#### LAKE CLAIMS

Geological and Geochemical Assessment Report
Performed from October 1st - October 10th, 1985

Bridge River Area, Lillooet Mining Division N.T.S. Map 92T/15W, Zone 10

Centered at Approximately

50°,53',20" Latitude 122°,00',30" Longitude

Owned by

AMAZON PETROLEUM CORP. and CARPENTER LAKE RESOURCES (60% and 40% interest respectively)

Operated by

AMAZON PETROLEUM CORP.

Author

A. H. ARIK

Date

October 17th, 1985

Place

Vancouver, B.C.

GEOLOGICAL BRANCH ASSESSMENT REPORT

13,953

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## INTRODUCTION

I was commissioned by Amazon Petroleum Corporation to make an assessment report on the Lake claims which are located in Goldbridge area, between Gun Lake and Carpenter Lake in Lillooet Mining Division.

I conducted a geological exploration program for 10 days on October 1 to October 10th 1985. Geological maps of 1:1200 and 1:5000 scale accompanies this report. I have also carried out some limited rock geochem where the gossan zones and quartz veins are observed. 5 chip samples and 4 float samples were sent out to Chemex Laboratories in Vancouver for precious and base metals analysis. Results are pending and to be included in the report later on because of the time limit of handing over the report to the Ministry of Energy Mines and Petroleum Resources on October 21st, 1985. Grid lines shown on the maps were carried out by compass from the known points which were previously examined.

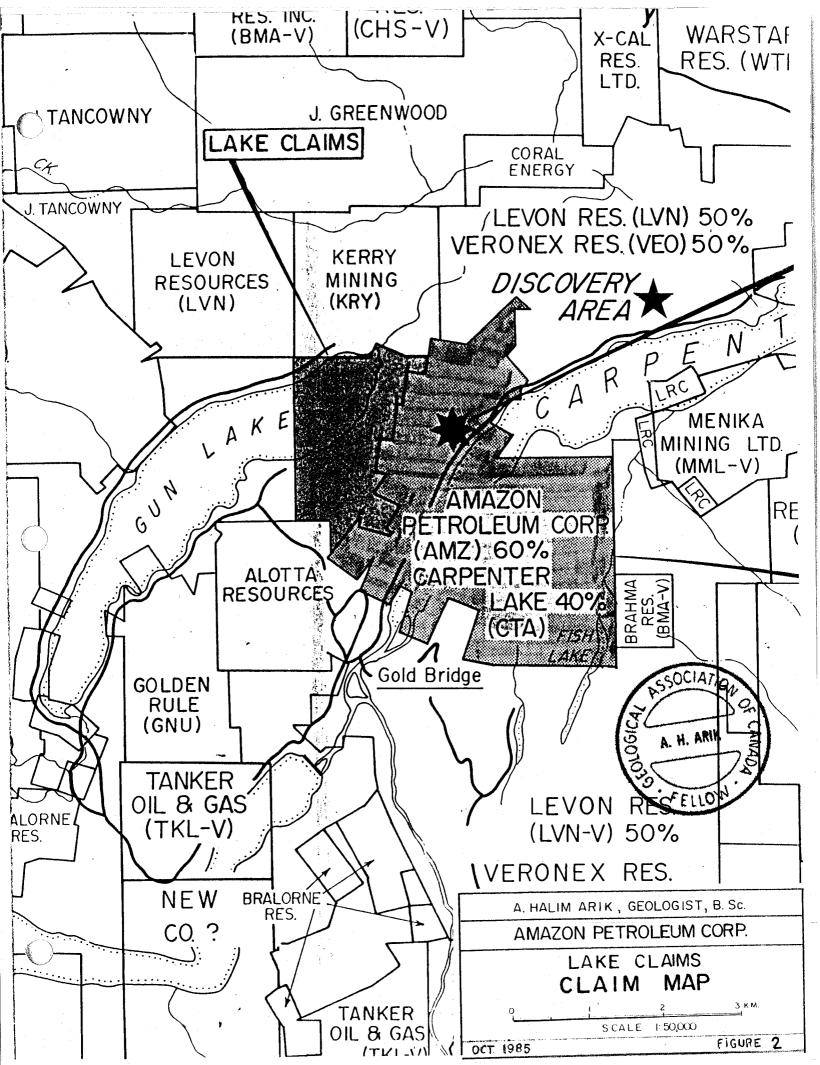
This report was prepared for Amazon Petroleum Corporation, #801-700 West Pender Street, Vancouver, B.C.

