

Smithers

85-125-13525



Province of British Columbia Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
Geology, Geochemistry, Geophysics	\$ 7742.89

AUTHOR(S) Delbert E. Myers, Jr. Lyndon Bradish SIGNATURE(S) *[Handwritten signatures]*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED 14 February 1985 YEAR OF WORK 1984

PROPERTY NAME(S) ~~MT. MCKENDRICK~~ *Harold and Emily*
MT. MCKENDRICK

COMMODITIES PRESENT Au, Ag, Pb, As, Zn, Cu D. GEOLOGY *New M. 1*

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN None 934266 PROPERTY NTS 93 L/15E

MINING DIVISION Omineca

LATITUDE 54° 49.5' N LONGITUDE 126° 44.0' W

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

Harold, Emily, Tony 1 (18 units)

OWNER(S)
(1) Noranda Exploration Co., Ltd. (2) *[Handwritten]*

MAILING ADDRESS
P.O. Box 2380, Vancouver B.C. V6B 3T5
Myers, Jr. Geologist

OPERATOR(S) (that is, Company paying for the work)
(1) *[Handwritten]* (2) *[Handwritten]*

MAILING ADDRESS

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):
A gold-silver bearing quartz vein cuts Lower Jurassic Pelkwa andesites and leucocratic granite dykes and/or sills. The vein strikes 315° and dips steeply NE. It is mineralized with galena, pyrite, arsenopyrite, sphalerite, chalcopryite, and tetrahedrite. It is exposed over a 500 m length and is up to 0.9 m thick.

REFERENCES TO PREVIOUS WORK See references.

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area) Ground Photo	1:1,000	Harold, Emily	\$ 711.84
GEOPHYSICAL (line-kilometres) Ground Magnetic Electromagnetic Induced Polarization Radiometric Seismic Other Airborne	2 km 2 km		\$ 912.64
GEOCHEMICAL (number of samples analysed for) Soil Silt Rock Other	358 7 31 1	Multi element	\$ 6,118.41
DRILLING (total metres; number of holes, size) Core Non-core			
RELATED TECHNICAL Sampling/assaying Petrographic Mineralogic Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL Legal surveys (scale, area) Topographic (scale, area) Photogrammetric (scale, area) Line/grid (kilometres) Road, local access (kilometres) Trench (metres) Underground (metres)			
			TOTAL COST \$ 7,742.89

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS: ✓
Value work done (from report) 7742.89	Mosaica Expl. Co. Ltd.	—	1142.89	
Value of work approved				
Value claimed (from statement) 6600.—				
Value credited to PAC account 1142.89				
Value debited to PAC account				
Accepted: TEH Date 30 Oct 89	Rept. No. 85-125-13525			Information Class 3

ASSESSMENT REPORT

**GEOLOGY, GEOCHEMISTRY, AND GEOPHYSICS
of the
MOUNT MCKENDRICK PROPERTY**

N.T.S. 93 L/ 15E

**Mineral Mining Division
British Columbia**

**Latitude 54 deg. 49.5' N
Longitude 126 deg. 44.0' W**

**Report by: Delbert E. Myers, Jr.
Project Geologist**

**Lyndon Bradish
Division Geophysist**

Submitted: March 1985

**Claims owned by: Noranda Exploration Company, Limited
(No Personal Liability)
P.O. Box 2380
Vancouver, B.C.**

**Operated by: Noranda Exploration Co., Ltd. (NPL)
3A-1750 Quinn Street
Prince George, B.C.**

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,525

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SUMMARY

A gold-silver bearing, quartz vein was optioned by Noranda on Mt. Mckendrick. It had received no physical work since before 1935.

A program of geological mapping, mineralization sampling, soil sampling, and VLF-EM and magnetic surveying was undertaken over the McKendrick Vein in July and August 1984.

Au, Ag, Pb, Zn, and As soil geochemical anomalies were found associated with the McKendrick Vein. Several other soil geochemical anomalies were found which should be investigated further.

The McKendrick Vein is exposed for a 500 m length on surface and ranges up to 0.9 m wide. The best grade chip sample taken in 1984 ran 8.1 ppm gold and 140 ppm silver over 0.5 m (sample 16560).

The Vein appears to separate area of slightly different magnetic characteristics and may cause weak VLF-EM anomalies. Hence these geophysical tools may be useful in tracing the Vein to the SE under thick overburden.

Additional veins were found and a reported in the literature in the area. Further prospecting in the area is recommended.

The Mckendrick Vein is open to the SW and was not sampled at depth. Two adits reported to be short are collapsed and were not entered. Diamond drilling is recommended to test for mineralization at depth.

INTRODUCTION

PURPOSE

The purpose of this work on Mount McKendrick was to begin evaluating the economic potential of a mineralized quartz vein and to locate its possible extension or locate other similiar veins in the area.

LOCATION AND ACCESS

Mount McKendrick(5715' or 1742m) is located twenty-nine(29) kilometers east by north of Smithers, B.C. and ten(10) kilometers NNW of Dome Mountain(Figure 1).

Access to the showing on Mount McKendrick is by helicopter from Smithers or by a bushwack hike from McKendrick Pass of about 4 km with a vertical gain of about 640 m(2100'). The nearest access by four-wheel drive vehicle is from McKendrick Pass or from another road about 5.0 km straight-line distance south of the showing.

A Bell 206 helicopter from Smithers was used to travel to and from the property for this work, except as noted later.

PROPERTY

The property consists of three claims as follows:

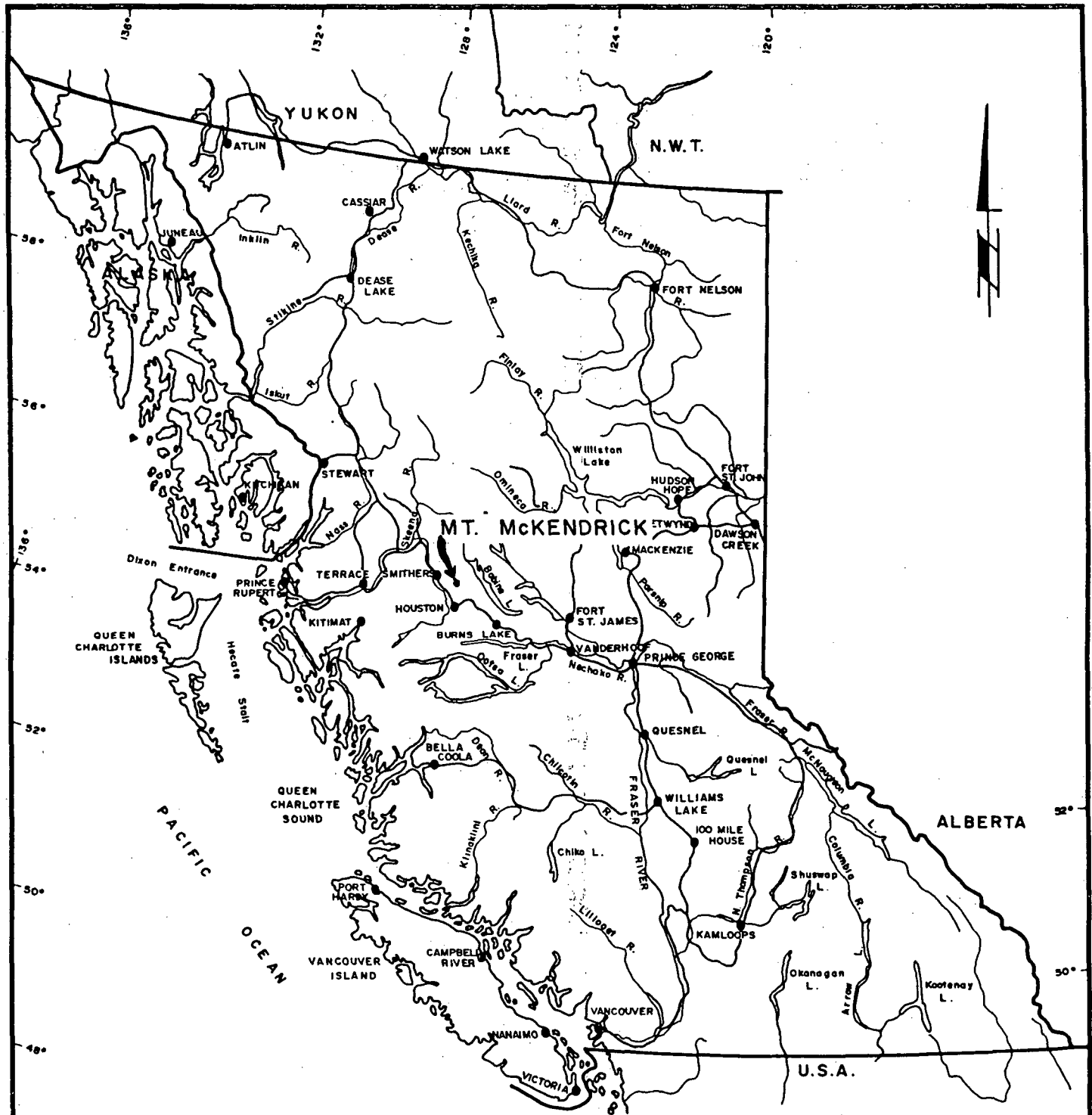
<u>Name</u>	<u>Record No.</u>	<u>Type of Claim</u>	<u>Units</u>	<u>Record Date</u>
Emily	4703	2P	1	13 Aug. 1982
Harold	4704	2P	1	13 Aug. 1982
Tony 1	6040	MC	16	15 Feb. 1983

These claims are held by Noranda Exploration Company, Limited under option from A. L'Orsa of Smithers, B.C. The claims are shown in Figure 2.

These claims are adjoined on the south by the Byron 1 and 2 claims of Noranda Exploration.

PREVIOUS WORK

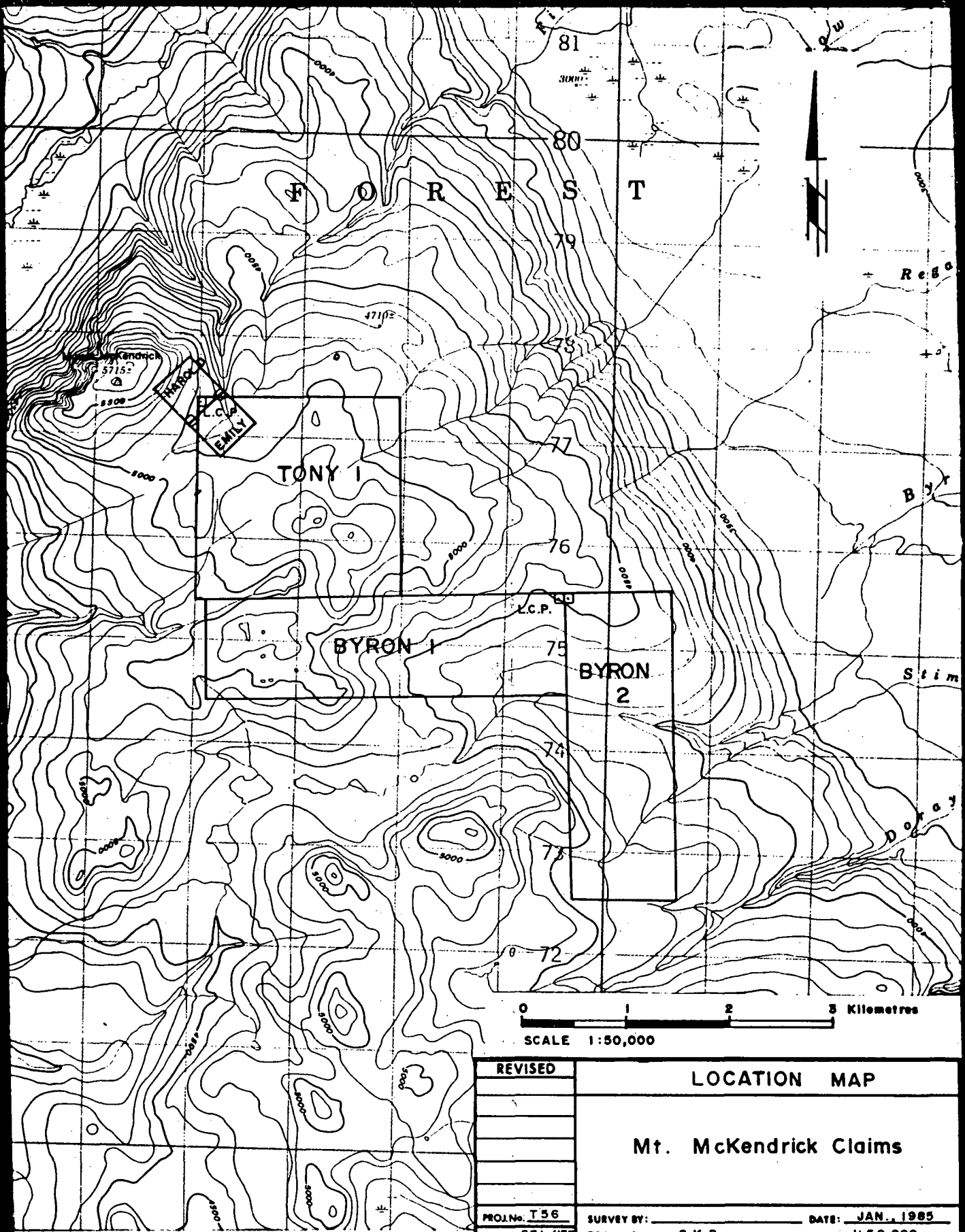
The Mount McKendrick vein is described by Robertson (1912). He does not give any grades but says that a 50 foot(15 m) tunnel was driven on the vein. The width of the vein in the tunnel faces was 4.4 feet(1.34 m).



0 100 200 KILOMETRES
SCALE 1:8,000,000

REVISED	Mt. McKendrick	
	LOCATION MAP	
PROJ.No. T56	SURVEY BY: _____	DATE: Feb. 1985
N.T.S. 93L	DRAWN BY: S.K.B.	SCALE: 1:8,000,000
DWG.No.	NORANDA EXPLORATION	
Fig. 1	OFFICE: PRINCE GEORGE, B.C.	

VANGAL 11927



REVISED	LOCATION MAP	
	Mt. McKendrick Claims	
PROJ. No. T56	SURVEY BY: _____	DATE: JAN., 1985
N.T.S. 93L/15E	DRAWN BY: S.K.B.	SCALE: 1:50,000
DWG. No.	NORANDA EXPLORATION	
Fig. 2	OFFICE: PRINCE GEORGE, B.C.	

Lay(1935) reports the Mount McKendrick vein to be from 15 inches(40 cm) to 3.5 feet(107 cm) in width, striking N79 deg. (sic) and dipping steeply northeast. He notes two adits, each 75 feet(23 m) long and pits exposing the vein over a 2000 foot(610 m) length. Lay says that that there may be another, parallel vein to the west "close to the trail at 4340 feet(1320 m) elevation".

L'Orsa(personal communication) has done some sampling of the vein and obtained values of up to 0.45 opt(15.4 ppm) gold and 32.4 opt(1110 ppm) silver.

WORK UNDERTAKEN

The Tony 1 claim was staked at Mount McKendrick in February 1984 to cover the possible strike extension of the McKendrick Vein (so named here in honor of Bill McKendrick who discovered it in the early 1900's).

The field work covered by this report was done from 30 July through 6 August 1984. A total of 17 man-days of field work was done on the property during this period (Appendix 1: Summary of Personnel). Additional office work was done but is not included in the costs except for one man-day of report writing (Appendix 2: Statement of Cost).

A grid of flagged lines was established over the McKendrick Vein using compass and topofil measurements. It consists of a 700 m long baseline at 314 degrees and 14 1/2 sidelines 450m long at 44 degrees. In addition a topofil and compass line was run at a 140 degree azimuth from the Tony 1 LCP to the south boundary of the Tony 1 claim. This line was also flagged for relocation.

