

GEOLOGICAL REPORT

ON

THE BRONSON CLAIM GROUP

LIARD MINING DIVISION

B.C.

58°00'N - 125°00'W - SE

94K/3W

FOR

WINDERMERE EXPLORATION LTD. (N.P.L.)

1418 - 355 Burrard Street

Vancouver, B. C.

By

Albert F. Reeve, P.Eng.

Geological Engineer

July 26, 1969 - June 30, 1970

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## INTRODUCTION

This report is based on geological investigations carried out on the Bronson "A" and "B" claim groups during 1969 and 1970. It is submitted to the British Columbia Department of Mines to satisfy assessment requirements on seventy-three claims for 1 year.

## PROPERTY

| <u>Claim Name</u>              | <u>Record No.</u>       | <u>Record Date</u> |
|--------------------------------|-------------------------|--------------------|
| Bronson "A" Group (33 claims)  |                         |                    |
| Bronson #1 to #8               | 39808 to 15             | July 25, 1969      |
| Bronson #15 to #24             | 39822 to 31             | July 25, 1969      |
| Bronson #39                    | 40342                   | Oct. 3, 1969       |
| Bronson #40                    | 40343                   | Oct. 3, 1969       |
| Bronson #42                    | 40345                   | Oct. 3, 1969       |
| Bronson #44                    | 40347                   | Oct. 3, 1969       |
| Bronson #54 to #60             | 40356 to 62             | Oct. 3, 1969       |
| Bronson #62                    | 40364                   | Oct. 3, 1969       |
| Bronson #64                    | 40366                   | Oct. 3, 1969       |
| Bronson #66                    | 40368                   | Oct. 3, 1969       |
| Bronson #78                    | 40380                   | Oct. 3, 1969       |
| Bronson "B" Group (40 claims)  |                         |                    |
| Bronson #9 to #14              | 39816 to 21             | July 25, 1969      |
| Bronson #25 to #28             | 39832 to 35             | July 25, 1969      |
| Bronson #41                    | 40344                   | Oct. 3, 1969       |
| Bronson #43                    | 40346                   | Oct. 3, 1969       |
| Bronson # <del>46</del> to #50 | 4034 <del>8</del> to 53 | Oct. 3, 1969       |

PROPERTY (Cont'd)

2.

| <u>Claim Name</u>             | <u>Record No.</u> | <u>Record Date</u> |
|-------------------------------|-------------------|--------------------|
| Bronson "B" Group (40 claims) |                   |                    |
| Bronson #61                   | 40363             | Oct. 3, 1969       |
| Bronson #63                   | 40365             | Oct. 3, 1969       |
| Bronson #65                   | 40367             | Oct. 3, 1969       |
| Bronson #67 to #73            | 40369 to 75       | Oct. 3, 1969       |
| Bronson #76                   | 40378             | Oct. 3, 1969       |
| Bronson #77                   | 40379             | Oct. 3, 1969       |
| Bronson #79 to #88            | 40381 to 90       | Oct. 3, 1969       |

TOTAL NUMBER OF CLAIMS 73

Registered Owner:

Windermere Explorations Ltd. (N.P.L.)  
1418 - 355 Burrard Street  
Vancouver 1, B. C.

FMC #88664

LOCATION, LOCAL GEOGRAPHY & ACCESS

(Location Map Fig. 1 Appendix D)

The Bronson claims lie on a sharp, steep sided, E-W trending ridge about 20 miles south of the Churchill mine and 100 miles west of Ft. Nelson, B.C. Elevations range from 5,800' to 8,100' ASL. Rock exposure accounts for more than 50% of the area covered by the property. Fifteen to twenty per cent is occupied by glacial ice.

Present access is 20 miles by helicopter from a point on the Churchill road near the junction of Delano and Churchill Creeks. A tentative 35 mile access road route has been laid out along the Toad and upper Gataga River Valleys.

WORK DONE

METHOD

Detailed geological investigations consisted of compass, chain and altimeter mapping @ 1" = 200' and 1" = 1,000 ft. scales. Using a control base of expanded air photographs and photogrammetric topographic plans. This work was accompanied by limited hand trenching and channel sampling of mineralized exposures (See Fig. 5).

The services of a professional mountaineer were engaged to assist with mapping and sampling on the steepest rock faces.

PERSONNEL & CONTRACTORS

L. P. Duquette, Mining Technician

P. Ziebart, Mining Technician

Leo Verstraete, Mountaineer

Doug McGrath, Mountaineer

John Burton, Mountaineer

A. F. Reeve, Geological Engineer

Bondar-Clegg & Company Ltd., Assayers

Bronson Aero Services Ltd., Helicopter support

Cordilleran Engineering Limited, Consulting Geologists

McElhanney Surveying & Engineering Ltd., Photogrammetry

Any of the above named individuals or companies may  
be contacted;

c/o Cordilleran Engineering Limited  
1418 - 355 Burrard Street  
Vancouver, B. C.

Telephone: 681-8381

## REGIONAL GEOLOGY

### GENERAL

The Churchill-Racing River Region is occupied by paleozoic and proterozoic sedimentary rocks. An extensive system of NW trending basaltic dikes intrude the proterozoic strata.

Outcrop is generally abundant (more than 50%) except in drift-filled valleys and on lower talus slopes.

A fully detailed geological interpretation of the region is beyond the scope of available field data. Complete geological mapping of the entire area has been done by Dr. Gordon Taylor of the G.S.C. Publication of his map sheet is expected in 1970.

### STRATIGRAPHY AND LITHOLOGY

The following is a very general description of regional rock units. The stratigraphic aspect is treated here in the broadest possible terms because the local sequence has been somewhat complicated by faulting and folding.

UPPER PALEOZOIC

The youngest rocks in the immediate area are thickly bedded grey carbonates which have been described as "Pre-Silurian" by others. These include dolomite, limestone, minor quartzite and sandy carbonates having a total thickness of more than 6,000'. They have gentle dips and are easily distinguished from the older sediments by their light color and relatively flat attitudes. They have a local areal extent of about 500 square miles, mainly in the North East part of the region.

A second lithologic group, included in the Upper Paleozoic, are reddish brown-purplish conglomerates and sandstones; they lie between the Pre Silurian carbonates and the Proterozoic. The largest outcrop is at Roosevelt Peak where this member is 3,000' thick. Elsewhere it is entirely absent from the regional sequence or has a thickness of only a few tens of feet.

Two NW trending limey black shale bands occur within the grey carbonate unit in the NE quarter of the area. According to Taylor of the G.S.C. these represent thin thrust plates of the Mississippian-Devonian Besa River Formation.

LOWER PALEOZOIC

This consists of moderately metamorphosed shales, argillites, schist, minor conglomerate, sandstone and limestone.



## REGIONAL GEOLOGY

### STRATIGRAPHY AND LITHOLOGY - Lower Paleozoic (Cont'd)

7.

They occupy two NW trending bands in the SW quarter of the area (500 sq. mi.). Their relationship in the local stratigraphic sequence is not precisely known by the writer. They have been described as members of the Windermere Formation by others.