#### PROPERTY

The property consists of 3 claims and 2 fractions totalling 14 units as follows:

| Name | <u>Units</u> | Rec. No. | Date of Records  |
|------|--------------|----------|--|
| Lake | #1 12        | 3010     | 21 October 1984  |
| Lake | #2 1         | 3009     | 21 October 1984  |
| Lake | #3 1         | 3008     | 21 October 1984  |
| Lake | #2 fraction  | 3012     | 21 October 1984  |
| Lake | #1 fraction  | 3011     | 21 October 1984  |
|      |              |          | the control of the co |

These claims are held jointly with with Carpenter Lake Resources Ltd., each company having 60% interest for Amazon Petrolem Corporation and 40% interest for Carpenter Lake Resources Ltd. A location map accompanies this report.



#### **SUMMARY**

This report mainly consists of geological investigations of the mining property held by Amazon Petroleum Corp. (60% interest) and Carpenter Lake Resources Ltd.(40% interest), the property being known as Lake claims which are located in Goldbridge Area in Lillooet Mining Division.

The writer has visited and examined all of the Company's properties in the region on various occasions, and several reports have been submitted. There have been also other detailed reports on the periphery properties which are acknowledged under "References" so in this report the back ground information, history, etc., has been only briefly summarized.

The property is underlain by the series of Fergusson sediments and volcanics intruded by fair size of hornblende porphyry dyke and diorit porphyry dykes, occationally and possibly associated with a few quartz veins and silicified zones of 0.5 to 1.5 m., on the mid western portion of the claims. No remarkable minera lization has been observed in the showings, except for minor and residual, disseminated pyrite in greenstones.

Under the light of recent investigations of the property, it seems some limited geochemical sampling should be carried out, together with a few trenches to expose more of the existing quartz showings. For the realization of this program, partial grid could be put in this area. This program is estimated at \$10,000.