The McKendrick Vein was mapped and all outcrops and workings in which it is exposed were sampled. Both grab and chip samples were taken. All rock samples were analysed at the Noranda Vancouver Geochemical Laboratory by methods described in Appendix 4.

B horizon soils were sampled at 20 meter intervals on lines 50 meters apart over all of the Harold claim and the northern half of the Emily claim. Three hundred twenty soils were taken. All soil samples taken were analysed at the Noranda Vancouver Geochemical Laboratory for Au, Ag, Cu, Pb, Zn, Mo, Mn, and As by methods described in Appendix 4.

Two soil profile pits were dug and sampled on the Harold and Emily claims.

Thirty-eight (38) B-horizon soil samples were taken from the Tony 1 claim on the flagged line at 140 degrees and along the south boundary of the claim. These were taken at 50 or 100 m intervals from about 3.2 km of line.

Seven stream sediment samples were taken during the course of the above work. These were analysed according to the methods given in Appendix 4 by the Noranda Vancouver Geochemical Laboratory for Au, Ag, Cu, Pb, Zn, Mo, Mn, and As.

VLF-EM and magnetometer surveys were done on part of the grid. Two kilometers of each survey were done on lines 400 m long and 100 m apart. Readings were taken at 20 m intervals.

The magnetometer survey employed a total field magnetometer (G. 836) manufactured by Exploranium Geometrics of Ontario. The useable resolution of this instrument is 10 nT. The data was corrected for diurnal variations.

The VLF-EM survey was completed with the EM-16 manufactured by Geonics Ltd. The transmitter was NLK at Jim Creek, Washington, U.S.A., transmitting at a frequency of 24.8 kHz.

All access to the property was by helicopter. One crew, however, hiked out from the property down a unnamed creek. Vehicles had been left on the road through McKendrick Pass. The hike down took about 2 1/4 hours. Most of the work was done from a two man flycamp on the Emily claim.

RESULTS

SOIL SURVEYS

A total of 358 B-horizon soil samples were taken from two grids on the property. The results of this work are given in Figures 3 to 6 and 7 to 9.

Three hundred twelve (312) analyses from B-horizon soils from the Harold and Emily claims were analysed statistically by computer and anomalous values were chosen partially on the basis of this analysis and partially on personal experience. Anomalous values chosen for B-horizon soils are as follow:

Element	Weakly Anomalous	Strongly Anomalous
Au	0.030 ppm	0.060 ppm
Ag	1.0	2.0
Cu	100	200
Pb	20	50
Zn	250	500
Mo	5	10
Mn	2000	4000
As	100	200

Anomalous samples are either indicated by contours or by bold symbols on Figures 3 to 9.

All strongly anomalous B-horizon soil samples were taken from the Emily and Harold claims. Most of these strong anomalies are located south or east of (downhill from) the lower adit on the McKendrick Vein. Because of this there is a good chance that these anomalies are due to natural or man-induced dispersion from the Vein. Therefore such anomalies are given a low priority for follow-up.

Two strong anomalies occur higher up on the mountain and away from the McKendrick Vein. These are found at:

1200E, 760N
1200 and 1250E, 1100 to 1140E

These anomalies are for Pb and As and should be followed-up by detailed sampling and prospecting.

Several soil anomalies are coincident with outcrop of the McKendrick Vein as would be expected. Au, Ag, Pb, Zn, and As are anomalous in such samples.

Most of the soil anomalies are isolated from other soil anomalies. This is not the case for arsenic anomalies, which are rather more widespread and continuous

than anomalies for other elements (Figure 5). Arsenic concentrations in soils are relatively high in this area and undoubtedly reflect anomalous concentrations in bedrock. These high As values may be related to the alaskitic intrusive. This is also suggested by the goodly number of molybdenum anomalies on the grid.

Figure 10 gives the grid numbers for soil samples from the Tony 1 claim and for all silt and some rock samples taken in the area.

The results of two shallow soil profiles are given in Figure 11. Profile A has no anomalous samples. Profile B which is located 180 m downhill from the Lower Adit has samples strongly anomalous in gold and arsenic. There are no clear trends in this limited data showing concentration changes with depth. All soils in this area are likely to be immature and glacially derived.

The usefulness of soil geochemistry for tracing the extension of the McKendrick Vein to the SE is still unknown. Further sampling will be necessary to attempt to trace such possible extensions.

GEOLOGY

Mount McKendrick is underlain by mainly andesitic volcanics of the Lower Jurassic Telkwa Formation which have been intruded by leucocratic granite. It may be this leucocratic granite which caused Tipper and Richards (GSC Open File 351) to map acid volcanics of their Brian Boru Formation in this area. Such acid volcanics do not occur on the property.

The andesites are NW striking with unknown dip. They are generally greenish gray.

Numerous dikes of white, fine to medium grained alaskitic granite cut the andesites. These dikes are apparently offshoots of a larger mass of granite centered about 2 km NE of the Lower Adit (L'Orsa, personal communication).

The McKendrick Vein cuts both of these units. The Vein strikes 315 degrees and dips steeply NE (Figure 12). The Vein is exposed over a length of 500 m and ranges up to 0.9 m wide where presently exposed. It was reported to be 4.4 feet (1.3 m) wide in a adit face (Robertson, 1912).

The McKendrick Vein appears to pinch out to the NW as no further trace can be found, although exposure is fairly good. To the SE the Vein may continue under thick overburden in a sub-alpine basin. The Vein will not easily be traced in this direction.

The quartz vein is composed mainly of white, coarse grain quartz. In a few locations the McKendrick Vein is banded, but in general it is massive with minor disseminated or clotted sulfides. Galena, pyrite, arsenopyrite, sphalerite, chalcopyrite, and tetrahedrite are found in the Vein. Minor carbonate, sometimes ankerite, and chlorite also occur in the vein.

Analyses of the vein are given on Figure 12. The McKendrick Vein is exposed in eight pits and trenches and in several outcrops. It ranges in thickness where sampled from 0.3 to 0.9 m and averages 0.59 m thick.

Twenty-nine (29) rock samples were taken from along the McKendrick Vein. Sixteen (16) of the 29 samples were grab or chip samples taken of the Vein itself. Gold values range from 0.45 to 8.1 ppm and silver values range from 0.4 to 260 ppm in chip samples. The best grade chip sample is 8.1 ppm gold and 140 ppm silver over 0.5 m (sample 16560).

Figures 7 to 9, 11 and 12 give all of the rock sampling results.

The only other mineralized rock samples were taken from the creek east of the Lower Adit. A sample of a very narrow quartz vein (several cm wide) contained 0.53 ppm Au, 470 ppm Ag, 0.7% Cu, 1.7% Pb, 2.0% Zn, and 300 ppm As (sample 16577). A sample of alaskite taken 300 m upstream (sample 16576) was anomalous in Au, Ag, and Pb.

SILT SAMPLING

Seven silt (stream sediment) samples were taken on Mount McKendrick. Their locations are given on Figure 10 and the analytical results are given on Figures 7 to 9 along with some soil and rock results.

The most anomalous sample (number 15768, 250 ppm Zn and 480 ppm As) is from a stream draining the Lower Adit area. The silt was taken about 300 m east of the Lower Adit (Figure 10).

GEOPHYSICS

Magnetometer and VLF-EM surveys were completed over a portion of the McKendrick grid. This area, as seen on Figures 13 and 14 is bounded between lines 1000 E and 1400E, stations 800 N and 1200 N on the Emily and Harold claims.

The magnetometer survey recorded values between 40 nT and 930 nT on a datum of 57,500 nT. Three magnetic signatures are evident from the contoured plan map (Fig. 13)

as follows:

- 1). Grid north of the baseline, the area is characterized by large amplitude, high frequency variations. The contact of this package lies within a 25 meter envelope of the baseline.
- 2). A similiar package to the one above is seen on lines 1200E and 1100 E, grid south of 950 N.
- 3). The remaining area is characterized by a low background (300 to 400 nT).

The VLF-EM profiles (Figure 14) show the effects of topography as seen by the predominantly negative values of the in-phase profiles. There are several "crossovers" notably at approximately 1100 E, 1125 N; 1300 E, 1010 N; and 1300 E, 900(?) N.

The anomaly at 1100 E, 1125 N has a good profile shape but marks a dramatic change in background levels. This may be due to topographic effects, but does warrant a closer examination.

The response a 1300 E, 1010 N is suspect as it is the result of a single reading.

The 1300 E, 900N response is probably due to a change in slope (topographic effect).

As the VLF-EM response expected from the McKendrick Vein is small compared to the response recorded due to variations in topography, it is difficult to seperate the signal from the noise in the profiles.

CONCLUSIONS

The McKendrick Vein gives rise to a Au, Ag, Pb, Zn, As soil geochemical anomaly.

Three soil geochemical anomalies appear to have sources other than the McKendrick Vein. They are located at:

L 1200 E, 760 N,
L 1200 E, 1100 N, and
L 1250 E, 1120 and 1140 N.

The McKendrick Vein is younger than the Lower Jurassic Telkwa andesites and the leucocratic granite which cuts the volcanics.

The vein is exposed over a length of 500m and ranges up to 0.9 m in width were exposed. It extends under thick overburden to the SE.

A several centimeter thick mineralized quartz vein was sampled in the main creek about 500 m NE of the lower adit on the McKendrick Vein. Another vein is reported to exist to the west (Lay, 1935).

The McKendrick Vein was not sampled below surface. Two old adits are collapsed and were not entered.

The McKendrick Vein appears to separate area of slightly different magnetic characteristics and may give rise to a small VLF-EM response at 1300 E, 1010 N. Two other weak VLF-EM anomalies occur at: 1100 E, 1125 N and
1300 E, 900 N.

These geophysical tools may help trace the McKendrick Vein under overburden when used in closely spaced surveys.

RECOMMENDATIONS

Further soil geochemical and VLF-EM and magnetic surveys should be done to the SE of the known extent of the McKendrick Vein to trace it further.

Prospecting and soil sampling should be undertaken in the area to locate additional mineralized veins.

The McKendrick Vein should be diamond drilled to determine the extent and grade of mineralization at depth.

REFERENCES

Lay, D., 1935. "Pioneer" in Annual Report of the Minister of Mines, 1934. Victoria, B.C., pp. C11-C12.

Robertson, W.F., 1912. "Ste. Anne and St. Eugene Mineral Claims" in Annual Report of the Minister of Mines, 1911. Victoria, B.C., pp. K109-K110.

APPENDIX 1

Summary of Personnel - Mount McKendrick Project

Name, Address	Position	Field Work
Bill Kirby P.O. Box 2380 Vancouver, B.C. V6B 3T5	Geophysics Operator	30 July 1984
Del Myers 3A-1750 Quinn Street Prince George, B.C. V2N 1X3	Project Geologist	30 July 1984
Tim Reedman 3A-1750 Quinn Street Prince George, B.C. V2N 1X3	Field Assistant	30 July to 5 August 1984
Chris Reib P.O. Box 2380 Vancouver, B.C. V6B 3T5	Geophysical Operator	30 July 1984
Doug Shearer 3A-1750 Quinn Street Prince George, B.C. V2N 1X3	Geologist	30 July to 5 August 1984

APPENDIX 2

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

DATE FEBRUARY 1985

PROJECT - MT MCKENDRICK

TYPE OF REPORT Geology, Geochem AND Geophysics

a) Wages:

No. of Days -	17 mandays	
Rate per Day -	\$86.32	
Dates From -	July - August 1984	
Total Wages	17 X \$86.32	\$1,467.43

b) Food and Accommodation:

No. of Days -	17	
Rate per Day -	\$40.00	
Dates From -	July - August 1984	
Total Cost -	17 X \$40.00	\$ 680.00

c) Transportation:

No. of Days -	17	
Rate per Day -	\$89.27	
Dates From -	July - August 1984	
Total cost	17 X \$89.27	\$1,517.58

d) Analysis \$3,732.60

e) Cost of Preparation of Report

Author	\$ 172.64
Drafting	\$ 86.32
Typing	\$ 86.32

f) Other:

Total Cost \$7,742.89

UNIT COSTS

Unit Costs for Geology

No. of Days - 4
No. of Units - 4 Days
Unit Costs - 177.96 / Day
Total cost 4 X 177.96 \$ 711.84

Unit Costs for Geochem

No. of Days -
No. of Units - 387 Samples
Unit Costs - 15.81 / Samples
Total Cost - 387 X 15.81 \$6,118.41

Unit Costs for Geophysics

No. of Units - 2 Lkm
Unit Costs - 456.32
Total Costs - 2 X 456.32 \$ 912.64

Total Cost \$7,742.89

NORANDA EXPLORATION COMPANY, LIMITED

CORDILLERA DIVISION

DETAILS OF ANALYSES COSTS

Project: Mt. McKendrick

<u>Element</u>	<u>No. of Determinations</u>	<u>Cost per Determination</u>	<u>Total</u>
Cu	387	1.60	619.20
Pb	387	.60	232.20
Zn	387	.60	232.20
Ag	387	.60	232.20
Mo	387	.60	232.20
Mg	387	.60	232.20
Ni	29	.60	17.40
As	387	1.50	580.50
Au	387	3.50	1,354.50
Total			\$3,732.60

APPENDIX 3

STATEMENT OF QUALIFICATIONS

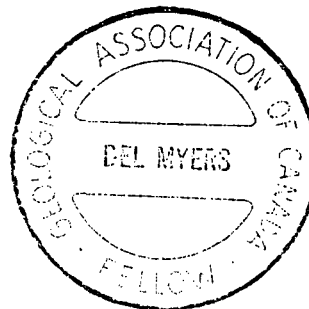
I, Delbert E. Myers, Jr., of the City of Prince George, Province of British Columbia, hereby certify that:

1. I am a graduate of Pennsylvania State University with a Bachelor of Science degree in Geological Sciences (1970) and of the University of Toronto with a Master of Science degree in Geochemistry (1973).
2. I have practised the profession of geology continuously since graduation.
3. I have been employed as a geologist by Noranda Exploration Company, Limited since June 1980.
4. I am a founding member of the Association of Professional Engineers, Geologists, and Geophysicists of the N.W.T. and a fellow of the Geological Association of Canada.
5. The information contained in this report is based on published and unpublished reports on the property and surrounding area, and on work done by me or under my supervision in 1984.
6. I have no interest in the property except as a small shareholder of Noranda Inc.

Dated at Prince George, B.C., this 22nd day of March, 1985.



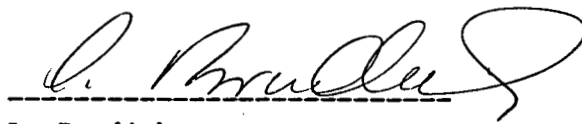
Delbert E. Myers, Jr.
Project Geologist
Noranda Exploration Company,
Limited (No Personal Liability)



STATEMENT OF QUALIFICATIONS

I, Lyndon Bradish of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a Geophysicist residing at 1826 Trutch Street, Vancouver British Columbia.
2. I am a graduate of the University of British Columbia with a B.Sc. (geophysics).
3. I am a member in good standing of the Society of Exploration Geophysicists, Canadian Institute of Mining and the Prospector's and Developer's Association.
4. I presently hold the position of Division Geophysicist with Noranda Exploration Company, Limited and have been in their employ since 1973.



L. Bradish.

MAR 27 1984

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver.

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 geochemical analysis.

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

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 0.4 g and chemical quantities are doubled relative to the above noted method for digestion.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn can be determined directly from the digest (dissolution) with a conventional atomic absorption spectrometric procedure. 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 dissolution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.3 g sample is digested with 1.5 ml of perchloric 70% and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL is used to *measure* arsenic content in the digest.

Barium - Ba: 0.1 g sample digested overnight with conc. perchloric, nitric and hydrofluoric acid; Potassium chloride added to prevent ionization. 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 with an AA-475 complete with EDL.

