

LOG NO: DEC 18 1991 RD.

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FILE NO:

COMINCO LTD

EXPLORATION
NTS: 104G/3

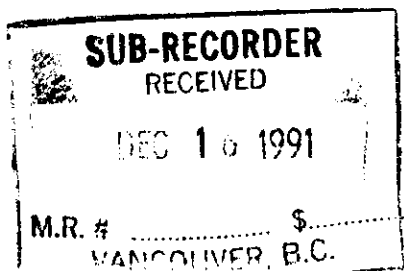
WESTERN CANADA
November 29, 1991

ASSESSMENT REPORT

Geological Work on
Fore 29 and Fore 30 Mineral Claims
Liard Mining Division, British Columbia

Latitude: 57°02'N

Longitude: 131°02'W



Work Performed
August 11-26, 1991

Owner and Operator
Cominco Ltd

M.G. WESTCOTT

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,936

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COMINCO LTD

EXPLORATION

NTS:

WESTERN CANADA

November 29, 1991

SUMMARY

Cominco Ltd staked the Fore 29 and Fore 30 mineral claims on June 25, 1991. These claims comprise the westernmost portion of Cominco Ltd's Foremore property, where exploration efforts have focused on locating the source of Zn, Pb, Ag \pm Cu, \pm Au mineralization found in boulders located at the toe of a large valley glacier.

The 1991 exploration program involved prospecting and mapping rock exposures on the Fore 29 and Fore 30 mineral claims. Expenditures for work performed in 1991 totalled \$14,055. Exploration efforts in 1991 failed to locate any significant mineralization and the source of the mineralized boulders remains unknown.

INTRODUCTION

The initial Foremore claim group was staked in 1987 following discovery of (a) "massive" iron-oxide \pm chalcopyrite and (b) auriferous quartz vein \pm sulphide boulders at the toes of a large glacier. A follow-up program in 1988 located and evaluated the gold bearing quartz \pm sulphide veins and located a mineralized boulder field comprised of Zn/Ag/Pb bearing sulphide-rich boulders. In 1989 Zn/Cu/Pb/Au/Ag bearing sulphide-rich boulders were discovered. Geologic mapping, prospecting and geophysical surveys were conducted in 1989 and 1990 in an effort to locate the source of the sulphide mineralization. It was concluded that the source of the mineralized boulders is located beneath the large valley glacier.

