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255

82E SE179

GRAND FORKS MINES LTD.

REPORT

HEK AND HEL CLAIMS

NTS: 82E/1W

LAT: 49 12' N

LONG: 118 35' W

GRAND FORKS MINES LTD.

100-450 West Georgia Street

Vancouver, B.C.

V6B 1Z3

Vancouver, British Columbia

Sept. 15th, 1985

ROY WARES, P. Eng.

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1. INTRODUCTION

1.1. Location

The Hek and Hel claims are located in the Boundary District of British Columbia, 21 km north of Grand Forks, the regional supply centre. (Fig. 1)

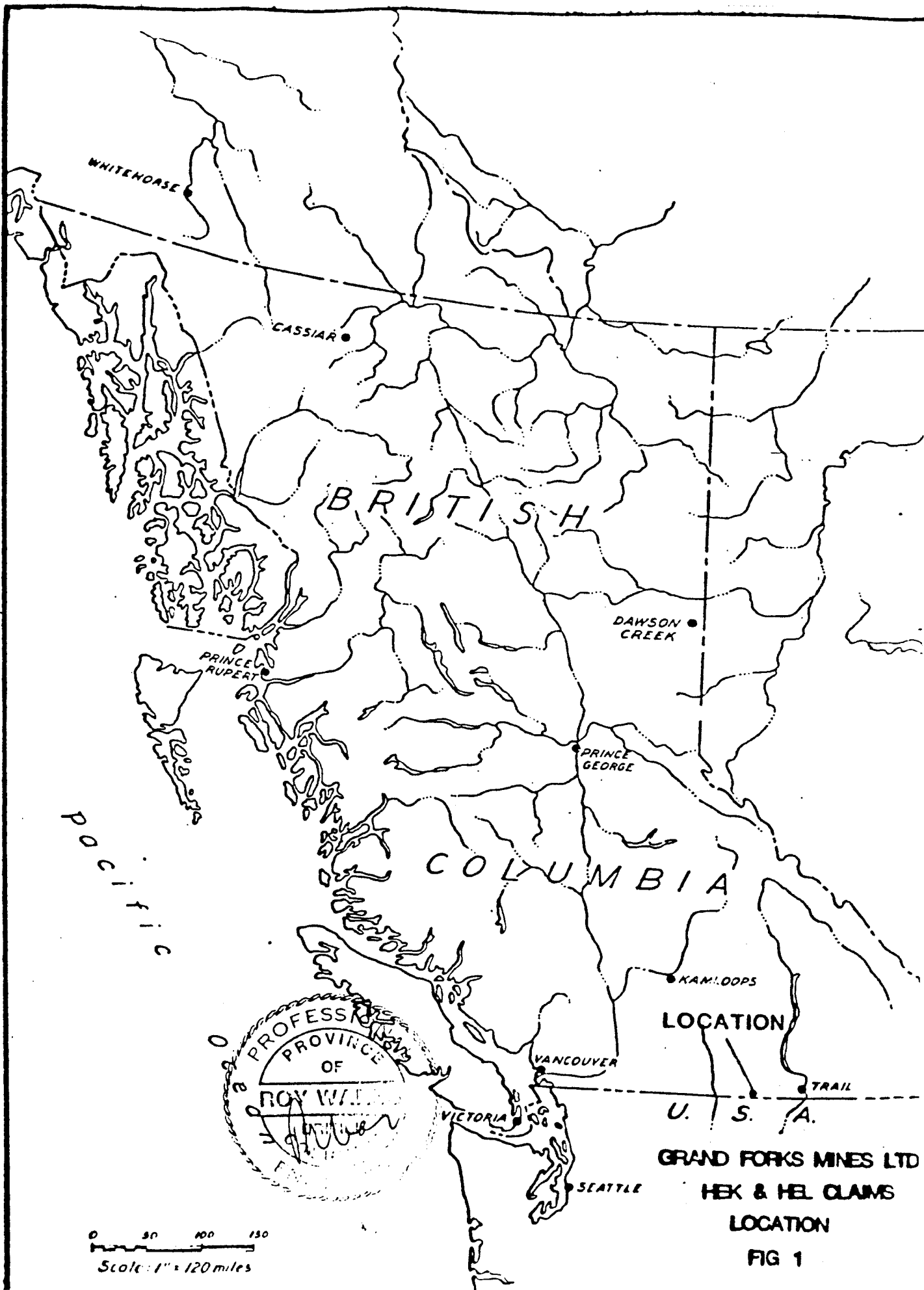
The property is located on the west side of the Granby River.

1.2. Access

Access to the property is from Grand Forks by an all weather paved road. Within the property, there are a number of old logging roads that provide access.

1.3. Topography

The claim group is situated at elevations from 800 to 1150m A.S.L. The greater part of the property lies on the south facing slope north of Rock Candy Creek.



GRAND FORKS MINES LTD
 HEK & HEL CLAIMS
 LOCATION
 FIG 1

1.4. Claim Status

The property comprises the following units: (Fig. 2)

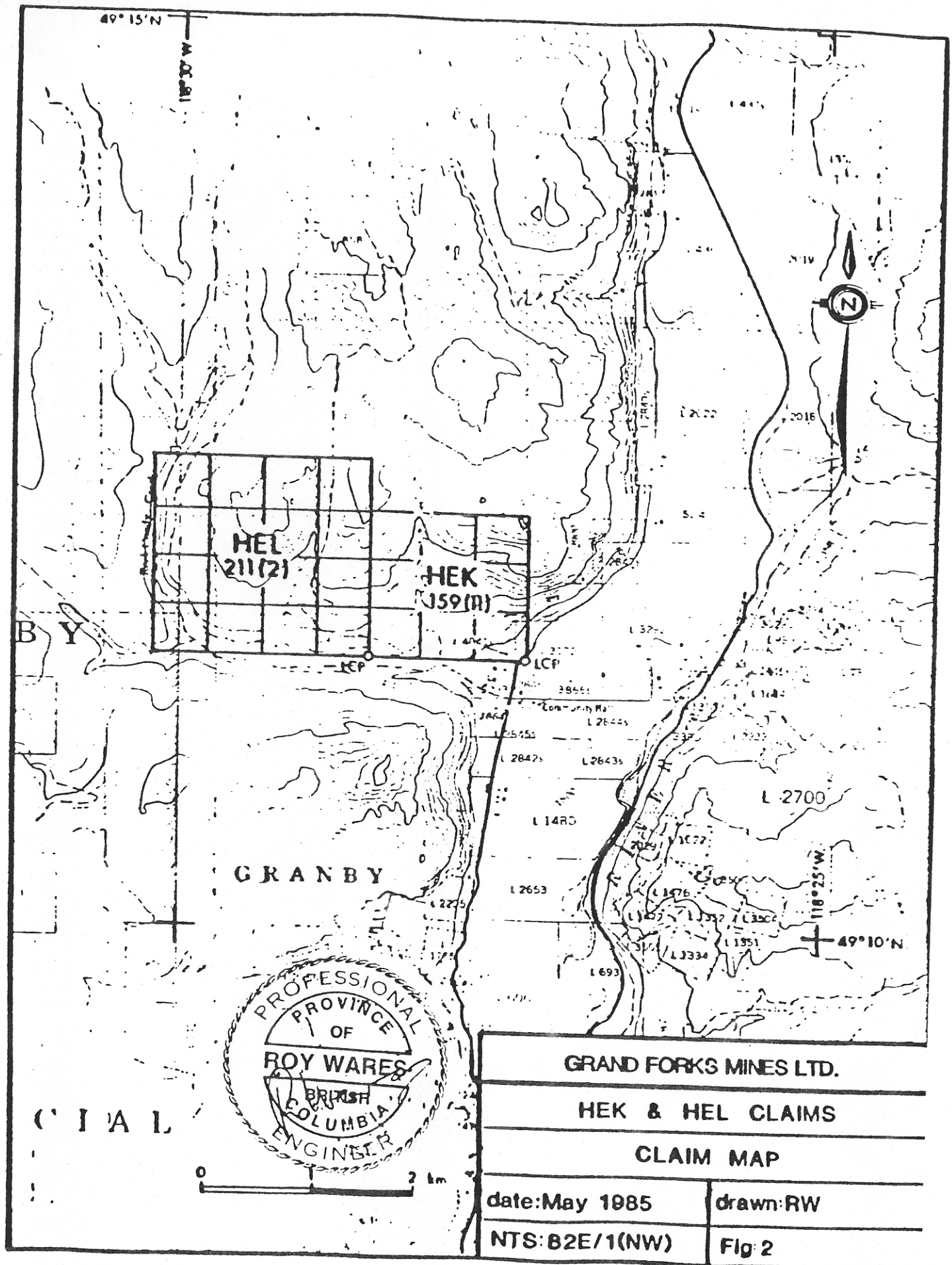
	<u>Record No.</u>	<u>Date of Record</u>	<u>Expiry Date</u>
Hek	159 (11)	Nov. 17	Nov. 17, 1987
Hel	211 (2)	Feb. 5	Feb. 5, 1988

The claims are held by Consolidated Boundary Explorations Ltd. (the operator). Grand Forks Mines Ltd. has an option to acquire a 50% interest in these claims.

