## ICE AND YALAKUM MINERAL CLAIMS

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    N.T.S. 92G-14
490 58' N 1230 25' W
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FOR
MAR-GOLD RESOURCES LTD.
BY

DAVID A. YEAGER, GEOLOGIST
CHARLES K. IKONA, PENG.


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### 1.0 INTRODUCTION

The ICE and YALAKUM mineral claims were located in early spring of 1977 by Mr. E. Hansen of Squamish on gold-silver-copper showings first located in the l920's. These claims have subsequently been acquired by Mr. F. Marehard of Mar-Gold Resources Ltd., a Vancouver based resource company.

A preliminary exploration program carried out by Pamicon Developments Ltd. in October 1979 recommended that a diamond drill program be carried out. Subsequently, in October 1980, three holes were drilled to a total amount of 315 metres. The drilling was contracted by Asmith Diamond Drilling Ltd. of Atlin, B.C.
2.0 LIST OF CLAIMS

| Name of Claim | Record No. | No. of Units | Expiry Date |
| :---: | :---: | :---: | :---: |
| ICE | 141 | 20 | January 18, 1981 |
| ICE 1 | 150 | 6 | February 1, 1981 |
| ICE 2 | 151 | 4 | February 1, 1981 |
| YALAKUM MINES | 183 | 4 | July 4, 1981 |

The author examined claim posts on the ground and has inspected the records of the British Columbia Department of Mines. This inspection indicates that the claims as recorded by Mr. Hansen are in good standing. The author has also examined documents which transfer sole ownership of these claims to Mr. Marehard.



### 3.0 LOCATION, ACCESS, AND TOPOGRAPHY

The property is located on the north side of the Ashlu River, some 12 kilometres above its confluence with the Squamish River. Approximate coordinates of the claim group are $49^{\circ} 58^{\prime} \mathrm{N}$ latitude and $123^{\circ} 25^{\prime} \mathrm{W}$ longitude.

Access is by well maintained logging road, a distance of 29 miles from the Town of Squamish, which is located at the head of Howe Sound, 50 kilometres north of Vancouver.

Topography over the claim group comprises a south facing slope averaging 25 to 30 degrees in steepness and is of an irregular nature with alternating bluffs and draws.

Logging is proceeding in the area at present with first growth timber being harvested. The main showings are located in a recent logging slash.
4.0 HISTORY

The area first received attention in the early 1920's with the discovery of gold in quartz veins on the south side of the Ashlu River. In subsequent years a horse trail was constructed into the area and several hundred feet of underground workings developed. Some hand-sorted material was shipped out on packhorses.

During the same period mineralization was located on what are now the ICE claims. Limited surface and underground work resulted in the shipping of 2 tons of hand-sorted ore which reportedly ran over 5 oz. per ton Au.
(1) Personal communication

### 5.0 GEOLOGY

The area has been mapped by the Geological Survey of Canada at a scale of 1 inch $=4$ miles, and the geology is presented in Map 42-1963 (Squamish: Vancouver, West Half).

Detailed geologic mapping was carried out by the author at a scale of $1 \mathrm{~cm}=10 \mathrm{~m}$ using a $20 \mathrm{~m} \times 20 \mathrm{~m}$ picket grid for location. An altimeter survey was completed at the same time to establish topographic control. This information is presented in Figure 3.

The claim group is underlain by plutonic rocks of Cretaceous age composed of variably textured granodiorites. The granodiorites are presumed to represent different phases of the same intrusive event as there is no marked alteration at the intrusive contacts.

### 5.1 LITHOLOGY

Two main rock types are predominant in the area. Unit 2 is a finely crystalline, equigranular, hornblende granodiorite. There is little variation in the unit with the exception that in many areas, up to 20 cm inclusions of very finely crystalline granodiorite forms up to $80 \%$ of the rock (Unit 2a). These masses are interpreted as stoped fragments of an original country rock, presumably of andesitic composition.

Unit 3 is a coarsely crystalline, hornblende and/or biotite granodiorite. The biotite and hornblende occur in large (up to 4 mm ) crystal aggregates as well as in small disseminated crystals. The unit is variable in texture throughout the map area, the notable variations being crystal size and relative amounts of biotite and hornblende. These variations often occur on a very local scale at times giving the rock a gneissic banded appearance. Unit 3 also contains up to 20 cm

### 5.0 GEOLOGY (Continued)

inclusions of very finely crystalline material (Unit 3a). In one locality these fragments are relatively unaltered and were identified as andesites of volcanic origin. Again, these are presumably stoped fragments of intruded country rocks.

