

COMINCO LTD.

EXPLORATION
93 G 15

WESTERN DISTRICT

SUB-RECORDER
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OCT 4 - 1991
M.R. # _____ \$ _____
VANCOUVER B.C.

ASSESSMENT REPORT

DIAMOND DRILLING

PRINCE 4 MINERAL CLAIM

Record No 9555

PRINCE GEORGE

Caribou Mining Division

LOG NO: OCT 08 1991 RD.
ACTION:
FILE NO:

Latitude: 53 deg. 45' N Longitude: 122 deg. 46' W

24 September 1991

A. M. Pauwels

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,699

ASSESSMENT REPORT
 DIAMOND DRILLING
 PRINCE 4 MINERAL CLAIM

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COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

ASSESSMENT REPORT

DIAMOND DRILLING

I SUMMARY

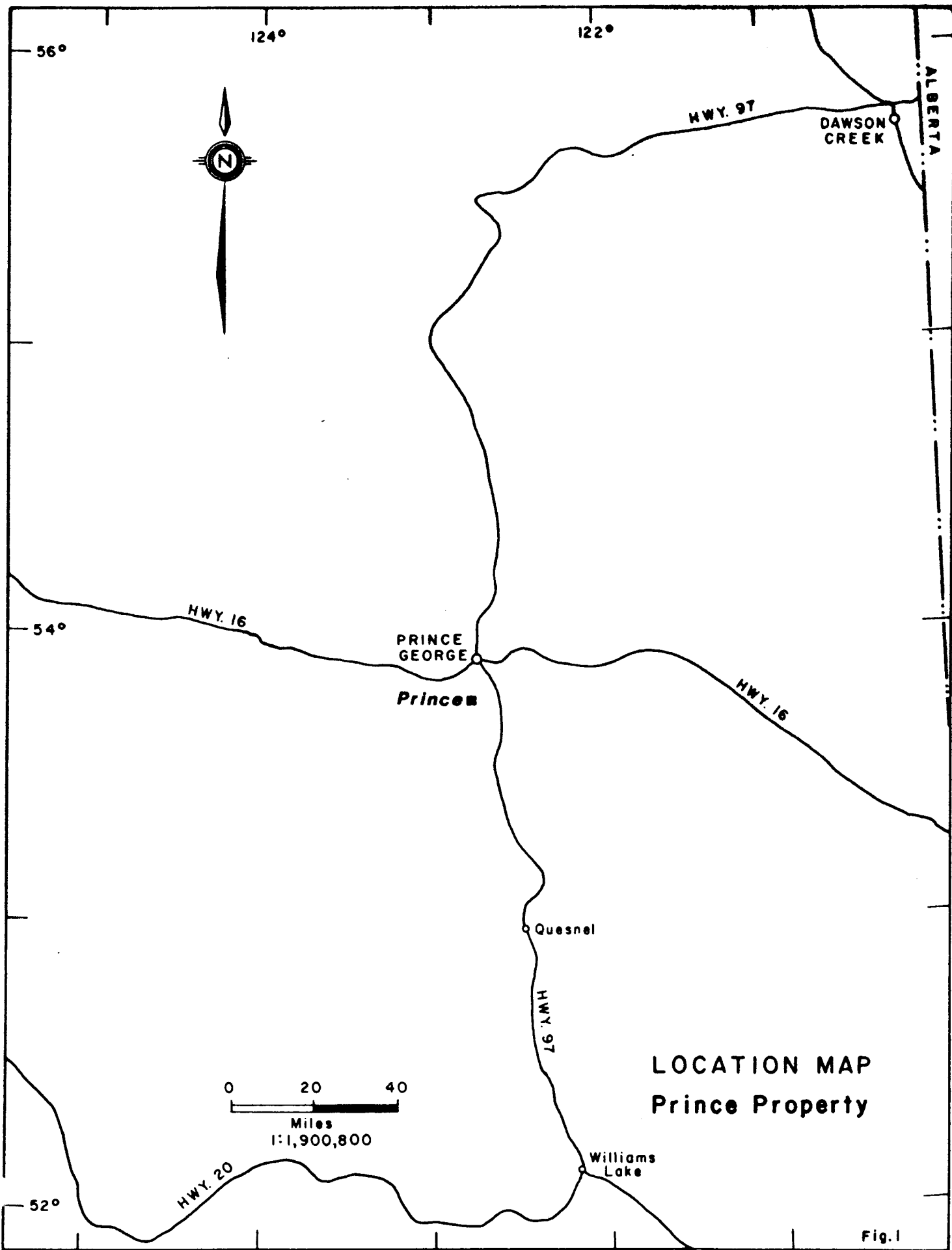
The Prince claims cover a prominent aeromagnetic high, 15 km south of Prince George in an area blanketed with late-glacial lacustrine clays. Exploration in previous years found an overburden covered, chargeability high on the southern flank of the magnetic high. Geochemical surveys indicated elevated copper, gold and arsenic associated with this IP high. One drill hole was completed this year to investigate this IP high. Alkalic volcanic rocks were intersected, most with elevated copper contents, the maximum value being 340 ppm Cu over 3 m.