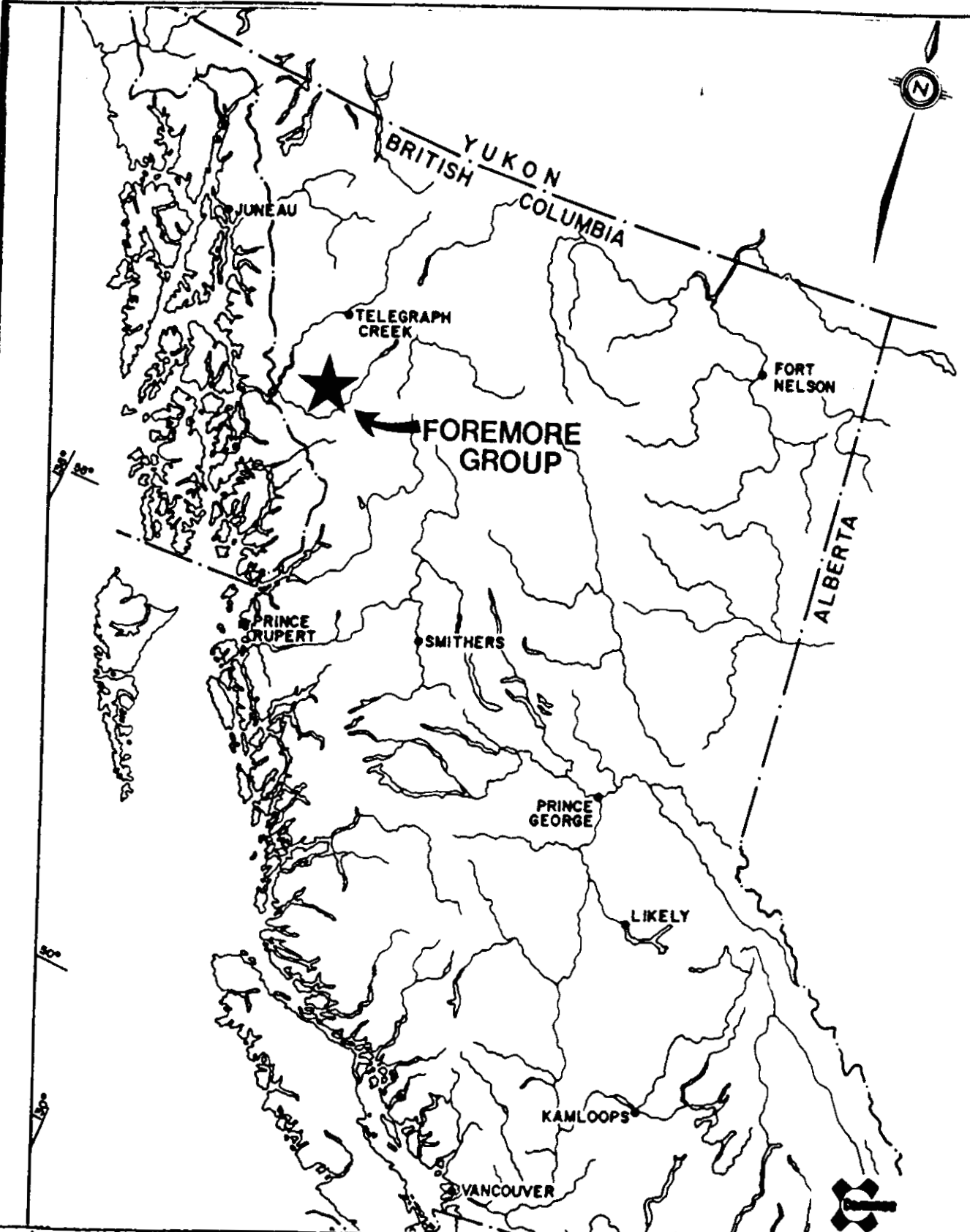
In 1990, a diamond drilling program consisting of five holes (totalling 1363 m) tested geophysically defined targets beneath the glacier. No significant mineralization was intersected in drill core.

The 1991 program on the Foremore property entailed geologic mapping (1:2500 scale) and prospecting ground covered primarily by the fore 29 and Fore 30 claims. The mapping was carried out as part of an ongoing property mapping project commenced in 1989.

LOCATION AND ACCESS

Fore 29 and Fore 30, comprising the westernmost portion of the Foremore claim group, are located in the Liard Mining Division on the southeast corner of NTS Map Sheet 104G/3. The claims have a common legal corner post located at latitude: 57°01'43" and longitude 131°01'29".

The claims are accessible via helicopter from Bronson airstrip (44 km south), Bob Quinn airstrip (46 km east), or Forest Kerr airstrip (16 km southeast). Nearest road access is highway 37, an all-weather road 46 km to the east.

