

MAP No.

ASSESSMENT REPORT
N. M. E. A. P.
CONFIDENTIAL
OPEN FILE



TYPE OF
WORK: GEOLOGICAL

106 D 7

REPORT FILED UNDER	Canadian Nickel Co. Ltd.	DOCUMENT NO. 091665
DATE PERFORMED	Aug. 14-20, 1985	DATE FILED: 22 Nov. 1985
LOCATION - LAT. LONG.	64°25'N 134°38'W	AREA:
CLAIM NO.	BLENDE 16-88 YA77655-YA77727	
VALUE \$		
WORK DONE BY	W. Groeneweg	
WORK DONE FOR	Canadian Nickel Co. Ltd.	
REMARKS	<p>Geologic mapping of the property at a 1:10 000 scale was done in 1985. A total of 10 rock samples and 9 soil samples were analyzed for Ag, Cd, Cu, Pb, Sb, Zn. The best sulphide mineralization consists of a 30 cm wide quartz vein containing chalcopyrite, galena and sphalerite with a strike length of 15 m. A chip sample across the vein ran 1261.7 g/t Ag, 6.3% Zn, 2.9% Pb, 2.16% Cu.</p> <p style="text-align: right;">42X 85 p. 191 ✓</p>	

091665



GEOLOGICAL REPORT
BLENDE 16-88 Claims
YA77655 - YA77727

MT. WILLIAMS, WERNECKE MTS., YUKON T.
N.T.S. 106 D-7
TOPO COORDINATES 64°25'N, 134°38'W



091665

August 28, 1985
Wim Groeneweg

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 5806.00.

DA Emend

for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

Summary and Conclusions

The Blende 16-88 claims, owned by Canico, surround the Blende 1-15 claims, owned by Archer, Cathro. The properties are underlain by Helikian and Ordovician sedimentary rocks, mainly dolomites and dolomitic shales. On the Blende 1-15, along an E-W trending fault, a zone of fracturing has developed where the fault is cutting Unit G2a dolomites. The fractures are filled with dolomite, galena and sphalerite. The average grade of this zone is far from economic. The fault zone appears to continue on the Blende 16-88, but only occasional fractures were found to contain low grade mineralization.

Neither the Blende 1-15 or the Blende 16-88 is of further interest. It is not recommended to file assessment work on the Blende 16-88 claims.

General

The Blende 16-88 property was mapped and prospected from August 14 to 20, 1985. The claims, owned by Canadian Nickel Company Limited, surround the Blende 1-15 property, owned by Archer, Cathro & Associates (1981) Limited. The topography consists of rugged mountains and wide, alpine glaciated, valleys. Most of the property is above tree line with elevations varying from 1200 to 1800 m. Low shrubs and mosses cover the terrain up to 1500 m.

The weather during the summer is fickle. The open season is from late June to early September.

Water is available in the main valleys from small lakes and the major creeks.

The Blende 1-15 property is described in a report by R.J. Cathro and R.C. Carne dated August 16, 1984.

Location and Access

The property is located on Mount Williams in the Wernecke Mountains, 70 km NE of the mining town of Elsa (see figure 1). Access is by helicopter from Mayo (110 km). The Wind River winter road from Elsa passes at 10 km from the claims along the Beaver River. All creeks on the Blende property eventually drain into the Beaver River.

Property Status

The Blende 16-88 claims were staked on October 26, 1984, recorded and transferred on October 31, 1984, and were assigned grant numbers YA 77655 - YA 77727 (see figure 2). The claims are owned by Canadian Nickel Company Limited.

