

013528

Prop. Sub.

Dawson Range Mines Ltd.,
Box 466, Lillooet, B.C.
March 31, 1976.

105D

Cyprus Anvil Mg Corporation,
330-335 Burrard Street,
Vancouver, B.C.

Dear Mr. Bruk,

Don Sumanik, of 69 Ortona Ave., White Horse, asked me to send you the enclosed report on the Braine Creek property, by G.C. Gutrath. I, also enclose a ^{REPORT} report and assay, of a specimen taken near the place where Mr. Gutrath sampled.

Of the 16 claims mentioned in Mr. Gutrath's report, only 11 are in good standing. Don Sumanik, of the above address has the assessment recording information. He can be reached by phone. (668-5514 White Horse.

Yours Very Truly,

Paul Polischuk
Paul Polischuk

*mining exploration services
property evaluation & development
computer applications in the mineral industry*

February 27, 1976

Dawson Range Mining Ltd.,
c/o Mr. Paul Polischuk,
Lillooet, B.C.

Dear Mr. Polischuk:

I am enclosing a report on a radioactive sample submitted to me on your behalf by Mr. Jim Elwell for analysis.

A thin section and polished section were made from the specimen and the remaining pieces sent to the laboratory for chemical and spectrographic analysis.

The thin section was examined by the writer and the polished section by Dr. A.J. Sinclair, P.Wng.

A spectrographic analysis was made by General Testing Laboratories for 34 elements. They recommended assays for thorium, uranium, nickel and arsenic. Small amounts of cobalt and bismuth were also detected. Although not read spectrographically, the analyst at General Testing mentioned the presence of Lanthanum and other rare earths.

In consultation with Dr. Sinclair, after receipt of the chemical analyses, we make the following

MONTGOMERY CONSULTANTS LIMITED
805-850 W. HASTINGS ST. VANCOUVER B.C. V6C 1E1
685-3931



suggestions:

1. The "glaucodot" might better be termed cobaltian arsenopyrite. There is probably a complete series with iron and cobalt and, in this case, the small amount of cobalt would suggest cobaltian arsenopyrite rather than glaucodot.
2. The nickel is probably present in pyrite (nickeliferous pyrite).
3. The presence of rare earths suggests that the thorium may be present in "rare earth oxides".

A sample of the material was also submitted to Min-En Laboratories for geochemical analysis and assay for U_3O_8 . These analyses resulted in values of 9.0 ppm Uranium for the rock geochemical test and of 0.003 % U_3O_8 for the assay. These values are much too low to account for the radioactivity of the rock. It appears, therefore, that most of the radioactivity is due to the presence of thorium.

I am not familiar with the details regarding the location, size, structure, etc. of the deposit but, if they are of sufficient interest to you, it might be worth getting an assay for nickel and reading the rest of the spectrographic film for rare earths.

Yours sincerely,


J.H. Montgomery, P. Eng.

MINERALOGRAPHIC INVESTIGATION OF JHM SPECIMEN

A microscopic examination of JHM specimen showed the following

| | | | |
|-------------|--------------|-------|--|
| mineralogy: | Uraninite(?) | — | |
| | Pyrite | ————— | |
| | Glaucodot | ————— | |
| | Chalcopyrite | ————— | |
| | Limonite | ————— | |
| | Mn stain | ————— | |

Lines to the right of each mineral show the interpreted relative ages of deposition i.e. paragenesis of the minerals. Total opaque mineral content of the specimen is about 5 vol. % although distribution of sulphides is not even on the scale of 1 to 2 ". In a 2" x2" polished surface for example nearly all sulphides were in a zone comprising about one-quarter of the surface such that a layered aspect appears to be characteristic of the ore. The other three-quarters of this particular polished surface consists of silicate (and carbonate) gangue stained with limonite and Mn oxides along grain boundaries and cleavage surfaces, and containing small blebs of sulphides (mainly pyrite) but with very low overall sulphide content. Minerals will be described individually in the order in which they appear in the paragenetic sequence listed above.