### PROTEROZOIC

This unit is composed of shale, argillite, limey argillite, slate and minor grey quartzite and dolomite. It represents the local "basement" and has been related to the Purcell group in Southern B. C. (G.Taylor, G.S.C., verbal).

The bedding has been steeply to moderately inclined by folding, producing a marked angular conformity with the overlying grey carbonate and red clastic unit.

The Proterozoic has an areal extent of about 1,000 square miles and is important because it is the exclusive host of "Churchill-type" quartz-carbonate-copper sulphide veins.

### INTRUSIVE ROCKS

The only intrusives found in the area were hypabyssal basic dikes. They are dark grey to green in color and probably

## REGIONAL GEOLOGY

### INTRUSIVE ROCKS (Cont'd)

8.

have an average composition of basalt. The dikes are steeply to moderately inclined ( $90^{\circ}$  -  $45^{\circ}$ ), and have a general North to NNW trend and NNE in the northeast quarter of the region. They are usually 10' to several hundred feet in width and frequently can be traced for several miles along strike.

These intrusive rocks occur exclusively within the Proterozoic sedimentary unit and appear to be structurally controlled by faults and fractures. The walls show no significant contact metamorphism but are sometimes sheared and mineralized with quartz, carbonate and sulphides.

### STRUCTURE

The Churchill-Racing River Region is located immediately west of the Rocky Mountain Front Thrust Fault which strikes NW and dips SW. It divides the Paleozoic and Proterozoic sediments in the area of interest from softer Mesozoic sediments in the foothills region to the east.

The region is centered on a structural "high" or uplift which has caused Precambrian rocks to outcrop in an area otherwise occupied by Paleozoic and Mesozoic sediments.

Within this "high" is a topographic or structural depression referred to by Taylor (G.S.C.) as the Racing River Synclinorium which is filled by Pre Silurian sediments (i.e., grey carbonates, red clastics). Observation of this feature on a large scale map suggests a regional drag fold.

Locally folding and faulting has produced a consistent structural trend of NNW.

#### FAULTING

Four NNW striking major fault structures appear to occur in the area. They are from east to west.

- (a) West of the headwaters of Wokpash Creek,
- (b) along the west side of the Upper Racing River to the headwaters of Tentsi Creek,
- (c) immediately east of Mt. Roosevelt and,
- (d) along the upper reaches of the Toad River.

These faults are interpreted by Vale (UBC Thesis, 1957) as steep west-dipping thrusts. Considerable crumpling and drag folding was noted in Proterozoic rocks along the displaced zones.

Numerous smaller faults which are probably subsidiary to the major structures have trends of NNW and ENE. They are steep and have normal displacements.

## REGIONAL GEOLOGY

### STRUCTURE - Faulting (Cont'd)

10.

It is suspected that these secondary faults or fractures control the emplacement of basalt dikes and mineralized quartz-carbonate veins.

### FOLDING

The Proterozoic (Purcell) sediments are folded into a NNW trending anticlinorium. It is generally an open structure but, overturning was noted at the headwaters of Chrischa Creek and on the north side of Delano Creek east of the Churchill mine.

Upper Paleozoic rocks are gently warped, creating a clear angular unconformity with the underlying Purcell.

## LOCAL GEOLOGY

(Figure 3 Appendix "D")

The Bronson copper showings are located on an eastwest oriented ridge. The elevation of the ridge top is 7,900' to 8,100' ASL. A parallel valley immediately to the

north has an elevation of 6,100' to 6,500' ASL. The mineralized ridge is steep and rugged particularly on the north side. There are small patches of glacial ice nearby.

The area of interest is occupied by brown platey shales and limey argillites (Proterozoic). They strike NNW and dip 35° to 60° to the SW. This unit is overlain by younger limestone shales and argillites which dip 10° to 25° southwestward, and outcrop about 2,000' west of the mineralized zone.

Locally, at least 13 North to NW trending basic dikes cross the ridge. They are 50' to 500' in thickness with near vertical dips. Dikes in the immediate vicinity of the most intense mineralization show anomalous branching and irregularity along strike and are inclined at steep angles to the west.

A complex concentration of fractures and or small displacement faults are centred about the mineralized area. This feature is clearly apparent on the north face when viewed from a distance. The strongest of these fractures strikes North 60° E along the principal vein system and cuts through dikes without any substantial displacement. These fractures are apparently subsidiary to a fault system located in valleys to the north and northwest of the Bronson Prospect.

MINERALIZATION

The Bronson Prospect is a system of quartz-carbonate veins mineralized with chalcopyrite and bornite. There are two distinct zones of interest;

(a) On the North face of the Ridge a zone up to 170' wide; includes 3 to 5 subparallel veins each with exposed widths of 3' to 20'. This zone appears to dip at about 90° and has a strike of N 60° E. It has been traced horizontally for a distance of 4,000' and vertically for 1,200'.

The veins are well mineralized with chalcopyrite for a distance of about 2,000' at the western extremity of the zone. This is confirmed by observations of outcrop from the air, the float train below, and by limited prospecting and sampling on the face (9 chip samples). One section that was sampled contained 36.8 feet of exposed high-grade vein matter where the zone is 170' wide (see Fig. 6). The "D" vein on the north edge of the zone is the thickest and most persistent. It can be clearly traced for about 3,000'.

(b) On the south slope of the Ridge there are 3 veins 1' to 4' wide heavily mineralized with bornite and chalcopyrite in a zone

LOCAL GEOLOGY  
MINERALIZATION (Cont'd)

13.

that is 120' wide. The longest vein has been traced for 600'. The mineralization occurs on the sheared margins of a branched dike. It has a general trend of North to N 20° E and dips steeply westward.

SAMPLING RESULTS

Some difficulty was encountered in sampling the veins on the north face due to heavy snow and steep topography.

The south face was mapped and sampled by ordinary means. The results are shown on Table I and Figure 5, Assay Plan.

They can be summarized as follows:

|                         |     |         |
|-------------------------|-----|---------|
| Total Number of Samples | ... | 18      |
| Average Exposed Width   | ... | 4.7'    |
| Average Grade           | ... | 9.2% Cu |
| Number of veins sampled | ... | 8       |

On the north face the exposed veins can be grouped to produce weighted averages including intervein waste as follows: (See Fig. 6, Cross Section P-0)

(Continued on Page 14 following Tables I & II)