History

The mineralization on the Blende property was discovered in 1975 by Cyprus Anvil Mining Corporation. Cyprus carried out reconnaissance mapping and prospecting and limited stream and soil geochemical sampling. The results of this work are shown on Archer, Cathro's figure 2. The geochem results show Pb-Zn anomalies in several creeks, all except one draining the known area of mineralization. The one exception is a sample collected in a

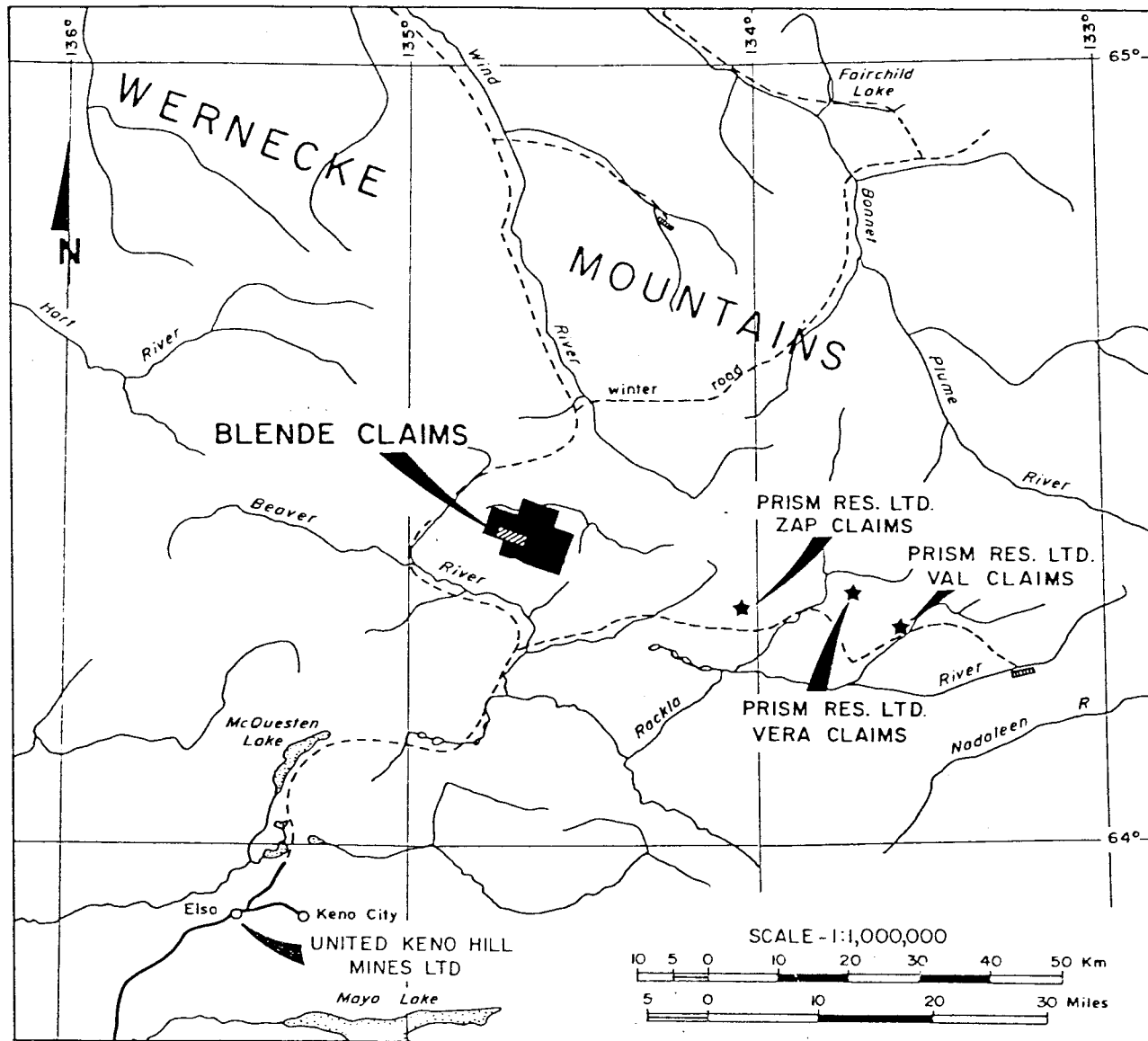


Figure 1

LOCATION MAP
 BLENDE PROPERTY
 MT. WILLIAMS, Y.T.