## LOCATION AND ACCESS

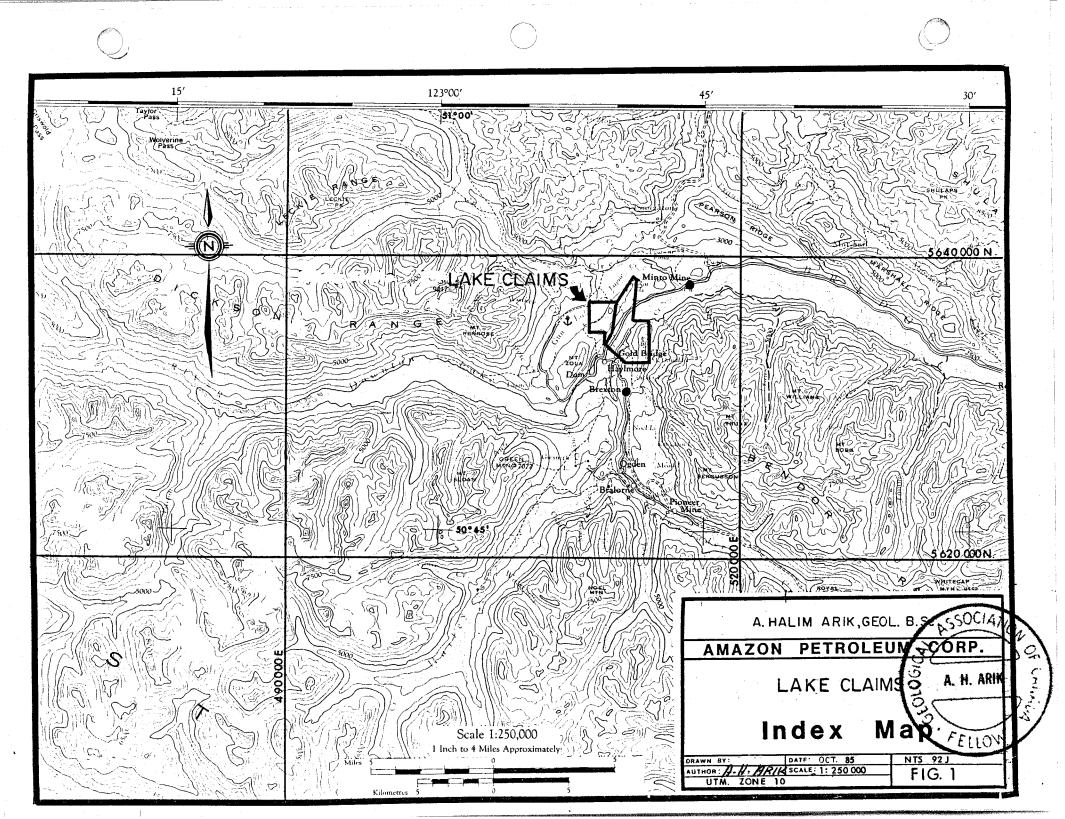
The property is located on the south east of the Gun Lake, by covering all the east corner of the lake and taking a small corner from the northern shore. Access is by way of either 5 km or 11 km of hard surface, stabilized road which is the portion of the highway connecting Lillooet to Goldbridge. That is an all-season open road. 11 km road leads to Gun Lake resort first, then to the property by another 1 km secondary road, which takes a 4 wheel drive in winter months. The 5 km road is an alternate road to the same resort area mentioned above. It crosses the approximately 250 m high mountains and hills before ending up within the property. Recently B.C. Highways Department built up a new road to the Gun Lake as shown on the map #5.

