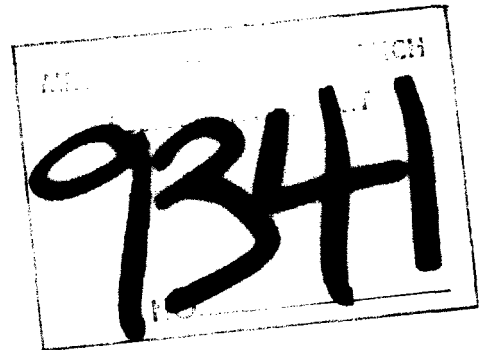


GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE
"XJ", "XK", "XL", "XM", "XN", "XW", "XG", BLUE AND SKY
MINERAL CLAIMS
GATAGA RIVER AREA
LIARD MINING DIVISION
BRITISH COLUMBIA

Lat. 58°13'N

Long. 126°07'W

N.T.S. 94L/1E



NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

M.J. Savell

May 1981

TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	1
LOCATION AND ACCESS	1
PHYSIOGRAPHY	1
CLAIMS AND OWNERSHIP	1
PREVIOUS WORK	2
GRID PREPARATION	2
GEOLOGY	2
A. Regional	2
B. Property	3
(1) Lithology	3
(2) Structure	4
(3) Mineralization	4
GEOCHEMISTRY	4
A. Soils	4
(1) Sampling	4
(2) Laboratory Determination Method	4
(3) Presentation of Results	5
(4) Discussion of Results	5
B. Rocks	6
CONCLUSIONS AND RECOMMENDATIONS	6

FIGURES

Figure 1	Location Map (1:250,000)	Follows page	1
Figure 2	Detailed Location Map (1:50,000)	Follows page	1
Figure 1-A,B,C.	Geological Plan (1:5,000)		
Figure 2-A,B,C.	Geochemical Soil Survey - Pb in ppm	(1:5,000)	
Figure 3-A,B,C.	Geochemical Soil Survey - Zn in ppm	(1:5,000)	
Figure 4-A,B,C.	Geochemical Soil Survey - Ag in ppm	(1:5,000)	
Figure 5-A,B,C.	Geochemical Soil Survey - Cu in ppm	(1:5,000)	
Figure 6-A,B,C.	Geochemical Soil Survey - Mo in ppm	(1:5,000)	
	(Figures 1-6 (A,B,C.) located in pockets)		

APPENDICES

Appendix I	Certificate of Analyses
Appendix II	Statement of Costs
Appendix III	Statement of Qualifications

1. INTRODUCTION

This report describes the work carried out by Noranda Exploration Company, Limited (No Personal Liability) on the XJ, XK, XL, XM, XN, XG, XW, Blue and Sky mineral claims, Liard Mining Division, during July and August 1980.

The ownership of the "X" claims was transferred from Zapata Granby Corporation to Noranda Exploration Company, Limited on November 30, 1979. The Blue and Sky claims were staked by Noranda in June 1980 in order to cover unclaimed areas to the north of the "X" claims. The geologic setting of the "X", Blue and Sky mineral claims is favourable for the occurrence of shale hosted baritic and pyritic lead-zinc deposits.

Geological mapping at a scale of 1:5,000 over almost all of the property, an area of approximately 30 square kilometres, was performed. A total of 1,433 soil samples were collected and analyzed. Assays were performed on 22 rock samples.

2. LOCATION AND ACCESS

The claims are located within the N.T.S. map area 94L/1E, on the headwaters of Braid and Through Creeks. This is roughly midway between the Kechika and Gataga River Valleys, 65 kilometres north of Ware.

Access to the property was made by helicopter from Mayfield Lakes, 25 kilometres to the east in the Gataga River Valley. Access to Mayfield Lakes was made by float plane from Watson Lake, 270 kilometres to the northwest.

3. PHYSIOGRAPHY

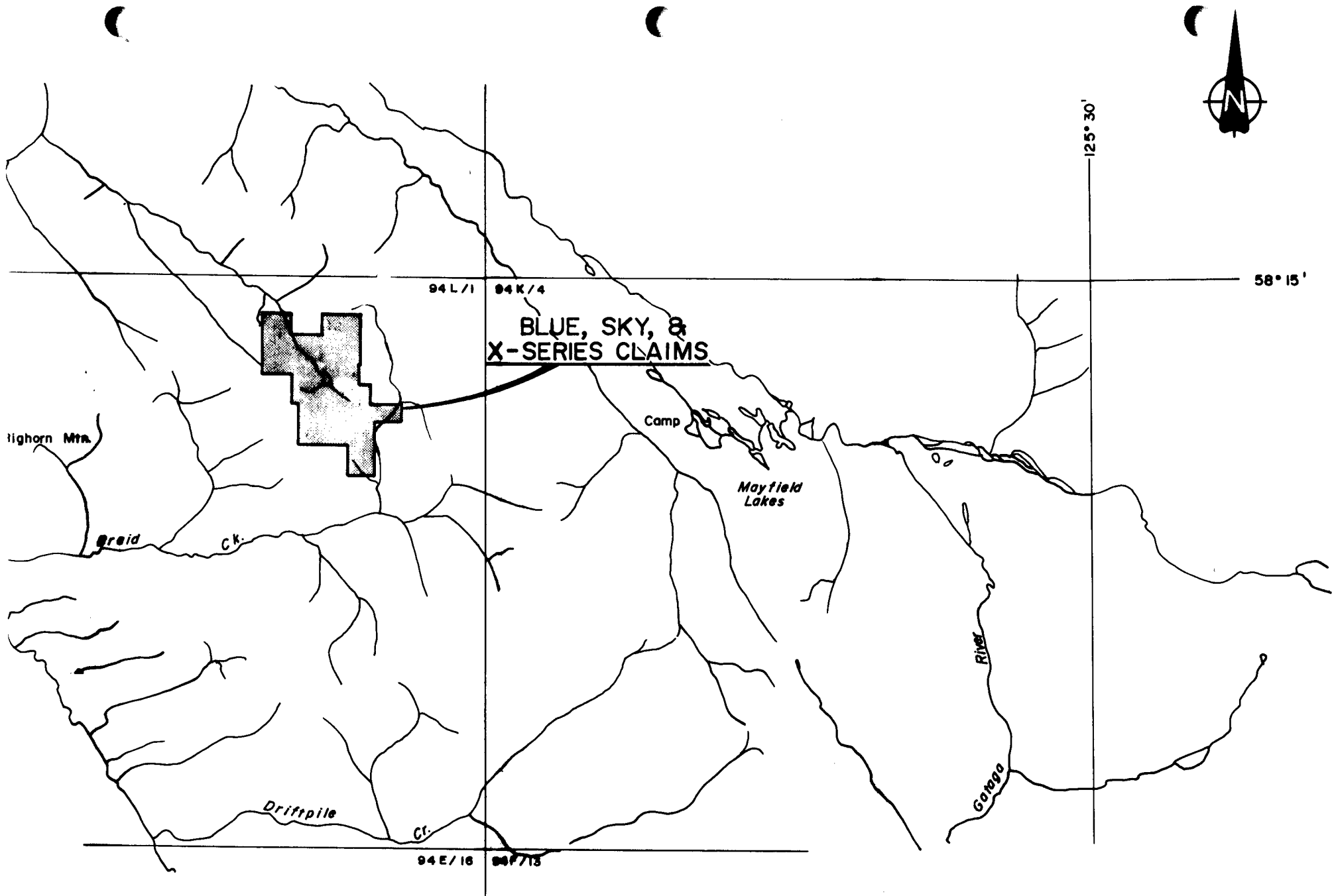
The property lies within the Muskwa Range of the northern Rocky Mountains. The physiography is typified by long, low ridges and valleys that parallel the northwest structural strike of the underlying sedimentary rocks. Local relief is about 300 to 500 meters with a maximum elevation of about 2100 meters above sea level.

Treeline is at approximately 1600 meters on the south facing slopes. Vegetation consists mainly of spruce, juniper, and a variety of small bushes. Grasses cover dry slopes and marshy valleys. The highest ridges exhibit no soil cover, and are flanked by talus slopes.

4. CLAIMS AND OWNERSHIP

The property consists of the following claims:

<u>CLAIM</u>	<u># UNITS</u>	<u>RECORD #</u>	<u>RECORD DATE</u>	<u>OWNER</u>
XM	10	407	June 29, 1977	Noranda Exploration Company Limited (No Personal Liability)
XN	10	408	" "	" " "
XW	18	411	" "	" " "
XJ	20	412	" "	" " "
XK	20	413	" "	" " "



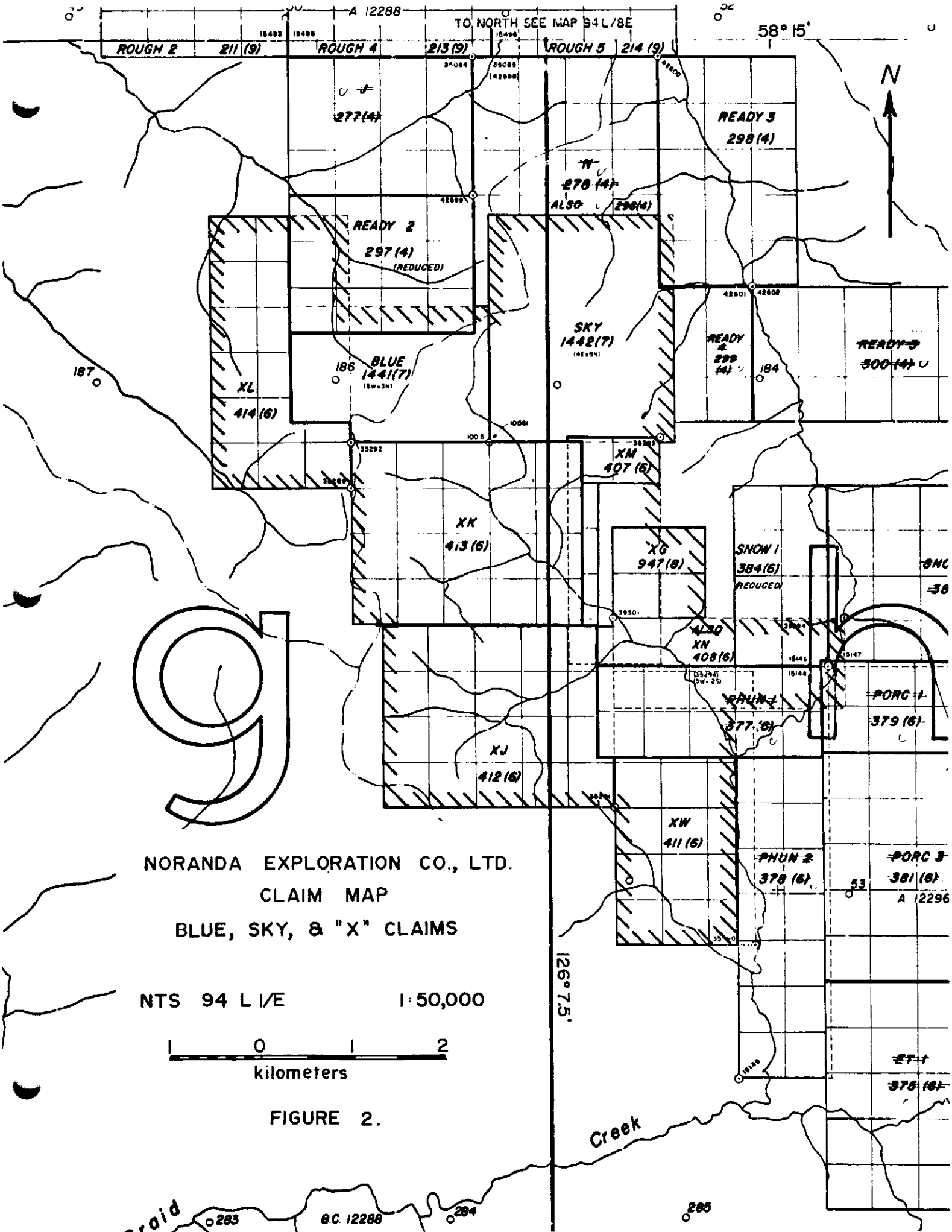
NORANDA EXPLORATION COMPANY LIMITED
LOCATION MAP

FIGURE I.



N.T.S. 94 K/4 , 94 L/1

1:250,000



NORANDA EXPLORATION CO., LTD.
 CLAIM MAP
 BLUE, SKY, & "X" CLAIMS

NTS 94 L 1/E 1:50,000

0 1 2
 kilometers

FIGURE 2.

<u>CLAIM</u>	<u># UNITS</u>	<u>RECORD #</u>	<u>RECORD DATE</u>	<u>OWNERSHIP</u>
XL	18	414	June 29, 1977	Noranda Exploration Company Limited (No Personal Liability)
XG	4	947	August 30, 1979	" "
Blue	15	1441	July 14, 1980	" "
Sky	20	1442	" "	" "

5. PREVIOUS WORK

The "X" claims were staked by the Zapata Granby Corporation in 1977, after regional exploration work confirmed the presence of the "Black Clastic" belt, along with numerous smithsonite occurrences. Reconnaissance geological mapping, silt sampling, and limited soil sampling were carried out (Assessment Report No. 6689). Silt sampling revealed areas anomalous in zinc, lead and barium. Follow-up work in 1979 by Zapata Granby Corporation consisted of laying out a flagged grid and soil sampling (Assessment Report No 8172). Note that this grid and the results obtained for Pb, Zn, and Ag are included in the maps of the present report.

6. GRID PREPARATION

For control purposes, a new grid was laid out. A transit controlled, chain saw cut base line was run on a bearing of 315° for a length of 7.1 kilometres and designated 0+00E. Flagged and chained grid lines were run at 200 meter spacings 90° northeast and southwest of the base line. One-half meter high pickets were placed every 25 meters, and soil samples collected at 50 meter intervals. The total length of grid lines surveyed was 70.7 kilometres. (Note that the areas sufficiently covered by the Zapata Granby grid were not redone.)

The base line, and grid lines 2+00S to 18+00S were surveyed and soil sampled by Snake River Contracting of Sechelt, B.C.

Grid lines 0+00N to 52+00N were surveyed and soil sampled by employees of Noranda Exploration Company, Limited. The 11.1 kilometres of tie lines were also surveyed by Noranda employees.

The 1:5,000 scale topographical base maps used in this report were prepared for Noranda Exploration Company, Limited by Pacific Survey Corporation of Vancouver, B.C. from federal government aerial photographs flown in 1975.

7. GEOLOGY

A. REGIONAL

The area has been mapped regionally by the G.S.C. and the results of their work are available as Map #42-1962 (1" = ½ mile). More recent work, done by D.G. MacIntyre, is available on the Geological Compilation and Mineral Occurrence Map, Driftpile Creek - Akie River published by the B.C. Ministry of Energy, Mines and Petroleum Resources (preliminary Map 38, May 1980).

