATELY SILICIFIED CREAM COLOURED RHYODACITE. MINOR LIGHT GREY SILICA BANDS 015/60 NE
54685	CHANNEL	2	SAME DESCRIPTION AS 54684
54686	CHANNEL	2	SAME DESCRIPTION AS 54684
54687	CHANNEL	2	SAME DESCRIPTION AS 54684
54688	CHANNEL	2	SAME DESCRIPTION AS 54684
54689	CHANNEL	2	WEAKLY SILICIFIED RHYODACITE WITH ORANGE BROWN STAINING ALONG FRACTURES 012/64NE
54690	CHANNEL	2	STRONG ARGILLICALLY ALTERED RHYODACITE. BUFF WHITE TO GREY.
54691	CHANNEL	2 26	MODERATE ARGILLIC ALTERATION OF ORANGE-BROWN RHYO-DACITE MINOR GREY SILICA.
54692	CHANNEL	2	SAME DESCRIPTION [illegible] 5[illegible]

ROCK SAMPLE DESCRIPTIONS (TRENCH - B) ②

SAMPLE NO.	TYPE	WIDTH (m)	DESCRIPTION
54693	CHANNEL	2	WEAK TO MODERATE ARGILLICALLY ALTERED GREYISH BROWN RHYODACITE. FRACTURES 050° / 10(
54694	CHANNEL	2	SAME DESCRIPTION AS 54693
54695	CHANNEL	2	FAULT ZONE. INTENSE ARGILLIC ALTERATION OF RHYODACITE. LIGHT GREY CLAY.
54696	CHANNEL	2	MODERATE ARGILLICALLY ALTERED GREY TO ORANGE BROWN RHYODACITE WITH GREY SILICA BANDS THROUGHOUT.
54697	CHANNEL	2	SAME DESCRIPTION AS 54696
54698	CHANNEL	2	SAME DESCRIPTION AS 54696
54699	CHANNEL	2	FAULT ZONE. LIGHT GREY CLAY (INTENSE ARGILLIC ALTERATION)
54700	CHANNEL	2	SAME DESCRIPTION AS 54696
54851	CHANNEL	2	SAME DESCRIPTION AS 54696
54852	CHANNEL	2	SAME DESCRIPTION AS 54699
54853	CHANNEL	2	SAME DESCRIPTION AS 54696
54854	CHANNEL	2	SAME DESCRIPTION AS 54699
54855	CHANNEL	2	MODERATE TO STRONG LIMONITIC STAINING OF RHYODACITE GREY SILICA BANDS. IRON SEEPS 010/38 NE
54856	CHANNEL	2	FAULT ZONE. LIGHT GREY TO ORANGE BROWN CLAY

ROCK SAMPLE DESCRIPTIONS (TRENCH - 8) ③

SAMPLE NO.	TYPE	WIDTH (m)	DESCRIPTION
54857	CHANNEL	2	MODERATELY SILICIFIED LIGHT BROWN RHYODACITE TUFF. 162/68W.
54858	CHANNEL	2	SAME DESCRIPTION AS 54857
54859 - 79	CHANNEL	2	FAULT ZONE. LIGHT GREY TO INTENSE ORANGE BROI. CLAY. IRON SEEPS. VERY INTENSE ARGILLIC ALTERATION

PETROGRAPHIC DESCRIPTIONS

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph. D. Geologist

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Report for: K.J. Taylor,
Mingold Resources Inc.,
709 - 837 West Hastings,
VANCOUVER, B.C., V6C 1B6

Invoice 7279,
April 1988

Samples: Barb-1, -2, MBHT -1A, -2A, -2B, Discovery #1
Epithermal Gold Occurrence

Summary:

The host rocks range from rhyolite to latite, with each area having distinctive features.

Barb-1 and -2 are rhyolites with K-feldspar phenocrysts. Barb-1 has a moderate flow-foliation defined by orientation of groundmass feldspar, and Barb-2 has a prominent flow-banding defined by layers of different texture. Spherulitic textures are prominent in Barb-2.

MBHT-1A, -2A, and -2B are porphyritic latites, with phenocrysts of plagioclase and much less biotite and hornblende in a feldspar-rich groundmass. MBHT-1A also shows prominent flow-banding, caused by thin interlayers rich in quartz.