Uraninite (?) is identified with fair certainty on the basis of general characteristics and the observed radioactivity of the sample. However, other radioactive minerals can have a vaguely similar appearance and some doubt about the identification does exist due mainly to the anhedral (massive) form of individual grains with no well developed crystal faces and no indications of the mammillary forms characteristic of the pitchblende variety. The mineral occurs in irregular patches 1 mm. or more in length and commonly elongate roughly parallel to the crude layering of the specimen. A few smaller anhedral grains are also present.

The uraninite is not associated spatially with sulphides and in only one case was a small rounded grain of uraninite found as an inclusion in a large pyrite grain. This latter texture is the basis for the proposed position of uraninite in the paragenetic sequence.

Pyrite occurs in two predominant grain size ranges: 0.05 mm. or less and 0.15 to 0.2 mm. or larger. The two sizes are both abundant and at least on the scale of the polished section appear to be mostly mutually exclusive. Pyrite is largely anhedral and rarely subhedral. Most grains are inclusion-free but a few large masses appear to be agglomerations of smaller grains with much gangue present as small inclusions.

Glaucodot--(CoFe)AsS--is much like arsenopyrite in general appearance but is not as anisotropic nor as birefractant, and it is on this basis that the identification has been made. Most glaucodot is anhedral and is closely associated with pyrite either as composite grains with simple character (i.e. roughly equal amounts of the two with mutual boundaries) or as partial rims about pyrite grains. These textural features determine the position of glaucodot paragenetically. Rare rhomb-shaped crystals of glaucodot occur in some cases where it is in contact with chalcopyrite. In one such case the glaucodot crystal contains a core of pyrite. Size of glaucodot grains rarely exceeds 0.2 mm in maximum length.

Chalcopyrite forms moderately large, irregular masses up to 0.3 mm across and also occurs as minute grains attached to pyrite. The larger grains contain most of the chalcopyrite in the specimen examined and they are generally free of inclusions. The smaller grains represent about 20 to 25% of the chalcopyrite present and would be difficult to separate from gangue if chalcopyrite were to be recovered.

Limonite occurs in massive patches here and there, but is mainly

distributed in earthy form along grain boundaries and cleavage planes of gangue minerals. Some massive patches have a relict core of pyrite. Some surfaces of the hand specimen indicated the presence of Mn oxides (black) along some fracture surfaces but specific manganese minerals could not be identified in polished section.



.....
Dr. A. J. Sinclair, P. Eng.
Jan. 28, 1976



GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD.


1001 EAST PENDER STREET, VANCOUVER 6 B.C., CANADA
 PHONE (604) 254-1647 - TELEX 04-507514 - CABLE SUPERVISE

TO: DR. J.H. MONTGOMERY
 805 - 850 West Hastings Street
 Vancouver, B.C.
 V6C 1E1

SEMI QUANTITATIVE SPECTROGRAPHIC ANALYSES CERTIFICATE

No.: 7602-1756 DATE: Feb. 20/76

We hereby certify that the following are the results of spectrographic analyses made on:

| | 1 | 2 | 3 | 4 | 5 | |
|------------|----|-------|---|---|---|---|
| Aluminum | Al | 0.5 | | | | SAMPLE No. 1 DESCRIPTION: 1 Radioactive Sample 2 3 4 5 All results expressed as percentages MATRIX — Major constituent MAJOR — Above normal spectrographic range TRACE — Detected but minor amounts N.D. — Not detected ★ — Suggest assay NOTES: Rejects retained one month. Pulps retained three months. On request pulps and rejects will be stored for a maximum of one year. ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED. <div style="text-align: right;">  L. WONG - Chief Assayer _____ SIGNATURE AND TITLE </div> |
| Antimony | Sb | ND | | | | |
| Arsenic | As | * | | | | |
| Barium | Ba | ND | | | | |
| Beryllium | Be | ND | | | | |
| Bismuth | Bi | 0.07 | | | | |
| Boron | B | ND | | | | |
| Cadmium | Cd | ND | | | | |
| Calcium | Ca | 0.5 | | | | |
| Chromium | Cr | 0.001 | | | | |
| Cobalt | Co | 0.05 | | | | |
| Copper | Cu | 0.3 | | | | |
| Gallium | Ga | ND | | | | |
| Gold | Au | TRACE | | | | |
| Iron | Fe | MAJOR | | | | |
| Lead | Pb | 0.01 | | | | |
| Magnesium | Mg | 2. | | | | |
| Manganese | Mn | 0.3 | | | | |
| Molybdenum | Mo | 0.005 | | | | |
| Niobium | Nb | ND | | | | |
| Nickel | Ni | * | | | | |
| Potassium | K | ND | | | | |
| Silicon | Si | MAJOR | | | | |
| Silver | Ag | TRACE | | | | |
| Sodium | Na | ND | | | | |
| Strontium | Sr | 0.07 | | | | |
| Tantalum | Ta | ND | | | | |
| Thorium | Th | ** | | | | |
| Tin | Sn | ND | | | | |
| Titanium | Ti | 0.5 | | | | |
| Tungsten | W | ND | | | | |
| Uranium | U | * | | | | |
| Vanadium | V | 0.01 | | | | |
| Zinc | Zn | ND | | | | |

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

REPORT ON THE 'A' CLAIM GROUP

BRAINE CREEK AREA

MAYO MINING DIVISION

YUKON TERRITORY

North Latitude: 64°25'
West Longitude: 134°55'

on behalf of

DAWSON RANGE MINES LTD. (N.P.L.)

and

THUNDER CREEK MINES LTD. (N.P.L.)

by:

G. C. Gutrath, B.Sc., P.Eng., Geologist
ATLED EXPLORATION MANAGEMENT LTD.

August, 1974

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SUMMARY AND CONCLUSION

The A group of 16 contiguous claims is located on the east side of Braine Creek in the north central Yukon.

Access to the property is by helicopter from the community of Mayo, located 65 miles to the south.

The claim group is underlain by Precambrian dolomites that have been intruded by a gabbro stock of Cretaceous age.

A lead-zinc-copper-silver mineralized zone is located in a small creek that drains the claim group. The mineralization consists of galena, sphalerite, chalcopyrite, pyrrhotite and pyrite. The layered sulphide minerals occur as massive bands up to six inches wide bordered by lower grade altered dolomite.

The zone has a true width of 5.5 feet and strikes south 80° east and dips 27° to the south. It can be traced for 300 feet to the north before it is obscured by overburden. To the south the zone is completely masked by talus.

One sample across a true width of 5.5 feet assayed 0.003 ounces per ton gold, 1.57 ounces per ton silver, 2.61% zinc, 7.13% lead and 0.40% copper.

The second sample was composed of massive sulphides and assayed 0.005 ounces per ton gold, 4.48 ounces per ton silver, 20.6% lead, and 14.4% zinc and 0.64% copper.

Additional work is required to determine the extent and grade of the mineralized zone and the entire claim group should be prospected to see if additional zones can be located.

A CLAIM GROUP
BRAINE CREEK AREA
MAYO MINING DIVISION

INTRODUCTION

This report is written at the request of Mr. P. Polischuk
President of Dawson Range Mines Ltd. (N.P.L.)

The property was examined on August 12, 1974 with Mr. M.
Cloutier. The A claims #1 to #4 were checked and they are staked
according to the Yukon Quartz Mining Act. Mr. Cloutier staked an
additional 12 contiguous claims while the writer was carrying out the
property examination.

HISTORY

The property was located by Mr. M. Cloutier while carrying out reconnaissance prospecting and geochemical silt sampling program.

There has been no other work done on the property.