The property lies within the Kechika Trough, a southerly extension of the much larger Selwyn Basin. The area is underlain by a succession of marine carbonate, pelitic and clastic strata ranging in age from Cambrian to Mississippian. The strata have been deformed by broad folding, and thrust faulting dipping west, both of which have a general regional trend bearing about 140°.

B. PROPERTY

The interpreted geology for the area mapped is shown on maps 6-A, 6-B, and 6-C. Note that in order to maintain the scale at 1:5,000 the property has been divided into 3 maps. Sheet A covers the southern part, sheet B the middle, and sheet C the north.

(1) Lithology

The rocks in the area range in age from Cambrian to Upper Devonian (ages obtained from MacIntyre, 1979).

The rocks of most importance to this report are of Silurian and Middle/Upper Devonian age. The Silurian strata consists of:

- a) a distinctive, grey, hard, massive and blocky, bedded, buff to orange weathering dolomite, often with small pyrite concretions,
- b) grey to brown, fairly brittle, fissile flature bedded, occasionally laminated and cleaved, buff to orange weathering dolomitic siltstone, with minor amounts of soft black shale,
- c) a grey, bedded, blocky, laminated, brown weathered limestone.

The Middle/Upper Devonian rocks (Gunsteel Formation) are of more interest as they contain the Pb and Zn mineralized massive barite and pyrite horizons found at the Driftpile Creek property, approximately 16 kilometres to the S.E. of this property (Assessment Report No.7658).

A detailed stratigraphic study of the Gunsteel Formation on this property was not possible, due to the limited amount of outcrop, the recessive nature of the soft shales, and lack of drilling. However, several distinctive lithologies are discernable:

- a) A black, hard, bedded, blocky, siliceous to cherty shale, black to rusty weathered, often pyritic, rarely laminated, with minor chert and soft shale.
- b) A black, soft to slightly brittle, cleared, fissile, carbonaceous shale, grey to rust weathered, often pyritic, rarely laminated, with minor siltstone and argillite.
- c) A black to dark grey, very fine, heavy, bedded baritic shale, with massive to blebby barite.
- d) Black shale as in (2) with large blocks of grey limestone debris or boudined beds.
- e) A black, fine quartz pebble conglomerate in a shaley matrix.

Two other much younger deposits are also present on the property. Black sands and gravels of lacustrine origin are found in the southern end of the property. Two distinct levels of these Pleistocene deposits

are found, one at 1300m, the other at 1560m. Also present in many of the valley floors are recent accumulations of travertine or tufa.

(2) Structure

The Silurian and Devonian rocks described above occur in a north-westerly striking linear belt approximately 3-4 km. wide. Interpretation of the structure of this area was hampered by the same reasons which made the stratigraphy hard to study, and also by the difficulty in determining younging directions and distinguishing between bedding and cleavage.

In general, the rocks of this area have been compressed into south-westerly dipping overturned synclines and anticlines, with minor modifications. Plunges vary, and may be either northwest or southeast in direction. The older Atan Group has been thrust over these younger rocks to the southwest. The area has been cut by northeasterly trending normal faults.

(3) Mineralization

The only showings of interest found to date are a sphalerite bearing calcite vein cutting through Gunsteel shales, the barite rich shales, barite float, and Zn oxide coatings on black shales (locations on Maps 6-A,B,C.)

8. GEOCHEMISTRY

A. Soils

(1) Sampling Method

A total of 1,433 soil samples were collected at 50m intervals along the grid described above. The "B" soil horizon was sampled by digging a small hole with a grub hoe. Samples were placed in "Hi Wet Strength Kraft 3½" x 6 1/8" Open End" envelopes on which the grid location was marked.

The samples were later analyzed for Pb, Zn, Ag, Cu, and Mo in the geochem lab of Noranda Exploration Company, Limited at 1050 Davie Street, Vancouver, B.C.

(2) Laboratory Determination Method

The samples are first dried in a drying cabinet for a period of 24-48 hours. They are then screened and sifted to obtain a -80 mesh fraction.

To determine the amount of total extractable Pb, Zn, Ag, Cu and Mo in each sample, the following procedure is employed:

A small amount of the -80 mesh material, 0.200 grams, is digested in 2 ml of HClO₅ and 0.5 ml of HNO₃ for approximately four hours. Following digestion, each sample is diluted to 5 ml with demineralized H₂O. A Varian Techtron Model AA-5 atomic absorption spectrophotometer is used to ascertain the content, in parts per million, of each

element.

(3) Presentation of Results

The results of the above analysis are shown on the following maps:

- Pb - 1-A,B,C
- Zn - 2-A,B,C
- Ag - 3-A,B,C
- Cu - 4-A,B,C
- Mo - 5-A,B,C

Note that the property has been divided into three sheets (A,B,C). The maps also include the grid and geochemical results of Zapata Granby's work of 1979 for Pb,Zn and Ag.

(4) Discussion of Results

From inspection of the lab results the following values are considered appropriate for this property:

	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>Cu</u>	<u>Mo</u>
range -	2-530 ppm	20-140,000	0.1-16	4-1200	2-700
background	2-40	20-300	0.1-0.8	4-60	2-20
threshold	40-100	300-1500	0.8-2	60-200	20-80
anomaly	+100	+1500	+2	+200	+80

The major anomalous zones within the grid are:

- (1) Along the base line from about 17+00N to 25+00N, extending from about 1+00W to 2+00E.
- (2) A thin, linear zone striking northwest at about 4+00 to 6+00 east of the base line from 5+00S to 23+00N.
- (3) East end of grid from 4+00S to 0+00N.

These areas are anomalous in Pb,Zn, and in some degree to Ag. There is a good possibility that they reflect an as yet undiscovered mineralized horizon in the Gunsteel Formation.

There are also several areas with very high Zn values (up to 14%) unaccompanied by Pb,Ag,Cu or Mo. These occur in relatively flat, swampy and mossy valley floors, with ubiquitous tufa accumulations. It is assumed that these high values have been derived from the tufa, in which Zn has become trapped. The primary source of this zinc has been the Gunsteel, from its high background and/or a possible undiscovered mineralized horizon.

High Ag values, accompanied by high Cu and Mo values, occur in fairly large areas at about 800 - 1000 m west of the base line from 14+00S and 4+00N to 22+00N. It is assumed these values reflect high background amounts of Ag,Cu and Mo in the underlying rocks.

B. Rocks

A total of 22 rock samples were analyzed for their content of Pb, Zn, Ba, and Ag, and 5 of these were also analyzed for Au. Although no sulphide mineralization was observed in these rocks, it was thought that perhaps any mineralization present may be extremely fine grained and thus essentially invisible.

Representative grab samples were taken of suitable outcrops and also a few boulders of float. The analyses were performed by Rossbacher Laboratory Ltd., of 2225 S. Springer Avenue, Burnaby, B.C. The sample numbers and descriptions are given in the list below, the locations are shown on Maps 6-A,B,C. The certificate of analysis is given in Appendix 1.

<u>SAMPLE #</u>	<u>DESCRIPTION</u>
3526 J	Soft black shale
3551 J	Siliceous black shale, rusty weathered
3552 J	Soft black shale near gossan
3553 J	Ferricrete
3554 J	Siliceous black shale
X12601	Soft black shale
02	Baritic shale
03	Baritic shale
04	Dolomite
05	Baritic shale
06	Dolomite
07	Siliceous black shale
08	Siliceous black shale
09	Barite float
10	Barite float
11	Barite float
12	Baritic shale
13	Baritic shale
14	Pyrite concretion in soft shale
15	Hard black shale
16	Black siliceous shale
24	Black cherty shale

9. CONCLUSIONS AND RECOMMENDATIONS

The presence of lithologies similar to those found at the

Driftpile Creek property, and the delineation of several areas with anomalous amounts of Pb, Zn, and Ag in the soil, indicates that the possibility of important mineralization occurring on the property exists. The most promising of these anomalies should be tested by diamond drilling and/or trenching.

Respectfully submitted



Michael Savell
Michael Savell
Geologist

APPENDIX 1 - Certificates of Analyses

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 80448-C/493

TO: NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER, B.C.

INVOICE NO. 1058

DATE RECEIVED

ATTN: 16 # 8-81/8-172

GATAGA "X" R.M.C.

DATE ANALYSED Dec. 1980.

SAMPLE NO.:	%	%	%	oz/t	oz/t
	T. Ba	Pb	Zn	Ag	Au
X 12601	0.10	0.04	0.04	0.02	
X 12602	12.0	0.02	0.02	0.04	
X 12603	24.0	0.02	0.02	0.02	
X 12604	1.20	0.02	0.02	0.02	
X 12605	23.0	0.02	0.02	0.02	
X 12606	0.30	0.10	0.02	0.02	
X 12607	0.10	0.02	0.02	0.04	
X 12608	3.30	0.02	0.02	0.02	
X 12609	44.0	0.02	0.02	0.02	
X 12610	50.0	0.02	0.02	0.02	
X 12611	52.0	0.02	0.02	0.02	
X 12612	0.60	0.02	0.02	0.02	
X 12613	0.30	0.02	0.02	0.08	
X 12614	0.10	0.02	0.02	0.04	
X 12615	0.10	0.02	0.02	0.02	
X 12616	0.10	0.02	0.08	0.02	
X 12624	0.10	0.02	0.02	0.02	
J 3526	0.04	0.02	0.02	0.02	0.001
J 3551	0.02	0.02	0.10	0.04	0.001
J 3552	0.18	0.02	0.04	0.02	0.002
J 3553	0.01	0.02	0.02	0.08	0.002
J 3554	0.18	0.02	0.02	0.04	0.001

Certified by

Rossbacher

APPENDIX 11 - Statement of Costs

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT GATAGA X

DATE May 19, 1981

TYPE OF REPORT Geology, Geochem, Line Cutting

a) Wages:

No. of Days	121		
Rate per Day	\$ 63.5369		
Dates From:	April 1/80 - Dec. 31/80		
Total Wages	121	x \$ 63.5369	<u>7,687.97</u>

b) Food and Accomodation:

No of days	121		
Rate per day	\$ 16.7141		
Dates From:	April 1/80 - Dec. 31/80		
Total Cost	121	x \$ 16.7141	<u>2,022.41</u>

c) Transportation:

No of days	121		
Rate per day	\$ 174.3772		
Dates From:	April 1/80 - Dec. 31/80		
Total Cost	121	x \$ 174.3772	<u>21,099.64</u>

d) Instrument Rental:

Type of Instrument			
No of days			
Rate per day	\$		
Dates From:			
Total Cost		X \$	

Type of Instrument			
No of days			
Rate per day	\$		
Dates From:			
Total Cost		X \$	

f) Analysis (See attached schedule) 5,394.70

g) Cost of preparation of Report

Author	5 Days	317.70
Drafting	2 Days	809.75
Typing	2 Days	127.08

h) Other:

Camp & Field Supplies	505.55
Contractors	15,115.17
Telecommunications	7.18

Total Cost 53,087.15

e) Unit costs for GEOLOGY

No of days 121

No of units

Unit costs: 227.6645 / Day

Total Cost 121 x 227.6645 27,547.40

f) UNIT COST FOR GEOCHEM

No. of Units 1433 Samples

Unit Costs \$8.34603 / Sample

Total Cost 1433 X \$8.34603 11,959.86

g) UNIT COST FOR LINECUTTING

No. of Units 77.8

Unit Cost 174.5487 / km

Total Cost 77.8 x 174.5487 13,579.89

TOTAL: \$53,331.70

NORANDA EXPLORATION COMPANY, LIMITED
(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT: GEOCHEM AND GEOLOGY

<u>ELEMENT</u>	<u>NO. OF DETERMINATIONS</u>	<u>COST PER DETERMINATION</u>	<u>TOTAL</u>
Cu	1478	1.25	1,847.50
Zn	1478	.60	886.80
Pb	1478	.60	886.80
Mo	1478	.60	886.80
Ag	1478	.60	886.80

\$5,394.70

APPENDIX 111 - Statement of Qualifications

STATEMENT OF QUALIFICATIONS

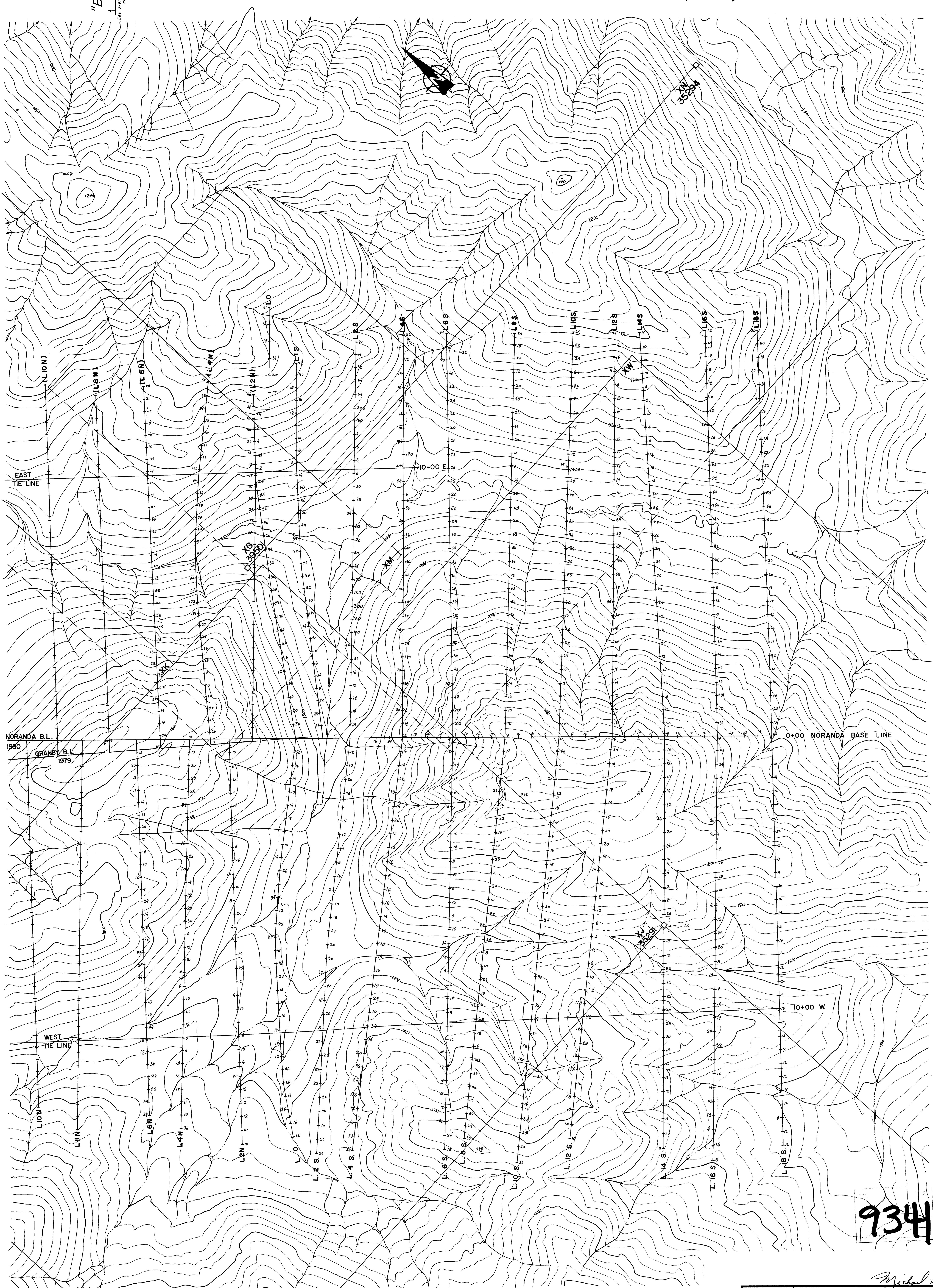
I, Michael Savell of the City of Vancouver, Province of British Columbia, do certify that:

1. I have been an employee of Noranda Exploration Company, Limited since May 1980.
2. I am a graduate of Dalhousie University with a Bachelor of Science degree in geology.