1.5. Previous Work

Intermittent exploration has been carried out over a long period in the claim group area.

- a. Gold was first discovered in 1901. At that time, the Property was known as the "Exchange".
- b. In 1939, Hecla Mining carried out an underground programme on the Simpson workings (formerly the "Exchange"). They are reported to have shipped 364 tons to the trail smelter, averaging 0.71 ozs Au/ton and 0.25 ozs Ag/ton.
- c. From 1966 to 1969, Bryell Minerals carried out a programme of geophysical, geochemical and drilling work.
- d. From 1975 to 1976, Consolidated Boundary carried out geological mapping, ground magnetometer surveys and 1973' of diamond drilling.
- e. In 1976, Hecla Mining Co. carried out a detailed evaluation of the Hek claims.



GRAND FORKS MINES LTD.

HEK & HEL CLAIMS

CLAIM MAP

date: May 1985

drawn: RW

NTS: B2E/1(NW)

Fig: 2

- f. Grand Forks Mines Ltd. with Consolidated Boundary as operator, extended the geological mapping with additional geochemistry and geophysics. Two drill holes for a total of 110m were drilled in 1984.

The property was examined by the writer in 1974 and on May 10, 1985, accompanied by I. Wiebe and G. Nakade, President of Consolidated Boundary Explorations Ltd.

2. GEOLOGY

2.1. Regional Geology

The regional geology of the area has been adequately summarized in prior reports.

Essentially, the property straddles a contact zone of mixed intrusive rocks to the north and Paleozoic rocks to the south.

The Paleozoic or Anarchist group consists of metasediments with a volcanic component. Part of the series comprises gneissic granitic rocks. Some serpentinites are present.

The intrusives to the north of the property are of various ages with both Tertiary and Mesozoic plutons present.

2.2. Property Geology

The geology of the property has been described in various reports.

It has been summarized by Meyer (1976), Burton (1983) and Sookochoff (1985).

The description and map data outlines the following features:

- a. There is a dominant alkalic intrusive complex on the Hek claims. This is a Tertiary complex intrusive into and bordered by Anarchist group rocks and granitic rocks.
- b. The Anarchist group of rocks appears to be the focus of mineralization of economic interest. Units mapped as diorite have been considered to be flow components of the Anarchist metavolcanics.

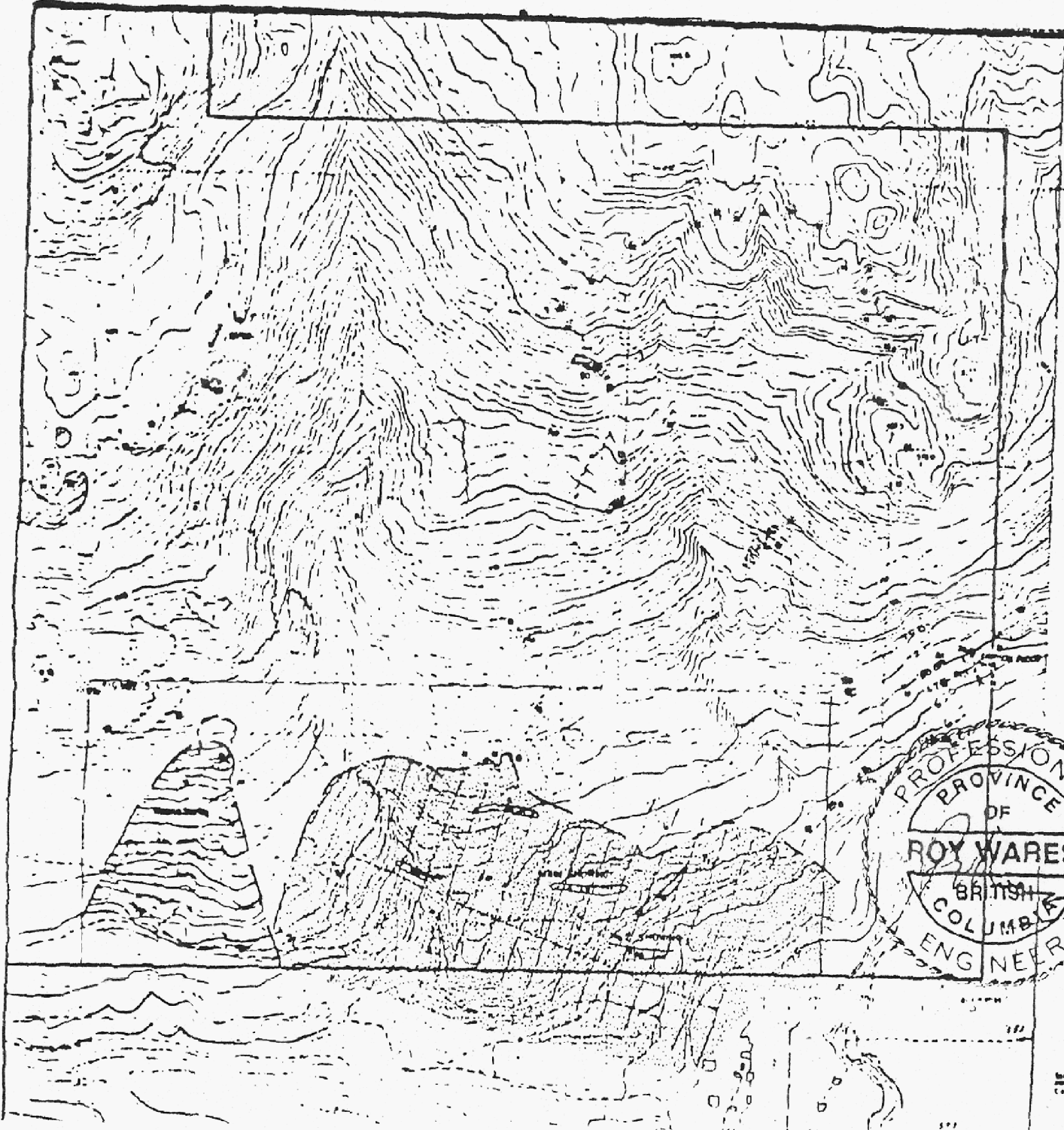
2.3. Mineralization

The mapping programmes carried out in 1976, 1980 and 1983, which are summarized by Sookochoff (1985), present a clear picture of the known distribution of mineralization.

Though there is evidence of scattered sulphide occurrences elsewhere on the Property, there are three areas of economic potential (Fig. 3)

The Simpson-Zucco Mine is a quartz filled shear zone in a skarn zone in the Anarchist volcanics. It has been described as being mineralized with pyrite, pyrrhotite and chalcopyrite over a width of 100'.

The other two zones, the Main and No. 2 showing comprise massive pyrrhotite with minor pyrite and chalcopyrite.



LEGEND

	UNIT 1	Aa	Andesite
		b	Diorite
		Ca	Chert
	UNIT 2	ca	Calcite
	UNIT 3	Sy	Syenite
		Og	Granite
		4	Amphibole
		G	Granite
		Ca	Calcite
			Leucophaea
	Alluvium		
	Quarry		
	Fault		
	Road		
	Boundary		
	Contour		
	Spot		
	Grid		



GRAND FORKS MINES LTD.
HEK & HEL CLAIMS
GENERAL GEOLOGY

FIG 3



This map and report are shown based on the best ground control available at the time of writing. The accuracy of the map is not guaranteed. The map is the property of the author and is not to be used for any other purpose without his written consent. 1968

3. EXPLORATION RESULTS

3.1. General

Intermittent exploration over a period of years has built up a picture of the distribution of mineralization and lithological variations on the property. While interpretations of controls vary, the balance of the information indicates the areas of priority for exploration.

3.2. Exploration Prior to 1976

In 1939, Hecla Mining carried out an underground exploration programme on the Simpson Mine. A total of 364 tons were shipped to trail, averaging 0.71 ozs Au/ton and 0.25 ozs Ag/ton.

Bryell Minerals carried out a programme of IP surveys, trenching, and drilled six holes on the Glover Creek zone.

3.3. 1976 Programme

This programme by both Hecla and by Consolidated Boundary Explorations has been summarized by Meyer (1976).

The work carried out by Hecla comprised geological, geochemical and geophysical data, primarily on the Hek Claim. The Hecla programme, summarized by Meyer, defined the distribution of the alkaline syenite, its attendant dyke suite. They concluded that mineralization was concentrated in sedimentary units affected by alteration in the syenite complex.

A programme of drilling was carried out in 1975 by Consolidated Boundary Explorations (or its predecessor). A total of 11 holes totalling 1973' were drilled. Drill locations are shown in Fig. 4.

The results cited by Meyer are as follows:

<u>Hole No.</u>	<u>Footage</u>	<u>Length</u>	<u>Oz Au/ton</u>
1	10 - 85	75'	0.0732
2	0 - 34	34'	0.2802
3	30 - 55	25'	0.0924
4	0 - 23	23'	0.164
5		No values	
6		No values	
7	60 - 86	26'	0.200
8	160 -169	9'	0.08
9		No values	
10		No values	
11		No values	

Meyer concluded, and this is borne out by field data, that gold values were associated with a steep east west zone of massive sulphides.

Geochemical surveys by Hecla were largely inconclusive.