Discovery #1 is a non-porphyritic latite, which was altered strongly. It is distinct from the other samples in that it contains no K-feldspar.

Alteration of the host rock is variable, and in part difficult to characterize because of the extremely fine grain size of the phyllosilicate alteration products, dominated by kaolinite, illite, and sericite, and gradations between these. These were distinguished mainly by birefringence, with kaolinite having very low birefringence, kaolinite-illite slightly higher, and sericite still higher. Quartz alteration ranges from cryptocrystalline to fine grained; some of the finer grained quartz is difficult to distinguish optically from kaolinite.

Samples are brecciated in various degrees. Some samples show two or more distinct events; brecciation history is summarized as follows:

Barb 1 — strongly brecciated, matrix dominated by feldspar/kaolinite with abundant very fine grained replacement intergrowths of quartz; minor opaque (pyrite?)

Barb 2 — intense brecciation, with breccia matrix dominated by cherty quartz, with a few patches of earlier, cryptocrystalline quartz. Sericite and pyrite form disseminated petches. Breccia matrix locally vuggy with coarser grained quartz lining vugs. Branching vein of sericite/illite and minor quartz.

(continued)

MBHT-1A no brecciation, but abundant veins perpendicular to flow-foliation of cryptocrystalline kaolinite-quartz, with patches of marcasite and of limonite.

MBHT-2A moderately to strongly brecciated; matrix dominated by extremely fine grained quartz and kaolinite/illite, with patches of coarser grained quartz, and grains and clusters of marcasite. A few veinlets are of cryptocrystalline quartz-(kaolinite).

MBHT-2B moderately to strongly brecciated; matrix dominated by extremely fine grained quartz and kaolinite, possibly with K-feldspar with coarser grained, replacement patches of quartz. Still coarser grained angular quartz grains occur in the breccia matrix; their origin is uncertain. Breccia matrix contains abundant patches of sulfides, dominated by marcasite with much less pyrite. No gold or silver minerals were recognized.

Discovery #1 latite cut by early vein material dominated by quartz with lesser sericite; this is cut by slightly(?) later quartz vein with minor pyrite. Later brecciation has a matrix of extremely fine grained quartz with lesser sericite and moderately abundant disseminated pyrite and minor marcasite.

The following comments relate to specific questions you asked in your letter, which are not answered elsewhere in the detailed descriptions.

The best precious metal values occur in rocks which were strongly brecciated, and in which the breccia groundmass is dominated by silica. More than one stage of brecciation is important, as probably is the presence of sulfides. Discover #1, the sample with the highest content of gold, shows three distinct ages of silicification associated with vein formation and brecciation. Kaolinite tends to be more abundant in the peripheral zones of much lower-grade precious metals. The presence of "black silica" indicates disseminated sulfides, which although not diagnostic for containing precious metals, may indicate proximity to a hydrothermal vent, which also would be a locus for precious-metal mineralization.

The lack of correlation between abundance of sulfides and silicification and precious metal content in reverse-circulation drilling samples may not be a specific enough tool to use.

The number of different brecciation events is more important (although probably positively correlated with) the overall intensity of brecciation to locate the main hydrothermal conduits. Within these, at the appropriate levels in the system, one would expect to fined the best grade precions metala content.

Host rocks (except possibly Discovery #1) are flows. Discovery #1 has no distinct textures to indicate its origin. Flow-banding is common in some of the samples.

Variation in MBHT-1A is due to alteration rather than contact of two distinct rock types: see cut surface and note flow-banding crossing the entire rock roughly perpendicular to the major fracture set. Sulfides in this and other samples are assooiated with the silicification, rather than being a later replacement.

Early quartz veins in Discover #1 have a delicate radiating and spheroidal texture suggesting relatively low-temperature formation.