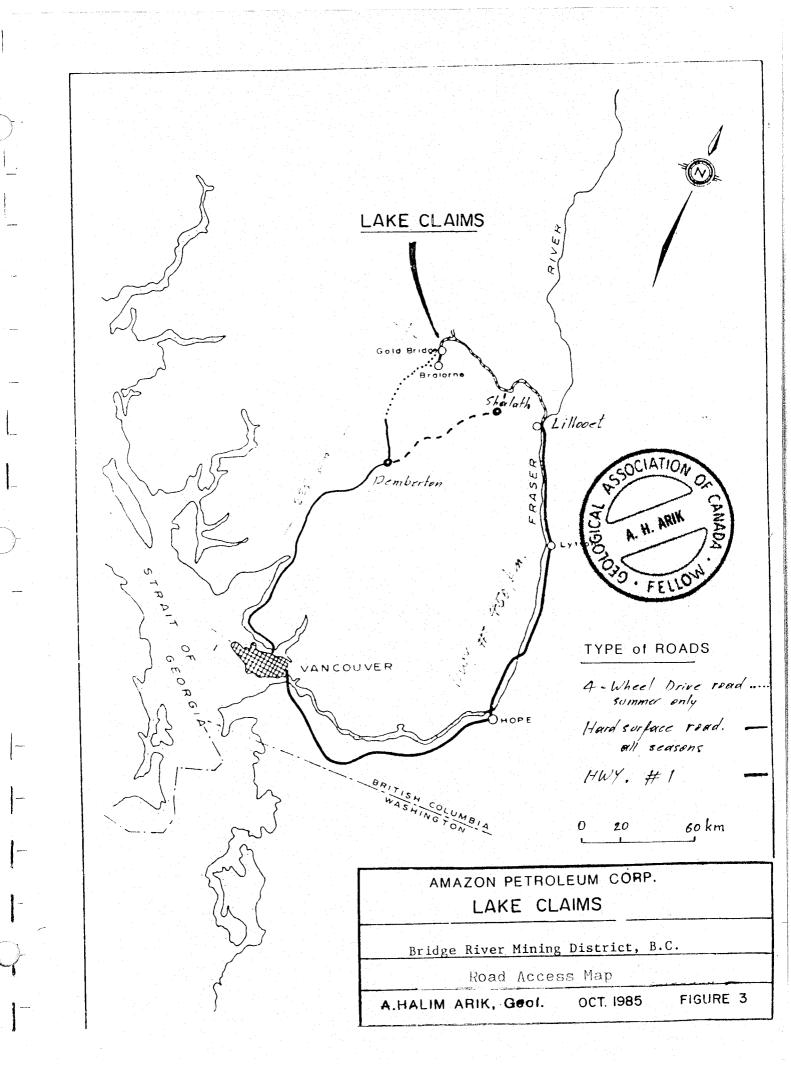
#### PHYSIOGRAPHY AND VEGETATION

The Lake claims extend within 1.5km of the southeast shore of Gun Lake to just south of a swamp shown on the geological map attached (see Map #6). Eastern extension goes out less than a km towards the interior which is basically consists of small hills bulldozed by recent glaciation. The highest peak in the area is 1090 m and is located just southeast corner of the lake. Between the lake and the peak, there is a sharp gradient of almost 70° -80° which makes it very difficult to climb. This is the only portion of the Gun Lake area which is accessible by road.

The eastern part of the mountain shows approximately 300 m drop which is mostly outcropping of greenstone. All areas are affected by glaciation and volcanic ashes are visible almost everwhere, sometimes thickening to 1m deep. Even on top the highest peak, there is 30 or 40 tons of rounded granitic boulders, remainders of recent glaciation.

The vegetation covers the whole area, moderately distributed fur trees are dominant. Because of present road construction, most of them now have been logged and the rest will be logged, in the near future.





## HISTORY OF THE PROPERTY

This is fully covered in the writer's report of November 15th, 1984. The claims date from early 1950 and were acquired April 13, 1985, jointly by Carpenter Lake Resources Ltd. and Amazon Petroleum Corporation.

As the writer has examined every corner of the property, it doesn't seem that the history of the property dates back too far. The only indications of past workings in the area are the couple of trenches (5 to 10m in length) and one exploratory pit on the mid-south section of the property. The most recent exploration activities carried on in the property are the geochem sampling, trenching and diamond drilling by R. Sheraphim in 1984 and B. Morris in 1985 respectively.

