

Report On

AU GROUP AND CV MINERAL CLAIMS

Callison Lake Area  
Cassiar District  
Liard Mining Division, B.C.

N.T.S. 104  
59° 12' 21" North Latitude  
129° 47' 37" West Longitude

for

MID MOUNTAIN MINING LTD.

600-885 Dunsmuir Street  
Vancouver, B.C.

by

G.C. SINGHAI, M. Tech., P. Eng.

April 10, 1984

## INDEX

|                                    | Page |
|------------------------------------|------|
| SUMMARY                            | (i)  |
| INTRODUCTION                       | 1    |
| PROPERTY AND OWNERSHIP             | 2    |
| LOCATION AND ACCESS                | 3    |
| TOPOGRAPHY, VEGETATION AND CLIMATE | 4    |
| HISTORY OF THE AREA                | 5    |
| GEOLOGY                            | 9    |
| MINERALIZATION                     | 12   |
| CONCLUSIONS                        | 16   |
| RECOMMENDATIONS                    | 18   |
| COST ESTIMATE                      | 19   |
| CERTIFICATION                      | 21   |
| BIBLIOGRAPHY                       | 22   |

## MAPS

1. Location Map
2. Claim Map with Extension of Quartz Veins
3. Regional Geological Map

## SUMMARY

The Au and CV Groups of mineral claims of Mid Mountain Ltd. are located about 12 air kilometers southeast and 30 air kilometers east of Cassiar respectively, in the Liard Mining Division, B.C. The history of the area dates back to 1874 when placer gold was discovered in the McDame Creek area and has produced to date about 170,000 ounces of gold including a 73 ounce nugget which is believed to be the largest in the history of British Columbia. In recent years, the prospecting activities increased in the area and, as a result, the Erickson, Cusac and Plaza gold mines were put into production. Each of them has a mill capacity of about 50 to 175 tons per day. The Erickson gold mine has produced about 18,987 ounces of gold by milling 28,296 tonnes of ore grading 0.672 oz/ton gold and 0.659 oz/ton silver up to the end of 1982. The production for 1983 is not known.

The area overlies the Sylvester Group of volcanics and sedimentary rocks of Mississippian to Permian age which in turn overlies the McDame Group of Devonian age. The basal sedimentary formations of the Sylvester Group includes 150 meters thick argillite, siltstone, limestone, chert,

conglomerate and siliceous tuff. These sediments are intruded by 5-15 meters thick sills of andesites. The Upper Volcanic Formation consists of andesites and basaltic pillow lavas which are metamorphosed to greenstone. The gold-bearing quartz veins are hosted by greenstone. The Sylvester Group forms the core of the complex folding system of McDame Synclinorium. These rocks are also effected by a complex system of faulting. The present producing mines in the area are located in this type of geological and structural environment.

The mineralization occurs in the number of sub-parallel quartz veins which are filling the east and east/northeasterly trending joint system and shears of greenstone caused by complex folding and faulting. It indicates that lithologic control of these veins is secondary, as most of them are hosted by greenstone and a few of them at the contact of the hanging wall argillite and footwall greenstone. These veins can be divided into two types depending upon their hosted rocks. These veins vary in widths of 1-5 meters and as well in length from 10 meters to 60 meters. They are traced for 3-5 kilometers along strike though faulted and subparallel. They are lenticular in shape. The free gold is found in both types of veins

with mineral assemblage of small amounts of pyrite, tetrahedrite, chalcopyrite, arsenopyrite and traces of sphalerite and galena. Covellite, azurite and malachite are found in weathered zones. The presence of mariposite is also noticed. Ankeritic carbonates and graphite is accompanied with the veins which are hosted at the contact of greenstone and argillite.

The extensions of three northeasterly trending Erickson Mines producing quartz veins are noticed by Mr. M.J. Kreklo, owner and prospector of the Au Group. The extension of the Jennie vein is also noticed in the area. The geological and structural environment of this property and extension of Erickson producing veins suggests a very good possibility to find ore of economical value. Therefore, an exploration programme of two stages is recommended at a cost of \$412,275.00.

REPORT ON

AU AND CV MINERAL CLAIMS

Callison Lake Area

Liard Mining Division, B.C.

for

MID MOUNTAIN MINING LTD.