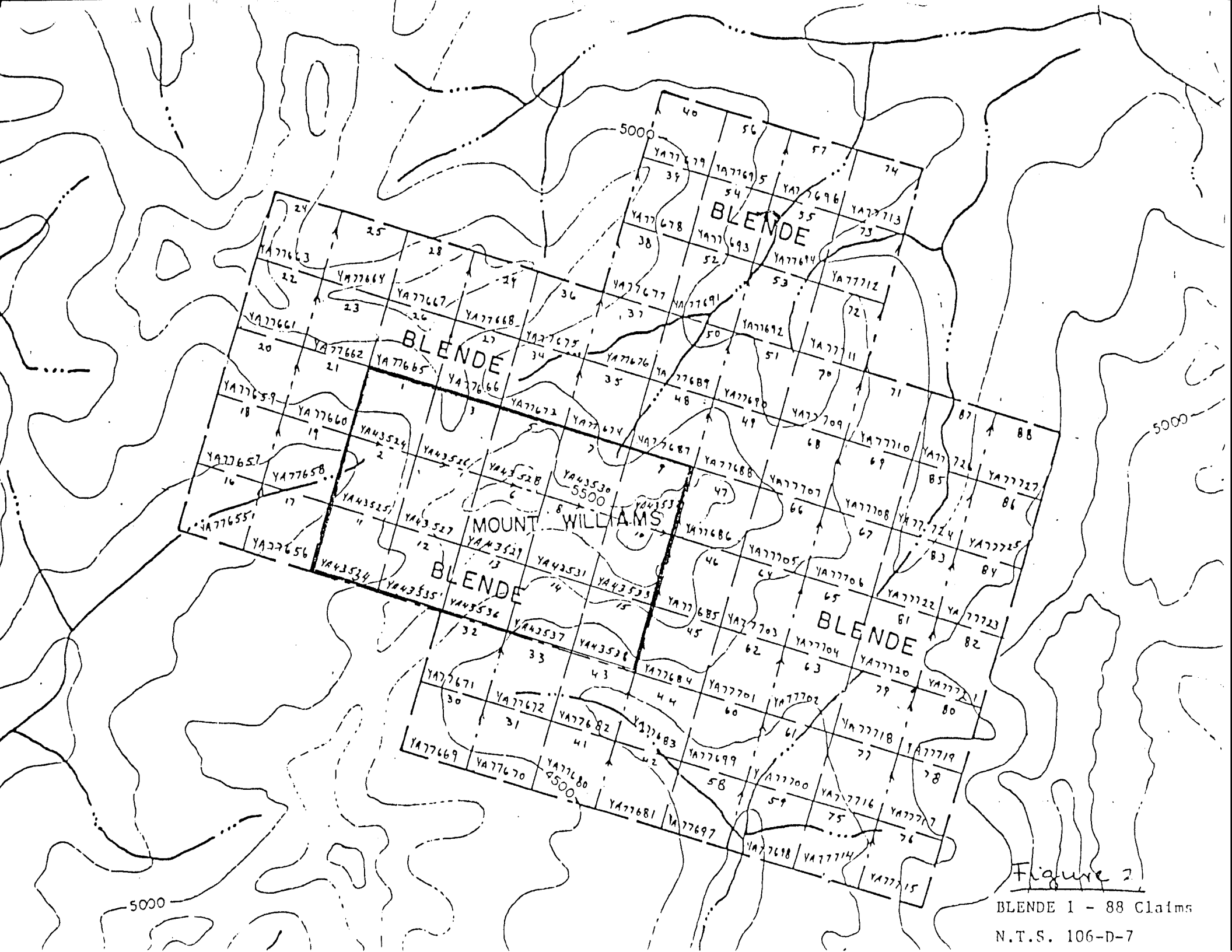


Figure 2

BLENDE 1 - 88 Claims

N.T.S. 106-D-7

creek at the east end of the property. This sample contained 550 ppm Pb and 820 ppm Zn. The creek drains a cirque which lies mainly outside our property.

The soil samples were taken along the banks of the major creeks and many showed to have anomalous lead values. It is suspicious, however, that similar values (150-500 ppm Pb) occur in soils overlying all rock formations and up to 3 km away from the known area of mineralization. This was enhanced when no mineralization was found in these areas during the prospecting reported in this report.