TABLE I

SAMPLING AND ASSAY DATA - BRONSON PROSPECT

| Sample No. | Location  | W Width            | G % Cu. | oz. Ag. | oz. Au. | WxG   | Remarks                                | Ref* |
|------------|---|--------------------|---------|---------|---------|-------|--|------|
| 401        | South Slope 1                                   | 2.5                | 9.49    | .88     | .01     | 23.7  | Swarm of four veins.                   | PZ   |
| 402        | South Slope 2                                   | 2.5                | 3.46    | .38     | .17     | 8.6   | Mineralized wall rock,                 | PZ   |
| 403        | South Slope 3                                   | 1.5                | 29.22   | 3.40    | Tr.     | 43.8  |  | PZ   |
| 404        | South Slope 4                                   | 2.0                | 26.51   | .78     | Tr.     | 53.0  | Not Sampled                            | PZ   |
| 405        | South Slope 5                                   | 4.0                | 15.36   | .18     | Tr.     | 61.4  |  | PZ   |
| 406        | South Slope 6                                   | 1.0                | 12.90   | 1.18    | Tr.     | 12.9  |  | PZ   |
| A135       | Float train below North Face, 1500' (Composite) | Est. 5'-10' (7.5') | 9.18    | .40     | .02     | 68.8  | Est. length of source 1000' to 3000'   | PS   |
| 417        | North Face A Vein                               | 3.0'               | 7.47    | .14     | .005    | 22.4  | Est. length of A Vein 700'             | LV   |
| 422        | North Face A Vein                               | 2.8'               | 9.85    | .06     | Tr.     | 27.6  |  | LV   |
| 451        | North Face B Vein                               | 3.0'               | 16.11   | .20     | Tr.     | 48.3  | One outcrop                            | LV   |
| 418        | North Face C Vein                               | 5.0'               | 17.69   | .14     | .01     | 88.4  | Possibly one vein 20' between samples. | LV   |
| 419        | North Face C <sub>1</sub> Vein                  | 8.0'               | 9.60    | .14     | Tr.     | 76.8  | Snow covered                           | LV   |
| 423        | North Face D Vein                               | 9' ( 6.0'          | 1.30    | Tr.     | Tr. )   | 10.0  |  |      |
| 424        | North Face D Vein                               | ( 3.0'             | .73     | Tr.     | Tr. )   |       |  |      |
| 425        | North Face D Vein                               | 5.0'               | 12.68   | .08     | .02     | 63.4  | Est. length of D Vein 3000'.           | LV   |
| 420        | North Face D Vein                               | 10.0'              | 6.32    | Tr.     | Tr.     | 63.2  |  | LV   |
| 421        | North Face D <sub>1</sub> Vein                  | 8.0'               | 2.63    | .06     | .01     | 21.0  |  |      |
| TOTALS     |   | 74.8'              |         |         |         | 693.3 |  |      |

\*Samples taken by Paul Ziebart,  
Peter Sevensma,  
Leo Verstraete

AVERAGE GRADE =  $\frac{693.3}{74.8}$  = 9.2% Cu.

AVERAGE WIDTH =  $\frac{74.8}{16}$  = 4.7 ft.

TABLE I



TABLE II

SAMPLING AND ASSAY DATA - BRONSON PROSPECT

Check Assays of Rejects

| <u>Sample No.</u> | <u>% Cu</u> |
|-------------------|-------------|
| 401               | 9.26        |
| 403               | 28.04       |
| 405               | 15.51       |
| 422               | 8.67        |
| 418               | 18.34       |
| 423               | 1.72        |
| 425               | 13.13       |
| 421               | 3.83        |

LOCAL GEOLOGY  
SAMPLING RESULTS (Cont'd)

14.

| <u>Veins</u> | <u>Total Width</u> | <u>Average Grade</u> |
|--------------|--------------------|----------------------|
| D            | 20'                | 4.1% Cu              |
| C,B          | 58'                | 3.7% Cu              |
| C,B,D        | 110'               | 2.7% Cu              |

The entire vein system has a total known strike length of 4,600'. 2,600 feet is heavily mineralized with copper sulphides.

SUMMARY & CONCLUSIONS

Copper mineralization was discovered in the area presently occupied by the Bronson Property as a result of prospecting and geochemical reconnaissance carried out during early June 1969.

The Bronson claims are located about 20 miles south of the Churchill Copper Mine, 100 miles west of Ft. Nelson, B. C. and are only accessible by helicopter at this time.

Copper occurs in a system of subparallel quartz-carbonate chalcopyrite veins, enclosed by moderately inclined shales of

Proterozoic age. Some bornite is also present in the veins. The mineralization is generally similar to material found on local properties being developed by Churchill Copper Corp. and Davis Keays Mining Co.

The results of mapping and sampling indicate a long persistent structure which is mineralized with chalcopyrite and bornite and can be summarized as follows:

|                         |     |         |
|-------------------------|-----|---------|
| Total Number of Samples | ... | 18      |
| Average Exposed Width   | ... | 4.7'    |
| Average Grade           | ... | 9.2% Cu |
| Number of veins sampled | ... | 8       |

On the north ridge face the exposed veins can be grouped to produce weighted averages including intervein waste as follows:

(See Fig. 7, Cross Section P-0)

| <u>Veins</u> | <u>Total Width</u> | <u>Average Grade</u> |
|--------------|--------------------|----------------------|
| D            | 20'                | 4.1% Cu              |
| C,B          | 58'                | 3.7% Cu              |
| C,B,D        | 110'               | 2.7% Cu              |

The entire vein system has a total known strike length of 4,600'. 2,600 feet is heavily mineralized with copper sulphides.

These preliminary results suggest that an economic volume copper bearing material may be present in the form of;

(a) a "multiple vein" deposit with an overall grade of 2-3% copper and a volume of more than 15 million tons.

or

(b) a series of single vein bodies totalling about 1 to 3 million tons having an average grade of more than 5% Cu.

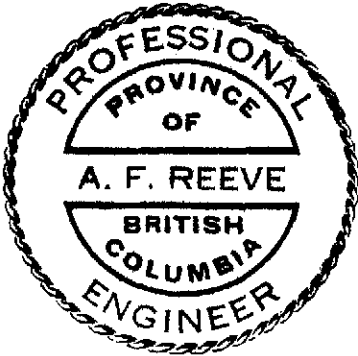
In view of this a continued, intensified exploration program is justified.

### RECOMMENDATION

It is suggested that an exploration program consisting of 5000' of diamond drilling be undertaken from an underground drilling station located below the mineralized outcrops on the north ridge face. Detailed surface sampling should be carried out in conjunction with this work.

The costs of such a program will be high (\$250,000 min.) because it would be supported by helicopter until access road

construction can be justified by the results of further sampling and drilling.



Respectfully submitted

WINDERMERE EXPLORATION LTD. (N.P.L.)

A handwritten signature in cursive script, appearing to read "A. F. Reeve".

A. F. Reeve, P.Eng.

July 15, 1970

APPENDIX A

STATEMENT OF ESTIMATED EXPENDITURES

STATEMENT OF ESTIMATED EXPENDITURES  
GEOLOGICAL INVESTIGATION OF  
THE BRONSON CLAIM GROUP.

