

5466

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CANADIAN NICKEL COMPANY LIMITED

93L/4W

REPORT ON

GEOLOGICAL, GEOCHEMICAL, AND GEOPHYSICAL

SURVEYS CONDUCTED ON THE CHLORE CLAIMS

- 1974 -

OMINECA MINING DIVISION

LONG. 127°51'40"W

LAT. 54°07'10"N

N.T.S.: 93L-4W

CHLORE 1-8

<p>Department of Mines and Petroleum Resources ASSESSMENT REPORT</p>	
NO.	5466
MAP

BY

R. A. Jamieson, B. Sc.

November, 1974

REPORT

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PLANS AND SECTIONS

	<u>Scale</u>
1 Location, Claim and Grid Map	1" = 1000 ft.
2 Geological and Lithochemical (Copper) Plan	1" = 200 ft.
3 Geological and Lithochemical (Molybdenum) Plan	1" = 200 ft.
4 Soil Sampling (Copper) Plan	1" = 200 ft.
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7, 8 I.P. - Chargeability and Resistivity Profiles	1" = 200 ft.
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SUMMARY

During the summer of 1973, the Canadian Nickel Company Limited located chalcopyrite and molybdenite mineralization associated with an Intermontane intrusive unit situated in the Clore River Valley, immediately southeast of Hope Peak (elev. - 6,103 ft.). A block of 8 claims was staked and recorded over the area of interest in May and June of 1974.

In February, 1974, Pacific Survey Corp. Ltd., prepared an ortho-photo which served as a basis for the topographic control necessary to conduct detailed geochemical, geological and geophysical surveys over the main area of interest.

Late in June, 1974, a fly-camp was set up on the claim group and supported by helicopter from Smithers. R. Jamieson, geologist, and a student assistant commenced work on the property, with the establishment of 5.6 miles of compass and paced (flagged) grid lines. Rock and soil geochemical sampling programmes were completed over the intrusive body at this time.

As a result of interesting assay results, a second fly-camp was set up on the property in late August. Induced Polarization (I.P.) and magnetic surveys were conducted by Canico personnel under the supervision of H. Limion, Inco Staff Geophysicist. Six lines of I.P. surveys were completed on 1000 ft. spaced lines. At this time more rock geochemical sampling and geological mapping was undertaken by R. Jamieson.

The fly-camp was dismantled in early September and the crews demobilized to Smithers and Terrace.

LOCATION

The property is located in a remote mountainous region within the Omineca Mining Division. It is situated 5.4 miles south-southwest of Smithers in the N.T.S. quadrant 93L-4W, at longitude 127°51'40"W and latitude 54°07'10"N. The claim block lies on both sides of the Clore River at an elevation of 3,000 feet above sea level, between Hope Peak (elev. - 6,103 ft.) on the west and Corona Peak (elev. - 6,641 ft.) on the east.

ACCESS

The only access to the claims covered by this report is by helicopter. Support for the work on the property was provided by a Jet Ranger 206-B helicopter on contract from Dominion-Pegasus Helicopters based at Smithers and at the Canadian Nickel Company Limited base camp at Bear Lake. A charter Jet Ranger 206-B helicopter from Okanagan Helicopters based in Terrace was also used for support.

A logging road from Houston to the northeast corner of Morice Lake ends only 12 miles from the Clore property. If drilling is to be conducted on the property all of the heavy equipment could be transported to Morice Lake by truck and then conveyed the last 12 miles by helicopter.

TOPOGRAPHY AND WATER

The claims covered by this report occur at the 3,000 ft. level of the Clore River Valley, and cover an area of relatively hilly glaciated landscape, vegetated mainly with small to medium coniferous growth. The entire area was devastated by a forest fire at some time in the past and windfalls from the fire still remain.

Steep cliffs, up to 50 ft., are found along the Clore River in the central portion of the claim group.

Several small lakes and ponds are found on the property and an adequate water supply for any drilling programme is readily available.

CLAIMS

A block of 8 claims was staked by agents for the Canadian Nickel Company Limited on May 30, 1974 and recorded on June 10, 1974.

<u>CLAIM NAME</u>	<u>TAG NO.</u>	<u>REGISTRATION NO.</u>	<u>RECORDING DATE</u>
Chlore 1	408705	130533	June 10, 1974
Chlore 2	408706	130534	June 10, 1974
Chlore 3	408707	130535	June 10, 1974
Chlore 4	408708	130536	June 10, 1974
Chlore 5	408709	130537	June 10, 1974
Chlore 6	408710	130538	June 10, 1974
Chlore 7	408711	130539	June 10, 1974
Chlore 8	408712	130540	June 10, 1974

GRID SURVEY

The location line of the claim block, azimuth 61°, was used as the base line for the grid. The starting point was located from an ortho-photograph produced by Pacific Survey Corp. Ltd. Cross lines at 500 ft. intervals were turned off the base line, by compass, 1,000 ft. to the north and 1,000 ft. to the south. Stations were paced in every 100 ft.

REGIONAL GEOLOGY

On a regional basis, this property lies within the most western zone of the Hazelton Group of volcanics, Lower Jurassic to Middle Jurassic in age. The volcanics consist mainly of andesitic to rhyolitic tuffs, breccias and flows with minor intercalated sedimentary rocks.

The claims cover an Upper Cretaceous to Early Tertiary acid intrusive body belonging to the Intermontane Group of porphyritic intrusions. The intrusive is shown by N.C. Carter and R.V. Kirkham on the B.C. Dept. of Mines and Petroleum Resources Map 69-1. Since the intrusive is located close to the Coast Range front, it may be related in age to the Coast Range Batholith.

DETAIL GEOLOGY

Geological mapping of the Chlore claims was conducted in two stages during the summer of 1974 by R.A. Jamieson. The first stage was carried out in late June while the second stage was conducted in late August and early September. Mapping was done at a scale of 200 ft. to the inch, using the grid stations for control.

As an aid to rock type identification, etching and staining of hand specimens was standard procedure during this mapping programme. Hydrofluoric acid was used for the etching and sodium cobaltinitrite for the staining of potassium feldspars. Petrological examination confirmed the accuracy of the

rock names applied in the field. Rock classifications for both hand-specimen identification and petrological examination were based on the Classification of Igneous Rocks (Russel B. Travis), the Colorado School of Mines (Volume 50, No. 1).

The oldest rocks on the property, the Hazelton Group, occur as a north-south trending, steeply dipping volcanic - sedimentary sequence. Overburden coverage in this area is extensive and rocks of this group as well as the intrusive are obscured by glacial - fluvial overburden.

The volcanics and sediments are intruded by an east-west trending oval shaped porphyritic granodiorite body which in turn has been cut by a series of younger biotite feldspar porphyry dikes. The porphyry dikes occur along the northern contact area of the granodiorite and generally strike in a northeasterly direction.

Outcrop exposure in the area of the intrusive is limited. About 90% of the intrusive and surrounding rock are covered by glacial overburden.

CRETACEOUS AND TERTIARY INTRUSIVES

Granodiorite

The porphyritic granodiorite is generally medium grained, with closely packed phenocrysts (75%) in a granular matrix (25%). The phenocrysts are very variable in size and are generally composed of quartz, plagioclase and biotite with very minor amounts of amphibole. The matrix is generally a fine grained intergrowth of quartz, K-feldspar, minor plagioclase, chlorite, sericite and carbonate. The granodiorite is generally leucocratic, light grey in colour but near contacts may take on a slightly pinkish-red tinge. Typical composition: plagioclase 50%, biotite 15%, K-feldspar 20%, quartz 15%.

Along the northern margin of the intrusive, is a fairly intense stockwork of unidirectional quartz veinlets, carrying moderate amounts of molybdenite. Pyrite, chalcopyrite and trace pyrrhotite are generally found as disseminations in the granodiorite, although locally chalcopyrite and pyrite may occur as concentrations along fractures or quartz veinlets.

Alteration in the granodiorite is moderate to locally intense. Plagioclase generally alters to sericite with minor kaolinite, K-feldspar, carbonate and epidote, while biotite is commonly altered to chlorite, with minor sphene, clinozoisite and carbonate.

From available field evidence the intrusive contacts appear to have an almost vertical attitude.

Altered Porphyritic Quartz Diorite (Quartz Feldspar Porphyry)

This facies was found at only one locality within the intrusive. It is exposed along the Clore River near the central portion of the intrusive. The

quartz diorite is light to medium grey-green in colour. It is medium grained and weakly porphyritic with close packed phenocrysts (75%) in a granular matrix (25%). The phenocrysts consist of 80% altered plagioclase and 20% altered biotite. The matrix is a granular intergrowth of quartz (60%), plagioclase (20%), sericite (10%) and carbonate (10%).

Alteration consists of plagioclase altered to sericite and carbonate. Mafic material was probably originally biotite but is now completely altered to a shreddy mass of green biotite, chlorite and clinozoisite diagnostic of hydrothermal alteration.

High values, copper 1.71% and molybdenum 0.84%, were recorded in this facies. The mineralization is associated with a vein and appears extremely narrow in width.

Quartz Diorite (Equigranular) - Highly Altered

This facies may represent a sheared variety of the granodiorite, and is found along the Clore River, in the northeastern corner of the intrusive. It is medium grained and equigranular and generally medium grey to light green in colour. Quartz occurs as interstitial material, locally in large patches like phenocrysts. Typical composition: plagioclase 65%, quartz 20%, altered mafics 15%.

Alteration consists of plagioclase highly altered to sericite, kaolinite and carbonate. Mafics which were originally amphibole may have been altered first to biotite and finally to clinozoisite and an opaque material, possibly magnetite.

Minor disseminated chalcopyrite and pyrite occur in this altered quartz diorite.

Biotite - Feldspar Porphyry Dikes

A series of biotite feldspar porphyry dikes trending 045° - 050° and varying in width, occur along the western and northern contacts of the intrusive. The dikes are of quartz monzonite composition and generally contain about 80% matrix and 20% phenocrysts. The phenocrysts are mainly plagioclase, with fewer biotite phenocrysts. The matrix is a fine grained intergrowth of quartz and K-feldspar with minor plagioclase and biotite.

Alteration is less intense here than in the granodiorite. In the dikes there is alteration of the plagioclase to sericite and kaolinite with minor carbonate, while the biotite is altered to chlorite.

Diabase

A diabase dike is present, 200 to 300 ft. south of the claim boundary in the central portion of the property. It appears to strike north-east, south-west. The rock is variably altered with some fresh and some intensely altered plagioclase. It is unmineralized and is of no economic interest.

LOWER JURASSIC TO MIDDLE JURASSIC HAZELTON SEDIMENTS AND VOLCANICS

Sediments

Where the intrusive - host rock contact was observed, the intrusive was in direct contact with sediments. The sediments appear to form a pocket - like band surrounding the intrusive and are themselves surrounded by volcanics.

The sediments vary from fine to medium grained, light, siliceous rocks, which appear to be quartzitic (sandstone) in origin; to very fine grained pyritic, graphitic, slaty sediments.

Considerable iron staining is present in these fine grained sediments, especially in the sections along the river, where fracturing is very intense.

Contacts between the intrusive and sediments are generally sharp and clear, although in northern sections, along the east-west trending creek, contacts are difficult to delineate.

Volcanics

Volcanics ring the intrusive and sediments, forming a complete envelope surrounding the two.