Gold - Au: 10.0 g sample is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with MIBK from the aqueous solution. AA is used to determine Au.

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 the use of 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 from a perchloric-nitric decomposition, usually from the multi-element digestion, is buffered. The aqueous solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

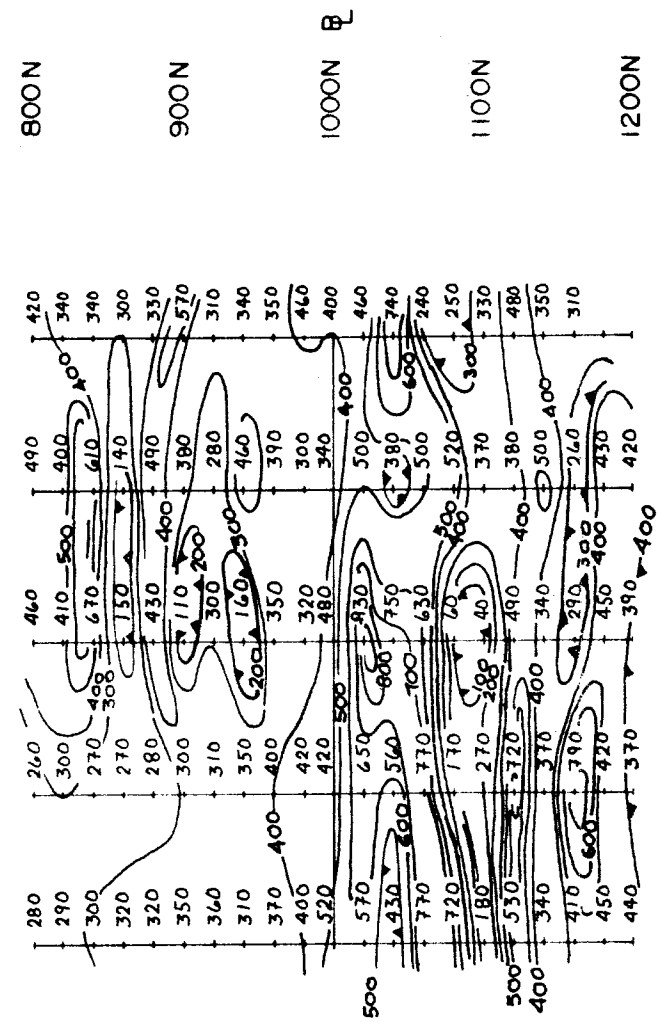
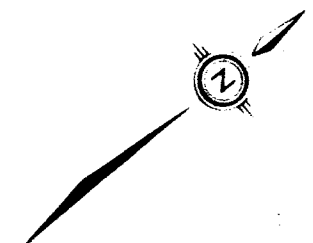
* N.B. If additional elemental determinations are required on panned samples, state this at the time of sample submission. Requests after gold determinations would be futile.

LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01
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	

EJvL/1e
March 14, 1984

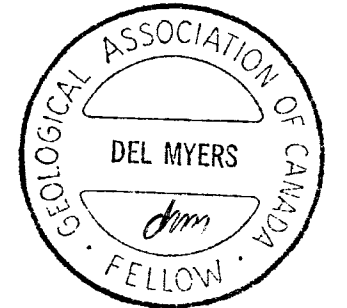
13,525



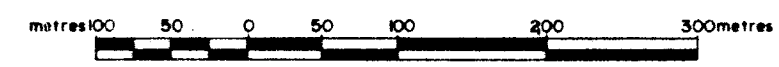
L 1000E
L 1100E
L 1200E
L 1300E
L 1400E

LEGEND

INSTRUMENT : Unimag
 FIELD MEASUREMENT : Total
 DATUM : 57500
 CONTOURS : At 100^γ intervals
 CONDUCTOR AXIS :
 SURVEY DATE : 84-07-30
 OPERATOR : C.R.



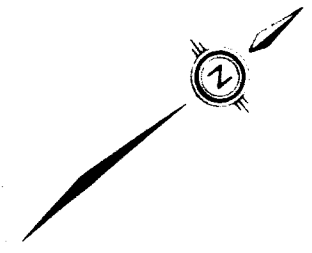
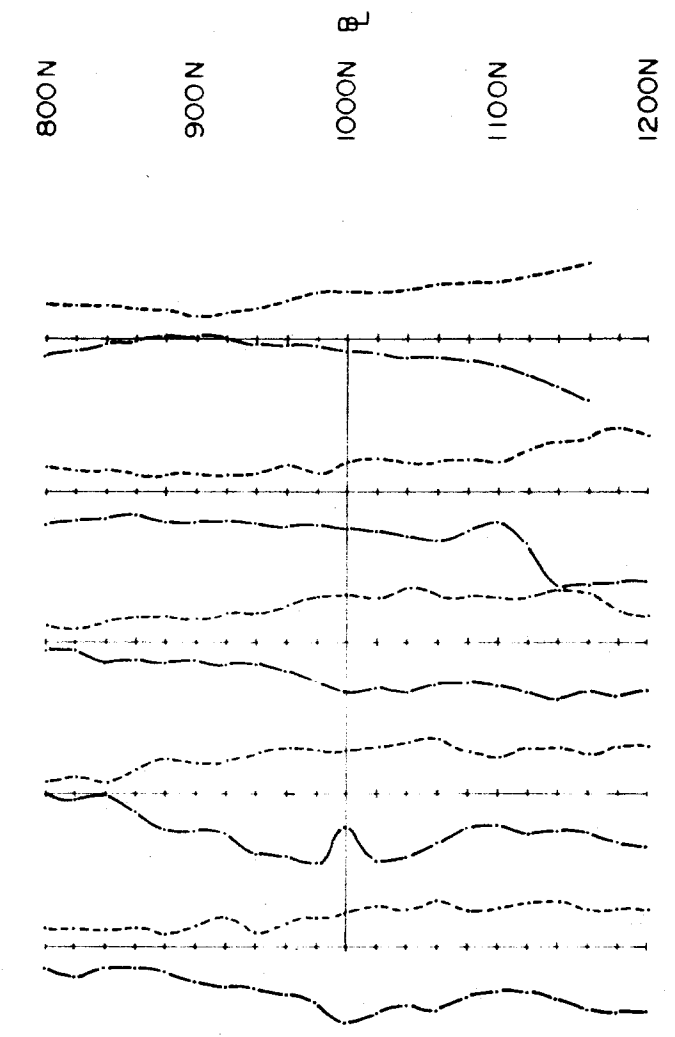
SCALE
1 cm = 50m



REVISED	Mt. McKENDRICK	
<i>AS</i>		
PROJ No 59	SURVEY BY C.R.	DATE 84-09
NTS 93L15	DRAWN BY skelittle	SCALE 1:5000
DWG. No	NORANDA EXPLORATION	
Fig. 13	OFFICE: Vancouver	

GEOLOGICAL BRANCH
ASSESSMENT REPORT

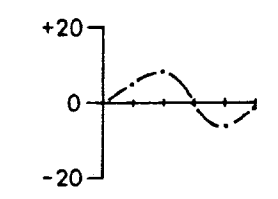
13,525



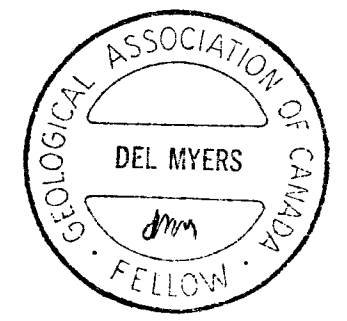
LEGEND

INSTRUMENT : GEONICS EM 16
 STATION : SEATTLE (NLK)
 FREQUENCY : 24.8 KHz
 IN PHASE : - - - - -
 OUT PHASE :
 VERTICAL SCALE : 1cm. = 20%
 CONDUCTOR AXIS :

SURVEY DATE : 84-07-30
 OPERATOR : B.K.



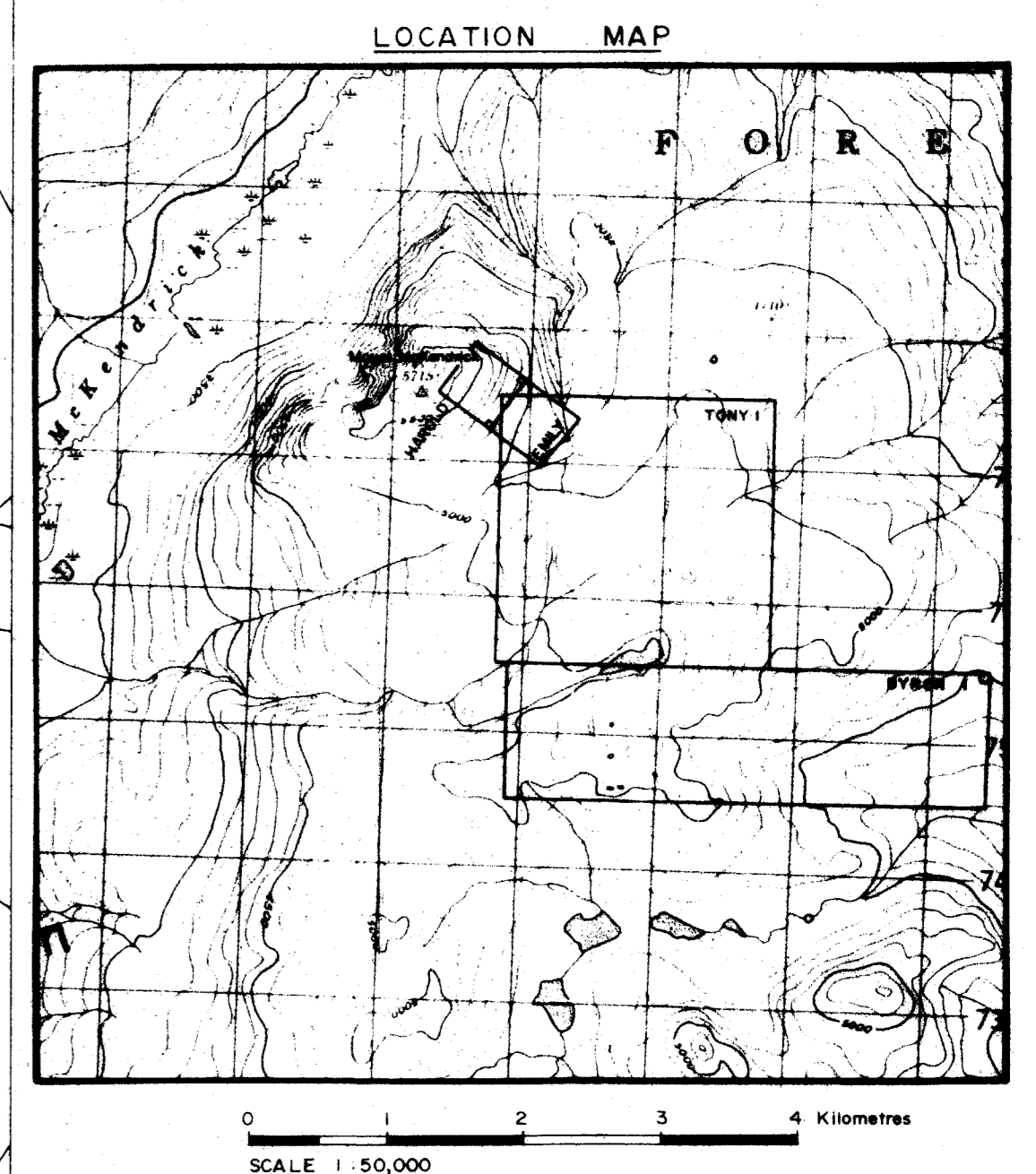
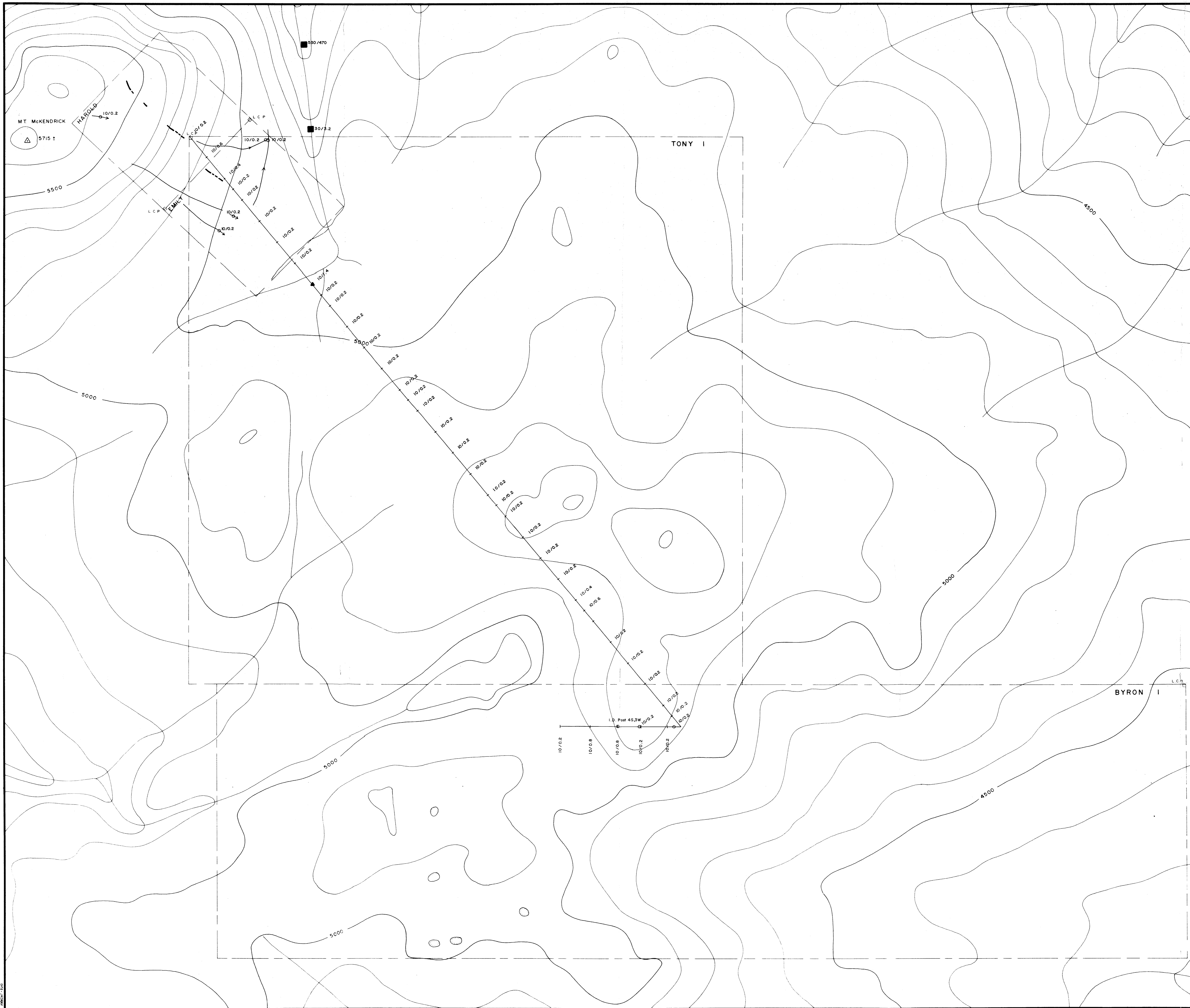
CROSSOVER SENSE



SCALE
1 cm = 50m



REVISED	Mt. McKENDRICK <u>V.L.F. SURVEY</u>	
<i>BK</i>		
PROJ. No. 59	SURVEY BY: B.K.	DATE: 84-09
N.T.S. 93 L 15	DRAWN BY: skeLillie	SCALE: 1:5000
DWG No Fig 14	NORANDA EXPLORATION OFFICE: Vancouver	