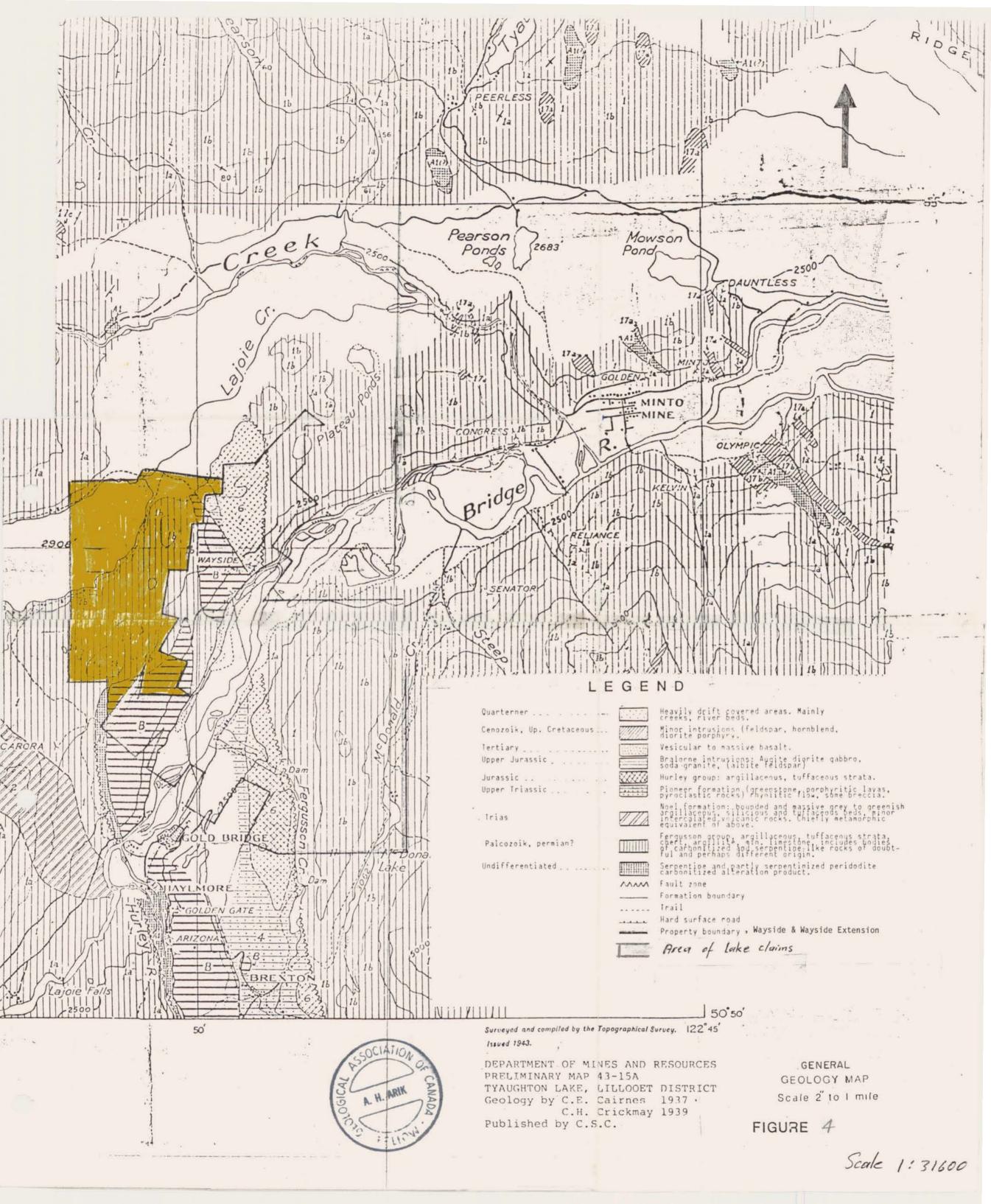
By taking into conssideration that the area is within the historical mining camp of Bralorne and Pioneer, the early explorer and prospectors had not neglected this region to leave their footprints which are barely traceable today.

## GENERAL GEOLOGY & MINERALIZATION

As seen on the accompanying geology map, the Bralorne-Bridge River Mining District is located in the eastern part of the coast mountains. Both the Lake claims and the Bralorne deposits with others along the line fall in between coast plutonic complex and intermountain belts within cogeosynclinal area. Actually these claims appear to be part of the most northern extremity of the structural failure occuring along the Bralorne intrusives, making the area geolocially comparable with Bralorne - Pioneer Mines. The underlying and oldest rock formation is Fergusson series which is comprised of argillite and cherts interbedded with limestone and volcanics which is, in some cases, the host rocks for mineralization or the causitive source for it.