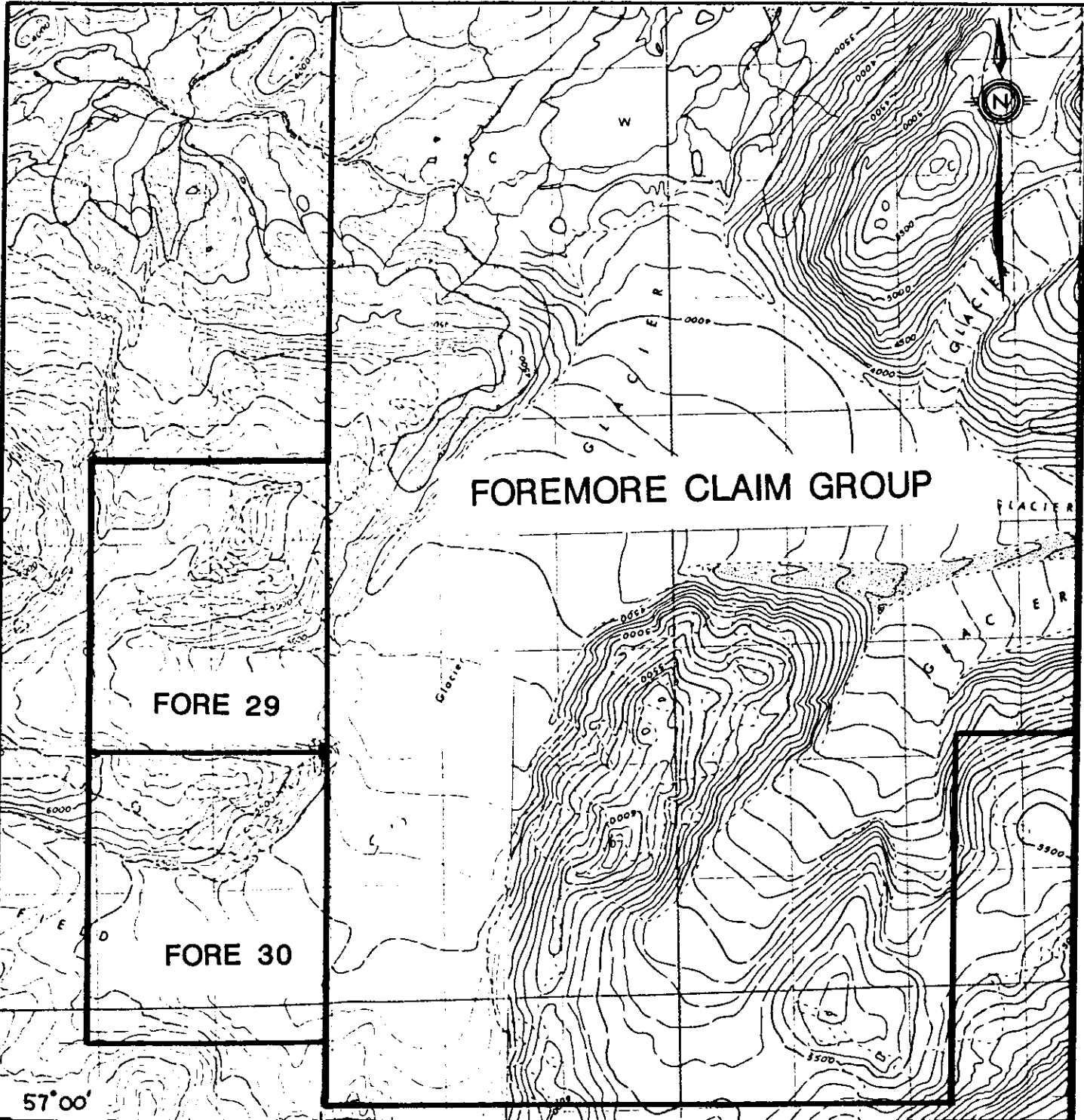


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LOCATION MAP

FIGURE 1

Scale: 1 : 1000000 Date: Nov., 1991 Plate:



57°00'

75 76 377000m E 78 131°00' 79 380000m E 81 82 83



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

CLAIM MAP

FIGURE 2

Scale: 1:50,000 Date: Nov., 1991 Plate:

4.

TENURE

The Foremore claim group consists of 32 claims totalling 599 units. All claims are 100% owned and operated by Cominco Ltd.

