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1006		
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GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL REPORT

ON THE  
NATION RIVER PROPERTY  
(JEN 1 TO 3 MINERAL CLAIMS)

CARIBOO MINING DIVISION

N.T.S. 93 G/14

FILMED

Latitude: 53° 51' N  
Longitude: 123° 25' W

NORANDA EXPLORATION COMPANY, LIMITED  
(NO PERSONAL LIABILITY)

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

17,805

BY: GORDON MAXWELL  
LYNDON BRADISH

SEPTEMBER, 1988

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SUMMARY:

The JEN claims were staked by Colin Campbell during the summer of 1984 to cover an area that indicated anomalous gold geochemistry in soil and rocks. The property was optioned from the owner in 1987 by Noranda Exploration Company, Limited. An exploration program consisting of 60 km's of linecutting, 50 km's of mag survey, 2 km's of I.P. survey, 286 "B" horizon soil samples and detail mapping was completed in May and June of 1988.

The program outlined two potential gold bearing horizons which warrant further follow up including diamond drilling.

INTRODUCTION:

The initial phase of the exploration program on the Jen Claims began in late May and continued through June of 1988. The program consisted of 60 line km's of grid being established, 50 km's of magnetic survey, 2 km's of I.P. survey and a total of 286 "B" horizon soil samples. A small portion of the grid has been geologically mapped. All work was performed by Noranda Exploration personnel under the supervision of Gord Maxwell.

LOCATION & ACCESS:

The Jen claims are situated approximately 50 km's due west of Prince George. The property lies immediately east and north of Cluculz Lake, which is a popular recreation area.

The property can be directly accessed from Highway 97 or via a series of gravel access roads to various parts of the property. Also, a major hydro power line cuts across the northern part of the property and provides additional access.

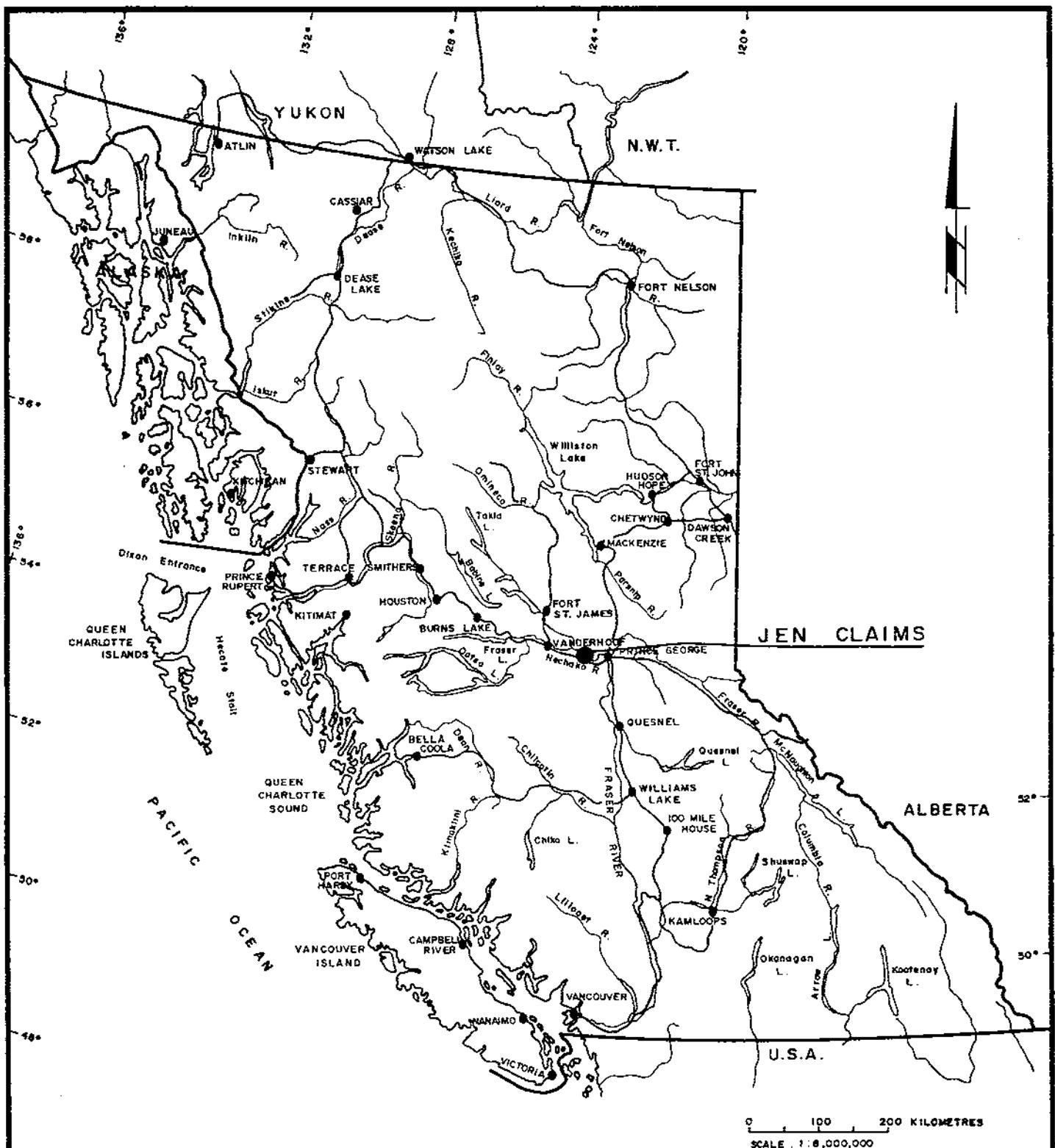
CLAIM STATISTICS:

NAME	# UNITS	RECORD #	RECORD DATE	OWNER
Jen 1	20	6266	July 20, 1984	Colin Campbell
Jen 2	20	6465	Sept 14, 1984	Colin Campbell
Jen 3	20	6466	Sept 14, 1984	Colin Campbell

TOPOGRAPHY & VEGETATION:

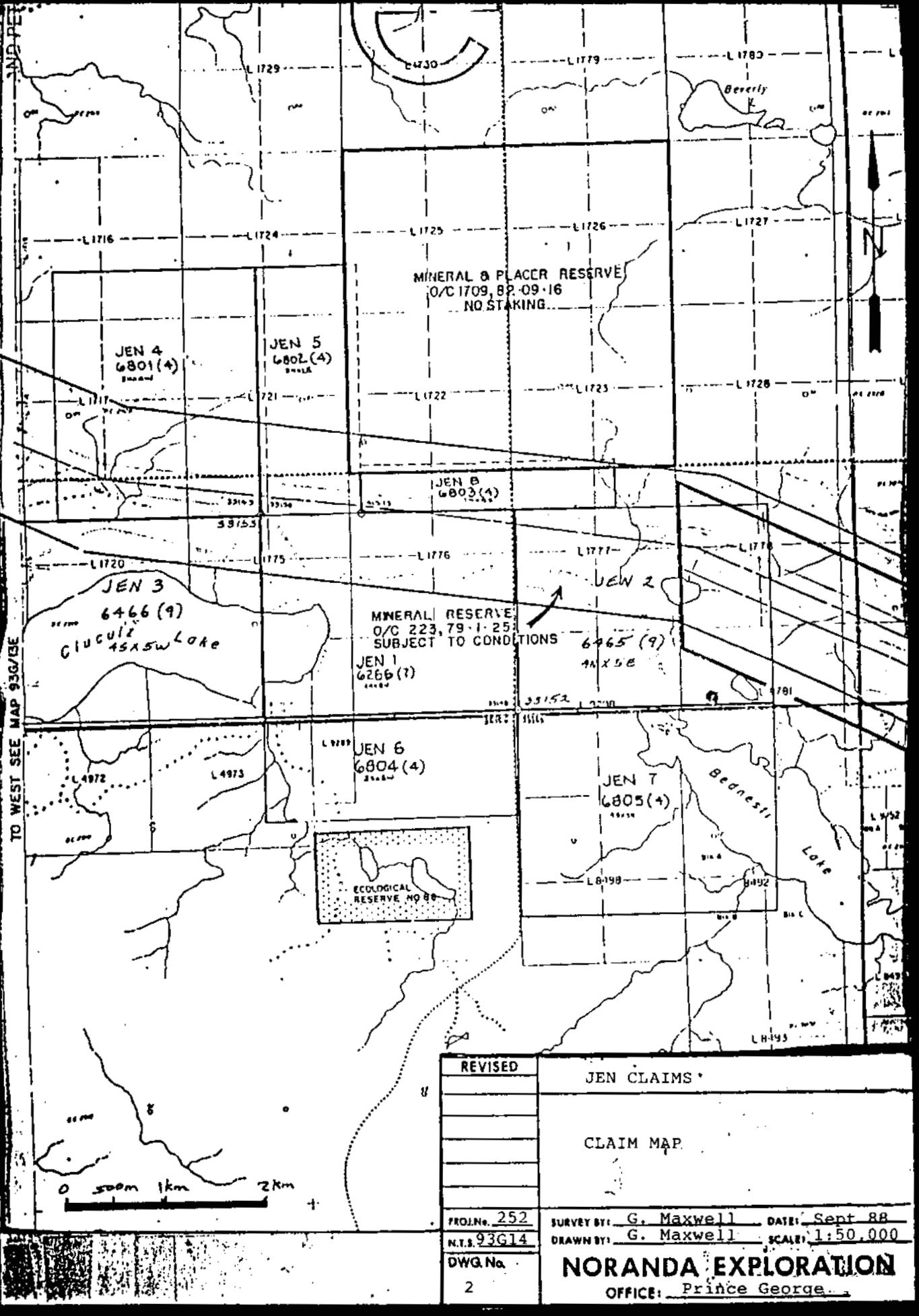
The property lies in an area of heavy glacial overburden cover, with the exception of what appears to be an old river channel to the east of Cluculz Lake. This has produced a steep scarp to the north, visible along the highway and a gentler slope on the south scarp. This cut has exposed some outcrop along the highway and to the east of Cluculz Lake. Throughout this area, the overburden cover is fairly thin and amenable to soil geochemistry.

The area is covered by mature pine, spruce, fir and balsam fir which in some areas have been logged in the past. There is no underbrush on the pine flats to the north, but the south is tangled with thick alder.



