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PROGRESS REPORT

EXPLORATION LICENCE 1/63

Waratah, Tasmania

Progress of surface exploration work conducted
by

COMINCO EXPLORATION PTY. LTD.

on behalf of

CLEVELAND TIN N.L.

for the six months ending
31st December 1973

By: R.V. Sale
13 February 1974

Submitted to support
renewal of EL 1/63
from 11 February 1974

F.L. Hunt
Manager
Cominco Exploration Pty. Ltd.

1. SUMMARY

This report covers the assessment of the geochemical programme completed in the 1972/73 summer field season in the western portion of EL 1/63 and lease 27M/71. Results of the concurrent geological programme were fully covered in the previous six monthly progress report. This report also outlines details of the 1973/74 summer field programme currently underway. This programme is designed to cover a much larger area of EL 1/63 than previously attempted.

2. INTRODUCTION

In August 1971, Cominco Ltd. acquired 54% equity in Aberfoyle Limited. Subsequently, Cominco Exploration Pty. Ltd. were appointed exploration consultants to the Aberfoyle Group of Companies, including Cleveland Tin N.L.

Lease 27M/71 (previously 43M/66) and surrounding EL 1/63 are 100% owned by Cleveland Tin N.L. Previous names are still in use, viz:

i) around Cleveland Mine (Sn Cu) ore and/or mineralised zones - Halls, Henrys, Khaki, Lucks, Smithys, Battery

ii) within EL 1/63 (as at December 1973) mineralised locations:

Washington Hey (Ag Pb)

Washington Extended (Ag Pb)

Badger Prospect (Sn)

EL 1/63 is granted for six monthly intervals, with the renewal date being February 11, 1974.

The area is located at latitude $41^{\circ}28'S$, longitude $145^{\circ}24'E$, and the mine township is Luina, approximately 98 kms by sealed road from the Tasmanian north coast port of Burnie.

Previous Exploration

i) By Cominco prior to current programme

Previous work, including geologic mapping designed to investigate relationships between similar mineralisation at Cleveland and Mt. Bischoff was reported by Ransom and Simpson (1973) - previous 6-monthly report.

ii) By others prior to Cominco involvement

Considerable line cutting and soil sampling was completed prior to 1971. Maps CT 128 A,B and C are compilations of this work, together with Cominco work. Unfortunately, pre 1971 soil samples have been destroyed, making it impossible to standardize analytical and sample preparation procedure. The latter is considered to be significant and will be discussed further in the section on geochemistry.

Objectives

The objective of work in the six months under review was to assess previous geochemistry and geology and plan work for the 73/74 summer season. Subsequent to this review, programmes of soil, stream sediment and stream water geochemistry were planned to cover the major part of the EL. These programmes are based on the recognition of a zoned mineralogical halo surrounding the Cleveland ore body, and complement the earlier geological programme.

3, EXPLORATION AND DEVELOPMENT

A. Reconnaissance and Research

Mineralogical zoning, where developed, has long been recognised as a valuable aid in ore search. A zonal pattern at Cleveland has been recognised for many years and is now being investigated in the course of an M.Sc. study. This study follows on from preliminary studies of Zn distribution carried out earlier.

Zonal studies of Sn-sulphide bodies of similar type to those in N.W. Tasmania have been pursued in the USSR where successful prediction to depths of 500 metres has been based on understanding this distribution

pattern (Orchinnika and Grigoryan, 1971).

The zoning is suspected to be a reflection of a pneumatolytic/metamorphic aureole around granitic intrusives with genetic as well as spatial significance.

B. Prospecting

Nil, outside the geochemical programme.

C. Geological Mapping

Geological mapping was planned as a routine adjunct to geochemical sampling. It is in progress, as illustrated on maps CT 128 A,B and C.

d. Geochemical Work

1) Programme Followed

Compilation of all existing data, considered reliable, constituted the major programme. No further soil samples were collected, however, a limited fluoride-in-water orientation programme was completed. Analytical results (emission spec) for an additional 339 samples over those reported previously were received.

An attempt to reach bedrock beneath a strong Sn, Cu, Ag, Bi anomaly in Deep Creek alluvials was not successful. The alluvials are deep, water-logged and coarse. It is not practical to determine by geochemical methods whether the values represent contamination from the mine area or mineralisation underlying the alluvials. (Proton magnetometry will be used as a basic technique in those areas.)

2) Result Presentation

Results for analyses on soil samples have been plotted at 1:1000 scale and presented as a composite soil geochemical plan for Sn Cu and Zn, showing anomalous Sn contours plus Ag Bi As where anomalous and Pb Mn (pre 1971) where available. (Refer plates Ct 129A-I).

Anomalous Sn has arbitrarily been taken at 50 ppm and anomalous Ag Bi and As as 0.1, 1 and 50 ppm respectively. For Ag Bi and As these are the detection limits of the spectrographic technique employed.

Anomalous Sn soil contours, including four orientation lines over the mine area, have also been plotted at 1:5000 scale. (Plates 129B-C)

3) Interpretation of results

Excellent correlation exists, allowing for minor downslope dispersion, of the strong Sn soil values (+800 ppm Sn) with outcropping or shallow soil covered ore grade mineralisation in the mine orientation. This is clearly demonstrated by the 1:5000 plots.

Early prospecting activity may have enhanced the anomalies slightly, however, lines L and K, which were chosen for the minimal amount of disturbance, gave similar results to line QA where disturbance is more obvious.

It is also apparent from the orientation soil lines over the mine, that the aerial extent of the +100 ppm Sn soil contour is many orders larger than the +800 ppm Sn soil anomalies attributable to the Halls, Henrys and Khaki lode systems. (Hawkes and Webb, 1962, quote "average" Sn soil values as 10 ppm.)

Prospecting and pitting within the +100 ppm Sn soil contour to the west of the Crescent Spur, which is not an area affected by downslope dispersion from known lodes, revealed cassiterite bearing quartz veins in mica sandstone. These are interpreted as part of the correct aureole conditions for ore development.

The presence of the large anomalous Sn in soil halo around the Cleveland lode system is significant

-5-

in that it enlarges the target to an extent where stream sediment geochemistry becomes a reasonable exploration proposition.

On this basis, a stream sediment programme of moderately high density (6 samples/square kilometre) was designed to cover the bulk of EL 1/63.

Results from a very limited fluoride-in-water orientation around the mine gave sufficient encouragement to include concurrent fluoride-in-water measurements in the regional stream sediment programme. The techniques employed will be similar to those successfully employed to locate fluorite lodes in Europe. (Friedrich and Pluger, 1971; Pluger and Friedrich, 1973.)

The Cleveland ore lenses on average contain of the order of 5-10% CaF_2 .

4) "Targets" Located

Thirty six reconnaissance (12½ m spaced) soil anomalies (+50 ppm Sn) to the south east of the mine area planned for follow up (5 m) sampling. In all cases, these anomalies are of the significantly lower order than those attributable to ore grade mineralisation in the orientation survey.

If follow up soil sampling proves positive, bedrock sampling will be initiated prior to any decision on drilling.

Several single point anomalous Sn-in-soil values have been recorded in pre1971 (Aberfoyle) work to the south of the mine, but were not considered significant, due to the regular occurrence of erratic isolated high values. (J.A. Teluk, pers. comm.) This has not been the Cominco experience in mine orientation.

It is considered that poor sampling practice (pulverising inadequate sample prior to analysis)

caused erratic Sn behaviour. Pulverising of adequate amounts of sample is critical in investigating the physical dispersion of resistate minerals.

Further reconnaissance soil sampling is planned in the area.

E. Geophysical Work

Nil

F. Trenching

Limited to unsuccessful pitting in water-logged Deep Creek alluvial rubble.

G. Diamond Drilling

Nil

4. GEOLOGY

None in this period; for previous work refer to EL 1/63 Progress Report for 6 months ending June 30 1973.

5. FINANCE

Expenditure for the period July 1 to December 31 1973 on surface exploration is as follows:

Geology	1,950*
Geochemistry	<u>3,792</u>
	<u>5,742</u>

*Largely expended on compilation and drafting of plans for geological purposes.

6. CONCLUSIONS

A geochemical compilation has been made of the results of the 1972/73 summer programme, together where possible with those from earlier programmes. Following a review of this data, a programme of soil, stream sediment and stream water geochemistry has been initiated to cover a much larger area of EL 1/63 than has previously been attempted. This

programme is based on the concept that Cleveland type ore bodies are of replacement type origin and their formation requires the coincidence of correct pneumatolytic aureole conditions and a chemically reactive favourable bed. Aureole conditions can be inferred from regional geochemical considerations and geological programmes are of assistance in predicting the presence of favourable beds.

Consequently, the geochemical programmes are designed to complement the earlier geological programme in an integrated exploration approach.