SALARIES & FEES

|                                       |               |         |            |
|---------------------------------------|---------------|---------|------------|
| L. Verstraete, Mountaineer            | 20 days @\$70 | \$1,400 |            |
| J. Burton, Mountaineer                | 10 days @\$25 | 250     |            |
| D. McGrath, Mountaineer               | 10 days @\$30 | 300     |            |
| P. Ziebart, Mining<br>Technologist    | 5 days @\$25  | 125     |            |
| L.P. Duquette, Mining<br>Technologist | 10 days @\$30 | 300     |            |
| A.F. Reeve, Geological<br>Eng.        | 6 days @\$100 | 600     |            |
| R.J. Trimble, Geologist               | 3 days @\$30  | 90      | \$3,065.00 |

EMPLOYEE BENEFITS..... 150.00

FOOD SUPPLIES

55 man days @\$5..... 275.00

EQUIPMENT & SUPPLIES

Hardware, camp, climbing gear, explosives etc... 600.00

TRANSPORTATION

Helicopter 12 hrs. @\$100 +  
Aviation fuel & Lubricants..... 1,295.00

PHOTOGRAMMETRY..... 2,130.00

ASSAYING

18 samples @\$8..... 144.00

OFFICE

|                          |        |        |
|--------------------------|--------|--------|
| Drafting 5 days @\$30    | \$ 150 |        |
| Stenography 10 hrs. @\$3 | 30     |        |
| Printing                 | 20     |        |
| Office Supplies          | 50     | 250.00 |

TOTAL EXPENDITURE \$7,909.00

APPLY \$7,300 to cover 1 years assessment requirements on the  
Bronson A & B Groups.



APPENDIX B

AFFIDAVIT IN SUPPORT OF EXPENDITURES



APPENDIX B

|                              |   |                                |
|------------------------------|---|--------------------------------|
| CANADA                       | ) | IN THE MATTER of the statement |
|                              | ) | of Expenditures for geological |
| Province of British Columbia | ) | mapping of the Bronson Mineral |
|                              | ) | Claims in the Liard Mining     |
| TO WIT:                      | ) | Division.                      |

I, ALBERT F. REEVE, Geological Engineer, of 1418 - 355 Burrard Street, in the City of Vancouver, in the Province of British Columbia, DO SOLEMNLY DECLARE:

1. THAT the geological investigation of the Bronson Claim group was carried out under my direction.
2. THAT the Statement of Expenditures set out in Appendix "A" of my report "Geological Report on the Bronson Claim Group", dated July 26 to June 30, 1970, truly represents the amounts expended on geological mapping of the said claim group.

AND I make this solemen Declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virture of the Canada Evidence Act.

DECLARED before me at the  
 City of Vancouver, in the  
 Province of British Columbia,  
 this 15<sup>th</sup> day of July  
 A.D. 70.

)  
 )  
 )  
 )  
 ) 

J. T. Low

A Commissioner for taking  
 Affidavits for British Columbia

APPENDIX C

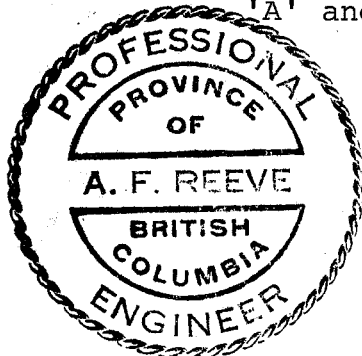
WRITERS CERTIFICATE OF QUALIFICATIONS

CERTIFICATE

I, ALBERT F. REEVE, of Vancouver, B. C.,

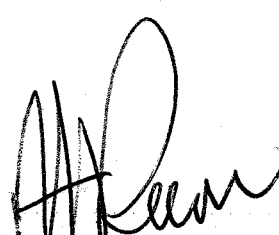
hereby certify that:

1. I am a geological engineer with an office at 1418 - 355 Burrard Street.
2. I am a graduate of the Provincial Institute of Mining, Haileybury, Ontario, 1958; and received a Bachelor of Science degree from Michigan College of Mining and Technology, Houghton, Michigan, 1961.
3. I am a certified member of the associations of Professional Engineers in the provinces of Ontario and British Columbia.
4. I am the author of this report.
5. I supervised geological investigation of the Bronson 'A' and 'B' claim groups which are described herein.



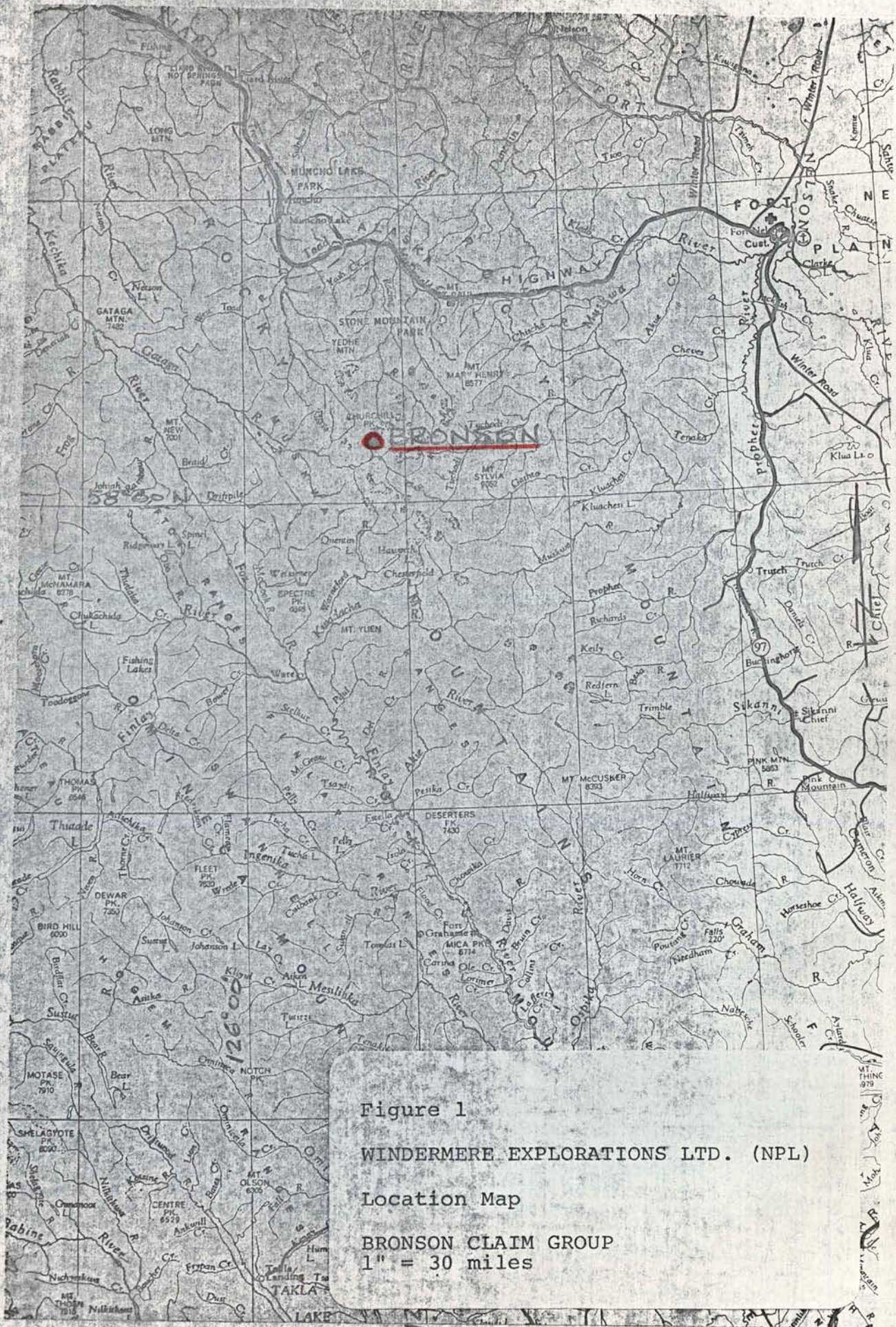
July 15, 1970  
Vancouver, B.C.