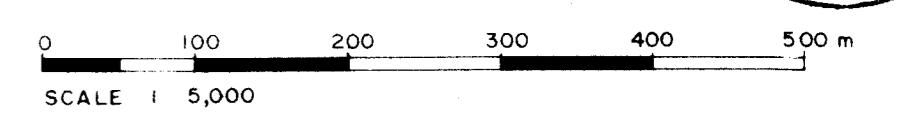
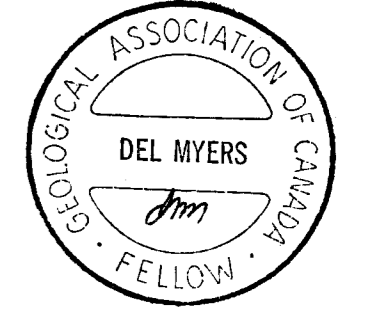


LEGEND

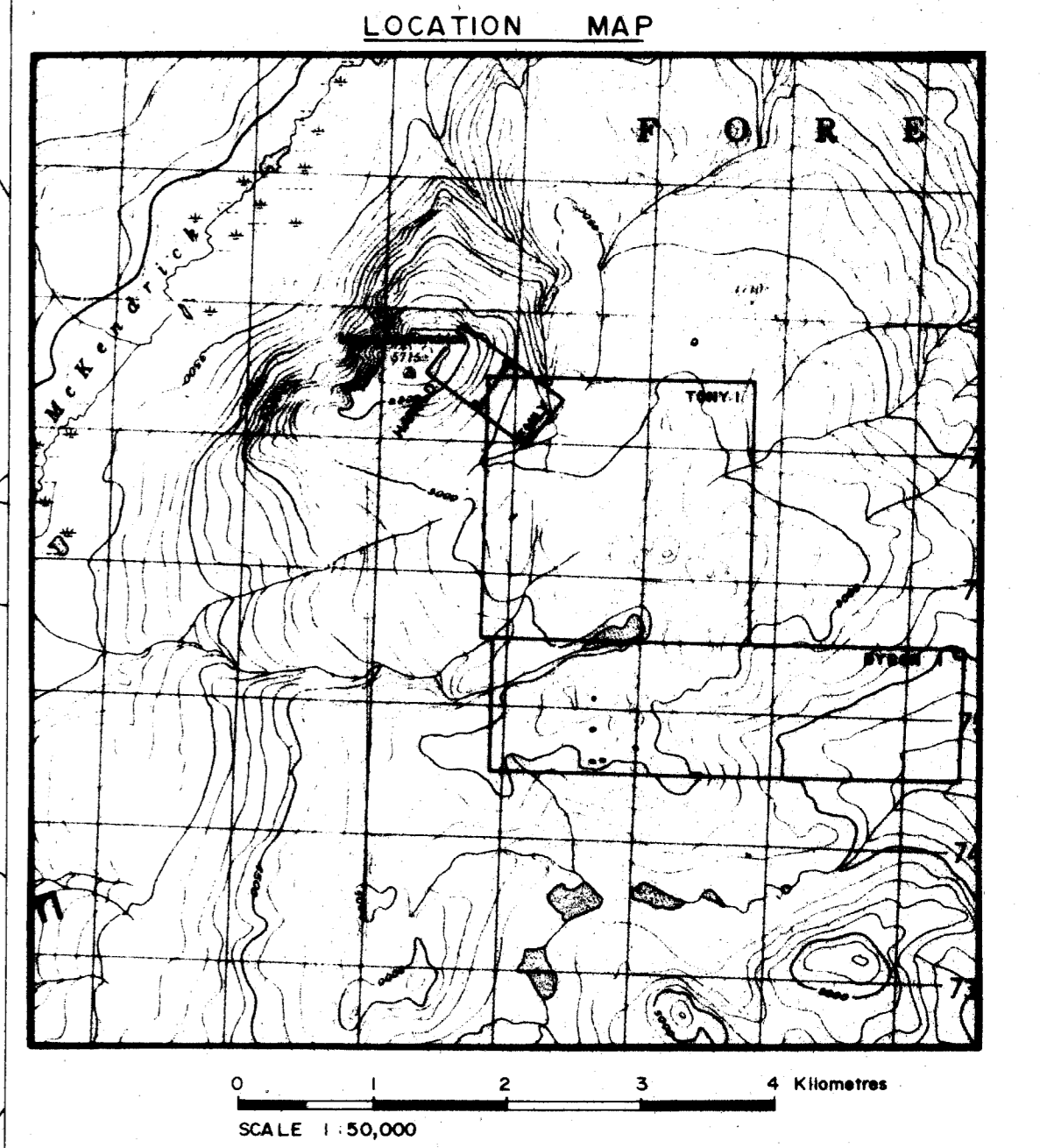
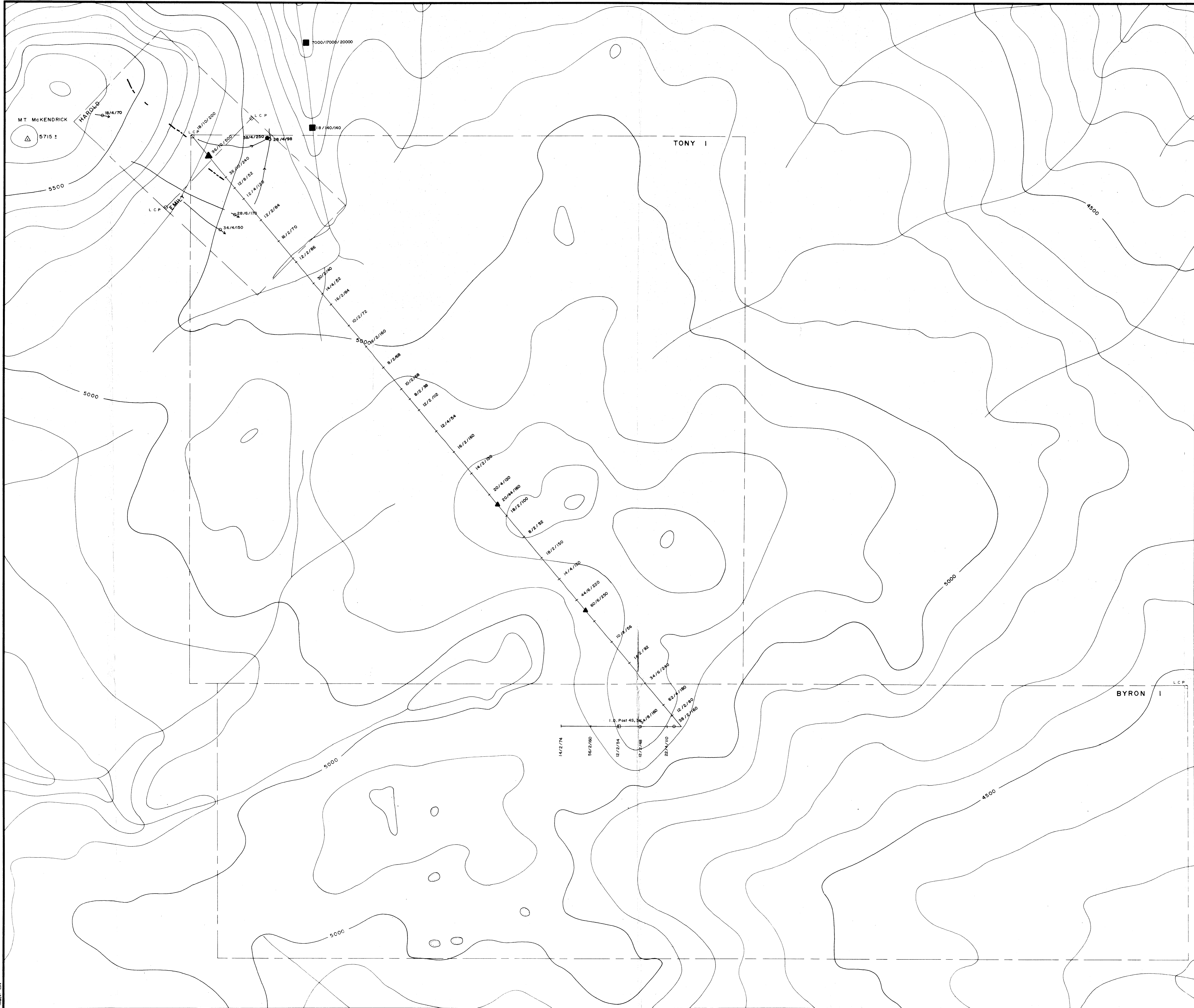
- Quartz vein - inferred, definite
- + 10/0.2 Soil sample assay Au(ppb), Ag(ppm.)
- 10/0.2 Silt sample assay Au(ppb), Ag(ppm.)
- 30/3.2 Rock sample assay Au(ppb), Ag(ppm.)
- L.C.P. Claim post and claim boundary
- ▲ Weakly anomalous soil, rock
- Strongly anomalous soil, rock

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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REVISED	MT. MCKENDRICK - L'ORSA OPTION	
<i>OB</i>	SOILS, SILTS, ROCKS GEOCHEM RESULTS Au(ppb), Ag(ppm.)	
PROJ. No. T-96	SURVEY BY: D. SHEARER	DATE: JULY, 1984
N.T.S.	DRAWN BY: S.K.B.	SCALE: 1:5000
DWG. No.	NORANDA EXPLORATION	
Fig. 7	OFFICE: PRINCE GEORGE, B.C.	

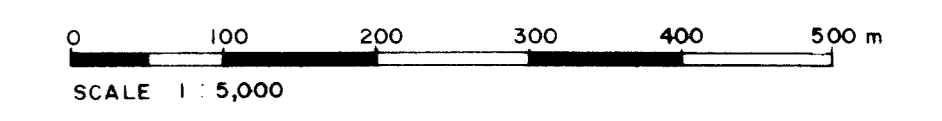
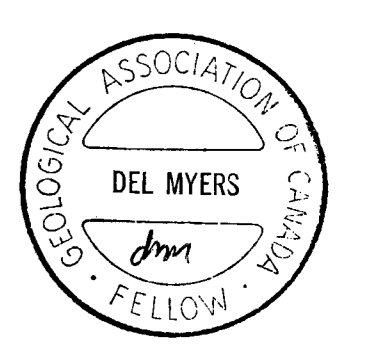


LEGEND

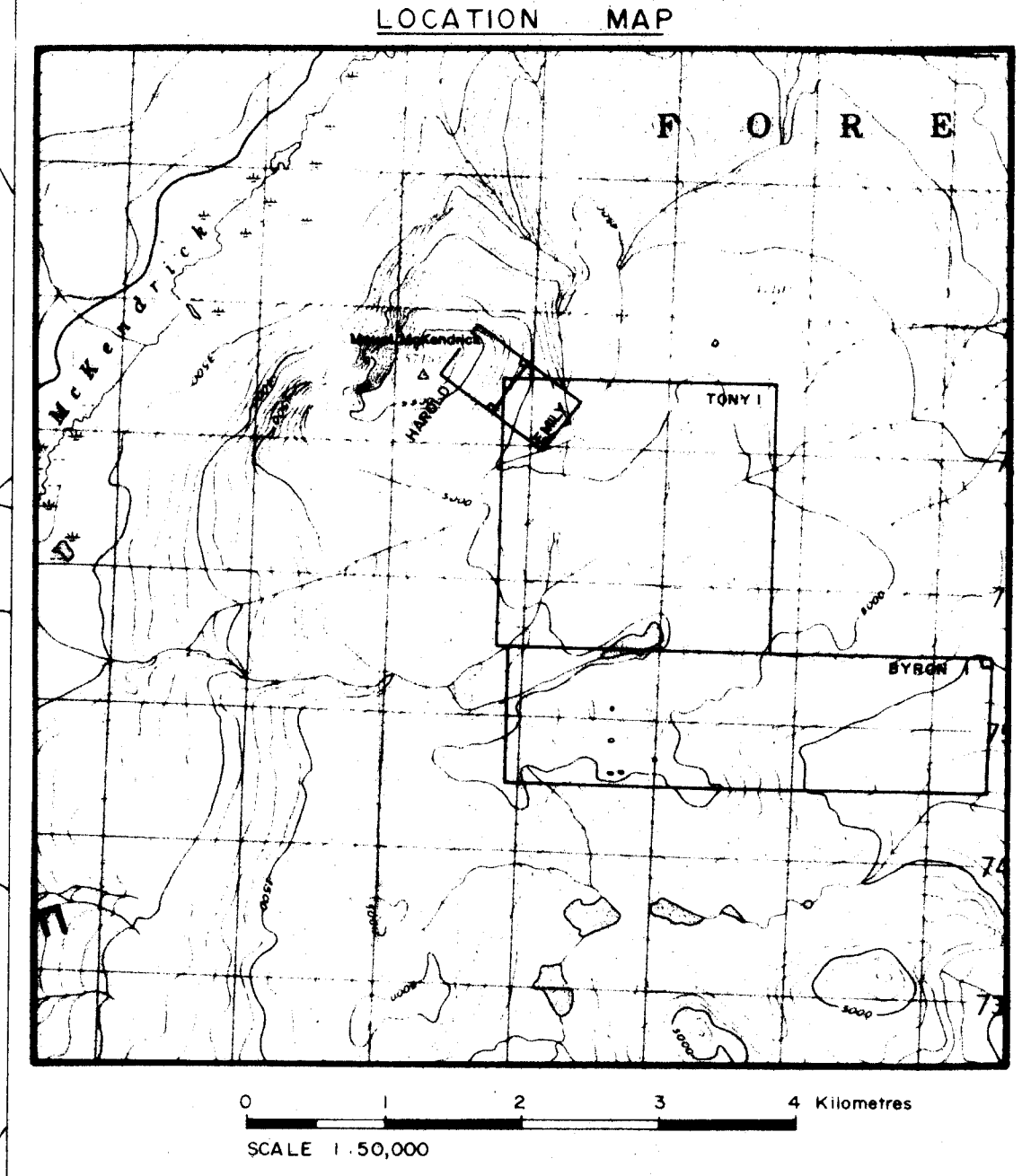
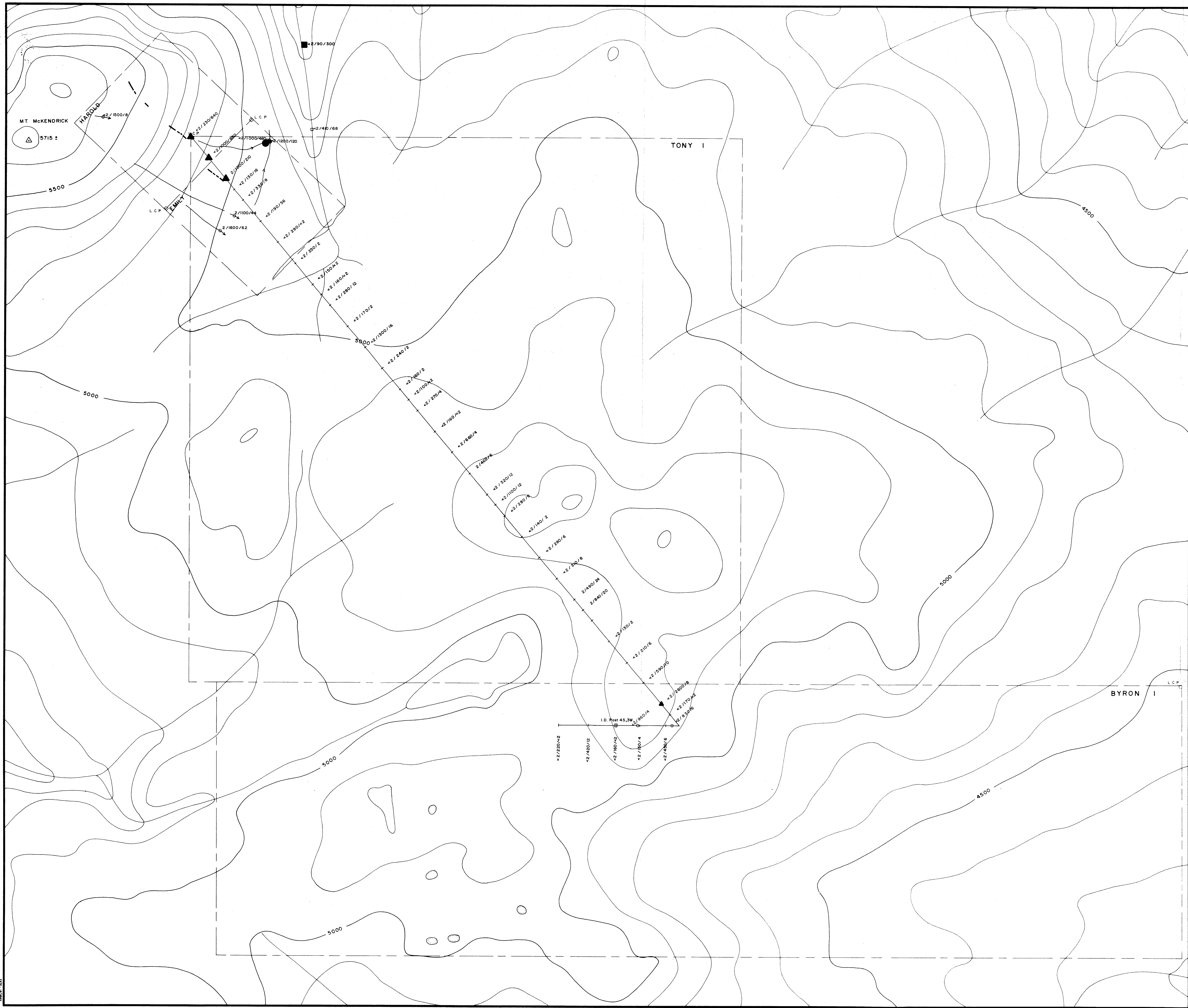
- Quartz vein - inferred, definite
- 30/2/140 Soil sample assay Cu/Pb/Zn (ppm.)
- 34/8/180 Silt sample assay Cu/Pb/Zn (ppm.)
- 18/40/140 Rock sample assay Cu/Pb/Zn (ppm.)
- L.C.P. Claim post and claim boundary
- ▲ ● Weakly anomalous soil, rock, silt
- ▲ ● Strongly anomalous soil, rock, silt