INTRODUCTION

This report is on 18 units of Au Group and 11 units of CV Group totalling 29 staked mineral claims located about 12 air kilometers southeast and 30 air kilometers east of the Town of Cassiar respectively, in the Liard Mining Division, B.C. It is prepared at the request of Mr. Harold S. Eisler, the Secretary of Mid Mountain Mining Ltd., 600-885 Dunsmuir Street, Vancouver, B.C. This report is based on the written and verbal information provided by Mr. Marco J. Kreklo, Box 1863, Summerland, B.C. the original owner of the property. The writer is also familiar with the surrounding and regional area since 1971. He could not visit the property and do a proper examination and evaluation due to the weather conditions. The property is covered by about 1.5 meters of snow. Therefore, he had to evaluate on the basis of

information provided and his knowledge of the surrounding areas. This study is undertaken to evaluate the property and propose a program of exploration if it is warranted.

#### PROPERTY AND OWNERSHIP

The property consists of 18 units of Au Group and 11 CV staked mineral claims totalling 29 units. The CV mineral claims are located during the period of September 12 - 15, 1983 and were recorded in Victoria recording office on October 11, 1983. Mr. Harold S. Eisler of 600 - 885 Dunsmuir Street, Vancouver, B.C. acquired these claims by a Bill of Sale dated November 14, 1983.

The Au Group were located on November 21 and 22, 1983 by Steven J. Buzikievich, Box 1480, Summerland, B.C. as an agent for Mr. Harold S. Eisler of 600-885 Dunsmuir Street, Vancouver, B.C. These claims were recorded in Victoria recording office on December 15, 1983. The details of these claims are as follows:

| <u>Name of Claims</u> | <u>Record Nos.</u> | <u>Date of Recording</u> |
|-----------------------|--------------------|--------------------------|
| CV 1-4 (included)     | 2952 - 2955        | October 11, 1983         |
| CV 7-13 (included)    | 2958 - 2964        | October 11, 1983         |
| AU (18 units)         | 3022               | December 15, 1983        |



PROPERTY



MID MOUNTAIN MINING LTD.

AU 1-18, CV 1-4, B 7-13  
MINERAL CLAIMS

McDAME LAKE AREA  
LIARD MINING DIVISION, B.C.

**LOCATION MAP**



The above claims are located in the Liard Mining Division in accordance with the Mineral Act of the Province of British Columbia. The legality of ownership of these claims were not confirmed by the writer and it is not within the scope of this report.

#### LOCATION AND ACCESS

The AU and CV Group of mineral claims are located about 12 air kilometers and 30 air kilometers southeast and east of The Town of Cassiar respectively. The AU group and CV1-2 and CV3-4 are located east of the Erickson Gold Mines Ltd. which is in production. These mineral claims are in the Liard Mining Division, B.C. These are centered approximately (AU Group)  $59^{\circ} 12' 50''$  North Latitude and  $129^{\circ} 43' 24''$  West Longitude, and (CV7-13)  $59^{\circ} 15' 51''$  North Latitude and  $129^{\circ} 21' 08''$  West Longitude respectively.

The AU group is accessible by about 12 kilometers of all-weather road from Cassiar to Highway #37, thence about 5 kilometers by Highway #37, and then by Erickson

Mine road. The Highway #37 runs close to the Northwest corner of Au group.

The CV 7- 13 is accessible by about 12 kilometers of all-weather road from Cassiar to Highway #37 and thence about 13 kilometers of Highway #37 which runs through Watson Lake. This Highway runs through northeast corner of the property. There is a daily regular air service to Watson Lake from Vancouver. The Town of Watson Lake is about 30 kilometers from Cassiar. Supplies are available from Cassiar and Watson Lake.

#### TOPOGRAPHY, VEGETATION AND CLIMATE

The Au group of claims are located in the Callison Lake area of the Cassiar Mountains. The general slope of area is westerly and the McDame Creek runs through the property. The elevation varies from 1067 meters in the Centre of the property to 1372 meters above sea level in the eastern part of the area.

The CV group of claims are located on the northeastern slope of Mt. Pendleton and south of McDame Creek. The elevation varies from 1067 meters to 760 meters above

sea level with north and northeasterly gentle slope.