7. REFERENCES

- American Geological Institute International Geological Review (1968) Book Section Vol.10 No.8 Ore Deposits Part 2, p 108-121
- Hawkes, H.E. (1962) Geochemistry in Mineral Exploration and Webb, J.S. p 373
- Friedrich G.H., (1971) Geochemical Prospecting for Barite and Fluorite Deposits Pluger W.L. Canadian Inst.Min.Spec.Vol.II pp 151-156
- Ovchinnikov, L.N. Grigoryan S.V. (1971) Primary halos in prospecting for sulphide deposits. Canadian. Inst.Min.Spec.Vol.II pp 375-380
- Pluger W.L. (1963) Determination of total and cold -extractable fluoride in soils and stream sediments with an ion sensitive fluoride electrode. Ins.tMin.Met.Proc.4th Intern.Geoch. Expl.Symp. pp 421-427.
- Ransom, D.M. (1973) Progress Report - Cleveland Tin N.L. 6 months ending June 30 1973 Simpson, D.C. CEPL unpub report for Tas Mines Dept/

8. ATTACHMENTS

- Map 1 (Plan CT 115/73) Regional Geology of Luina-Waratah 1:50,000
- Map 2 (Plan CT 130) Summary Map: regional geology with previous and proposed 1973/74 exploration activity. 1:50,000
- Maps 3-5 (Plans CT 128A-C) Cleveland Mine Area: Summary Map. Fact geology and previous geochemical coverage with proposed geochemical coverage 1973/74 1:5,000

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Maps 6-7 (Plans CT 127 B,C) Cleveland MINE area:
Summary Map; Sn soil geochemistry
and fact geology

1:5,000

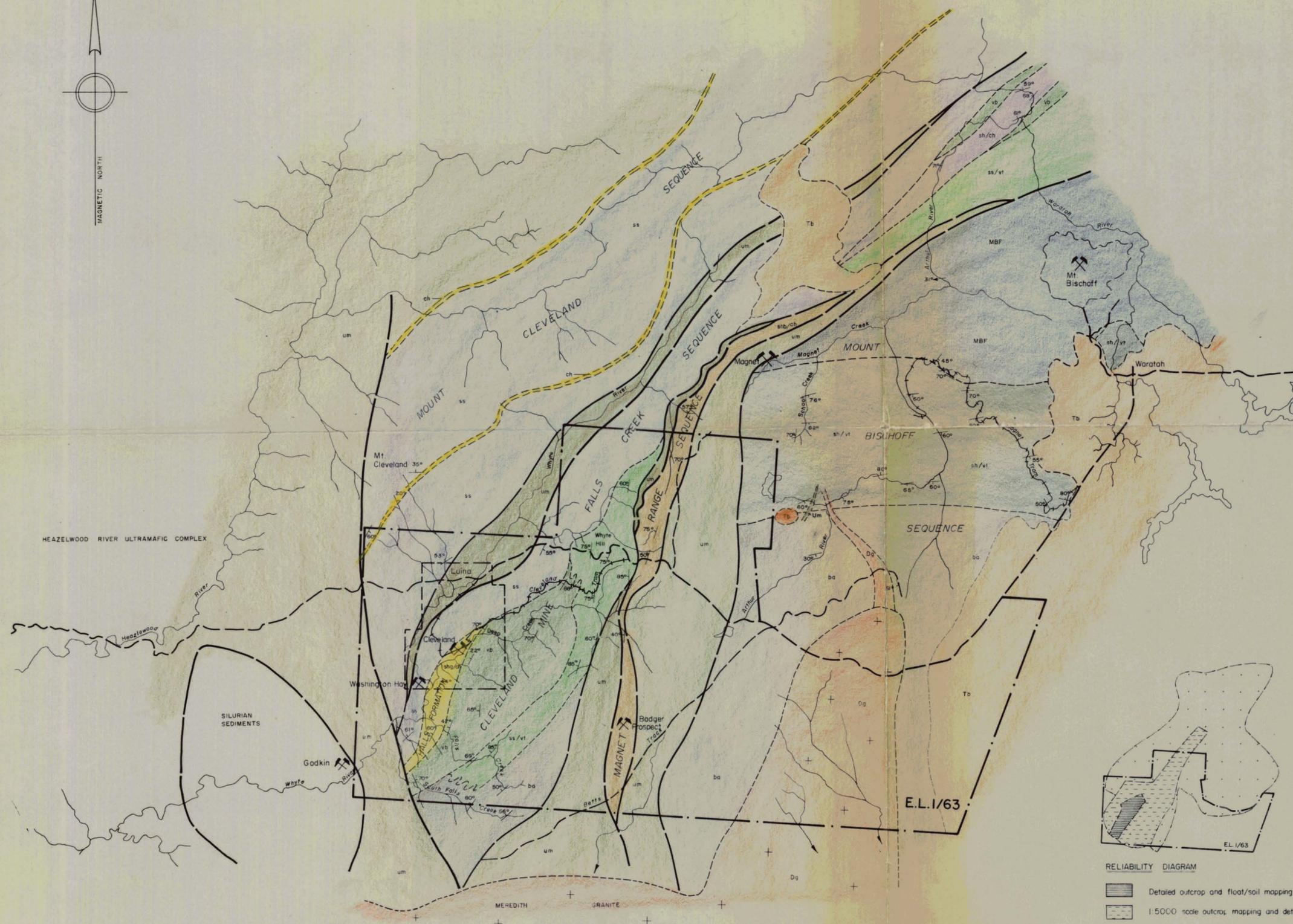
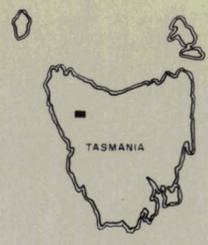
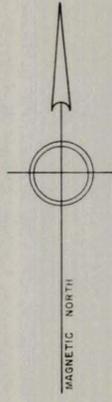
Maps 8-16 (Plans CT 129A-I incl) Composite soil geochemical
plans. Sn Cu Zn with anomalous
Sn contours, plus Ag Bi As where
anomalous, and Pb Mn (pre 1971)

1:1,000

Submitted: Federick L Hunt
for R.V. Sale
Geochemist
Cominco Exploration Pty. Ltd.

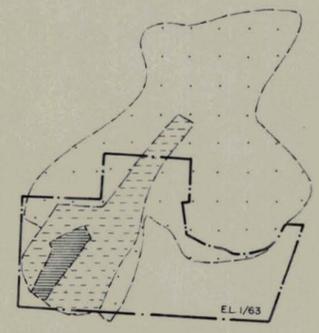
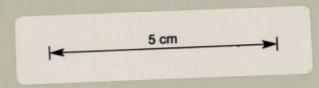
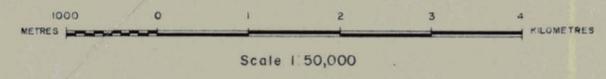
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Cleveland Tin (1)
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- TERTIARY
 - Tb Basalt
- DEVONIAN
 - Dg Granite, quartz porphyry dykes
- MT. BISCHOFF SEQUENCE
 - ba Black argillites
 - sh/vt Tuffs, greywackes Grey shale, purple shale. } Crimson Creek Formation
 - MBF Slates, quartzites - Mt Bischoff Formation
- MAGNET RANGE SEQUENCE
 - shb/ch Red argillites, arenites and cherts
- EARLY CAMBRIAN/ PRECAMBRIAN (Stratigraphic sequence uncertain)
 - ss Mica sandstones
 - shg/ch Cherts, grey shales - Hall's Formation
 - vb Basic lavas, tuffs
 - ss/vt Mica sandstones, tuffaceous shales, volcanic arenites
- MT CLEVELAND SEQUENCE
 - ss/ch Mica sandstone with chert members
- Um Ultramafic rocks: dunite, pyroxenites, gabbros, basalts (probably allochthonous)

- Tram
- Mine
- E.L. Boundary
- M.L. Boundary
- Interpreted Boundary
- Fault
- Dip & Strike of Bedding
- Road or track
- River or creek



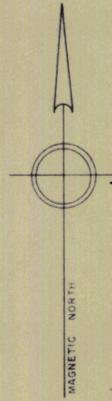
- RELIABILITY DIAGRAM
- Detailed outcrop and float/soil mapping 1:1000 scale
 - 1:5000 scale outcrop, mapping and detailed stream traversing
 - Regional stream and ridge traversing 1:10,000 and 1:50,000 scale
 - Remainder photo interpretation and regional magnetics

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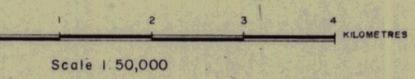
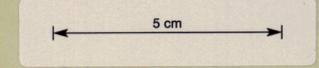
CLEVELAND TIN NL.

SUMMARY MAP - REGIONAL GEOLOGY with PREVIOUS and PROPOSED 1973 / 74 EXPLORATION ACTIVITY LUJINA - WARATAH AREA 3073 TASMANIA prepared by COMICO EXPLORATION PTY LTD

Scale 1:50,000 Date FEBRUARY 1973 Plate CT 130

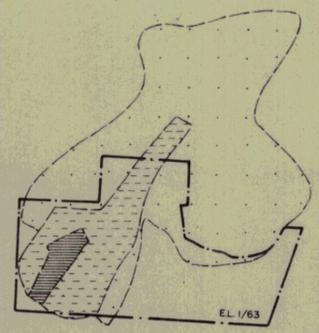


- DETAILED SOIL GEOCHEMISTRY. Approx. 12.5m x 50m Prior to October 1973. Samples retained CEPL Adelaide.
- PROPOSED 12.5m SOIL SAMPLING SUMMER 73/74 = 29 Km Sampling, = 19.3 Km Line cutting.
- AREA OF PROPOSED STREAM SEDIMENT / FLOURIDE IN WATER COVERAGE. 6 Samples/square Km. (Approx. 50 sq. Km.)