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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REVISED <i>Ab</i>	MT. McKENDRICK - L'ORSA OPTION	
	SOILS, SILTS, ROCKS GEOCHEM RESULTS Cu/Pb/Zn in ppm.	
PROJ. No. T-56	SURVEY BY: D. SHEARER	DATE: JULY, 1984
N.T.S. 93L/15E	DRAWN BY: S.K.B.	SCALE: 1:5000
DWG. No.	NORANDA EXPLORATION	
Fig. 8	OFFICE: PRINCE GEORGE, B.C.	

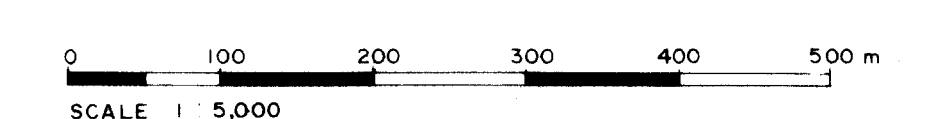
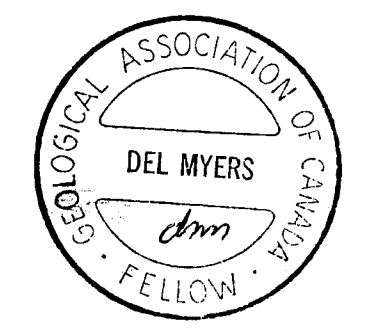


LEGEND

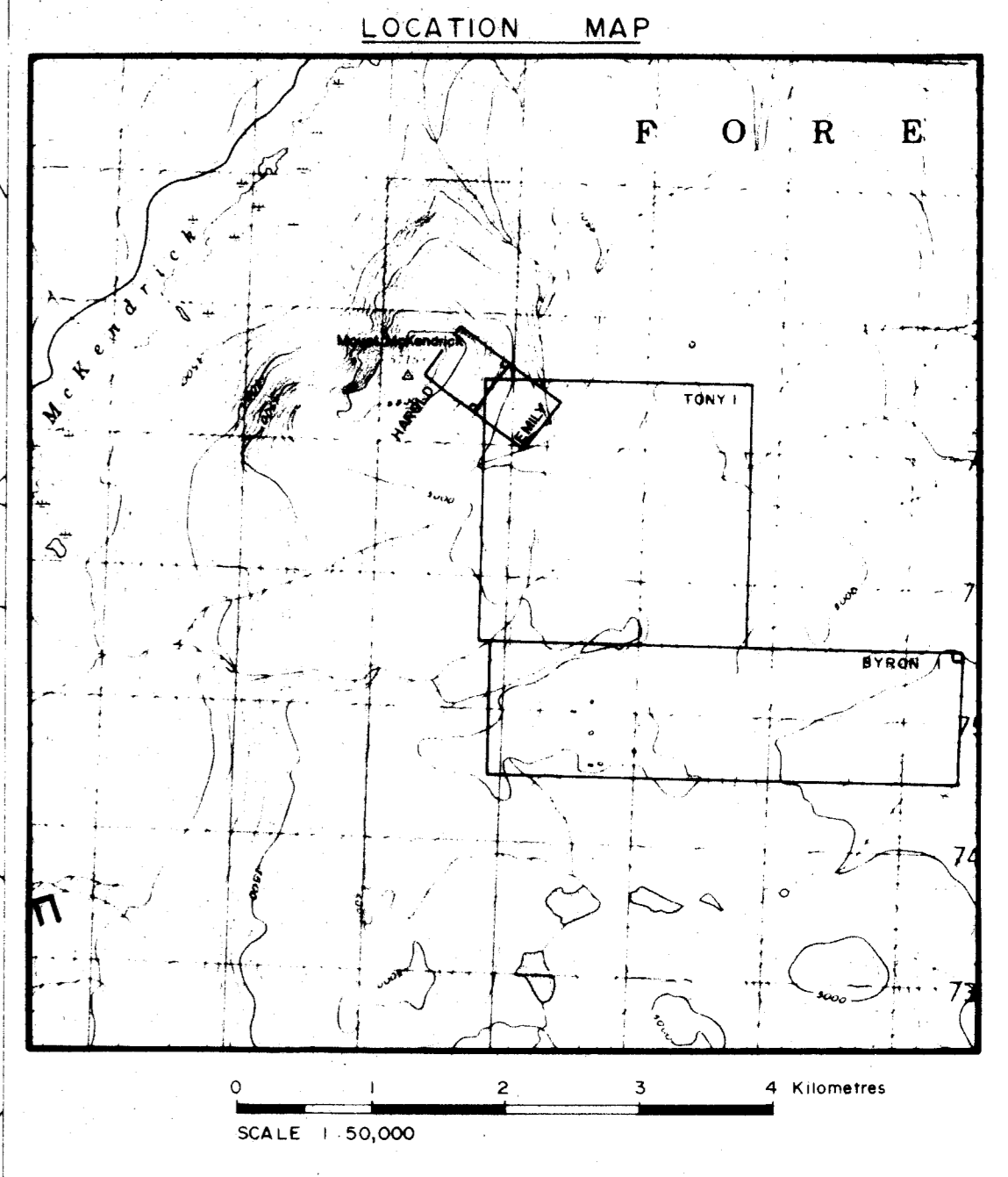
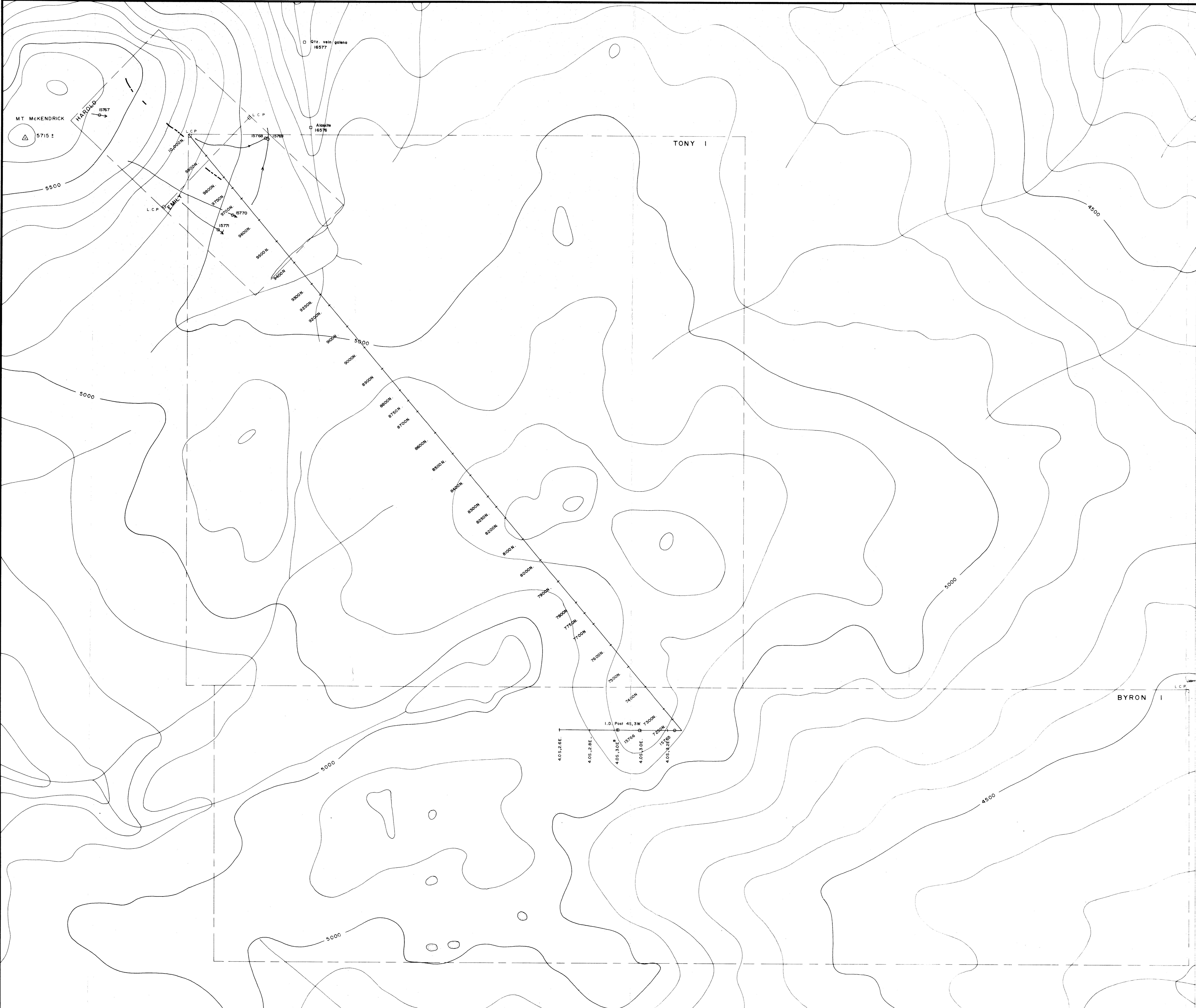
- Quartz vein - Inferred, definite
- 2/180/2 Soil sample assay Mo/Mn/As (ppm.)
- 2/1500/8 Silt sample assay Mo/Mn/As (ppm.)
- 2/90/300 Rock sample assay Mo/Mn/As (ppm.)
- L.C.P. Claim post and claim boundary
- ▲ Weakly anomalous soil, rock, silt
- Strongly anomalous soil, rock, silt

GEOLOGICAL BRANCH
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REVISED	MT. McKENDRICK - L'ORSA OPTION	
<i>lb</i>	SOILS, SILTS, ROCKS GEOCHEM RESULTS Mo/Mn/As in ppm.	
PROJ. No. T-56	SURVEY BY: D. SHEARER	DATE: JULY, 1984
N.T.S. 93L/15E	DRAWN BY: S.K.B.	SCALE: 1:5000
DWG. No.	NORANDA EXPLORATION	
Fig. 9	OFFICE: PRINCE GEORGE, B.C.	

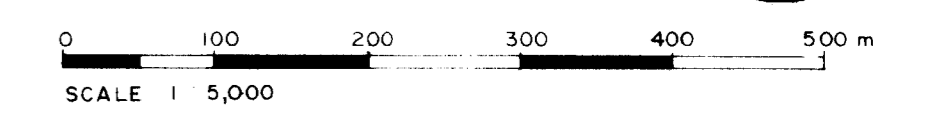
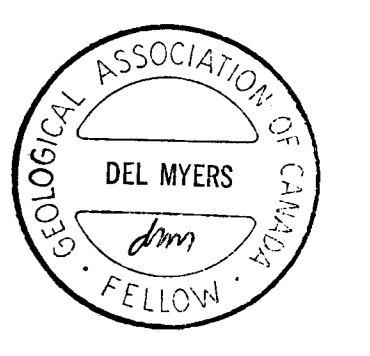


