

COMINCO LTD.

EXPLORATION
NTS: 82M/13E

WESTERN DISTRICT

GEOCHEMICAL ASSESSMENT REPORT ON THE

CK GROUP OF MINERAL CLAIMS

KAMLOOPS MINING DISTRICT, B.C.

LATITUDE: 51°56' LONGITUDE: 119°35'

DURING MAY 27 - SEPTEMBER 18, 1980

UNDER SUPERVISION OF Z.T. NIKIC, SENIOR GEOLOGIST

OWNER AND OPERATOR : COMINCO LTD.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8317
NO.

Part 1
of 4

OCTOBER 1980

M.R. MURRELL

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STATEMENT OF EXPENDITURES

APPENDIX "A"

LOCATION AND INDEX MAP

PLATE 1 (in pocket)

GEOCHEMICAL MAPS - NO. 1

PLATE 2 (in pocket)

- NO. 2_a, 2_b

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PLATE 4 (in pocket)

- NO. 4

PLATE 5 (in pocket)

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PLATE 6 (in pocket)

GEOCHEMICAL ASSESSMENT REPORTCK GROUP OF CLAIMSKAMLOOPS MINING DIVISIONI INTRODUCTIONLocation

The CK group of mineral claims is located in the Kamloops Mining Division, forty-three kilometres northeast of Clearwater, B.C. The property is on either side of the Raft River, centred on the junction of the Raft River with Kowalski Creek. It is 24 km long by 7 km wide.

II ACCESS

The town of Clearwater is located on the Trans Canada Highway, 130 km north of Kamloops. Access from Clearwater to the CK property is by 65 km of excellent gravel logging roads along the Raft River. Several logging roads provide access to some of the showings areas, but much of the property is accessible only by foot or helicopter.

III TOPOGRAPHY

Much of the CK group of claims consist of fairly steep tree and brush covered side hills. The higher portion is flat to rolling, containing scattered swampy areas.

IV PROPERTY DEFINITIONHistory

- 1973 - Discovery of mineralized boulders and in-place mineralization by Andy Horne, Chase, B.C.
- 1974, 1975 - Optioned by Rio Tinto - Airborne EM; geochemistry, I.P., minor magnetometer work, and 7 diamond drill holes.
- 1976 - Sicintine Mines - backhoe trenching on one showing.
- 1977 - Optioned by Cominco.
- 1978 - I.P., magnetometer, VLF, minor geochemistry, Cat trenching, diamond drilling (20 holes).
- 1979 - Geological mapping (1:5,000, 1: 0,000), I.P., magnetometer, large geochemical program, diamond drilling (18 holes).

Current Owner and Operator

Cominco Ltd., 200 Granville Square, Vancouver, B.C.

Economic Assessment

Work to date has shown the probable existence of a long mineralized Zn/Pb body. The usual width is not of mineable thickness, however local folding may have produced significant thickening of the zone. Much more work is required to determine the economic significance of the mineralized zone.

Extent of Claims Covered by This Report

See Appendix "A".

V SUMMARY OF WORK DONE

Two thousand and twenty-seven geochemical samples were collected on the property and analysed for lead and zinc. Topographic control was based on a 1:5,000 topographic map prepared by McElhanney Surveying. Grid control was by hip-chaining, compassing and altimeter reading.

VI GEOLOGY

The claims are underlain by metasediments and intrusives of the Shuswap Metamorphic Complex. Exposure is quite poor over much of the claim group, but mapping has suggested that limy and siliceous calc-silicates, biotite gneisses, marbles, and pegmatite underlie the extensive overburden. Several showings have been found, most have an associated geochemical expression.

VII GEOCHEMISTRY

A total of two-thousand and twenty-seven soil samples were taken from the CK group of mineral claims during 1980.