<u>Claim</u>	<u>Units</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>Due Date</u>
More 1	20	4400	Dec. 01/87	Dec. 01/96
More 2	20	4401	Dec. 01/87	Dec. 01/99
More 3	20	4402	Dec. 01/87	Dec. 01/96
More 4	20	4403	Dec. 01/87	Dec. 01/96
Fore 1	20	4404	Dec. 01/87	Dec. 01/96
Fore 2	20	4405	Dec. 01/87	Dec. 01/96
Fore 3	20	4406	Dec. 01/87	Dec. 01/96
Fore 4	20	4407	Dec. 01/87	Dec. 01/96
Fore 5	20	4604	Jun. 03/88	Jun. 03/96
Fore 6	20	4605	Jun. 03/88	Jun. 03/96
Fore 7	20	4606	Jun. 03/88	Jun. 03/96
Fore 8	20	4607	Jun. 03/88	Jun. 03/96
Fore 9	20	4608	Jun. 03/88	Jun. 03/96
Fore 10	20	4609	Jun. 03/88	Jun. 03/96
Fore 11	20	4610	Jun. 03/88	Jun. 03/96
Fore 12	20	5349	Sept 25/88	Sept 25/96
Fore 13	20	5350	Sept 25/88	Sept 25/93
Fore 14	20	5351	Sept 25/88	Sept 25/96
Fore 15	20	5352	Sept 25/88	Sept 25/93
Fore 16	20	5353	Sept 26/88	Sept 26/93
Fore 17	20	5354	Sept 26/88	Sept 26/93
Fore 18	20	5355	Sept 26/88	Sept 26/93
Fore 19	20	5356	Sept 26/88	Sept 26/93
Fore 20	20	6237	Aug 23/89	Aug 23/96
Fore 21	20	6238	Aug 23/89	Aug 23/96
Fore 22	15	6236	Aug 23/89	Aug 23/96
Fore 20	6	6488	Oct. 03/89	Oct. 03/96
Fore 23	15	6489	Oct. 03/89	Oct. 03/96
Fore 24	20	6490	Oct. 05/89	Oct. 05/96
Fore 25	3	6491	Oct. 05/89	Oct. 05/96
Fore 29	20	301327	Jun 25/91	Jun 25/92
Fore 30	20	301328	Jun 25/91	Jun 25/92

GEOLOGY

(a) Regional

The Foremore property is situated within the Stikine terrane, on the western margin of the Intermontane Belt. Stratigraphy in the area consists of Paleozoic, Triassic and Jurassic arc-related volcanic and sedimentary rocks.

5.

Paleozoic (Stikine Assemblage) stratigraphy in the area is dominated by: schists, phyllites, limestones and greenstones. Original lithologies were felsic to mafic tuffs, pyroclastic breccias, argillaceous sediments and gabbroic sills (Holbek, 1988). Stikine Assemblage rocks are variably metamorphosed and deformed, largely as a result of the Permian to mid-Triassic Tahltanian orogeny (Souther, 1971 and 1972; Read and Okulitch, 1977). Widespread alteration assemblages are characteristic of lower greenschist facies metamorphism (i.e. epidote, chlorite, muscovite). The contact between Paleozoic and Mesozoic rocks is everywhere mapped as either a fault or unconformity (Holbek, 1988).

Triassic (Stuhini Group) rocks in the area are typically andesitic flows and tuffs and are weakly to moderately deformed. Middle Triassic diorite and granodiorite intrusive bodies such as Hickman Batholith, located 20 km northwest of Foremore, may be coeval with Stuhini volcanics (Holbek, 1988). Upper Triassic stratigraphy is dominated by shales, cherts, conglomerates and volcanoclastics.

Jurassic and Tertiary intrusives locally cut the Paleozoic and Triassic stratigraphy.

(b) Property

The Foremore property is underlain by assorted volcanic, intrusive and sedimentary rocks of Paleozoic, Mesozoic and possibly Cenozoic age. Structural complexity and lack of distinct marker units makes stratigraphic interpretation difficult. The age-stratigraphic subdivisions that are tentatively defined are based largely on structural fabric (i.e. number and severity of deformational phases observed) and lithologic correlation. Locally, fossiliferous limestones provide lithologic age constraints.

Mapping in 1991 focussed on outcrop exposed on a nunatak located in the southwest corner of the property. Rock types comprising the nunatak section are described as follows:

UNIT

13 Felsic-intermediate sills (<10 m) and dykes (<2 m). Light green, fine grained, locally pyritiferous, non-foliated, age unknown.

POST-TRIASSIC (?)

12 Rhyolitic quartz-feldspar porphyry. Light purple-grey, 2-4 mm quartz eyes, non-foliated, likely high level intrusive equivalent of units 11t and 11fb.

11fb Quartz-feldspar porphyritic flow breccia. Light purple-grey, clasts (10-30 cm) provide evidence of fluvial reworking, non-foliated except adjacent to structures.

6.