At the present time this particular area is being actively investigated by a number of companies. Cypress Resources Ltd. drilled a silver occurrence at Grey Copper Hill 12 miles to the west, and Anvil Mines Ltd. are drilling a property near Kathleen Lake 20 miles to the east of the "A" group.

CLAIMS

The A claim group was staked by Mr. M. Cloutier.

| <u>NAME</u> | <u>RECORD NUMBER</u> | <u>EXPIRY DATES</u> |
|-------------|----------------------|---------------------|
| A1 to A4 | Y95025-Y95028 | August 5, 1975 |
| A5 to A16 | Y96477-Y96488 | August 27, 1975 |

The claims are located in the Mayo Mining Division, NTS 106-D-7

RECOMMENDATION

The following exploration program is recommended to explore the claim group.

Phase I

1. Hand trench and sample the mineralized zone in the creek and along strike to the north and south.
2. Carry out a reconnaissance geochemical, geological and prospecting program on the entire claim group, with special attention being given to the magnetic anomalies that outline the contacts of the gabbro intrusive.

Phase II

Phase II will be contingent on the results of Phase I. If the results of the trenching are favourable drilling will be required to test the mineralized zone on the creek. Geochemical anomalous or additional mineralized zones located by the Phase I program will require more detailed investigation.

ESTIMATED COSTS

Phase 1

| | | |
|----|--|------------------------|
| 1. | Supervision and geological mapping 5 days @ \$150.00/day..... | \$ 750.00 |
| 2. | Geochemical silt sampling and prospecting 10 days - 2 men @ \$100.00/day..... | 1,000.00 |
| 3. | Trenching 10 days - 2 men @ \$125.00/day..... | 1,250.00 |
| 4. | Food and accommodation 50 man/days @ \$15.00/day..... | 750.00 |
| 5. | Analysis Assaying..... | \$ 500.00 |
| | Geochemical analyses..... | 250.00 |
| | | 750.00 |
| 6. | Transportation Scheduled Aircraft..... | 1,000.00 |
| | Helicopter 6 hours..... | 2,400.00 |
| | | <u>3,400.00</u> |
| | | 7,900.00 |
| | Overhead and contingencies @ 20%..... | <u>1,580.00</u> |
| | | \$ 9,480.00 |
| | | <u><u>9,480.00</u></u> |

Phase 11 (Contingent on Results of Phase 1)

| | | |
|----|---|----------------------------|
| 1. | 1,000 feet of diamond drilling at an overall cost of \$30.00/foot..... | \$ 30,000.00 |
| 2. | Trenching, sampling and detailed geological mapping..... | <u>15,000.00</u> |
| | | \$ <u><u>45,000.00</u></u> |

GEOGRAPHY

Location

The property is located on the east side of Braine Creek, a tributary of the Beaver River in the Yukon Territory. The community of Mayo is 65 miles to the southeast of the property.

Approximate co-ordinates of the property are $64^{\circ}25'$ north latitude and $134^{\circ}55'$ west longitude.

Access

Access to the property is by helicopter from Mayo. A winter tote road from Mayo follows the west side of Braine Creek.

Topography

The claims group cover a west facing cirque valley between the elevations of 3300 feet and 5500 feet. The mineralized zone is located on the north fork of the creek at an approximate elevation of 3,800 feet.

Climate

The climate is typical of the north central Yukon. Rain fall would vary from 20 to 25 inches per year and the maximum compacted winter snowfall at the 3,800 foot elevation would be 6 feet. The area would be free of snow from mid June to the end of September.