Unit 1 was encountered in a single float occurrence at the eastern edge of the map area and consists of a breccia zone with fragments of hornblendite and granodiorite in a quartz matrix. The breccia in places gives way to massive hornblendite No sense of orientation was apparent due to the lack of outcrop. However, the occurrence was approximately four metres wide.

### 5.2 STRUCTURE

Regionally, the Ashlu River Valley appears to represent a structural trend at $\mathrm{N} 60^{\circ} \mathrm{W}$ with cross structures represented by secondary drainages trending at $\mathrm{N} 30^{\circ} \mathrm{E}$.

In the map area, a number of fracture and vein attitudes were measured and several fairly consistent sets were recognized. The most predominant fracture set on the property averaged $081 / 60^{\circ} \mathrm{N}$ and was associated with shearing and sulphide mineralization. A second set at $020 / 70^{\circ}$ E consisted of barren hairline fractures. Three groups of veins were measured: $124 / 39^{\circ} \mathrm{NE}, 116 / 72^{\circ} \mathrm{N}$, and $130 / 80^{\circ} \mathrm{SW}$. Veins in the latter two sets carry gold mineralization.

### 6.0 DIAMOND DRILLING AND ASSAYING

The 1980 diamond drill program was conducted during the month of October using a hydraulic winkie type drill with $B Q$ equipment. The drill contractor was Asmith Drilling Ltd. of Atlin, B.C. Three

### 6.0 DIAMOND DRILLING AND ASSAYING (Continued)

holes were drilled totalling 315 metres. Transcripts of the drill logs are presented in Appendix $I$ of this report. Locations of the drill collars as well as section locations are shown on Figure 3 at a scale of $1: 1,000$. Drill hole cross sections have been constructed at a scale of $1: 500$ and appear on Figures 4 and 5 .

The program was considered to be exploratory in nature; and was initiated to investigate the various vein and shear structures mapped during the 1979 program.

DDH A-80-1 was drilled normal to the local geologic foliation (Figure 3) from south of the main draw in a due south direction at -450. Predominantly coarse grained granodiorite was encountered with the exception of two zones of hornblendite breccia that appear to correspond with surface exposures of the same rock type. The hole finished in fine grained granodiorite. Three mineralized veins were encountered near the top of the hole. The main minerals were quartz, pyrite, epidote with occasional magnetite and chalcopyrite. Nine assay samples were taken with only trace amounts of gold and silver detected.

DDH A-80-2 was drilled vertically from the same collar as A-80-1 to test structures on the south side of the main draw. The same coarse grained granodiorites were encountered as in 80-1 with the exception of two small zones of fine grained granodiorite. A small zone of hornblendite breccia was encountered near the bottom of the hole. Five mineralized veins were noted; containing quartz and pyrite with one containing epidote and magnetite as well. The latter vein, the lowermost encountered in the hole, contained 1,400 parts per billion gold.

DDH A-80-3 was spotted 20 metres to the south of $A-2$ and $A-3$ and drilled at $-50^{\circ}$ to the southwest. This direction was chosen as



### 6.0 DIAMOND DRILLING AND ASSAYING (Continued)

normal to the attitude of the open cut vein approximately 60 metres south along strike from the open cut. Again, predominantly coarse grained granodiorite was encountered in most of the hole except for one small intersection of fine grained granodiorite near the bottom of the hole. Eleven mineralized veins were encountered; the uppermost disseminated pyrite vein contained l,240 parts per billion gold and greater than 20 parts per million silver. The remainder of the predominantly disseminated pyrite zones contained only trace amounts of precious metals.

### 7.0 DISCUSSION AND CONCLUSIONS

The area drilled is underlain predominantly by coarse grained granodiorite. The fine grained granodiorite apparently occurs as restricted lenses as shown by the surface mapping on the southern portion of the grid.

The hornblendite breccia appears to be a relatively continuous body between holes 1 and 3 and the surface outcropping. There does not seem to be any relationship between the hornblendite and the precious metal veining.

The higher grade intersection in hole 3 occurs in a vein that also appears to be intersected near the top of holes 1 and 2. However, the lower values in the vein in the latter two holes indicate that precious metal values tend to fluctuate within individual veins or structures. If such is the case, it is statistically unlikely that all gold bearing structures encountered in drill holes will give spectacular assay results at every intersection. Moderate values, such as the two reported in holes 2 and 3 , should therefore be considered good indications that the host structure is gold bearing, and is likely to yield higher grades where mineralization is localized by favourable cross structures.