- TERTIARY Basalt
- DEVONIAN Granite, quartz porphyry dykes
- MT BISCHOFF SEQUENCE
Black argillites Crimson Creek Formation
- Tuffs, greywackes Grey shale, purple shale.
- Slates, quartzites - Mt Bischoff Formation
- EARLY CAMBRIAN/ PRECAMBRIAN (Stratigraphic sequence uncertain)
- MAGNET RANGE SEQUENCE
Red argillites, arenites and cherts
- CLEVELAND MINE - FALLS CREEK SEQUENCE
Mica sandstones
- Cherts, grey shales - Hall's Formation
- Basic lavas, tuffs
- Mica sandstones, tuffaceous shales, volcanic arenites
- MT CLEVELAND SEQUENCE
Mica sandstone with chert members
- Ultramafic rocks dunite, pyroxenites, gabbros, basalts (probably allochthonous)

- Tram
- Mine
- E.L. Boundary
- M.L. Boundary
- Interpreted Boundary
- Fault
- Dip & Strike of Bedding
- Road or track
- River or creek



- RELIABILITY DIAGRAM
- Detailed outcrop and float/soil mapping 1:1000 scale
 - 1:5000 scale outcrop mapping and detailed stream traversing
 - Regional stream and ridge traversing 1:10,000 and 1:50,000 scale
 - Remainder photo interpretation and regional magnetics



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Amended by	E.V.S.	Feb 74		

EL 1/63 Boundary

EL 1/63 Boundary

HILLS REFERENCE PLANE

OLD MARKET TRAIL

TO WARATAH

WHYTE HILL

WARATAH CORINNA ROAD

GOVERN TRACK

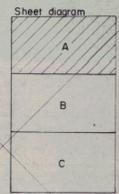
HYDRO LINE

EVELAND

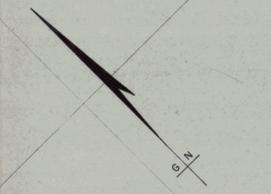
DEEP CREEK

DC 6

RIDGE LINE



Proposed New Soil Sampling Summer season 1973-74



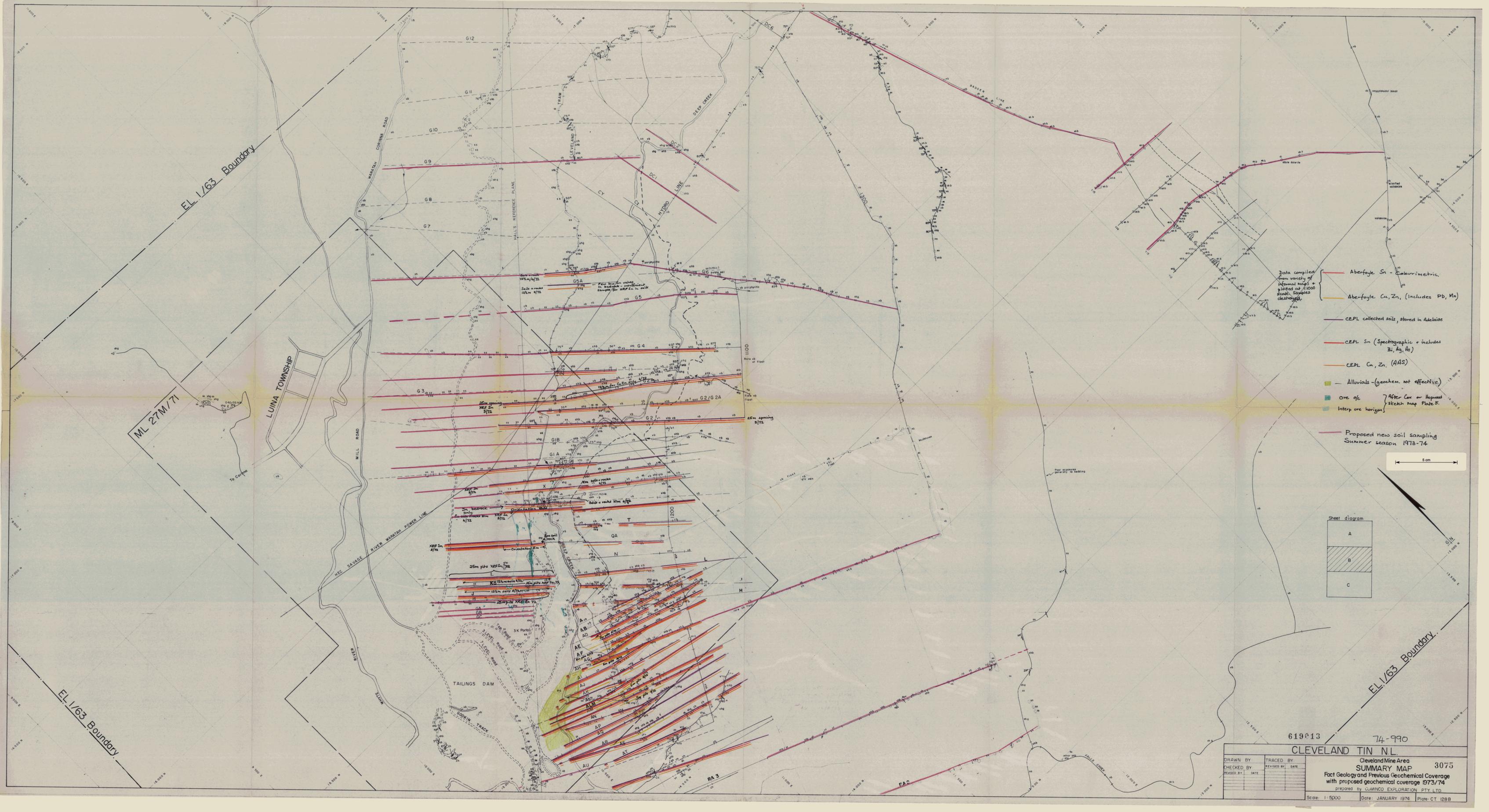
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CLEVELAND TIN N.L.
Cleveland Mine Area 3074

SUMMARY MAP
Fact Geology and Previous Geochemical Coverage with proposed geochemical coverage 1973/74
prepared by GUMINCO EXPLORATION PTY. LTD.

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REVISED BY	DATE

Scale: 1:5000 Date: JANUARY 1974 Plate: CT 128A



EL 1/63 Boundary

ML 27M/71

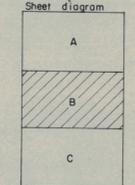
LUINA TOWNSHIP

EL 1/63 Boundary

EL 1/63 Boundary

- Data compiled from variety of informal maps & stored at 1:1000 scale. Samples destroyed.
- Aberfoyle Sn - Colourimetric.
 - Aberfoyle Cu, Zn, (Includes Pb, Mn)
 - CEPL collected soils, stored in Adelaide
 - CEPL Sn (Spectrographic & includes Bi, Ag, As)
 - CEPL Cu, Zn, (AAS)
 - Alluvials - (geochem. not effective)
 - Ore of
 - Interp ore horizon
- Proposed new soil sampling Summer season 1973-74

5 cm



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CLEVELAND TIN N.L.

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REVISOR	DATE

Cleveland Mine Area 3075
 SUMMARY MAP
 Fact Geology and Previous Geochemical Coverage
 with proposed geochemical coverage 1973/74
 prepared by CUMINCO EXPLORATION PTY. LTD.
 Scale: 1:5000 Date: JANUARY 1974 Plate: CT 128B

LEGEND

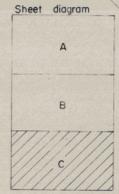
- ss Micaceous sandstone
- vb Basic volcanic, probably lavas, spaltic mineralogy
- vt Basic tuff, includes tuffaceous shales, lithic & lapilli beds, tuff breccias & volcanic arenites.
- shg Grey shale or mudstone
- shb Brown & purple shales or mudstones
- ch Chert, undifferentiated
- ub Rocks of ultrabasic affinity, includes serpentinite, pyroxenite, gabbro diorite, both coarse & fine grained occasionally amygdules probably related to Hazelwood River Complex.
- ba Dominantly dark to black argillites containing rarer arenaceous layers & micaceous varieties

- Grid lines
- Rock outcrops
- Distribution of float on grid lines
- Dips on bedding
- Dips on faults
- Dips on cleavage
- Fold axes
- Creeks with rock outcrops indicated

- CEPL soils collected and stored in Adelaide.
- CEPL Sn (Spectrographic and includes Bi, Ag, As.)
- CEPL Cu Zn (AAS)
- Aberfoyle Sn (Colourimetric)
- Aberfoyle Cu Zn. (Includes Pb, Mn.)
- Proposed new soil sampling Summer season 1973-74

Data compiled from a variety of informal maps and plotted at 1:1000 scale. Samples destroyed.

NOTE: Where rock type symbols are not outlined from a survey indicated. Exceptions are data plotted from regional creek traverses.