BARB-1 **Brecciated Porphyritic Rhyolite Flow (K-feldspar Phenocrysts)**

The rock contains phenocrysts of K-feldspar in a groundmass dominated by K-feldspar and kaolinite. The rock was brecciated strongly, with the breccia groundmass dominated by feldspars and kaolinite with abundant replacement patches of quartz and minor disseminated opaque.

phenocrysts	
K-feldspar	5- 7%
groundmass	
K-feldspar/plagioclase	25-30
kaolinite	20-25
Ti-oxide-(hematite)	.1
plagioclase	0.3
opaque (pyrite?)	0.1
zircon	trace
breccia matrix	
feldspar/kaolinite	20-25
quartz patches	12-15
leucoxene	0.3
opaque (pyrite?)	0.2

K-feldspar forms subhedral phenocrysts from 0.5-1.5 mm in average size, with a few up to 2 mm across. It also forms clusters of a few subhedral to anhedral grains from 0.5-1 mm in average size. Grains are untwinned, and it is possible that some are plagioclase.

The rhyolite groundmass contains scattered, subhedral lathy plagioclase grains up to 0.2 mm in length. These are contained in lathy to feathery K-feldspar (possibly with lesser plagioclase) averaging 0.01-0.03 mm in size intergrown with extremely fine grained (0.002-0.003 mm) kaolinite. The K-feldspar grains commonly show a moderately preferred orientation, giving the rock a weak flow-foliation. Ti-oxide and lesser pyrite form moderately abundant dusty disseminations averaging 0.005-0.01 mm in size; these are coarser in the fragments than in the breccia groundmass, and are the best method of distinguishing the two. Zircon forms a few subhedral grains up to 0.1 mm in size; they occur as single grains in the breccia matrix, but are considered to be fragments of the original rock.

The breccia matrix is dominated by extremely fine grained feldspar (0.002-0.005 mm) and kaolinite (0.002-0.003 mm). Feldspars locally show textures similar to those in tha groundmass of the rhyolite. Quartz forms irregular patches of anhedral grains averaging 0.05-0.1 mm in size, commonly intergrown with feldspar/kaolinite, and probably replacing them. Leucoxene forms anhedral patches up to 0.4 mm in size. Opaque (pyrite?) forms disseminated grains and clusters of grains averaging 0.03-0.1 mm in size. Opaque/semiopaque also forms abundant dusty disseminations, which give the matrix its dark grey color.

BARB - 2 Porphyritic Rhyolite Fragments in Quartz-rich Matrix

The rock contains fragments averaging 1 mm to 1 cm in size of porphyritic, commonly spheroidal rhyolite (K-feldspar phenocrysts) in a matrix of extremely fine to very fine grained quartz. Pyrite is widespread. At one end of the rock are secondary Fe-oxides.

fragments of rhyolite	
phenocrysts	
K-feldspar	5- 7%
groundmass	
K-feldspar	25-30
quartz	2- 3
sericite	0.3
pyrite	0.1
Ti-oxide	trace
breccia matrix	
quartz	50-55
limonite/hematite	1- 2
sericite	1- 2
pyrite	0.3

veins	
1) sericite-(quartz)	1- 2%
2) limonite-(hematite)	1

K-feldspar forms subhedral to euhedral phenocrysts averaging 0.3-1.2 mm in size. Some are replaced slightly to moderately in irregular patches by quartz, and locally by patches of sericite, both similar in texture to that of the same minerals in the breccia matrix.

The groundmass of the rhyolite shows a variable texture. Scattered large (over 1 mm) spherulites and fragments of spherulites consist of extremely fine to very fine grained, radiating aggregates of K-feldspar. Smaller spherulites (0.1-0.2 mm) occur in irregular clusters. The groundmass commonly has a well developed flow-foliation defined by layers of different texture from 0.05-0.02 mm in thickness. Some of these layers contain small spherulites. Some coarser grained patches of groundmass (0.03-0.07 mm) are dominated by K-feldspar with minor to moderately abundant interstitial quartz. Ti-oxide forms a few subhedral patches up to 0.15 mm long.Pyrite forms disseminated subhedral grains averaging 0.02-0.04 mm in size, and a few patches up to 0.3 mm across of similar grains. Hematite(?) forms dusty disseminations and patches.

The groundmass is replaced irregularly by patches and veinlets of quartz (0.02-0.07 mm) and of sericite (0.003-0.005 mm).