The area is moderately timbered by spruce, pine, poplar, larch and birch. The valley bottoms and swampy areas are overgrown alder and willow growth. This timber may not be of any economic value.

The climate of the area is a typical interior West Coast type. It is most pleasant for most of the year but rainfall is heavy sometimes during the summer months. The winter months are very cold and most of the time temperatures are about 20° F below zero. Snowfall is heavy averaging 2-3 feet but exploration and mining can be carried out throughout the year with a properly winterized camp and by maintaining the roads. Water is available for diamond drilling and mining from Callison Lake and from two creeks running through the middle of the property.

#### HISTORY OF THE AREA

There is no work being carried out on this property at the present time. But, since the Erickson,

Cusac and Plaza gold mines have been put into production, panic claims staking and prospecting activities have been created in this general area of McDame Creek.

The history of the Cassiar area gold deposits dates back to 1874 when placer gold was discovered in McDame Creek, and a total of 70,000 ounces of placer gold was produced during 1874 to 1895. Since that time, small scale placer mining continues to date and about 170,000 ounces of placer gold has been produced including a 73 ounce nugget which is believed to be the largest in the history of British Columbia. J.F. Callison, a prospector from Fort Nelson, discovered an outcrop of quartz vein carrying free gold on Troutline Creek in 1934 and, as a result of it, many other veins were discovered up to 1937. Consolidated Mining & Smelting Company of Canada Limited carried out extensive exploration work including diamond drilling and, as a result of it, all the veins that are of interest today had been known by 1939. Some of these veins were mined especially high grade section in the early days. J.F. Callison made a shipment by air in 1934 of one ton of ore material containing 4 ounces of gold from the newly discovered

quartz vein. During the period of 1939, 130 tons of ore was shipped by A.W. Boulton from the Jennie vein and recovered 114 ounces of gold and 20 ounces of silver. During each following decade a few tens of tons to a maximum of 100 tons of ore was mined from one or more of the five or six main deposits. There were five mills operating, none larger than 12 tons per day capacity in the area. The remains of a 200 ton per day crusher are present at Snow Creek.

The single biggest mining operation of A.W. Boulton was from the Jennie vein on the Erickson Creek in the McDame Creek area until late 1978 when the Erickson Gold Mining Corp. began milling ore. Full production began on January 18, 1979 and produced 18,987 ounces gold and 18,686.439 ounces silver by milling 28,296 tonnes of ore averaging 0.672 oz/ton gold and 0.659 oz/ton silver. Mining and milling continued in 1980 through 1983 and the mill capacity was increased to 175 tons per day. The ore reserves are conservatively estimated at 100,000 tons of proven and probable, grading 0.5 ounces per ton gold.

Cusac Industries Limited began milling a small stockpile of high grade ore in their 50 ton per daymill. The source vein, known as the Hot Vein, is one of the rare new discoveries in the area. This vein is about 1.07 meters wide. The ore reserves are 37,250 tons grading 0.43 oz/ton gold. This includes 12,000 tons from the Hot vein. The company has discovered another vein, known as the Freddy vein, during underground development of the Hot vein. It is 1.83 meters wide assaying 0.55 ounces per ton in gold. They have discovered a third vein, known as the Dino vein, which has yielded, in mining tests, 500 tons grading 2.19 ounces per ton gold. This vein is open along dip and strike for further exploration.

Plaza Resources Corporation put their property into production by mining the Vollaug vein with a 50 ton per day capacity mill but sold the property and mill with 7000 tons of ore to Erickson Gold Mines Ltd.