LEGEND

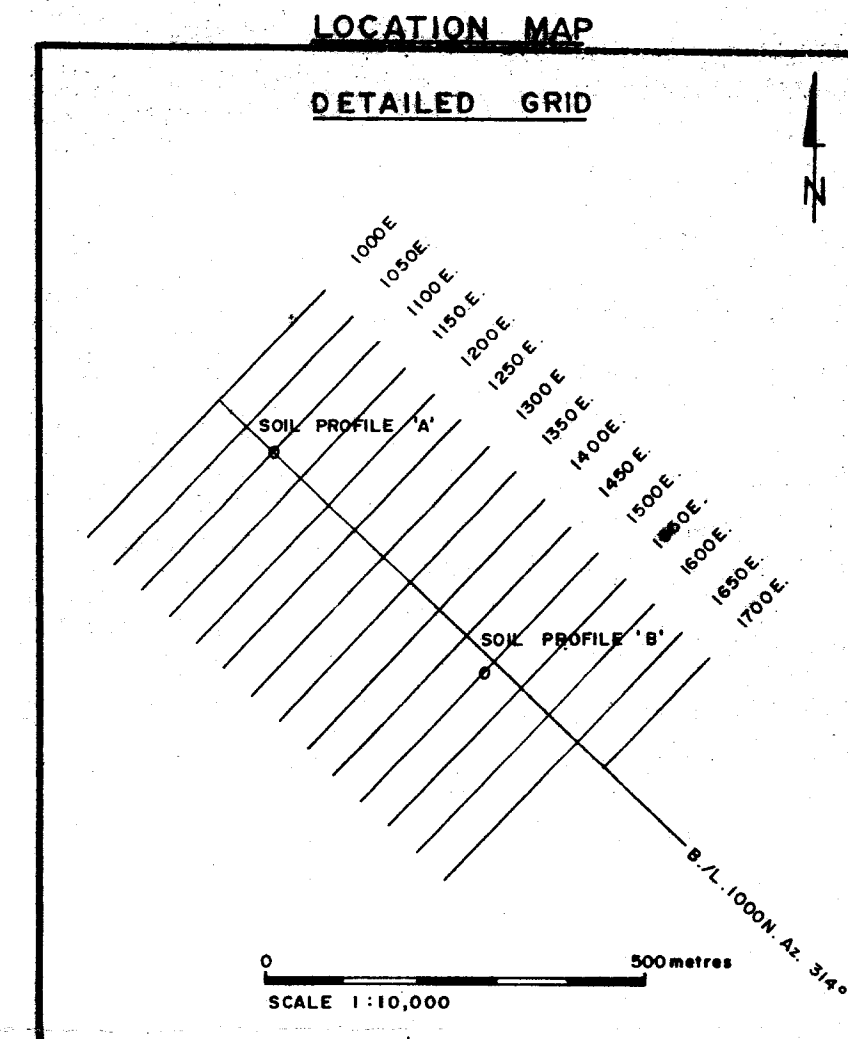
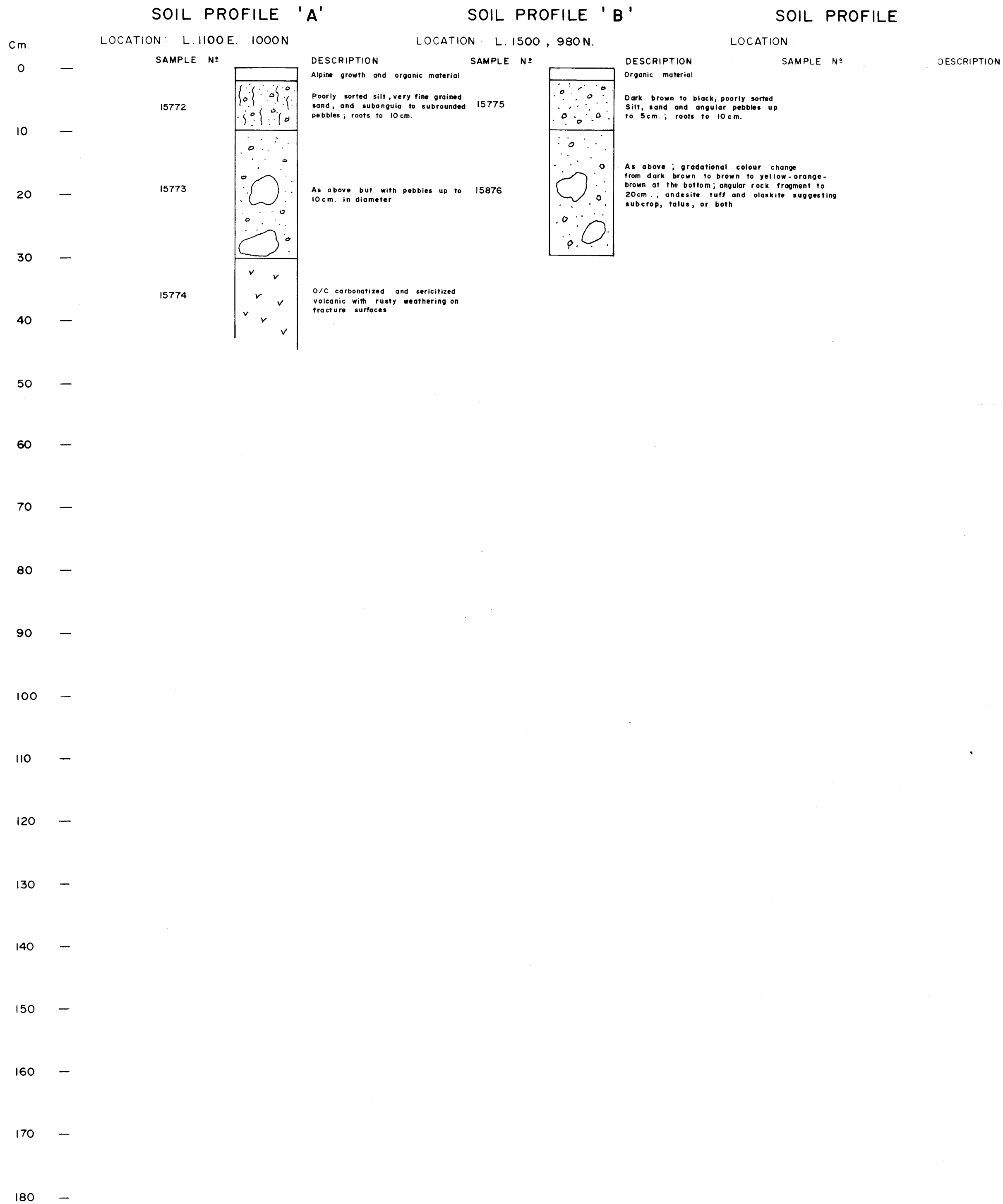
- Quartz vein - inferred, definite
- | Soil sample location
- Silt sample location
- Rock sample location
- L.C.P. Claim Post and claim boundary

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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REVISED	MT. McKENDRICK - L'ORSA OPTION	
<i>Ob</i>	SOIL, SILT, ROCK GEOCHEM SAMPLE LOCATIONS	
PROJ. No. T-56	SURVEY BY D. SHEARER	DATE JULY, 1984
N.T.S. 93L/15E	DRAWN BY S.K.B.	SCALE 1:5000
DWG No.	NORANDA EXPLORATION	
Fig. 10	OFFICE PRINCE GEORGE, B.C.	

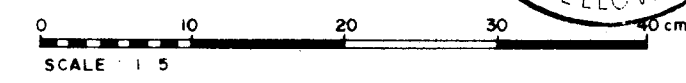
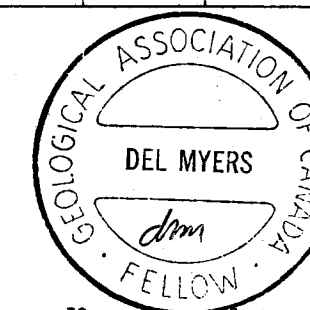


**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

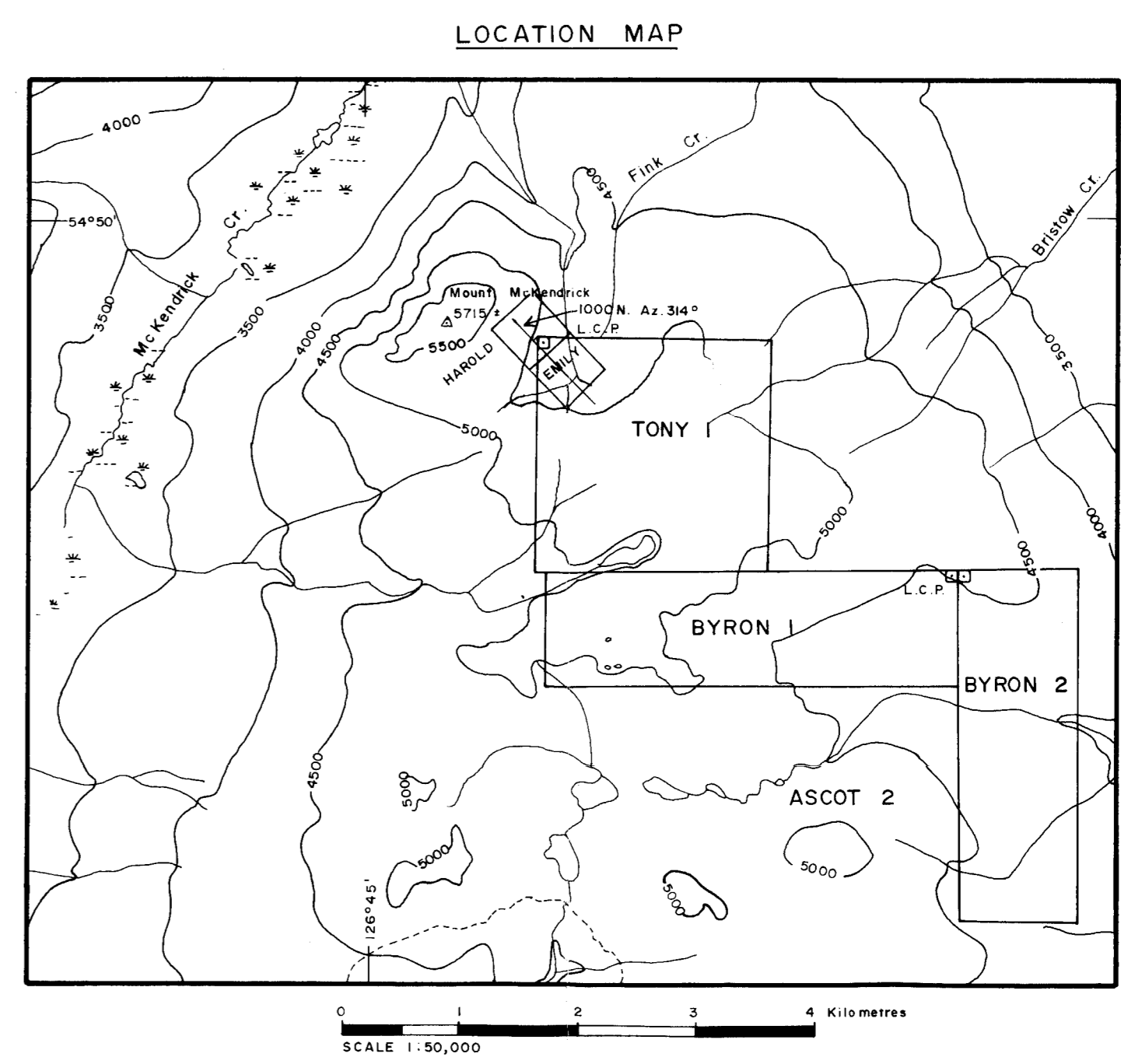
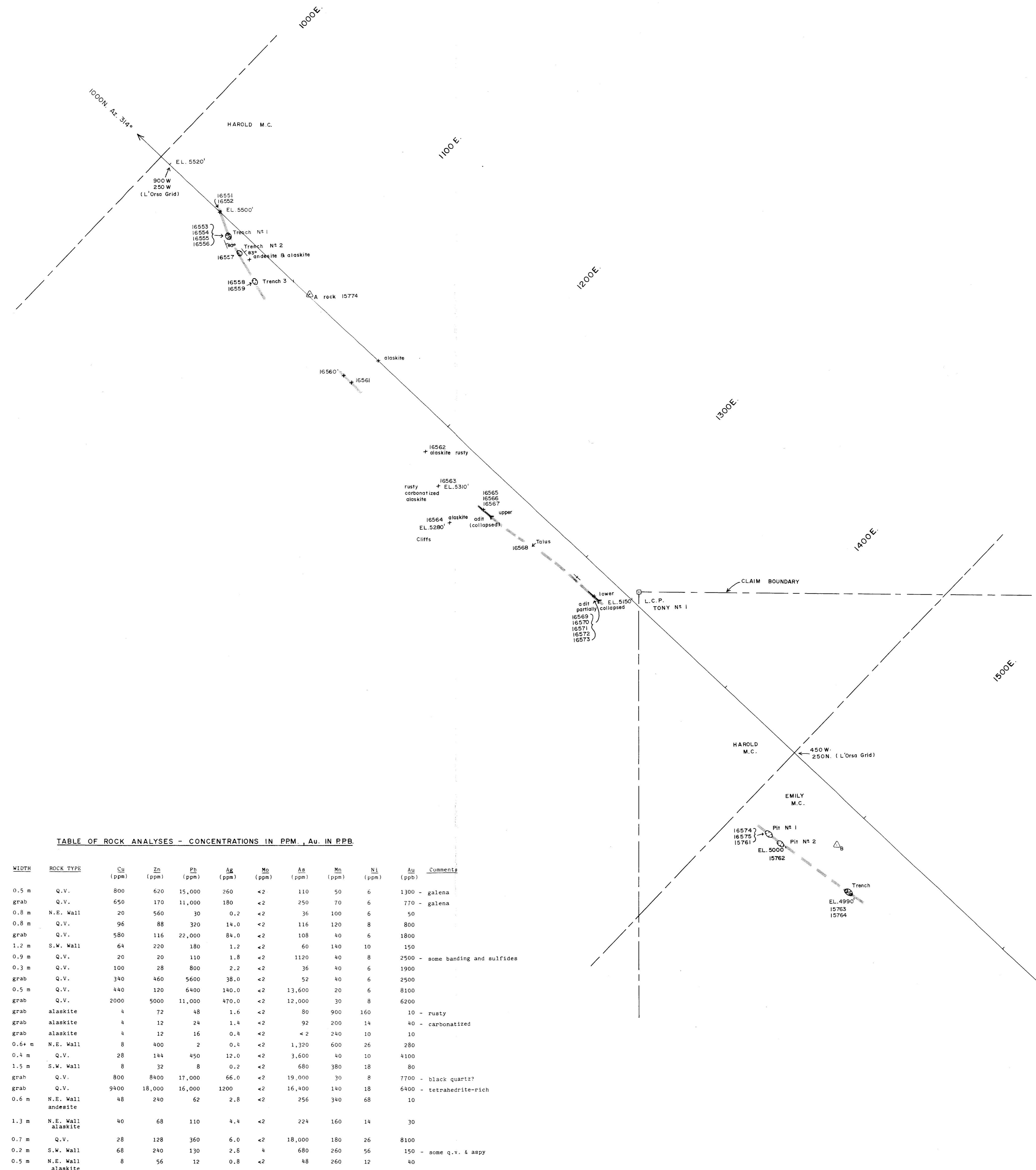
13,525

TABLE OF GEOCHEM ASSAYS

	SAMPLE N°	Au(ppb)	Ag(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	Mof(ppm)	As(ppm)	Mn(ppm)
PROFILE 'A'	Soil 15772	10	0.2	10	2	42	< 2	< 2	330
	Soil 15773	10	0.2	14	2	60	< 2	10	290
	Rock 15774	10	0.2	6	2	60	2	< 2	520
PROFILE 'B'	Soil 15775	60	0.2	36	4	130	< 2	54	680
	Soil 15876	10	0.2	34	4	130	2	380	420



REVISED FEB. 1985	MT. McKENDRICK	
	SOIL PROFILES 'A' ; 'B'	
PROJ. No. 59 N.T.S. 93L/15E	SURVEY BY: D. Shearer DRAWN BY: S.K.B.	DATE: JULY 1984 SCALE: 1:5
DWG No. Fig. 11	NORANDA EXPLORATION OFFICE PRINCE GEORGE, B.C.	