Sample Location

Soil samples were taken from the B horizon, when it could be identified, otherwise the sample was taken usually at 10 to 30 cm deep. Samples were dug by shovel and retrieved by plastic spoon. They were placed in standard kraft soil sample bags and marked for identification. Each sample located was marked in the field by a grid numbered pink flagging. Ground control was by hip chain and compass. Only a minor amount of cut lines were utilized.

Sample Preparation

Samples were air-dried and shipped to Cominco's Lab in Vancouver for analyses. There they were oven dried, sieved and the minus 80 mesh fraction analysed by hot acid digestion and atomic absorption.

Presentation of Data

The results are plotted on topographic maps at scale of 1:5,000. Anomalous values for zinc are considered to be greater than 200 ppm; and anomalous lead values are considered to be greater than 40 ppm. These results are contoured on the accompanying maps.

VIII CONCLUSIONS

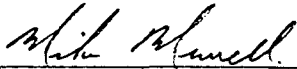
The purpose of the geochemical program was to help in the location of possible economic bodies of zinc and lead. Results are plotted on the enclosed geochemical maps.


A few zones containing values anomalous in zinc and lead were discovered during 1980. These values were sometimes associated with several of the known showings on the property. No follow-up work has yet been carried out to explain the source of the other anomalies.

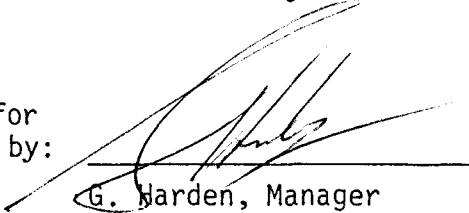
IX ATTACHMENTS

- a) Appendix "A" - Statement of Expenditures
- b) Appendix "B" - Statement of Qualifications
- c) Location Map - Scale 1:50,000 with index to geochemical sheets.

- d) Geochemical Maps - Sheet 1 - Scale 1: 5,000
Sheet 2 - Scale 1: 5,000
Sheet 3 - Scale 1: 5,000
Sheet 4 - Scale 1: 5,000
Sheet 5 - Scale 1: 5,000

Report by: 
M.R. Murrell
Project Geologist

Endorsed by: 
Z.T. Nikic
Senior Geologist

Approved for
Release by: 
G. Harden, Manager
Exploration
Western District

C A N A D A
PROVINCE OF BRITISH COLUMBIA
TO WIT:

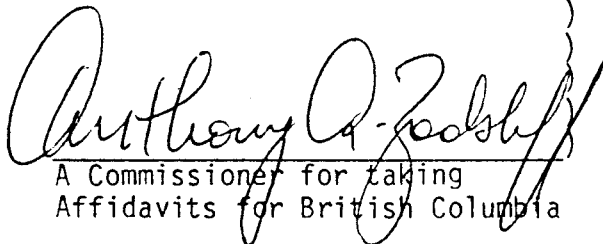
STATUTORY DECLARATION

I, ROBIN LAWSON WOODS, of the District of North Vancouver, in the Province of British Columbia, DO SOLEMNLY DECLARE THAT:

1. I am the Supervisor, Exploration and Foreign Accounting for Cominco Ltd., 2300 - 200 Granville Street, Vancouver, British Columbia, and, as such have knowledge of the facts deposed to herein.
2. Attached to this Statutory Declaration, as Schedule A, is a statement of expenditures indicating the expenditures charged by Cominco Ltd. to the CK Property account for the period January 1, 1980 to October 31, 1980.
3. The statement of expenditures referred to in paragraph 2 is true and accurate to the best of my knowledge, information and belief.
4. This Statutory Declaration is made in support of an application for credit as assessment work pursuant to the Mineral Act of British Columbia.

AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

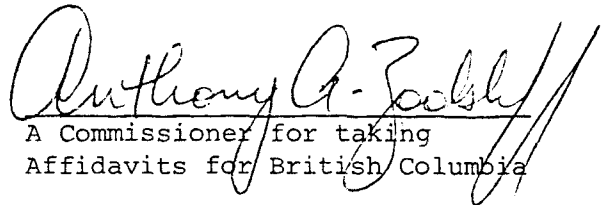
DECLARED before me at the City)
of Vancouver in the Province)
of British Columbia, this 12th)
day of November 1980)


A Commissioner for taking
Affidavits for British Columbia

Anthony Allen Zoobkoff
A Commissioner for taking
Affidavits for British Columbia.


Robin Lawson Woods

This is Schedule A referred to in the Statutory Declaration of ROBIN LAWSON WOODS declared before me this 12th day of November, 1980.


A Commissioner for taking Affidavits for British Columbia

Anthony Allen Zoobkoff
A Commissioner for taking Affidavits for British Columbia

STATEMENTS OF EXPENDITURES


CK PROPERTY

KAMLOOPS M.D., B.C.

JANUARY 1, 1980 TO OCTOBER 31, 1980

Geology	\$ 59,850
Linecutting	2,559
Geophysics	13,273
Geochemistry	16,045
Diamond drilling	104,565
Transportation	11,681
Access	10,898
Camp costs	8,394
Tenure	11,988
Option payment	20,000
Communications	2,164
Administrative services	24,142
	<hr/>
	\$285,559
	<hr/> <hr/>

Cominco Ltd.
Vancouver Office
November 12, 1980
Copies: Mining Recorder (2)
Senior Technician
File (2)


Robin Lawson Woods
Supervisor, Exploration
& Foreign Accounting

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

C K PROPERTY

KAMLOOPS, M.D., B.C.

STATEMENT OF EXPENDITURES

WORK PERFORMED JULY 5 - SEPT. 18, 1980

<u>TYPE OF WORK</u>	<u>DIRECT COST</u>	<u>CAMP COST</u>	<u>SUPERVISION & CORE LOGGING COSTS</u>	<u>TOTAL COSTS</u>
Drilling	\$ 104,565	\$ 5,950	\$ 37,600	\$ 148,115
Geochemistry	16,045	1,410	7,300	24,755
Road Const. & Acc. to Drill sites	10,898	1,034	4,950	16,882
Geophysics	15,832	-	-	15,832
	<u>\$ 147,340</u>	<u>\$ 8,394</u>	<u>\$ 49,850</u>	<u>\$ 205,584</u>

C K PROPERTY

WORK PERFORMED JULY 5 - SEPT. 18, 1980

<u>GROUPING</u>	<u>DRILLING</u>	<u>GEOCHEM.</u>	<u>ROAD</u>	<u>GEOPHYSICS</u>	<u>TOTAL</u>
CK80-1	\$ -	\$ 1,637	\$ 4,000	\$ -	\$ 5,637
2	-	4,852	-	744	5,596
3	-	7,906	-	930	8,836
4	-	7,021		10,044	17,065
5	40,896	-		-	40,896
6	29,586	1,733	2,176	3,525	37,020
7	72,700	1,052	-	-	73,752
	\$ 143,182	\$ 24,201	\$ 6,176	\$ 15,243	\$ 188,802

TOTAL VALUE OF WORK DECLARED

GR.CK 80 1-7	\$ 188,802
CK 79-3 Suppl.	3,000
CK 79-7	<u>8,700</u>
Cost Statement in Assessment Report to be Minimum.	<u>\$ 200,502</u>

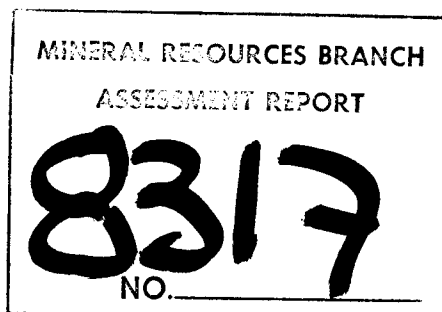
<u>PAC APPLIED:</u>	<u>WORK APPLIED</u>	<u>WORK & PAC APPLIED</u>
Credit + Applied		
\$ 37.000	CK 80-1 \$ 3,400.00	\$ 3,400.00
-	80-2 5,596.00	5,900.00
	80-3 8,836.00	10,100.00
	80-4 17,065.00	20,800.00
	80-5 40,896.00	50,400.00
	80-6 36,844.00	44,000.00
	80-7 73,752.00	88,200.00
\$ 36,411.00	\$ 186,389.00	\$ 222,800.00