Michael Savell
Geologist
Noranda Exploration Company, Limited
(No Personal Liability)

"B"
1:5000
See overlap sheet



934

Michael Savell

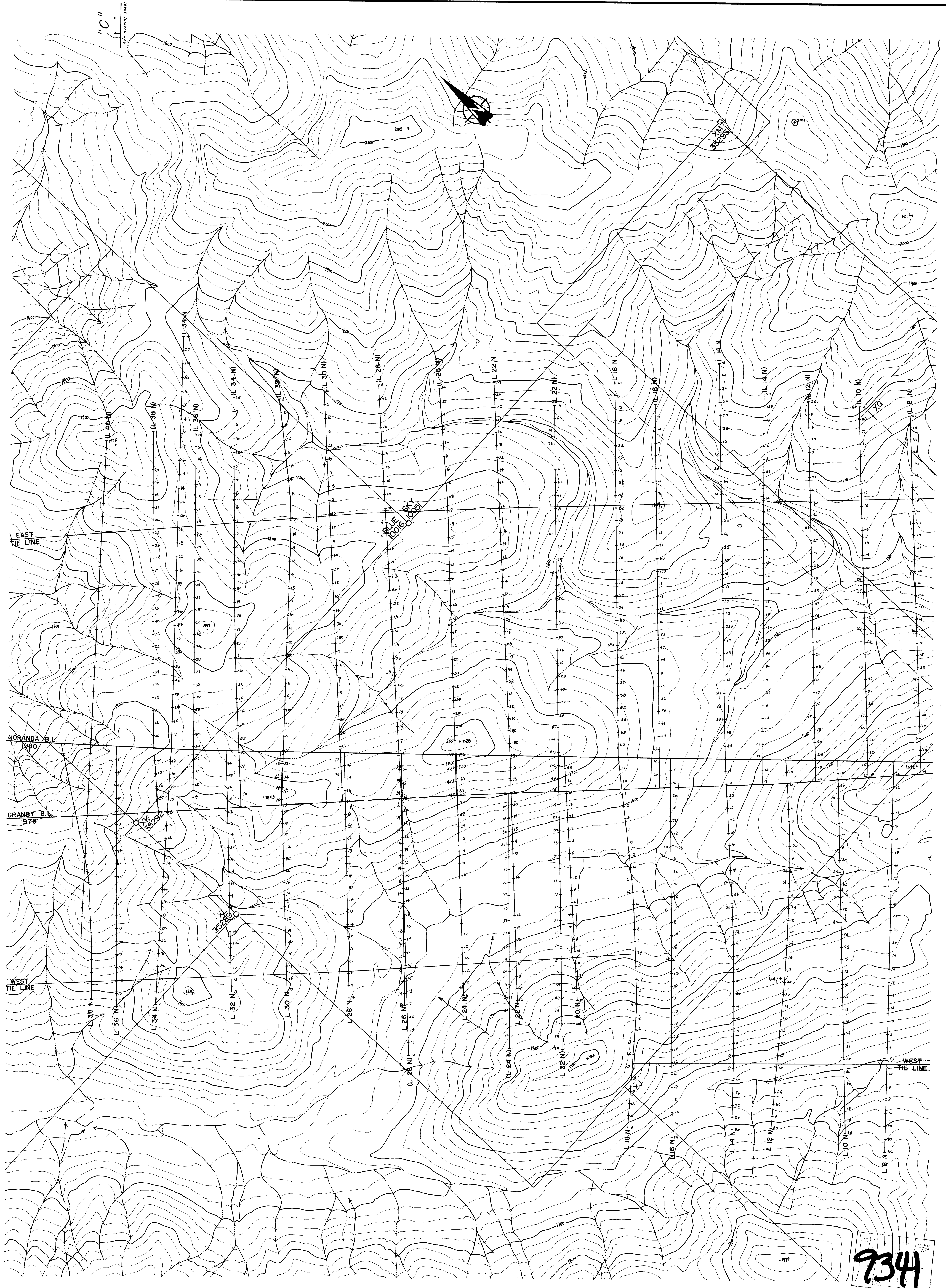
"B"
1:5000
See overlap sheet

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C. GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

Sheet "A"
100 0 100 200 300 400 500
METERS

CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

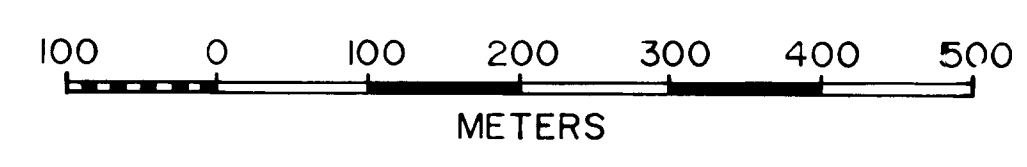
REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Pb. in P.P.M.	
PROJ. No. 1016	SURVEY BY R.M., M.S.	DATE DEC. 1980
N.T.S. 94 L/E	DRAWN BY M.S., S.N.	SCALE 1:5,000
DWG. No.	NORANDA EXPLORATION	
1. of 4	OFFICE VANCOUVER	



"C"
See overlapping sheet

"C"
See overlapping sheet

Sheet "B"



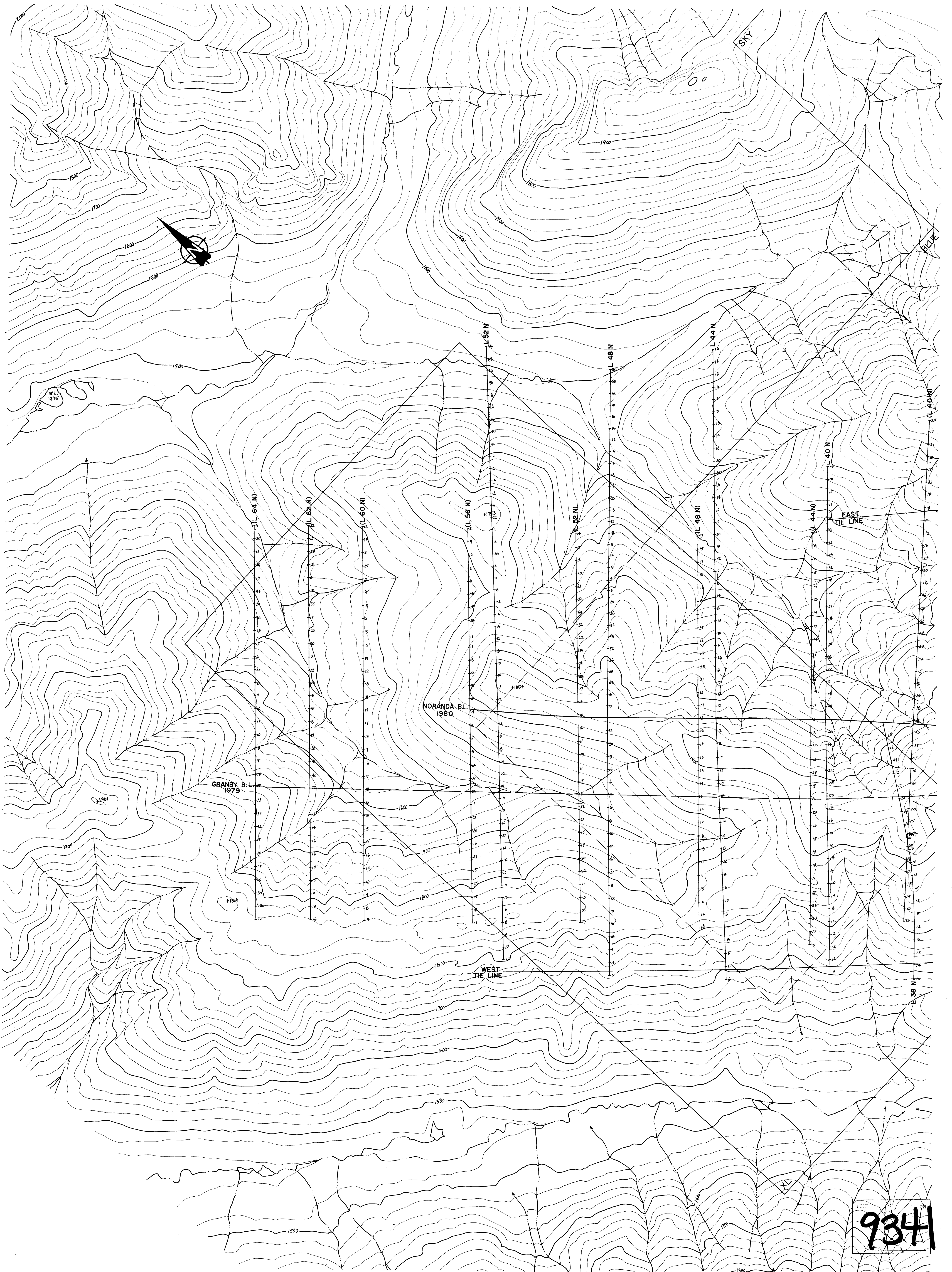
CONTOUR INTERVAL : 20 METERS
 CLAIMS LOCATED BY COMPASS & TOPOFIL
 L.C.P. INDICATED BY □
 GRANBY (1979) LINES INDICATED BY BRACKETS

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
 THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
 GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Pb. in P.P.M.	
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980
N.T.S. 94 L/TE	DRAWN BY: M.S., S.N.	SCALE: 1:5,000
DWG. No. 1 of B	NORANDA EXPLORATION OFFICE: VANCOUVER	

934

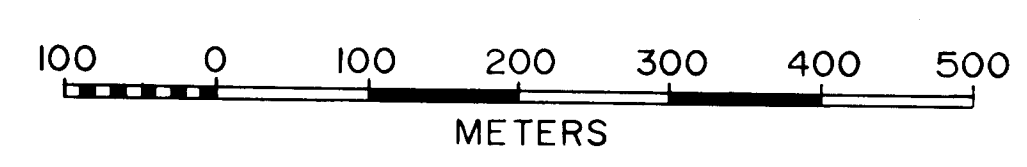
Michael Savell



9341

Michael Savell

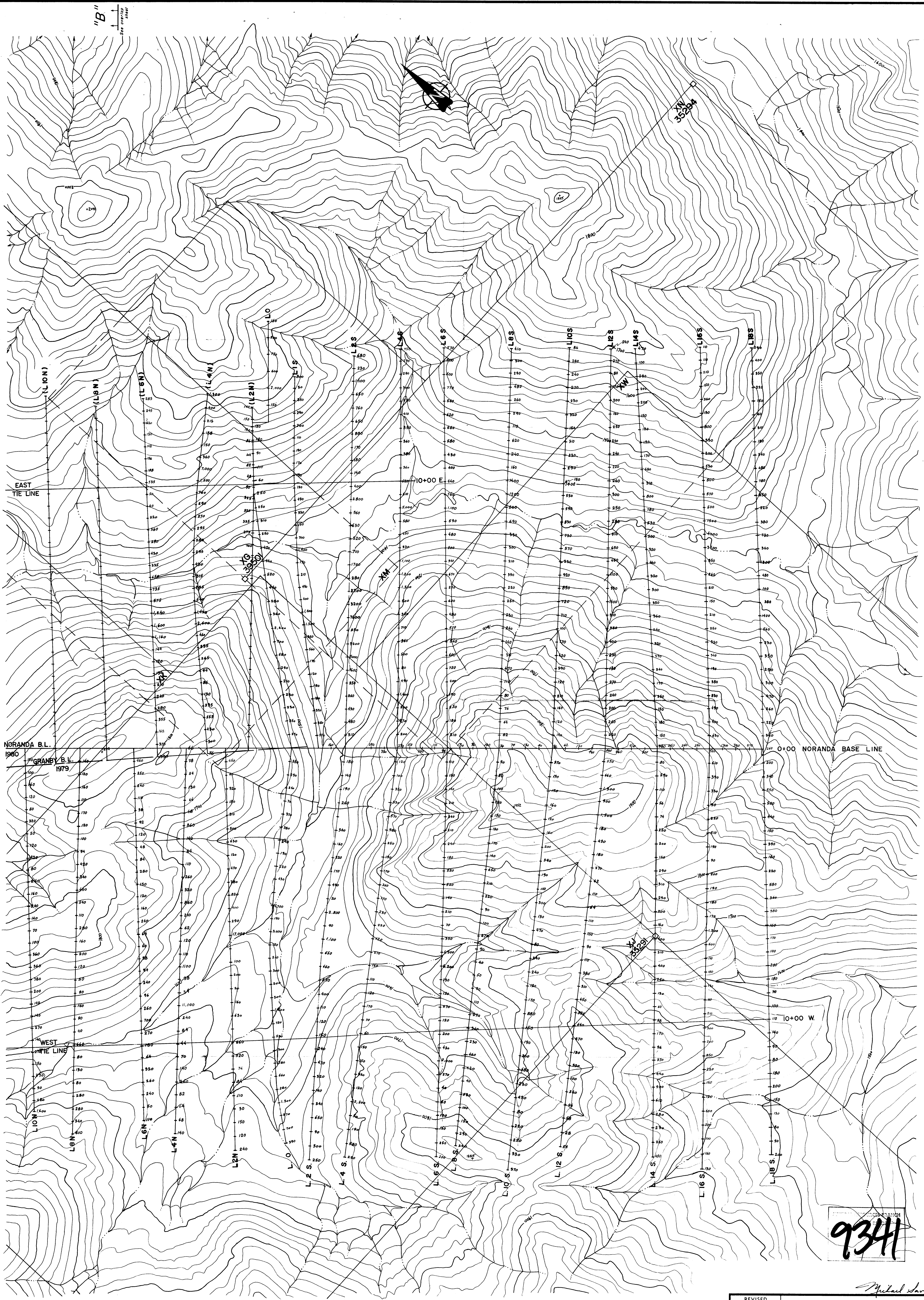
Sheet "C"