REVISED	LOCATION MAP	
	JEN CLAIMS	
PROJ. NO.	252	
N.T.S.		
DWG. NO.	1	
SURVEY BY:	G. Maxwell	
DRAWN BY:	S.K.B.	
SCALE:	1:6,000,000	
<b>NORANDA EXPLORATION</b>		
OFFICE: PRINCE GEORGE, B.C.		

TO WEST SEE MAP 93G/13E



#### PREVIOUS WORK:

Prior to the staking by the owner, no previous work has been reported on the property. Two old, shallow trenches were found south of the main swamp, but the creator is unknown. The property was staked in 1984 by Colin Campbell to cover an area of geochemically anomalous gold in rocks and soils. In addition, the owner also established a small grid, completed detail mapping, chip sampling and a self potential survey.

#### REGIONAL GEOLOGY:

The Jen claims are believed to be underlain by a sequence of Permian sediments of the Cache Creek group and Upper Triassic to Lower Jurassic volcanics of the Takla Group. The Cache Creek sediments consist mainly of cherty, siliceous, graphitic phyllite and the Takla volcanics consists mainly of massive to well foliated andesite.

The Pinchi Fault which trends northwest, is situated 10 km's east of the property. What appears to be a parallel splay of the Pinchi cuts across the property and is manifested mainly by the magnetic data. Also, very strong sub east-west structures have been mapped on the property south of the highway.

#### LOCAL GEOLOGY:

The property is believed to be underlain by a combination of Upper Triassic to Lower Jurassic Takla group andesites and Permian Cache Creek phyllites. The andesites are typically pale to light green, massive to strongly foliated with weak to moderate pervasive carbonate alteration. These are sometimes interbedded with thin beds of strongly foliated argillite. The largest outcrop of andesite occurs immediately adjacent the highway at the bottom of Cluculz hill. Here the andesite is cut by numerous thin (1-2 cm) quartz veins trending 070 degrees.

The phyllites are usually light to dark grey, well foliated with 0-25% cherty laminations, weakly to moderately graphitic with numerous quartz and calcite veinlets. The best exposure of these is along the south Cluculz Lake access road where these trend 070 degrees and dip shallowly to the south. Here a series of pinched and swelled quartz veins appear within the strongly foliated phyllite. In addition, a small unit of highly calcareous phyllite (marble?) is found further to the east between lines 5000E and 5100E between 4550N and 4800N.

A highly altered unit of buff to brown quartz, ankerite and mariposite altered rock termed listwanite, occurs between lines 5100E and 5300E between 4700N to 4900N. This unit trends to occur along splays of the Pinchi Fault.

Several structures transect the property, the most notable is an east-west trend fault zone which parallels the main swamp to the east of Cluculz Lake. This structure appears to offset a northwest trending structure, which is believed to be a parallel splay of the Pinchi Fault.

GEOCHEMISTRY:

METHOD -

A total of 286 "B" horizon soil samples were taken using grub hoes from holes ranging from 15 to 35 cm in depth. The samples were collected in early June of 1988. The soil was placed in Kraft wet-strength paper bags, dried, then shipped to Noranda Labs in Vancouver, B. C. for analysis. (For analytical procedure, see Appendix III). Results are plotted on 1:2500 scale maps at rear of report.

OBSERVATIONS -

Gold - Gold values range from 10 to 1700 ppb. Two main areas of anomalous gold geochem occur on the grid: 1) a large area of outcrop immediately north of the highway, and 2) a zone between lines 4300E and 4800E immediately south of the east-west trending swamp. This anomaly appears to coincide with the limits of a major east-west trending fault structure.

Copper - Copper values range from 6 to 240 ppm, where values over 100 ppm are considered anomalous. Besides some single station isolated anomalies, the only area of concentrated anomalous copper geochem occurs coincident with the gold anomaly on the northside of the highway.

Zinc - Zinc values range from 34 to 600 ppm, where values over 350 ppm are considered anomalous. Only two sample sites are considered anomalous; L5400E/4500N and L4800E/4700N.

Silver - Silver values range from the detection limit of 0.2 ppm to 1.4 ppm, no values are considered anomalous.

Arsenic - Arsenic values range from 2 to 180 ppm, values over 100 ppm are considered anomalous. The two samples greater than 100 ppm are coincident with the highest Au geochem sites (1000 ppb and 1700 ppb).

Lead - Lead values range from 2 to 34 ppm, no samples are considered anomalous.

## GEOPHYSICS:

### MAGNETOMETER SURVEY INSTRUMENTATION -

The magnetometer surveyed employed a field and base station package also manufactured by Scintrex of Concord, Ontario. The MP-3 system records the Total Magnetic Field with a field accuracy of 1 to 2 nano Teslas with all applicable corrections having been applied to the data. Readings were recorded at 12.5 meter intervals.

### I.P. SURVEY INSTRUMENTATION -

The I.P. survey employed a Frequency Domain system manufactured by Phoenix Geophysics of Toronto, Ontario. The transmitter and generator have a capacity of producing 1.2 Kilowatts of electrical power although this amount of power is rarely used.

I.P. surveys that were carried out during the early part of 1986 utilized the same transmitter but in the Time Domain mode along with a Huntac Mark IV receiver. A two second cycle time was used throughout the survey.

The survey parameters employed for these surveys were as follows:

Dipole array	:	Dipole-Dipole
Dipole length	:	25 meter detail
	:	50 meter 'recon'
Separations	:	n=4 on detail
	:	n=3 on recon
Frequencies	:	0.25 and 4.0 Hertz
Parameters recorded	:	Percent Frequency Effect (PFE) and Resistivity (ohm-meters)
I.P. transmitter	:	Phoenix IPT-1 & MG-1
I.P. receiver	:	Phoenix IPV-1

A fixed transmitter setup using up to four Tx dipoles on either side of the transmitter was the most frequently used. The recorded resistivities indicate that EM coupling was negligible.

### DISCUSSION OF RESULTS -

The magnetometer survey has mapped the area as having a fairly uniform magnetic field with few strong anomalies. Superimposed on the data are cultural responses due to a (East-West) major high tension powerline which is seen at the north extremity of the map and a smaller powerline (and road) which is manifested as a string of magnetic lows across the central portion of the map. Other cultural effects are noted to occur throughout the map area, however, their effects are small.

A narrow source of high magnetic susceptibility is mapped between L5400E/4500N and L4900E/4840N defining a prominent 125 degree trend. While this anomaly appears to terminate at or near the Highway, there is a weaker expression of this anomaly which extends some distance beyond the apparent termination point.

A low amplitude narrow magnetic high is defined between Lines 3000E and 4800E and occurs in a sinuous manner between stations 5100N and 5300N. Near the east termination of this linear feature, there is a low amplitude but pronounced magnetic low centered at approximately 4650E/5250N.

The I.P. survey has mapped a number of sub parallel anomalous features particularly some narrow low resistivity sources, which are interpreted to be significant fault structures. Associated with one of these is a clear and well defined PFE anomaly. On the Magnetometer Survey Map the interpreted I.P. anomalies are as indicated. Two suspected fault structures are identified from the I.P. results and occur in the south west quadrant of the grid.

ZONE 1: This feature is mapped between L4600E/4550N and L4400E/4437.5N with a possible extension down to L4000E/4200N? The I.P. data suggests that this is sourced by a narrow low resistivity zone, possibly a fault structure, which strikes at an azimuth of 070 degrees. Coincident with this source is a wide, low amplitude magnetic high suggesting the presence of dispersed magnetic minerals. A poorly defined PFE response associated with this signature further suggests the presence of disseminated sulphides and/or possibly graphite.

ZONE 2: A substantial I.P. and resistivity anomaly is mapped north of Zone 1 between L4600E/4700N and L4400E/4675N, with a possible extension to L4000E/4562.5N. In close association with the response at L4000E/4562.5N there is a substantial I.P. and resistivity source centered approximately at L4000E/4450N and which has an attractive response. The resistivity source is relatively narrow and overall is suggestive of a mineralized (gp and/or sulphides) fault structure. This zone has a strike direction of 075 degrees azimuth.

Other responses are mapped, as indicated on the Magnetometer Survey Map, from the limited I.P. conducted on this property. These two zones mentioned above standout from this data set and are considered high priority targets. Note that these two zones may be possibly truncated by the strong magnetic 'dike' mentioned above. Other anomalous features of interest and worth mentioning are located at L4600E/4800N, a low resistivity source at n=4 and L4400E/4800N, a near surface low resistivity source.

CONCLUSIONS:

The soil geochemistry has outlined a strong gold bearing structure which appears to trend 080 degrees over a 700 meter strike length. Gold values are somewhat spotty throughout the zone, but this may be attributed to a local variation in overburden depth. Outcrop along this structure is very poor but from examination of rubble and subcrop, one gets the feeling there is a strong fault zone cutting through this area. The mag survey faintly outlines the same structure which is manifested by a string of mag lows. The I.P. survey has mapped a series of low resistivity/high I.P. zones with flanking high resistivity cores which may be the result of a stockwork of quartz veins or intense silicification. The mag survey has also outlined a north west trending structure which cuts across the entire property. The north half is marked by a string of mag lows indicating a fault structure, but the south half is manifested by a linear mag high which is thought to be serpentinites coming up along the fault, which is typical of the Pinchi Fault.

RECOMMENDATIONS:

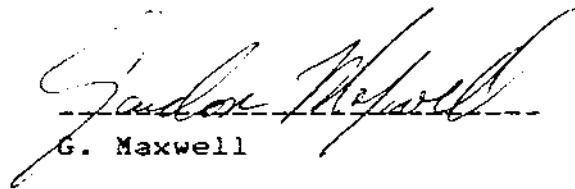
- 1) The mag survey should be extended to the east and to the southeast in an attempt to further delineate these structures.
- 2) Further I.P. surveys should be conducted to outline the limits of the east/west trending fault structure.
- 3) A series of diamond drill holes should be put down along the structures to test this zone for gold bearing zones.

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Gordon Maxwell of Prince George, Province of British Columbia, do hereby certify that:

1. I am a Geologist residing at 5905 Rideau Street, Prince George, British Columbia.
2. I am a graduate of the University of Manitoba with an Hons. B. Sc. (geology).
3. I am a member in good standing of the Canadian Institute of Mining and the Prospector's and Developer's Association.
4. I presently hold the position of Project Geologist with Noranda Exploration Company, Limited and have been in their employ since 1980.