Actual PAC Applied

\$ 36,411.00
- 37.00
<u>\$ 36,374.00</u>

Tenure Fees

N/G 7 @ \$5.00	\$ 35.00
Fees 5% of Assessment work value	<u>11,140.00</u>
	\$ 11,175.00



H. H. H. H.

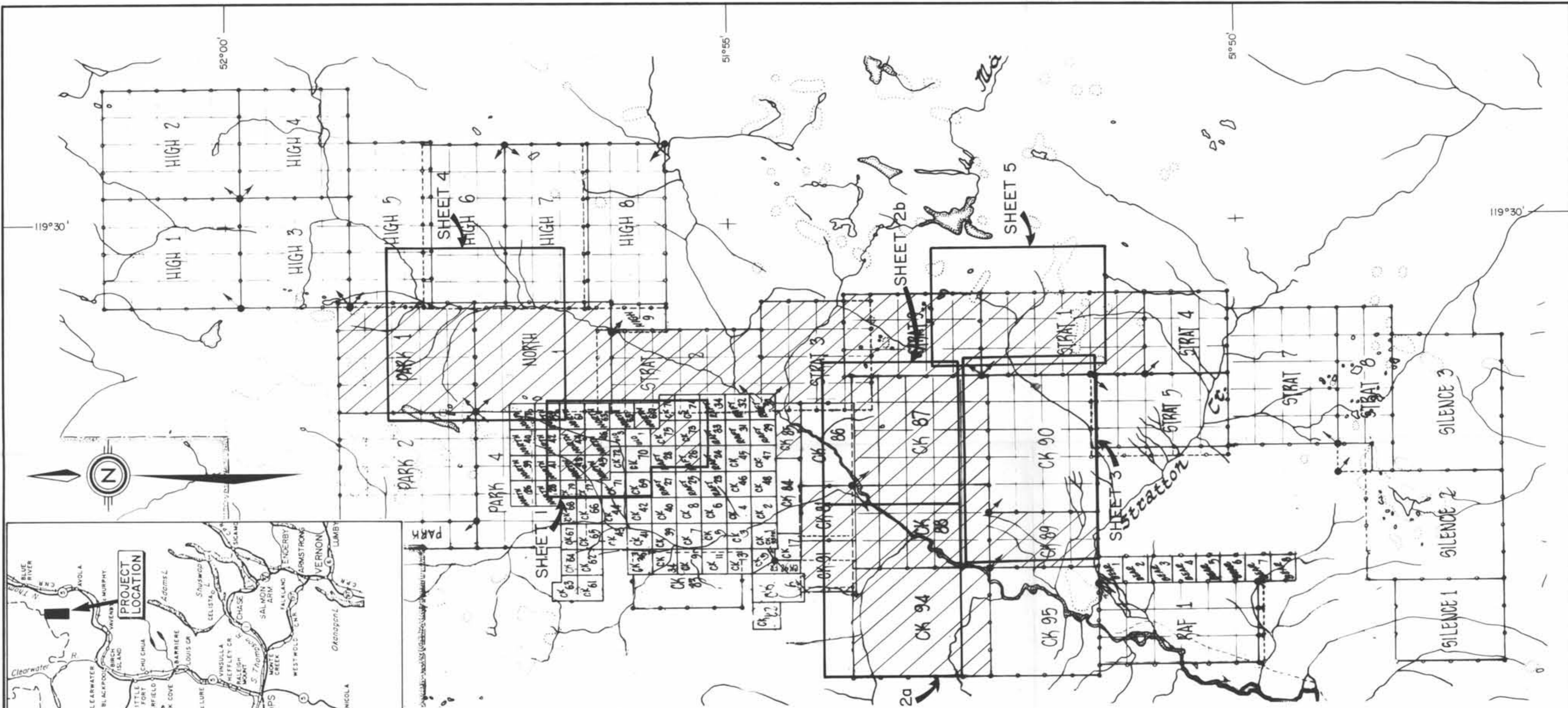
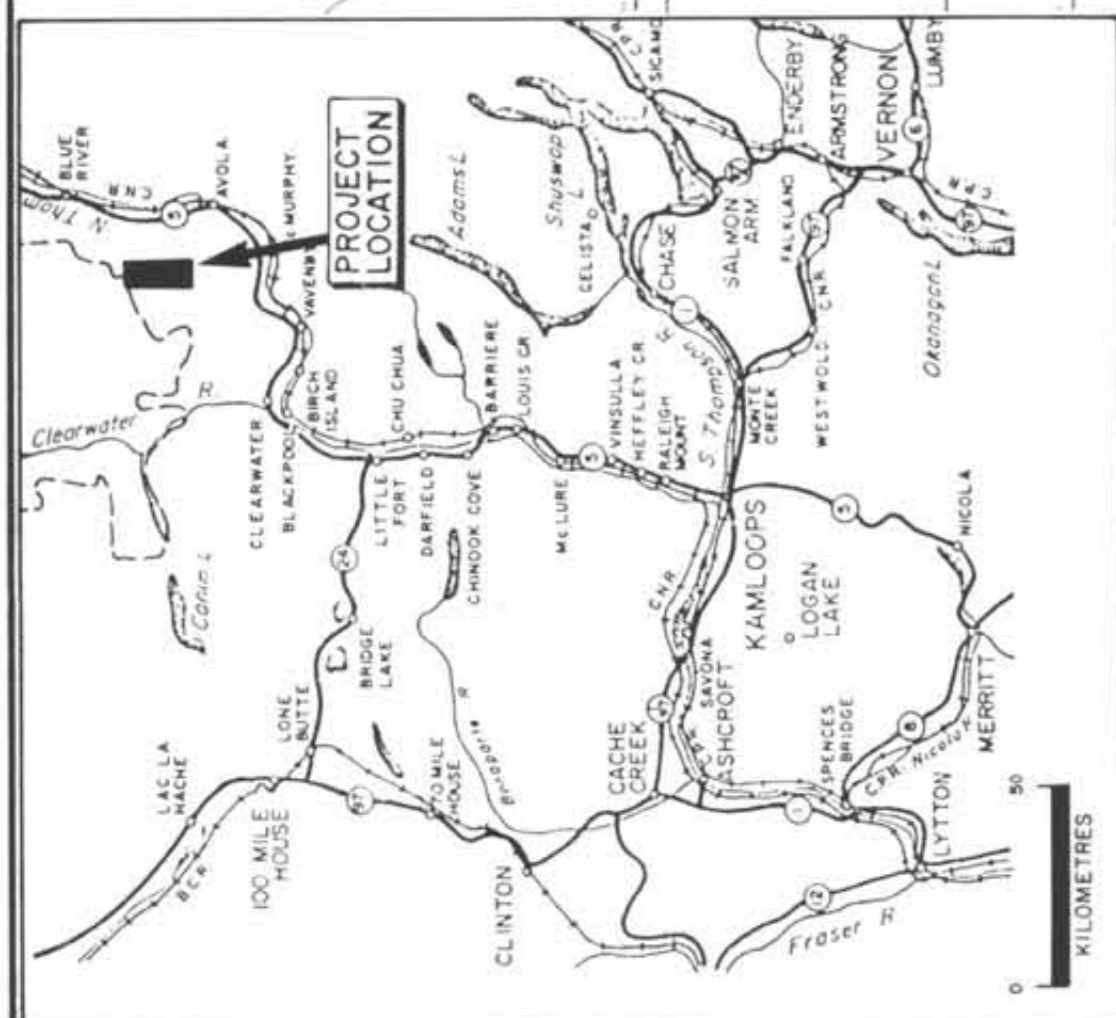
APPENDIX "B"