Vegetation

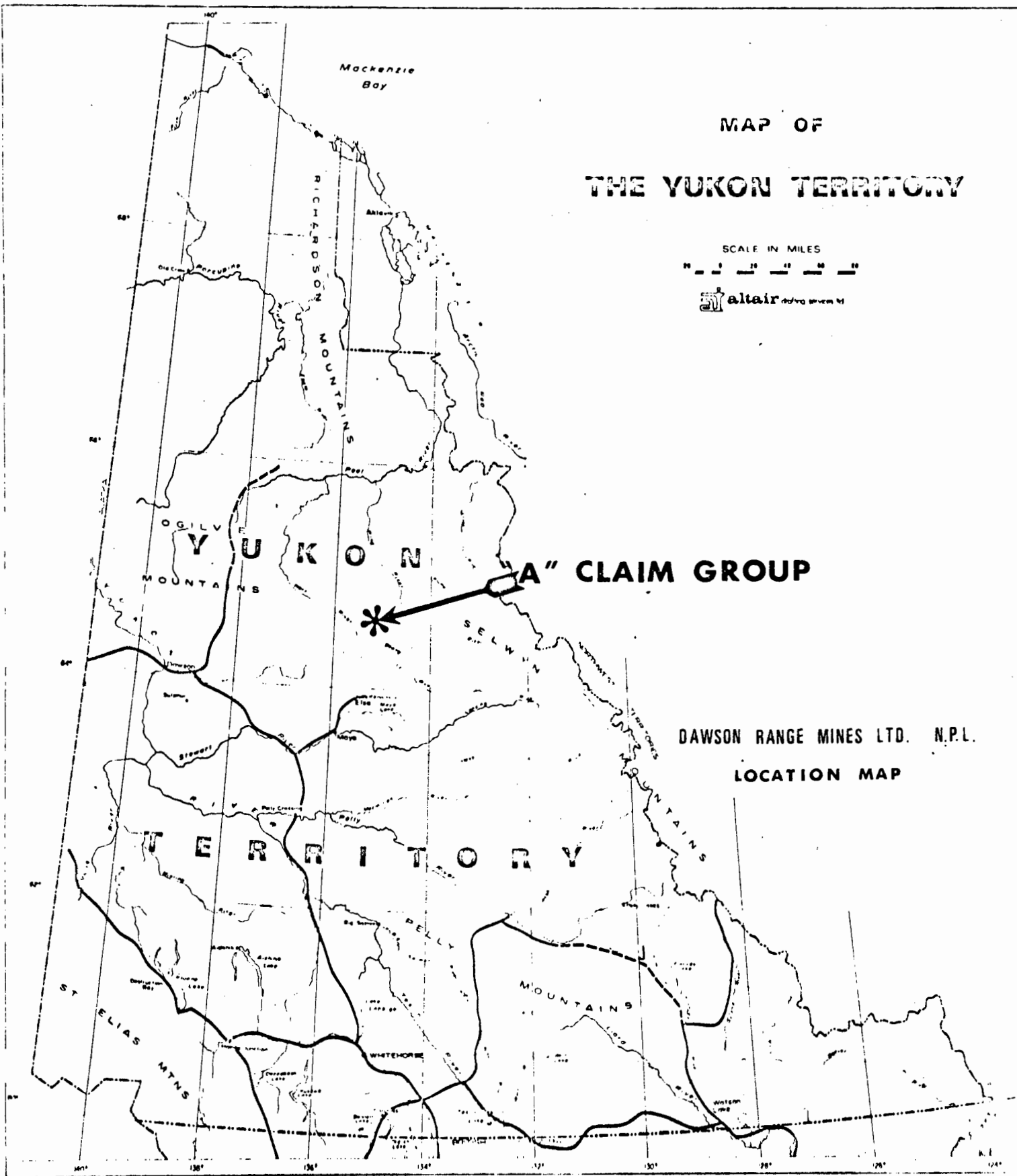
The majority of the cirque valley and the showing area as above timber line. In the valley of Braine Creek there is spruce suitable for mine timbers and general construction lumber.

Water

There is ample water on the property for drilling requirements.

MAP OF
THE YUKON TERRITORY

SCALE IN MILES
" 1" 2" 3" 4" 5"
altair



YUKON "A" CLAIM GROUP

DAWSON RANGE MINES LTD. N.P.L.
LOCATION MAP

obscured by talus . The zone strikes south 80° east, dips at 27° to the south and has a true width of 5.5 feet.