LEGEND

- X Small outcrop
- Trench
- Claim post, Claim boundary
- 16551 Rock sample N1
- EL. 5520 Elevation in feet
- 34° Strike and dip - vertical, inclined
- Adit
- Quartz vein - inferred, definite
- △ Soil Profile A

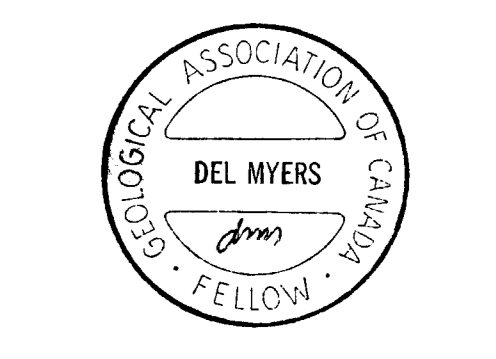
TABLE OF ROCK ANALYSES - CONCENTRATIONS IN PPM, Au. IN PPB

SAMPLE #	WORKING	WIDTH	ROCK TYPE	Cu (ppm)	Zn (ppm)	Pb (ppm)	Ag (ppm)	Mo (ppm)	As (ppm)	Mn (ppm)	Ni (ppm)	Au (ppb)	Comments
16551	Outcrop	0.5 m	Q.V.	800	620	15,000	260	<2	110	50	6	1300	galena
16552	Outcrop	grab	Q.V.	650	170	11,000	180	<2	250	70	6	770	galena
16553	Trench 1	0.8 m	N.E. Wall	20	560	30	0.2	<2	36	100	6	50	
16554	Trench 1	0.8 m	Q.V.	96	88	320	14.0	<2	116	120	8	800	
16555	Trench 1	580	Q.V.	580	116	22,000	84.0	<2	108	40	6	1800	
16556	Trench 1	1.2 m	S.W. Wall	64	220	180	1.2	<2	60	140	10	150	
16557	Trench 2	0.9 m	Q.V.	20	20	110	1.8	<2	1120	40	8	2500	some banding and sulfides
16558	Trench 3	0.3 m	Q.V.	100	28	800	2.2	<2	36	40	6	1900	
16559	Trench 3	grab	Q.V.	340	460	5600	38.0	<2	52	40	6	2500	
16560	Outcrop A	0.5 m	Q.V.	440	120	6400	140.0	<2	13,600	20	6	8100	
16561	Outcrop B	grab	Q.V.	2000	5000	11,000	470.0	<2	12,000	30	8	6200	
16562	Outcrop	grab	alaaskite	4	72	48	1.6	<2	80	900	160	10	rusty
16563	Outcrop	grab	alaaskite	4	12	24	1.4	<2	92	200	14	40	carbonatized
16564	Outcrop	grab	alaaskite	4	12	16	0.4	<2	4	240	10	10	
16565	upper portal	0.64 m	N.E. Wall	8	400	2	0.4	<2	1,200	600	26	280	
16566	upper portal	0.8 m	Q.V.	28	144	450	12.0	<2	3,600	40	10	4100	
16567	upper portal	1.5 m	S.W. Wall	8	32	8	0.2	<2	680	380	18	80	
16568	Talus	grab	Q.V.	800	8400	11,000	66.0	<2	19,000	30	8	7700	black quartz?
16569	lower portal	grab	Q.V.	9400	18,000	16,000	1200	<2	16,400	140	18	6400	tetrahedrite-rich
16570	lower portal	0.6 m	N.E. Wall andesite	48	240	62	2.8	<2	256	340	68	10	
16571	lower portal	1.3 m	N.E. Wall alaaskite	40	68	110	4.4	<2	224	160	14	30	
16572	lower portal	0.7 m	Q.V.	28	128	360	6.0	<2	18,000	180	26	8100	
16573	lower portal	0.2 m	S.W. Wall	68	240	130	2.8	4	680	260	56	150	some q.v. & aspy
16574	pit	0.5 m	N.E. Wall alaaskite	8	56	12	0.8	<2	48	260	12	40	
16575	pit	0.6 m	Q.V.	40	520	260	2.4	<2	4	140	8	450	
15761	pit	0.1+ m	S.W. Wall alaaskite	20	140	2	1.6	<2	12	160	20	2700	altered
15762	pit	0.8 m	Q.V.	48	88	170	2.2	<2	4,000	60	10	2400	
15763	pit	0.4 m	Q.V.	8	20	2	0.4	<2	68	40	10	540	
15764	pit	0.3 m	S.W. Wall alaaskite	8	12	2	0.2	<2	4	60	8	160	

* NOTE: Q.V. - Quartz Vein

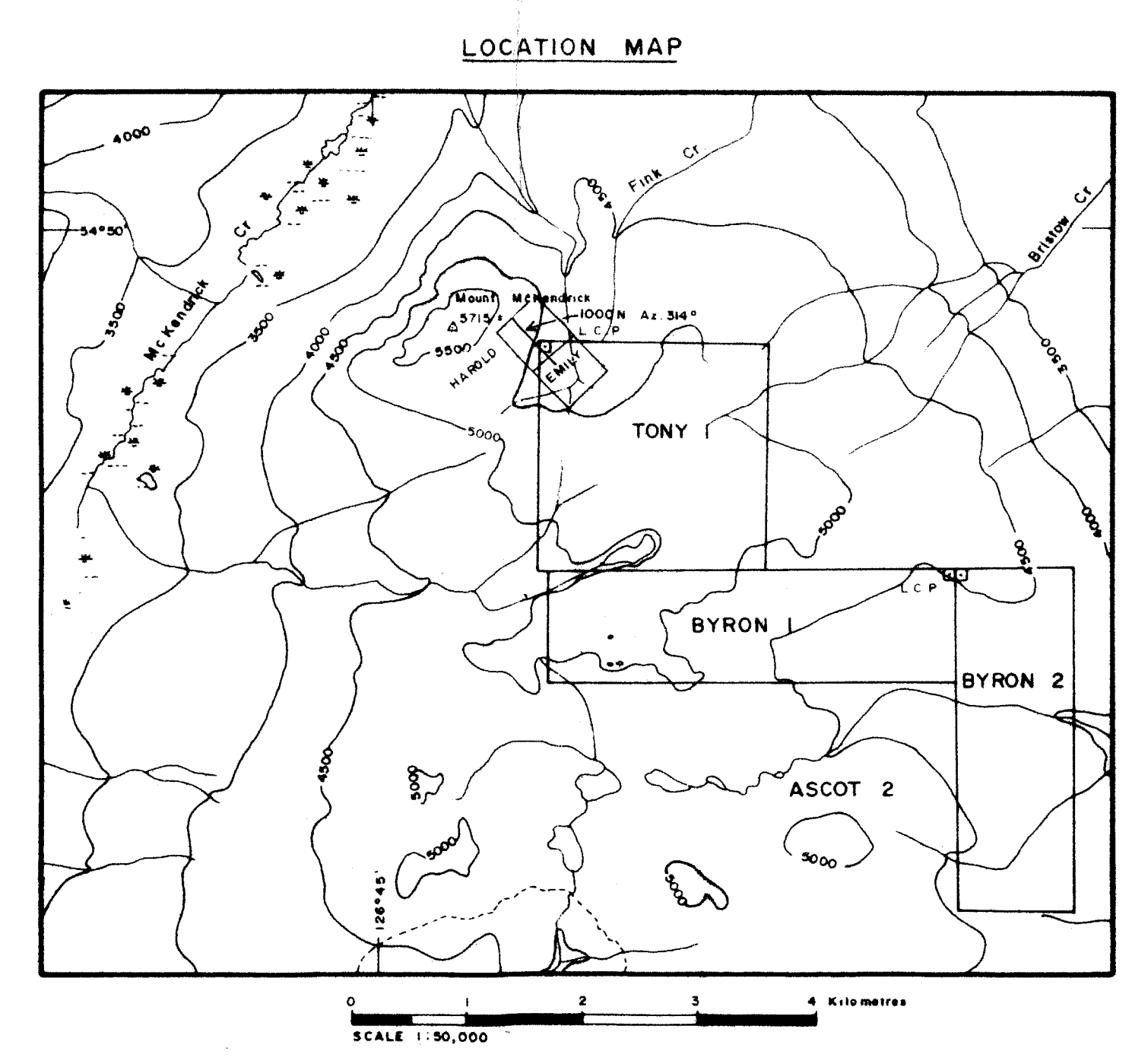
GEOLOGICAL BRANCH
ASSESSMENT REPORT

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0 10 20 30 40 50 60 70 metres
SCALE 1:1,200

REVISED FEB. 1985	MT. MCKENDRICK - L'ORSA OPTION
	PLAN OF WORKINGS AND SAMPLES
PROJ. No. _____	SURVEY BY: DEM.M., D.S. DATE: JULY 30, 1984
N.T.S. 931/15E	DRAWN BY: S.K.B. SCALE: 1:1,000
DWG. No. _____	NORANDA EXPLORATION
Fig. 12	OFFICE: PRINCE GEORGE, B.C.

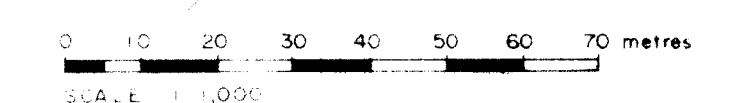
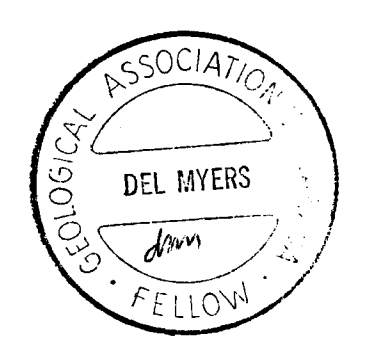


LEGEND

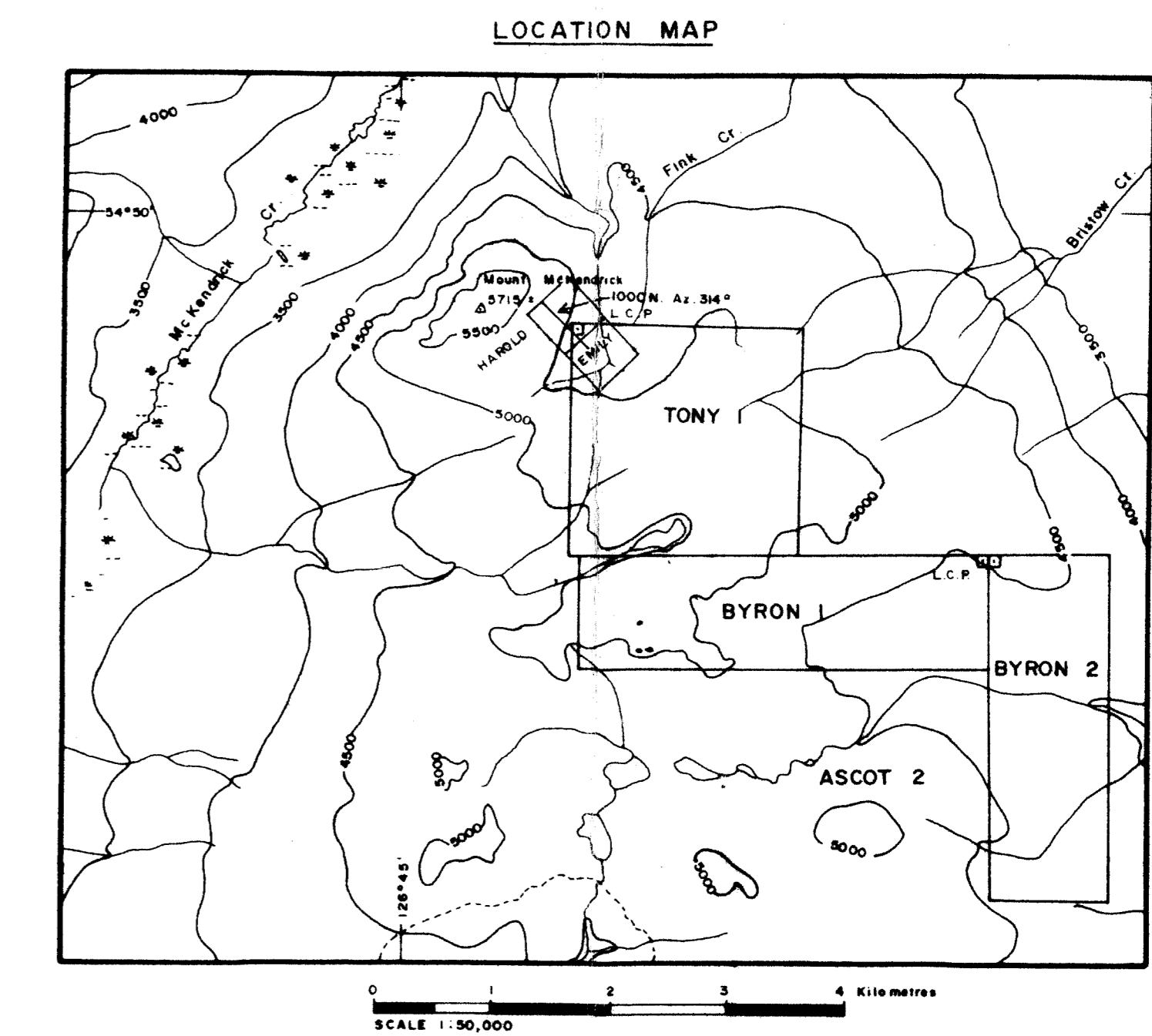
- L.C.P. Claim boundary
- Adit
- Quartz vein - inferred, definite
- Mo. contours, ≥ 5ppm, ≥10ppm
- Mn. contours, ≥ 2000ppm, ≥ 4000ppm

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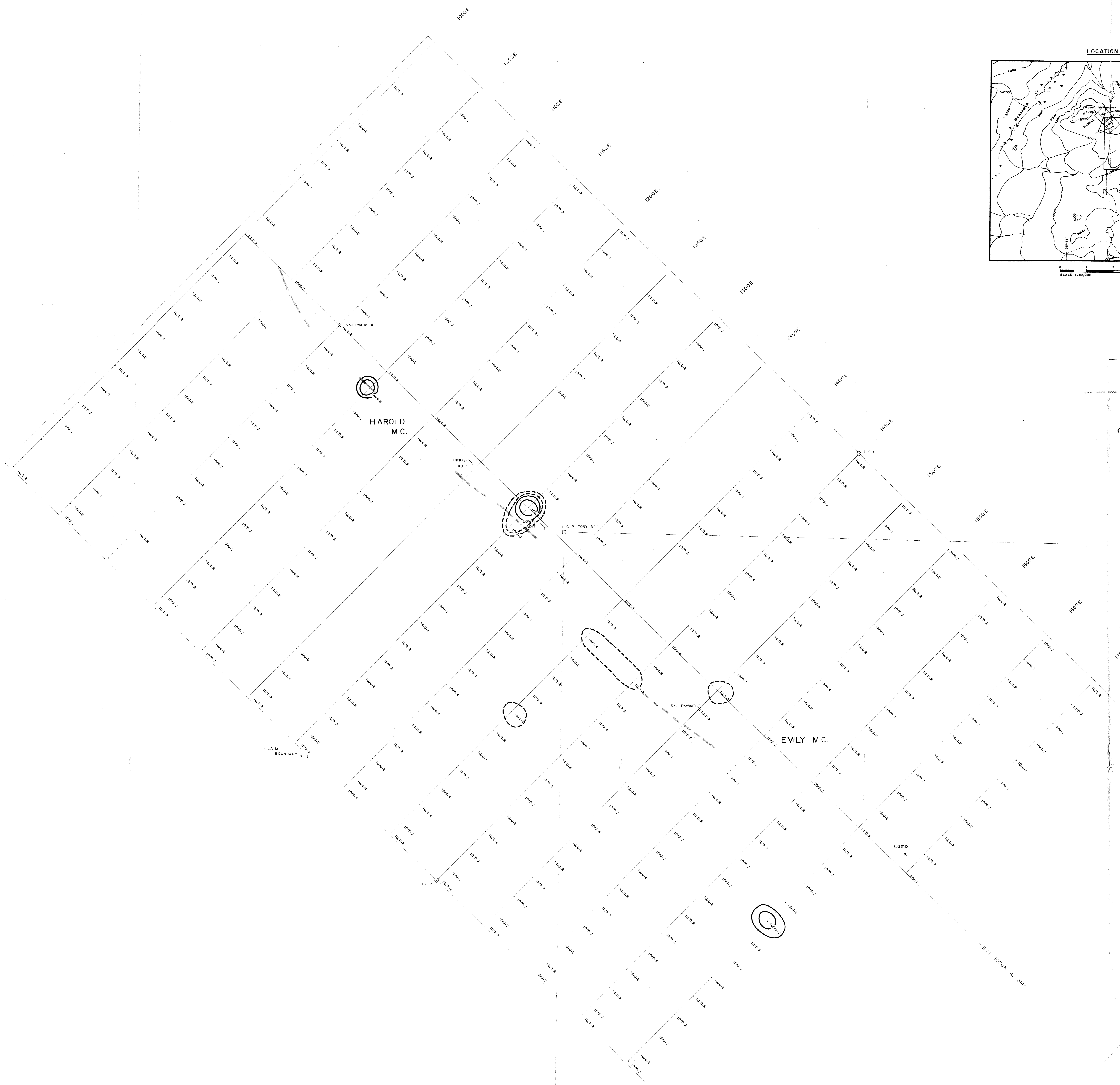


REVISED	MT. MCKENDRICK - L'ORSA OPTION	
FEB 1985	B - HORIZON SOILS	
	GEOCHEMICAL RESULTS	
	MO, MN in ppm.	
PROJ. No. T-26	SURVEY BY: GEM/J.R.S.	DATE: JULY 30, 1984
N.T.S. 33.1/15E	DRAWN BY: S.K.B.	SCALE: 1:1000
DWG. No.	NORANDA EXPLORATION	
Fig. 6	OFFICE: PRINCE GEORGE, B.C.	