Gordon Maxwell  
G. Maxwell

APPENDIX II  
STATEMENT OF COSTS/COST BREAKDOWN

A) I.P. SURVEY:	
Wages - 40 mandays @ \$150.00/day	\$ 6,000.00
Food & Accommodations - 40 mandays @ \$50.00/day	\$ 2,000.00
Truck Rental	<u>\$ 200.00</u>
	\$ 8,200.00
B) MAG SURVEY:	
Wages - 10 mandays @ \$150.00/day	\$ 1,500.00
Food & Accommodations - 10 mandays @ \$50.00/day	\$ 500.00
Truck Rental	<u>\$ 400.00</u>
Cost of report preparation	<u>\$ 200.00</u>
Equipment Rental	<u>\$ 1,000.00</u>
Fuel	<u>\$ 200.00</u>
	\$ 3,800.00
C) LINECUTTING:	
Wages - 40 mandays @ \$100.00/day	\$ 4,000.00
Truck Rental	<u>\$ 400.00</u>
Fuel	<u>\$ 200.00</u>
	\$ 4,600.00
D) GEOLOGY:	
Wages - 15 mandays @ \$150.00/day	\$ 2,250.00
Food & Accommodations - 10 mandays @ \$50.00/day	\$ 500.00
Truck Rental	<u>\$ 100.00</u>
Fuel	<u>\$ 100.00</u>
Cost of report preparation	<u>\$ 400.00</u>
	\$ 3,350.00
E) SOIL GEOCHEMISTRY:	
Wages - 10 mandays @ \$100.00/day	\$ 1,000.00
Truck Rental	<u>\$ 100.00</u>
Analysis	<u>\$ 3,146.00</u>
Cost of report preparation	<u>\$ 1,000.00</u>
	\$ 4,346.00

### APPENDIX III

#### ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

Revised:01/86

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984)

#### Preparation of Samples

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) are analysed in its entirety, when it is to be determined for gold without further sample preparation. See addendum.

#### Analysis of Samples.

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition than that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

#### Elements Requiring Specific Decomposition Method

Antimony - Sb: 0.2 g sample is attacked with 3.3 mL of 6% tartaric acid, 1.5 mL conc. hydrochloric acid and 0.5 mL of conc. nitric acid, then heated in a water bath for 3 hours at 95° C. Sb is determined directly from the acid solution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.4 g sample is digested with 1.5 mL of 70 % perchloric acid and 0.5 mL of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

**Barium - Ba:** 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

**Bismuth - Bi:** 0.2 g - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

**Gold - Au:** 10.0 g sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from the aqueous solution. Gold is determined from the MIBK solution with flame AA.

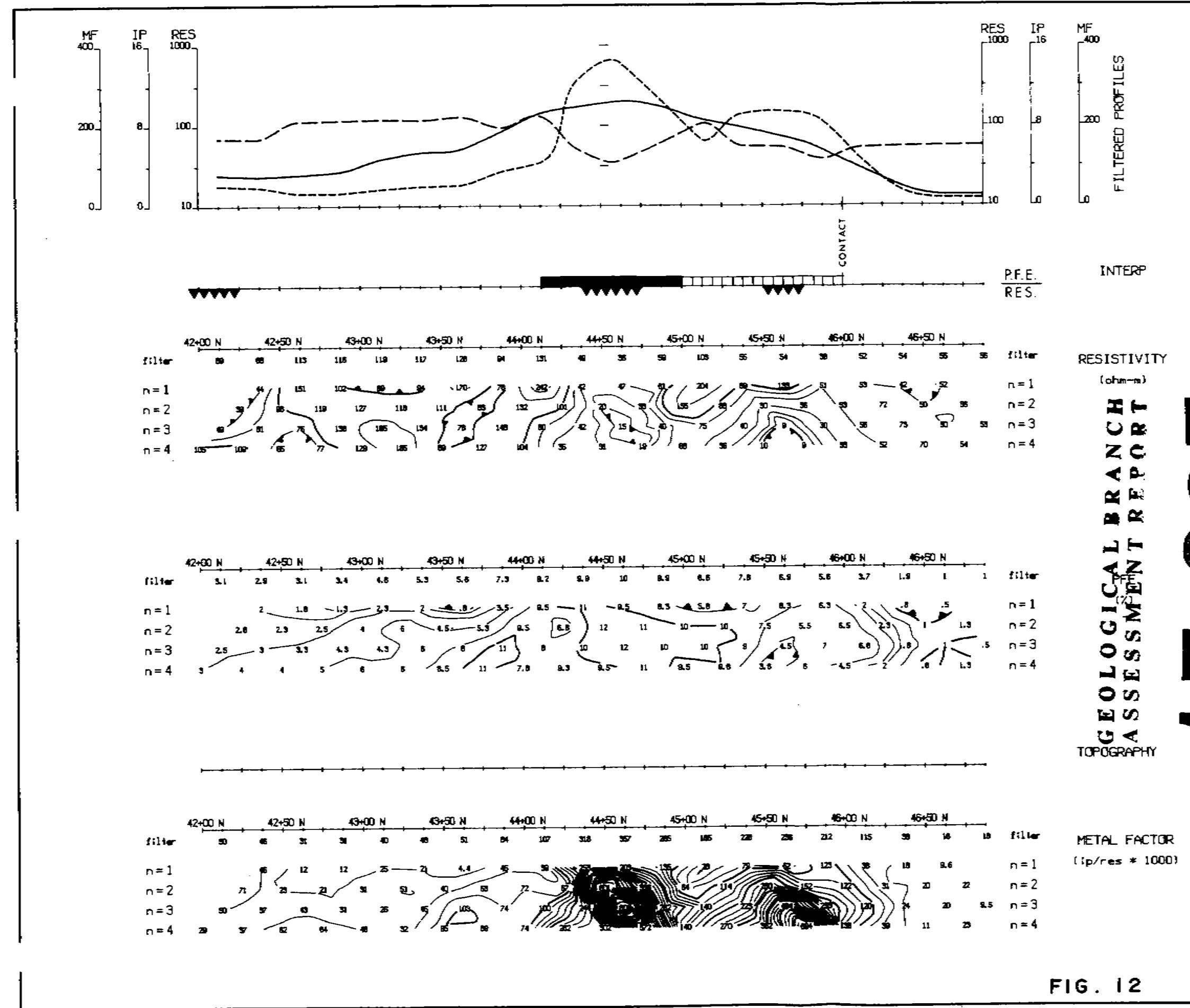
**Magnesium - Mg:** 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with a nitrous oxide flame determines Mg from the aqueous solution.

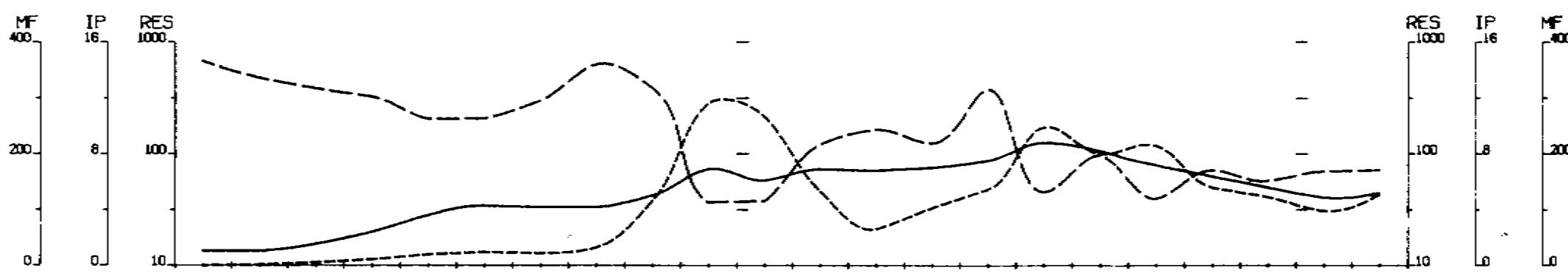
**Tungsten - W:** 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

**Uranium - U:** An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01 (10PPB)
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	





P.F.E. RES. INTERP.

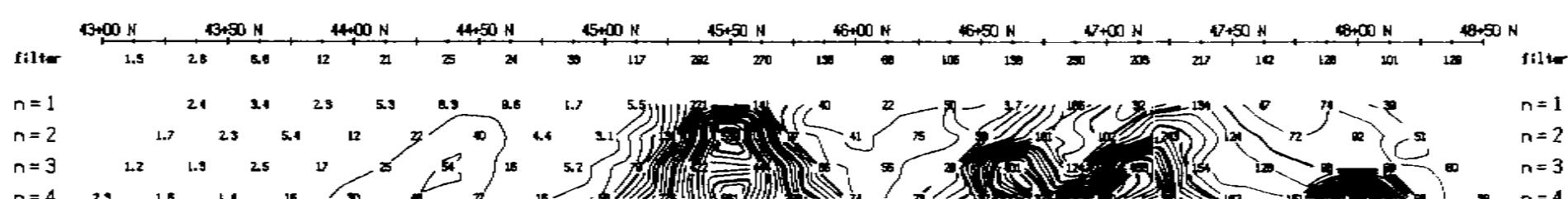
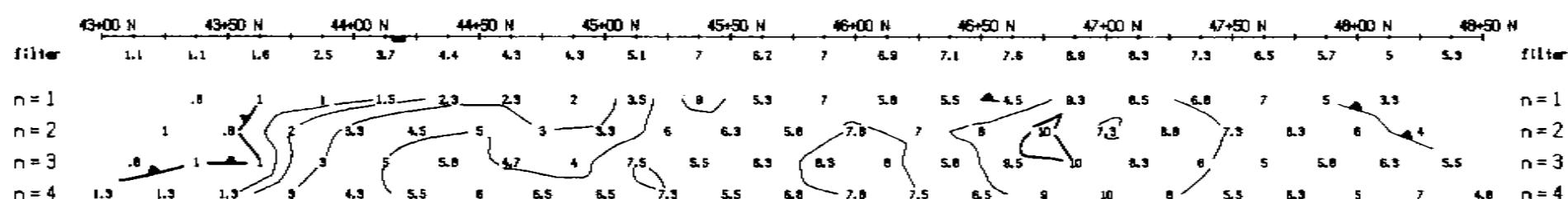
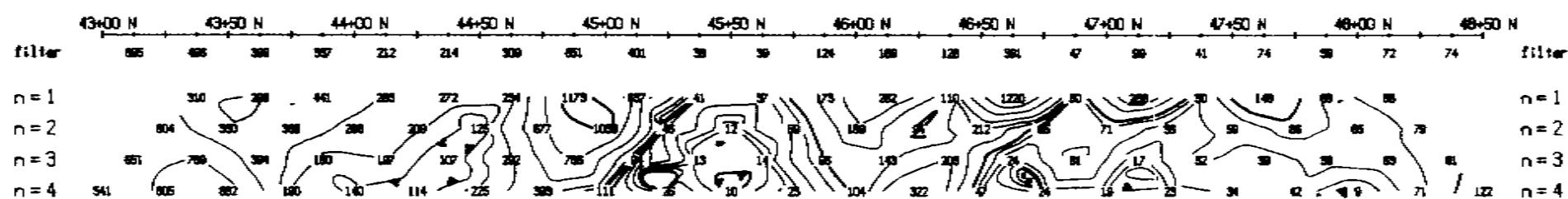
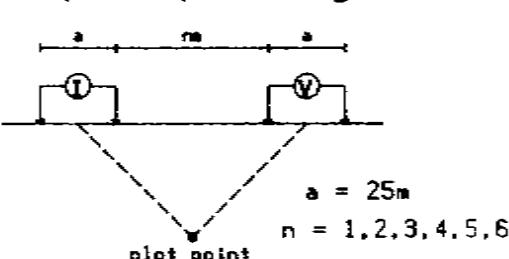