Signed

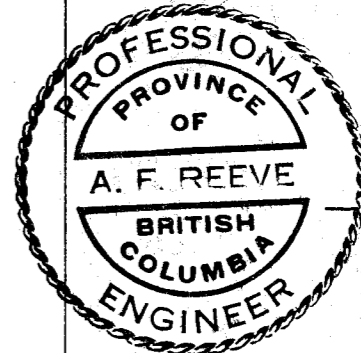
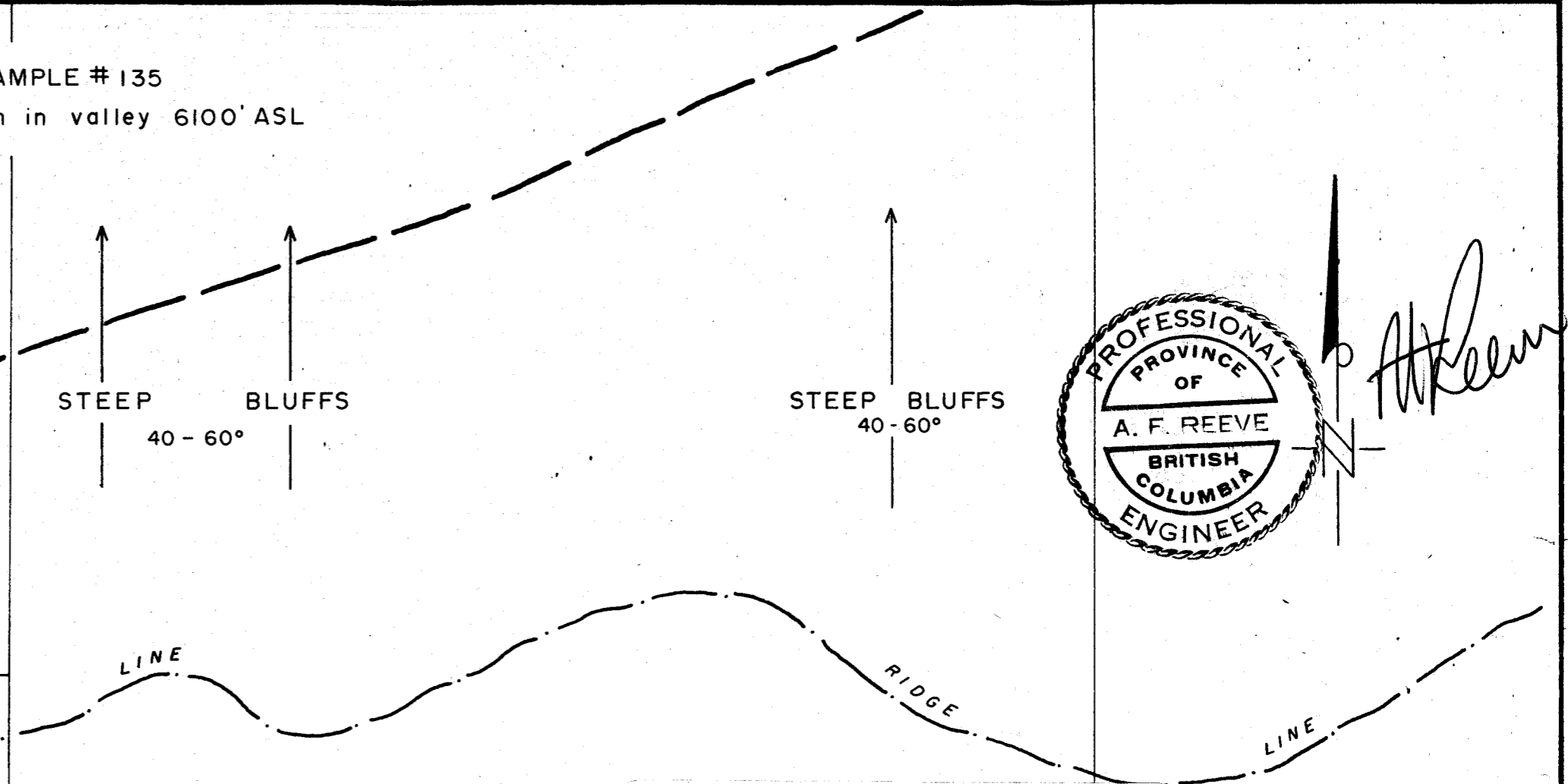
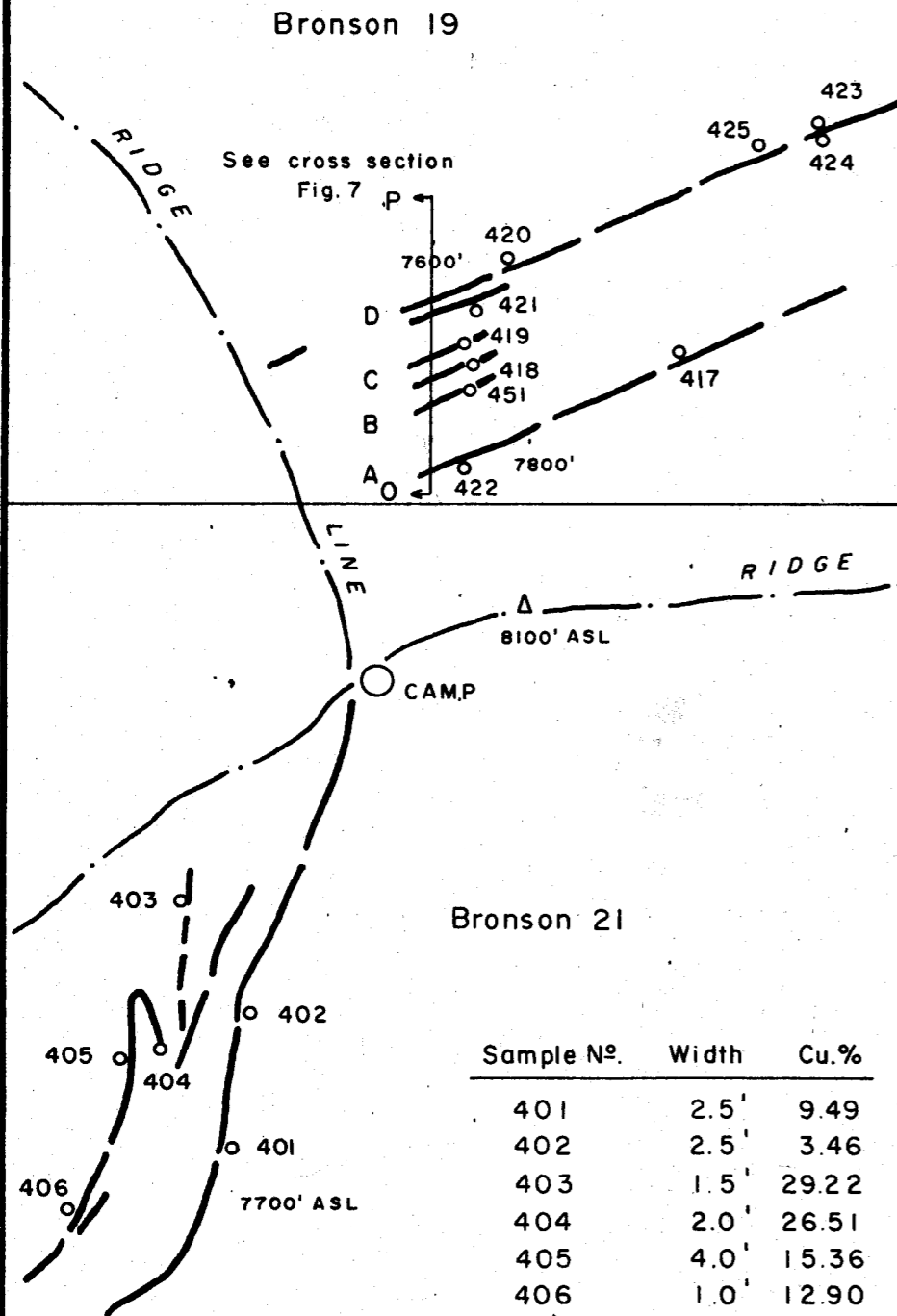
  