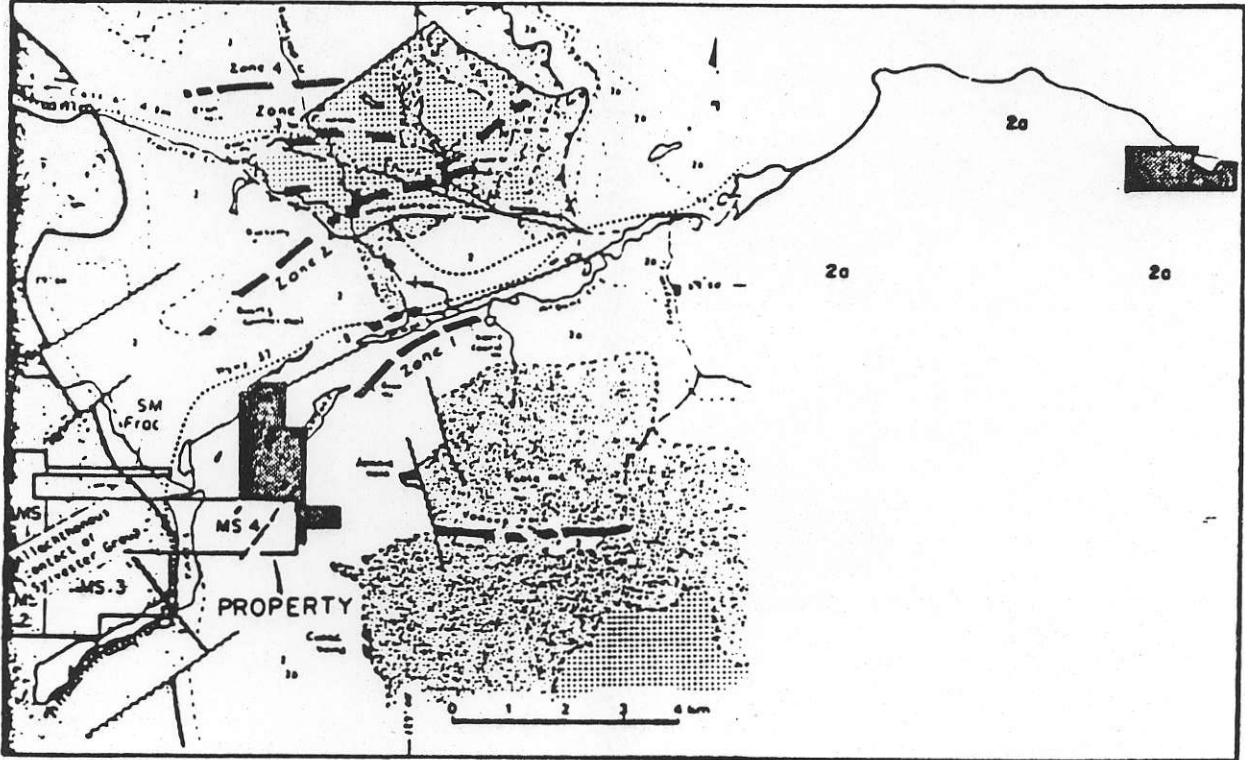
United Hearne Resources Limited, Table Mountain Ltd., Esso Resources Canada Limited, Newcastle Silver Mines Limited and other exploration companies are active in the area. United Hearne-Taurus Resources Limited starting

milling and mining the Hanna gold mine (Cornucopia, Benroy and Copco veins) 8 kilometers east of Cassiar.

## GEOLOGY

The geology of the area was mapped by various geologists. Mr. G.M. Dawson mapped the area to accompany Memoir No. 629 of the G.S.C. in 1887. The geology of the McDame area was mapped by L.L. Price, 1949 and H. Gabrielse, 1950-1954 of the Geological Survey of Canada and prepared map No. 1110A to accompany Memoir No. 319 by H. Gabrielse. A Panteleyev and L.J. Diakow of the Ministry of Energy, Mines and Petroleum Resources of B.C. mapped the Geology of McDame area in 1980 and 1981 at 1:10,000 scale and published in Paper No. 1981-1 and 1982-1.

Study of all the previous geological work and maps indicates that the area overlies, the host rocks for the gold-bearing quartz veins area, Sylvester Group volcanic and sedimentary rocks of Mississippian to Permian age which form the core of the McDame synclinerium. These rocks are mainly a greenstone, chert argillite assemblage. These rocks are in contact with Cassiar batholith allochthonously of Jurassic and/or Cretaceous age. This contact



## REGIONAL GEOLOGY OF THE McDAME AREA

SYLVESTER GROUP (MISSISSIPPIAN TO ? PERMIAN)