FIG. 14

## Line 4600 E

Dipole-Dipole Array



### Filtered Profiles

filter

Resistivity	-----	*
Polarization	-----	**
Metal Factor	-----	***
	-----	****

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : PHOENIX  
Frequency : 0.25/4.0 Hz  
Operator : WK\SK

### INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- ▼ Pronounced resistivity decrease

### TOPOGRAPHY

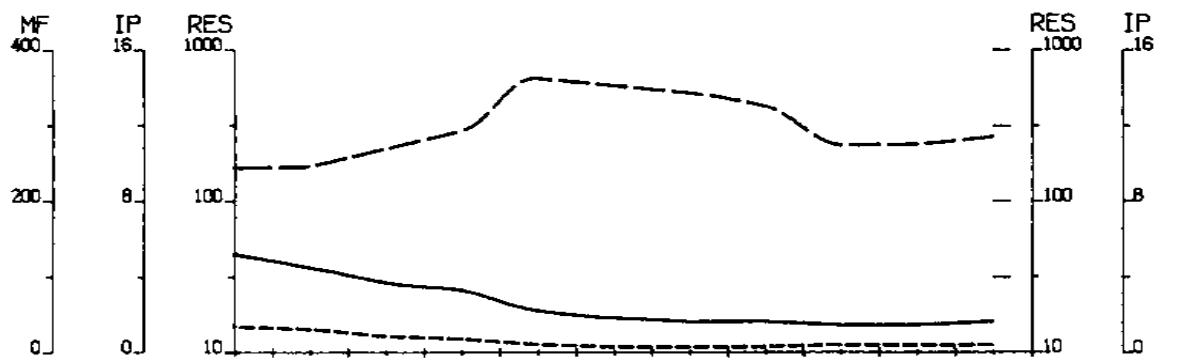
### NATIONS PROJECT

## INDUCED POLARIZATION SURVEY

### Line 4600 E C.B.C DISTRICT

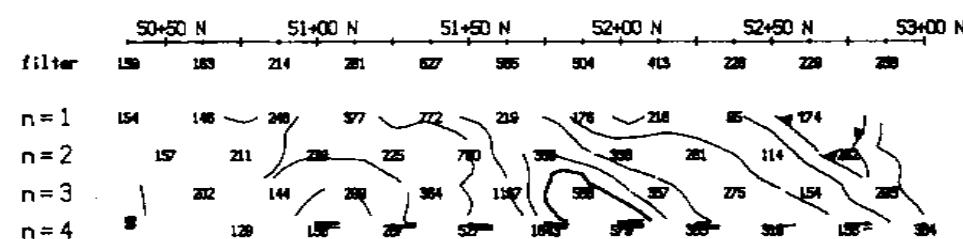
Date: 88/06/20 N.T.S.  
Interpretation by: L. Bradish  
Scale: 1 : 2500

n o r a n d a

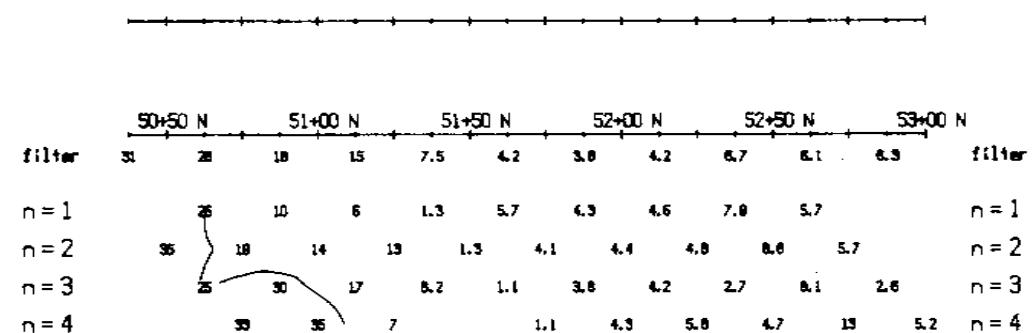
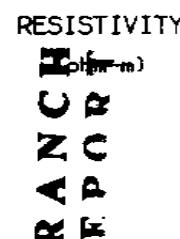
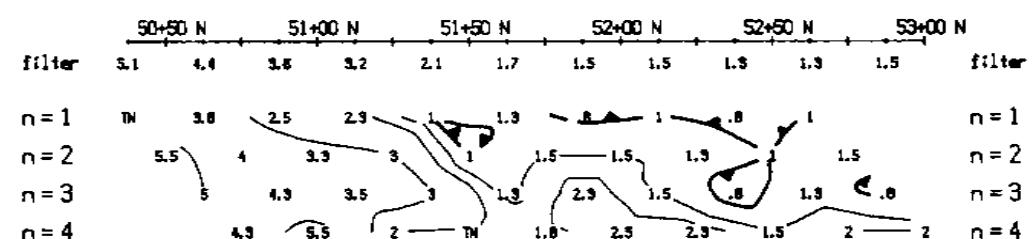
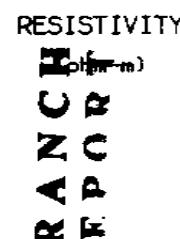
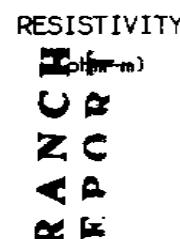


FILTERED PROFILES

P.F.E.      INTERP



RESISTIVITY  
filter

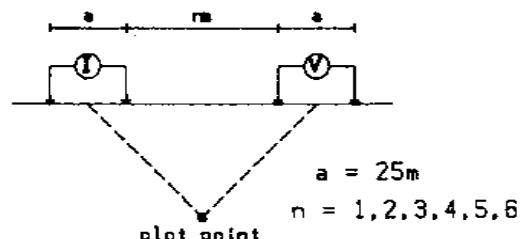


METAL FACTOR  
(ip/res \* 1000)

FIG. 15

## Line 5000 E

Dipole-Dipole Array



## Filtered Profiles

Resistivity      Polarization      Metal Factor

filter \*      filter \*\*      filter \*\*\*      filter \*\*\*\*

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : PHOENIX  
Frequency : 0.25/4.0 Hz  
Operator : WK\SK

## INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- ▼ Pronounced resistivity decrease

## TOPOGRAPHY

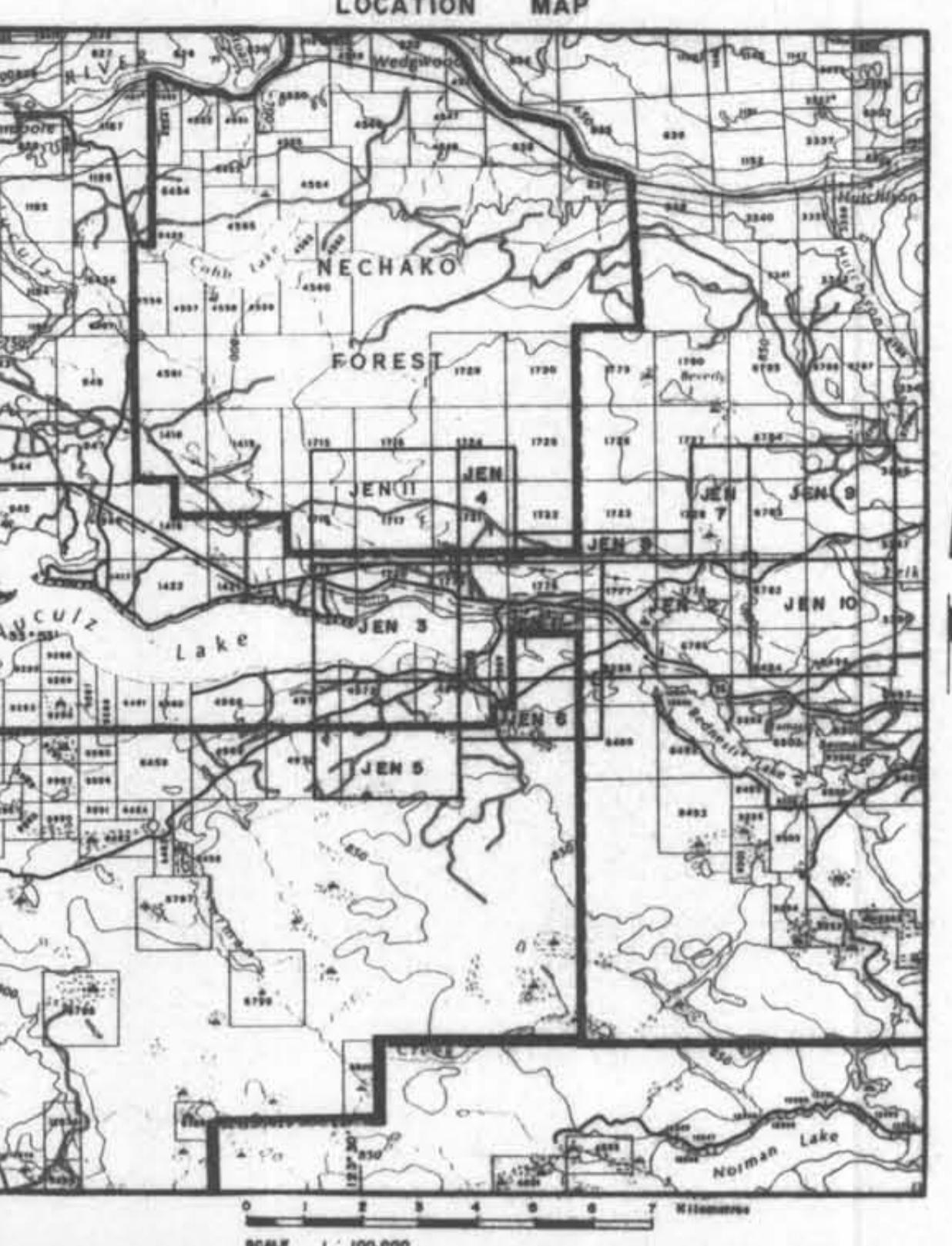
## NATIONS PROJECT

## INDUCED POLARIZATION SURVEY

Line 5000 E  
C.B.C DISTRICT

Date: 88/06/20 N.T.S.  
Interpretation by: L. Bradish  
Scale: 1 : 2500

noranda



### LEGEND

ROCK TYPES	
1 ANDESTITE	pale to light green buff weathering. massive to strongly foliated, 1-2 mm diam. pyroxene weak to moderate carbonate alteration
2 PHYLLOLITE	a) light to dark grey, well foliated with 0-25% chlorite laminations, weakly to moderately altered b) calcareous, dark grey phyllite laminated
3 LISTWANITE	buff to brown, with minor light green, quartz, ankerite and marcasite altered rock
 SYMBOLS	
swamp	scr - sericitic
lake	hem - hematite
claim post	ba - bauxite
clear-cut	an - ankerite
Blaized, flagged or cut line	 
Logging road	 
Cabin	 
Trech	 
Outcrop: large, small	 
Rock sample location (bedrock)	 
Rock sample location (float)	 
strike and dip of bedding	 
strike and dip of contact	 
strike and dip of foliation or shearing	 
strike and dip of jointing	 
Geological contact, defined	 
Geological contact, inferred	 
Geological contact, assumed	 
Linear structure	 
Fault	 

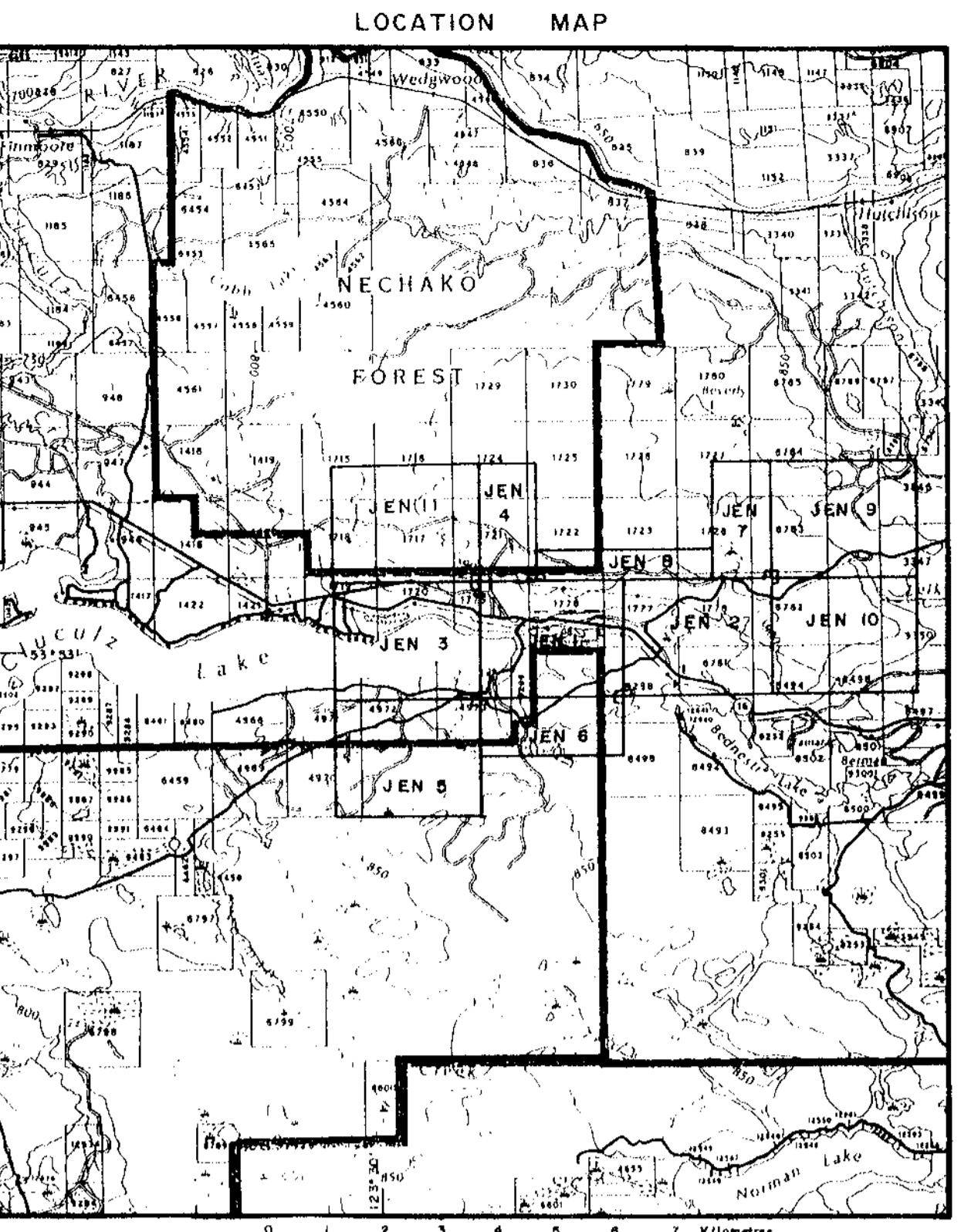
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

17,805

Map Sheet Index  
2 1

0 50 100 150 200 meters  
SCALE 1:2,500

REVISED	NATION RIVER OPTION	
JEN CLAIMS		
GEOLOGY MAP		
PROJ. No. 252	SURVEY BY C.C. B.D.	DATE JUNE 1, 1968
M.T.S. 936/14	DRAWN BY S.K.B.	SCALE 1:2,500
DWG. No.	FIG. 3	
NORANDA EXPLORATION		
OFFICE: PRINCE GEORGE, B.C.		