3.4. 1983 Programme

This programme has been summarized by Sookochoff (1985).

The programme was essentially a detailed ground programme. Mapping defined, in greater detail than before, the geology of the property, the relationship of rock units and the concentration of sulphides in the Anarchist rocks, though focussed on the environment of the alkaline complex.

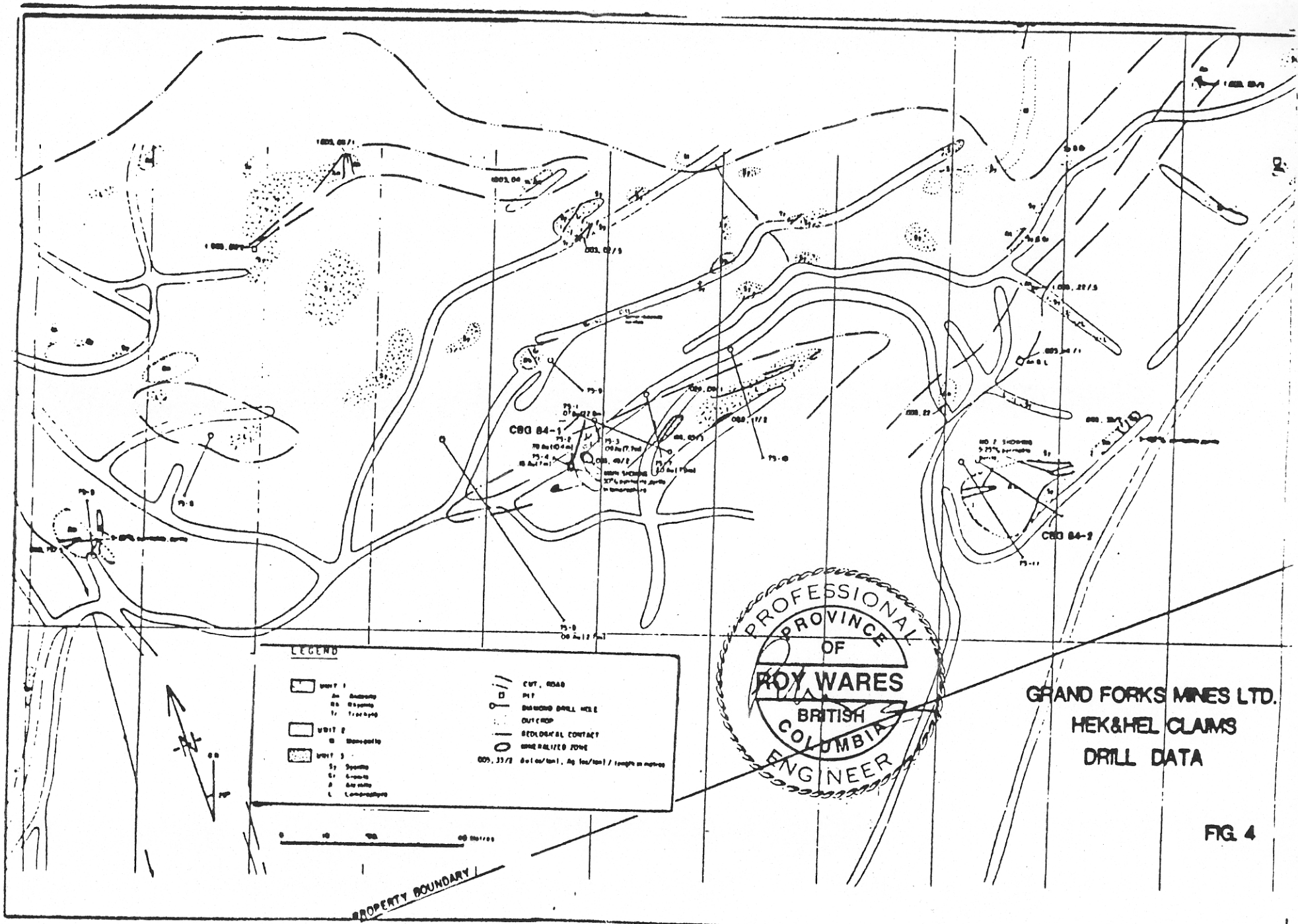
Trenching indicated the possibility of other zones parallel to the Glover or Main zone.

Geochemical sampling indicated a moderate anomaly with 438 ppb Au, between the Main showing and the Simpson Mine on line 1400 E.

3.5. 1984 Programme

Two holes (Fig. 4) were drilled on the Property in May, 1984, (Sookochoff, 1985). A total of 110m of core was drilled.

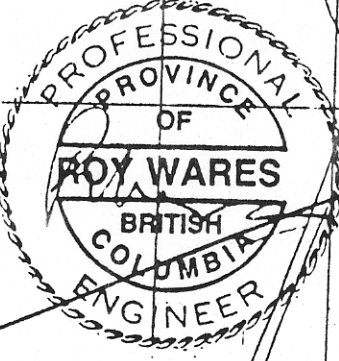
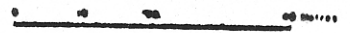
Hole No. CBG 84-1 drilled on the Main showing to test strike and dip extensions of previous drill data, failed



LEGEND

- UNIT 1
 - Q Quartzite
 - G Gneiss
 - T Trachyte
- UNIT 2
 - S Serpentinite
- UNIT 3
 - Sy Syenite
 - G Gneiss
 - A Amphibolite
 - L Amphibolite

- CUT, ROAD
- PT DRIVING DRILL HOLE
- OUTCROP
- SEDIMENTAL CONTACT
- GENERALIZED ZONE
- CG, 33/2 50 t/ton, 40 t/ton / trough in profile



GRAND FORKS MINES LTD.
HEK&HEL CLAIMS
DRILL DATA

FIG. 4

to cut any significant zones with 5' of 0.05 ozs Au/ton being the highest. Some marked lithological contrasts exist between core lithology and surface geology.

Hole No. CBG 84-2 drilled on the No. 2 showing cut andesitic rocks with pyritic disseminations. The best intersection was 0.027 ozs Au/ton over 5'.

3.6. Summary of Exploration Data

All efforts to date have been directed at defining a high grade vein zone.

Data from 1975 and 1984 suggest the presence of a wider but low grade zone of 0.05 ozs Au/ton to 0.30 ozs Au/ton.

This may be a more attractive exploration target.

4. SUMMARY

The exploration efforts on the Hek and Hel Property have had variable results to date.

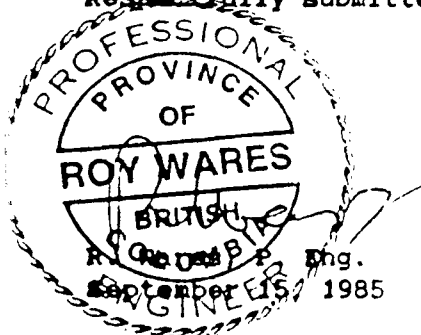
- a. Mapping in 1976, 1980, and 1983, have established the geological framework and indicated the areas of economic potential.
- b. The general geology is that of an alkaline syenite complex on the Hek claim, intrusive into Anarchest sequence metasediments and metavolcanics.
- c. Limited production took place from the Simpson Mine in 1939. From that time, exploration has been episodic.
- d. Three main showings are present. These are the Simpson Mine, the Main Showing and the No. 2 zone. Other occurrences are widespread but minor.
- e. Mineralization comprises massive pyrrhotite zones with pyrite and chalcopyrite.
- f. Drilling data over the years shows some variability. The best intersection was hole No. 75-2 with 0.28 ozs Au/ton over 7.2m.
- g. Despite detailed trenching and mapping, the distribution of the gold bearing zones is not clearly indicated, though a broad westerly trend is indicated.

5. CONCLUSIONS

A future programme of work on the Hek and Hel claim group is warranted.

- a. The previous data clearly indicates that the focus of exploration activity should be on the three zones with clear indications of gold mineralization.
- b. Previous drilling has served to indicate a degree of variability and not firmly established specific, as apart from general controls.
- c. Previous efforts have focussed on massive sulphide zones carrying gold mineralization. The wide zones with gold values of 0.05 ozs Au/ton to 0.28 ozs Au/ton over widths from 3 to 28m, suggests that the exploration focus should be shifted to testing the possibility of a large tonnage, but low grade zone.
- d. The possibility of the presence of a large, low grade zone should be tested by ground EM surveys, followed by reverse circulation, inclined drill holes. Depth and strike extensions can be established at a relatively low cost.
- e. A programme with the objectives of testing the extent of this low grade zone is recommended.
- f. Costs of the initial programme are estimated to be \$85,000.

Respectfully submitted,



6. PROPOSED WORK PROGRAMME

6.1. Objectives

The objectives of the proposed work programme are as follows:

- a. By careful VLF and horizontal loop EM surveys, establish the distribution pattern of the Main Zone and the Simpson/Zucco area.
- b. By reverse circulation drilling, determine the grade, control and continuity of the massive sulphide zones in the Main Zone.
- c. Using light drill equipment, drill some test holes in the area of the Simpson/Zucco showing.
- d. To assess the potential for a large, low grade zone around the massive sulphide zone.