11f Quartz-feldspar porphyritic lapilli-block tuff. Light purple-grey, heterolithic, +/- volcanoclastic component, non-foliated except adjacent to structures.

PERMIAN-TRIASSIC (?)

10 Basaltic flow breccia. Dark green +/- purple clasts, highly epidotized, pillowed locally, non-foliated.

9fb Andesitic-basaltic flow breccia, light-dark green +/- maroon, sub-well rounded clasts, volcanoclastic component evident, non-foliated.

9t Andesitic crystal-lapilli-block tuff. Medium-dark green, blocky fracture pattern, weak- no foliation, volcanoclastic component evident.

MISSISSIPPIAN AND OLDER (?)

Crin.

Lst. Crinoidal limestone. Light green-purple, average crinoid size 2-5 mm, occurs as pods and lenses within units 2-7, commonly has tuff component, moderately to well foliated.

8 Lapilli tuff, light mauve-green, well foliated.

7 Maroon and green schistose tuff. Intermediate composition, thin calcareous horizons interfoliated, crinoidal limestone lenses, tightly folded.

6 Felsic-intermediate ash and lapilli tuff. Light green, ash tuffs typically thin bedded, well foliated, crinoidal limestone lenses locally.

5 Interbedded argillite, chert, ash tuff and crinoidal limestone. Bedding parallel foliation.

4 Dark grey-black, shale/argillite, well developed bedding parallel parting.

7.

- 3 Felsic-intermediate ash-lapilli tuff +/- flow breccia. Light-medium green, moderately well foliated, occasional coarse crinoidal limestone lenses.
- 2 Intermediate ash-lapilli tuff and flow breccia. Medium-dark green, weak-moderate foliation, similar to Unit 3 but more mafic and less foliated, few lenses of crinoidal limestone.

DEVONIAN

- 1 Coralline limestone. Mottled light-dark grey, Favosites bearing, well foliated, variably argillaceous, locally tightly folded.

Units 1 through 8 comprise a layered stratigraphic package that strikes northwesterly and dips 15-30° to the southwest. The relationship between stratigraphic layering and bedding is not clear, as bedding transposition is probable within intensely deformed schistose sections.

The contact between Unit 1 and Unit 2 is everywhere occupied by a 5-10 m wide felsic-intermediate sill (Unit 13). This contact is thought to represent either a structural break or unconformity.

A northwest trending, westerly dipping angular unconformity separates older rocks (Units 1-8) and younger rocks (Units 9-12). Rocks west of the unconformity are weakly to non-foliated, while to the east deformational fabric ranges from a moderate foliation to a well developed schistosity.

Units 11t, 11fb and 12 are compositionally similar; all are felsic, light grey-purple and quartz-feldspar porphyritic. Unit 12 appears to represent an intrusive equivalent of Unit 11 flow breccias (11fb) and tuffs (11t).


CONCLUSIONS


The Fore 29 and Fore 30 claims were staked June 25, 1991 in order to cover outcrop exposed on a nunatak located at the southwest corner of the Foremore property. The 1991 exploration program entailed mapping (1:2500) and prospecting.


Mapping resulted in recognition of two distinct stratigraphic packages: (1) Mississippian-Devonian Stikine Assemblage strata comprised of felsic to intermediate volcanics and assorted sedimentary rocks including argillite, chert and limestone. Rocks within this package are moderately well foliated to schistose. (2) Post-Mississippian, intermediate volcanic flows and tuffs; and felsic quartz-feldspar porphyritic flows, tuffs and intrusions. Rocks comprising this package are weakly to non-foliated.

8.

Prospecting failed to locate any significant mineralization. The source of the mineralized boulders remains unknown.