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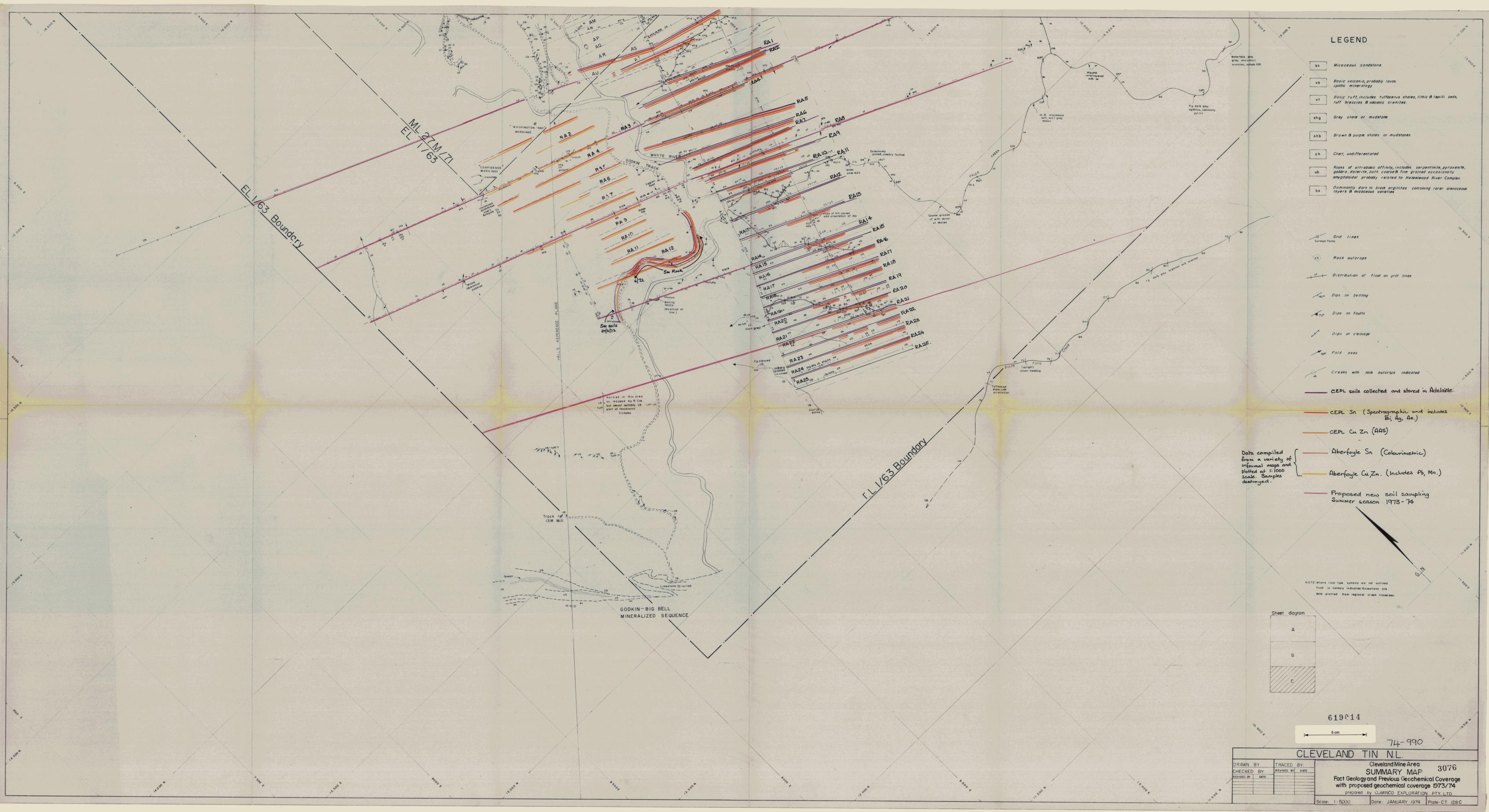


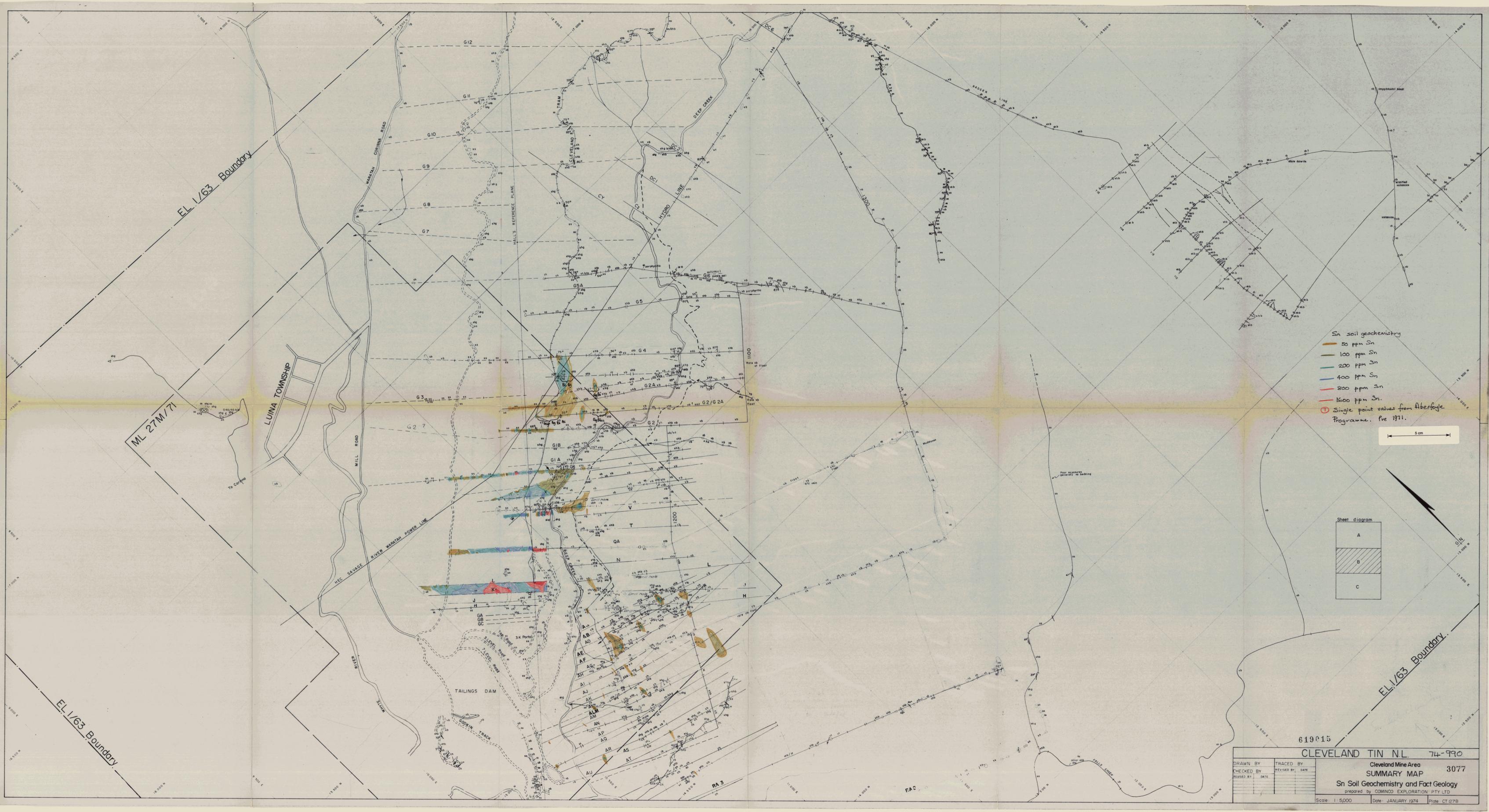
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CLEVELAND TIN N.L.

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REVISED BY	DATE

Cleveland Mine Area 3076
 SUMMARY MAP
 Fact Geology and Previous Geochemical Coverage with proposed geochemical coverage 1973/74
 prepared by GUMINCO EXPLORATION PTY LTD
 Scale: 1:5000 Date: JANUARY 1974 Plate: CT 128C

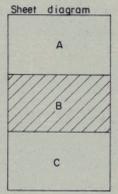




Sn soil geochemistry

- 50 ppm Sn
- 100 ppm Sn
- 200 ppm Sn
- 400 ppm Sn
- 800 ppm Sn
- 1600 ppm Sn
- Single point values from Aberystwyth Programme. Pre 1971.

5 cm



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CLEVELAND TIN N.L. 74-990

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Cleveland Mine Area 3077
SUMMARY MAP
Sn Soil Geochemistry and Fact Geology
prepared by COMINCO EXPLORATION PTY LTD
Scale: 1:5000 Date: JANUARY 1974 Plate CT 127B

LEGEND

- ss Micaceous sandstone
- vb Basic volcanic, probably lavas, spaltic mineralogy
- vt Basic tuff, includes tuffaceous shales, lithic & lapilli beds, tuff breccias & volcanic arenites.
- shg Grey shale or mudstone
- shb Brown & purple shales or mudstones
- ch Chert, undifferentiated
- ub Rocks of ultrabasic affinity, includes serpentinite, pyroxenite, gabbro, dolerite, both coarse & fine grained occasionally amygdaloidal, probably related to Heazlewood River Complex.
- ba Dominantly dark to black argillites containing rare arenaceous layers & micaceous varieties

- Grid lines
- Survey Points
- Rock outcrops
- Distribution of float on grid lines
- Dips on bedding
- Dips on faults
- Dips on cleavage
- Fold axes
- Creeks with rock outcrops indicated

- Sn soil geochemistry.
- 50 ppm Sn
 - 100 ppm Sn
 - 200 ppm Sn
 - 400 ppm Sn
 - 800 ppm Sn
 - 1600 ppm Sn

Single point values from Abarfoyle Programme Pre-1971

NOTE: Where rock type symbols are not outlined float is commonly indicated. Exceptions are data plotted from regional creek traverses.