II INTRODUCTION

The Prince property is located 15 km south of Prince George (See figure 1 and 2). Access is by the paved Westlake road south of Prince George to Tedford Drive. From the end of Tedford a muddy logging road, 3 km long, reaches the property. The claims are situated on the plateau west of the Fraser river. Topography is gentle and elevation averages 750 m above sea level. In 1991 one hole was completed to test the IP high. The hole was drilled with a track mounted JKS-200 diamond drill by Falcon Drilling Ltd. of Prince George. The core was logged by A.M. Pauwels, Senior geologist. Analysis of split cores for copper and gold was done at Cominco's Exploration and Research Laboratory in Vancouver

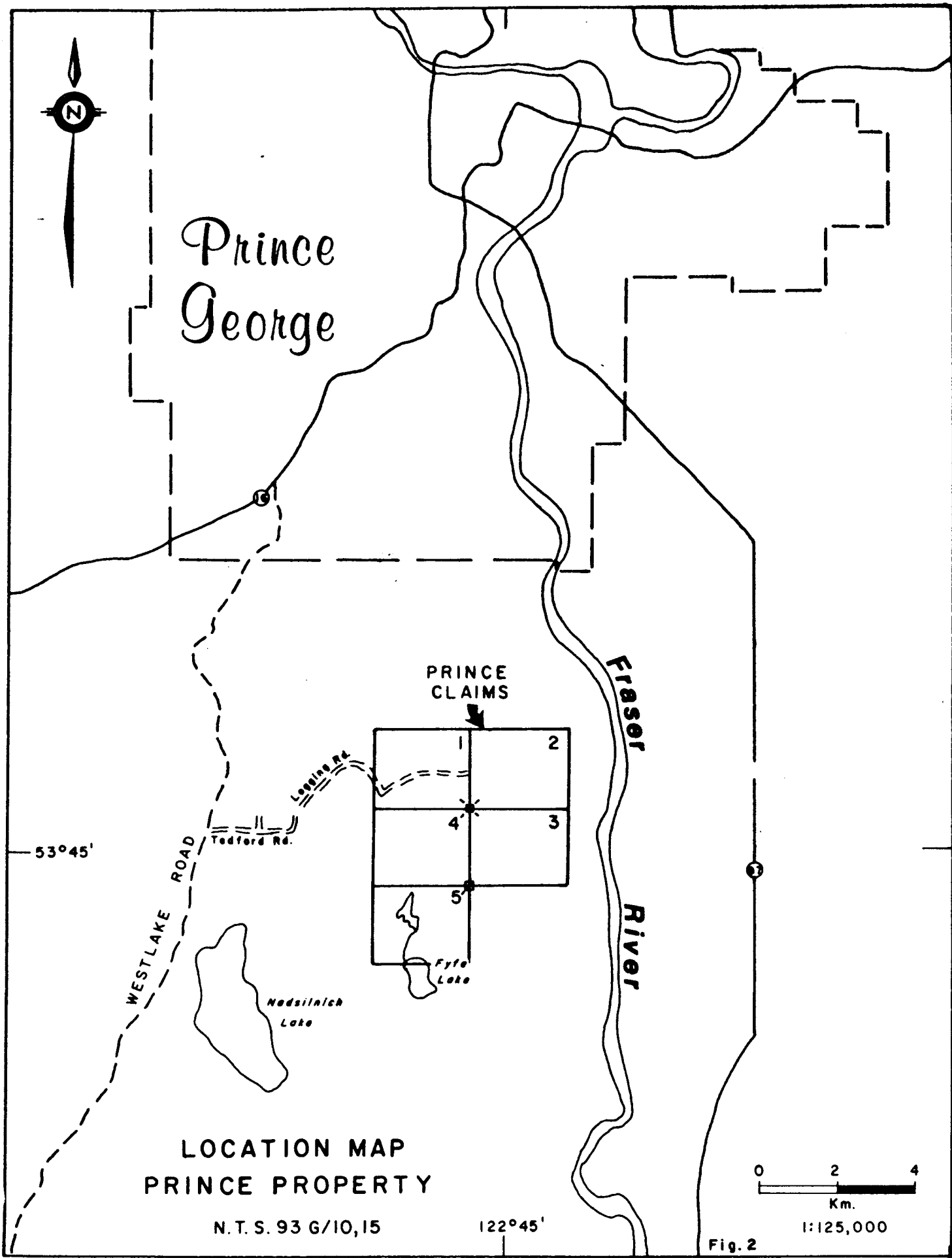
III PREVIOUS EXPLORATION

The earliest work on the property dates back to 1958, when prospectors for Wennergren investigated a prominent aeromagnetic anomaly located during airborne surveys. No record exists of this work. Later in 1969 the Minou claims were acquired by A. Savidge and K.Kaniar. Their interest was sparked by high molybdenum values in soils. Exploration consisted of silt sampling, soil sampling and trenching. The area was reported to be entirely covered with lacustrine clays, the only bedrock was monzonite found in some of the trenches. Analytical results for the soil samples were very low, a few higher values were found for copper in samples from overburden and weathered bedrock in the bottom of the trenches. The highest value was 730 ppm Cu. The property was staked by Cominco in February 1989 to cover a large aero magnetic high, potentially associated with porphyry-style copper-gold mineralization. Geochemical surveys were done in May and August and consisted of soil sampling with a power auger. Later in September an IP survey was completed and a chargeability high was found on the southern flanks of the aeromagnetic high. In 1990 more detailed IP was performed and bark sampling was done over the IP high. Elevated copper and gold in soils and elevated arsenic in bark samples were found to be associated with parts of the IP high.



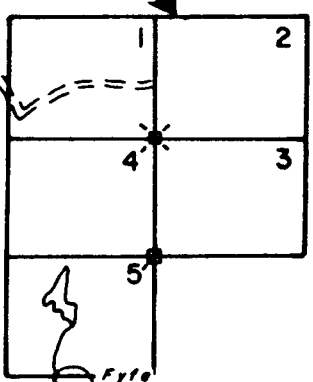
**LOCATION MAP
Prince Property**

Fig. 1



Prince
George

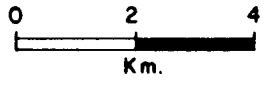
PRINCE
CLAIMS



LOCATION MAP
PRINCE PROPERTY