To the north and east of the intrusive, the volcanic unit is strongly agglomeratic, becoming less fragmental to the south and west.

The volcanics are of andesitic or dacitic composition and locally take on a strongly siliceous appearance. The unit is generally medium to dark green in colour.

In areas south-west of the intrusive, the volcanics appear to be pillowed. Correct top determinations could not be made from these pillows, due to deformation and poor pillow development.

MINERALIZATION

Sulphide mineralization in the granodiorite consists of pyrite, chalcopyrite, molybdenite and minor pyrrhotite. Chalcopyrite, pyrite and pyrrhotite generally occur as disseminations in the intrusive, although locally they are found along fractures and quartz veinlets. Molybdenite, on the other hand, generally occurs in quartz veinlets and only rarely as disseminations. On polished sections, most of the chalcopyrite grains show a thin rim of colloform sphalerite. Disseminated magnetite, as high as 10 percent, was found in a section of the intrusive.

Pyrite and chalcopyrite are generally prevalent throughout the intrusive, while molybdenite and pyrrhotite are restricted to the northern and eastern sections.

A malachite stained, east-west trending vein, approximately 2 to 3 inches wide, found in the altered quartz diorite (quartz, feldspar porphyry) along the Clore River, contains about 5 percent of chalcopyrite and molybdenite (1.71% Cu and 0.84% Mo).

Locally within the intrusive, especially in the northern sections, quartz veinlets often reach stockwork intensity, however they are too often unidirectional. The quartz veining extends out into the sediments where it is generally barren.

Molybdenite is found in the biotite-feldspar porphyry dikes in the northern area of the claim group. Here the mineralization occurs as fracture fillings.

In general the surrounding sediments appear barren of economic sulphide mineralization, other than pyrite. Pyrite content in these sediments may reach 10%.

ROCK GEOCHEMICAL SURVEY

The lithochemical sampling programme was conducted in two stages by R. Jamieson. The first part was done in June and the second part in late August and early September. Most of the stations were confined to testing the intrusive units on the gridded portion of the claims, although a number of representative samples were also taken from the surrounding volcanic and sedimentary rocks.

Sampling consisted of compositing a number of rock chips at each station, taken from either outcrop or frost heaves known to be in situ. These were then submitted for copper, molybdenum and zinc analysis to Bondar-Clegg and Co. Ltd. in Vancouver.

After pulverizing the chips to minus 100 mesh, treatment consisted of attacking the sample first with concentrated nitric acid, followed by the addition of concentrated hydrochloric acid and digestion for 3 hours.

The solutions were then bulked to 20% acid concentration, homogenized, settled and analyzed by atomic absorption.

SOIL GEOCHEMICAL SURVEY

A soil sampling programme was conducted by student geologist, J. Keir, in June. Most of the stations were confined to testing the intrusive units on the gridded portion of the claims.

Sampling consisted of taking a representative soil section of the reddish brown, 'B' horizon. In general, soils were well developed in the area and the

majority of samples were from the 'B' horizon. These samples were then submitted for copper, molybdenum and zinc analysis to Bondar-Clegg and Co. Ltd., in Vancouver.

After drying and sieving the samples to minus 80 mesh, the samples were weighed to 0.5 gm. Treatment consisted of the same method as used on the lithochemical samples. Precision for the analysis is $\pm 50\%$ at the detection limits and $\pm 20\%$ at twice the detection limit.

INDUCED POLARIZATION SURVEY

The purpose of the survey was to check for and map polarizable material within the intrusive.

A total of 14,400 line feet of I.P. survey was done by a Canico crew. A rental, time domain I.P. unit from Scintrex Limited, was used. The equipment consisted of a 2.5 K.W. transmitter and an IPR-8 receiver. The transmitter worked with on-off times of 2 seconds. The receiver was operated in the three-slice mode and results from the center slice were plotted; these correspond to 0.7 times the results from the "standard" Newmont receiver. The pole-dipole array with potential electrode spacings of 200 ft. and 400 ft. was used initially. A potential electrode spacing of 200 ft., with current - potential spacings of 200 ft. and 400 ft. was finally selected.

Interpretation of the I.P. data is predicated on finding resistivity and chargeability contrasts. Zones of low chargeability, such as at (00; 3000E) and (200N; 00) help to define areas of little or no polarizable material. An apparent chargeability of 30-35 MV/V follows and delimits the contact of the intrusive. High chargeabilities (exceeding 100 MV/V) and low resistivities are found with the sediments at the edges of the intrusive. The intrusive appears to be mineralized near the contact. There are chargeability highs within the intrusive: found at 400N on lines 4000E, 3000E and 2000E and also at 500S on Line 2000E. Contour maps of resistivity and chargeability based on these interpretations are attached.

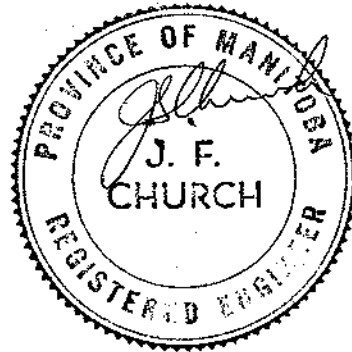
CONCLUSIONS AND RECOMMENDATIONS

1. No definite conclusions can be drawn from the ground magnetic data. Differences are too vague and irregular to interpret any geological boundaries.
2. Correlation of geology and I.P. suggests that a chargeability reading of 30-35 MV/V defines the edge of the intrusive and the two highs within the intrusive are targets for follow-up.
3. The rock geochemical sampling programme has defined three zones of interesting copper and molybdenum mineralization:
 - a) along the northern margin of the granodiorite from 2200E to 3300E,

- b) along the Clore River from 100N to 900N;
 - c) along the western and northwestern contact area of the intrusive.
4. The soil geochemical sampling programme has defined three zones of interesting copper and molybdenum mineralization. They agree closely with the anomalous rock geochemical targets.
5. The property contains a number of features which make it an encouraging porphyry copper-molybdenum prospect:
- a) an acid intrusive body with a porphyritic phase and several related smaller phases, occurs in a Jurassic sequence of sediments and volcanics;
 - b) copper-molybdenum mineralization occurs as disseminations and as well, is associated with a system of randomly orientated fractures and a quartz stockwork;
 - c) there is some evidence of a pyrite "halo" occurring peripheral to the intrusive;
 - d) alteration in the intrusive is moderate to locally intense. Plagioclase to sericite, minor kaolinite, K-feldspar, carbonate and epidote. Biotite to chlorite, minor sphene, clinozoisite and carbonate.
6. This property is at the stage where sub-surface testing is required in order to evaluate its potential. A programme of 4 to 6 drill holes (BQ size) to depths of approximately 600 to 800 ft. is recommended.

The drill pattern should be designed to provide a reasonable statistical sampling of the geochemical, geological and geophysical targets.

Robert Jamieson



R. Jamieson/sn

November 19, 1974

Attachment

APPENDIX 1

CHLORE CLAIMS EXPENDITURES - 1974

Aircraft:	Dominion-Pegasus Helicopters - Jet Ranger			
	Geol.-Geochem. Surveys; June, July, Aug. =	13.8 hrs		
	Geophys. Survey; September	<u>9.5 hrs</u>		
		23.3 hrs		
		@ \$235.00	5,475.50	
	Okanagan Helicopters - Jet Ranger			
	Geophys. Survey; Aug. - Sept.	4.5 hrs		
		@ \$285.00	<u>1,282.50</u>	6,758.00
Salaries:	Inco - Canico Personnel			
	Geol. - Geochem. Survey - June 24 to			
	July 3			
	R. Jamieson 8 days @ 61.00		488.00	
	E. Hunter 2 days @ 67.00		134.00	
	J. Keir 8 days @ 39.00		312.00	
	R. Lamour 1 day @ 48.00		48.00	
	Geological Survey - Aug. 27 to Sept. 3rd			
	R. Jamieson 8 days @ 61.00		488.00	
	Geophys. Survey - Aug. 27 to Sept. 3rd			
	H. Limion 8 days @ 91.00		728.00	
	K. Olbrich 8 days @ 57.00		456.00	
	R. Lamour 8 days @ 48.00		384.00	
	D. Hunter 8 days @ 28.57		<u>228.56</u>	3,266.56
Analyses:	Bondar-Clegg and Co. Ltd. - Vancouver			
	July - Rock Samples 58 @ 2.55		147.90	
	- Soil Samples 219 @ 2.25		492.75	
	Sept.- Rock Samples 60 @ 2.55		<u>153.00</u>	793.65
Supplies:	Canada Safe Way Ltd. - Terrace			
	Groceries - Aug. 27th		340.44	
	Meal Allowance June - July 19 man days @ 10.00		190.00	
	Terrace Esso - fuel		59.83	
	Pacific Survey Corp. - Vancouver			
	Photo enlargement and prints		<u>95.00</u>	685.27
I.P. Survey:	Scintrex Ltd. Concord, Ont.			
	I.P. unit rental @ \$2,195/mth x 1/2	1,097.50		
	1 extra day	76.00		
	Insurance, handling, consumables	111.00	1,284.50	
	Transportation - Sudbury to Smithers			
	Personnel @ \$ 211.00 ea.	422.00		

APPENDIX 1

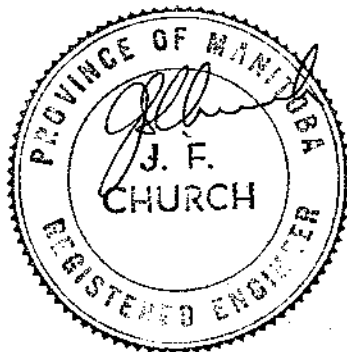
CHLORE CLAIMS EXPENDITURES - 1974

(Cont'd.)

	Equipment - Otter and Freight	\$982.40	\$1,404.40
	Misc. Supplies		
	- metal stakes, batteries, etc.	\$ 92.80	\$ 2,781.70
Report:	Salaries - draftsmen, geologist, geophysicist, typist	\$ 625.00	
	Materials	\$ 75.00	\$ 700.00

Total Expenditures: \$14,985.18

Total Claim Year Credits: 74



APPENDIX 2

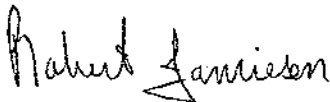
QUALIFICATIONS

I, Robert A. Jamieson, received a Bachelor of Science Degree (Geology) from the University of New Brunswick in May, 1971. I have been actively engaged in mineral exploration with The International Nickel Company of Canada, Limited since graduating.

June, 1971 to August, 1972 and April, 1973 to September, 1973 were spent on geological mapping and diamond drilling projects in the Precambrian Shield of northern Quebec and Ontario.

Seven months, from September, 1972 to March, 1973 were spent on uranium exploration and detailed radiometric core logging of rocks from northwestern Quebec.

The 1974 field season was spent doing reconnaissance geological mapping, detailed geological mapping and rock geochemical sampling in northwestern British Columbia.



Robert A. Jamieson

Robert A. Jamieson,
4 Dahlia Court,
Copper Cliff, Ontario.

APPENDIX 3

CERTIFICATE

I, Heikki Limion, of Lively, Ontario certify that:

I am a geophysicist employed since 1967 by The International Nickel Company of Canada, Limited as a Staff Geophysicist.