### LEGEND

ROCK TYPES:	
[1]	ANDESITE: pale to light green buff weathering, massive to strongly foliated, 1-2% disseminated pyrite, weak to moderate carbonatization.
[2]	PHYLLOLITE: a) light to dark grey, well foliated with 0-25% chevron laminae, weakly to moderately graphitic; b) massive, dark grey phyllite (marble).
[3]	LIMSTONITE: buff to brown, with minor light green, yellow, tan, and marl-like altered rock.
af - andesite	gr - gneiss
chl - chlorite	hs - hematite
elt - elongation	bx - breccia
gns - gneiss	ak - adularia
gr - gneiss	
qz - quartz	
po - porphyrite	
q - quartz	
cal - calcite	
fr - fractured	
ch - chert	
v - vein	
sh - shaly	
sp - sulphide	
SYMBOLS:	
~	swamp
o	lake
-	claim post
—	clear-cut
—	Blazed, flagged or cut line
—	Logging road
□	Cabin
—	Trench
—	Outcrop: large, small
—	Rock sample location (bedrock)
—	Rock sample location (float)
—	Strike and dip of bedding
—	Strike and dip of contact
—	Strike and dip of foliation
—	Geological contact, defined
—	Geological contact, inferred
—	Geological contact, assumed
—	Linear structure
~~~	Fault

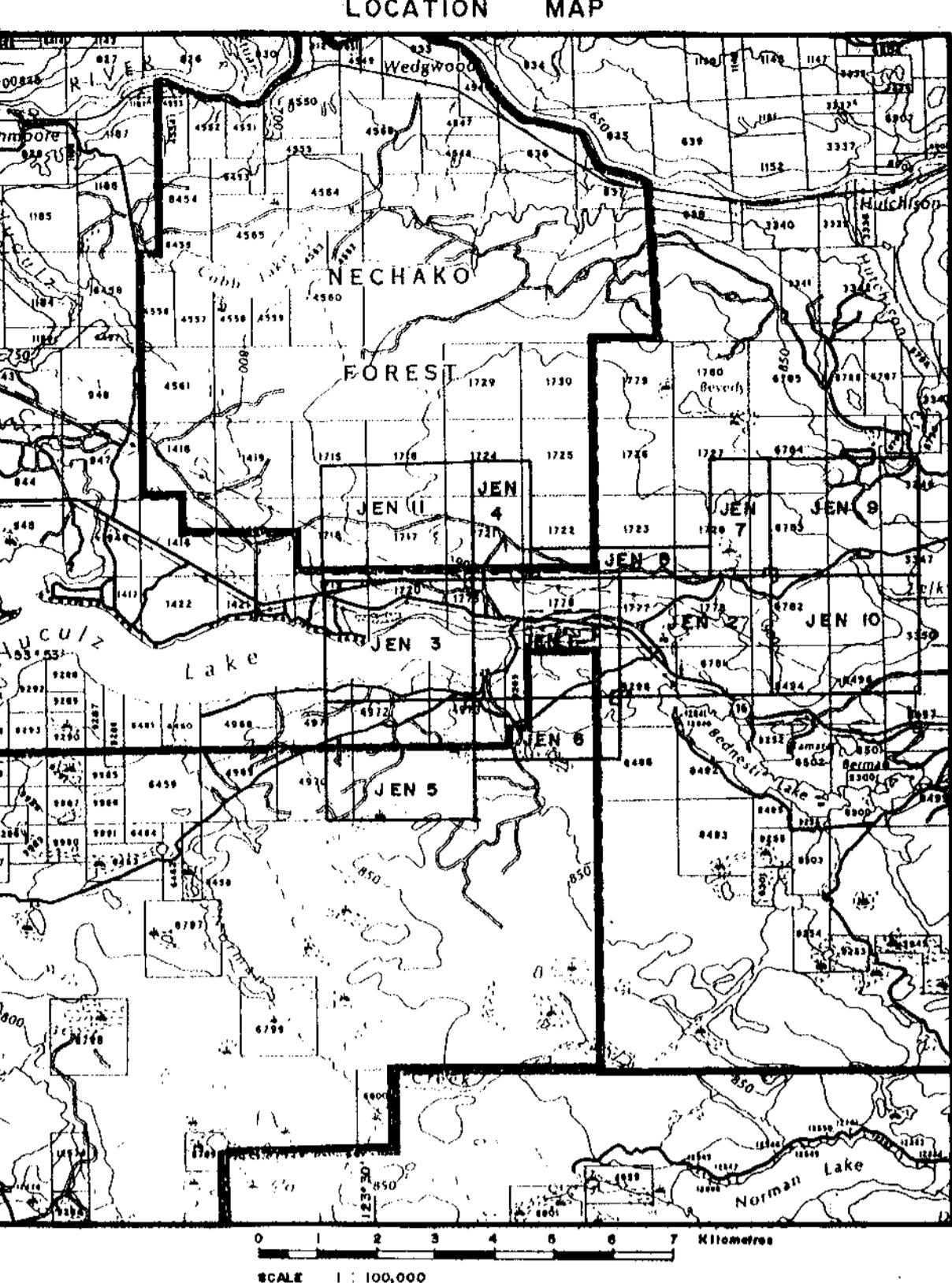
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

17-805

Map Sheet Index  
2 | 1

Scale 1:2,500

REVISED	NATION RIVER OPTION	
	JEN CLAIMS	
	GEOLOGY MAP	
PROJ. No. 252	SURVEY BY: C.C. B.O. DATE: JUNE 1, 1988	
NTS. 330714	DRAWN BY: S.K.R. SCALE: 1:2,500	
DWG. No.	FIG. 4	
NORANDA EXPLORATION		
OFFICE: PRINCE GEORGE, B.C.		



### LEGEND

Soil Geochem Survey Cu(ppm)/Au(ppb)


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

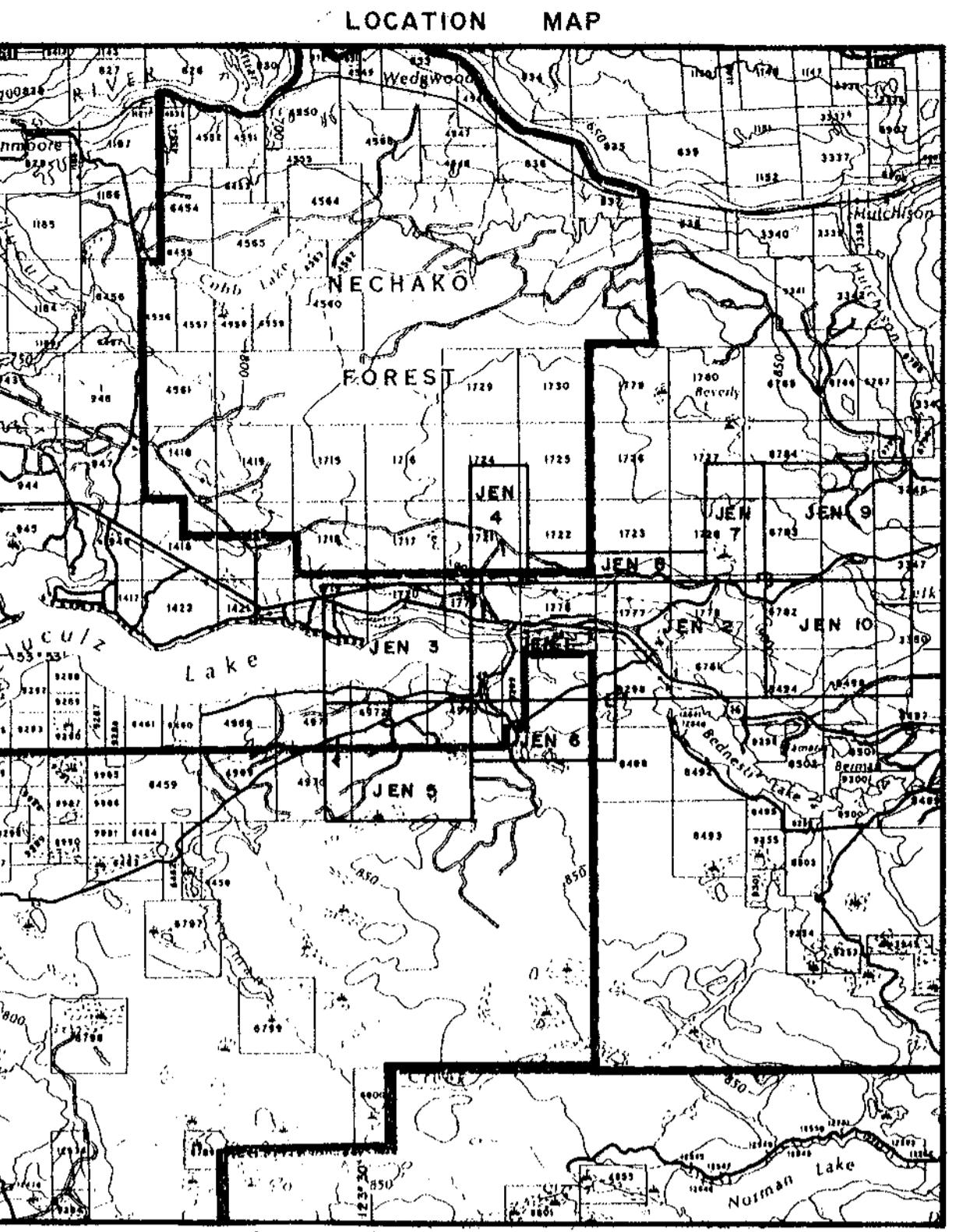
**17,805**

Map Sheet Index  
2 1

Scale 1:2,500  