- |                             |   |                   |   |
|-----------------------------|---|-------------------|---|
| <p>2</p> <p>2a</p> <p>1</p> | <p>GREENSTONE-CHERT ASSEMBLAGE: MASSIVE PALE TO DARK GREEN ANDESITE FLOWS, TUFF, IN PART FINE-GRAINED DYKES AND SILLS, SOME CHERT, INCLUDES PORPHYRITIC FELDSPATHIC ANDESITE FLOWS (AND ? SILLS)</p> <p>CHERT, TUFFACEOUS CHERT, INCLUDES SOME ARGILLITE; IN NORTHEAST WELL-LAYERED CHERT-PHYLLITE, TUFFACEOUS CHERT, RIBBONED CHERT, AND ARGILLITE</p> <p>ARGILLITE, SILTSTONE, CHERT, QUARTZITE, LIMESTONE, PEBBLE CONGLOMERATE, TUFF, INCLUDES NUMEROUS DYKES AND ANDESITE SILLS</p> | <p>4</p> <p>3</p> | <p>BASALT: WIDESPREAD PILLOWS, SOME BRECCIA TUFF, AND MINOR ARGILLITE; IN SOUTHEAST, ABUNDANT BRECCIA, TUFF, AND SMALL LIMESTONE POOLS</p> <p>SILTSTONE, ARGILLITE, GREYWACKE, PEBBLE CONGLOMERATE, QUARTZ ARENITE, CALCAREOUS SILTSTONE, LIMESTONE</p> |
|                             |   |                   | <p>VEIN SYSTEM</p>  |

FIGURE 3

**MID MOUNTAIN MINING LTD.**

AU 1-18, CV 1-4, & 7-13  
MINERAL CLAIMS

McDAME LAKE AREA  
LIARD MINING DIVISION, B. C.

**GEOLOGY MAP**



AS PER A PREPARED BY L. J. DIAKOW



runs along the west shore of Vines Lake.

The Sylvester Group of rocks can be divided into two major units. Lower sedimentary-volcanic rocks overlies the McDame Group of Devonian age, and consists of fine-grained clastic rocks, andesitic fine-grained volcanic rocks and diabasic porphyritic intrusions and an upper part composed primarily of marine and pillowed basalt.

The lower (basal) formations consists of about 150 meters thick argillite, siltstone, limestone, chert, quartzite, conglomerate and tuff. The upper siliceous tuffs are intruded by fine to medium-grained porphyritic andesite sills 5 to 15 meters in thickness and are exposed north of Lang Creek. It is also intruded by small bodies of medium-grained diorite.

The overlying unit consists of dark grey-green to brown and orange on weathering but pale grey-green when freshly broken fine-grain, massive, volcanic rocks of andesitic and possibly slightly more acidic composition. These volcanics are interbedded with varying amounts of chert and medium-grained diabasic to porphyritic feldspathic

rocks which are probably sill. They are highly fractured and jointed.

The bedded fine to coarse-grained classic rocks lie stratigraphically above the fine-grained volcanic sedimentary unit and cap Table Mountain. These consist mainly of siltstone, argillite, greywacke, quartz, conglomerate and quartz arenite. Much of the upper part is calcareous of brown weathered limestone of up to 1.5 meters thickness.

A thick sequence of massive and pillowed basalt underlies the entire north-central part of the McDame Creek area and along the Quartz and Troutline Creeks. It also contains iron-rich tuff argillite, ferruginous chert and mudstone.

The Sylvester Group has been affected by two phases of folding. Folds of phase one are seen in the north-east part of the area, have flat to gentle plunge, north-easterly trending axis and are asymmetrical recumbent structures. The second type of folds are recumbent folds with inclined axes that trend as  $55^{\circ}$  northeast. The area has been affected by at least one major, westward-dipping thrust fault and various northeast striking steep-dipping faults.

## MINERALIZATION

The Lode gold deposits occurs in the two types of vein systems and it is studied by Joseph T. Mandy in 1931 to 1937. He had identified the three northeast to east-northeasterly trending greenstone hosted vein system that contains many of the well mineralized veins.

These three vein systems are subparallel fracture zones hundreds of meters in width and about three kilometers apart. But Panteleyev and Diakow mapped the area during the summers of 1980 and 1981 and divided into two types which depends on the bases of host rocks. Type 1 veins are hosted by greenstone and Type 2 veins occur at bedding contacts between greenstone and argillite.