6.2. Work Programme

- a. Survey and tie in all former drill holes on the Main, No. 1 and No. 2 zones.
- b. Conduct a VLF-EM survey over the Main, No. 1, No. 2 and Simpson/Zucco zones.
- c. Conduct a horizontal loop EM survey to define depth extensions of the massive sulphide zones.
- d. Drill a total of 1,400m of reverse circulation drilling to test the low grade potential of the Main Zone.

6.3. Cost Estimate

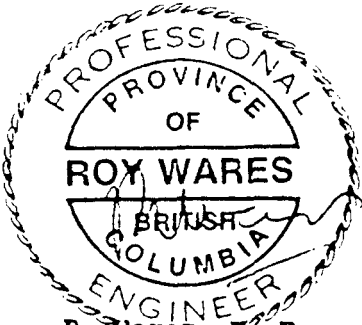
Phase I

a. Survey of drill collars	\$ 1,800
b. Reflagging old grid	2,000
c. VLF-EM survey, 10 kms. at \$400/km.	4,000
d. Horizontal loop EM survey, 3.5 kms. at \$800/km	2,800
e. Reverse circulation drilling, 1600m at \$32/m	51,200
f. Mobilization/Demobilization	2,000
g. Assays, 250 at \$20/sample	5,000
h. Site preparation	2,000
i. Project Managmeent R&B	4,000
j. Consulting, report preparation	<u>2,500</u>

Sub Total	77,300
+10% Contingency	<u>7,730</u>

TOTAL \$85,030

SAY \$85,000
=====



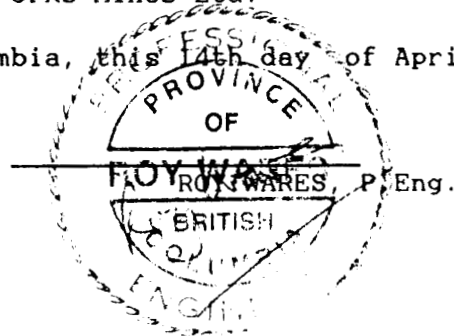
R. Wares, P. Eng.
September 15, 1985

STATEMENT OF QUALIFICATIONS

I, ROY WARES, with a business address in the City of Vancouver, British Columbia, do hereby certify that:

- a) This report is based upon an examination of relevant maps and documents on the Hek and Hel Property, and a field visit in 1974 and on May 10, 1985.
- b) I am a registered member, in good standing, of the Association of Professional Engineers of B.C.
- c) I have practised my profession for 21 years in B.C., Yukon, Ontario, U.S.A. and the U.K.
- d) I am a graduate of Aberdeen University with a B.Sc.(Hons) in Geology and Queen's University, Kingston, Ontario with an M.Sc.
- e) I have no interest in any property or company holding a property within 10 km. of the Hek and Hel Property.
- f) I have received no interest, either direct or indirect, nor do I expect to receive any interest, direct or indirect, in the securities of Grand Forks Mines Ltd. or any affiliate, nor do I beneficially own, directly or indirectly, any securities of Grand Forks Mines Ltd. or any affiliate.
- g) To the best of my knowledge, all of the information above, and within this report, is factual, correct and true.
- h) This revised Statement of Qualifications replaces that in the original report, dated Sept. 15, 1985.
- i) Grand Forks Mines Ltd. has indicated in writing that no work has been done on the Hek and Hel property since that date.
- j) This report has been prepared for submission to the Vancouver Stock Exchange and any other regulatory authorities, and as such, I hereby consent to the inclusion of my name and any sections of this report as are deemed necessary in any Statement of Material Facts or other financing document of Grand Forks Mines Ltd.

DATED at Vancouver, British Columbia, this 14th day of April 1986.



A.2.

REFERENCES CITED

- Burton A. (1983) Report on Hek and Hel Property, private report for S.J. Resources, Feb. 1983.
- Meyer W. (1976) Summary Report, Geological, Geophysical, and Geochemical Surveys and Diamond Drilling on the Hek Claim, private report for Boundary Explorations, Oct. 1976.
- Sookochoff L. (1985) 1984 Assessment Report on the Hek Claim Group, Pass Creek area. Ass. Report, Jan. 1985.

GRAND FORKS MINES LTD.

REPORT

GOLDEN CROWN AND WINNIPEG PROPERTY

NTS: 82E/2E

LAT: 49 05' N

LONG: 118 35' W

GRAND FORKS MINES LTD.

100-450 West Georgia Street

Vancouver, B.C.

V6B 1Z3

Vancouver, British Columbia

Sept. 15, 1985

ROY WARES, P. Eng.

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1. INTRODUCTION

1.1. Location

The Golden Crown and Winnipeg Claim Group is located in the Boundary District, B.C., 390 kms east of Vancouver, B.C. (Fig. 1).

The property is located 15 kms north west of Grand Forks.

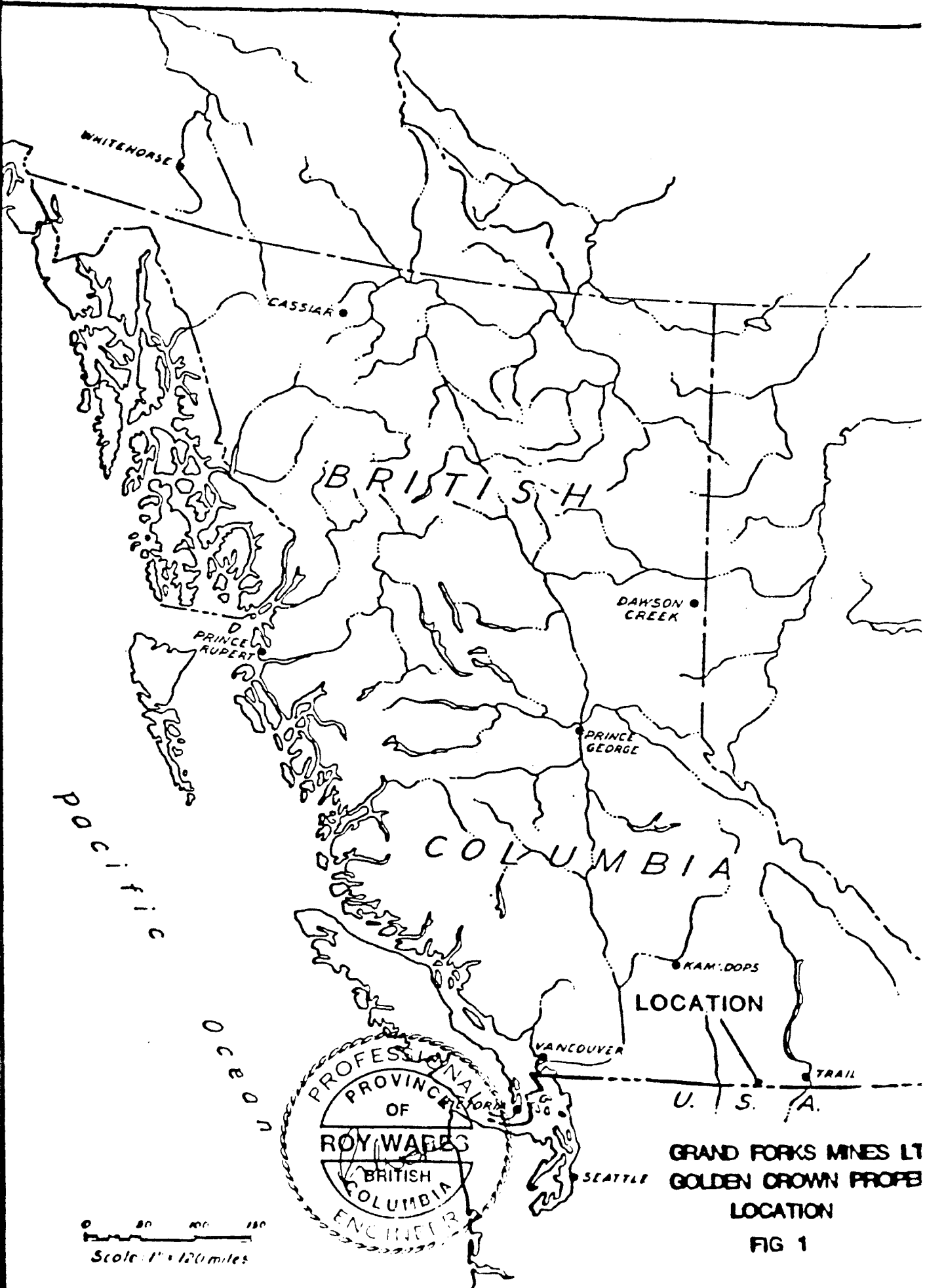
1.2. Access

Access to the property is from Hwy 3, via the Phoenix Mine Road. From the turn off, 1/2 km east of the pit, the property is reached by a good gravel road, a distance of 3 kms.

The claim group has adequate water for exploration programmes. It is easily serviced from Grand Forks.

1.3. Topography

The property is located at elevations from 1250 to 1450 m A.S.L., in an area of moderate timber cover.



