

COMINCO LTD.

EXPLORATION
NTS: 82E/4E

WESTERN DISTRICT
6 July 1983

ASSESSMENT REPORT

ON

DIAMOND DRILLING

ON THE

BROWN BEAR (L385)

CROWN GRANTED MINERAL CLAIM

OSOYOOS M.D.

LATITUDE: 49°12'N
LONGITUDE: 119°38'W

OWNER: Fairview Mining Company Ltd.

OPERATOR: Cominco Ltd./700-409 Granville Street, Vancouver, B.C.

WORK PERFORMED: April 20-23, 1983

Reported by:

A.M. PAUWELS

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,364

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Geology

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

INTRODUCTION

The Brown Bear Crown granted mineral claim (L.385) is located in the southern Okanagan, 11 km west of Oliver, B.C. The property is situated along the Oliver-Cawston gravel road (see Figure 1). Topographic relief in the area is moderate, elevations range from 800 to 900 m above sea level. Vegetation on the claim consist of open forest (Douglas Fir, Red Pine). The Brown Bear claim is owned by the Fairview Mining Company Ltd., which is controlled by Asarco Inc. The property is currently under option to Cominco Ltd., 700-409 Granville Street, Vancouver.

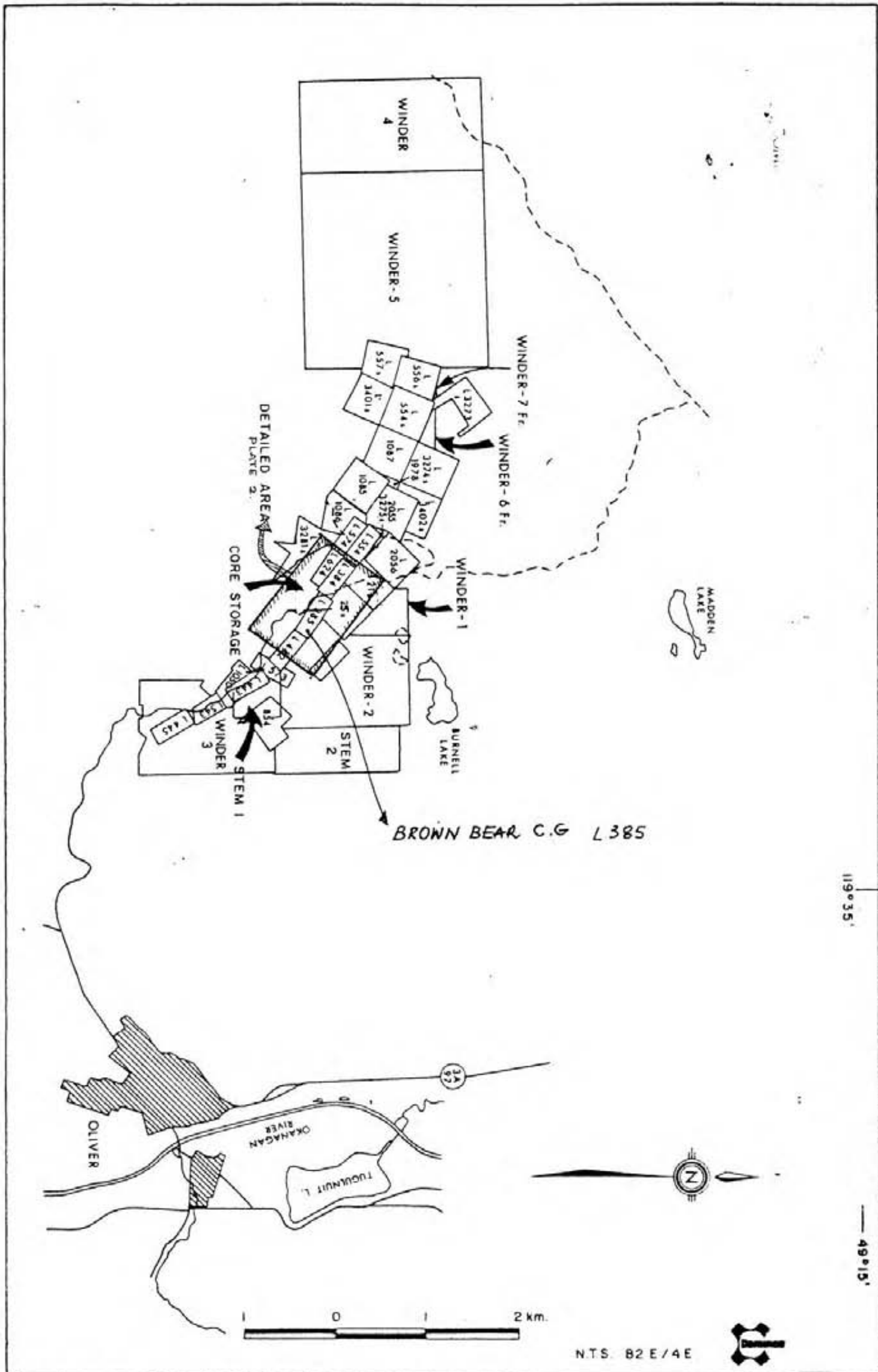
HISTORY

The Brown Bear is part of the Fairview Gold Mining Camp and was originally located in 1887. The Fairview camp saw its first activity at the turn of the century till 1903. Two adits at the eastern end of the claim date from that period. Activity in the Fairview camp returned in the 1930's with mining at the Morning Star, Stemwinder and Fairview Mines. By 1940 mining ceased till September 1946 when Cominco resumed mining at the Fairview Mine. This mine was used as a silica source for the Trail smelter till 1961 when it closed.

Exploration in the camp resumed in 1980, under joint agreement between Asarco and Cominco. Drilling was done on the Brown Bear claim in 1982 (Assessment report by W.E. Wiley, March 19, 1982) and 1983.

GEOLOGY

The claim is underlain by Kobau group metasediments of undetermined, but pre-Cretaceous age. The Kobau group consists of phyllite, quartzites and metavolcanics intruded by the Oliver granite to the north and the Fairview granodiorite to the south. Locally on the claim, the Kobau group consists of quartzites, striking N50°W and dipping 40 to 70° to the NE. Quartzites



119°35'

49°15'

Drawn by: W.E.W.		Traced by: H.H.	
Revised by	Date	Revised by	Date
AMP	July 1983		

BROWN BEAR C.G.