STATEMENT OF QUALIFICATIONS

I, MICHAEL RAY MURRELL, hereby declare that I was graduated from the University of Alberta with an Honours B.Sc. in geology during May 1966. During my undergraduate summers I was employed on geological programs by B.A. Oil (now Gulf Oil), and by a small mining company. Upon graduation I joined Cominco Ltd. and have been engaged in many aspects of mining exploration since that time.

Dated this 30th day of October 1980
at Vancouver, British Columbia.

Signed: *M.R. Murrell*
M.R. Murrell
Project Geologist

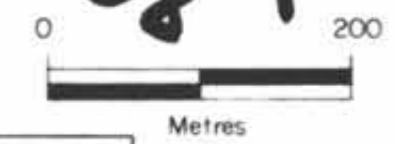


part 1

MINERAL RESOURCES BRANCH.
ASSESSMENT REPORT
8317
NO.

CK PROPERTY				82 M 83 D	
ASSESSMENT WORK AND CLAIM MAP LOCATIONS GEOCHEMISTRY - 1980 COVERAGE					
Drawn by:	Traced by: SAW		Scale: 1: 50,000	Date: Feb 1980	Plate: 1
Revised by:	Date:	Revised by:	Date:		
MRM	10/80				

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of 4



MINERAL RESOURCES BRANCH
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NO.