Archer, Cathro staked the Blende 1-15 claims in 1981. Minor sampling was carried out in 1981-82, and more systematic chip sampling was done on the main mineralized structure, the No. 5 zone, in 1984. The chip sampling was done across 10 sections perpendicular to a fractured zone in dolomites of the Gillespie Lake Group of probable Helikian age. Archer, Cathro reported the results of this sampling as averaging 3.63% Pb, 4.32% Zn and 70 ppm Ag across an average thickness of 13.75 m, and interpreted along a strike length of 800 m and a vertical range of 300 m. This was then given a potential tonnage of 10×10^6 .

The No. 5 zone was visited on August 8, 1985. As the zone crops out on a very steep slope, outcrops are erratic and most of the strike length of the zone is covered by scree and younger shales. The best marker, actually, is the quartz-carbonate alteration zone in the structural footwall which is dark brown in color on weathered surfaces. Most sections sampled are also partially covered. Mineralization consists of galena and sphalerite in dolomite filled fractures within partly silicified host dolomite. The sphalerite has been strongly oxidized and the rocks are coated with white oxidation products as hydrozincite, etc. This probably enriched the surface chip samples in metal content, especially of zinc. Nine of the eleven sections occur in the eastern half of the zone. The western half was only sampled at the western end with a 330 m gap not sampled because of scree cover. This gap also corresponds with the 300 m vertical drop.

Consequently the average values given by Archer, Cathro should be taken as maximum geological tonnage potential with exaggerated Pb and Zn contents considering the erratic mineralization and enrichment by oxidation, especially of zinc.

The No. 5 zone does not offer an economically interesting target.

Geology and Mineralization

The geology of the Blende 16-88 claims was mapped on a 1:10,000 topographical base (see figure 4). The area is underlain by Helikian and Ordovician sedimentary rocks. A large Hadrynian diorite and gabbro intrusion occurs SW of the property. Several diabase dikes related to this intrusion occur in the SW corner of the Blende claim group.

The Helikian sediments belong to the upper portion of the Wernecke Supergroup. The oldest unit, the Quartet Group (Q2) crops out in an anticlinal axis at the western boundary of the property and consists of black shale and quartzites (or quartz rich sandstones). This Group is overlain by the Gillespie Lake Group which can be subdivided into four mappable units. The oldest unit (TR) occurs in the southwestern part of the property

and consists of orange to grey-green weathering, ochre to green dolomitic shales with ochre dolomite layers. They are intruded by diabase dikes which in turn are cut by barren quartz veins (up to 10 cm thick) along faults and fractures.

Unit TR is conformably overlain by Unit G2a which consists of massive to interbedded, orange weathering, grey dolomite. Most of the massive dolomite is stromatolitic. Minor shaly intervals seem to occur as facies changes and usually occur in depressions (e.g. saddles). Some narrow fractures filled with dolomite and minor galena, sphalerite (sample RX 39779) and sometimes chalcopryrite (sample RX 39380) occur along the ESE extension of the No. 5 zone, but do not have any economic interest. In the central part of the property abundant barren quartz veinlets cut the dolomite (samples RX 39377-78).

Unit G2b is a relatively thin sequence of black shales and interlayered dolomite and sits on top of the G2a unit in the central, north-central and east-central parts of the property. The unit appears to become more important east of the Blende and, in part, might represent a facies change of units G2a and G3.

Unit G3 is the upper part of the Gillespie Lake Group and consists of orange weathering, grey dolomite with interbedded yellow and maroon dolomite in the north and grey weathering, grey, massive, stromatolitic dolomite in the northwest.

The Gillespie Lake Group is unconformably overlain by flatlying light grey, crystalline, limestone and dolomite (partially breccias) with some quartzite beds, of Ordovician age (OSc), in the N and NE.

Except for the No. 5 zone, major faults are not visible in the field. Some faults have been interpreted because of stratigraphic continuity problems. Most beds strike in NW-SE directions; in the northern part of the property the strikes change to SW-NE.