### 8.0 RECOMMENDATIONS

All three drill holes in the 1980 program were collared on the south side of the main draw structure and directed in a southerly direction away from the structure. Any future drilling program should include several holes collared on the north side of the draw and drilled to the south in order to intersect the structure. However, as local logging contractors are presently developing new road cuts on the claim group, it would be prudent to delay further drilling until newly exposed ground can be prospected and sampled and any new showings evaluated. This should be possible during the early part of the 1981 season.

Respectfully submitted,

C.K. Ikona, P. Eng.









DRILL HOLE LOG
PAOPERTY: ICE (Ash7 A-80-3
DIPTEST PROPERTY: ICE (AShlu property -


DDH
$\left\lvert\, \begin{gathered}\text { PAGE NO. } \\ 2 \text { of } 3\end{gathered}\right.$



## APPENDIX II

## ENGINEER'S CERTIFICATE

I, Charles K. Ikon, of 5 Cowley Court, Port Moody, in the Province of British Columbia DO HEREBY CERTIFY that:

1. I am a consulting Mining Engineer with offices at 208, 850 West Hastings Street, Vancouver, B.C.
2. I am a graduate of the University of British Columbia with a degree in Mining Engineering.
3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
4. I examined the property reported on herein October 25, 1978; and that the work outlined in this report was carried out under my supervision by geologists whom I have known for several years and whose work I have every confidence in.
5. I have no interest in the property reported on nor in any securities which may be associated with this property, nor do $I$ expect to acquire any.

Charles K. Ikon, P. Eng.

DATED this $\qquad$ day of


TELEPHONE: (604)984-0221

CEFTIFICATE OF ANALYSIS

To ; Famicon Ievelofmerits Ltoty 208-850 W. Hastinss St. . Vamcouver, $B+C$.
VoE 1F1

| CERT. $\#$ | \% A8011201-001-A |
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INUDICE $\#$ * 40632
DATE : 2i-NOV-80
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GTTN: IAUE YEAGER


## CHEMEX LABS LTD．

212 BROOKSBANK AVE NORTH VANCOUVER．B．C CANADA

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TELEPHONE：（604）984－0221 TELEX

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| 145112 | 205 | 0.4 | $<10$ | －－ | －－ | －－ | －－ |
| 14512 C | 205 | 0.1 | 10 | －－ | －－ | －－ | －－ |
| 14513 C | 205 | 1.0 | 20 | －－ | －－ | －－ | －－ |
| 14514 C | 205 | 0.1 | $<10$ | －－ | －－ | －－ | －－ |
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## CHEMEX LABS LTD.

## ANALYTICAL CHEMISTS

212 BROOKSBANK AVE NORTH VANCOUVER. B.C. CANADA

V7J 2 C 1
TELEPHONE: (604)984-0221
telex:
043-52597

## CERTIFICATE CF ANALYJIS

TC : Pamicon Cevelopments Ltd., $208-850$ iw. Hastings St., Vancouver. $3 . C$. V63 1P1

CEFT. : $\because 8 \mathrm{CL127E-OC1-L}$
INVOICE \# : 41527
DATE : 05-DEC-3C
P.C. i : NONE

ASHLU

ATTN: CAVE YEAGER

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| 14520 | 205 | 0.1 | $<10$ | -- | -- | -- | -- |
| 14621 | 205 | 0.1 | $<10$ | -- | -- | -- | -- |
| 14622 | 205 | 0.6 | $<10$ | -- | -- | -- | -- |
| 14623 | 205 | 1.4 | 10 | -- | -- | -- | -- |
| 14624 | 205 | 0.4 |  | -- | -- | -- | -- |
| 14625 | 205 | >20.0 |  | -- | -- | -- | -- |

## CHEMEX LABS LTD.

212 BROOKSBANK AVE NORTH VANCOUVER. B.C CANADA

V7J 2 C 1
TELEPHONE: (604)984-0221 TELEX:

## CERTIFICATE OF ASSAY

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TO: Paricon Cevelocments Ltd.. 2Cg - 85C he Hastings St.. Vancouver. B.C. V69 1 P1
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CERT.# : AECIL3E2-CCl-A
INVJICE & : 13011382
DATE : 22-EEC-3C
P.C.# : NCNE
ASHLU
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ATTN. C. YEACER ; CRIGINALLY CN ABCIL27Ó


## APPENDIX IV

## STATEMENT OF COSTS AND PERSONNEL

## Wages

David Yeager, Geologist 208-850 W. Hastings St. Vancouver, B.C.