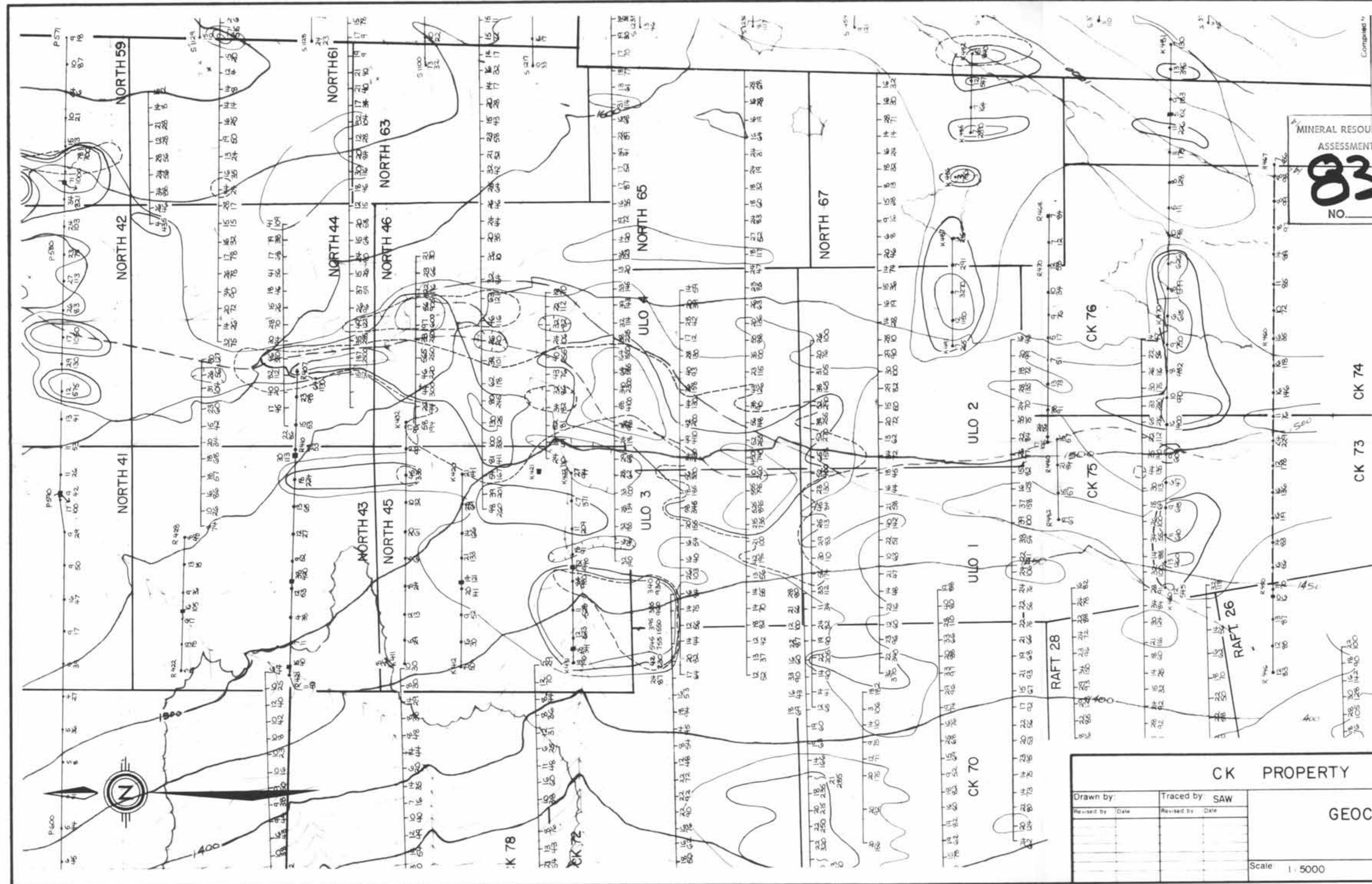
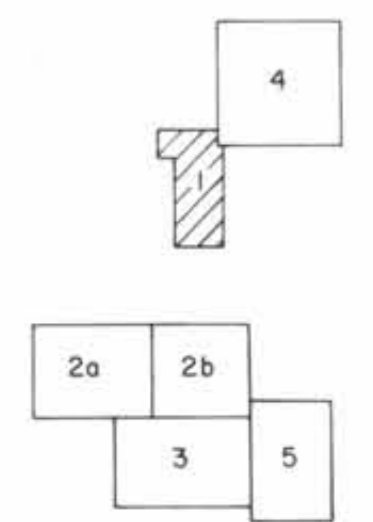
LEGEND

- Rio Tinto sampling
- Cominco sampling

Sample no. beginning with:
K/R/T 1980 sampling
S/P/I 1979 sampling

- 28 Pb/Zn
- Zn (ppm)
- 100
- 200
- 500
- Pb (ppm)
- 40

NOTE: Silt samples not included in the contouring.



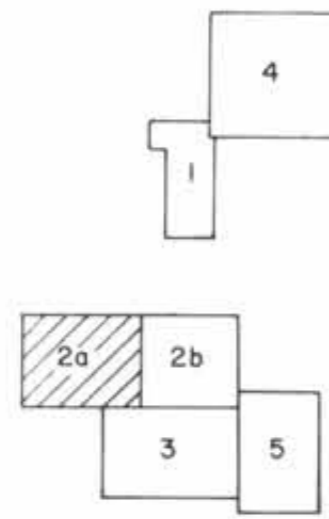
CK PROPERTY		
Drawn by:	Traced by: SAW	
Revised by: _____ Date: _____	Revised by: _____ Date: _____	GEOCHEMISTRY 1980 SHEET I
Scale 1:5000	Date Oct 1980	