Quartz veins up to 10 cm thick occur along fractures and faults. [The E-W fault zone which is host to the No. 1, 2, 5, 7, 9 Zones on the Archer Cathro claims was found to extend eastward onto the Canico claims (No. 3, 4, 8 Zones). Only the No. 3 Zone was located in the field and an analytical result returned negligible Ag, Zn, Pb values. A 30 cm wide shear zone located 200 m northeast of the No. 3 Zone contains a quartz vein with chalcopryrite, sphalerite and galena exposed over a strike length of 15 m. A chip sample ran 36.8 oz/ton Ag, 6.3% Zn, 2.9% Pb, 2.16% Cu. This represents the best mineralization located on the Canico claims. The narrow width does not warrant further work. Other samples collected on the property were not anomalous except for a 10 cm wide quartz vein (6.4 ppm Ag) and black shale ferricrete (27.2 ppm Ag, 0.18% Zn, 0.26% Pb) located west and north of the No. 5 Zone, respectively. The No. 10 Zone, ~~located west and north of the No. 5 Zone, respectively.~~, was not located.



LEGEND

- ORDOVICIAN - SILURIAN
 - OSc light grey, crystalline limestone and dolomite (especially breccias) with some quartzite beds
- HADRYNIAN or OLDER
 - + Diabase
- HELIKIAN or OLDER
 - GILLESPIE LAKE GROUP
 - G3 orange weathering, grey dolomite, with bedded yellow and massive dolomite; grey weathering, grey, massive stromatolitic dolomite (thinly bedded shales)
 - G2b black shales with interbedded dolomite
 - G2a massive to subbedded, orange weathering, grey dolomite, stromatolitic, minor black shales
 - TR orange to grey-green weathering, shales to green dolomitic shales, with some dolomitic layers
- QUARTET LAKE GROUP
 - Q2 black shale and grey quartzite

- — — geological contact
- - - - - fault
- x 81 Sample location (see RX 8974-82) Figure 3

BLENDE PROPERTY
 MT. WILLIAMS, Y.T.
 SCALE 1:10,000


GEOLOGY AND SAMPLE LOCATION MAP

AUTHOR'S QUALIFICATIONS

I, WIM GROENEWEG, of the City of Richmond, in the Province of British Columbia, HEREBY CERTIFY:

1. THAT I am a graduate of Leiden Univeristy, The Netherlands, with a doctorandus degree in geology (1966).
2. THAT I am Senior Staff Geologist with Canadian Nickel Company Limited of Copper Cliff, Ontario, POM 1NO.
3. THAT the work described in the geological report on the Blende 16-83 claims, dated August 28, 1985, was carried out by me.
4. THAT I am a Fellow of the Geological Association of Canada, a member of CIM and a member of the Society of Economic Geologists.

DATED at Vancouver, British Columbia, this 28th day of August, 1985



W. Groeneweg

TRAVERSE NUMBER _____
 N.T.S. 106 D-7

PROJECT BLENDE
 AREA Mount Williams, Yukon

GEOLOGIST(S) W. Groeneweg
 DATE August 14-20, 1985

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (p.p.m. / % / oz. per ton)					
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Ag ppm	Cd ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
RX 39374	Rock		Grab			Grey, crystalline, Ordovician dolomite, partly brecciated, carbonate veinlets.	0.2	1.0	3	14	20	30
RX 39375	Rock		Grab			Reddish-brown weathering, dark grey limestone, G3 unit.	0.2	1.0	21	64	20	70
RX 39376	Rock		Grab			Orange weathering, dark grey dolomite with quartz veinlets, unit G2a.	0.2	0.5	9	10	20	10
RX 39377	Rock		Grab			Ditto	0.2	0.5	7	10	20	20
RX 39378	Rock		Grab			Ditto	0.2	0.5	13	14	20	10
RX 39379	Rock		Grab			Quartz stockwork in dolomite G2a unit, water seepage (fault?). Possibly Cyprus Anvil No. 3 Zone.	0.2	0.5	4	18	20	10
RX 39380	Rock		Chip			Vertical shear zone, 30 cm wide, Strike 330°, quartz vein with chalcopyrite, galena, 15 m long.	>200 36.8 opt	>100 0.015%	>1% 2.16% 2.9%	>1% 1.484%	>1% 6.3%	>1%
RX 39381	Rock		Grab			Quartz vein, 10 cm wide, some Fe hydroxide filled vugs, Strike/Dip: 100°/45°W, cutting 60 cm wide diabase dike, Strike/Dip: 65°/45°SE, which cuts dolomitic shales of TR unit, Strike/Dip: 140°/20°NE. Quartz veins along faults which have broken up the diabase dike.	6.4	0.5	116	294	110	530



Chemex Labs Ltd.