CONTOUR INTERVAL : 20 METERS
 CLAIMS LOCATED BY COMPASS & TOPOFIL
 L.C.P. INDICATED BY
 GRANBY (1979) LINES INDICATED BY BRACKETS

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY	
	Pb. in P.P.M.	
PROJ. No. 1016	SURVEY BY R.M., M.S.	DATE DEC. 1980
N.T.S. 94 L/E	DRAWN BY MS	SCALE 1:5,000
DWG No.	NORANDA EXPLORATION	
1 of C	OFFICE VANCOUVER	

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
 THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
 GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL



9341

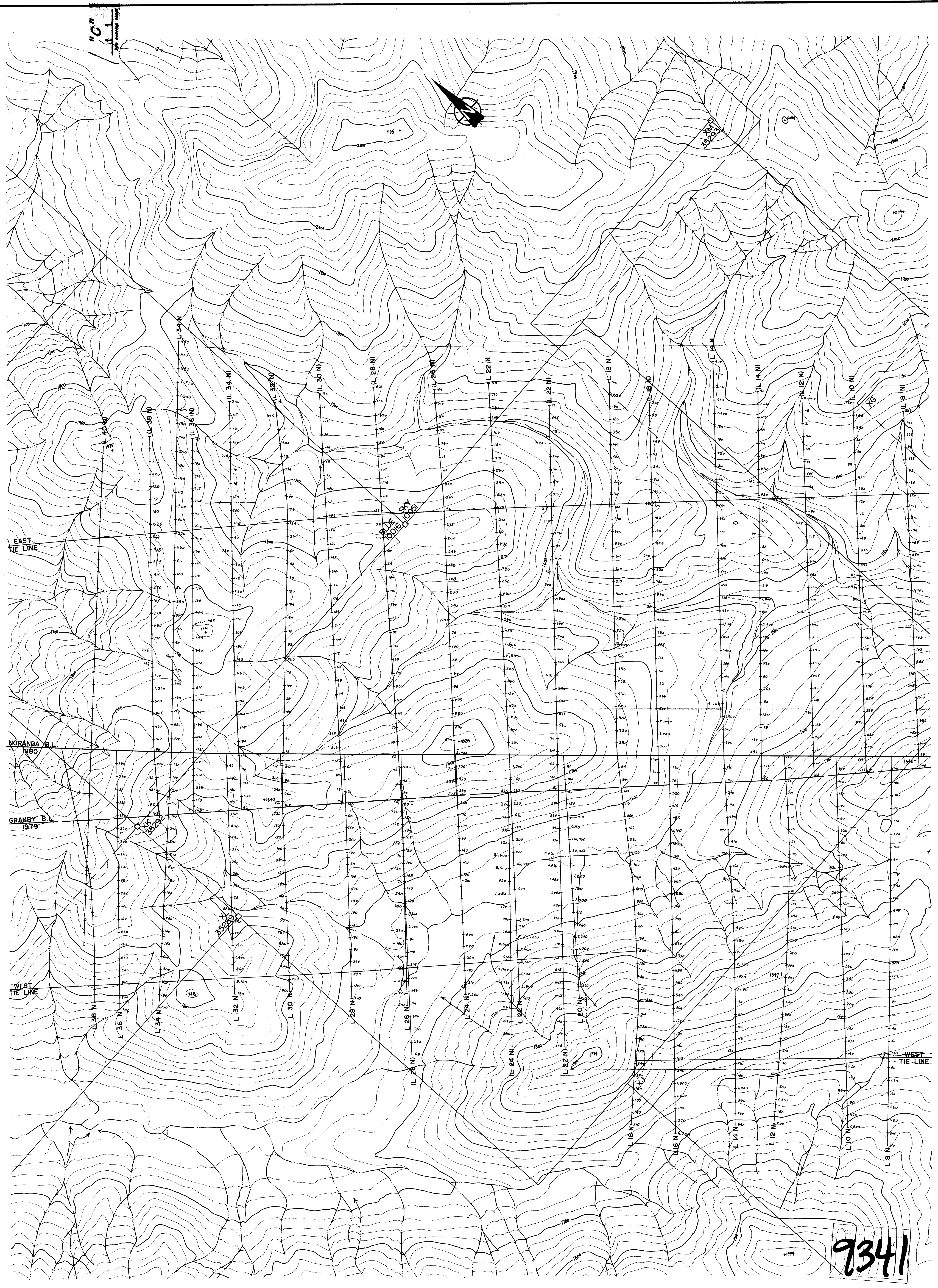
Mital Savell

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C. GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

Sheet "A"
 100 0 100 200 300 400 500
 METERS

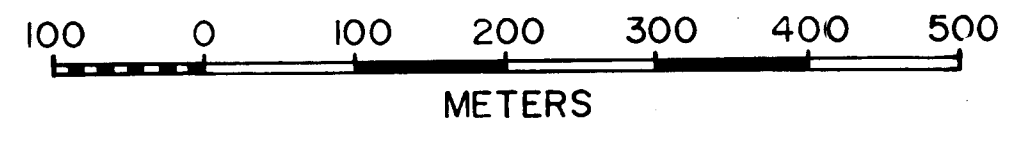
CONTOUR INTERVAL : 20 METERS
 CLAIMS LOCATED BY COMPASS & TOPOFIL
 L.C.P. INDICATED BY □
 GRANBY (1979) LINES INDICATED BY BRACKETS

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Zn. in P.P.M.	
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1990.
N.T.S. 94 L/IE	DRAWN BY: M.S., S.N.	SCALE: 1:5,000
DWG. No. 2 of 4	NORANDA EXPLORATION OFFICE: VANCOUVER	



"C"
See covering sheet

Sheet "B"



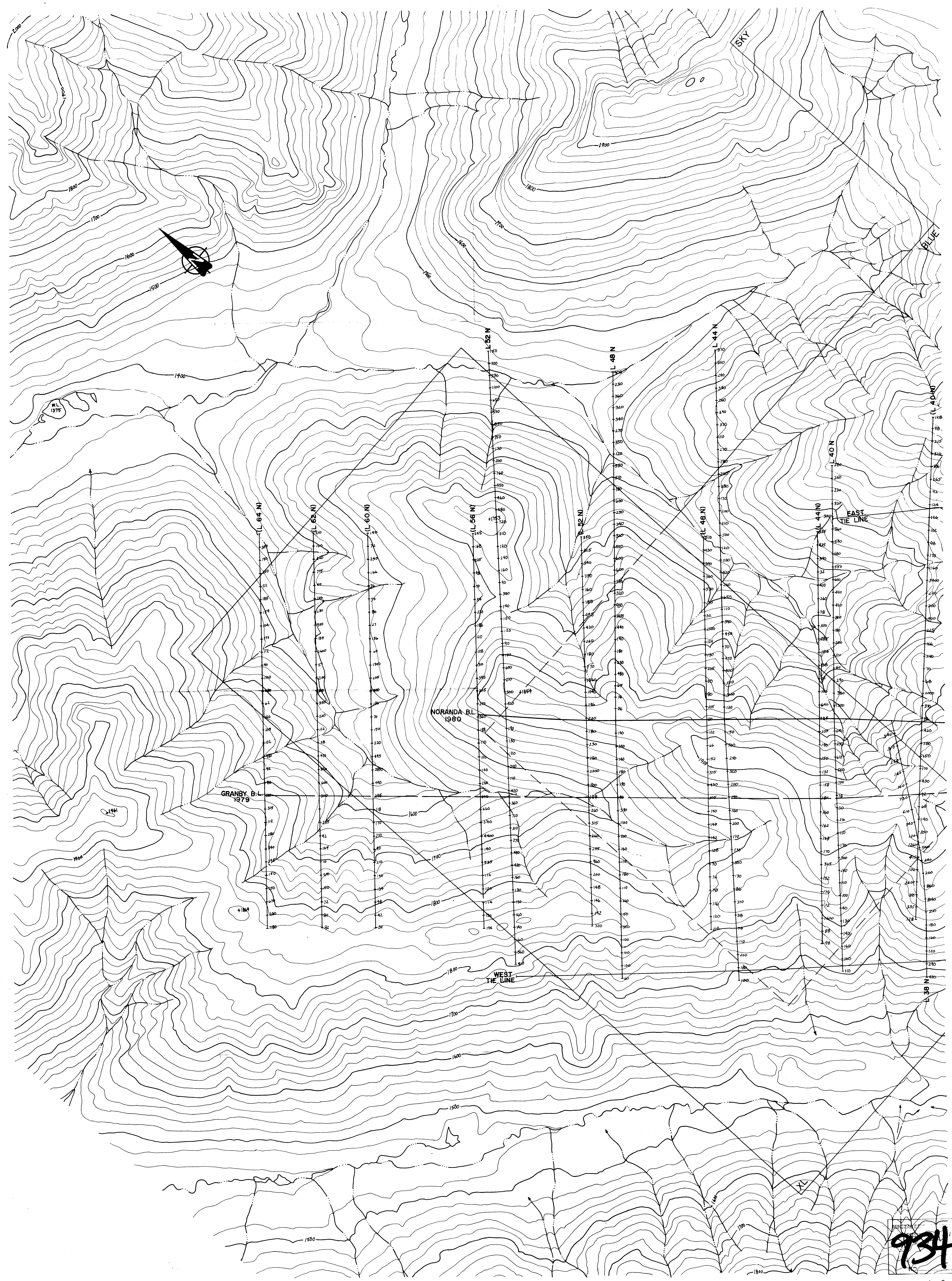
CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

9341

Michael Savell

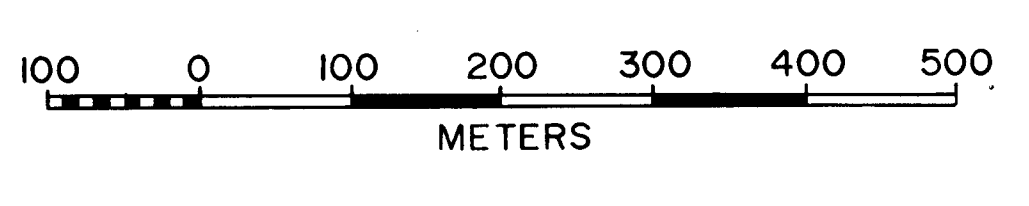
TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C. GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY	
	Zn. in P.P.M.	
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980
DWG. No. 94 L/E	DRAWN BY: M.S., S.N.	SCALE: 1:5,000
2. of B	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	



9341
 Michael Savell

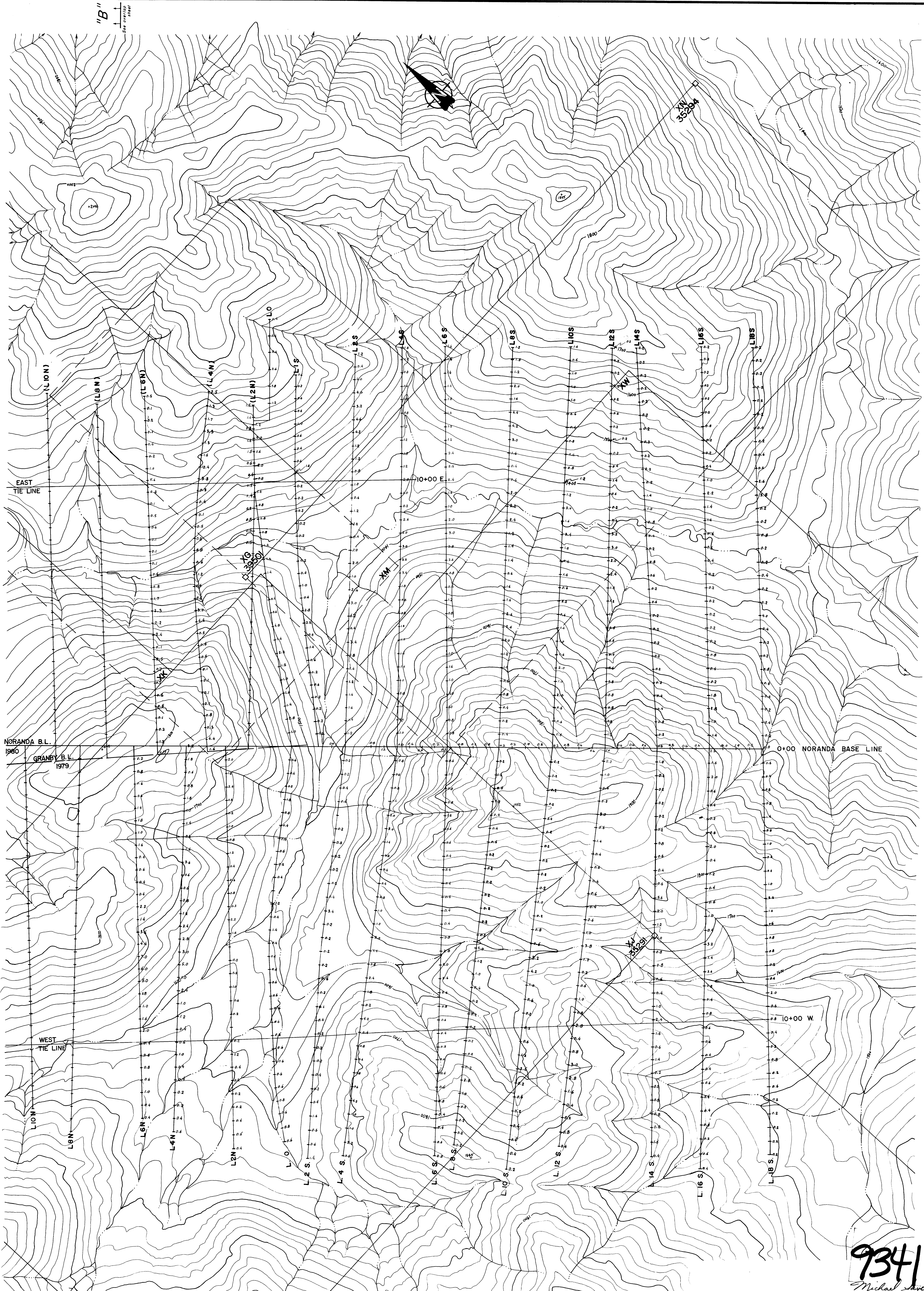
Sheet "C"



CONTOUR INTERVAL : 20 METERS
 CLAIMS LOCATED BY COMPASS & TOPOFIL
 L.C.P. INDICATED BY □
 GRANBY (1979) LINES INDICATED BY BRACKETS

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
 THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
 GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Zn. in P.P.M.	
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980
N.T.S. 94 L/E	DRAWN BY: MS	SCALE: 1:5,000
DWG. No. 2 of C	NORANDA EXPLORATION OFFICE: VANCOUVER	



"B"
SEE SURVEY SHEET

EAST TIE LINE

NORANDA B.L. 1980

GRANBY B.L. 1979

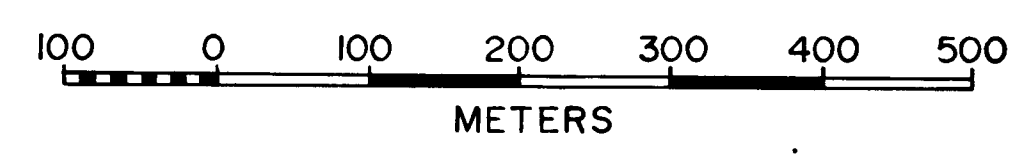
WEST TIE LINE

0+00 NORANDA BASE LINE

10+00 W.