GRAND FORKS MINES LT
 GOLDEN CROWN PROP
 LOCATION
 FIG 1

1.4. Claim Status

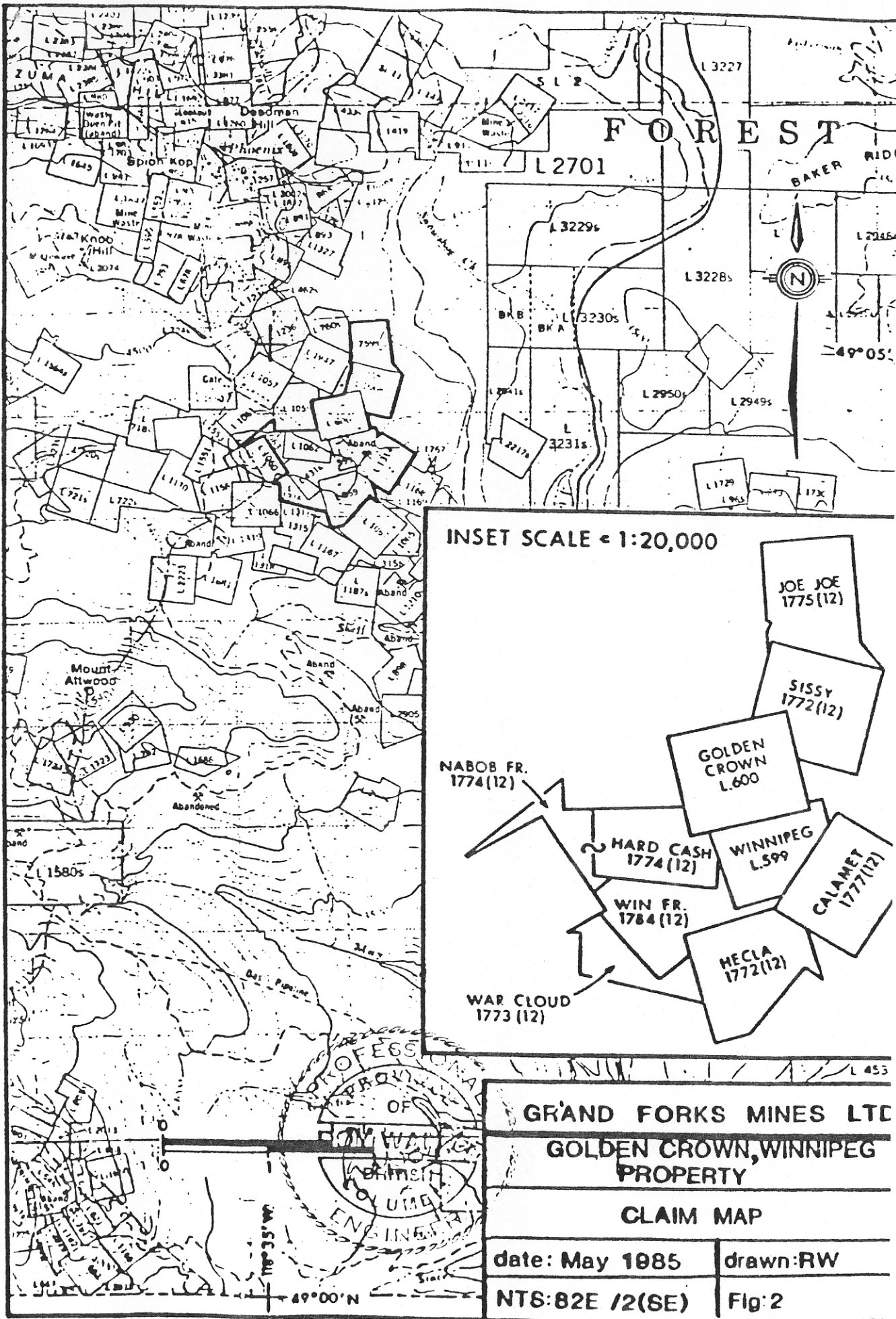
The property consists of two Crown granted claims, seven reverted Crown granted claims and one recorded two post claim, all contiguous. Particulars are as follows: (Fig. 2)

<u>Claim</u>	<u>Lot No.</u>	<u>Record No.</u>	<u>Expiry Date</u>
<u>Crown Granted Claims</u>			
Golden Crown		Crown Grant	Tax due July 1
Winnipeg		Crown Grant	Tax due July 1
<u>Reverted Crown Grants</u>			
Hecla	859	1772	Dec. 12, 1992
War Cloud Fr	1316	1773	Dec. 12, 1994
Hard Cash	1062	1774	Dec. 12, 1994
Nabor Fr	1063	1774	Dec. 12, 1994
Joe Joe	7595	1775	Dec. 12, 1994
Sissy	1068	1776	Dec. 12, 1994
Calumet	1314	1777	Dec. 12, 1994
<u>Recorded Claims (Two Post)</u>			
Win Fr		1784	Sept. 24, 1994

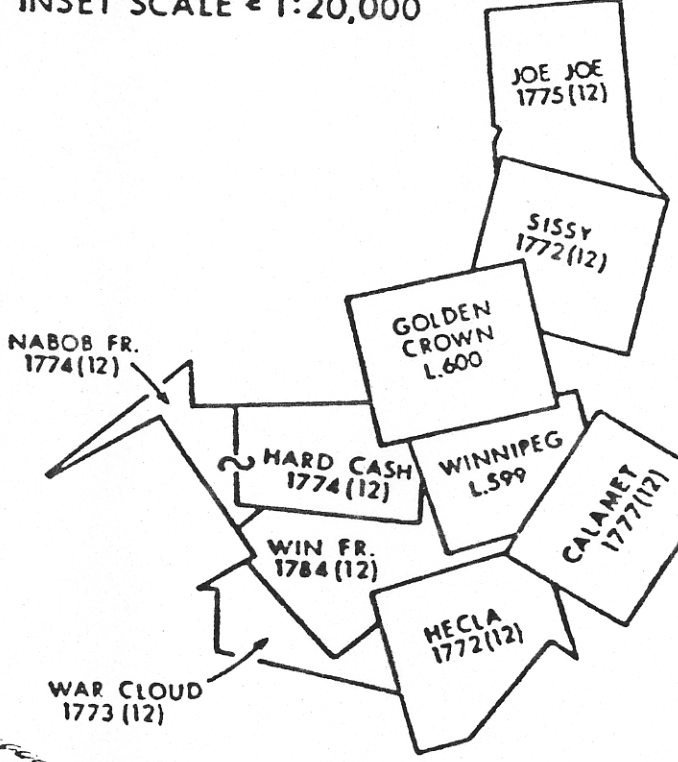
1.5. Previous Work, Prior to 1983

The history of the property has been adequately described in previous reports on the property. The essential details are as follows:

- a. The Winnipeg and Golden Crown were staked in 1891. Approximately 8000' of shaft and drift were completed prior to 1905.
- b. Development and shipping of ores from both claims continued in 1901 and 1902 and 1910 to 1912.



INSET SCALE = 1:20,000



GRAND FORKS MINES LTD	
GOLDEN CROWN, WINNIPEG PROPERTY	
CLAIM MAP	
date: May 1985	drawn: RW
NTS: 82E 1/2(SE)	Fig: 2

- c. Reported production from the properties is
- Winnipeg: 58,772 tons, grading 0.2oz Au/ton, 0.62ozs Ag/ton and 0.16% Cu.
 - Golden Crown: 2,742 tons, grading 0.45ozs Au/ton, 0.82ozs Ag/ton and 1.53% Cu.
- d. In 1965, Sabina Mines/Scurry Rainbow conducted ground exploration and drilled 1652 metres of core in 15 holes. The programme was focussed on the nickel content of the serpentinites.
- e. In 1977, Con Am Resources optioned the property and drilled 12 holes (769m).
- f. In 1980, the property was optioned by Munde Mines. Dolmage Campbell and Associates, as contractor for Munde, carried out a systematic programme of ground exploration, dewatering of the Golden Crown to the 30m level. Sixteen drill holes totalling 1564 m were drilled.
- h. In 1983, S.J. Resources and its successor, Grand Forks Mines Ltd., optioned the Property.

1.6. Previous Work, 1983 to 1984

In 1983, Consolidated Boundary Exploration Ltd., as operator carried out a programme of geological mapping, magnetometer work and trenching, followed by diamond drilling, totalling 692m (18 holes).

Follow up work in 1984 consisted entirely of diamond drilling. A total of 6 holes were drilled, totalling 700m.

In 1985, four holes totalling 750 m were drilled.

The property was examined on May 11th and 12th, 1985, accompanied by Mr. George Nakade, President of Consolidated Boundary Explorations Ltd.

2. GEOLOGY

2.1. Regional Geology

The general geology of the area has been described in a number of publications.

The most recent description is that by Church (1985). Essentially it comprises a basement complex of chert, schist and marble, overlain by Permo-Carboniferous and Triassic sediments and volcanic rocks. A heterogeneous suite of intrusions are present in the area. The area is cut by a number of Tertiary and older, re-activated fault zones.

Mineral deposits in the area are heterogeneous, ranging from skarn aspect copper and copper magnetite deposits, to structurally controlled massive sulphide deposits carrying precious metal values.

Recent activity in the area has been generated by Skylark Resources Ltd., Noranda and Kettle River Resources Ltd. Activity has been focused on precious metal occurrences.

2.2. Detailed Geology

The general geology has been adequately summarized in the reports by Saunders (1980) and Sookochoff (1984).