•Analytical Chemists •Geochemists •Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : CANADIAN NICKEL CO. LIMITED
P.O. BOX 12134
512 - 808 NELSON ST.
VANCOUVER, B.C.
V6Z 2H2

CERT. # : ABS15602-001-A
INVOICE # : 18515602
DATE : 9-SEP-85
P.O. # : NONE
G1009

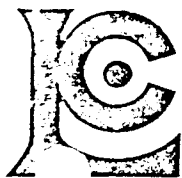
Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Bi, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and V can only be considered as semi-quantitative.

COMMENTS :

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Hg	Hr	Mo	Ni	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn		
	µg/g	ppm	ppm	ppm	ppm	ppm	µg/g	ppm	ppm	ppm	ppm	µg/g	ppm	µg/g	ppm	µg/g	ppm	ppm	µg/g	ppm	ppm	ppm	ppm	µg/g	ppm	ppm	ppm	ppm	ppm	ppm		
RX 39374	0.02	0.2	<10	<10	<0.5	<2	17.41	1.0	4	<1	3	0.08	10	<0.01	<10	10.61	206	<1	<0.01	1	90	14	20	<1	<0.01	<10	<10	4	10	30	--	--
RX 39375	0.03	0.2	<10	40	<0.5	2	17.16	1.0	9	<1	21	1.58	20	<0.01	<10	10.05	2464	<1	<0.01	5	200	64	20	<1	<0.01	<10	<10	11	10	70	--	--
RX 39376	0.02	0.2	10	40	<0.5	2	11.88	<0.5	7	22	9	1.57	10	<0.01	<10	6.64	2249	<1	<0.01	11	60	10	20	67	<0.01	<10	<10	5	<10	10	--	--
RX 39377	0.01	0.2	<10	10	<0.5	2	14.87	0.5	6	1	7	1.51	10	<0.01	<10	8.58	2203	<1	<0.01	4	60	10	20	<1	<0.01	<10	<10	4	10	20	--	--
RX 39378	0.01	0.2	10	10	<0.5	2	13.94	0.5	5	14	13	1.65	10	<0.01	<10	7.90	2040	<1	<0.01	4	60	14	20	<1	<0.01	<10	<10	6	10	10	--	--
RX 39379	0.02	0.2	<10	<10	<0.5	<2	15.46	0.5	6	1	4	1.00	20	<0.01	<10	9.12	1034	<1	<0.01	5	90	18	20	<1	<0.01	<10	<10	8	10	10	--	--
RX 39380	0.01	200.0	270	170	<0.5	<2	9.67	>99.9	13	9	>9999	3.51	10	<0.01	<10	5.31	1983	18	<0.01	14	260	>9999	>9999	159	<0.01	<10	<10	7	<10	>9999	--	--
RX 39381	0.01	6.4	10	10	<0.5	2	8.67	0.5	1	113	116	0.71	10	<0.01	<10	0.76	667	<1	<0.01	3	60	294	110	99	<0.01	<10	<10	2	<10	530	--	--
RX 39382	0.10	27.2	1140	490	<0.5	28	0.37	4.5	109	14	358	32.89	<10	0.04	<10	0.23	1890	9	<0.01	170	310	2642	270	14	<0.01	<10	<10	12	<10	1750	--	--

Certified by *Heidi Buchler*



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212 Brooksbank Ave
North Vancouver, B.C.
Canada V7J 2C1
Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ASSAY

TO : CANADIAN NICKEL CO. LIMITED
P.O. BOX 12134
512 - 808 NELSON ST.
VANCOUVER, B.C.
V6Z 2H2

CERT. # : A8516320-001-A
INVOICE # : I8516320
DATE : 2-OCT-85
P.O. # : NONE
G1009

Sample description	Prep code	Cu %	Pb %	Zn %	Cd %	Sb	NAA %	Ag FA oz/T
RX 39380	214	2.16	2.90	6.30	0.015	1.484		36.80

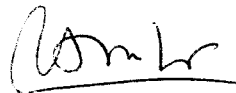
Block 16-85, Yukon
N.T.S. 106-D-7

.....
Registered Assayer, Province of British Columbia

AFFIDAVIT

I, Wim Groeneweg, of Vancouver, B.C. make oath and say:

That to the best of my knowledge the attached Statement of Expenditures for exploration work on the Blende 16-88 mineral claims on Claim Sheet 106 D-7 is accurate.