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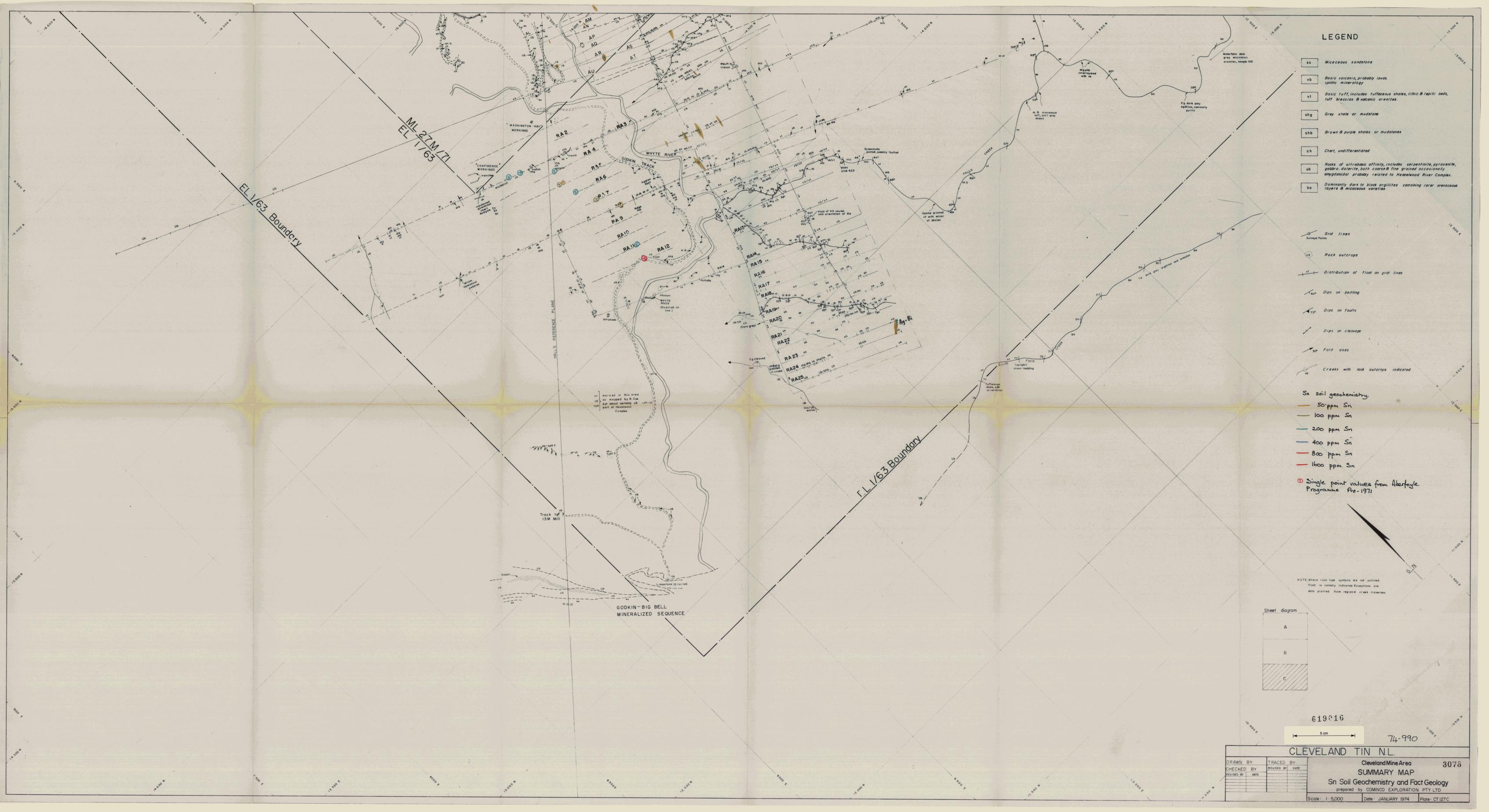


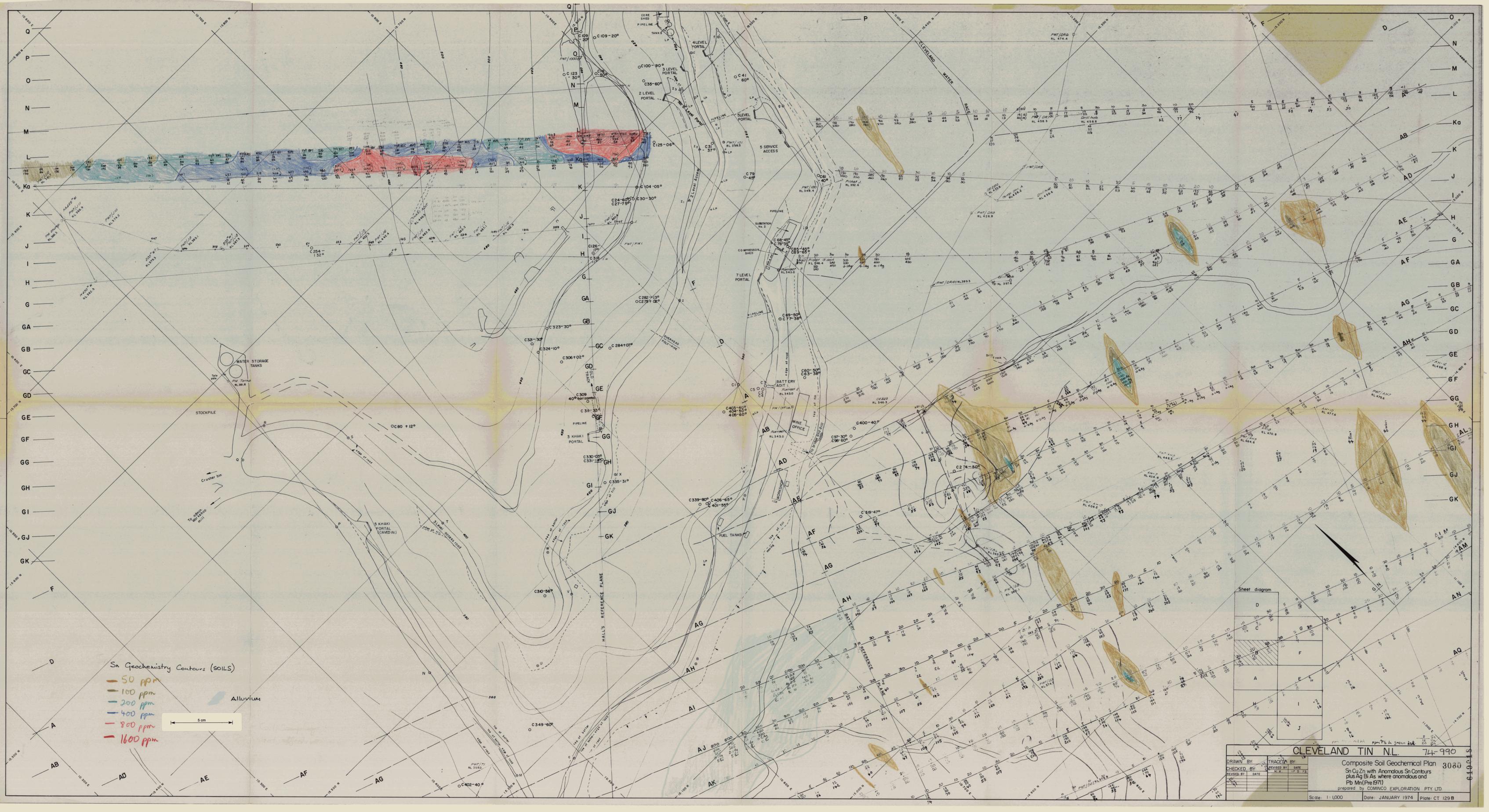
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CLEVELAND TIN N.L.

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REVISIONS	DATE

Cleveland Mine Area 3073
SUMMARY MAP
 Sn Soil Geochemistry and Fact Geology
 prepared by COMINCO EXPLORATION PTY LTD
 Scale: 1:5,000 Date: JANUARY 1974 Plate: CT127C





Sn Geochemistry Contours (SOILS)