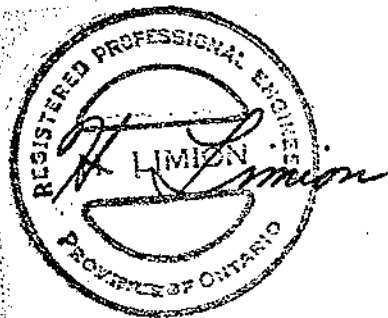
I am a graduate of the University of Toronto, with a B.A.Sc. in Engineering Science (Geophysics option) which I received in 1965.

I am a certified member of the Association of Professional Engineers of the Province of Ontario.

The Induced Polarization survey described in this report was performed under my direct personal supervision, and I prepared that part of the text relating to it.

H. Limion, P. Eng.

November 19, 1974



INCO, Field Exploration Laboratory,
Copper Cliff,
Ontario

APPENDIX 4

THIN SECTIONS

1. No. C-74-2987
Location: British Columbia, Chlore Claims, 93L-4W.
Classification: Altered quartz diorite (quartz, feldspar porphyry).
Phenocrysts (75%) -- Matrix (25%).

2. No. C-74-2988
Location: Ditto - 2987
Classification: Granodiorite (quartz, feldspar, biotite porphyry).
Phenocrysts (75%) - Matrix (25%).

3. No. C-74-2989
Location: Ditto - 2987
Classification: Granodiorite
Modal composition: plagioclase 50%, biotite 15%,
K-spar 20%, quartz 15%.

4. No. C-74-2990
Location: Ditto 2987
Classification: Granodiorite (equigranular).

5. No. C-74-2991
Location: Ditto - 2987
Classification: Granodiorite (quartz, feldspar, biotite porphyry)
Phenocrysts (65%) -- Matrix (35%).

APPENDIX 4

THIN SECTIONS (Cont'd.)

6. No. C-74-2992
Location: Ditto - 2987
Classification: Altered quartzdiorite (med. grained equigranular)
Modal composition: Plagioclase 65%, quartz 20%, mafics 15%.
7. No. C-74-2993
Location: Ditto - 2987
Classification: Feldspar porphyry-plagioclase phenocrysts in an inhomogeneous matrix of plagioclase, quartz and K-spar.
8. No. C-74-2994
Location: Ditto - 2987
Classification: Diabase.
9. No. C-74-4485
Location: Ditto - 2987
Classification: Granodiorite - weakly porphyritic.
10. No. C-74-4486
Location: Ditto - 2987
Classification: Granodiorite- weakly porphyritic.
11. No. C-74-4487
Location: Ditto - 2987
Classification: Granodiorite - weakly porphyritic.
12. No. C-74-4488
Location: Ditto - 2987
Classification: Granodiorite (quartz-feldspar porphyry)
Phenocrysts (70%) - Matrix (30%).

APPENDIX 4

THIN SECTIONS (Cont'd.)

13. No. C-74-4489
Location: Ditto - 2987
Classification: Granodiorite; as to C-74-4488 but with less matrix.
14. No. C-74-4490
Location: Ditto - 2987
Classification: Granodiorite to quartz diorite.
Phenocrysts (85%) -- Matrix (15%).
15. No. C-74-4491
Location: Ditto - 2987
Classification: Biotite, feldspar porphyry dike (quartz monzonite composition) Phenocrysts (20%) - Matrix (80%).
16. No. C-74-4492
Location: Ditto - 2987
Classification: Feldspar porphyry, lacks biotite phenocrysts.

INCO, Field Exploration Laboratory,
Copper Cliff,
Ontario

APPENDIX 5

POLISHED SECTIONS

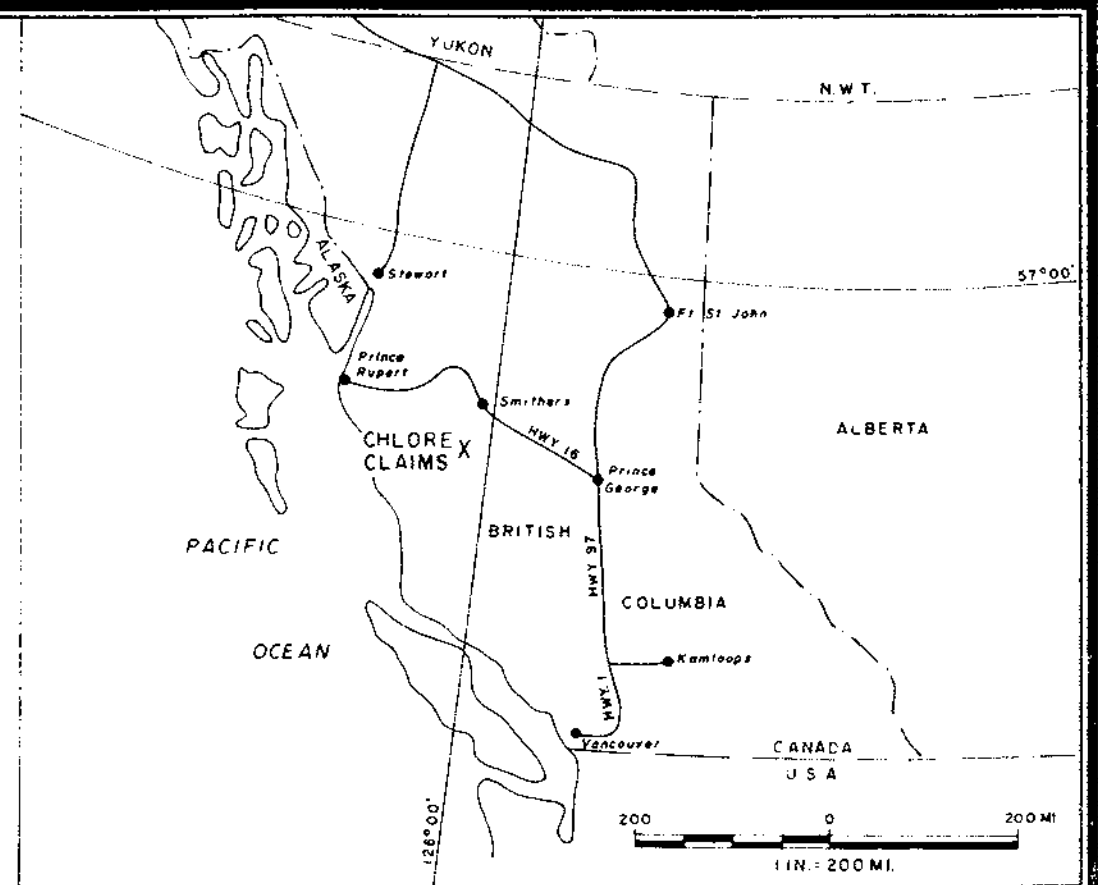
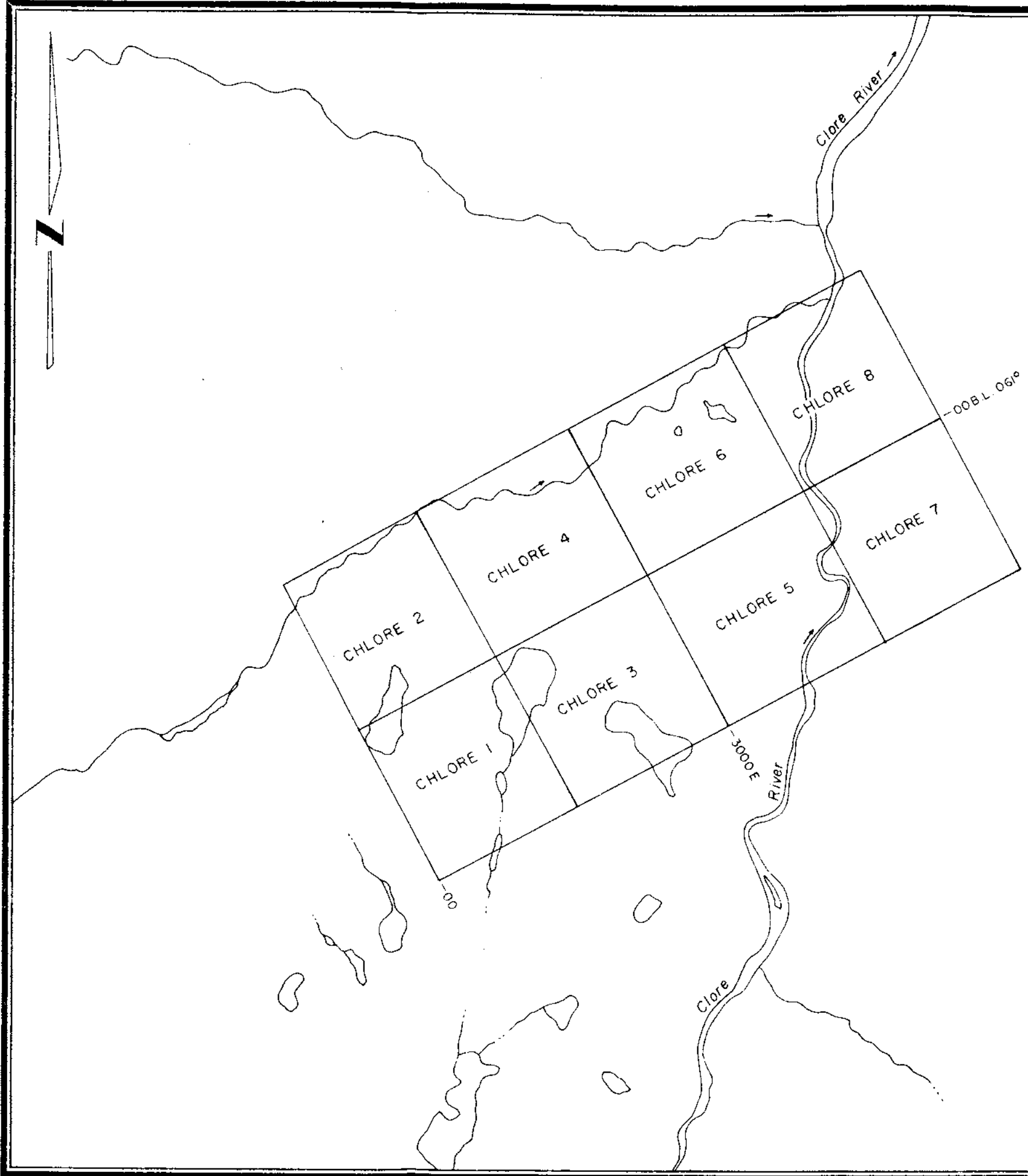
1. No. C-74-2987
Location: British Columbia, Chlore Claims, 93L-4W.
Description: Chalcopyrite, molybdenite and pyrite.
- mineralization is disseminated.

2. No. C-74-2988
Location: Ditto - 2987
Description: 10% disseminated magnetite and 1% chalcopyrite,
unrelated to fracturing.

3. No. C-74-2989
Location: Ditto - 2987
Description: Minute amounts of magnetite and pyrite - virtually barren.

4. No. C-74-2991
Location: Ditto - 2987
Description: 1% disseminated magnetite with minor pyrite.

5. No. C-74-2992
Location: Ditto - 2987
Description: Chalcopyrite and pyrite; chalcopyrite grains have a
thin sphalerite rim.