Essentially it comprises a suite of volcanic and volcanoclastic rocks of andesitic affinity with subordinate crystal tuffs. Minor cherty tuffs have been described. Deformed and podiform serpentinites are present.

Dioritic rocks are also present. They vary from coarse to medium grained units to medium grained altered diorites, carrying disseminated pyrrhotite.

The general lack of outcrop in the property has prevented a full description of relationship of the rock units. In particular, structural relationships are only partly understood.

Emphasis in 1980 and 1983, both in geology and core logging, has been directed towards understanding stratigraphic relationships. They have been only partly successful.

Examination of the 1983 and 1984 drill core shows a zonal pattern around vein structures with a halo of silicification.

2.3. Mineralization

Surface and drill intersections of precious metal mineralization on the property show the following features:

- a. The precious metal values are hosted in two types of veins.
- b. The predominant type is a massive sulphide, comprising pyrrhotite, with minor pyrite and chalcopyrite.
- c. The other type is a massive pyrrhotite zone with chalcopyrite and quartz.

Both types may be gradational. The quartz vein type appears to predominate in wall rock away from the serpentinite contact.

Examination of old drill core (Wares, 1985) showed two distinct types of mineralization. One type is pyrrhotite envelopes surrounding gently dipping diorite sills. The other is steeply dipping pyrrhotite zones, predominantly distributed at and close to serpentine bodies. No information was obtained to indicate if these are genetically related.

3. DRILLING

3.1. General

Exploration has been conducted over a period of years on the Golden Crown/Winnipeg Property.

Exploration has been intermittent and conducted with different target types. As such, it has been inconsistent. Drilling has been the major exploration tool, especially in 1968, 1978, 1980, 1983 and 1984.

3.2. Exploration Prior to 1983

Scurry Rainbow carried out a major programme in the area in 1968. (Scurry Rainbow, 1969).

They conducted a comprehensive ground exploration programme, followed up by drilling. The emphasis on the programme was towards the nickel potential of the serpentinites, with precious metal occurrences a lower priority.

Though they identified vein zones, they did not accord them any significance or assay all intersections.

The next comprehensive exploration effort was that conducted by Munde Mines in 1980.

The efforts included dewatering the 30m level of the Golden Crown.

The data was summarized by Saunders (1980). The essential conclusion was that the occurrences of precious metals were erratic and further exploration was a high risk.

3.3. Exploration 1983, 1984

Exploration in the above period has comprised ground mapping and core drilling.

The drill programme was designed to test extensions of previously known intersections and provided valuable information. Part of the programme tested other small new zones away from the control zone.

Results of the 1983 drill programme were as follows:

<u>ASSAYS</u>				
<u>Drill Hole</u>	<u>Width (ft)</u>	<u>Ozs Au/t</u>	<u>Ozs Ag/t</u>	<u>%Cu</u>
83-10	5'	0.052	0.06	--
83-14	8'	0.058	0.03	0.29
83-16	1.2'	0.456	0.75	1.68
83-17	1'	0.134	0.10	0.35
83-17	3'	0.345	0.09	0.20
83-18	7.2'	0.346(Au)	2.38	3.45
83-18	4.3'	0.683(Au)	1.66	3.63

The results were summarized by Sookochoff (1984).

Hole Nos. 83-17 established part of the Winnipeg zone, open on strike to the east. Holes Nos. 83-15, -16, appear to establish (Fig. 3) the presence of a second zone parallel to zone No.1, (Central Zone) which is open along strike. These zones require follow up.

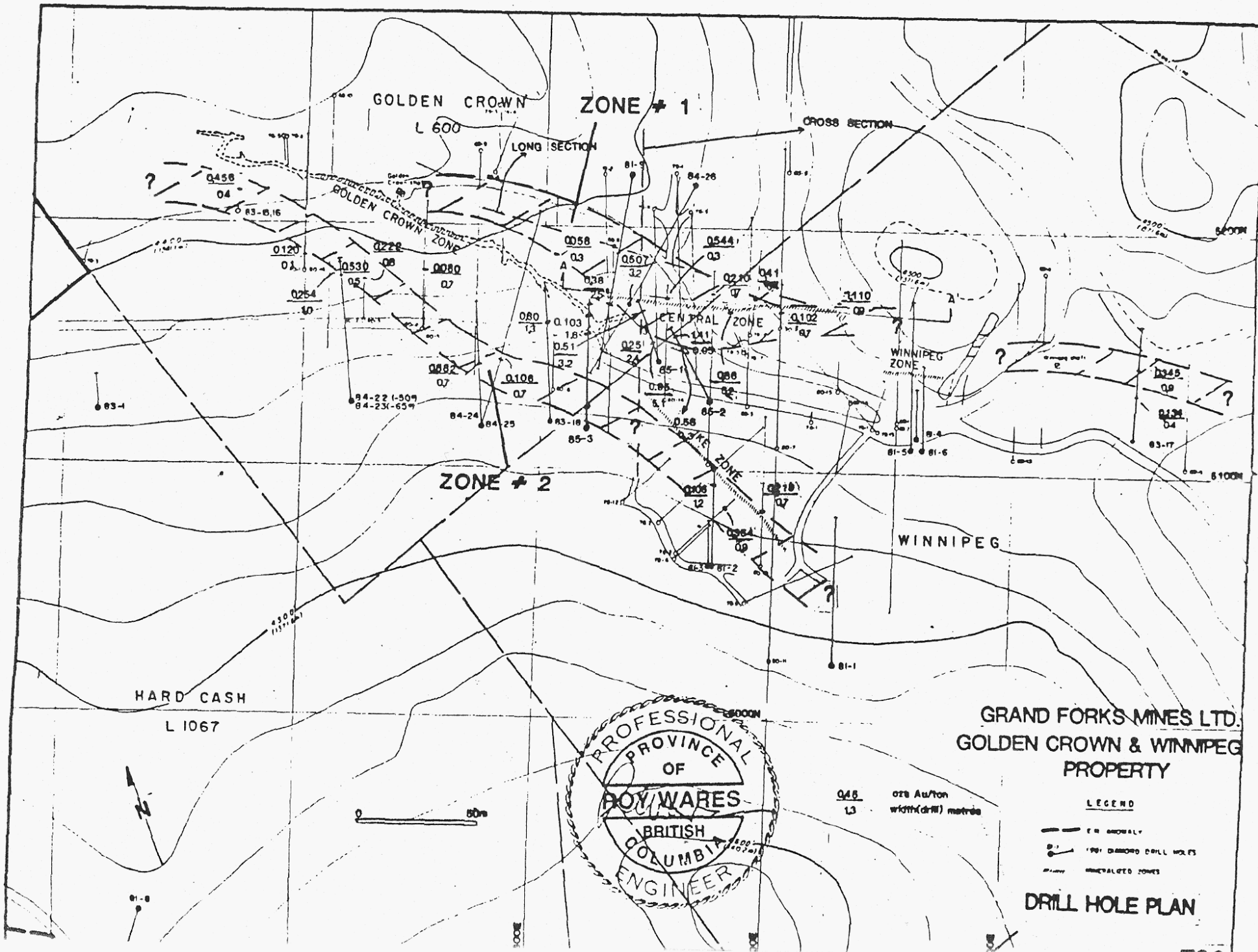
In 1984, selective drilling produced the following intersections:

<u>ASSAYS</u>				
<u>Drill Hole</u>	<u>Width(ft)</u>	<u>Oz. Au/T</u>	<u>oz. Ag/T</u>	<u>%Cu</u>
84-22	4.8	.310	1.14	2.38
	1.6	.530	1.10	2.13
84-23	3.0	.254	.35	.40
84-24	2.0	.882	.50	.61
	5.2	.026	.01	.04
84-25	2.2	.106	.67	1.04
84-26	3.0	.58	.27	.53
	4.0	.114	.06	.36
	3.0	.960	.29	1.09
84-26	(10.0)	(.507)	(.192)	(.63)

The data are shown on planview in Fig. 3.

The important feature is hole No.26, at a depth of 1220m, well below previous intersections, in zone No. 1.

Holes Nos. 84-22, -23, also showed continuity within zone No.2. Holes Nos. 84-24, -25 also established strength of the zone No.2.



GRAND FORKS MINES LTD.
GOLDEN CROWN & WINNIPEG
PROPERTY

0.45 gts Au/ton
13 width (drill) metres

- LEGEND
- E.R. ANOMALY
 - DIAMOND DRILL HOLES
 - GENERALIZED ZONES

DRILL HOLE PLAN

3.4. Exploration in 1985

Exploration in 1985, to date, comprised both re-examination of old drill core and further drill testing of the zone below the intersection in 84-26.

Re-examination of the old drill core (Wares, 1985) showed the following facts:

- a. The stratigraphy is dominated by three diorite sills. These have a silicified envelope and carry 3-5% pyrrhotite at the margins of the sill and within the diorite sills.
- b. The serpentine contact appears to be cut by a crush zone or minor fault. This is the zone with distinct potential.
- c. Precious metal values are low and variable in the diorite/sulphide zones and only have economic potential in the sulphide/serpentinite contact zones.