N. T. S. 93 G/10, 15

122°45'



1:125,000

Fig. 2

IV TENURE

The property consists of five claims, Prince 1 to 5, Record No's: 9552-5. 10787. The claims are fully owned by Cominco Ltd. Drilling was done on the Prince 4 claim and expenditures totalled \$ 12,113.41, details are given in Appendix I.

V GEOLOGY

There are few outcrops in the vicinity of the property. The area around Prince George is uniformly mantled, to an elevation of 790 m, by clays deposited in late-glacial Lake George. This lake was impounded behind ice dams during the waning stages of the last glaciation and had an ephemeral existence of approximately a hundred years. The uniformity of this cover is only broken by several beach levels composed of coarse rounded pebbles. Underlying bedrock is further covered by glacial tills and outcrops are only seen in deep river cuts, at higher elevations and on hill sides facing the north-northeasterly directed ice movement. Generally the area of the claims is assumed to be underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Takla formation. A few outcrops on the claims, consisting of monzonite and andesite, support this assumption.

VI DIAMOND DRILLING

Diamond drilling was done from May 25 to May 28, 1992. The hole was to test a chargeability high totally covered by overburden (see Figure 3). The drill rig was a track mounted JKS-200. This rig assembly, custom made by Falcon Drilling Ltd. of Prince George, has very low surficial impact and was capable to move cross country to the drill site without requiring any cutting of trees. Core size was BGM and the hole was drilled at -65 degrees to the east, to a depth of 183 m. A detailed description of the core and analytical results are given in Appendix II. The hole intersected volcanoclastic rocks cut by a few dykes. Pyrite is disseminated throughout, but is most abundant in the lower half of the hole. Carbonate veinlets are abundant, quartz and quartz-calcite veins are only abundant locally. Analytical results indicated elevated copper values over large parts of the core, values over 100 ppm Cu are common. Average copper content of the latite agglomerate is 175 ppm Cu, and the average for the volcanoclastic intervals in the top half of the hole is 196 ppm. All gold values, except for one, were below the detection limit of 10 ppb.