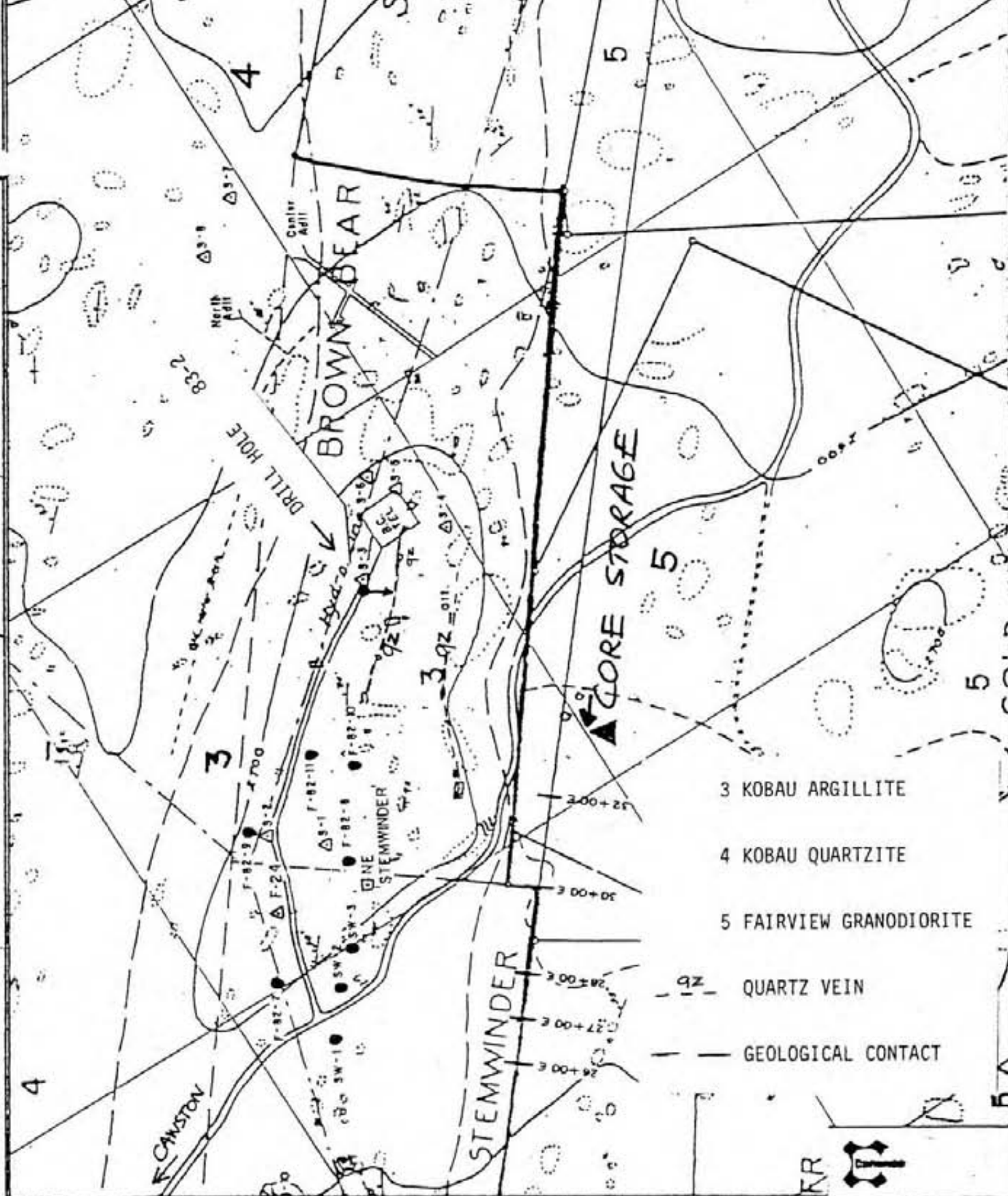
CLAIM

Perkins

Scale: 1 : 50,000

Date: July 1983

Plate: 1



Drawn by: AMP		Traced by:	
Revised By:	Date:	Revised By:	Date:
	July 83		

BROWN BEAR C.G.
DDH 83-2
LOCATION AND GEOLOGY

Scale: **1 - 3600** Date: **July 83** Page: **2**

2.

are in contact with Fairview granodiorite near the southern boundary of the claim (see Figure 2). Mineralization consists of quartz veins, generally conform^{able} with laminations in the quartzites. Quartz veins generally consist of 98% white translucent quartz, 1% sulphides: pyrite > galena > sphalerite > chalcopyrite and 1% sericite and clay and carry gold and silver values.

DRILLING

Drilling was done on the property in April and May 1983. The work was done by Phil's Diamond Drilling Ltd. of 100 Mile House B.C. with a Longyear 34 diamond drill and NQ size equipment. Drill cores are stored near the claim on the land of Mr. Otto Hess, a local resident.

This report concerns hole 83-2. The hole was aimed at intersecting two parallel quartz veins outcropping nearby (see Figure 2). One vein was intersected over 0.84 m at 19.75 m, grading 1,422 ppb Au, 20.7 ppm Ag. The second vein was not found, instead a fault was intersected at the expected depth (70 m). Expenditures are detailed in Appendix I and drill log records and analyses can be found in Appendix II.

CONCLUSIONS

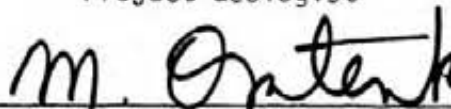
Hole 83-2 intersected one of two expected quartz veins. The one intersection is too narrow and of too low a gold/silver grade to be of economic interest.

Reported by:



A.M. Pauwels
Project Geologist

Endorsed by:



M.J. Osatenko
Senior Geologist

Approved for
Release by:



G. Harden
Manager, Exploration
Western District

Distribution

Mining Recorder (2)

Western District Files (1)

A.M. Pauwels (1)

A P P E N D I X I

STATEMENT OF EXPENDITURES