"B"
SEE SURVEY SHEET

Sheet "A"

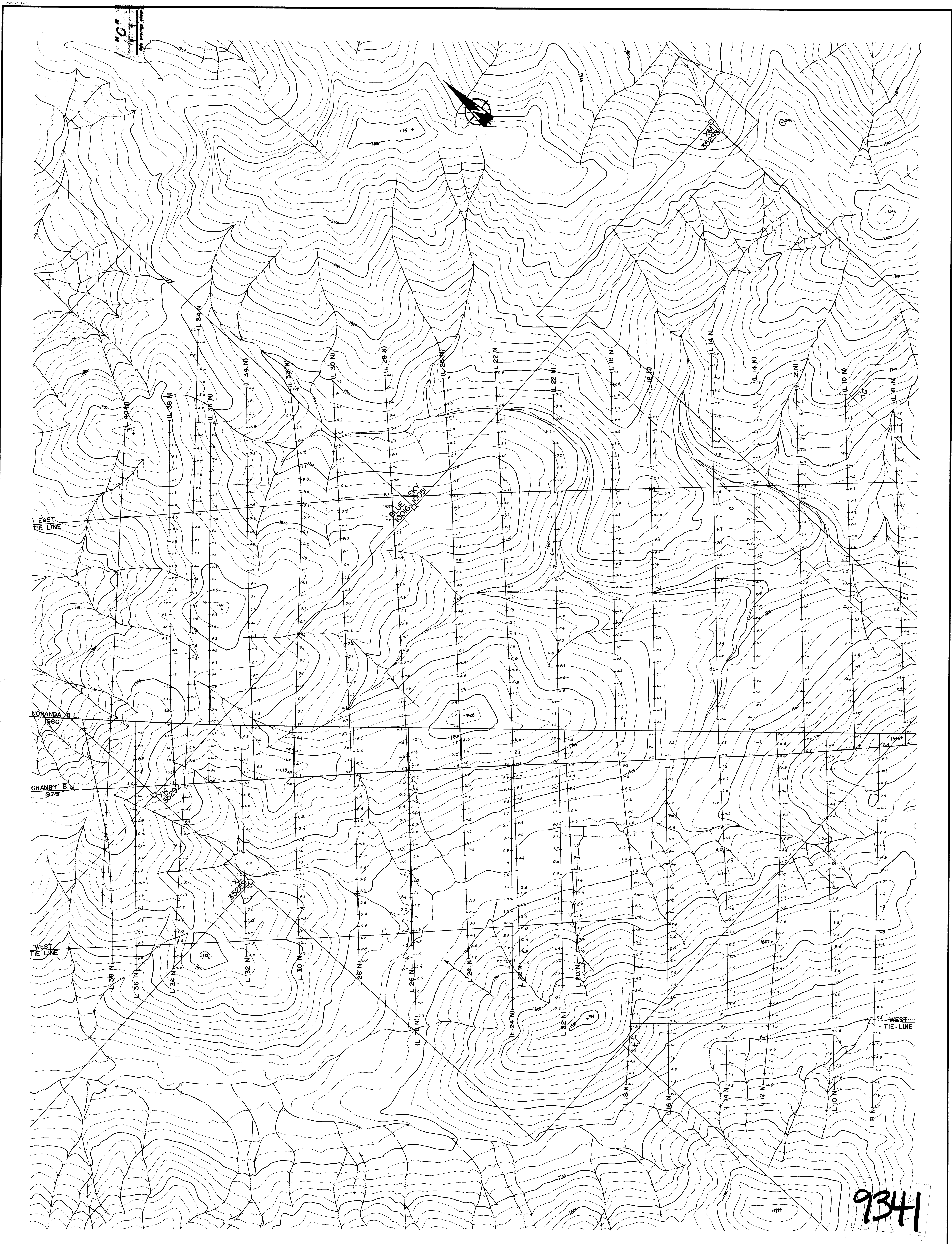


TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C. GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

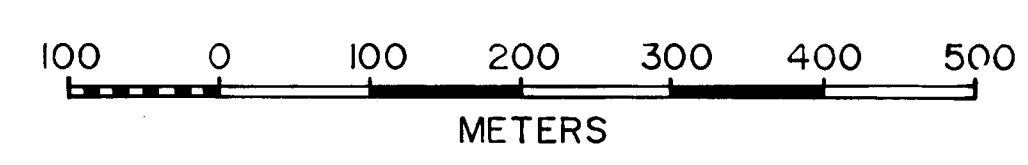
REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Ag. in P.P.M.	
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980
N.T.S. 94 L7/E	DRAWN BY: M.S., S.N.	SCALE: 1:5,000
DWG. No.	NORANDA EXPLORATION	
3 of 4	OFFICE: VANCOUVER	

9341
Michael Savell



"C"
↑
see covering sheet

Sheet "B"



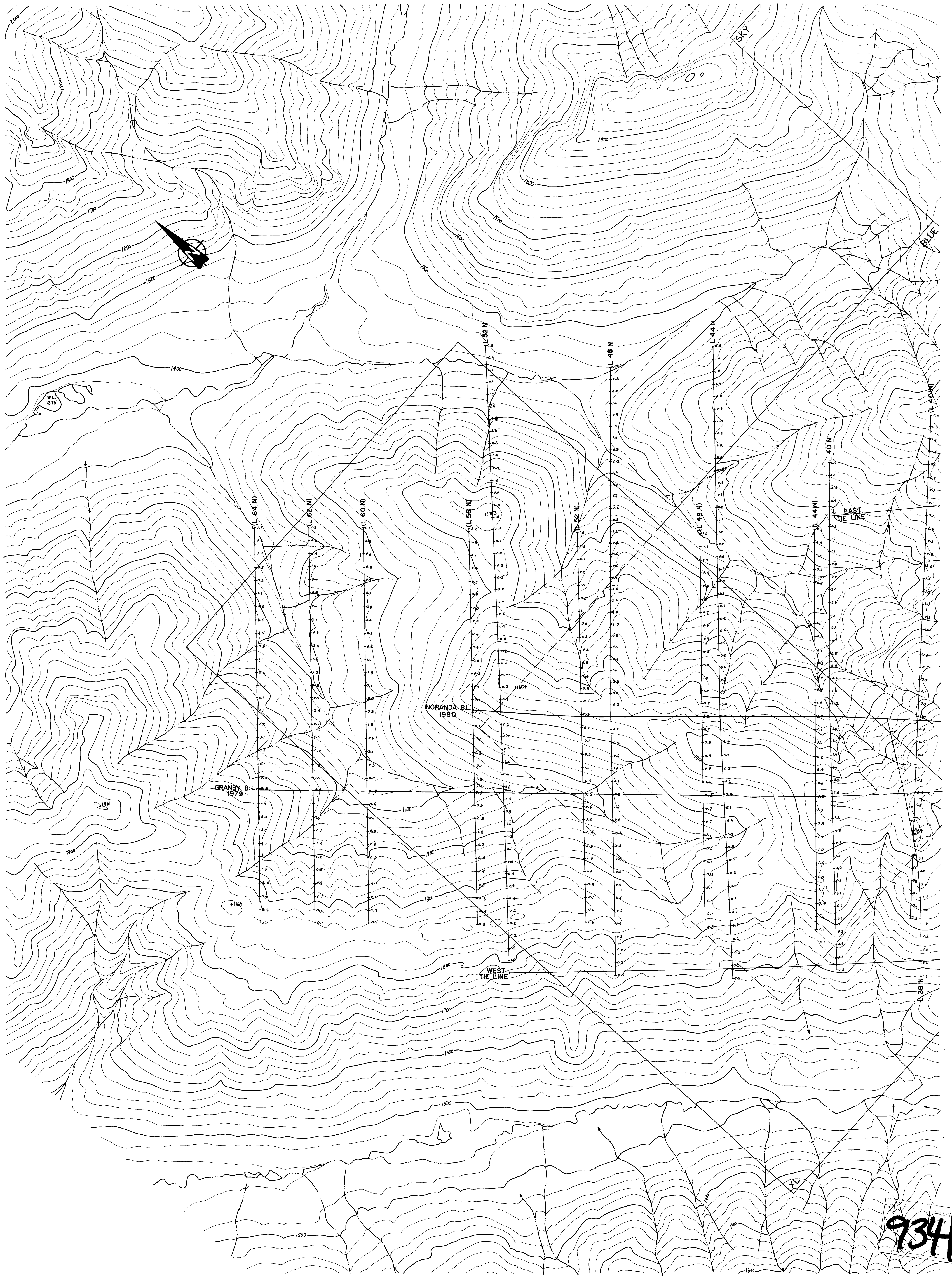
CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
GATAGA RIVER AREA, LIARD M.D. BY M. SAWELL

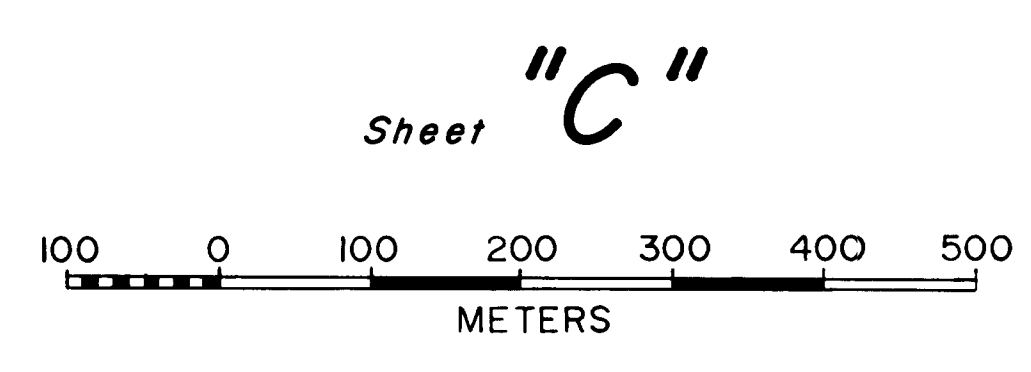
REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
GEOCHEMICAL SOIL SURVEY		
Ag. in P.P.M.		
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980
N.T.S. 94 L/TE	DRAWN BY: M.S., S.N.	SCALE: 1:5,000
DWG. No.	NORANDA EXPLORATION	
3. of B	OFFICE: VANCOUVER	

Michael Savell

9341



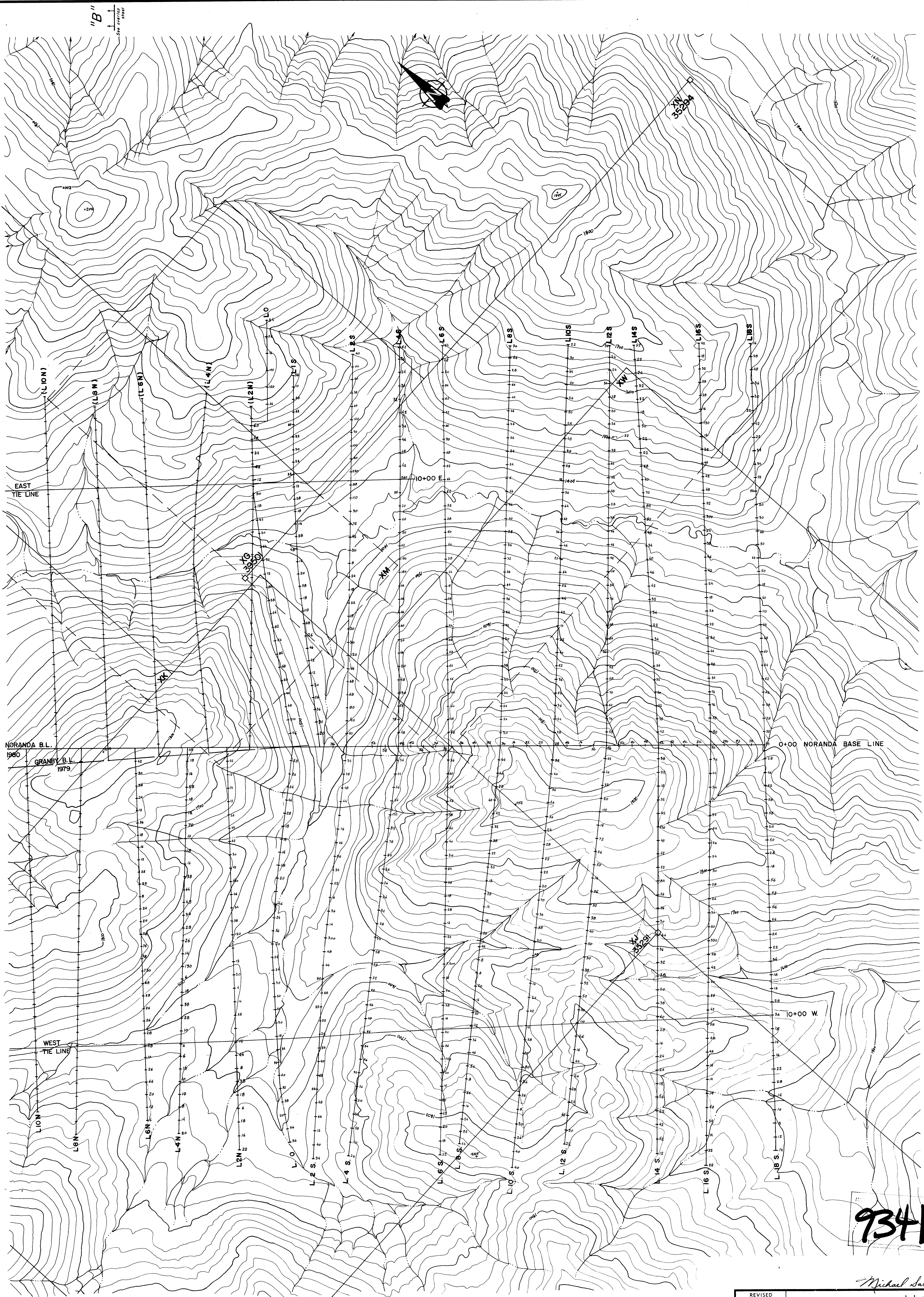
934
 Michael Savell



TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
 THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
 GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