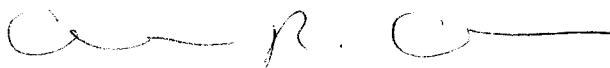


Wim Groeneweg

Sworn before me at Vancouver, B.C.

this 7th day of

November, 1985



Notary, Yukon Territory

STATEMENT OF EXPENDITURES
Blende 16-88 Claims, Yukon
Work Performed August 12-20, 1985

Salaries, 2 man geological crew	\$3,150.00
Equipment Rental	225.00
Truck Rental	217.00
Food and Supplies	400.00
Air Fare, Vancouver-Whitehorse-Vancouver	538.00
Hotels	223.00
Helicopter	1,437.00
Taxis	34.00
Assays	<u>120.00</u>
	<u>\$6,344.00</u>



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North Vancouver, B.C.
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Phone: (604) 984-0221
Telex: 043-52597

*** INVOICE ***

To : CANADIAN NICKEL CO. LIMITED
P.O. BOX 12134
512 - 808 NELSON ST.
VANCOUVER, B.C.
V6Z 2H2

Invoice # : I8516320
Date : 2-OCT-85
P.O. # : NONE
Project G1009

Invoice for analytical work reported on certificate(s) A8516320-001

Quantity	Analysed for code description	unit price	amount
1	301 - Cu %		
	312 - Pb %		
	316 - Zn %		
	320 - Cd %		
	347 - Sb NAA %		
	383 - Ag FA oz/T	39.00	39.00

Sample preparation and other charges :

1	214 - Received as pulp	0.00	0.00
---	------------------------	------	------

TOTAL \$ 39.00

Please pay this amount ----> \$ 39.00

TERMS -- NET 30 DAYS
1.5 % per month (18 % per annum) charged on overdue accounts

61009-14030-556

to LC Oct 18/85



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Av
North Vancouver, B.C.
Canada V7J 2C1
Phone: (604) 984-0200
Telex: 043-5250

*** INVOICE ***

To : CANADIAN NICKEL CO. LIMITED
P.O. BOX 12134
512 - 808 NELSON ST.
VANCOUVER, B.C.
V6Z 2H2

Invoice # : I8515602
Date : 9-SEP-85
P.O. # : NONE
Project G1009

Invoice for analytical work reported on certificate(s) A8515602-001

Quantity	Analysed for code description	unit price	amount
9	921 - Al	%	
	922 - Ag	ppm	
	923 - As	ppm	
	924 - Ba	ppm	
	925 - Be	ppm	
	926 - Bi	ppm	
	927 - Ca	%	
	928 - Cd	ppm	
	929 - Co	ppm	
	930 - Cr	ppm	
	931 - Cu	ppm	
	932 - Fe	%	
	933 - Ga	ppm	
	934 - K	%	
	935 - La	ppm	
	936 - Mg	%	
	937 - Mn	ppm	
	938 - Mo	ppm	
	939 - Na	%	
	940 - Ni	ppm	
	941 - P	ppm	
	942 - Pb	ppm	
	943 - Sb	ppm	
	944 - Sr	ppm	
	945 - Ti	%	
	946 - Tl	ppm	
	947 - U	ppm	
	948 - V	ppm	
	949 - W	ppm	
	950 - Zn	ppm	6.50
	Sample preparation and other charges :		58.50
9	205 - Rock geochem - RING	2.50	22.50
9	238 - ICP aqua-regia digestion	0.00	0.00

E. J. Hill
61009-14030-556
Blade 16-88 Claims

TOTAL \$ 81.00

Please pay this amount ----> \$ 81.00

TERMS: NET 30 DAYS
1.5 % per month (18 % per annum) charged on overdue accounts

to be paid 12/10