A limited drill programme was carried out in 1985 to test the zone flanking the intersection in 84-26. The holes were drilled in August, 1985. The results are as follows:

<u>Drill Hole</u>	<u>Footage(ft)</u> (Drill width)	<u>Width(ft)</u>	<u>ASSAYS</u>		
			<u>Oz. Au/T</u>	<u>oz. Ag/T</u>	<u>%Cu</u>
85-1	51.8 - 52.8	1'	0.126	0.23	0.51
	76.8 - 93.0	16.2'	0.953	0.64	1.10
	(weighted average)				
	including				
	76.8 - 81.0	4.2'	3.340	2.28	3.85
	341.6 - 351.6	10'	0.247	0.31	0.80
85-2	343.0 - 344.1	1.1'	0.58	1.02	2.17
	404.0 - 407.0	3'	1.412	0.79	2.68
85-3	480.0 - 485.0	5'	0.103	0.03	0.07
	527.0 - 529.0	2'	0.51	0.03	0.03

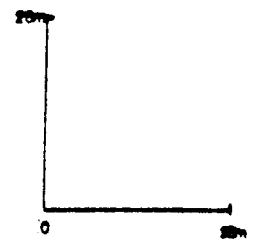
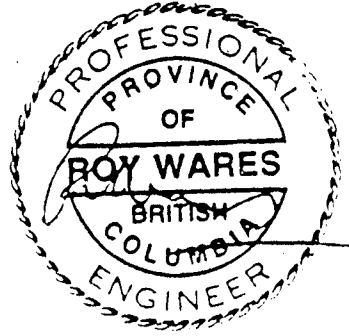
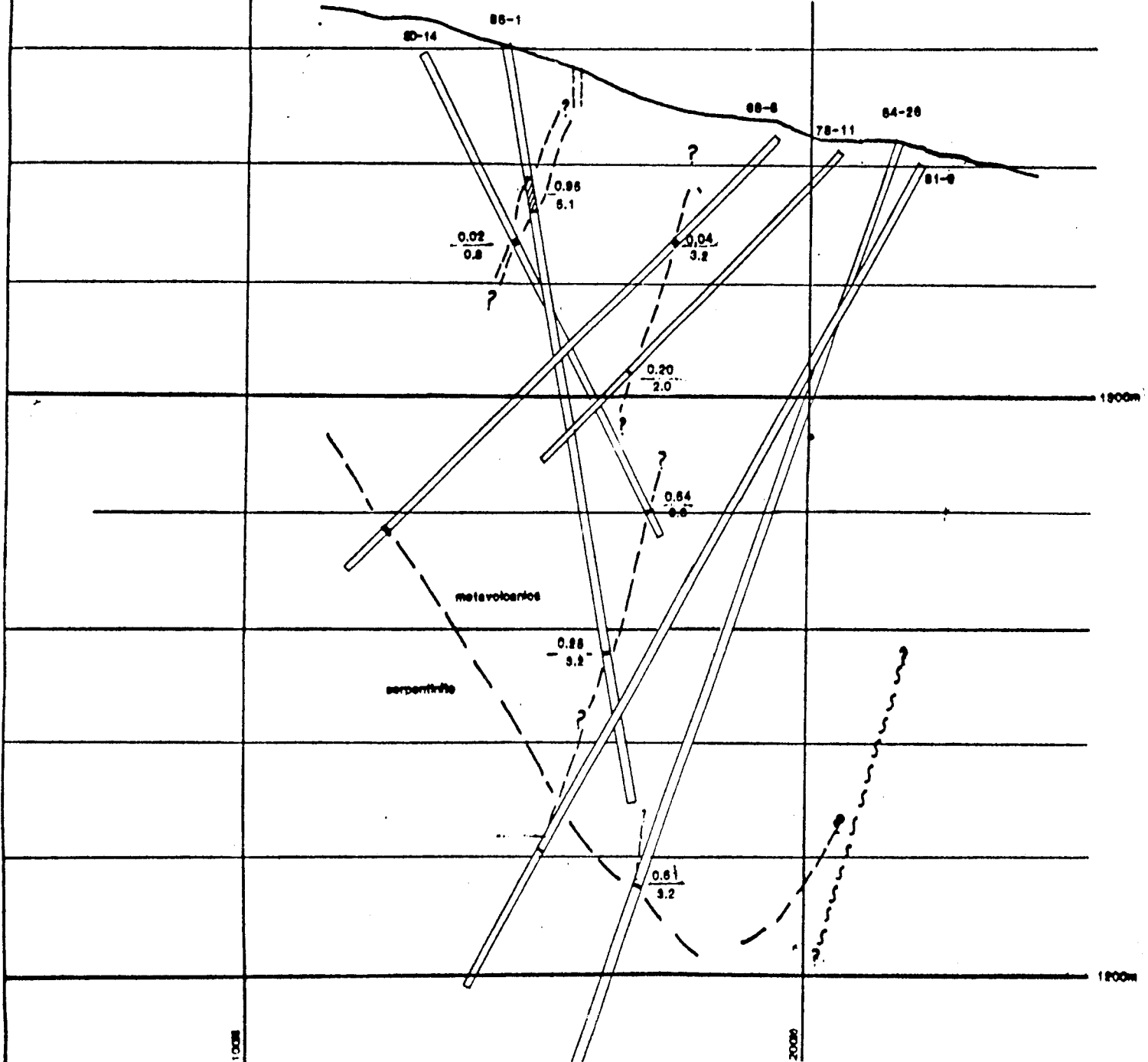
The drill hole locations are shown in Fig. 3.

Drill hole 85-1 intersected two veins within zone No. 1. The upper zone (76.8 - 93.0) is part of an offset of the Golden Crown zone. True width may be 4' - 5'.

Both holes 2 and 3 intersected two narrow zones, with true widths of 1' to 2.5'.

A composite cross section (Fig. 4) shows the relationship of these holes to previous intersections.

CENTRAL ZONE (ZONE # 1)



GRAND FORKS MINES LTD.	
GOLDEN CROWN & WINDYBEG PROPERTY	
SECTION 48 + 40 E	
Date: Sept 1988	Drawn: RW
NTS: 82E / 8(8E)	Flg: 4

The 1985 drilling shows a degree of structural complexity that has not been resolved to date. They do indicate some continuity of the zone intersected in hole 84-26. The zone should be further tested to establish more information on continuity and grade.

3.5. Summary of Data

The examination of the data, in addition to examination of drill core, shows the following:

- a. That there are at least two main zones in the area of economic interest.
- b. Within the plane of the control vein, gold bearing zones of economic aspect appear to have a gentle plunge to the north west.
- c. There is a degree of variability within the vein system; the present level of information precludes any assessment of the specific controls of this, or its potential effect on diluting mineralization.
- d. An (apparent) alteration envelope of partial silicification surrounds the vein zones.

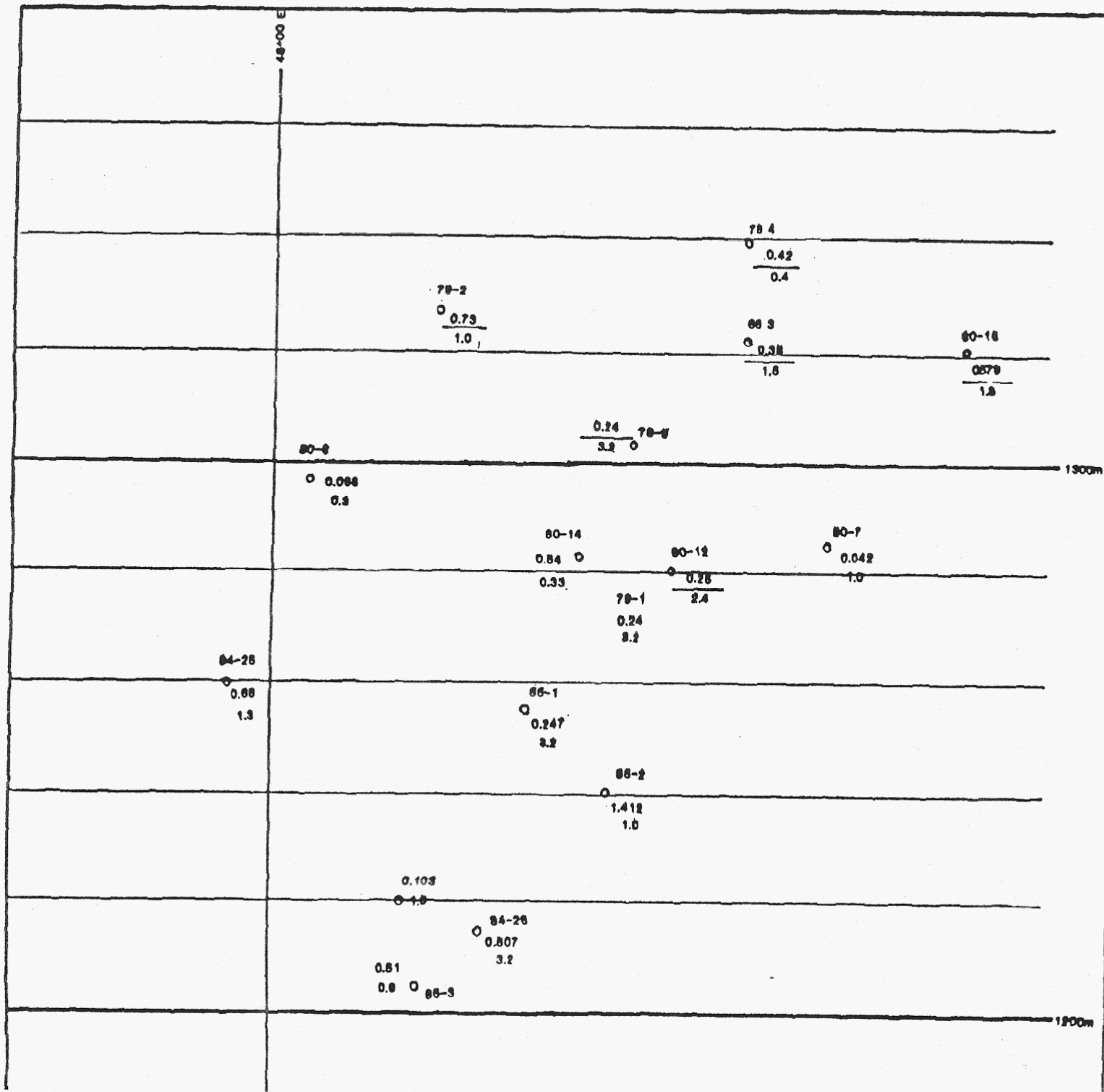
In order to establish the economic potential of the property, the following data needs to be established:

- a. Further data on the deep zones in 84-26, 85-1, 85-2 and 85-3.
- b. Continuity with intersections in the Winnipeg zone.

c. Continuity within zones No. 2 (Fig. 3).

A long section (Fig. 5) of the drill data in the Central Zone (Fig. 3) shows the spatial distribution of the intersections.

The data is too sparse to permit a calculation of tonnage or grade. Successful implementation of the proposed programme may permit a calculation of the above.



0.48 0.25 Asst
2.8m 0.12 Interpolation



0 25m 50m

Vertical Section

GRAND FORKS MINES LTD.
GOLDEN CROWN & WINDMILL PROPERTY
LONG SECTION CENTRAL ZONE
Date: Sept 1986 Drawn: RW
NTS: 02E / 010E Plg: 8

4. SUMMARY

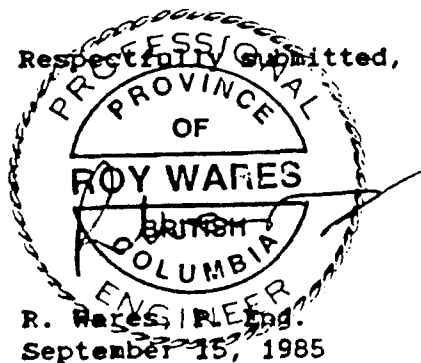
The essential features of the Golden Crown/Winnipeg Property can be summarized as follows:

- a. The property has had a history of intermittent exploration over a long period from 1895 to present.
- b. It is only in recent years that efforts have been consistent enough or careful enough to indicate economic potential.
- c. There are a number of zones on the property; the zones on the Golden Crown and Winnipeg appear to offer, at present, the best potential for developing targets of economic interest.
- d. Previous exploration had focussed implicitly on a tabular sheet like zone carrying precious metals; results were variable. The 1983-1985 programmes have established that at least two zones of economic interest are present, with zones of mineralization plunging at shallow angles within the plane of the vein.
- e. The precious metal mineralization occurs in vein systems both at the altered serpentinite contact and in vein systems that lie in the altered volcanic/volcaniclastic host; mineralization consists essentially of massive pyrrhotite zones and pyrrhotite-chalcopyrite quartz veins.
- f. Though general zones of mineralization can be identified, there is as yet insufficient data for establishing precise controls; these should be established during the proposed programme.

5. CONCLUSIONS

A review of the data on the Golden Crown/Winnipeg Property has resulted in the following conclusions:

- a. Recent exploration (1983-1985) on the property has clearly indicated the presence of at least two zones in the area of the Golden Crown and Winnipeg that carry precious metal values of interest.
- b. The low key but effective programme has indicated depth extensions below previous drill intersections and a second zone open along strike and at depth.
- c. More information needs to be obtained to permit a realistic evaluation of the economic potential.
- d. Objective of the proposed programme is to establish, by carefully chosen drill holes, grade and continuity of the deep zone in 84-26, 85-1, -2, and -3. A further objective should be to correlate this zone with the Winnipeg zone.
- e. It is premature at this stage to calculate blocks and grades without the data sought in the proposed programme.
- f. A programme totalling \$120,000 is recommended to accomplish the objectives set out in d).

Respectfully Submitted,

R. Wares, P. Eng.
September 15, 1985

6. RECOMMENDED WORK PROGRAMME

6.1. Objectives

The objectives of the proposed work programme are as follows:

- a. Establish continuity, grade and width of the identified vein zones with a view to an estimate of grade and tonnage.
- b. Establish local and property wide controls of the vein system as a control for drilling and to establish the potential of other areas on the claim group.

6.2. Programme Components

The objectives of the proposed programme can be met by implementing the following modular work programmes:

- a. Drill four holes along strike and downdip from the deep zone (Central Zone) to establish continuity and grade.
- b. Drill three holes in zone No. 2 to establish grade and continuity.
- c. Drill two holes to test the eastern extension of the Winnipeg zone.
- d. With the results of a, b and c, re-evaluate known surface showings as to comparability, and define options for underground exploration.
- e. The programme should be accomplished in two phases.

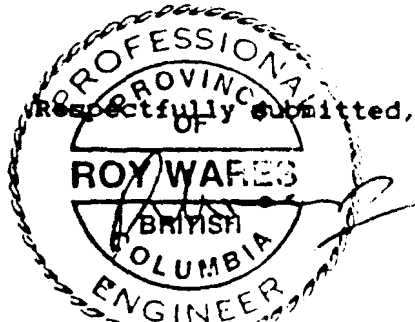
6.3. Cost Estimate

Phase I

a.	Diamond drilling, 550m, BQ core, at \$65/m	\$35,750
b.	Site Preparation 8 hrs, D-S, at \$80/hr	640
c.	Assays, 70 samples at \$20/sample	1,400
d.	Field project management	2,000
e.	Consulting and report preparation	<u>1,500</u>
	Sub-Total	41,290
	10% Contingency	<u>4,129</u>
	Total	<u>\$45,419</u>
	SAY	\$45,000 =====

Phase II (Contingent on Phase I)

a.	Diamond drilling, 900 m at \$65/m	\$58,500
b.	Site preparation 10 hrs, at \$80/hr	800
c.	Assays, 100 samples at \$20/sample	2,000
d.	Field project management	3,500
e.	Consulting, stroke engineering, and report preparation	<u>3,000</u>
	Sub-Total	67,800
	10% Contingency	<u>6,780</u>
	Total	<u>\$74,580</u>
	SAY	\$75,000 =====



Roy Wares, P. Eng.
September 15, 1985

STATEMENT OF QUALIFICATIONS

I, ROY WARES, with a business address in the City of Vancouver, British Columbia, do hereby certify that:

- a) This report is based upon an examination of relevant maps and documents on the Golden Crown Property, and a field visit on May 11, 12 1985.
- b) I am a registered member, in good standing, of the Association of Professional Engineers of B.C
- c) I have practised my profession for 21 years in B.C., Yukon, Ontario, U.S.A. and the U.K.
- d) I am a graduate of Aberdeen University with a B.Sc.(Hons) in Geology and Queen's University, Kingston, Ontario with an M.Sc.
- e) I have no interest in any property or company holding a property within 10 km. of the Golden Crown Property.
- f) I have received no interest, either direct or indirect, nor do I expect to receive any interest, direct or indirect, in the securities of Grand Forks Mines Ltd. or any affiliate, nor do I beneficially own, directly or indirectly, any securities of Grand Forks Mines Ltd. or any affiliate.
- g) To the best of my knowledge, all of the information above, and within this report, is factual, correct and true.
- h) This revised Statement of Qualifications replaces that in the original report, dated Sept. 15, 1985.
- i) Grand Forks Mines Ltd. has indicated in writing that no work has been done on the Golden Crown Property since that date.
- j) This report has been prepared for submission to the Vancouver Stock Exchange and any other regulatory authorities, and as such, I hereby consent to the inclusion of my name and any sections of this report as are deemed necessary in any Statement of Material Facts or other financing document of Grand Forks Mines Ltd.

DATED at Vancouver, British Columbia, this 17th day of April 1986.



A.2.

REPORTS CITED

- Church N. (1985) Geology of the Mount Attwood Phoenix Area, Greenwood (82E/2)
Min. of Energy, Mines & Petroleum Resources paper (1985-1)
- Saunders et al (1980) Geological and Diamond Drilling Report on the Golden Crown Property for Munde Mines (Dec. 1980).
- Scurry Rainbow (1989) Drilling Report on the Golden Crown Area for Sabina Mines (March 1969).
- Sookochoff, L. (1984) Ass. Rept. Diamond Drilling, Golden Crown Property for Consolidated Boundary Explorations Ltd. (March 1984)
- Wares, R. (1985) Technical Report: Analysis of previous drilling, Golden Crown Property: private report, Grand Forks Mines Ltd.