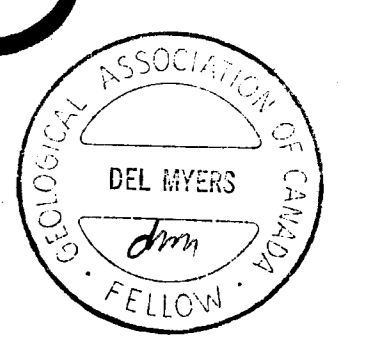
LEGEND

- L.C.P. Claim boundary
- Adit
- Quartz vein - Inferred, definite
- Au contours, ≥ 30ppb, ≥ 60ppb
- Ag contours, ≥ 10ppm, ≥ 2.0ppm

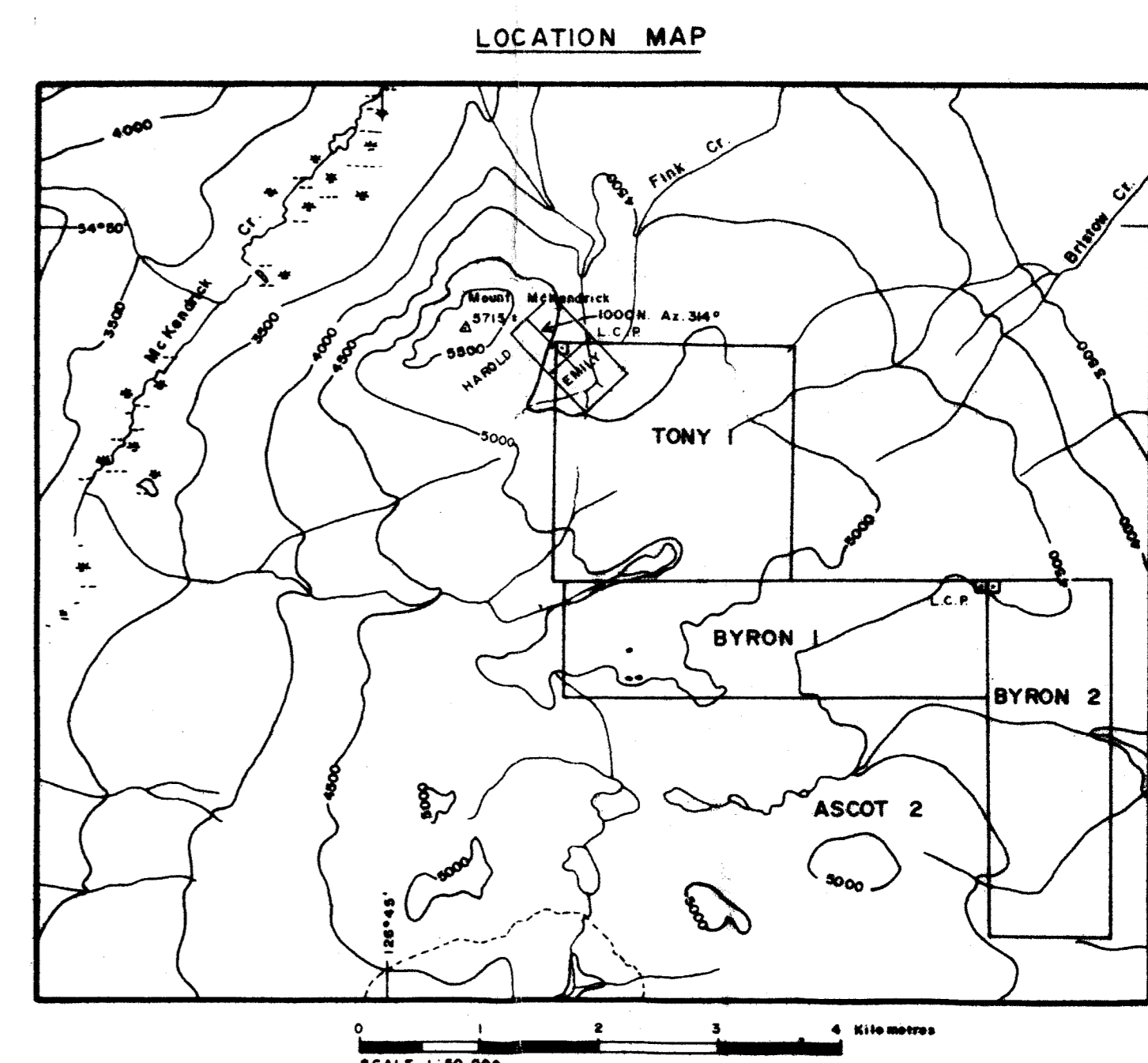
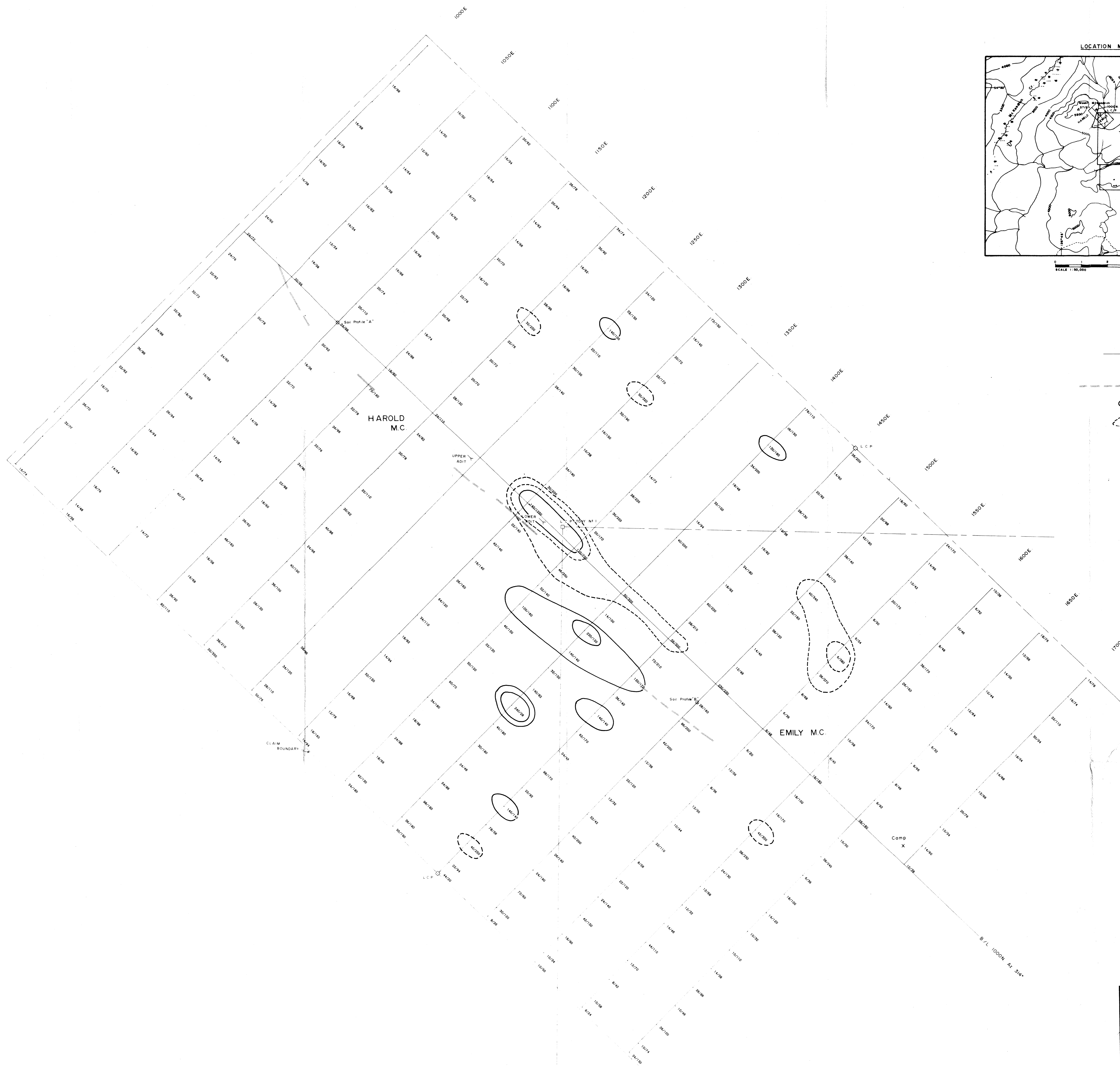


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ASSESSMENT REPORT**

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REVISED FEB. 1985	MT MCKENDRICK - L'ORSA OPTION	
	B - HORIZON SOILS	
	GEOCHEMICAL RESULTS	
	AU, ppb, AG, ppm.	
PROJ. No. T-56	SURVEY BY: DEM. D.S.	DATE: JULY 30, 1984
N.T.S. 93L/15E	DRAWN BY: S.K.B.	SCALE: 1:1000
DWG. No. Fig. 3	NORANDA EXPLORATION	
	OFFICE: PRINCE GEORGE, B.C.	

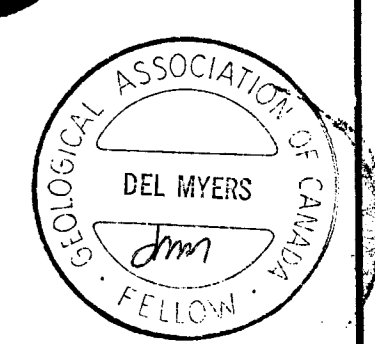


LEGEND

- L.C.P. Claim boundary
- Adit
- Quartz vein - inferred, definite
- Cu contours, ≥ 100ppm, ≥ 200ppm
- Zn contours, ≥ 250ppm, ≥ 500ppm

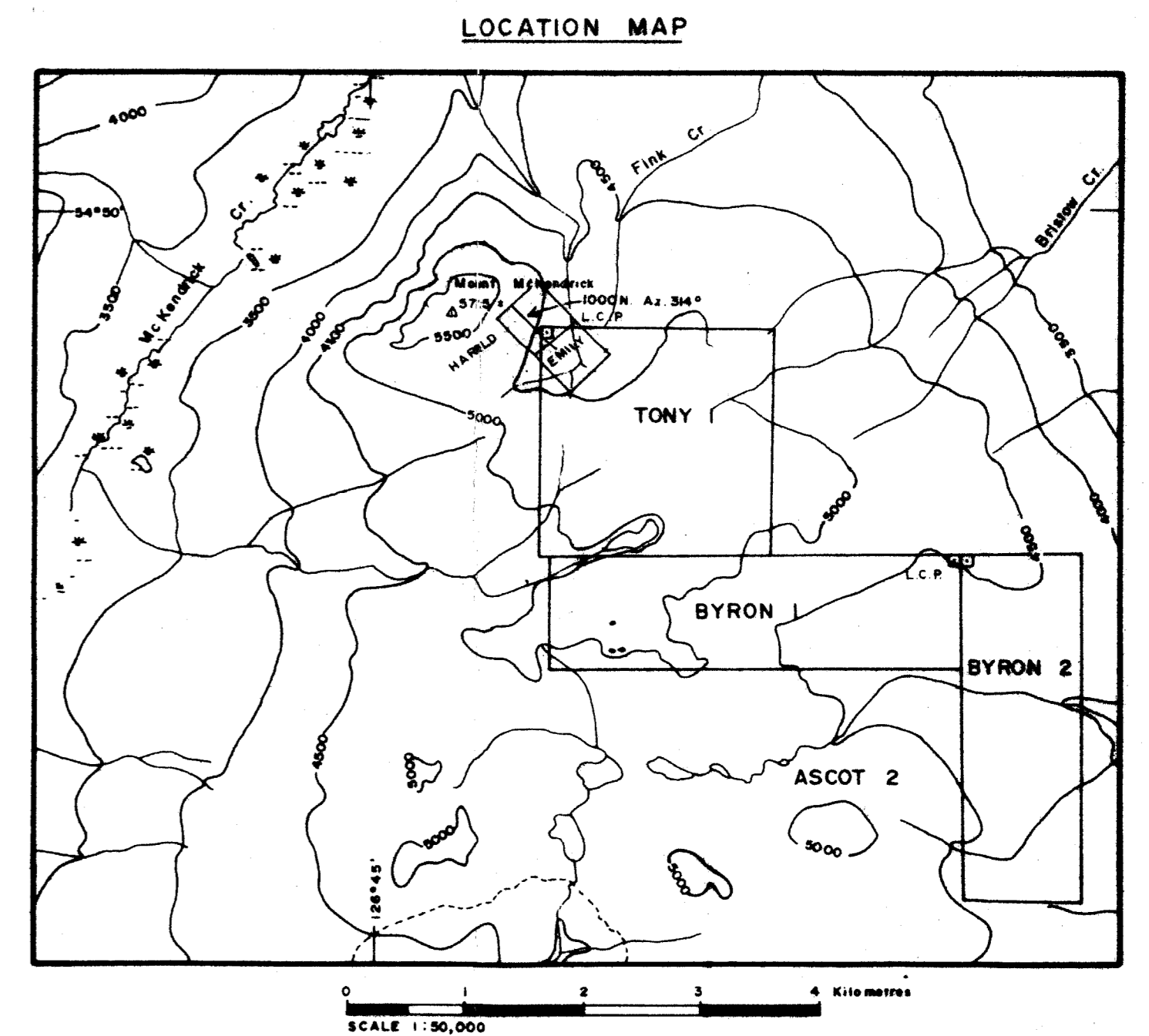
**GEOLOGICAL BRANCH
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SCALE 1:1000

REVISED FEB. 1985	MT MCKENDRICK - L'ORSA OPTION
	B - HORIZON SOILS GEOCHEMICAL RESULTS CU, ZN, in ppm.
PROJ. No. T-56	SURVEY BY: DEM. S. L. P. DATE: JULY 30, 1984
N.T.S. 934/1156	DRAWN BY: S.K.B. SCALE: 1:1000
DWG. No.	NORANDA EXPLORATION
Fig. 4	OFFICE PRINCE GEORGE, B.C.

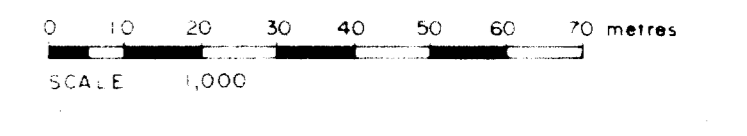
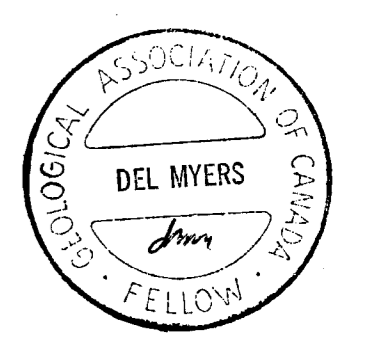


LEGEND

- L.C.P., Claim boundary
- Adit
- Quartz vein - inferred, definite
- Pb. contours, ≥ 20 ppm, ≥ 50 ppm
- As. contours, ≥ 100 ppm, ≥ 200 ppm

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ASSESSMENT REPORT**

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REVISED FEB. 1985	MT. MCKENDRICK - L'ORSA OPTION
<i>AB</i>	B - HORIZON SOILS GEOCHEMICAL RESULTS PB, AS in ppm.
PROJ. No. T-56	SURVEY BY: D.E.M. S.S. DATE: JULY 30, 1984
N.T.S. 931/15E	DRAWN BY: S.K.B. SCALE: 1:1000
DWG. No.	NORANDA EXPLORATION
Fig. 5	OFFICE: PRINCE GEORGE, B.C.