Reported by: 
M.G. Westcott
Geologist

Endorsed by: 
I.A. Paterson
Senior Geologist

Approved for
Release by: 
W.J. Wolfe
Manager, Exploration
Western Canada

MGW/pm
Distribution

Mining Recorder
Western Canada

APPENDIX I

STATEMENT OF EXPENDITURES

Fore 29 and Fore 30 Claims
Work Performed August 11-26, 1991

Salaries			
M.G. Westcott	10 days @ \$280/day		\$2,800
S. Tooley	10 days @ \$225/day		2,250
Camp mobilization/construction			3,500
Helicopter support	4.5 hrs @ \$725/hr		3,045
Domicile (food, expediting)			1,200
Report preparation	2 days @ \$280/day		560
Drafting/Reproduction			700
			<hr/>
		Total Expenditure:	\$14,055

APPENDIX II

REFERENCES

- Hølbek, P.M. (1988): Geology and Mineralization of the Stikine Assemblage, Mess Creek Area, northwest British Columbia, Unpublished Msc. Thesis, The University of British Columbia.
- Read, P., and Okulitch, A.V. (1977): The Triassic Unconformity of South-Central British Columbia. Can. Jour. Earth Sci. Vol. 14 #4, pp. 606-638.
- Souther, J.G. (1971): Geology and Mineral Deposits of the Tulsequah Map-Area, British Columbia. GSC Memoir 362.
- (1972): Telegraph Creek map-area, GSC Paper 71-44.

APPENDIX III

CERTIFICATE

I, Michael G. Westcott, of #14-1101 West 8th Avenue, Vancouver, British Columbia, Canada, declare:

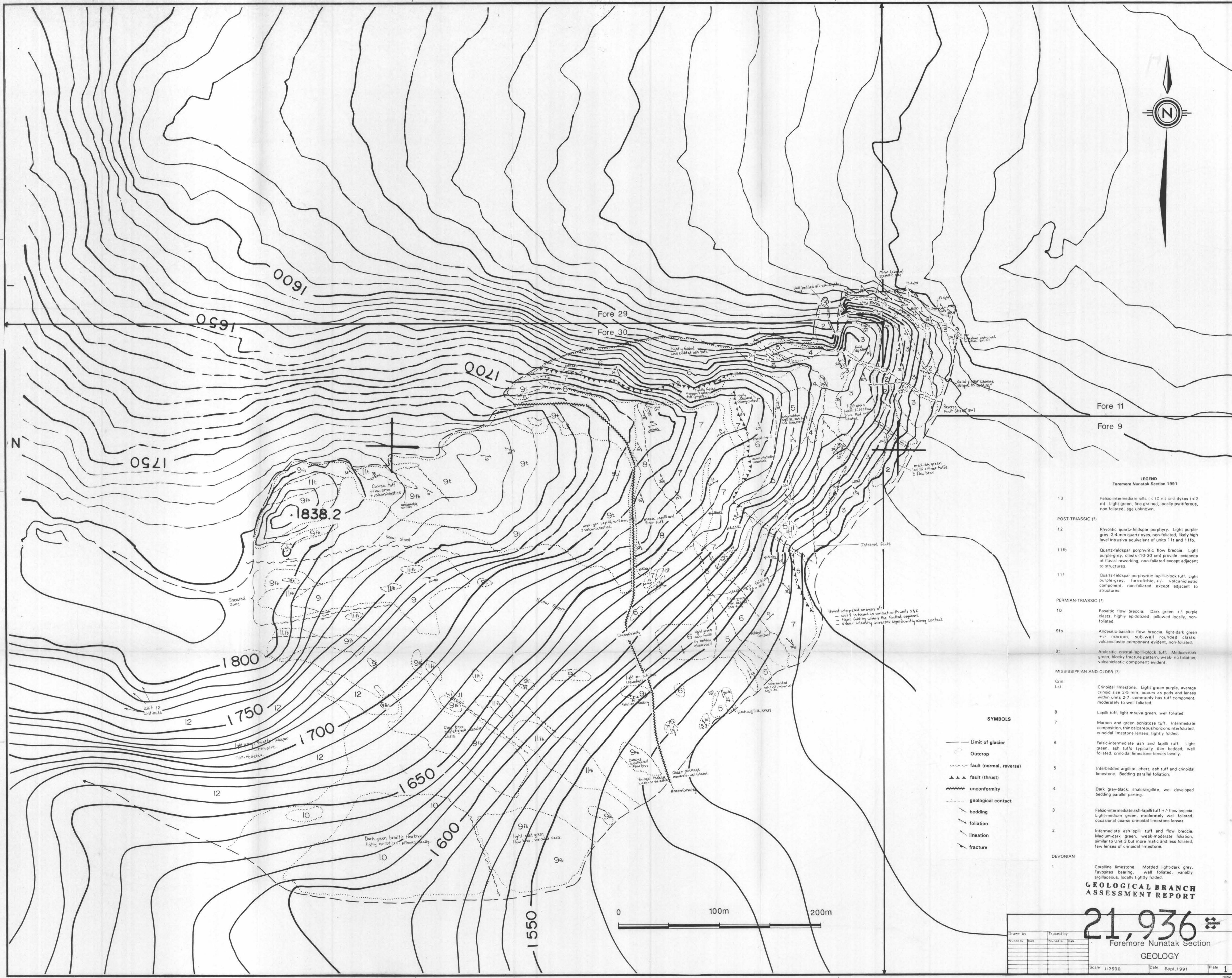
1. I am a geologist, residing at the above address.
2. I graduated from the University of British Columbia in 1988 with a Bachelor of Science (Geology) degree and from Queen's University, Kingston, Ontario in 1991 with a Masters of Science degree (Mineral Exploration).
3. I am an associate of the Geological Association of Canada.
4. This report is based on my person field examination of the property and a review of all pertinent information.