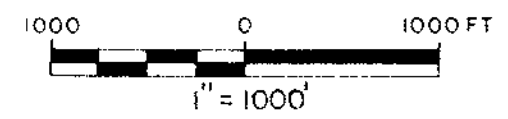


Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5466 MAP 1

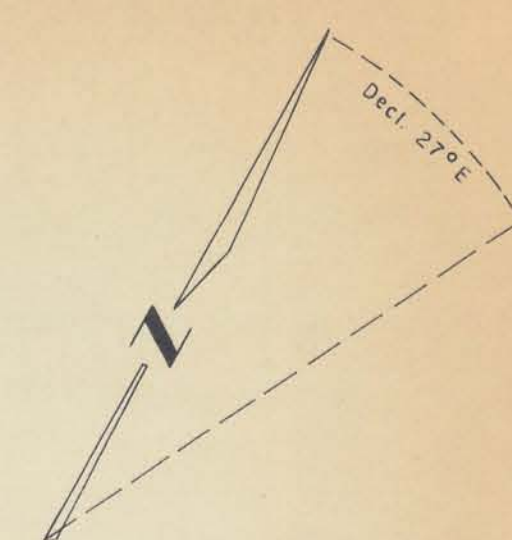
Canadian Nickel Co., Ltd.
 LOCATION MAP

CHLORE CLAIMS
 OMINECA MINING DIVISION
 BRITISH COLUMBIA

5466
MAP 1



To accompany report by R A. JAMIESON - Nov., 1974



- LEGEND**
- CRETACEOUS and TERTIARY INTRUSIVES:**
- 05 DIABASE - variably altered.
 - 02 BIOTITE-FELDSPAR PORPHYRY DIKES - altered, of quartz monzonite composition.
 - 06 QUARTZ DIORITE - weakly porphyritic (quartz-feldspar porphyry); altered; vein type mineralization (molybdenite, chalcocopyrite).
 - 07 QUARTZ DIORITE to GRANODIORITE - equigranular, sheared facies of O₁; highly altered.
 - 01 GRANODIORITE - medium grained, light grey, locally porphyritic (quartz-feldspar porphyry); locally fresh to moderately altered; generally weakly mineralized throughout (pyrite, chalcocopyrite, molybdenite, magnetite, and minor pyrrhotite).
- LOWER to MIDDLE JURASSIC - HAZELTON GROUP:**
- 03 VOLCANICS - siliceous, fine grained, dark, andesitic to dacitic in composition; locally pillowed.
 - 04 SEDIMENTS - fine grained, light to black, locally siliceous; locally graphitic and pyritic, up to 10% pyrite (strongly conductive); includes contact rock.

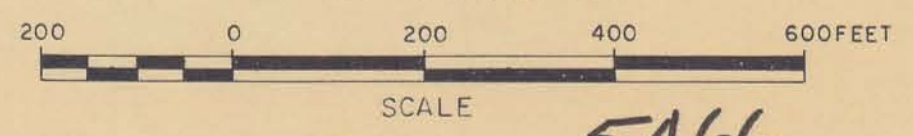
- Area of outcrop
- Geological contacts - known
- Geological contacts - assumed
- Strike and dip of vein
- Rock chip sample location
- Silt sample location
- Thin section number
- Claim post and boundaries
- Shore line (lake, river, creek)
- Swamp

- ROCK CHIP ANALYSES:**
- 0-99 p.p.m. Copper
 - 100-299
 - 300-699
 - 700-1499
 - >1500
 - 17,100/8400 Cu/Mo

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5466 MAP 2

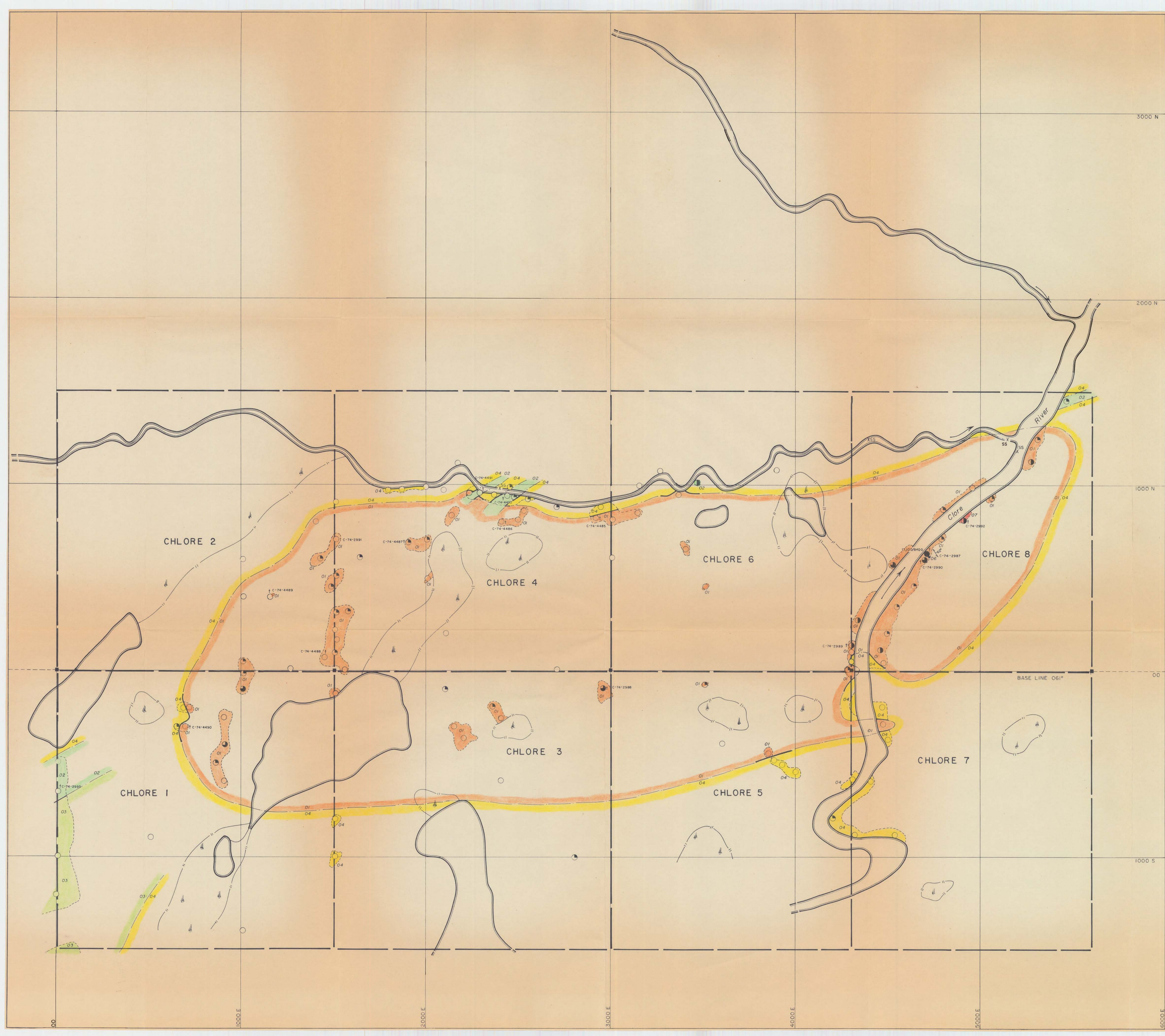
Canadian Nickel Co., Ltd.
GEOLOGICAL and LITHOCHEMICAL SURVEY
COPPER

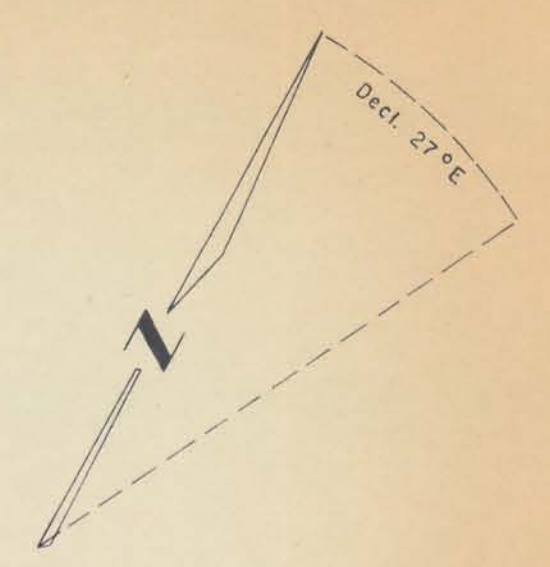
CHLORE CLAIMS
OMINECA MINING DIVISION
BRITISH COLUMBIA



5466

To accompany report by R.A. JAMIESON - Nov, 1974
MAP 2





LEGEND

CRETACEOUS and TERTIARY INTRUSIVES:

- 05 DIABASE - variably altered.
- 02 BIOTITE-FELDSPAR PORPHYRY DIKES - altered, of quartz monzonite composition.
- 06 QUARTZ DIORITE - weakly porphyritic (quartz - feldspar porphyry); altered, vein type mineralization (molybdenite, chalcocopyrite).
- 07 QUARTZ DIORITE to GRANODIORITE - equigranular, sheared facies of '01', highly altered.
- 01 GRANODIORITE - medium grained, light grey, locally porphyritic (quartz-feldspar porphyry); locally fresh to moderately altered; generally weakly mineralized throughout (pyrite, chalcocopyrite, molybdenite, magnetite, and minor pyrrhotite).

LOWER to MIDDLE JURASSIC - HAZELTON GROUP:

- 03 VOLCANICS - siliceous, fine grained, dark; andesitic to dacitic in composition; locally pillowed.
- 04 SEDIMENTS - fine grained, light to black, locally siliceous; locally graphitic and pyritic; up to 10% pyrite (strongly conductive); includes contact rock.