DRILLING: April 20-23, 1983

Hole No. 2 - 92 m (305') at \$59.04/m (18 ⁰⁰ /ft) -	\$ 5,490.00
- 1 dip test at \$40	40.00
- 1.22 m NW casing left in hole (4')	100.00
- 1 casing shoe	175.00

LOGGING: Supervision A.M. Pauwels 20-23 April 1983

Salary - at \$235/day (4 days)	940.00
Food/Lodging at \$30/day (4 days)	120.00
Truck at \$50/day (4 days)	<u>200.00</u>
	\$ 7,065.00

A. Pauwels

Drill Hole Record



Property	District	W. D.	Hole No.	83-2
Commenced	22 April 1983	Location	Oliver	Tests at 150'
Completed	24 April 1983	Core Size	NQ	Hor. Comp.
Co-ordinates	7249.73N 12665.09	True Brg.		Vert. Comp.
Objective	Intersect Hanging Wall and Main Veins		% Recov.	96%
			Date	24 April 1983

Claim
Brown Bear C.G.

T Brg. 220°

Collar Dip 51°

Elev.

- 2694'

Length 305'

92m

Hole No. 83-2

Sheet 1

From	To	Description	Sample No.	Length	Analysis
0	4.5	Casing/overburden			
4.5	44	Laminated Quartzite, quartz 70%, muscovite >> Chlorite, rare biotite.			
44	64.75	Laminated Quartzite, quartz 50%; Chlorite >> biotite, muscovite			
64.75	67.5	Quartz vein: white translucent; trace of galena, sphalerite, pyrite; 4" of sericitic, incorporated wallrock.			
		Crinkled bedding from 61 to 64.9'; at 58.1, 3" of fault gouge.	83200	61-64.75	
		At 67.5, 2" of sericite/clay. Crinkled bedding from 67.9 - 71.	83201	64.75 - 67.5	
67.5	123	Laminated quartzite (Muscovite, chlorite)	83202	67.5 - 72	
		70% quartz lamina maximum 5 mm, minimum 0.5 mm, median 2.5 mm pyrite 0.5%.	83203	204 - 106.5	
		30% mica laminae (60/40 Muscovite, chlorite)	83204	106.5 - 107.75	
106.5	107.75	Quartz veins 6" of quartz vein with trace of galena/sphalerite, rest is enclosed wallrock.	83205	107.75 - 110	
		6" of bleaching either side of quartz veins.			
123	128	Agrillite			
		60% are black layers, or chlorite > muscovite layers, minor biotite at 127			
		40% quartz laminae			
		6" fault gouge at 127			