0 50 100 150 200 metres

REVISED	NATION RIVER OPTION	
	JEN CLAIMS	
	SOIL GEOCHEM SURVEY	
	Cu (ppm) / Au (ppb)	
PROJ. No. 252	SURVEY BY S.H., RH	DATE JUNE, 1988
N.T.S. 93G/14	DRAWN BY S.K.B.	SCALE 1:2,500
DWG. No.		
FIG. 5		
NORANDA EXPLORATION		





### LEGEND

14/10 Soil Geochem Survey Cu(ppm) Au(ppb)

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

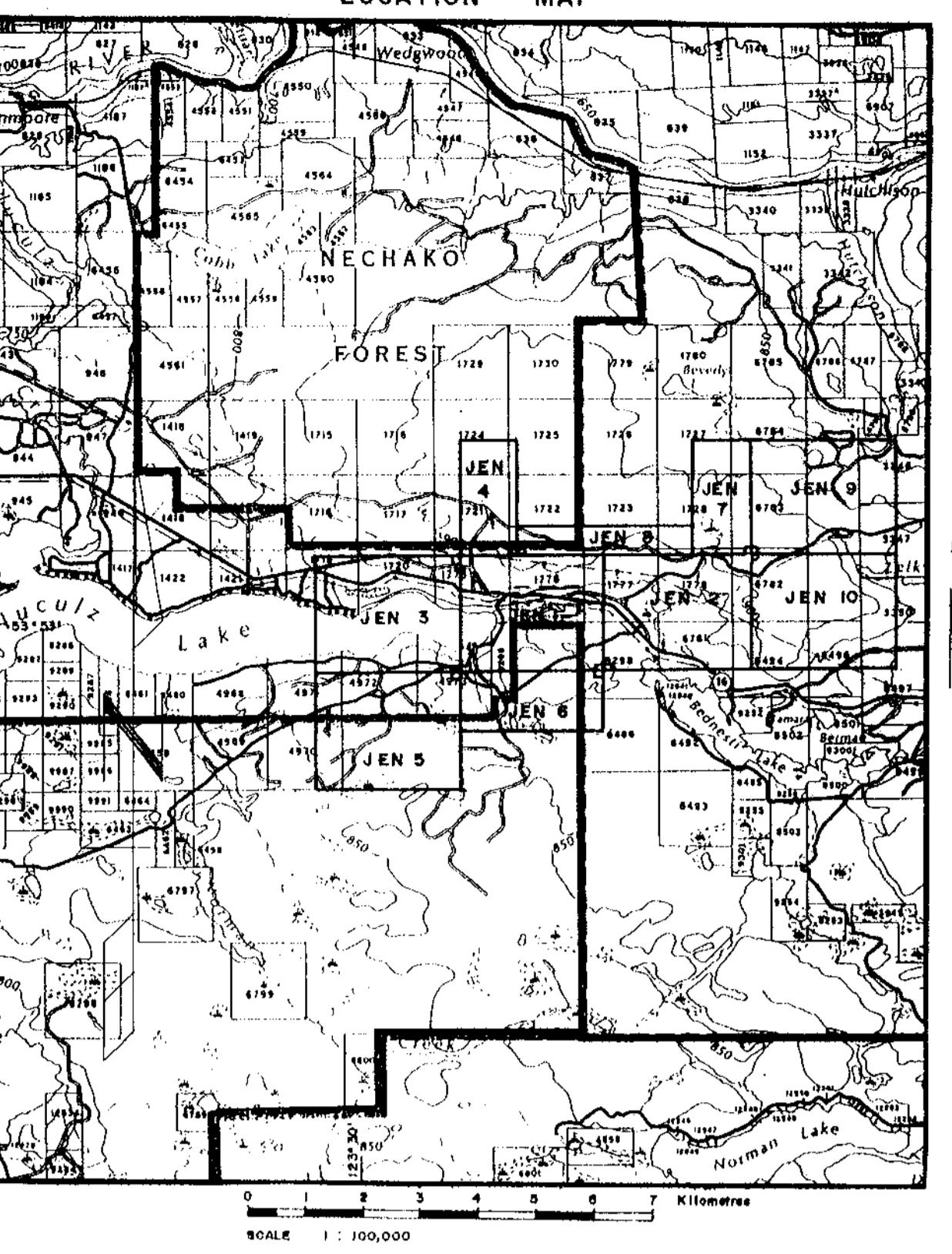
**17,805**

Map Sheet Index  
**2 1**

SCALE 1:2,500

REVISED	NATION RIVER OPTION	
JEN CLAIMS		
SOIL GEOCHEM SURVEY		
Cu(ppm); Au (ppb)		
PROJ. No. 252	SURVEY BY: B.H., D.H.	DATE: JUNE 1, 1988
NTS. 93G/14	DRAWN BY: S.A.B.	SCALE: 1:2,500
DWG. No.		
FIG. 6		
NORANDA EXPLORATION		





### LEGEND

L01 Soil Geochem Survey Ag(ppm)/As(ppm)


GEOLOGICAL BRANCH ASSESSMENT REPORT

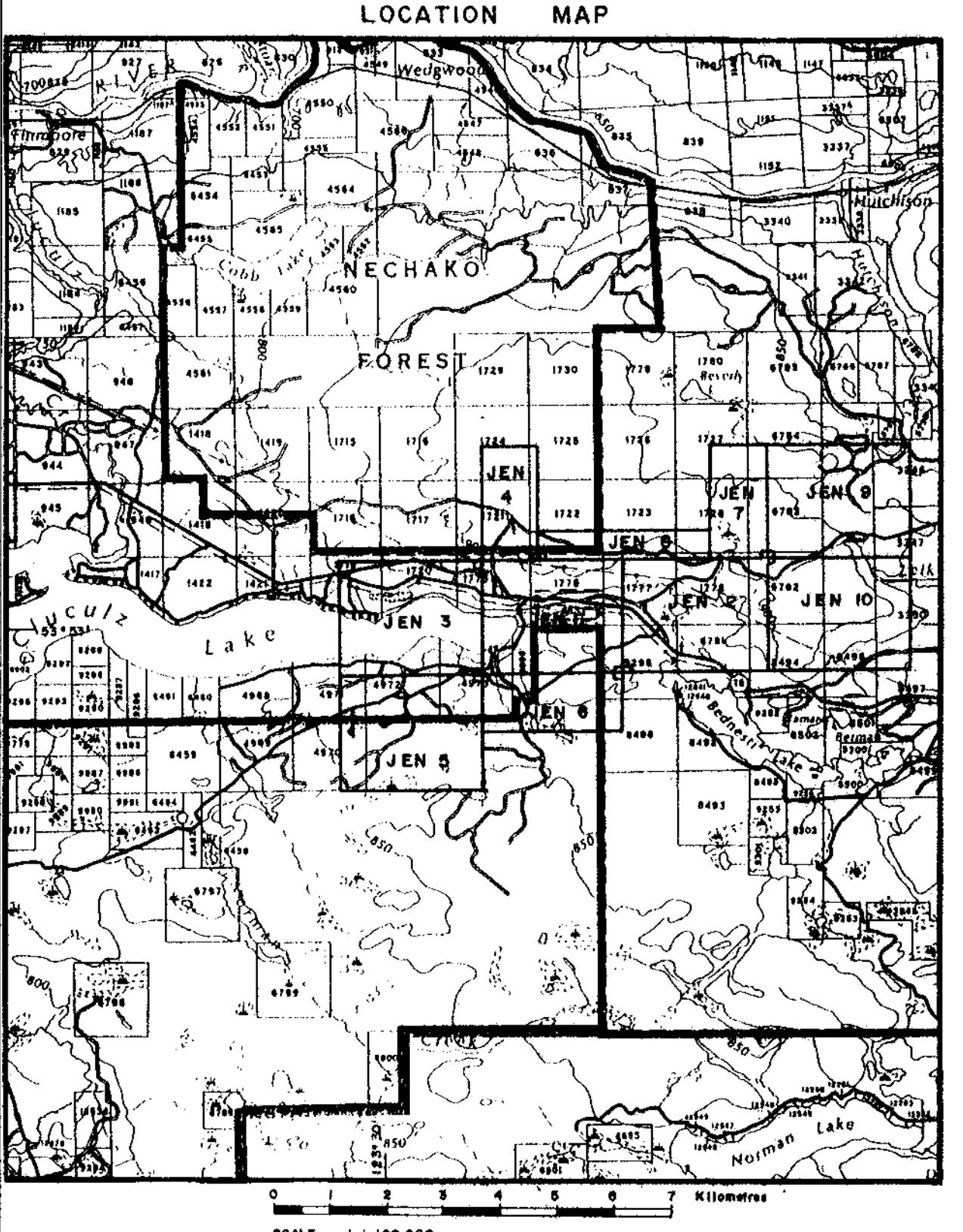
17,805

Map Sheet Index  
2 1

Scale 1:2,500

REVISED	NATION RIVER OPTION	
JEN CLAIMS		
SOIL GEOCHEM SURVEY		
Ag / As (ppm)		
PROJ. No. 292	SURVEY BY: B.H., R.H.	DATE: JUNE, 1988
NTS. 330/14	DRAWN BY: S.K.B.	SCALE: 1:2,500
DWG. No.		
FIG. 7		
NORANDA EXPLORATION		





### LEGEND

0.2/8 Soil Geochem Survey Ag(ppm)/As(ppm)


GEOLOGICAL BRANCH ASSESSMENT REPORT

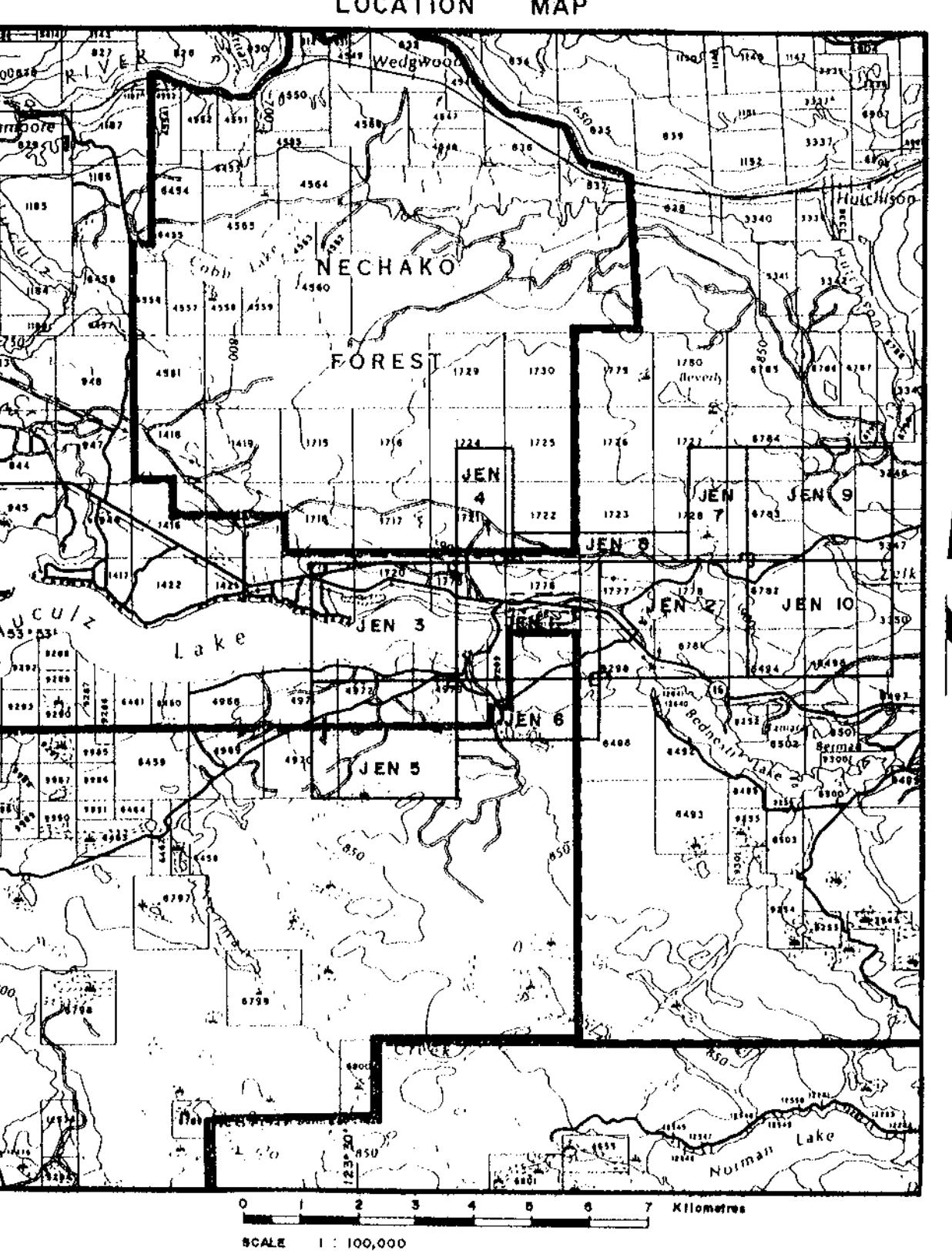
17,805

Map Sheet Index  
2 1

0 50 100 150 200 metres  
SCALE 1:2,500

REVISED	NATION RIVER OPTION			
JEN CLAIMS				
SOIL GEOCHEM SURVEY				
	Ag / As (ppm)			
PROJ. No. 252	SURVEY BY: B.H., R.H.	DATE: JUNE, 1988		
N.T.S. 33G/14	DRAWN BY: S.K.B.	SCALE: 1:2,500		
DWG. No.				
		FIG. 8		
		NORANDA EXPLORATION		
		OFFICE: PRINCE, GEORGE, B.C.		





### LEGEND

2/48 Soil Geochim Survey Pb(ppm)/Zn(ppm)