The breccia matrix is dominated by anhedral, commonly cherty quartz averaging 0.01-0.03 mm in size, with scattered patches of earlier(?), finer grained quartz averaging 0.005-0.01 mm in grain size. Sericite commonly forms extremely fine grained patches in both types of quartz. Pyrite forms disseminated grains averaging 0.01-0.02 mm in size. Locally the breccia matrix contains slightly coarser grained patches of quartz, some of which are vuggy; vugs are lined by subhedral to euhedral quartz grains up to 0.1 mm long, and commonly have a core of limonite coating the quartz grains.

A discontinuous, locally branching vein up to 0.8 mm wide is dominated by sericite (0.003-0.008 mm) with minor to locally moderately abundant quartz (0.015-0.03 mm) commonly concentrated on borders of the vein.

At one end of the section the rock is weathered, and contains secondary patches of limonite and lesser hematite up to 0.2 mm in size, and most common irregular seams and thin interstitial patches intergrown with quartz. One late vein up to 1 mm wide is of cryptocrystalline orange limonite with minor patches of bright red hematite.

MBHT -1A **Porphyritic Latite Flow cut by Kaolinite-Quartz-(Marcasite) Veins**

The rock contains scattered phenocrysts of plagioclase, biotite and hornblende in a flow-banded groundmass dominated by K-feldspar. Coarser grained bands are dominated by quartz. A network of kaolinite-quartz-(marcasite-limonite) veins up to 2 mm wide cuts irregularly across foliation.

phenocrysts			
plagioclase	5- 7%	veins	
biotite	1	kaolinite	5- 7%
hornblende	0.5	quartz	3- 4
groundmass		marcasite	0.3
plagioclase	5- 7	limonite	0.5
K-feldspar (+ plagioclase)	65-70		
quartz	4- 5		
Ti-oxide/hematite	0.3		
limonite	0.5		

Plagioclase forms single subhedral to euhedral, prismatic phenocrysts and clusters averaging 0.2-1 mm in size, with a few up to 1.7 mm long. These are altered completely to extremely fine grained sericite and/or kaolinite, and locally are stained yellow to brownish yellow by limonite.

Biotite forms a few equant phenocrysts averaging 0.1-0.3 mm in size, with a few from 0.5-1 mm long. A few fresh remnants show pleochroism from light to medium brown. Alteration is to pseudomorphic kaolinite and sericite, with minor to moderately abundant Ti-oxide and hematite in lenses parallel to cleavage and in irregular patches.

Hornblende forms a few, anhedral, equant to prismatic phenocrysts from 0.2-0.8 mm in size. Pleochroism is from light to medium brown. Along borders of and fractures in some phenocrysts are clusters of anhedral, opaque grains averaging 0.01-0.03 mm in size.

The groundmass contains minor to locally abundant, equant plagioclase grains averaging 0.02-0.03 mm in size. These are enclosed in an extremely fine grained eggregate of K-feldspar with possibly lesser plagioclase and kaolinite. Slightly wavy flow-banding is defined by thin seams averaging 0.05-0.15 mm thick rich in very fine grained quartz with minor K-feldspar. One quartz-rich layer up to 0.8 mm wide contains a relatively continueus band of quartz 0.1 mm wide bordered by a zone containing abundant angular quartz grains from 0.1-0.5 mm in size with minor interstitial feldspar/kaolinite groundmass. Another generally narrow layer bulges locally to over 1 mm in width, where it consists of fine grained quartz with minor interstitial feldspar-rich groundmass.

Dusty disseminated grains of semiopaque (Ti-oxide with lesser hematite) are moderately abundant in some parts of the rock.

The rock is cut by several veins dominated by extremely fine grained to cryptocrystalline, patchy aggregates of kaolinite and quartz. In many patches, quartz is slightly coarser grained (0.01-0.02 mm) than kaolinite, but in several others, quartz is finer grained (0.001-0.003 mm). Locally at one end of the section, the veins contain abundant patches of cryptocrystalline, orange limonite. A few veins contain minor to moderately abundant clusters up to 0.5 mm across and single elongate grains of opaque (marcasite) from 0.03-0.3 mm in size. Similar, generally very fine grained marcasite occurs locally in the host rock, commonly with phenocrysts.