VII CONCLUSIONS AND RECOMMENDATIONS

One drill hole, testing an IP high, intersected disseminated pyrite in moderately altered alkalic volcanic rocks. Elevated but clearly sub economic copper values were found throughout much of the hole. The alteration and geochemically elevated copper content could be part of a large, porphyry style, hydrothermal system and therefore additional drilling of the IP high is recommended.

Reported by



Andre M. Pauwels
Senior Geologist

Approved for Release



W. J. Wolfe
Manager, Exploration
Western Canada.

CORE STORED AT FALCON DRILLING WAREHOUSE IN PRINCE GEORGE

REFERENCES

- Armstrong, J.E.
1969 Surficial Geology, Prince George map-area, GSC, Map 3-1969.
- Holroyd, W, Pauwels, A
1990 Assessment Report, Geochemical Sampling and Geophysical Surveys, Prince 1-4 Mineral Claims.
- Scott, A.
1989 Logistical Report- Induced Polarization and Magnetometer Surveys, Prince George Area, B.C., Wee, Kirk, Spock, Prince, Pilot and Sal Properties, On Behalf of Cominco Ltd.
- Simpson J.G.
1971 A Report on Geochemical Surveys, Minou Claims Assessment Report 3067
- Tipper, H.W.
1960 Prince George , GSC, Map 49-1960, Geology Map
1971 Glacial Geomorphology and Pleistocene History of Central British Columbia, GSC, Bull. 196.

Dist: Cominco Files (1)
Mining Recorder (2)

**APPENDIX I
EXPENDITURES**

Planning, supervision, logging, Report A.M. Pauwels, 5 days @ \$ 450 /day	2,200.00
Sampling I. Stilwell 1 day @ \$ 122.91	122.91
Truck Rental and fuel 2 days @ \$ 60.00	120.00
Room/Board 3 days @ \$ 80.00	240.00
Analysis 41 samples, Au,Cu @ \$ 10.50	430.50
Drilling, Falcon Drilling Ltd as per invoice	9,000.00
TOTAL	12,113.41

APPENDIX II

DRILL HOLE LOG

DRILL HOLE RECORD

<u>Property:</u>	Prince	<u>Coordinates:</u>	1500 E 200 N	<u>HOLE:</u>	1
<u>Claim:</u>	Prince 4	<u>Length:</u>	183 m	<u>Logged by:</u>	A.M. Pauwels
<u>Dates:</u>	28 May-30 May	<u>Azimuth/Dip:</u>	270°/-65°	<u>Date:</u>	28 May, 1991
<u>Contractor:</u>		<u>Core Size:</u>	BGM		
		<u>Elevation:</u>			
<u>Objective:</u>	Test IP/Geochem high				
<u>Summary:</u>					

From	To (m)	Description
0	14	Overburden
14	40.5	Dark brown (weathered) to green, fine to medium grained, basaltic tuff. Small clusters of biotite (10-20%) in very fine pale green matrix, thin calcite veins. Very fine grained pyrite (1%). The last 10 meters is transitional to below, well bedded, with calcareous nodules arrayed along bedding planes, no biotite clusters.
40.5	45.7	Green volcanoclastic, fine to very fine grained interbedded with calcareous argillite, very fine grained disseminated py.
45.7	54.9	Fine grained finely laminated calcareous tuff, pale grey to green, 2 to 3% disseminated pyrite
54.9	93.6	Fine to very fine grained pale green Lafite or Andesite tuff, 1% disseminated pyrite. Quartz and quartz-calcite veinlets, some with pyrite, veins from 1% to 8% of core. Joint surfaces are chloritic some with flakes of sulphides.
93.6	97.0	Dark green porphyritic dyke. Feldspar crystals (20%), 2 to 5 mm. Dark very fine matrix with disseminated pyrite, riddled with calcite veins.
97.0	103.4	Fine to very fine grained, dark green, chlorotic probably andesite
103.4	167.1	Pale green to dark green and pink. Lahte agglomerate, large subrounded graffments with patches of pink k-spar/calcite. Matrix is dark biotite and K-spar matrix. Disseminated pyrite rare po, cpy. Sulphides also occurring in thin veins of calcite, calcite-quartz, rare epivote. Veining peaks at 10% in a few sections. Sulphides 2% from 103.4-140.3, 1% from 140.3-167.1
167.1	169.1	Felsic dyke. Fine grained quartzo-feldspathic matrix with feldspar laths (1-2mm), py 0.5%
169.1	183	Fine to very fine grained, green andesite, chlorotic, trace of sulphides
183		END OF HOLE