Albert F. Reeve, P.Eng.  
Geological Engineer

APPENDIX D

MAPS



COMPOSITE SAMPLE #135  
 Taken from float train in valley 6100' ASL



*A. F. Reeve*

Bronson 6  
 Bronson 8

Bronson 5  
 Bronson 7

TO ACCOMPANY GEOLOGICAL REPORT,  
 BY A. F. Reeve, P. Eng., on the  
 BRONSON GROUP,  
 100 miles West of Fort Nelson, B. C.  
 1  
 DATED: July 15, 1970.

| Sample No. | Width | Cu. % |
|------------|-------|-------|
| 401        | 2.5'  | 9.49  |
| 402        | 2.5'  | 3.46  |
| 403        | 1.5'  | 29.22 |
| 404        | 2.0'  | 26.51 |
| 405        | 4.0'  | 15.36 |
| 406        | 1.0'  | 12.90 |

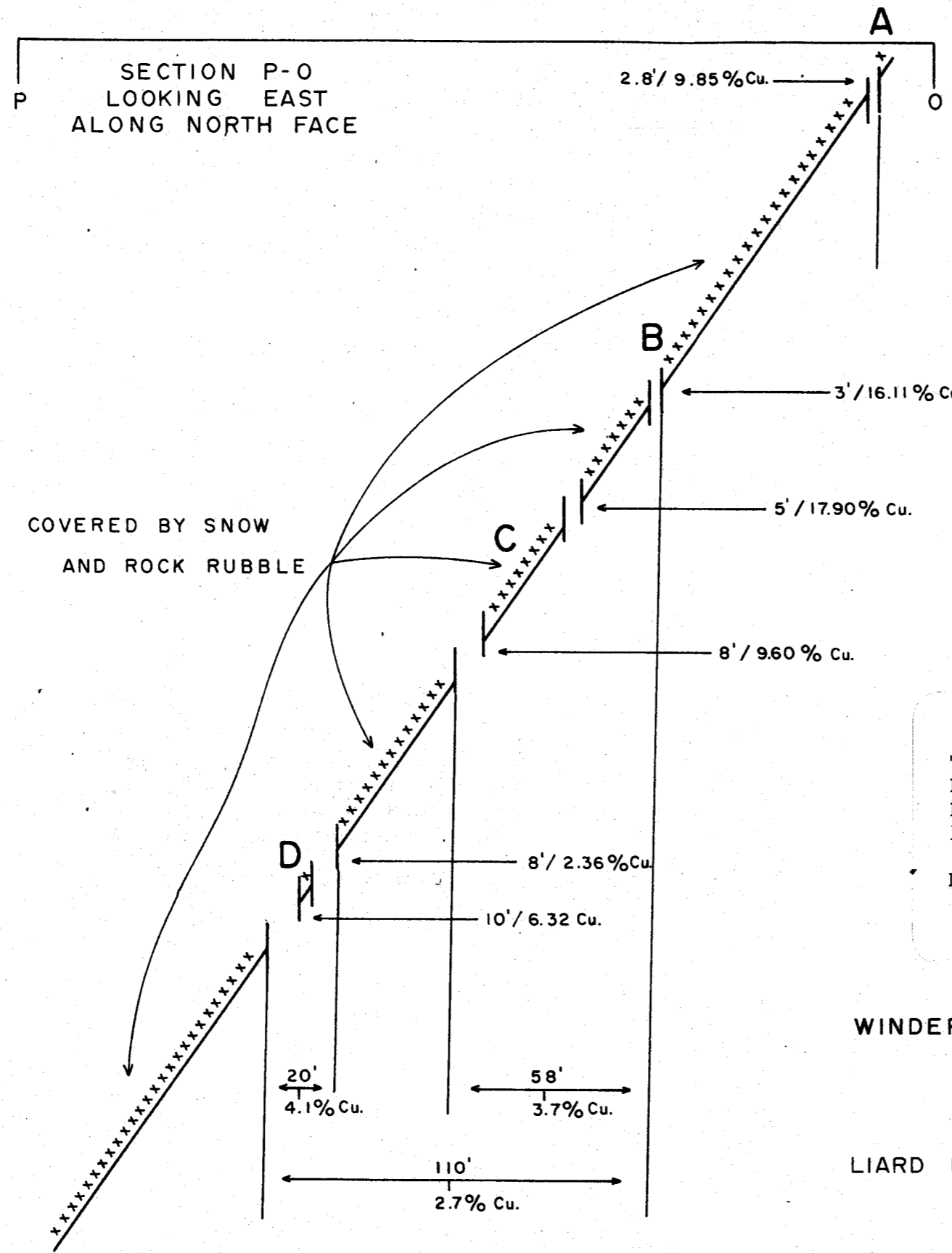
| Sample No. | Width | Cu. % |
|------------|-------|-------|
| 417        | 3.0'  | 7.47  |
| 418        | 5.0'  | 17.69 |
| 419        | 8.0'  | 9.60  |
| 420        | 10.0' | 6.32  |
| 421        | 8.0'  | 2.63  |
| 422        | 2.8'  | 9.85  |
| 423        | 6.0'  | 1.30  |
| 424        | 3.0'  | .73   |
| 425        | 5.0'  | 12.67 |
| 451        | 3.0'  | 16.11 |

WINDERMERE EXPLORATION LIMITED (N.P.L.)  
 BRONSON PROSPECT  
 ASSAY PLAN

LIARD MINING DIVISION BRITISH COLUMBIA

Scale 1" = 200'  
 by

CORDILLERAN ENGINEERING LIMITED  
 1418-355 BARRARD ST. VANCOUVER 1, B.C.