Dated at Vancouver, British Columbia, this

5th day of December 1991.



M.G. Westcott
Geologist



LEGEND
Foremore Nunatak Section 1991

- 13 Felsic intermediate sills (<10 m) and dykes (<2 m). Light green, fine grained, locally pyroclastic, non-foliated, age unknown.
- POST-TRIASSIC (?)
- 12 Rhyolitic quartz-feldspar porphyry. Light purple-grey, 2-4 mm quartz eyes, non-foliated, likely high level intrusive equivalent of units 11t and 11fb.
- 11fb Quartz-feldspar porphyritic flow breccia. Light purple-grey, clasts (10-30 cm) provide evidence of fluvial reworking, non-foliated except adjacent to structures.
- 11f Quartz-feldspar porphyritic lapilli-block tuff. Light purple-grey, heterolithic, +/- volcanoclastic component, non-foliated except adjacent to structures.
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- 10 Basaltic flow breccia. Dark green +/- purple clasts, highly epidotized, pillowed locally, non-foliated.
- 9fb Andesitic-basaltic flow breccia, light-dark green +/- maroon, sub-well rounded clasts, volcanoclastic component evident, non-foliated.
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- MISSISSIPPIAN AND OLDER (?)
- Crin. Crinoidal limestone. Light green-purple, average crinoid size 2-5 mm, occurs as pods and lenses within units 2, 7, commonly has tuff component, moderately to well foliated.
- Lst Lapilli tuff, light mauve-green, well foliated.
- 8 Maroon and green schistose tuff. Intermediate composition, thin calcareous horizons interfoliated, crinoidal limestone lenses, tightly folded.
- 7 Felsic-intermediate ash and lapilli tuff. Light green, ash tuffs typically thin bedded, well foliated, crinoidal limestone lenses locally.
- 6 Interbedded argillite, chert, ash tuff and crinoidal limestone. Bedding parallel foliation.
- 5 Dark grey-black, shales/argillite, well developed bedding parallel parting.
- 4 Felsic-intermediate ash-lapilli tuff +/- flow breccia. Light-medium green, moderately well foliated, occasional coarse crinoidal limestone lenses.
- 3 Intermediate ash-lapilli tuff and flow breccia. Medium-dark green, weak-moderate foliation, similar to Unit 3 but more mafic and less foliated, few lenses of crinoidal limestone.
- 2 Devonian
- 1 Coralline limestone. Mottled light-dark grey, Favosites bearing, well foliated, variably argillaceous, locally tightly folded.

SYMBOLS

- Limit of glacier
- Outcrop
- fault (normal, reverse)
- ▲▲▲ fault (thrust)
- ~~~ unconformity
- - - geological contact
- ↗ bedding
- ↘ foliation
- lineation
- ↖ fracture

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,936 #
Foremore Nunatak Section
GEOLOGY

Drawn by	Traced by
Revised by	Revised by