CONTOUR INTERVAL : 20 METERS
 CLAIMS LOCATED BY COMPASS & TOPOFIL
 L.C.P. INDICATED BY □
 GRANBY (1979) LINES INDICATED BY BRACKETS

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Ag. in P.P.M.	
PROJ. No. 1016	SURVEY BY R.M., M.S.	DATE DEC. 1980
N.T.S. 94 L/E	DRAWN BY M.S., S.N.	SCALE 1:5,000
DWG. No.	NORANDA EXPLORATION	
3 of "C"	OFFICE: VANCOUVER	

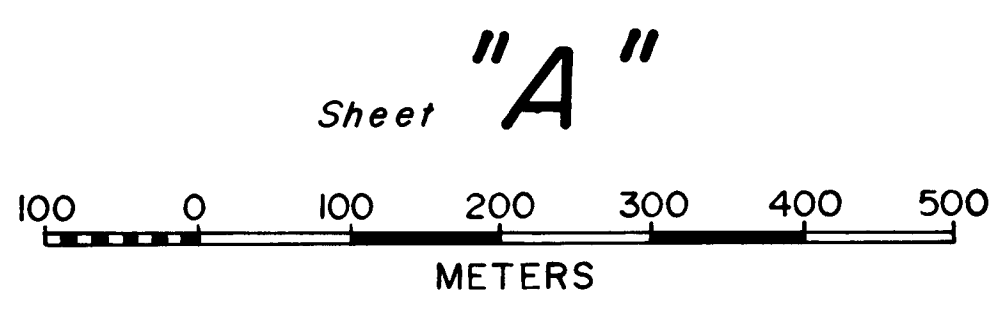


9341

Michael Savell

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
THE XA, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

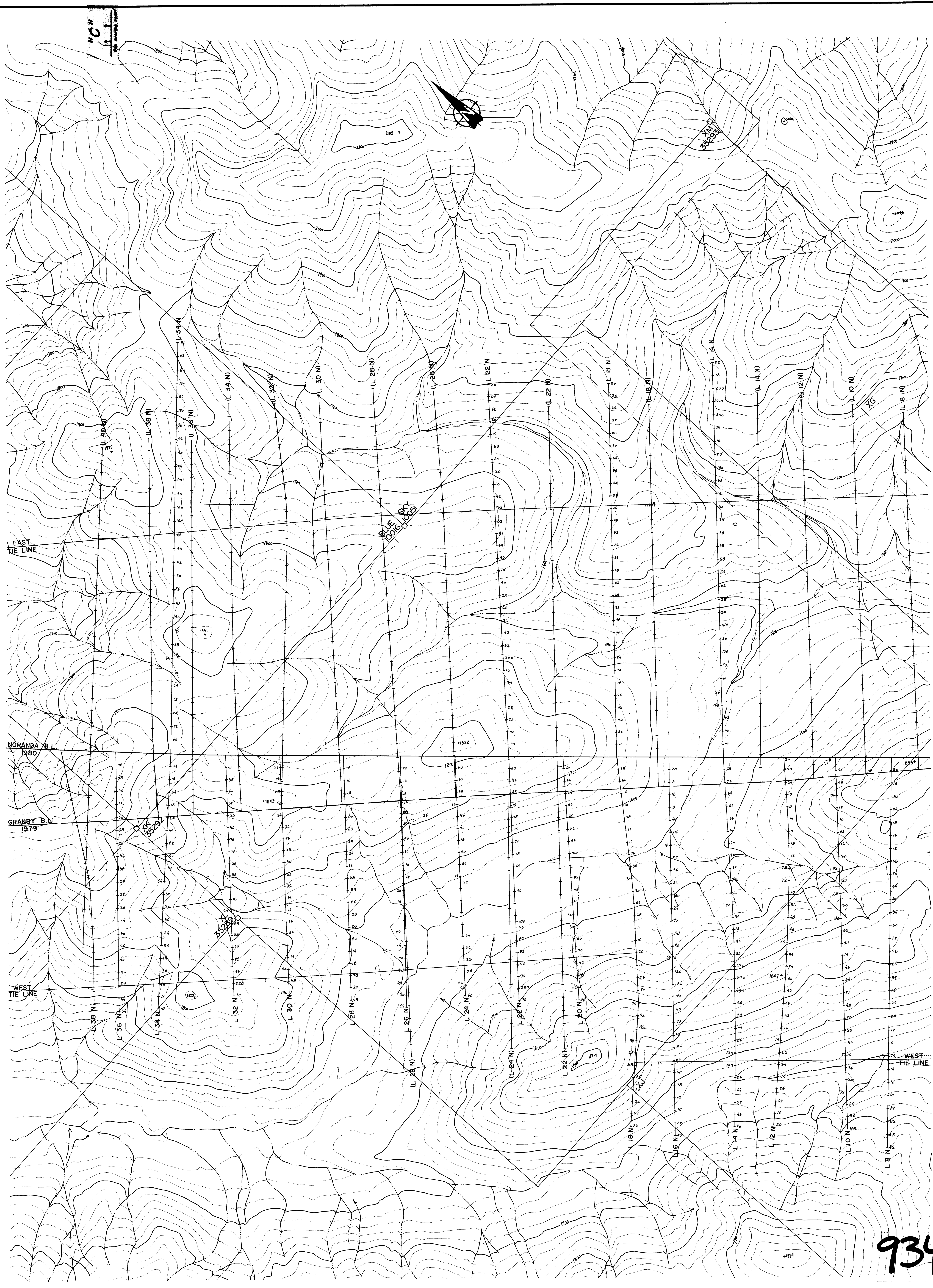
"B"
See overlaid sheet



Sheet "A"

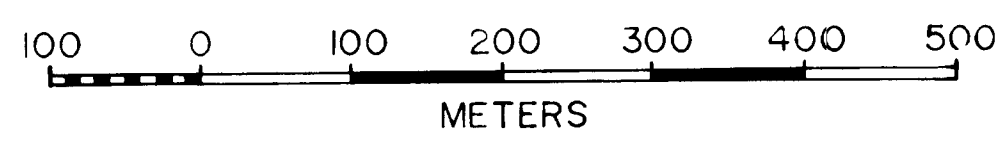
CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Cu.in P.P.M.	
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980
N.T.S. 94 L/E	DRAWN BY: M.S., S.M.	SCALE: 1:5,000
DWG. No.	NORANDA EXPLORATION	
4 of 4	OFFICE: VANCOUVER	



"C"
SEE REVERSE SHEET

Sheet "B"



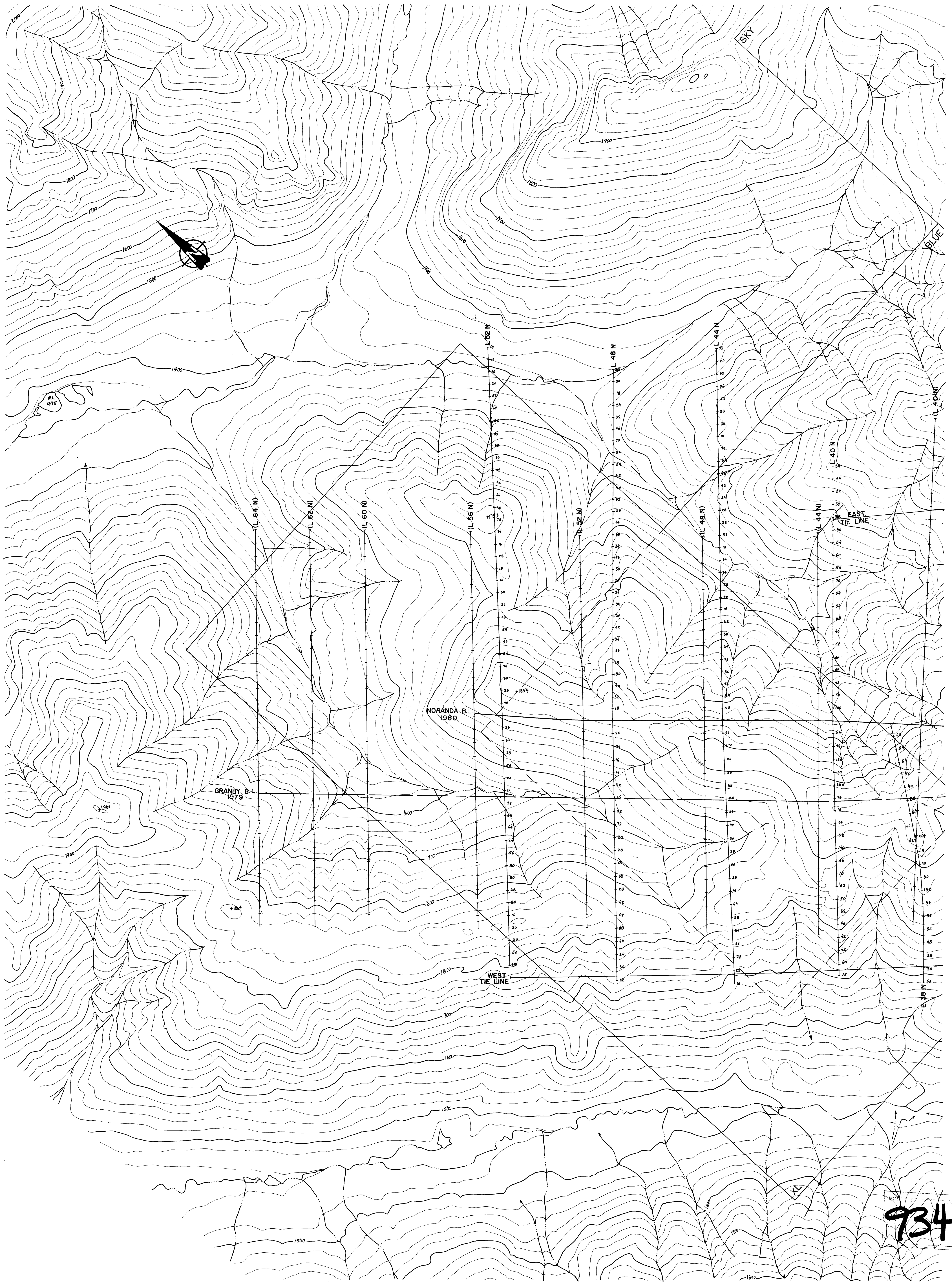
CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

9341

Michael Savell

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Cu. in P.P.M.	
PROJ. No. 1016	SURVEY BY R.M. MS.	DATE DEC. 1980
NTS 94 L/A/E	DRAWN BY M.S., S.N.	SCALE 1:5,000
DWG. No.	NORANDA EXPLORATION	
4 of B	OFFICE VANCOUVER	

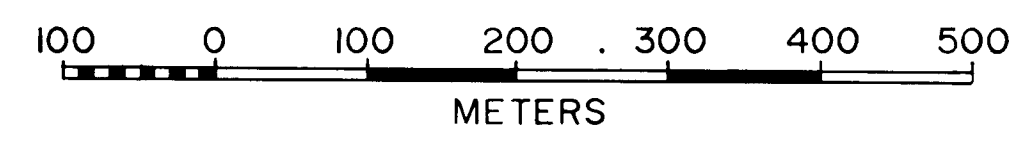
TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL



934

Michael Savell

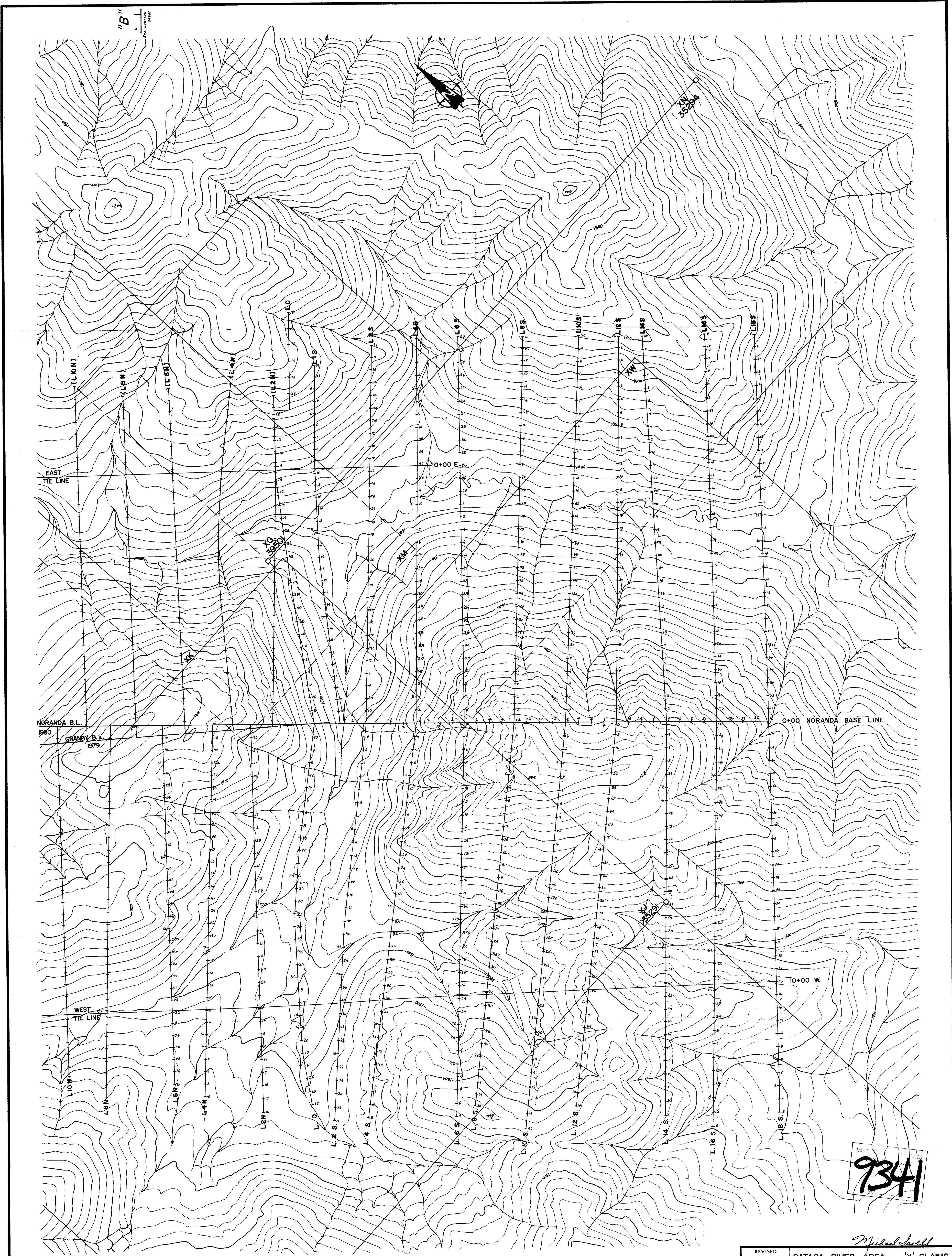
Sheet "C"



CONTOUR INTERVAL : 20 METERS
 CLAIMS LOCATED BY COMPASS & TOPOFIL
 L.C.P. INDICATED BY
 GRANBY (1979) LINES INDICATED BY BRACKETS

REVISED	GATAGA RIVER AREA — 'X' CLAIMS		
	GEOCHEMICAL SOIL SURVEY		
	Cu in P.P.M.		
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980	
NTS. 34 L/E	DRAWN BY: M.S., S.N.	SCALE: 1:5,000	
DWG. No.	NORANDA EXPLORATION		
4 of C	OFFICE: VANCOUVER		

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
 THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
 GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL



"B"
See overlap sheet

EAST TIE LINE

NORANDA B.L. 1980

GRANBY B.L. 1979

0+00 NORANDA BASE LINE

WEST TIE LINE

10+00 W.