MBHT-2A **Brecciated Slightly Porphyritic Latite with Matrix of Quartz-Clay-Marcasite**

The rock contains phenocrysts of plagioclase, lesser biotite and minor hornblende in an extremely fine grained groundmass dominated by feldspars. Fragments of the rock are surrounded by a matrix of quartz and lesser kaolinite/illite, with disseminated marcasite.

phenocrysts	
plagioclase	5- 7%
biotite	0.5
hornblende	minor
groundmass	
plagioclase	7- 8
K-feldspar/plagioclase	50-55
marcasite	0.3
Ti-oxide	0.2
hematite	minor
zircon	trace
matrix	
quartz	17-20
kaolinite/illite	7- 8
marcasite	1- 2
late veinlets	
hematite/limonite	0.5

Plagioclase forms subhedral to euhedral prismatic to tabular phenocrysts averaging 0.2-0.7 mm in size, with a few up to 1.2 mm long. Alteration is complete to extremely fine grained kaolinite/illite(?). This mineral has textures and birefringence intermediate between those of kaolinite and sericite. Some grains also contain clusters of marcasite as described below.

Biotite forms equant flakes averaging 0.15-0.2 mm in size, with a few up to 0.6 mm across. A few are partly fresh, with pleochroism from straw to medium brown. Most are altered completely to pseudomorphs of kaolinite/illite with seams of Ti-oxide.

Hornblende forms a very few phenocrysts up to 0.2 mm in size. Pleochroism is from light to medium brown. Grains are strongly fractured but unaltered.

The groundmass of the latite contains scattered, disseminated, equant plagioclase grains averaging 0.02-0.03 mm in size. These are enclosed in extremely fine grained (0.002-0.005 mm) feldspars (probably K-feldspar and lesser plagioclase, based on color of stained offcut block) intergrown with lesser kaolinite/illite(?). Dusty Ti-oxide and lesser hematite is widespread. Zircon forms a few subhodral grains up to 0.07 mm long associated with altered biotite.

Much of the matrix is dominated by anhedral aggregates of quartz and lesser clay minerals (kaolinite/illite?) averaging 0.005-0.01 mm in size, with moderately abundant disseminated grains and patches of quartz from 0.01-0.03 mm in size. Quartz also forms scattered grains and clusters of grains averaging 0.05-0.15 mm in size. Marcasite forms single elongate grains and clusters of equant to elongate grains averaging 0.08-0.25 mm in length.

A few irregular veinlets from 0.02-0.2 mm in width consists of cryptocrystalline (0.002-0.005 mm) silica with minor patches of kaolinite of similar grain size and texture. In a few places these cut across the breccia matrix.

Late seams up to 0.02 mm in width are of red-brown hematite/limonite; these commonly have vague halos containing patches of less intense Fe-oxide staining.

MBHT - 2B **Breccia: Fragments of Latite in Groundmass of Quartz-Kaolinite- K-feldspar-Marcasite-Pyrite**

The rock contains a fragments of altered slightly porphyritic latite in a matrix dominated by quartz with much less K-feldspar(?) and kaolinite and patches of marcasite-pyrite. The latite contains phenocrysts of strongly to completely altered plagioclase and biotite.

rock	
phenocrysts	
plagioclase	7- 8
biotite	1- 2%
zircon	trace
groundmass	
plagioclase	5- 7
K-feldspar/plagioclase/kaolinite	25-30
hematite/limonite	1- 2
matrix	
quartz	50-55
kaolinite	10-12
K-feldspar (?)	4- 5
marcasite	4- 5
pyrite	1

Plagioclase forms euhedral, prismatic phenocrysts averaging 0.3-1 mm in length. Many are altered completely to very fine grained quartz and kaolinite, and a few are altered completely to illite/kaolinite.

Biotite forms a few equant phenocrysts from 0.2-0.5 mm in size. They are altered strongly to completely to secondary kaolinite/illite and Ti-oxide seams and patches. Pleochroism of relic biotite is from light to medium/dark brown.

Zircon forms a very few subhedral grains up to 0.1 mm long.

The groundmass contains moderately abundant equant plagioclase grains averaging 0.03 mm in size. These are set in a groundmass of feldspars and lesser kaolinite averaging 0.002-0.01 mm in grain size. In several fragments the groundmass is altered strongly to limonite/hematite.

Much of the matrix consists of intergrowths of quartz and lesser kaolinite averaging 0.005-0.015 mm in grain size. These zones may also contain moderately abundant K-feldspar, as suggested by the distribution of yellow stain on the offcut block. Locally, patches up to a 2 mm across are dominated by kaolinite.