### Type 1 Veins

This vein type is hosted by mainly metamorphosed andesitic flows of tuffs, pillowed basaltic flows and, rarely, diabasic dykes, sills or flows. These rocks are metamorphosed or propylitically altered to green schist. These quartz veins consist of fine to coarse granular milky white quartz with small amounts of occasionally distributed carbonate and rare vugs with clear terminated quartz crystals. This type of vein occurs in sets of steeply-dipping, generally northeast to east-northeasterly striking.

subparallel fractures or en echelon gashes and short and narrow. Even those in larger shear zones tend to pinch and swell along strike. Most of these veins are arcuate or sigmoidal and end either by pinching out, by splaying into horsetails, or locally by forming bulbous knots of less than 1 meter in diameter. It is noticed that where veins terminate in quartz knots, another quartz vein develops in the hanging wall of the first vein and becomes thick along strike though thinner near knots. These veins vary in thickness from 1 to 5 meters and as well as in length from 60 meters to hundreds of meters. These veins have characteristic blended wall-rock alteration of 5 to 10 times as wide as the quartz veins that they surround and mostly have sharp, knife-edged margins. It is also noticed that alteration zones are up to 100 meters wide surrounding small discontinuous quartz veinlets. These alteration zones are of distinctive orange-brown soil over a buried vein system and serve as excellent exploration guides. These altered greenstones consist of albite, carbonate, clay minerals, pyrite crystals and rare chlorite with epidote. They also contain sericite and tourmaline with ankeritic carbonate in a highly altered zone. These veins occur in four zones (see geological map) and are as follows south to north:

Zone #1. Callision-McDame Lakes System.

This includes the Esso, Goldhill and Davis veins striking  $50^{\circ}$  east for a length of 2500 meters and controlled by  $40^{\circ}$  to  $50^{\circ}$  striking joint systems. It seems that the extension of two quartz veins of this zone are noticed in the northeast corner of the MS #4 claim.

Zone #2. Quartz Centre - Wings Canyon, Snowy Creek System.

This is the most persistent of the vein systems mineralizing a belt of about 5 kilometers long and 150 meters wide which includes the Rich, Snow Creek and Berube veins. These veins trend at  $90^{\circ}$  to  $115^{\circ}$ .

Zone #3. Quartz City - Upper Snowy Creek System.

This zone is a wide alteration zone with numerous small quartz veins which includes Quartzrock Creek veins and the Hanna Mine (Cornucopia) vein system.

Zone #4. Elan Vein System.

A number of large quartz lenses up to 8 meters wide trends east-westerly over a strike length of 3 kilometers.

## Type 2 Veins

These types of veins occur at bedding contacts of greenstone and argillite. But most of the time they are in greenstone or splayed into strands, some of which pass in and out of greenstone. Mostly footwall is greenstone and argillite in hanging wall. When quartz is in the argillite, it becomes ribboned with abundant graphitic lamella and commonly pinch or feather out. In some workings it is noticed that the veins are split by basic dykes of about 1 meter width and dykes are bleached and carbonate altered and become felsite. The Vollaug vein is ribboned quartz with graphite and is a good example of this type of vein.

The Jennie vein, Cusac veins and others are included in this type of vein. The alteration of footwall greenstones with this type of vein is less intense and similar to Type No. 1 veins. The hanging wall argillites are not altered at all except a thin zone of carbonate veining and a slight increase in pyrite content.

Both types of veins contain free gold with small amounts of pyrite, tetrahedrite, chalcopyrite, arsenopyrite and traces of sphalerite and galena. Covellite, azurite and malachite occur in weathered zones. Type No. 1 veins carry gold in arsenopyrite and in the weathered zone

free gold is noticed in cellular boxworks or plates cavity walls. In Type No. 2 veins, gold accompanies tetrahedrite or with graphite. The presence of malachite is also noticed with gold-bearing quartz veins but may not be as a rule.