9341

Michael Savell

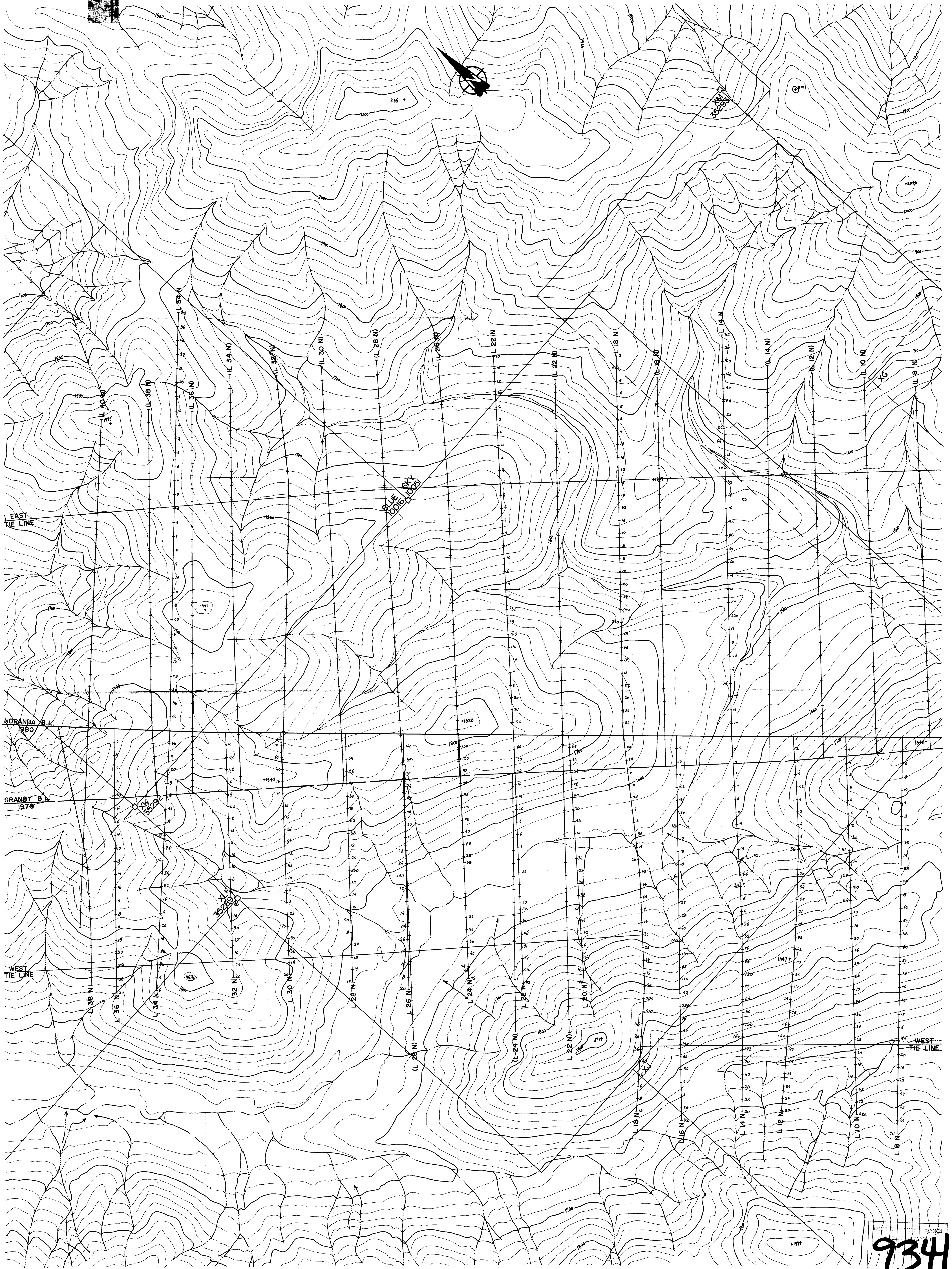
TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON THE X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, X11, X12, X13, X14, X15, X16, X17, X18, X19, X20, X21, X22, X23, X24, X25, X26, X27, X28, X29, X30, X31, X32, X33, X34, X35, X36, X37, X38, X39, X40, X41, X42, X43, X44, X45, X46, X47, X48, X49, X50, X51, X52, X53, X54, X55, X56, X57, X58, X59, X60, X61, X62, X63, X64, X65, X66, X67, X68, X69, X70, X71, X72, X73, X74, X75, X76, X77, X78, X79, X80, X81, X82, X83, X84, X85, X86, X87, X88, X89, X90, X91, X92, X93, X94, X95, X96, X97, X98, X99, X100, X101, X102, X103, X104, X105, X106, X107, X108, X109, X110, X111, X112, X113, X114, X115, X116, X117, X118, X119, X120, X121, X122, X123, X124, X125, X126, X127, X128, X129, X130, X131, X132, X133, X134, X135, X136, X137, X138, X139, X140, X141, X142, X143, X144, X145, X146, X147, X148, X149, X150, X151, X152, X153, X154, X155, X156, X157, X158, X159, X160, X161, X162, X163, X164, X165, X166, X167, X168, X169, X170, X171, X172, X173, X174, X175, X176, X177, X178, X179, X180, X181, X182, X183, X184, X185, X186, X187, X188, X189, X190, X191, X192, X193, X194, X195, X196, X197, X198, X199, X200, X201, X202, X203, X204, X205, X206, X207, X208, X209, X210, X211, X212, X213, X214, X215, X216, X217, X218, X219, X220, X221, X222, X223, X224, X225, X226, X227, X228, X229, X230, X231, X232, X233, X234, X235, X236, X237, X238, X239, X240, X241, X242, X243, X244, X245, X246, X247, X248, X249, X250, X251, X252, X253, X254, X255, X256, X257, X258, X259, X260, X261, X262, X263, X264, X265, X266, X267, X268, X269, X270, X271, X272, X273, X274, X275, X276, X277, X278, X279, X280, X281, X282, X283, X284, X285, X286, X287, X288, X289, X290, X291, X292, X293, X294, X295, X296, X297, X298, X299, X300, X301, X302, X303, X304, X305, X306, X307, X308, X309, X310, X311, X312, X313, X314, X315, X316, X317, X318, X319, X320, X321, X322, X323, X324, X325, X326, X327, X328, X329, X330, X331, X332, X333, X334, X335, X336, X337, X338, X339, X340, X341, X342, X343, X344, X345, X346, X347, X348, X349, X350, X351, X352, X353, X354, X355, X356, X357, X358, X359, X360, X361, X362, X363, X364, X365, X366, X367, X368, X369, X370, X371, X372, X373, X374, X375, X376, X377, X378, X379, X380, X381, X382, X383, X384, X385, X386, X387, X388, X389, X390, X391, X392, X393, X394, X395, X396, X397, X398, X399, X400, X401, X402, X403, X404, X405, X406, X407, X408, X409, X410, X411, X412, X413, X414, X415, X416, X417, X418, X419, X420, X421, X422, X423, X424, X425, X426, X427, X428, X429, X430, X431, X432, X433, X434, X435, X436, X437, X438, X439, X440, X441, X442, X443, X444, X445, X446, X447, X448, X449, X450, X451, X452, X453, X454, X455, X456, X457, X458, X459, X460, X461, X462, X463, X464, X465, X466, X467, X468, X469, X470, X471, X472, X473, X474, X475, X476, X477, X478, X479, X480, X481, X482, X483, X484, X485, X486, X487, X488, X489, X490, X491, X492, X493, X494, X495, X496, X497, X498, X499, X500, X501, X502, X503, X504, X505, X506, X507, X508, X509, X510, X511, X512, X513, X514, X515, X516, X517, X518, X519, X520, X521, X522, X523, X524, X525, X526, X527, X528, X529, X530, X531, X532, X533, X534, X535, X536, X537, X538, X539, X540, X541, X542, X543, X544, X545, X546, X547, X548, X549, X550, X551, X552, X553, X554, X555, X556, X557, X558, X559, X560, X561, X562, X563, X564, X565, X566, X567, X568, X569, X570, X571, X572, X573, X574, X575, X576, X577, X578, X579, X580, X581, X582, X583, X584, X585, X586, X587, X588, X589, X590, X591, X592, X593, X594, X595, X596, X597, X598, X599, X600, X601, X602, X603, X604, X605, X606, X607, X608, X609, X610, X611, X612, X613, X614, X615, X616, X617, X618, X619, X620, X621, X622, X623, X624, X625, X626, X627, X628, X629, X630, X631, X632, X633, X634, X635, X636, X637, X638, X639, X640, X641, X642, X643, X644, X645, X646, X647, X648, X649, X650, X651, X652, X653, X654, X655, X656, X657, X658, X659, X660, X661, X662, X663, X664, X665, X666, X667, X668, X669, X670, X671, X672, X673, X674, X675, X676, X677, X678, X679, X680, X681, X682, X683, X684, X685, X686, X687, X688, X689, X690, X691, X692, X693, X694, X695, X696, X697, X698, X699, X700, X701, X702, X703, X704, X705, X706, X707, X708, X709, X710, X711, X712, X713, X714, X715, X716, X717, X718, X719, X720, X721, X722, X723, X724, X725, X726, X727, X728, X729, X730, X731, X732, X733, X734, X735, X736, X737, X738, X739, X740, X741, X742, X743, X744, X745, X746, X747, X748, X749, X750, X751, X752, X753, X754, X755, X756, X757, X758, X759, X760, X761, X762, X763, X764, X765, X766, X767, X768, X769, X770, X771, X772, X773, X774, X775, X776, X777, X778, X779, X780, X781, X782, X783, X784, X785, X786, X787, X788, X789, X790, X791, X792, X793, X794, X795, X796, X797, X798, X799, X800, X801, X802, X803, X804, X805, X806, X807, X808, X809, X810, X811, X812, X813, X814, X815, X816, X817, X818, X819, X820, X821, X822, X823, X824, X825, X826, X827, X828, X829, X830, X831, X832, X833, X834, X835, X836, X837, X838, X839, X840, X841, X842, X843, X844, X845, X846, X847, X848, X849, X850, X851, X852, X853, X854, X855, X856, X857, X858, X859, X860, X861, X862, X863, X864, X865, X866, X867, X868, X869, X870, X871, X872, X873, X874, X875, X876, X877, X878, X879, X880, X881, X882, X883, X884, X885, X886, X887, X888, X889, X890, X891, X892, X893, X894, X895, X896, X897, X898, X899, X900, X901, X902, X903, X904, X905, X906, X907, X908, X909, X910, X911, X912, X913, X914, X915, X916, X917, X918, X919, X920, X921, X922, X923, X924, X925, X926, X927, X928, X929, X930, X931, X932, X933, X934, X935, X936, X937, X938, X939, X940, X941, X942, X943, X944, X945, X946, X947, X948, X949, X950, X951, X952, X953, X954, X955, X956, X957, X958, X959, X960, X961, X962, X963, X964, X965, X966, X967, X968, X969, X970, X971, X972, X973, X974, X975, X976, X977, X978, X979, X980, X981, X982, X983, X984, X985, X986, X987, X988, X989, X990, X991, X992, X993, X994, X995, X996, X997, X998, X999, X1000.

"B"
See overlap sheet

Sheet "A"
100 0 100 200 300 400 500
METERS

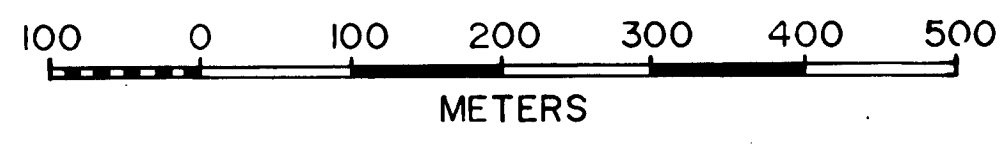
CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

REVISED	GATAGA RIVER AREA — 'X' CLAIMS		
	GEOCHEMICAL SOIL SURVEY		
	Mo. in P.P.M.		
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980	
N.T.S. 94 L/T/E	DRAWN BY: M.S., S.N.	SCALE: 1:5,000	
DWG. No.	NORANDA EXPLORATION		
5 of A	OFFICE: VANCOUVER		



1" = 100 M
See reverse side

Sheet "B"