Coarser grained patches (0.02-0.07 mm) are dominated by slightly interlocking quartz grains, with interstitial patches of extremely fine grained sericite/kaolinite. Quartz also forms angular grains from 0.2-0.7 mm in size. Textures of many suggest that these grains are relic phenocrysts; however, they occur only in the matrix and not in the fragments, and thus are interpreted as secondary. Some aggregates of coarser grained quartz are intergrown irregularly with extremely fine grained matrix quartz-(kaolinite), with textures suggesting that the coarser grained quartz formed by replacement.

Marcasite and much less pyrite form patches up to 1.5 mm in size of subhedral grains averaging 0.1-0.5 mm in size. These are mainly associated with a broad voinlike zone containing extremely fine grained quartz and abundant patches of kaolinite. A few tabular marcasite grains are up to 1.7 mm long. Marcasite is paler yellow than pyrite, and is strongly anisotropic, whereas pyrite is anisotropic to slightly anisotropic. Locally, associated with these coarser grains are much finer grained aggregates of marcasite and/or pyrite intergrown with quartz. The groundmass contains disseminated,

Discovery #1 **Breccia: Fragments of Latite and Early Quartz Vein in Sparse Matrix of Quartz-(Pyrite-Sericite-Marcasite)**

Irregular fragments of extremely fine grained latite are surrounded by a matrix of very fine to fine grained quartz and rimmed by quartz veins. Late brecciation was followed by healing by a matrix of extremely fine grained quartz with minor patches of sericite and disseminated pyrite and marcasite.

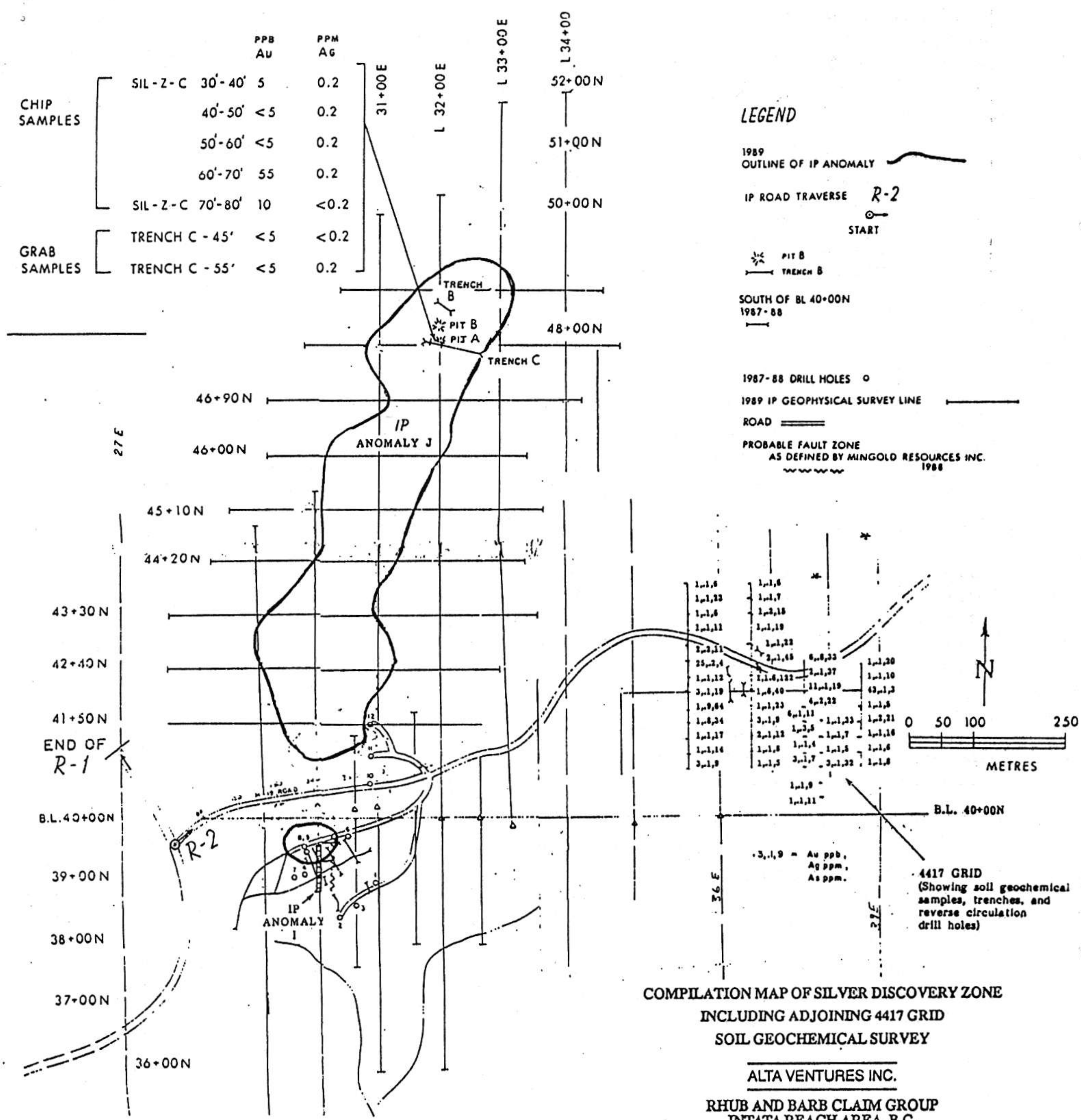
latite	25-30%
early vein	
quartz	30-35
sericite	0.5
later vein	
quartz	15-17
pyrite	minor
late breccia matrix	
quartz	7- 8
pyrite	1- 2
sericite	0.7
marcasite	minor