#### CONCLUSIONS

The above study indicates that the property is located in a favourable geological and structural environment. It overlies the Sylvester Group of volcanics and sedimentary rocks of Mississippian to Permian age. These rocks in turn overlie the McDame Group of Devonian age. The basal formations of the Sylvester consists of 150 thick meters of argillite, siltstone, limestone, chert, conglomerate and siliceous tuff which are intruded by 5-15 meters thick sills of andesite. The upper volcanic formations and pillow basaltic lavas are metamorphosed to the greenstones which hosts the gold-bearing quartz veins. These rocks form the core of the McDame Synclinorium. They are in contact with the Cassiar Batholith of Jurassic to Cretaceous age. These rocks were subjected to a complex system of folding and faulting.

The mineralization occurs in a number of quartz veins which are hosted by greenstone. These veins form well defined east-east-northeasterly trending structural zones, which were formed during large and small scale foldings. It appears that the lithologic control of the veins is secondary. This vein system can be divided into two which depends upon the hosting rocks. These veins vary in widths of 1-5 meters and in length from 10 meters to 60 meters and they are lenticular in shape. Free gold is found in both types of veins with a mineral assemblage of a small amount of pyrite, tetrahedrite, chalcopyrite, arsenopyrite and lenses of sphalerite, galena, covellite, azurite and malachite were also found in weathered zones. The presence of ankeritic carbonate, graphite and mariposite is also noticed.

The present producing mine of Erickson Gold, Plaza and Cusac Industries Limited are also located in similar types of geological and structural environment. The extension of three quartz veins trending northeast are noticed by the owner of the Au group of claims. The extension of Jennie vein is also noticed in the area. Erickson Gold Mines Ltd. is producing ore from all these veins at the present time.



This suggests that there is a good possibility of finding ore of economic importance from the extension of the producing veins.

The owner reports mineralization of similar type has been noticed in the CV Group of mineral claims. Therefore further exploration work is warranted.

#### RECOMMENDATIONS

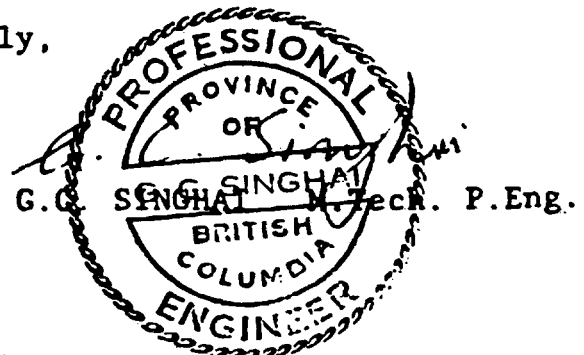
As a result of the above studies the following program of exploration is recommended:

1. 50 line kilometers of grid with stations at intervals of 30 meters should be established on Au and CV mineral claims.
2. The gridded area should be prospected and geologically mapped in detail.
3. The gridded area should be covered by soil sampling and each sample should be assayed for gold and silver in ppb; arsenic and copper in ppm.
4. Geochemically anomalous areas should be covered by E.M. and magnetic surveys.
5. Anomalous zones should be tested by trenching, bulldozing and diamond drilling.

This program can be implemented in two stages.

Submitted respectfully,

Dated at:  
901 - 675 West Hastings Street  
Vancouver, B.C. V6B 1N2  
April 10, 1984



## COST ESTIMATE

## Stage I

|    |  |                    |
|----|--|--------------------|
| 1. | 25 line kilometers of grid @ \$250/line kilometer                                | \$ 6,250.00        |
| 2. | Soil sampling and analysis for AU, AG, CU and Arsenic 1000 samples @ \$18/sample | 13,000.00          |
| 3. | Geological mapping and prospecting   | 6,000.00           |
| 4. | E.M. Survey and Magnetometer survey 20 line kilometers @ \$400/line kilometer    | 8,000.00           |
| 5. | Trenching and bulldozing   | 5,000.00           |
| 6. | Sampling and assaying of mineralized zones                                       | 2,000.00           |
| 7. | Supervision and engineering  | <u>5,000.00</u>    |
|    |  | \$45,250.00        |
|    | Contingencies say 10%  | <u>\$ 4,525.00</u> |
|    |  | \$49,775.00        |

## Stage II

|    |  |                     |
|----|--|---------------------|
| 1. | 500 meters of diamond drilling @ \$175/meter | 87,500.00           |
| 2. | Sampling and assaying                        | 7,000.00            |
| 3. | Supervision and engineering                  | <u>15,000.00</u>    |
|    |  | \$109,500.00        |
|    | Contingencies say 10%                        | <u>\$ 11,000.00</u> |
|    |  | \$120,500.00        |