ANALYSIS

From	To	ppm Cu	ppm Au
28.97	29.58	272	<10
35.99	39.04	335	<10
39.04	42.09	224	<10
42.09	45.14	112	<10
45.14	48.19	204	<10
48.19	51.24	171	<10
51.24	54.29	186	<10
54.29	57.03	295	<10
57.03	57.64	520	<10
57.64	60.39	164	<10
60.39	63.44	69	<10
63.44	55.49	60	<10
66.49	69.54	67	<10
69.54	72.59	89	<10
72.59	75.04	69	<10
75.64	78.69	91	<10
78.69	81.74	63	<10
81.74	84.79	65	<10
84.79	87.84	55	<10
87.84	90.89	57	<10
100.04	100.65	82	<10
103.09	106.14	186	<10
106.14	109.19	261	<10
109.19	112.24	215	<10
112.24	113.76	188	<10
113.76	115.29	320	<10
115.29	118.34	110	<10
118.34	121.39	204	<10
121.39	124.44	267	<10
124.44	127.49	156	<10
127.49	130.54	120	<10
130.54	132.06	106	<10
132.06	133.59	176	<10
133.59	136.64	101	<10
136.64	139.69	149	<10
139.69	141.21	226	44
141.21	142.74	166	<10
142.74	145.79	173	<10
145.79	148.84	122	<10
148.84	151.89	100	<10
151.89	154.94	96	<10

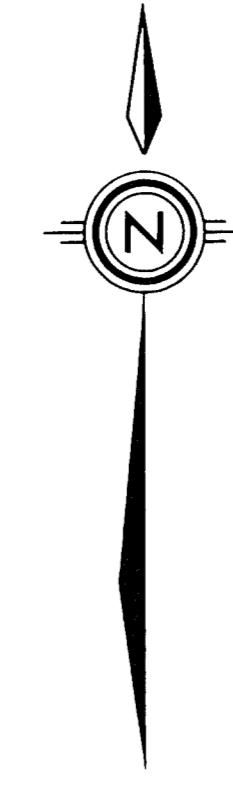
APPENDIX III
STATEMENTS OF QUALIFICATIONS

- I, ANDRE M. PAUWELS, 4900 Mariposa Court, Richmond, B.C. hereby declare that I:
1. Graduated from State University of Ghent, Belgium with a B.Sc., Geology in July, 1970.
 2. Have been engaged in mineral exploration as a Geologist:
 - in Ontario from September, 1970 until April, 1972 with Union Miniere Explorations and Mining Corporation Limited.
 - in British Columbia and Yukon Territories since May, 1972 until December, 1980 with Union Miniere Exploration and Mining Corporation Limited.
 - with Bethlehem Copper Corporation from January until May 1, 1981.
 - presently with Cominco Limited since May 1, 1981.
 3. Was engaged from 1970 until present in numerous geological, geochemical, geophysical and drilling programmes for mineral exploration in Ontario, British Columbia, the Yukon Territory, Northwest Territories, Arizona and Peru.
 4. Am a Fellow of the Geological Association of Canada



A.M. Pauwels
Senior Geologist

DATE: September 24, 1990



122°43'
+ 53°47'

FRASER
RIVER

PRINCE 1

PRINCE 2

PRINCE 3

PRINCE 4

PRINCE 5

Tree Improvement District

Red Rock
Research Planting

Red Rock
Research Planting

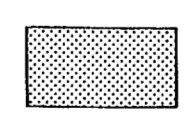
1991
D.D.H.

93 G/15
53°45'
93 G/10

cut lot line

Creek

Fyfe
LAKE

 I.P. ANOMALY

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,699

PRINCE PROPERTY

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

COMPILATION
1991 DRILLING

Scale: 1:10,000 Date: Sept. 1991 Plate: 3

0 200 400
Metres

93 G/15
93 G/10