Latite is dominated by quartz (0.003-0.005 mm), with disseminated grains and irregular to rectangular patches up to 0.15 mm in size of sericite (0.003-0.01 mm). Some patches of sericite may be secondary after plagioclase phenocrysts; however, the rock is essentially non-porphyritic. Some fragments are replaced completely by extremely fine grained quartz and minor kaolinite, with moderately abundant disseminated hematite. Pyrite forms minor disseminated grains and clusters of grains averaging 0.02-0.1 mm in size. Several fragments contain irregular to veinlike replacement patches of very fine grained quartz (0.02-0.05 mm); these are related in origin to late quartz veins.

The early quartz veins and breccia groundmass are dominated by subradiating to radiating quartz aggregates averaging 0.2-0.3 mm in size. These commonly contain dusty Ti-oxide and/or homatite/limonite in wispy, radiating seams. A few patches up to 0.8 mm in size consist of extremely fine grained sericite with abundant, dusty limonite(?).

In slightly later(?) veins up to 0.5 mm wide, quartz grains commonly are oriented perpendicular to vein walls, and are free of dusty inclusions. These commonly forms long curved borders of latite fragments, and some separate latite from radiating quartz aggregates.

The late breccia matrix consists of extremely fine grained quartz with moderately abundant patches of extremely fine grained sericite and disseminated dusty to very fine grained pyrite and much less marcasite.



COMPILATION MAP OF SILVER DISCOVERY ZONE
INCLUDING ADJOINING 4417 GRID
SOIL GEOCHEMICAL SURVEY

ALTA VENTURES INC.