## Stage III

|    |                                       |                  |
|----|---------------------------------------|------------------|
| 1. | 1000 meters of drilling @ \$175/meter | 175,000.00       |
| 2. | Sampling and assaying                 | 15,000.00        |
| 3. | Supervision and Engineering           | <u>30,000.00</u> |
|    |                                       | \$ 220,000.00    |
|    | Contingencies @ 10%                   | <u>22,000.00</u> |
|    |                                       | \$ 242,000.00    |

## Net Total

|           |                     |
|-----------|---------------------|
| Stage I   | \$ 49,775.00        |
| Stage II  | \$120,500.00        |
| Stage III | \$242,000.00        |
|           | <u>\$412,275.00</u> |

The implementation of Stage II depends on the success of Stage II and as a result of its success the programme of Stage III will be implemented.

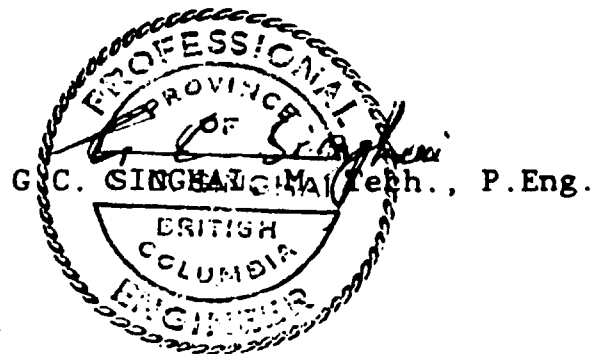


G. C. SINGHAI, M. Tech. P. Eng.

CERTIFICATION

I, Gyan Chand Singhai of 5620 Clearwater Drive, Richmond, B.C. do hereby certify that:

1. I am a member of the Association of Professional Engineers of British Columbia since 1969, and member of the Canadian Institute of Mining and Metallurgy.
2. I am a post-graduate in Applied Geology (1959) from the University of Saugor, Sagar, Madhya Pradesh, India and have been practising my profession since that time.
3. I was teaching in the University of Saugor, Sagar, and Ravishankar University, Raipur, India, and practised my profession in India, Canada, West Indies, Mexico, Peru and U.S.A.
4. This report is based on the written and verbal information supplied by the company and authors familiar with the general area.
5. I have no interest directly or indirectly in the property described herein, nor in any other properties of Mid Mountain Mining Ltd.
6. This may be used for the purpose of a prospectus, if so desired.



Dated at:  
 901-675 West Hastings Street  
 Vancouver, B.C. V6B 1N2  
 April 10, 1984

## BIBLIOGRAPHY

1. Diakow, L.J. and Panteleyev, A.  
1980  
Cassiar Gold Deposits, McDame Map Area. (104 p/4,5) B.C. Ministry of Energy, Mines and Pet. Res. Geological Field Work 1980, Paper 1981-1. pp. 55-62.
2. Gabrielse, Hubert  
1963  
McDame Map Area, Cassiar District, British Columbia. Memoir No.319 G.S.C.
3. Mandy, J.T.  
1931  
Placer Gold Deposits of McDame Creek Area, B.C. British Columbia Annual Report of Minister of Mines 1931; pp. A54-A61; 1935 pp. B12-B20; 1937, pp. B24-37; 1939 p. 64; 1947, pp. 70 and 188; 1961, p.6; 1962, p.6; 1963 p.6; 1963 p.10.
- 1982  
Cassiar Yukon Gold Mines Ltd. (N.P.L.) Letter to the Company.
4. Panteleyev, A. and Diakow, L.J.  
1981  
Cassiar Gold Deposits, McDame Map Area (104 p/4,5) B.C. Ministry of Energy, Mines and Pet. Res., Geological Field Work, 1981, Paper 1982-1, pp. 156-161.
- 1983  
Erickson Gold. A Corporate Profile.
5. Singhai, G.C.  
January 3, 1984  
Report on 1-4 MS. Group & SM. Fr. mineral claims. For Waterloo Resources Inc.