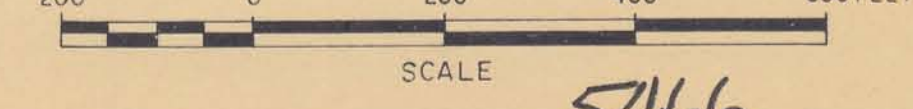
- Area of outcrop
- Geological contacts - known
- Geological contacts - assumed
- Strike and dip of vein
- Rock chip sample location
- Silt sample location
- Thin section number
- Claim post and boundaries
- Shore line (lake, river, creek)
- Swamp

- ROCK CHIP ANALYSES:**
- 0-09 p.p.m. Molybdenum
 - 10-29
 - 30-69
 - 70-149
 - >150
 - 450/144 Cu/Mo

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
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Canadian Nickel Co., Ltd.
GEOLOGICAL and LITHOCHEMICAL SURVEY
MOLYBDENUM

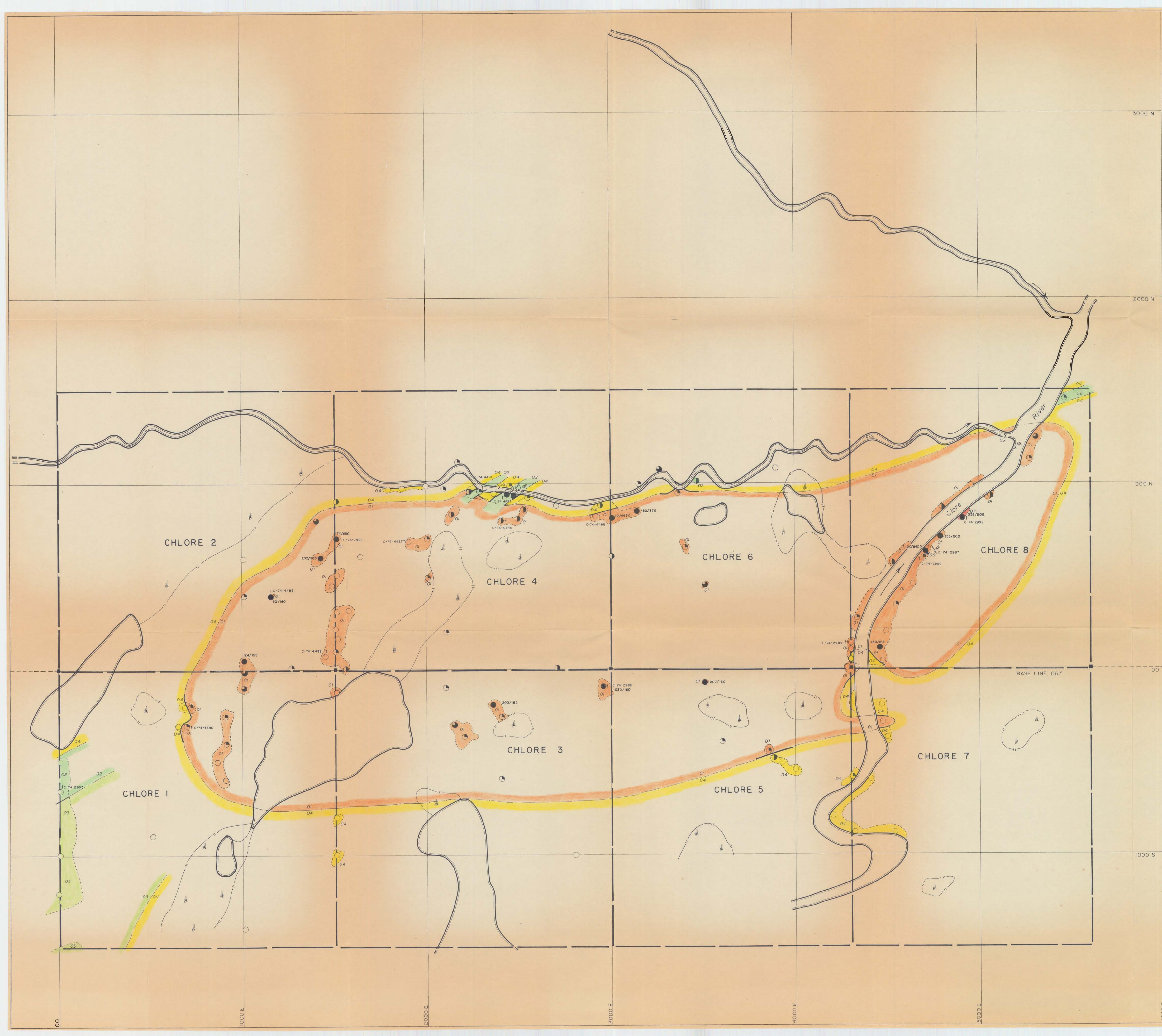
CHLORE CLAIMS
OMINECA MINING DIVISION
BRITISH COLUMBIA

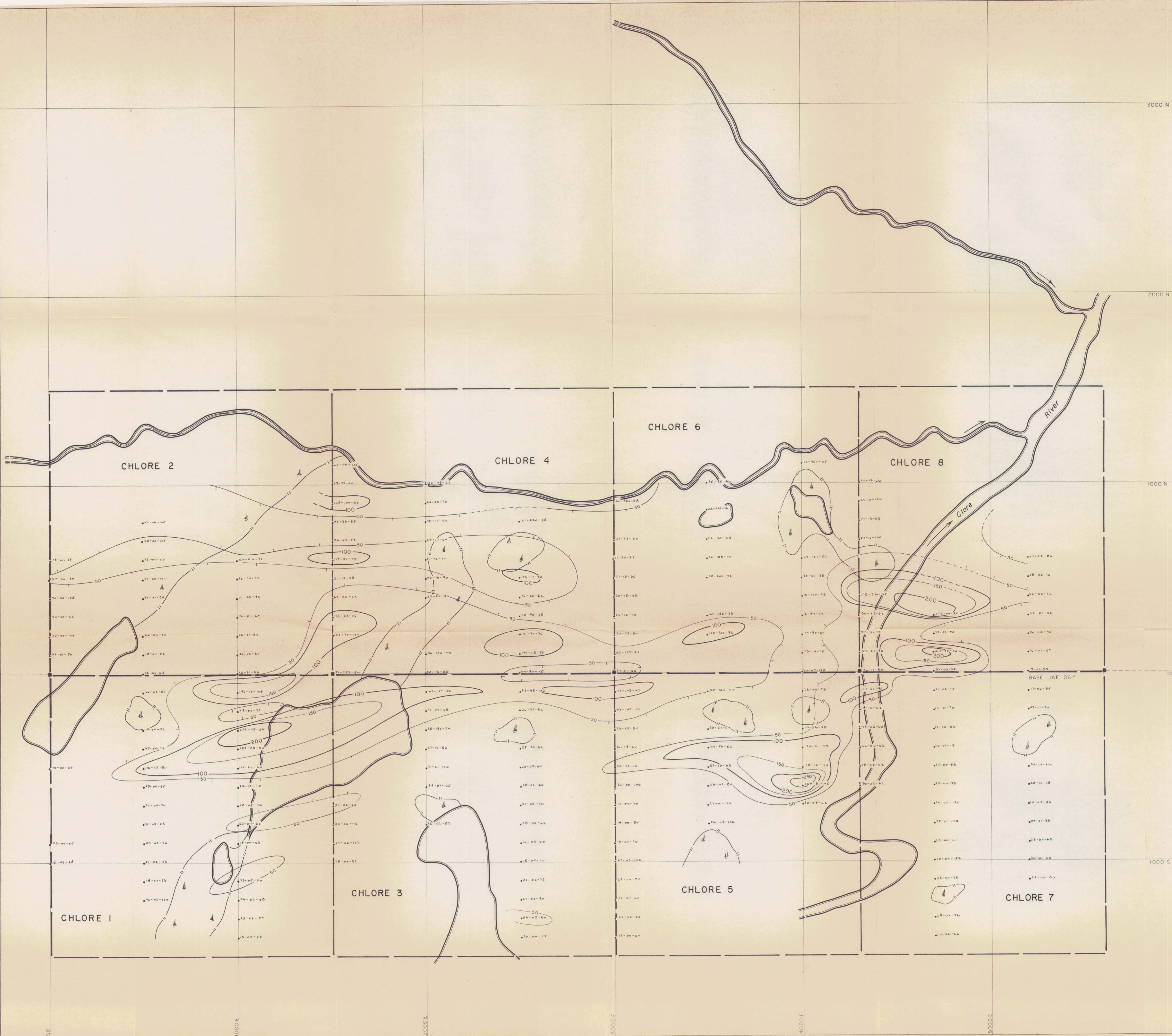
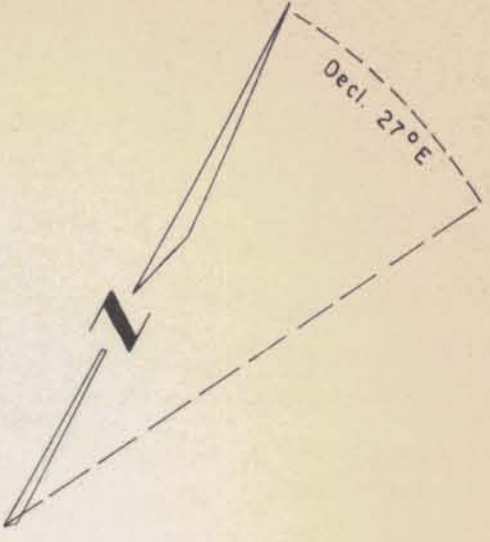


SCALE 5466

To accompany report by R. A. JAMIESON - Nov, 1974

MAP 3





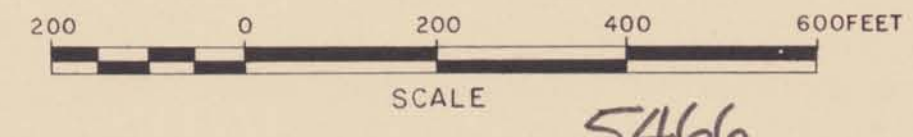
LEGEND

Sample location with values in p.p.m. Cu Mo Zn
 Contour interval: 50 p.p.m. Cu
 100 p.p.m. contour:
 50 p.p.m. contour:
 Relative low:
 Claim post and boundaries:
 Shore line (lake, river, creek):
 Swamp:

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5466 MAP 4

Canadian Nickel Co., Ltd.
 SOIL SAMPLING SURVEY
 COPPER

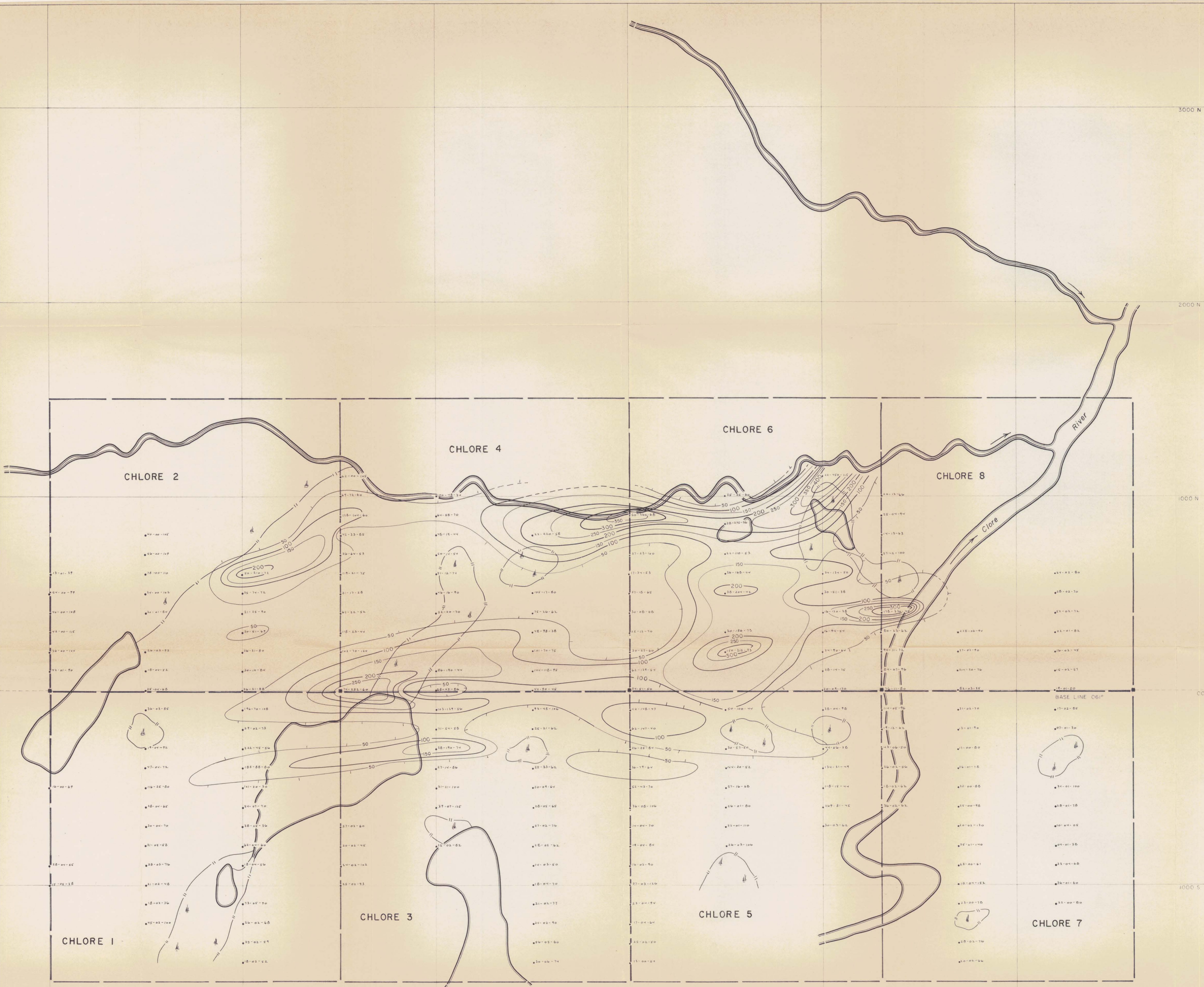
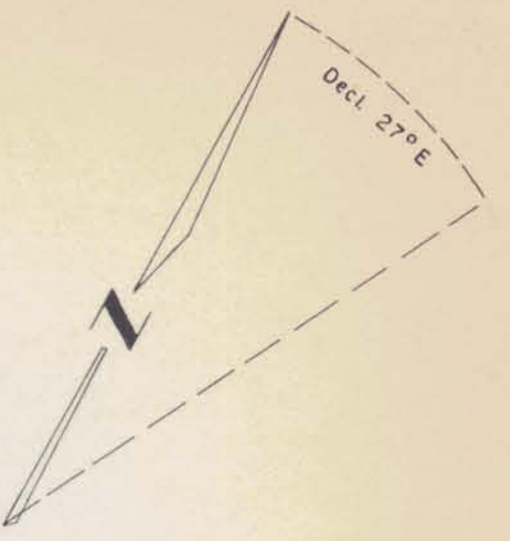
CHLORE CLAIMS
 OMECEA MINING DIVISION
 BRITISH COLUMBIA



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To accompany report by R.A. JAMIESON - Nov, 1974

MAP 4



LEGEND

Sample location with values in p.p.m. Cu Mo Zn

Contour interval: 50 p.p.m. Mo

100 p.p.m. contour:

50 p.p.m. contour:

Relative low:

Claim post and boundaries:

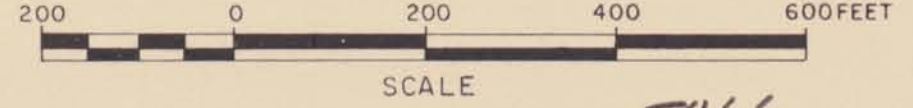
Shore line (lake, river, creek):

Swamp:

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5466 MAP 5

Canadian Nickel Co., Ltd.
 SOIL SAMPLING SURVEY
 MOLYBDENUM

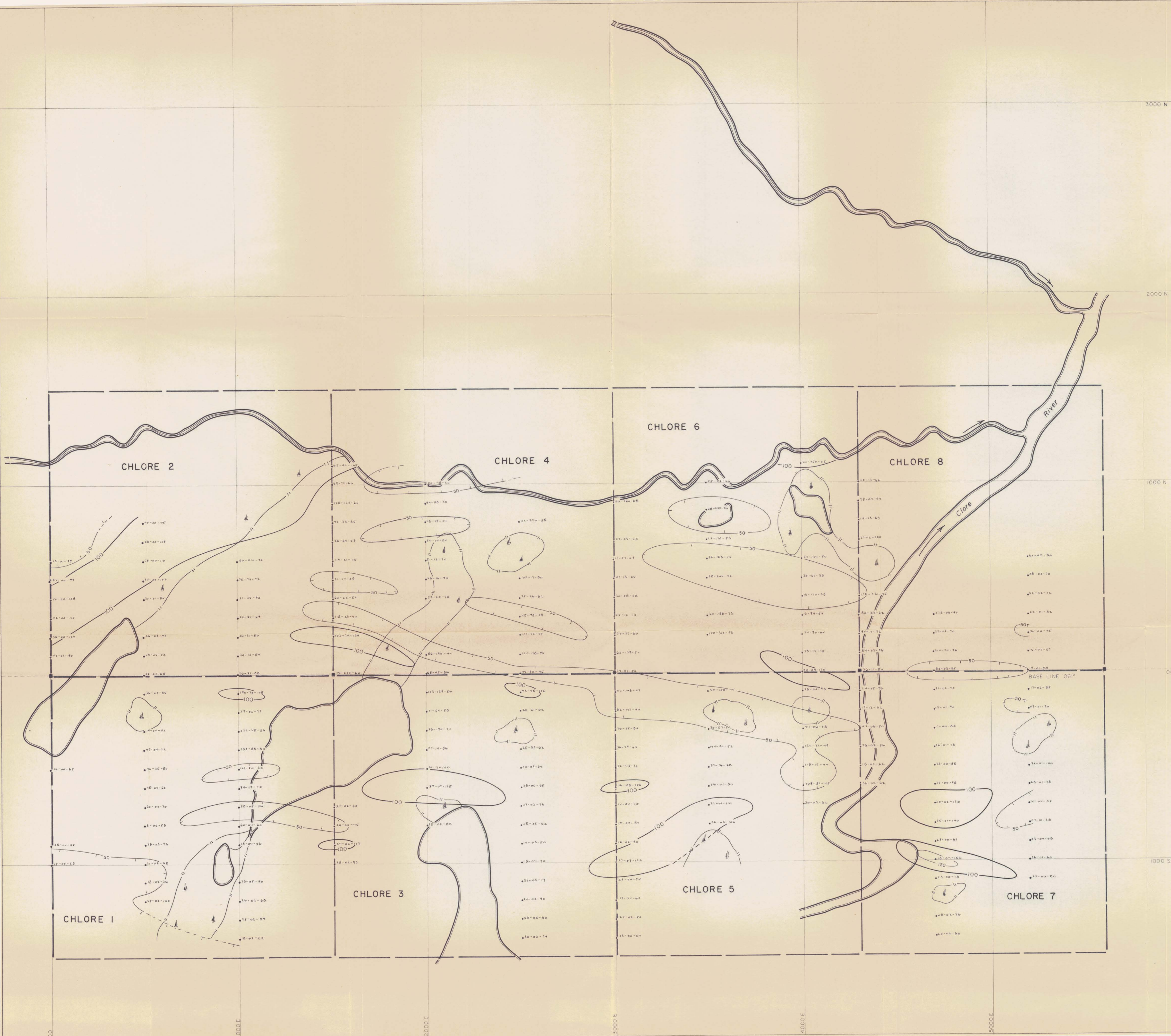
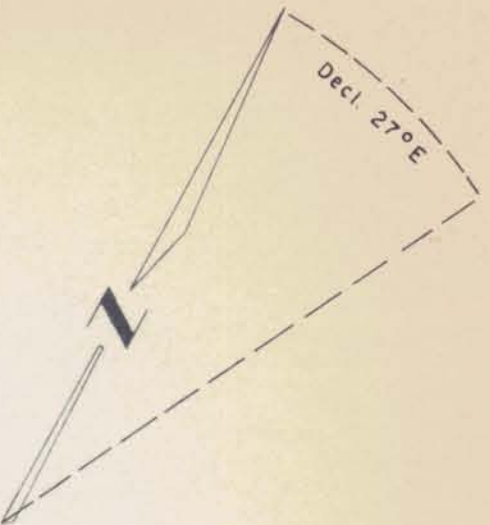
CHLORE CLAIMS
 OMINECA MINING DIVISION
 BRITISH COLUMBIA



SCALE **5466**

To accompany report by R.A. JAMIESON - Nov., 1974

MAP 5

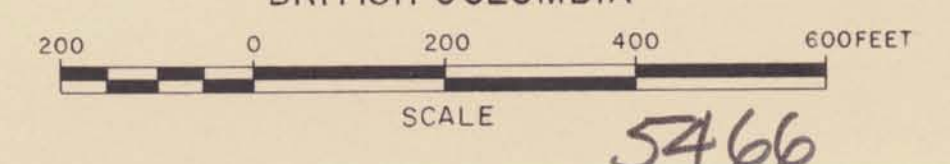


LEGEND

Sample location with values in p.p.m. Cu Mo Zn
 Contour interval: 50 p.p.m. Zn ● 19-12-62
 100 p.p.m. contour
 50 p.p.m. contour
 Relative low
 Claim post and boundaries
 Shore line (lake, river, creek)
 Swamp