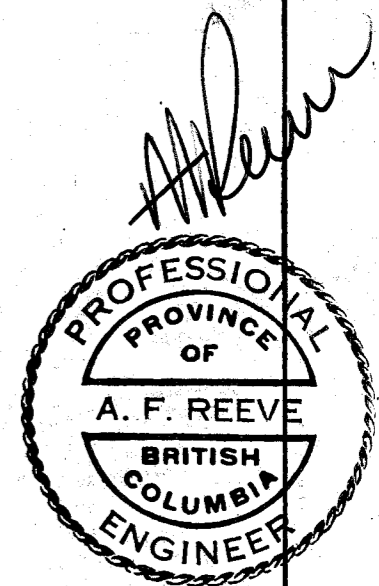
SECTION P-O  
LOOKING EAST  
ALONG NORTH FACE

COVERED BY SNOW  
AND ROCK RUBBLE

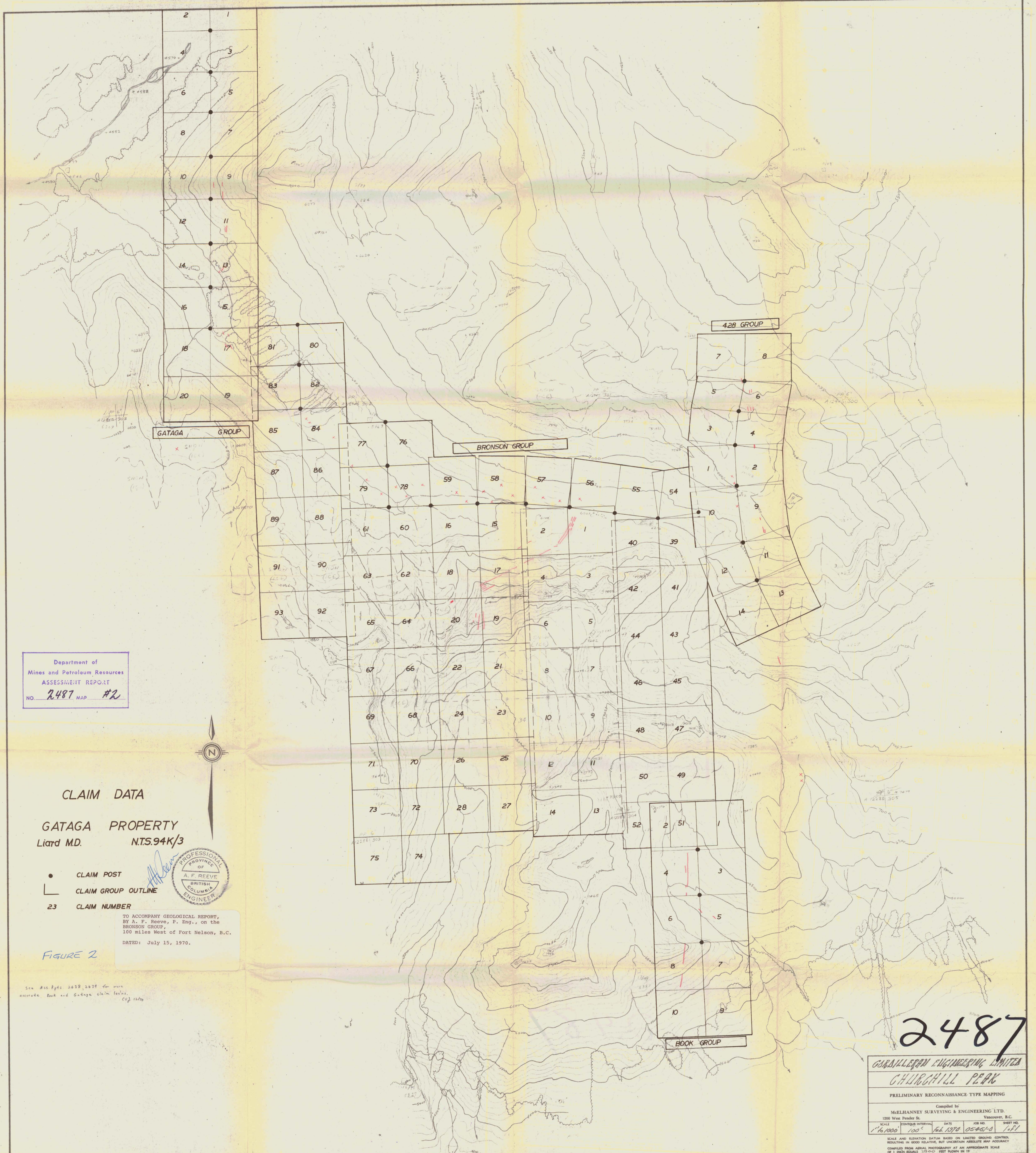
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2487 MAP #6

TO ACCOMPANY GEOLOGICAL REPORT,  
BY A. F. Reeve, P. Eng., on the  
BRONSON GROUP,  
100 miles West of Fort Nelson, B.C.  
DATED: July 15, 1970.

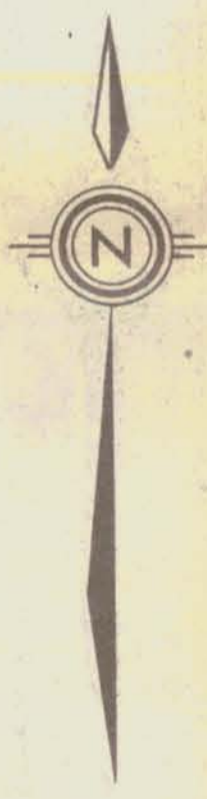
WINDERMERE EXPLORATION LIMITED (N.P.L.)  
BRONSON PROSPECT  
SECTION P-O NORTH FACE  
LIARD MINING DIVISION BRITISH COLUMBIA



Scale 1" = 40'  
by  
CORDILLERAN ENGINEERING LIMITED  
1418-355 BARRARD ST. VANCOUVER 1, B.C.



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. **2487** MAP #2



**CLAIM DATA**

**GATAGA PROPERTY**  
Liard M.D. N.T.S.94K/3

- CLAIM POST
- └ CLAIM GROUP OUTLINE
- 23 CLAIM NUMBER



TO ACCOMPANY GEOLOGICAL REPORT,  
BY A. F. Reeve, P. Eng., on the  
BRONSON GROUP,  
100 miles West of Port Nelson, B.C.  
DATED: July 15, 1970.

**FIGURE 2**

See Ass Rpts 2638, 2639 for more  
accurate Book and Gataga claim locations.

**2487**

**GORDALEGAN ENGINEERING LIMITED**  
**CHURCHILL PEAK**  
PRELIMINARY RECONNAISSANCE-TYPE MAPPING

Compiled by  
McELHANNAY SURVEYING & ENGINEERING LTD.  
1290 West Pender St. Vancouver, B.C.

|            |                  |           |          |           |
|------------|------------------|-----------|----------|-----------|
| SCALE      | CONTOUR INTERVAL | DATE      | JOB NO.  | SHEET NO. |
| 1" = 1000' | 100'             | July 1970 | 05-261-0 | 1 of 1    |

SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL, RESULTING IN GOOD RELATIVE, BUT UNCERTAIN ABSOLUTE MAP ACCURACY. COMPILED FROM AERIAL PHOTOGRAPHY AT AN APPROXIMATE SCALE OF 1 INCH EQUALS 2500 FEET FLOWN IN 1970.