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

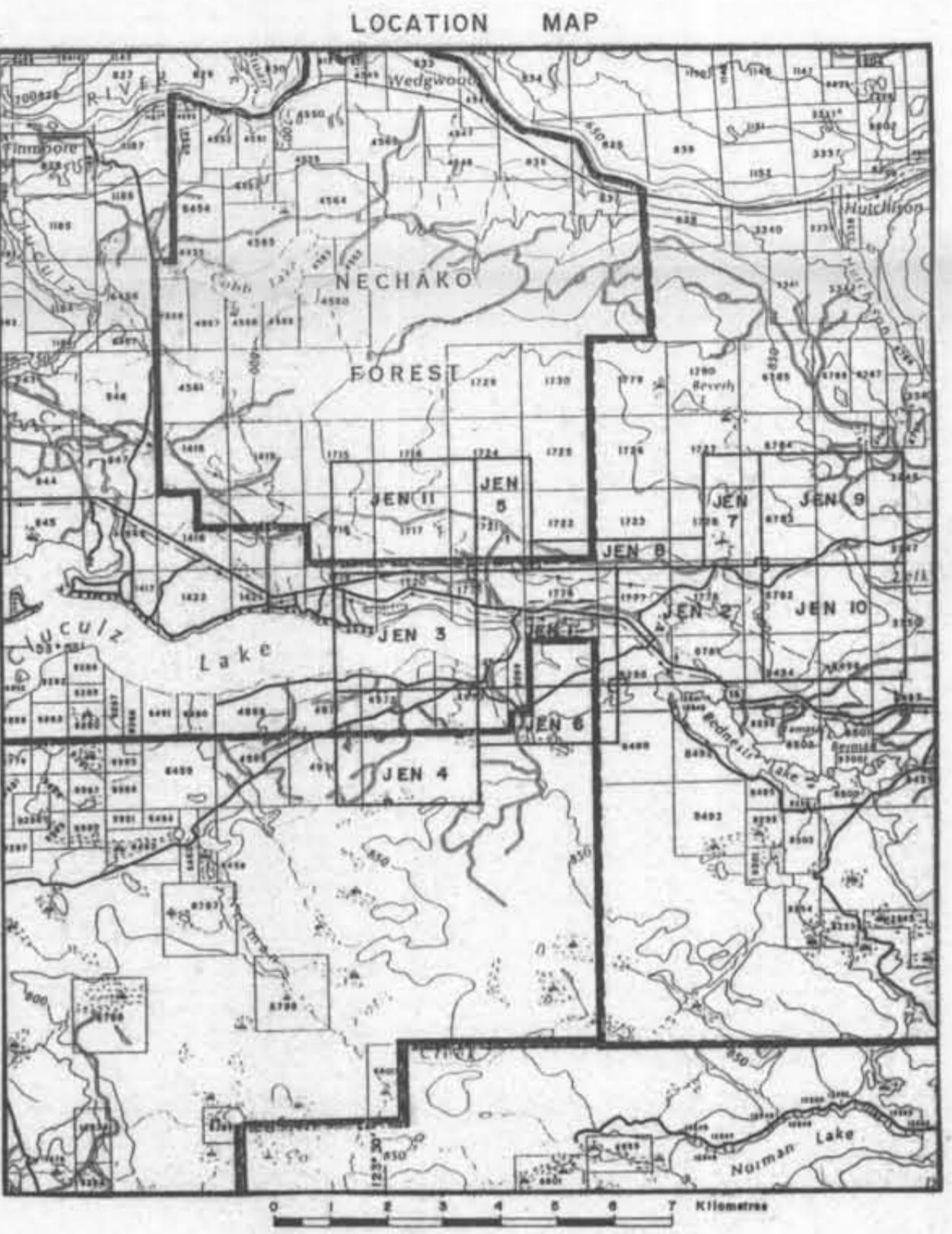
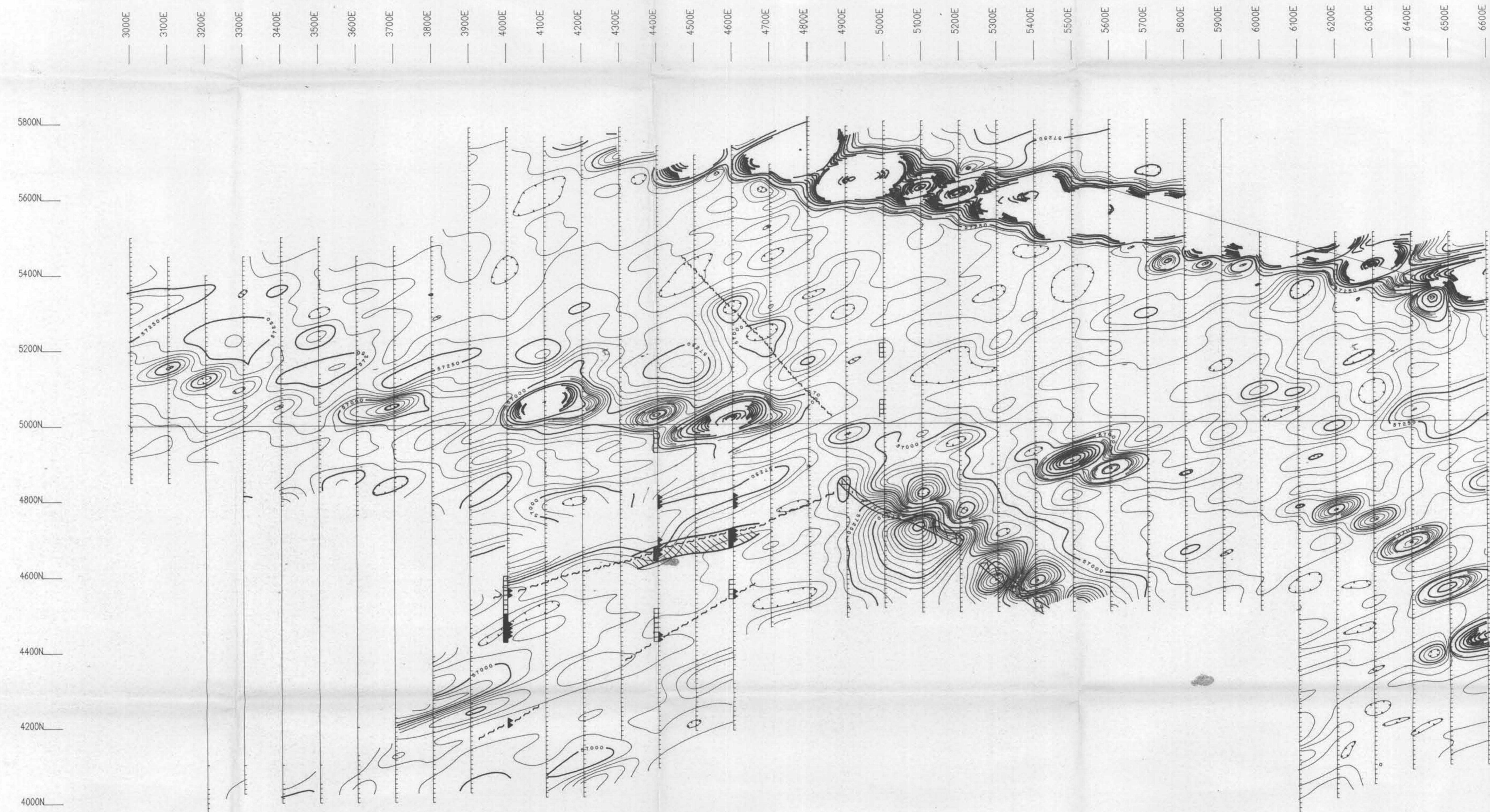
**17,805**

Map Sheet Index  
2 1

Scale 1:2,500  
0 50 100 150 200 metres

REVISED	NATION RIVER OPTION	
JEN CLAIMS		
SOIL GEOCHEM SURVEY		
Pb / Zn (ppm)		
PROJ. No. 252	SURVEY BY B.N. R.M.	DATE JUNE, 1988
NTS. 33G/14	DRAWN BY S.K.B.	SCALE 1:2,500
DWG. No.		
FIG. 9		
NORANDA EXPLORATION		
OFFICE PRINCE GEORGE, B.C.		



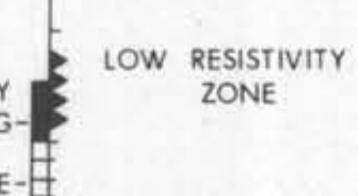


BASELINE 90°

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**17.805**

P.F.E. ANOMALY  
STRONG  
MODERATE



Instrument	: OMNI +			
Field	: TOTAL			
Datum	: 0.0 nT			
Contour Interval	: 50 nT			
Conductor Axis :				
100m	50m	25m	100m	200m

NATION RIVER GRID  
MAGNETOMETER SURVEY

PROJECT: NATION RIVER PROJECT PROJECT # : 252

BASELINE AZIMUTH : 90 deg.

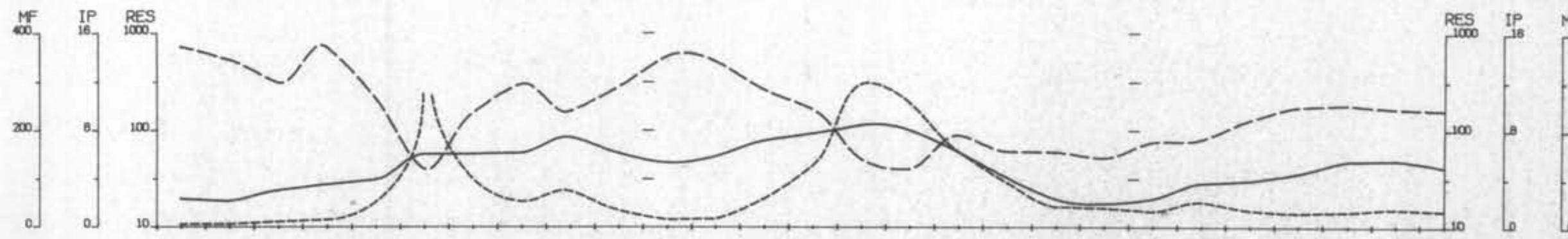
SCALE : t 5000 DATE : 6/ 6/88-

SURVEY BY : W.K. NTS :

FILE: M252NAT

NORANDA EXPLORATION

FIG. II



Line 4400 E  
Dipole-Dipole Array  
 $a = 25m$   
 $n = 1, 2, 3, 4, 5, 6$

Filtered Profiles  
filter \*  
Resistivity -----  
Polarization - - - -  
Metal Factor - - - - -  
Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...  
Instrument : PHOENIX  
Frequency : 0.25/4.0 Hz  
Operator : WK\SK

17,805  
INTERPRETATION  
■ Strong increase in polarization  
□ Moderate increase in polarization  
□ Pronounced resistivity increase  
▼ Pronounced resistivity decrease

TOPOGRAPHY  
NATIONS PROJECT

INDUCED POLARIZATION SURVEY  
Line 4400 E  
C.B.C DISTRICT

Date: 88/06/20 N.T.S.  
Interpretation by: L. Bradish  
Scale: 1 : 2500

n o r a n d a

FIG. 13