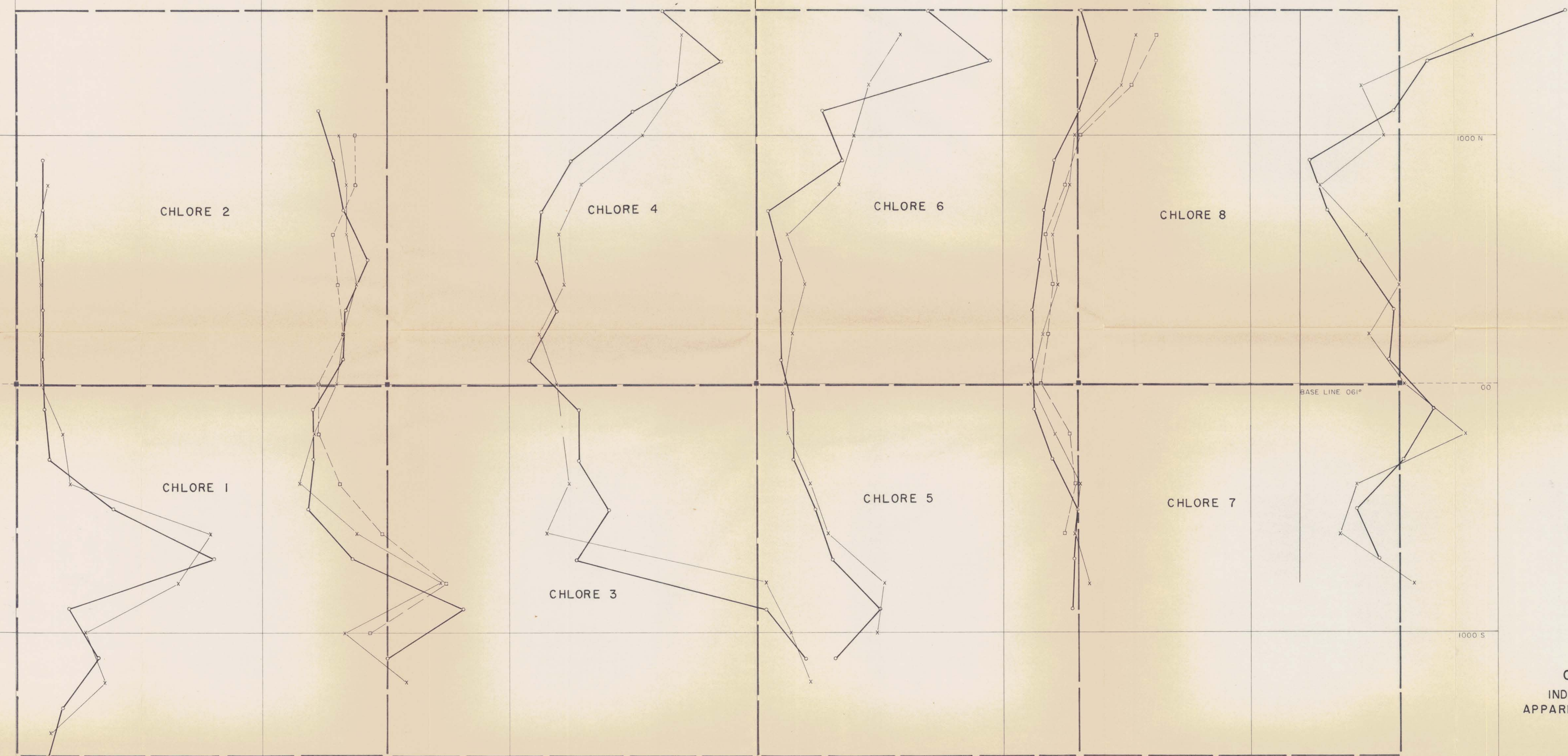
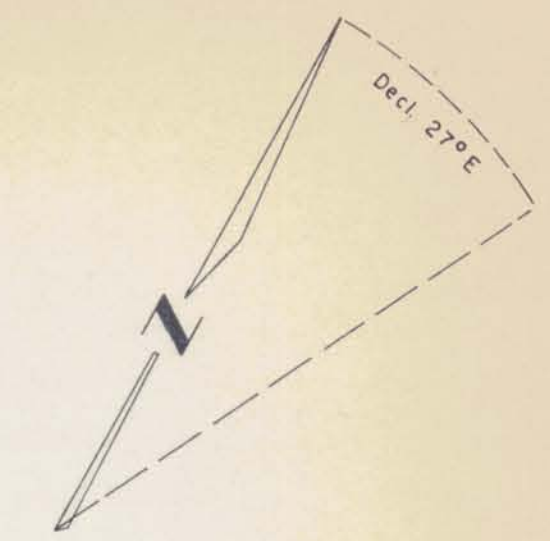
Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5466 MAP 6

Canadian Nickel Co., Ltd.
 SOIL SAMPLING SURVEY
 ZINC
 CHLORE CLAIMS
 OMINECA MINING DIVISION
 BRITISH COLUMBIA



To accompany report by R.A. JAMIESON - Nov, 1974
MAP 6

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LEGEND

Profile for $a=200'$, $n=1$:

Profile for $a=200'$, $n=2$:

Profile for $a=400'$, $n=1$:

Profile scale:

Claim post and boundaries:

C_1 F_1 P_2 C_2

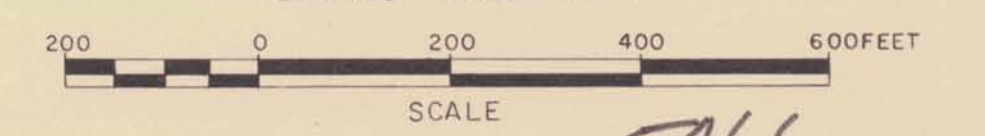
Pole-dipole array

Time domain

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5466 MAP 7

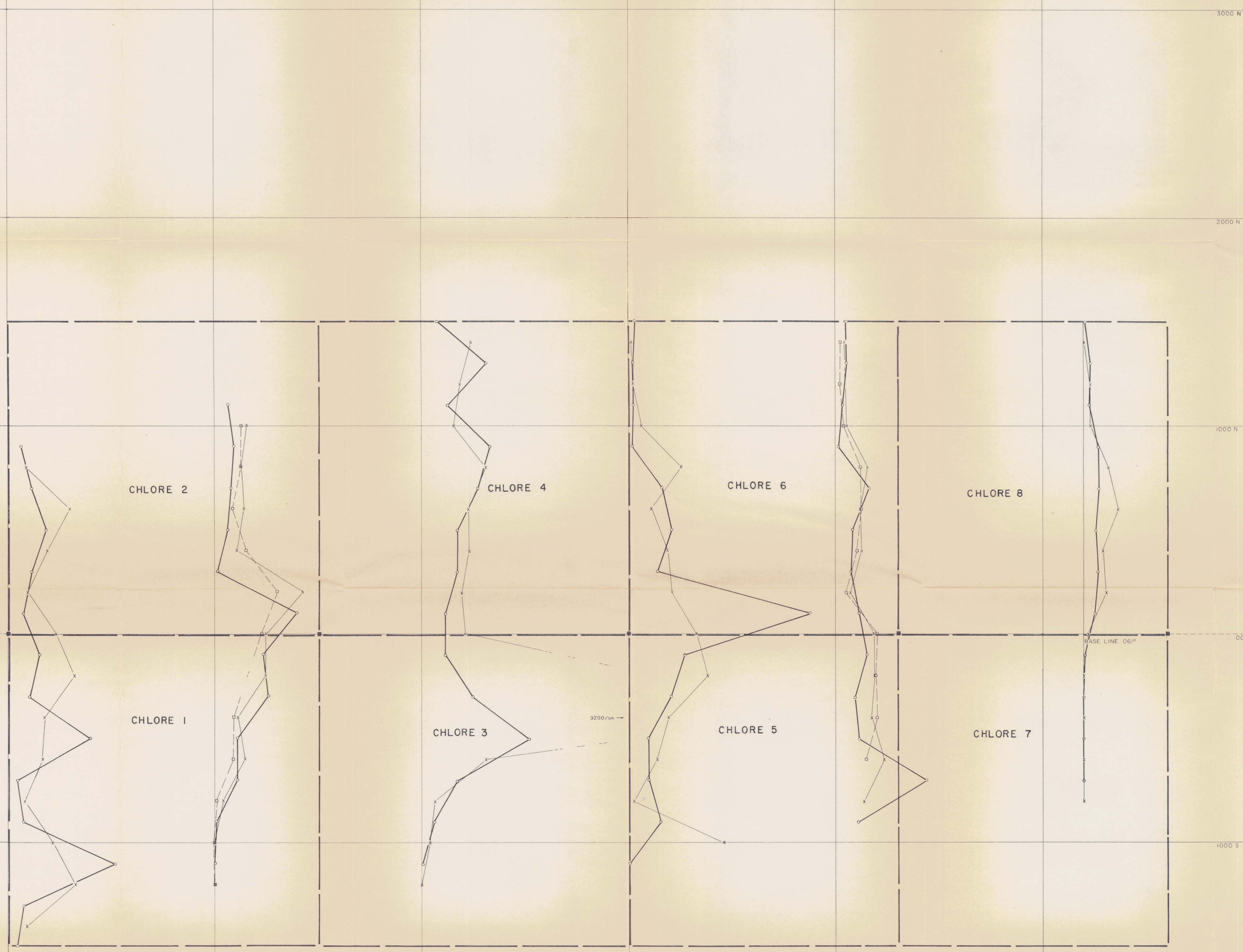
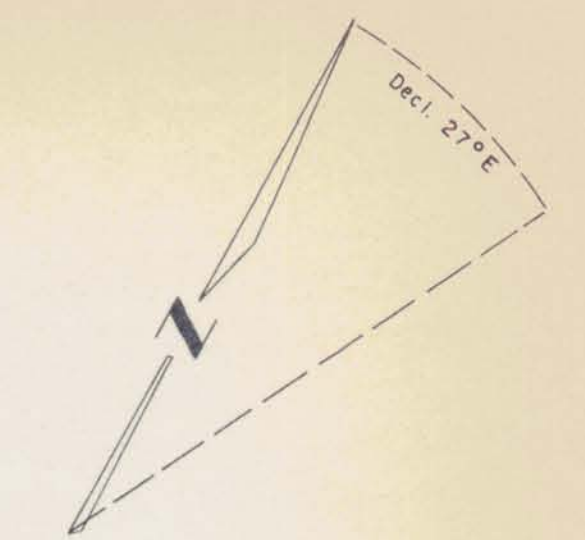
Canadian Nickel Co., Ltd.
INDUCED POLARIZATION SURVEY
APPARENT CHARGEABILITY PROFILES

CHLORE CLAIMS
OMINECA MINING DIVISION
BRITISH COLUMBIA



To accompany report by R.A. JAMIESON - Nov. 1974

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MAP 7



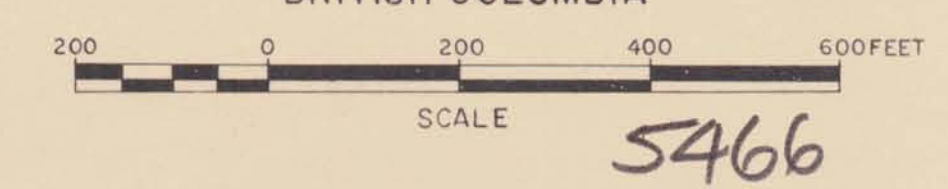
LEGEND

Profile for $a=200'$, $n=1$: ○—○—○
 Profile for $a=200'$, $n=2$: ×—×—×
 Profile for $a=400'$, $n=1$: □—□—□
 Profile scale: 500 1000 1500m-m.
 Claim post and boundaries: —+—+—+—+—