- 50 ppm
- 100 ppm
- 200 ppm
- 400 ppm
- 800 ppm
- 1600 ppm

Alluvium



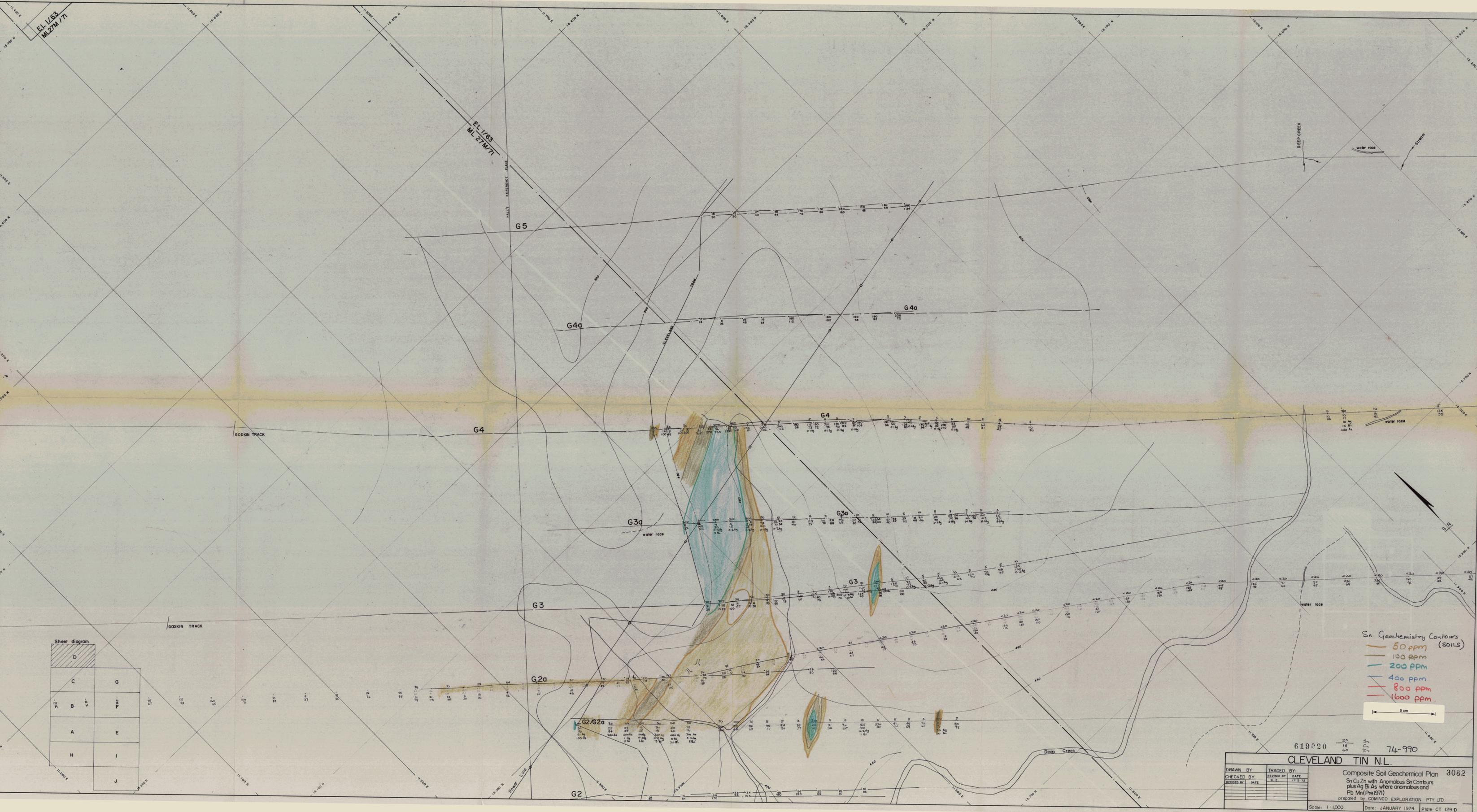
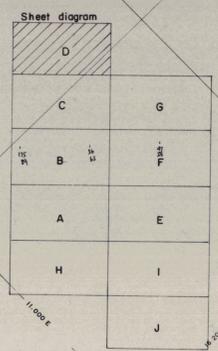
CLEVELAND TIN N.L. 74-990

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DATE	DATE

Composite Soil Geochemical Plan 3080
 Sn, Cu, Zn with Anomalous Sn Contours
 plus Ag, Bi, As where anomalous and
 Pb Mn (Pre 1971)
 prepared by COMINCO EXPLORATION PTY. LTD.
 Scale: 1:1,000 Date: JANUARY 1974 Plate: CT 129 B

EL 1/63
ML 2/M 71

EL 1/63
ML 2/M 71



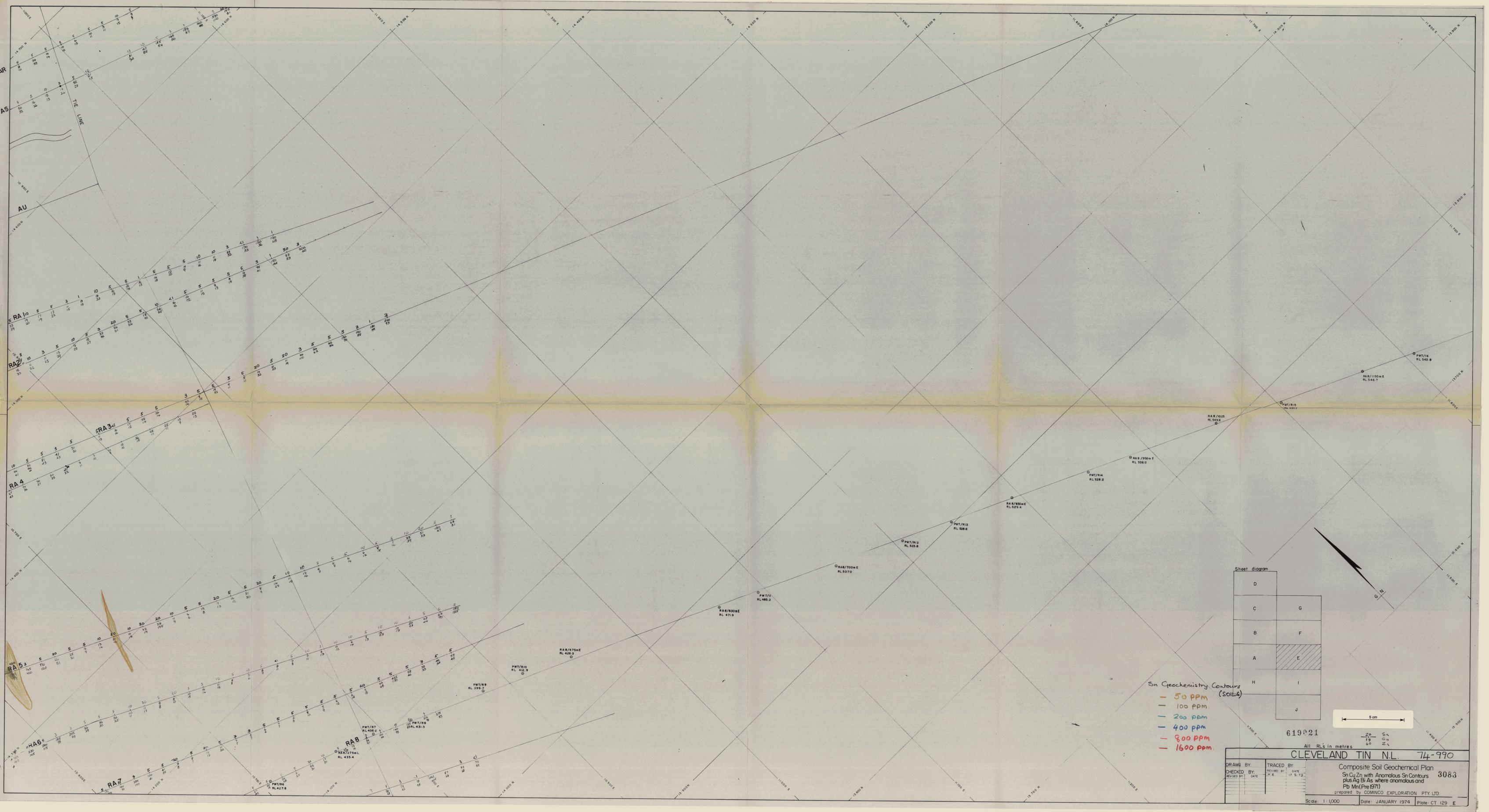
Sn Geochemistry Contours (SOILS)
 50 ppm
 100 ppm
 200 ppm
 400 ppm
 800 ppm
 1600 ppm

5 cm

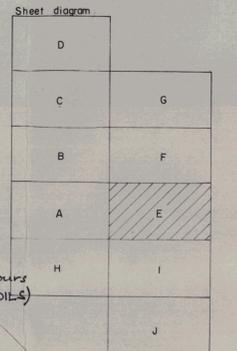
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 CLEVELAND TIN N.L.