April 1.0 day @ $\$ 100.00 /$ day $=\$ 100.00$
Oct. 2.5 day @ $\$ 150.00 /$ day $=375.00$
Nov. 5.25 day a $\$ 150.00 /$ day $=1787.50$ \$ $1,262.50$
T.C. Scott, Geologist

208-850 W. Hastings St.
Vancouver, B.C.
$\begin{array}{lrrrrr}\text { April } & 4.8 & \text { day @ } \$ 150.00 / \text { day }=\$ & 720.00 & \\ \text { May } & 14.3 & \text { day @ } \$ 150.00 / \text { day }= & 2,145.00 & 2,985.00 \\ \text { June } & .8 & \text { day @ } \$ 150.00 / \text { day }= & 120.00 & 2\end{array}$

Dave Caulfield, Helper 208-850 W. Hastings St.
Vancouver, B.C.
May $\quad 10.00$ day @ $\$ 75.00 /$ day + burden
$\$ 829.78$
829.78

Stan Seney, Helper
208-850 W. Hastings St.
Vancouver, B.C.
May 16.00 day @ $\$ 50.00 /$ day + burden $\$ 908.26$
908.26

Robert Darney, Geologist 208-850 W. Hastings St.
Vancouver, B.C.
Oct. $\quad 1.50$ day @ $\$ 150.00 /$ day $=\$ 225.00$ 225.00

APPENDIX IV cont.
Wages
Kevin Milledge, 208-850 W. Hastings St.
Vancouver, B.C.
Oct. $\quad 1.00$ day @ $\$ 75.00 /$ day $=\$ 75.00$ \$ 75.00
M. Cloutier,

208-850 West Hastings St.
Vancouver, B.C.
May 14.00 day @ $\$ 250.00 /$ day $=\$ 3,500.003,500.00$

Communication and Telephone
Billings to Project
May 1 to November 30

Travel and Accomodation
T.C. Scott, Expense Account $\$ 118.87$

Kevin Milledge, Expense Account
$\$ \quad 118.87$
123.87

Automobile Expense
Truck Rental
Red Hawंk

| April 30 | \# 647 | = | \$ | 143.57 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| May 9 | \#651 | = |  | 318.87 |  |
| Oct. 6 | \#719 | = |  | 72.24 |  |
| Oct. 17 | \#727 | = |  | 123.42 |  |
| Econo Car |  |  |  |  |  |
| Nov. 1 |  | $=$ |  | 111.75 |  |
| Pamicon |  |  |  |  |  |
| 11 days |  |  |  | 225.00 |  |
| Fuel |  |  |  |  |  |
| T.C. Scott, | Expense | Account |  | 126.90 |  |
| D. Yeager, | Expense | Account |  | 28.00 | 1,149.75 |

$\qquad$

## APPENDIX IV cont.

Misc.
T.C. Scott, Expense Account \$ 25.00

Technical Information
Topographic Map, Weldwood of Canada . 100.00

Outside Reproduction

Western Reproducers
Teeds Secretarial Service W.estwords
$\$ \quad 38.00$
6.60
45.00
89.60

Camp Equipment and Supplies
T.C. Scott, Expense Account Irly Bird Lumber \#43532
$\$ \quad 56.58$ 168.53

Food
T.C. Scott, Expense Account

Materials and Supplies Expendable
May 15 Deakin Equipment \#37624-37625
\#37150-37363
Irly Bird Lumber

Equipment Rental
B.C. Rental \#42640

Sovereign Metals
T.C. Scott, Expense Account

## Assay

Chemex Labs Ltd.
65 Assays for $\mathrm{Ag}, \mathrm{Au}, \mathrm{Cu}$.

Sub Total
$\$ 13,725.87$

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APPENDIX IV cont.
Management Fee
Pamicon Developments Ltd.
15% of $13,725.87
Drilling
Asmith Diamond Drilling
Hole #l
        3l7 feet @ $25.00/foot
        plus materials
        $7,925.00
    322.30
Hole # 2
    350 feet @ $25.00/foot
    plus material
    8,750.00
        287.65
Hole # 3
        367 feet @ $25.00/foot
9,175.00
26,459.95
```