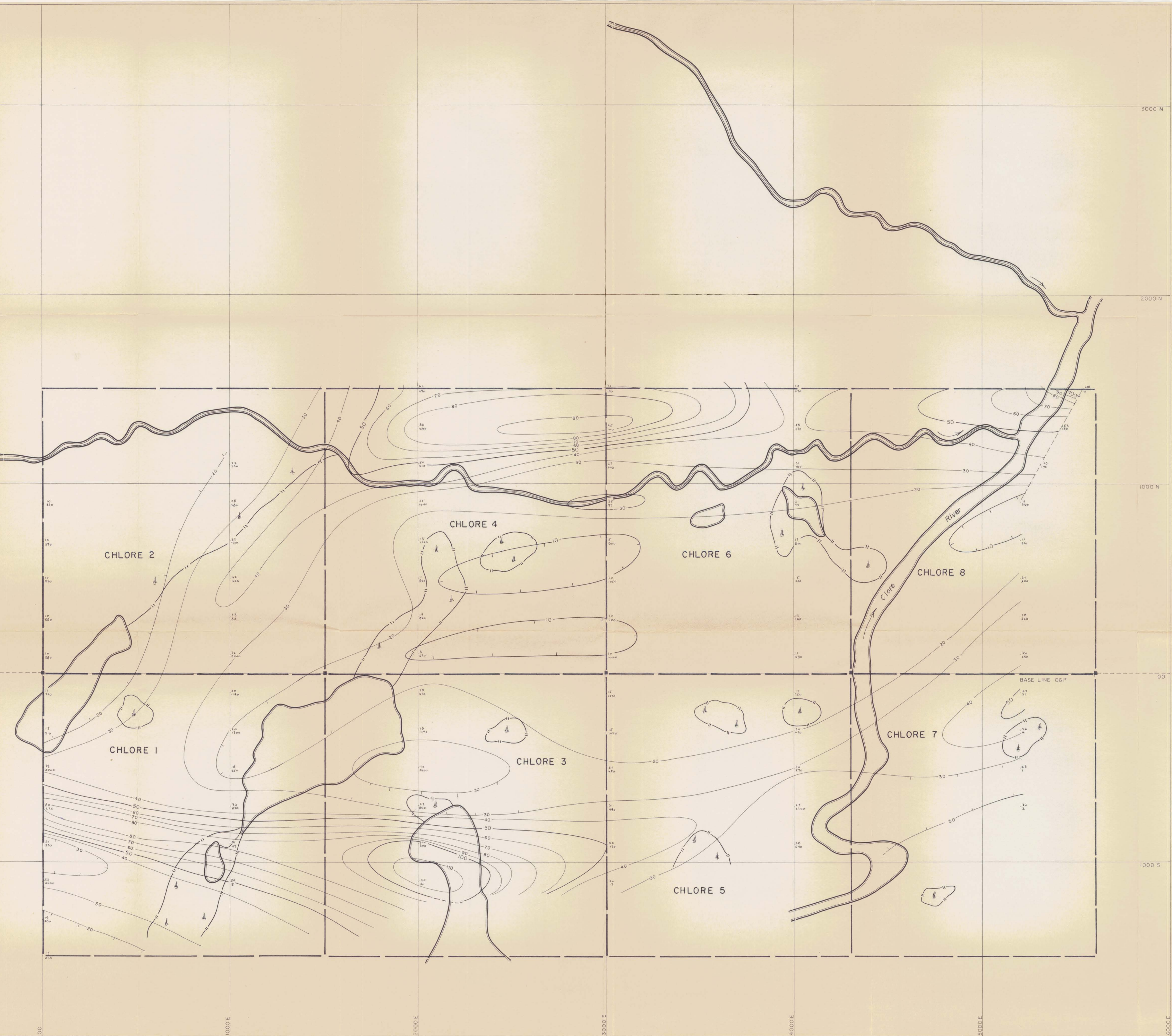
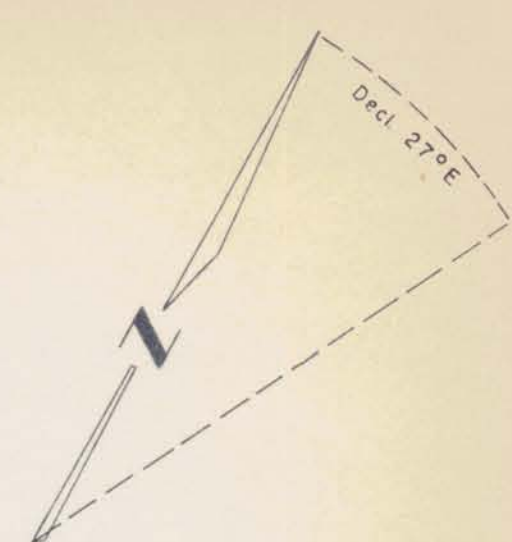
Grid N—E
 Pole-dipole array: C1 — P1 — a — P2 — C2
 Time domain: station

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 ASSESSMENT REPORT
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Canadian Nickel Co., Ltd.
 INDUCED POLARIZATION SURVEY
 APPARENT RESISTIVITY PROFILES
 CHLORE CLAIMS
 OMINECA MINING DIVISION
 BRITISH COLUMBIA



To accompany report by R.A. JAMIESON - Nov., 1974
 MAP 8
 93L 4W 10/74



LEGEND

Station read and readings recorded: 138 mv/v 140-ohm-m

Contour interval: 10 mv/v

10, 50, 100 mv/v contour: [Symbol]

Intermediate contour: [Symbol]

Relative low: [Symbol]

Claim post and boundaries: [Symbol]

Shore line (lake, river, creek): [Symbol]

Swamp: [Symbol]

Grid N →

C1 —> 10a P1 a P2 C2

Pole dipole array

Time domain

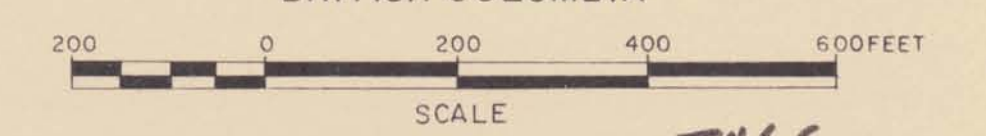
a = 200'

n = 1

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
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Canadian Nickel Co., Ltd.
INDUCED POLARIZATION SURVEY
APPARENT CHARGEABILITY CONTOURS

CHLORE CLAIMS
OMINECA MINING DIVISION
BRITISH COLUMBIA

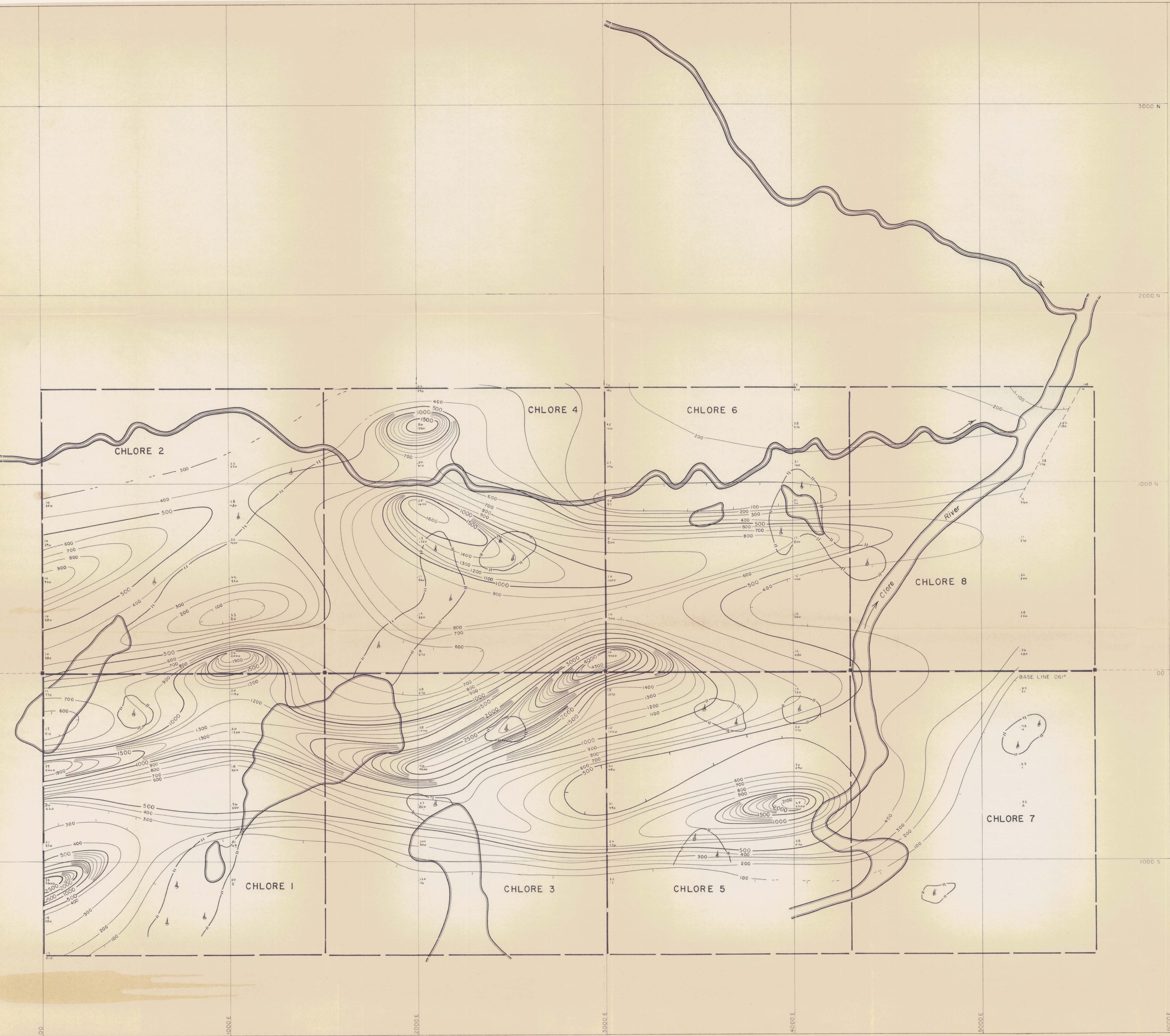
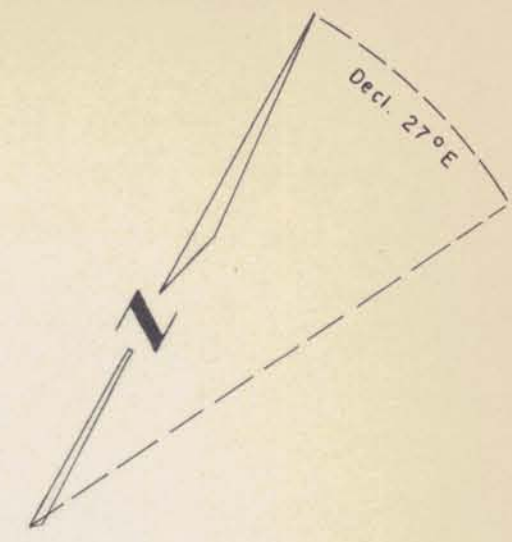


SCALE 5466

To accompany report by R.A. JAMIESON-Nov., 1974

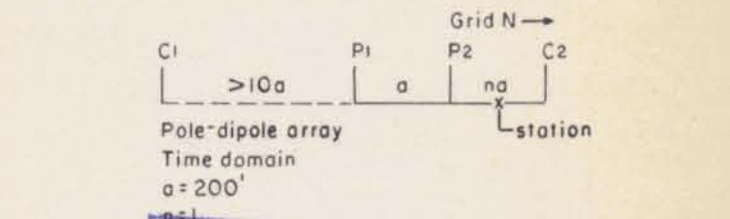
MAP 9

931.4W 10/74



LEGEND

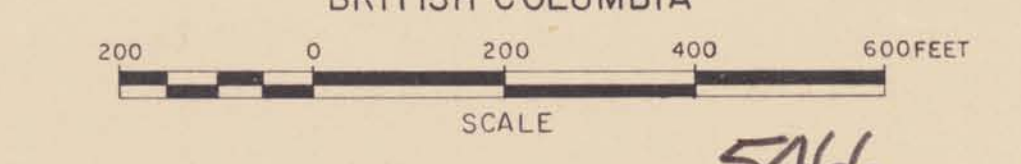
Station read and readings recorded: 100 ohm-m
 Contour interval: 100 ohm-m
 500, 1000 ohm-m contour:
 100 ohm-m contour:
 Relative low:
 Claim post and boundaries:
 Shore line (lake, river, creek):
 Swamp:



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5466 MAP 10

Canadian Nickel Co., Ltd.
 INDUCED POLARIZATION SURVEY
 APPARENT RESISTIVITY CONTOURS

CHLORE CLAIMS
 OMINECA MINING DIVISION
 BRITISH COLUMBIA



To accompany report by R.A. JAMIESON - Nov, 1974

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MAP 10