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CHECKED BY	REVISOR BY
REVISOR BY	DATE
DATE	DATE

Composite Soil Geochemical Plan 3082
 Sn Cu Zn with Anomalous Sn Contours
 plus Ag Bi As where anomalous and
 Pb Mn (Pre 1971)
 Prepared by COMINCO EXPLORATION PTY. LTD.
 Date: JANUARY 1974 Plate: CT 129 D



- Sn Geochemistry Contours (Soil-4)
- 50 ppm
 - 100 ppm
 - 200 ppm
 - 400 ppm
 - 800 ppm
 - 1600 ppm



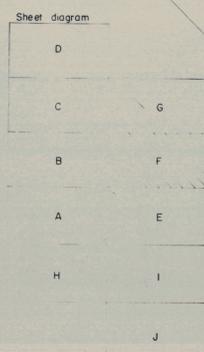
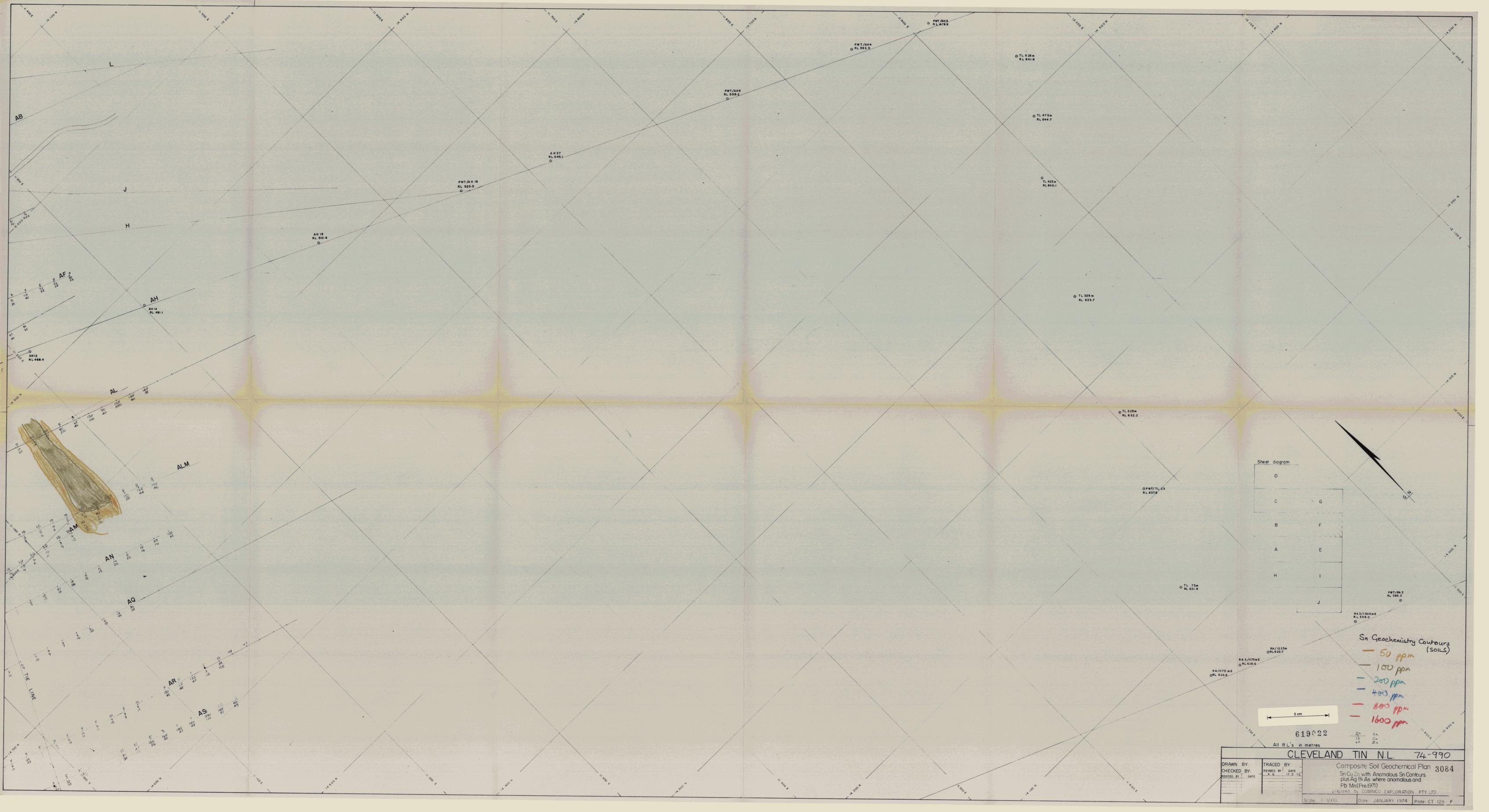
619021

All RL's in metres

CLEVELAND TIN N.L. 74-990

Composite Soil Geochemical Plan
 Sn Cu Zn with Anomalous Sn Contours plus Ag Bi As where anomalous and Pb Mn (Pre 1971) **3083**
 prepared by COMINCO EXPLORATION PTY LTD

Scale: 1:1,000 Date: JANUARY 1974 Plate: CT 129 E



Sn Geochemistry Contours (SOILS)

- 50 ppm
- 100 ppm
- 200 ppm
- 400 ppm
- 800 ppm
- 1600 ppm

5cm

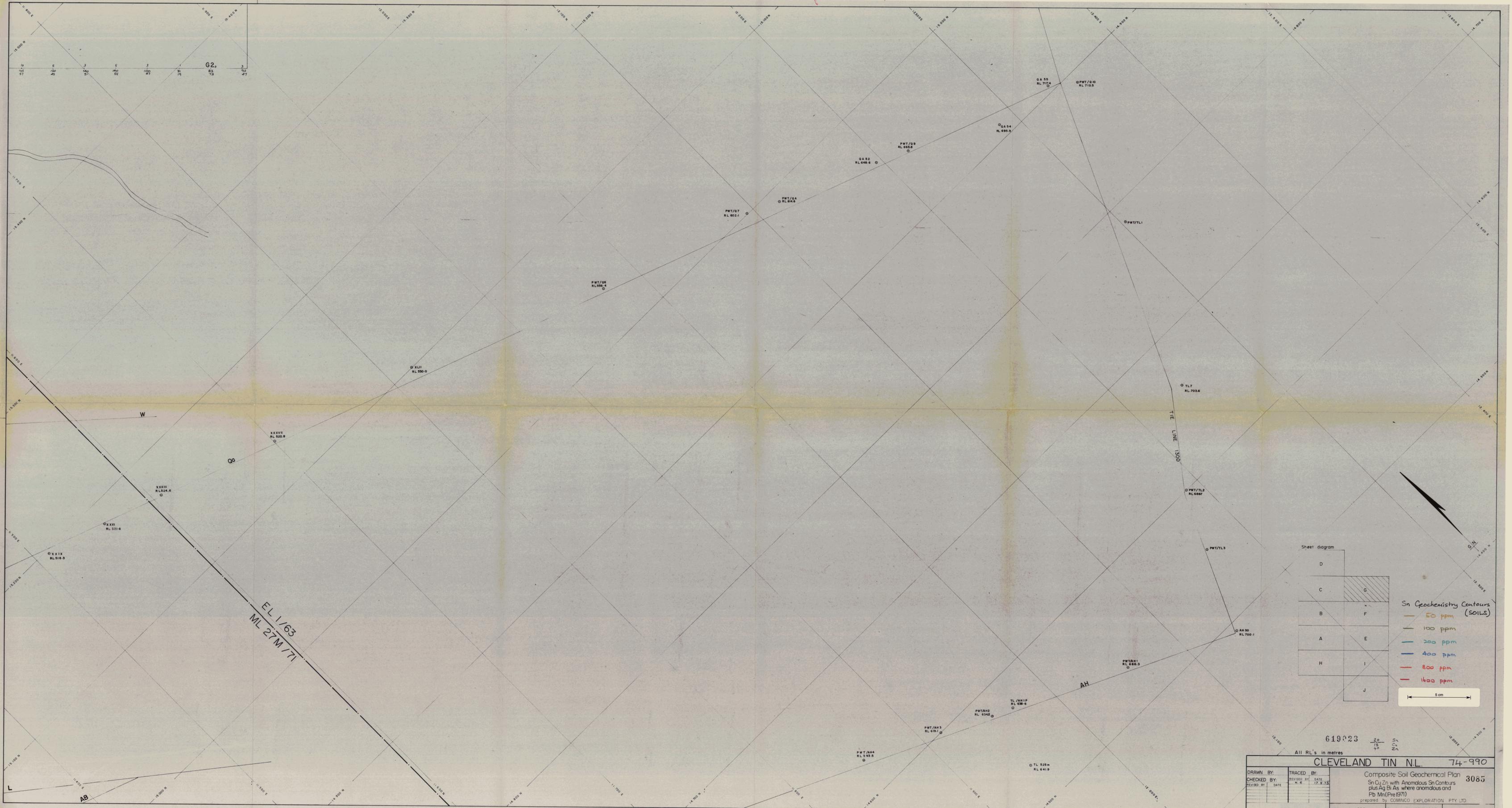
619022

All RL's in metres

CLEVELAND TIN N.L. 74-990

DRAWN BY: []
 CHECKED BY: []
 REVISED BY: []
 DATE: []

Composite Soil Geochemical Plan 3084
 Sn Cu Zn, with Anomalous Sn Contours
 plus Ag Bi As where anomalous and
 Pb Mn (Pre 1971)
 prepared by COMINCO EXPLORATION PTY LTD
 Date: JANUARY 1974
 Scale: 1:1000
 Plate: CT 129 F



G2

EL 1/163
ML 27M/71

Sheet diagram

D	G
C	F
B	E
A	H
H	I
	J

Sn Geochemistry Contours (SOILS)