A. Pauwels

Scale

Colour Plot & Date

Drill Hole Record



Property	District	Hole No. 83-2
Commenced	Locallon	Tests at
Completed	Core Size	Hor. Comp.
Co-ordinates		Corr. Dip
Objective		Vert. Comp.
		True Brg.
		Logged by
		% Recov.
		Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. 83-2	Sheet 3
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Footage From To	Description	Sample No.	Length	Analysis
163.6 - 166.5	Laminated Biotite quartzite as before.			
166.5 - 167.5	Diorite sill as 162 - 163.6			
167.5 - 191	Laminated Biotite quartzite as above			
192 - 192.5	Diorite sill as above.			
192.5 - 198	Laminated biotite quartzite as above			
198 - 200.5	Diorite sill as above			
200.5 - 207	Laminated Quartzite (chlorite, muscovite) Quartzite: 60% fragmental, irregular, subangular chlorite, minor muscovite 40% 0.25% pyrite			
207 - 232	Laminated quartzite (biotite) Quartz: 70%, coarse 105 min layer. Mica 30% (Biotite, chlorite)			
217 - 220	Diorite as before but includes 10% 204 mm feldspar porphyroblasts			
231 - 234	Fault gouge.			

911-9497

A. P. ...

Scale

Colour Plot
& Dip

Drill Hole Record



Property	District	Hole No.	83-2								
Commenced	Location	Tests at	Hor. Comp.								
Completed	Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates		True Brg.	Logged by								
Objective		% Recov.	Date								
Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
232 - 234	Fault gouge mostly washed away										
234 - 278.5	Coarse quartzite, crudely laminated. 95% quartz; 5 to 10% muscovite, minor chlorite; 1 to 2% pyrite. Thin (1mm) mica laminae are spaced 4 cm apart. Quartz is grey to translucent, some looks like large quartz fragments. Pyrite is flattened along micaplanes	832/06	141-47 252-245								
276 - 285.5	Laminated Quartzite (Biotite) Dark grey to black 1.5% pyrite (increased) along bedding 60% quartz, irregular laminae 30-40% Biotite layers, fine grained	832/07	245-247 247-152								
285.5 - 295	Coarsely laminated quartzite as 234 - 278.5										
295 - 305	As 276 & 285.5 Laminated biotite quartzite 5% consists of small (2 mm) subrounded "eyes" of flakey muscovite.										
305	End of Hole. Casing Left in Hole										

111.107

REPORTING DATE 13 MAY 1983

PAGE

SAMPLE NUMBER	FIELD NUMBER	HOLE No.	DRILL INTERVAL		Cu	Pb	Zn	Au	Wt Au	Ag
			FROM	TO	PPM	PPM	PPM	PPB	GRAM	PPM
R83 01865	83200		61.0	64.7	69	31	208	40	5.0	.4
R83 01866	83201		64.7	67.5	38	413	224	1422	5.0	20.7
R83 01867	83202		67.5	72.0	55	13	133	70	5.0	1.9
R83 01868	83203		104.0	106.0	41	<4	60	<10	5.0	<.4
R83 01869	83204		106.0	107.7	13	100	36	236	5.0	5.9
R83 01870	83205		107.7	110.0	64	33	78	<10	5.0	.6
R83 01871	83206		242.0	247.0	64	9	18	<10	5.0	<.4
R83 01872	83207		247.0	252.0	64	<4	38	<10	5.0	<.4

C. P. ...

APPENDIX III

AUTHOR'S QUALIFICATIONS

I, Andre M. Pauwels of 4900 Mariposa Court, Richmond, B.C. hereby declare:

1. THAT I graduated from State University of Ghent, Belgium with a B.Sc., in Geology in July of 1970;
2. THAT I 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 Ltd. since May 1, 1981.
3. THAT I was engaged from 1970 until present in numerous geological, geochemical, geophysical and drilling programmes for mineral explorations in Ontario, British Columbia and the Yukon Territories.
4. THAT I am a fellow of the Geological Association of Canada and member of the Association of Exploration Geochemists.



A.M. Pauwels, Geologist