Overlying the Fergusson series are the Hurley-Noel formations which consists of basically sediments with occasional bands of volcanic flows and pyroclastic layers. These intercalated volcanic units with formation are referred to as pioneer greenstone. relationship between these volcanics and the highly deformed sediments is not obvious. But this fine grained to crystalline, quite homogenous green rock is one of two important host rocks (the other being bralorne augite diorite) for ore bearing quartz veins, there is a gradational augite diorite and pioneer greenstone change between difficult to separate. This new version of dioritic greenstone is definitely younger than the Hurley-Noel formation. As for the oldest intrusive rocks in the immediate vicinity, are deepseated serpentine, peridodite and other undifferentiated ultra mafic. The next oldest is gabbro and then the economically important Bralorne intrusions and its derivatives composed of upper cretaceous grandiorite and tertiary syenodiorite or better known in the district as "Bendor relationship to the mineralization in the area Its essentially genetic rather than structural.

Bralorne intrusions lies in between Fergusson, series and the Hurley



Formation, striking northwesterly by hosting or associating with pioneer, Bralorne, BRX and Wayside mines along its course. All the rock units mentioned above in the Lake claims are also intruded by recent feldspar porphyry dykes, hornblend porphyry or Some sediments and volcanics are locally metamorphosed by these intrusive stocks, plugs and dykes. Strong zones of shearing and faulting are present a short distance from these Lake claims, namely by Cadwallader Fault zone on the west and the Fergusson break on the east. Age determination of Bendor plutons on the east and the coast plutonic ranges on the west puts the Bralorne intrusives somewhere in between these two coastal intrusive bodies. The Shulaps range 25 km to the east where the Yalakom river fault zone, a major transform fault-crustal rift places ultramafic intrusions Cretaceous age sedimentary rocks in contact with the Fergusson series. Sub parallel or slightly diagonal shear or fault zones are already established in Wayside, striking Northwesterly dipping 50° to 70° south easterly. One major fault of the Bralorne area, namely Empire fault, is passing or ending nearby the property which is 7.5 miles north of Bralorne. Several small serpentine bodies are present along the Cadwallader fault zone, in proximity to some of the gold deposits. Highly sheared and deformed of perhaps doubtful origin of serpentized rock is also intersected on holes 84-D3 and 84-P7 which was carried out in 1984.

No visible mineralization was encountered during the period of time of working. More potential for mineralization depends on quartz veins which are already sampled out. Those quartz veins usually are associated with highly contorted chert. Highly oxidized and altered zone on greenstone is another good indication for mineralization on the sample site #S-L15. Insignificant and residual pyrite crystals occasionally occur in greenstone and in some argillites.

## DESCRIPTION OF THE ROCK TYPES

The deposition of the rocks encountered in the Lake claims is mainly based on outcrops encountered through the field observations only.

## Greenstone:

A fine grained massive rock produced by low grade metamorphism of volcanic, pyroclastic rocks with basaltic and andesitic composition. Green colour is due to fine grained chlorite and epidote. They are formed in deep seas through volcanic activities from basic to ultra mafic magmas. Their free silica content is almost next to none. In the areas under study, it shows either in amigdaloidal or porphyritic texture. That is the host rock for sulphide mineralization, with minor precious metal values in it.

## Diorite, Augite Diorite:

intrusive rocks form a transitient rocks granite and gabbroic rocks. Most of these diorite plugs are immediately adjacent to or in the general and stocks vicinity of the Cadwallader fault zone. They are generally medium to coarse grained with occasional very fine grained matrix. It is laced with veinlets of minerals such epidote, chorite carbonate, etc. Its colour range, changing from gray, dark grey to greenish as in the case of Bralorne augite diorite which contains predominantly augite to be classified accordingly. Quartz content in it is less than 10% while ferro magnesian element reaching up to 60%. K-feldspar stands out in matrix. The rock changes from fine crystalline greenstone to mottled, granatoidal, coarsely crystalline diorite. It has intrusive and graditional contact Where it pioneer greenstone. becomes difficult to separate it has been classified as "greenstone diorite".

Carbonaceous and silica stockworking in augite diorite is quite distinctive in the Wayside property.