- 50 ppm
- 100 ppm
- 200 ppm
- 400 ppm
- 800 ppm
- 1600 ppm

5 cm

619023

All RL's in metres

CLEVELAND TIN N.L. 74-990

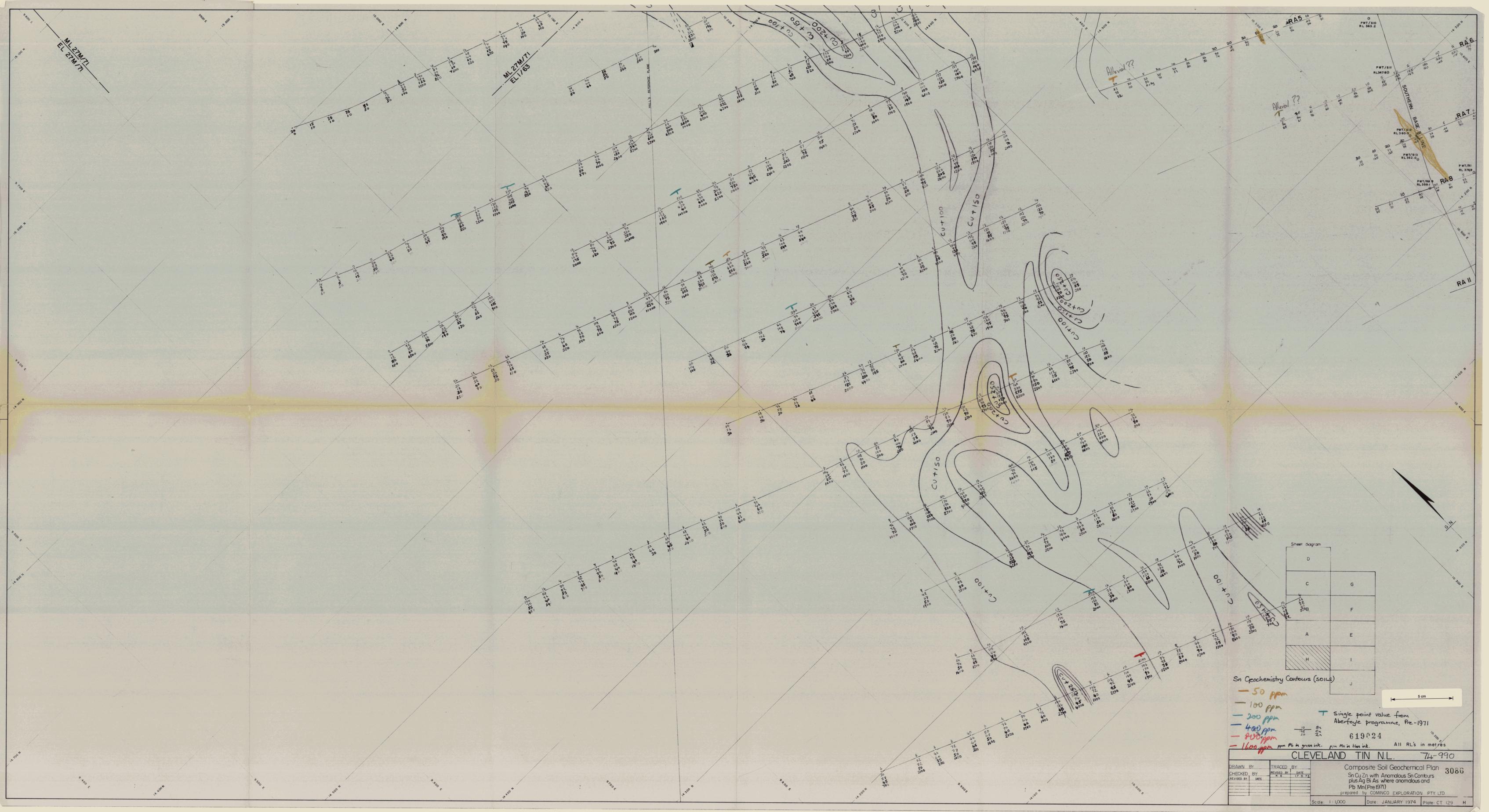
Composite Soil Geochemical Plan 3085

Sn, Cu, Zn with Anomalous Sn Contours plus Ag, Bi, As where anomalous and Pb Mn (Pre 1971)

prepared by COMINCO EXPLORATION PTY LTD

Scale: 1:1000 Date: JANUARY 1974 Plate: CT 129 6

DRAWN BY:	TRACED BY:
CHECKED BY:	REVISION BY:
DATE:	DATE:



ML 27M/71
EL 1763

ML 27M/71
EL 27M/71

Sheet diagram

D	
C	G
	F
A	E
H	I
	J

Sn Geochemistry Contours (soils)

- 50 ppm
- 100 ppm
- 200 ppm
- 400 ppm
- 800 ppm
- 1600 ppm

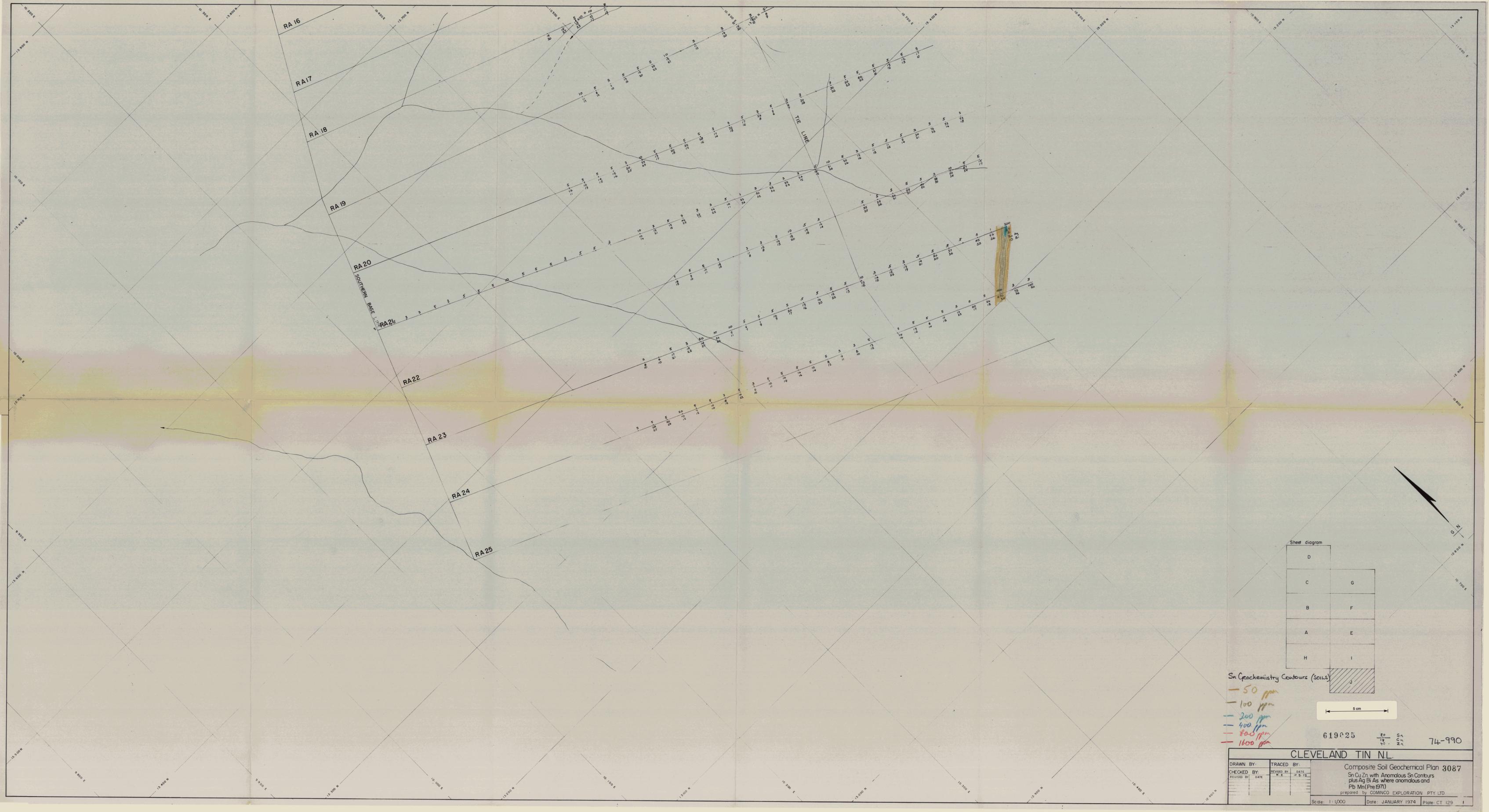
T Single point value from Aberfoyle programme, Pre-1971

619024

CLEVELAND TIN N.L. 74-990

DRAWN BY	TRACED BY
CHECKED BY	REVISED BY
DATE	DATE

Composite Soil Geochemical Plan
Sn Cu Zn with Anomalous Sn Contours plus Ag Bi As where anomalous and Pb Mn (Pre 1971)
prepared by COMINCO EXPLORATION PTY LTD



RA 16

RA 17

RA 18

RA 19

RA 20

RA 21

RA 22

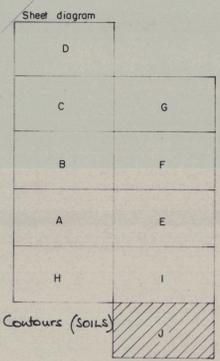
RA 23

RA 24

RA 25

TIE LINE

SOUTHERN BASE



- Sn Geochemistry Contours (soils)
- 50 ppm
 - 100 ppm
 - 200 ppm
 - 400 ppm
 - 800 ppm
 - 1600 ppm



619025 $\frac{50}{16}$ $\frac{50}{24}$ 74-990

CLEVELAND TIN NL.

DRAWN BY:	TRACED BY:
CHECKED BY:	REVIEWED BY:
PREPARED BY:	DATE:

Composite Soil Geochemical Plan 3087
 Sn Cu Zn with Anomalous Sn Contours
 plus Ag Bi As where anomalous and
 Pb Mn (Pre 1971)
 prepared by COMINCO EXPLORATION PTY LTD