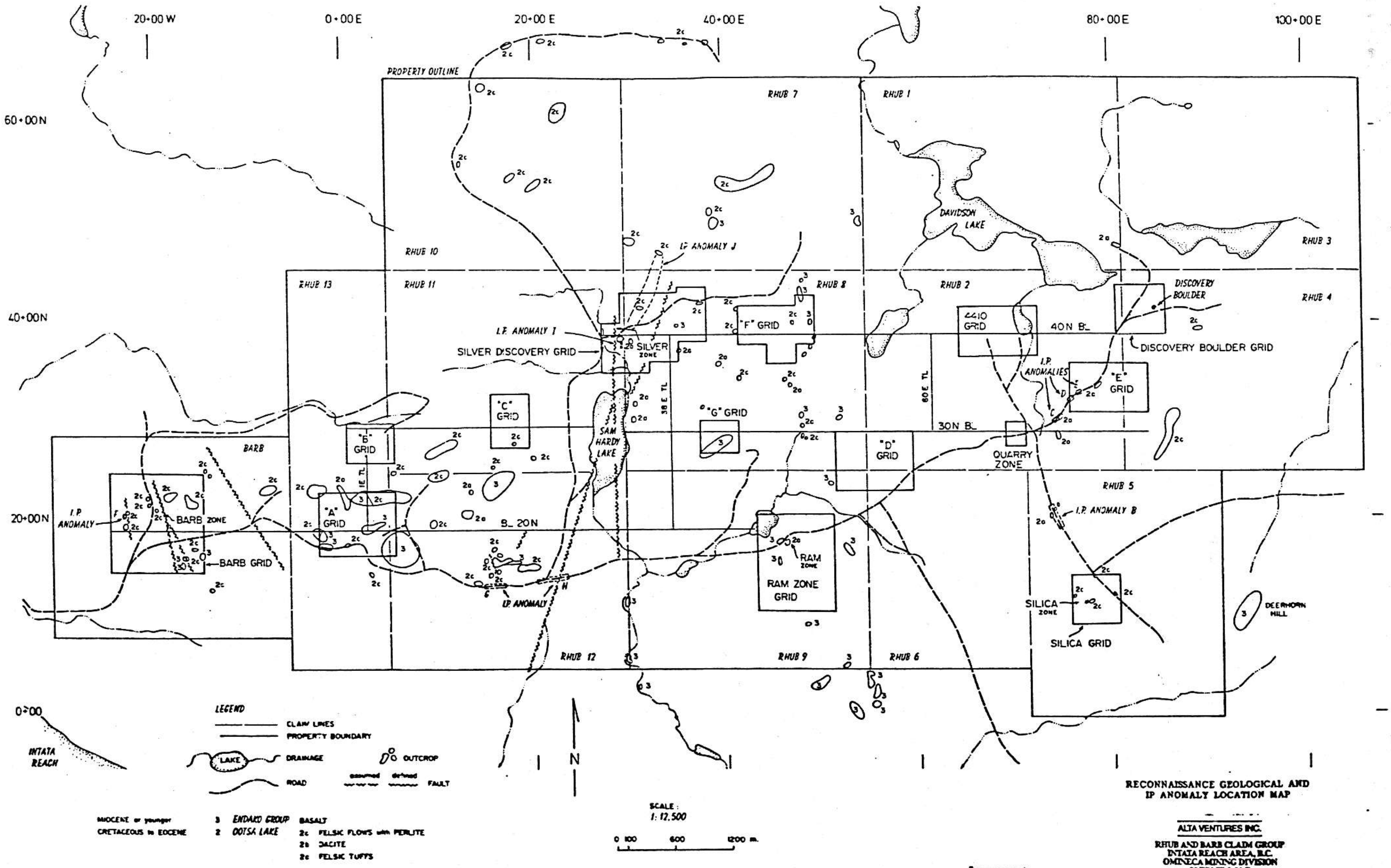
RHUB AND BARB CLAIM GROUP
INTATA REACH AREA, B.C.
OMINECA MINING DIVISION
93 F/11 W & 12 E

To accompany report by

Locke B. Goldsmith, P.Eng.
Consulting Geologist
Paul Kallock
Consulting Geologist
ARCTEX ENGINEERING SERVICES

June 1989

Fig. 6



RECONNAISSANCE GEOLOGICAL AND IP ANOMALY LOCATION MAP

ALTA VENTURES INC.

RHUB AND BARB CLAIM GROUP
INTATA REACH AREA, B.C.
OMINECA MINING DIVISION
93 F/11 W & 12 E

After [illegible] RESOURCES INC.

ARCTEX ENGINEERING SERVICES

Fig. 7

CERTIFICATE OF THE ISSUER

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the Securities Act and its regulations.

October 25, 1989
(date)

NEIL ROBIN LINDER
- Chief Executive Officer
and Promoter

MARC ERIC TURCOTTE
- Chief Financial Officer
and Promoter

ON BEHALF OF THE BOARD:

DAVID GEORGE MARK
- Director

CERTIFICATE OF THE AGENT

To the best of our knowledge, information and belief, the foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the Securities Act, and its regulations.

October 25, 1989
(date)

CANARIM INVESTMENT CORPORATION LTD.

Per: ______________________
PETER M. BROWN