## Porphyritic Rocks:

This is a kind of rock which has a special texture, wether it is the result of volcanics or part of the late stage intrusive activities remains questionable. This kind of texture is the result of chemical composition of the rock, as well as the pressure and temperature of that particular geological environment in which the rock was part of. The big crystals in the texture called fenocrytals and the little ones are called microliths. Most of the dyke rocks in the area under study have porphyritic texture, namely ryholite, andesite and dacite.

## Ryholite:

These are extrusive equivalent of granitic rocks. Since they are the product of acidic magma, their colours are light and found mostly in porphyritic texture in Wayside. As it is known, when partly crystallized magma surfaces out from the vents or fractures, noncrystallized portions of it very quickly cools off and solidify to form an effusive rock. Within the property limits, this kind of texture is more commonly represented by ryholitic dykes, flows and tuffs.

## Hybrid Diorite:

Black, fine grained, marginal, intrusive rock, sheared and grading to serpentinite; which is found locally near the margins of Bralorne intrusives.

#### Chert:

Light coloured, thin-bedded, intensely deformed and crumpled chert. Partly recrystallized by silification and

albitization. Individual ribbons separated by thin, foliated, argillite partings, planes.

# Argillite:

Thin bedded, strongly faulted (in places tabulated) and deformed and cleaved, black coloured unit, it shows occasional rusty oxidation and contains minor cubic pyrite crystals. In places this agrillite unit is highly silicified, especially where it is making contact with various formations.

#### CONCLUSIONS & RECOMMENDATIONS

- 1. The most promising exploration potential in the area studied are the two quartz showings and the altered and oxidized greenstone, dependant on the results of analyses of the chip rock samples taken from the said showings.
- 2. Because of heavy overburden and thick volcanic ash, full geochem soil sampling is not possible, but instead a limited geochem survey should be useful.
- 3. One of the quartz showings mentioned above, is so intermingled with the chert nearby, it is impossible to say exactly wether it is in situ, or transported there from somewhere. Therefore, it is necessary to make some trenching for better exposition at that particular locality. (Sample site #S-L02).
- 4. Another trenching to be carried out on the altered, oxidized greenstone to establish the relationship between hornblende porphyry dyke and the greenstone.

After performing these recommendations, it should be possible to fully evaluate this property.

A. Halim Arik FELLOW
Geologist, B.Sc.

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APPENDIX A
Cost Statement

# COST STATEMENT

| (A)  | A. Halim Arik, Geologist<br>10 days @ \$150.00 | \$1,500.00     |
|------|--|----------------|
|      |  |                |
| (B)  | Expenditures:-                                 |                |
|      | Truck rental plus                              | 223.36         |
|      | Room & Board                                   | 634.00         |
|      | Geological Analysis Drafting                   |                |
|      | Telephone, xerox                               |                |
|      | Secretarial blueprints                         |                |
|      | Report writing                                 | 528.58         |
|      |  |                |
| TOTA |  | \$2,885.94<br> |

APPENDIX B
Writer's Certificate

#### CERTIFICATE

- I, A. Halim Arik, of 3768 West 12th Avenue, having an office in the City of Vancouver at 510-850 West Hastings Street, in the Province of British Columbia, do hereby certify that:
- 1. I graduated from the University of Istanbul, Turkey, in 1960 with a B.Sc. degree in geology.
- 2. I have been practicing my profession for the past 20 years, Overseas and Canada combined.
- 3. I have no interest in the properties examined nor in the securities of Amazon Petroleum Resources, nor do I expect to receive any.
- 4. The findings of the report are from personal inspection and observations within certain periods of time since I have been involved with the studies and exploration of the property since 1981.
- 5. This report is prepared as an assessment work for the property, by the author in October 1985.

DATED AT Vancouver this 17th day of October, 1985

A. HALIM ARIK, Geologist, B.Sc.

October 17, 1985

APPENDIX C