The mineralized zone consists of interbanded galena, sphalerite, chalcopyrite, pyrite and pyrrhotite in a tremolite skarn zone. Massive sulphides bands up to 5 inches wide are interbanded with bands from .5 to 1.5 feet wide weakly mineralized skarn.

Numerous small occurrences of copper and lead mineralization were noted in the altered dolomites in the cirque area. From 1% to 3% pyrrhotite occurs in the gabbro.

SAMPLING

| | | <u>Gold</u> <u>Oz/T</u> | <u>Silver</u> <u>Oz/T</u> | <u>Lead</u> <u>%</u> | <u>Zinc</u> <u>%</u> | <u>Copper</u> <u>%</u> |
|-----|--|----------------------------|------------------------------|-------------------------|-------------------------|---------------------------|
| A-1 | Chip sample of main mineralized zone area over a true width of 5.5 feet. | 0.003 | 1.57 | 7.13 | 2.61 | 0.40 |
| A-2 | Massive galena sphalerite, chalcopyrite and pyrrhotite from A-1 Section. | 0.005 | 4.48 | 20.6 | 14.4 | 0.64 |



GEOLOGY

General

The general geology of the area has been mapped on a scale of 1 inch equals 4 miles by G. H. Green and J. A. Roddick, 1961 of the Geological Survey of Canada and reported on in Memoir 364.

The A Group lies in a northwesterly trending sedimentary belt of Precambrian age that is primarily composed of dolomite with minor limestone, argillite, conglomerate and quartzite. This series has been intruded by a number of stocks, sills and dikes of diorite to gabbro composition that are believed to be Cretaceous age or older.

Property

The claim group is underlain by Precambrian dolomite that has been intruded by a large stock of gabbro composition.

The dolomite is a light grey green colour, strikes southeast to easterly and dips at 20° to 30° to the south. The dolomites have undergone a varying amount of alteration depending on its proximity to the intrusive contact.

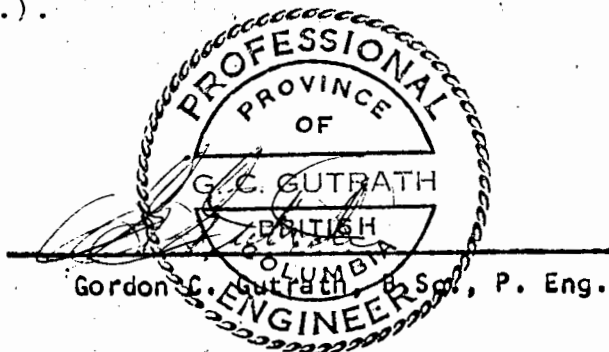
The gabbro is dark grey to dark brown in colour and has been weakly chloritized and serpentized.

A lead-zinc-copper mineralized zone is located in the south fork of the westerly flowing creek that originates at the head of the cirque valley. The zone is exposed in the creek over a distance of 20 feet and can be traced to the north for approximately 300 feet before it is obscured by overburden and vegetation. The the south the zone is completely

ENGINEER'S CERTIFICATE

I, GORDON C. GUTRATH, of 3636 Lakedale Avenue, in the Municipality of Burnaby, in the Province of British Columbia, DO HEREBY CERTIFY:-

1. That I am a consulting geologist with a business address of #420-475 Howe Street, Vancouver 1, B.C.
2. That I am a graduate of the University of British Columbia where I obtained my B.Sc. in geological science in 1960.
3. That I am a Registered Professional Engineer in the Geological Section of the Association of Professional Engineers in the Province of British Columbia.
4. That I have practised my profession as a geologist for the past fourteen years, and
5. That I have no interest in the property with which this report is concerned, nor do I expect to receive any such interest. I have no interest in the securities of Dawson Range Mines Ltd. (N.P.L.) or Thunder Creek Mines Ltd. (N.P.L.).



DATED at the City of Vancouver, Province of British Columbia, this 28th day of August, 1974.