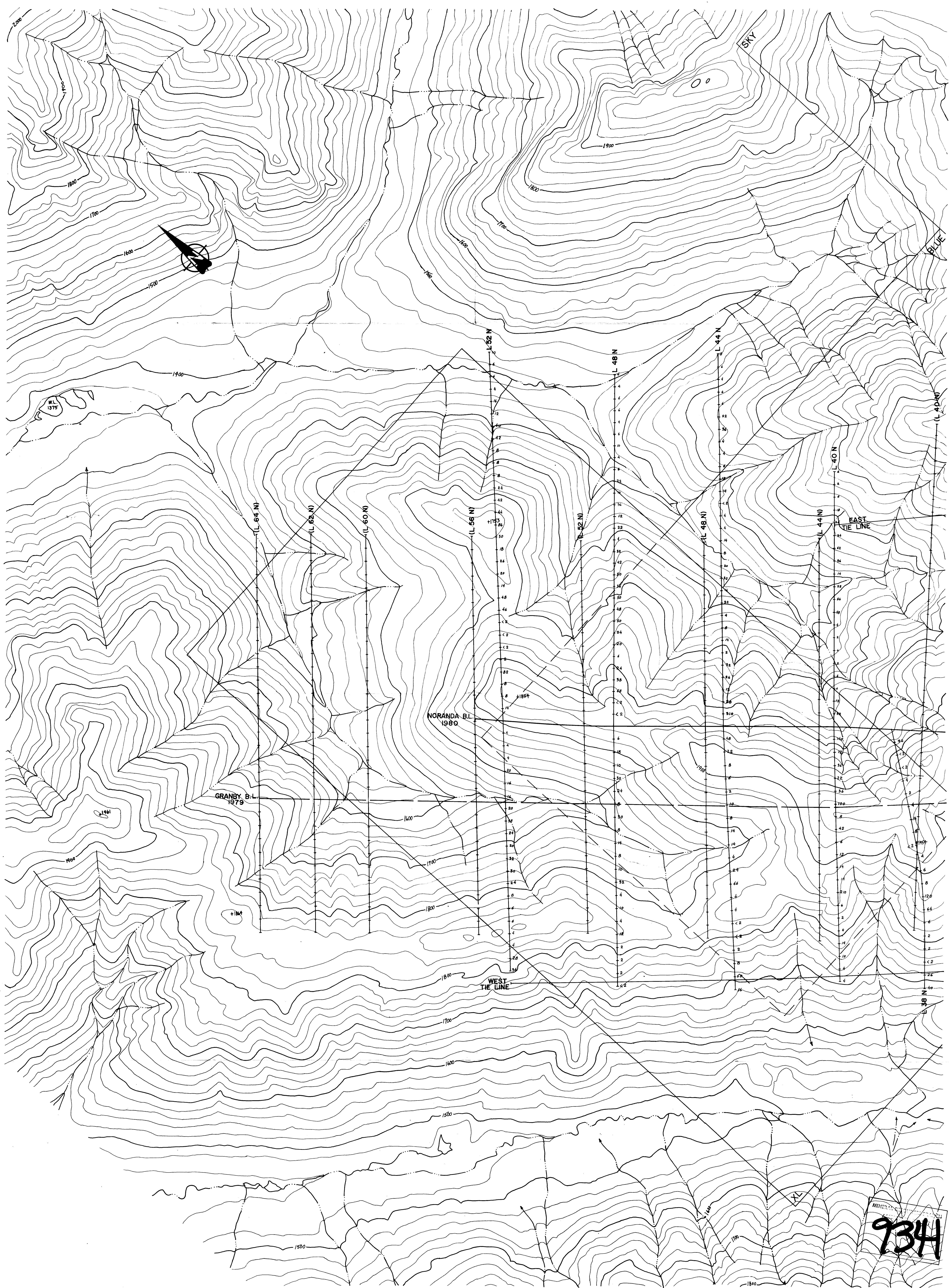
TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C. GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY Mo. in PPM.	
PROJ. No. 1016	SURVEY BY: R.M., M.S.	DATE: DEC. 1980
N.T.S. 94 L/E	DRAWN BY: M.S., S.N.	SCALE: 1:5,000
DWG. No. 5 of B	NORANDA EXPLORATION OFFICE: VANCOUVER	

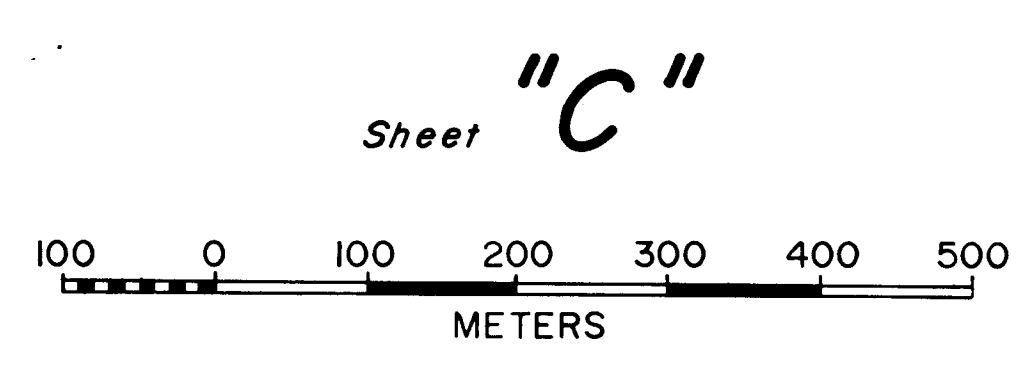
934

Michael Savell



934

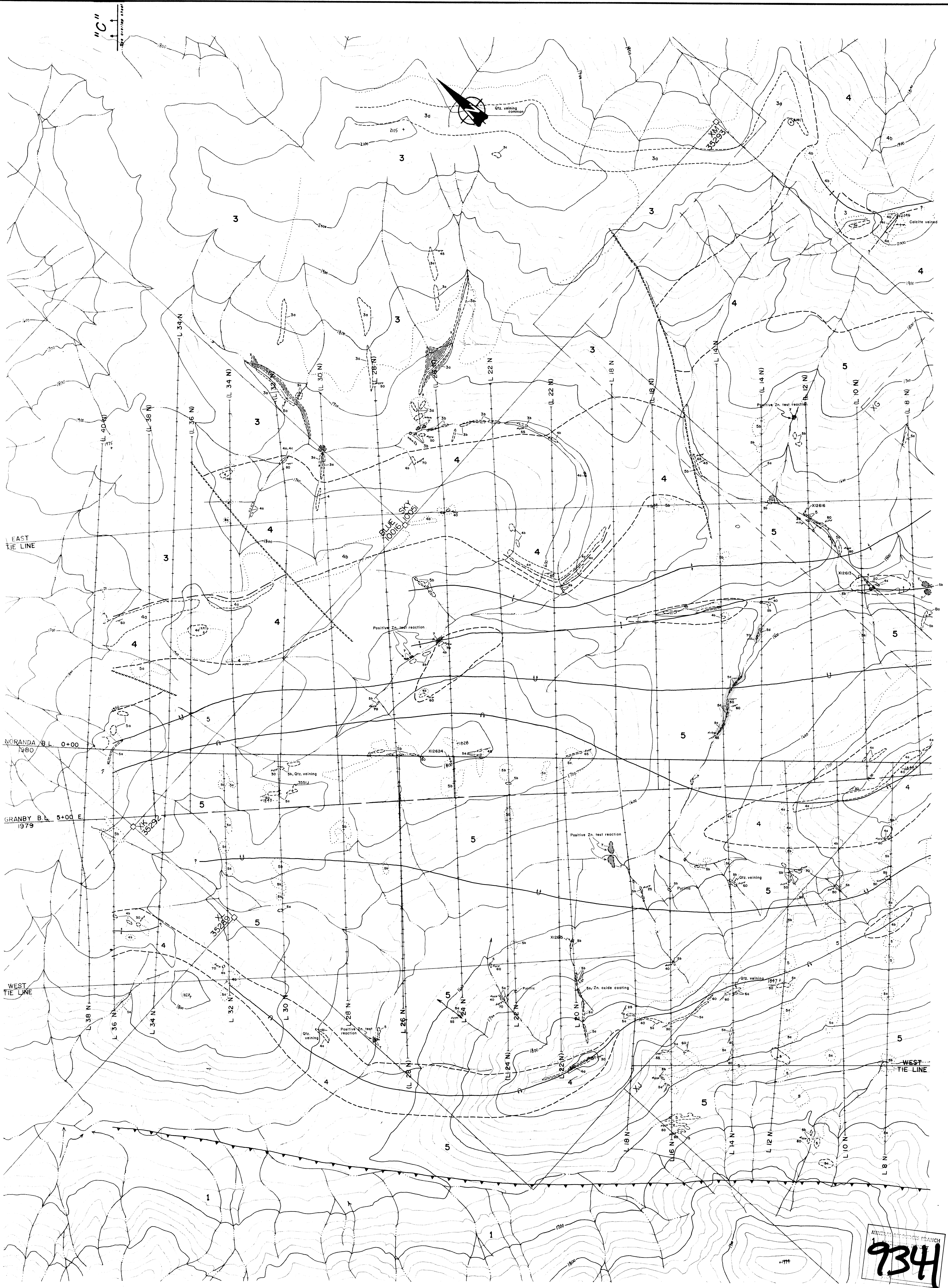
Michael Savell



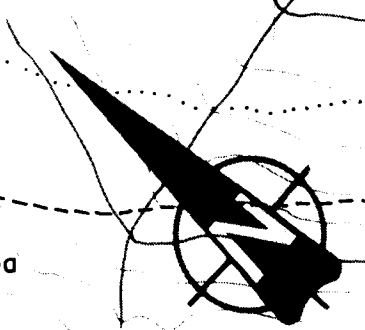
CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY
GRANBY (1979) LINES INDICATED BY BRACKETS

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
	GEOCHEMICAL SOIL SURVEY	
	Mo. in P.P.M.	
PROJ. No. 1016	SURVEY BY: R.M.J. M.S.	DATE: DEC. 1980
N.T.S. 94 L/TE	DRAWN BY: M.S. S.N.	SCALE: 1:5,000
DWG. No. 5 of C	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

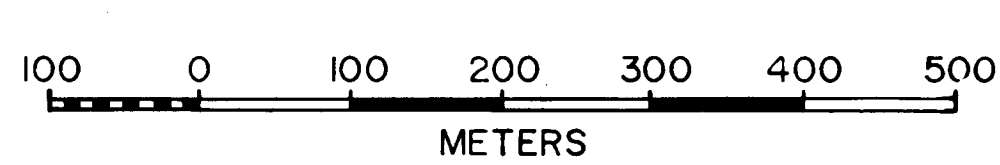


"C"
500 METERS



"C"
500 METERS

Sheet "B"

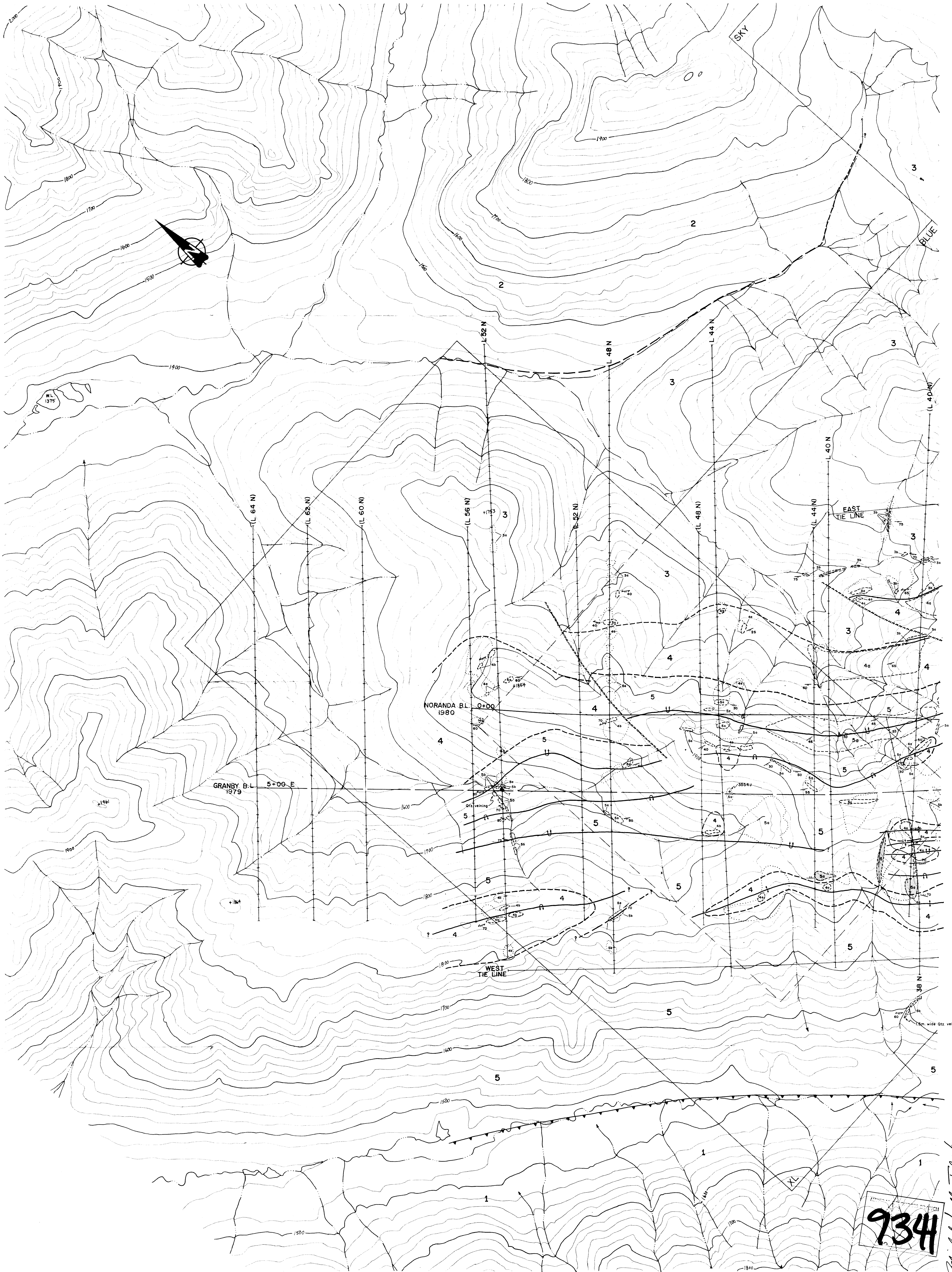


CONTOUR INTERVAL : 20 METERS
CLAIMS LOCATED BY COMPASS & TOPOFIL
L.C.P. INDICATED BY □
GRANBY (1979) LINES INDICATED BY BRACKETS

LEGEND, on drawing 6 of A
Michael David Smith

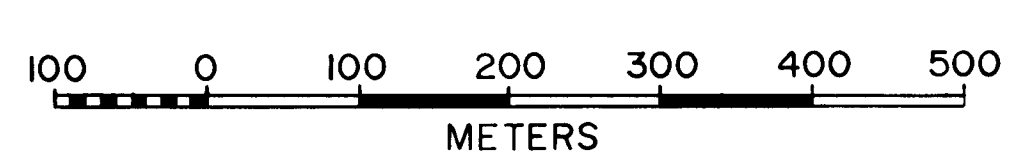
REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
GEOLOGICAL PLAN		
PROJ. No. 1016	SURVEY BY: J.N., M.S.	DATE: DEC. 1980
N.T.S. 94 L/A/E	DRAWN BY: M.S., S.N.	SCALE: 1:5,000
DWG. No. 6. of B	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C. GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL



LEGEND, on drawing 6 of A

Sheet "C"



CONTOUR INTERVAL : 20 METERS
 CLAIMS LOCATED BY COMPASS & TOPOFIL
 L.C.P. INDICATED BY □
 GRANBY (1979) LINES INDICATED BY BRACKETS

TO ACCOMPANY GEOLOGICAL AND GEOCHEMICAL REPORT ON
 THE XJ, XK, XL, XM, XN, XW, XG, BLUE, AND SKY M.C.
 GATAGA RIVER AREA, LIARD M.D. BY M. SAVELL

REVISED	GATAGA RIVER AREA — 'X' CLAIMS	
GEOLOGICAL PLAN		
PROJ. No. 1016	SURVEY BY J.N.I. M.S.	DATE DEC. 1980
N.T.S. 94 L/E	DRAWN BY M.S., S.N.	SCALE: 1:5,000
DWG. No. 6 of C	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

Michael Savell July 1981