**GEOLOGY  
LEGEND**

UPPER PALEOZOIC

**A** Limestone

LOWER PALEOZOIC

**B** Brown shale and argillite

PROTEROZOIC

**C** Mainly shale and limy argillite

PROTEROZOIC & LATE PALEOZOIC

Basic dikes

Quartz-carbonate-sulphide veins

Mineralized float

Attitude of bedding

Fault

Limited outcrop

Glacier

Claim groups perimeter

Geological contact

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2487 MAP #3



2487

TO ACCOMPANY GEOLOGICAL REPORT,  
BY A. F. REEVE, P. Eng., on the  
BRONSON GROUP,  
100 miles West of Fort Nelson, B.C.  
DATED: July 15, 1970.

GATAGA PROPERTY

LIARD M.D. NTS 94K/3

GURSHILLERAN ENGINEERING LIMITED

CHURCHILL PEAK

PRELIMINARY RECONNAISSANCE TYPE MAPPING

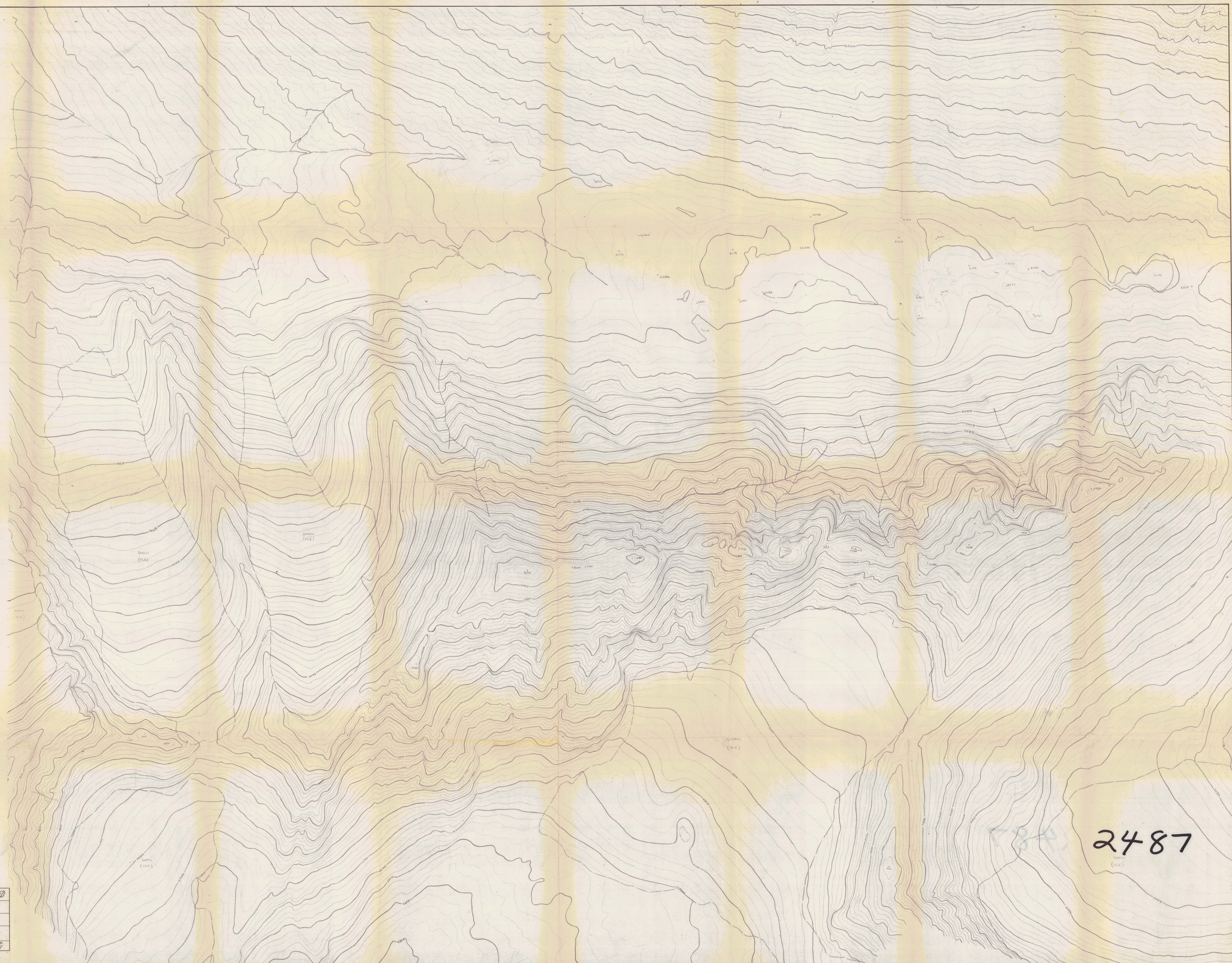
Compiled by  
MELHANEY SURVEYING & ENGINEERING LTD.  
Vancouver, B.C.

|            |                  |          |         |           |
|------------|------------------|----------|---------|-----------|
| SCALE      | CONTOUR INTERVAL | DATE     | JOB NO. | SHEET NO. |
| 1"=10,000' | 100'             | Jul 1970 | 05451-0 | 1 of 1    |

SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL.  
RESULTING IN GOOD RELATIVE, BUT UNCERTAIN ABSOLUTE MAP ACCURACY.  
COMPILED FROM AERIAL PHOTOGRAPHY AT AN APPROXIMATE SCALE  
OF 1 INCH EQUALS 2500 FEET PLANNED IN 1950.



FIGURE 3



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2487 MAP #4



TO ACCOMPANY GEOLOGICAL REPORT,  
BY A. F. REEVE, P. Eng., on the  
BROWN GROUP,  
100 miles West of Fort Nelson, B.C.  
DATED: July 15, 1970.

2487

PROFESSIONAL  
ENGINEERING  
OF  
A. F. REEVE  
BRITISH  
COLUMBIA  
ENGINEER

*A. F. Reeve*  
FIGURE 4

GORHAM ENGINEERING LIMITED  
CHURCHILL PEAK

PRELIMINARY RECONNAISSANCE TYPE MAPPING  
Compiled by  
MELHANNY SURVEYING & ENGINEERING LTD.  
100 West Pender St. Vancouver, B.C.

|           |                  |          |         |           |
|-----------|------------------|----------|---------|-----------|
| SCALE     | CONTOUR INTERVAL | DATE     | JOB NO. | SHEET NO. |
| 1" = 200' | 25'              | 26/07/70 | 05451-2 | 1/11      |

SCALE AND ELEVATION DATA BASED ON LIMITED GROUND CONTROL.  
ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL UNLESS OTHERWISE SPECIFIED.  
COMPILED FROM AERIAL PHOTOGRAPHY AT AN APPROXIMATE SCALE  
OF 1" = 1000' (1:12500) PRT. NUMBER 11.