LEGEND

- Rio Tinto sampling
- Cominco sampling

Sample no. beginning with:
 K / R / T 1980 sampling
 S / P / I 1979 sampling

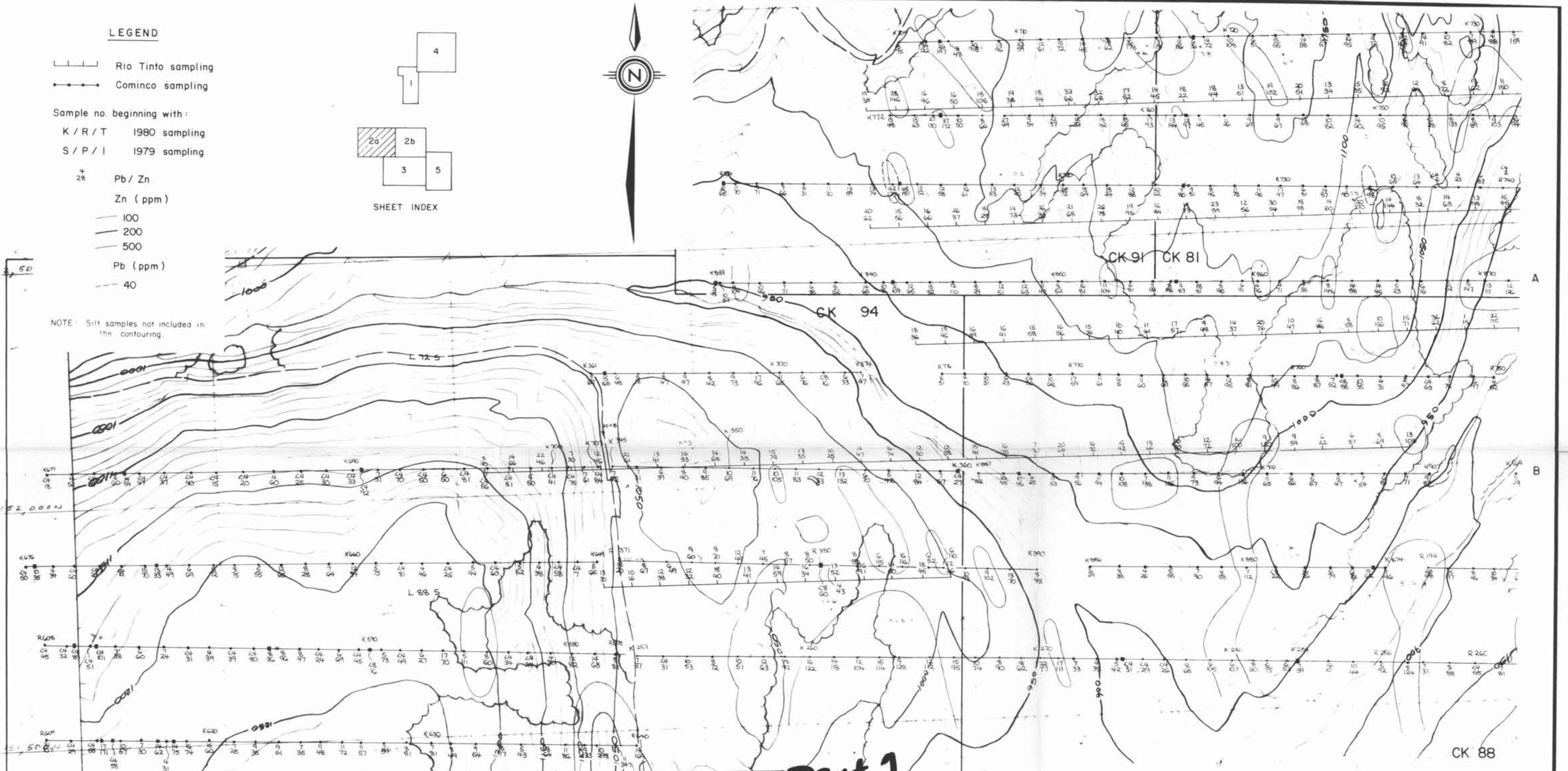
- + 20 Pb / Zn
- Zn (ppm)
- 100
- 200
- 500
- Pb (ppm)
- 40



SHEET INDEX



NOTE: Silt samples not included in the contouring.

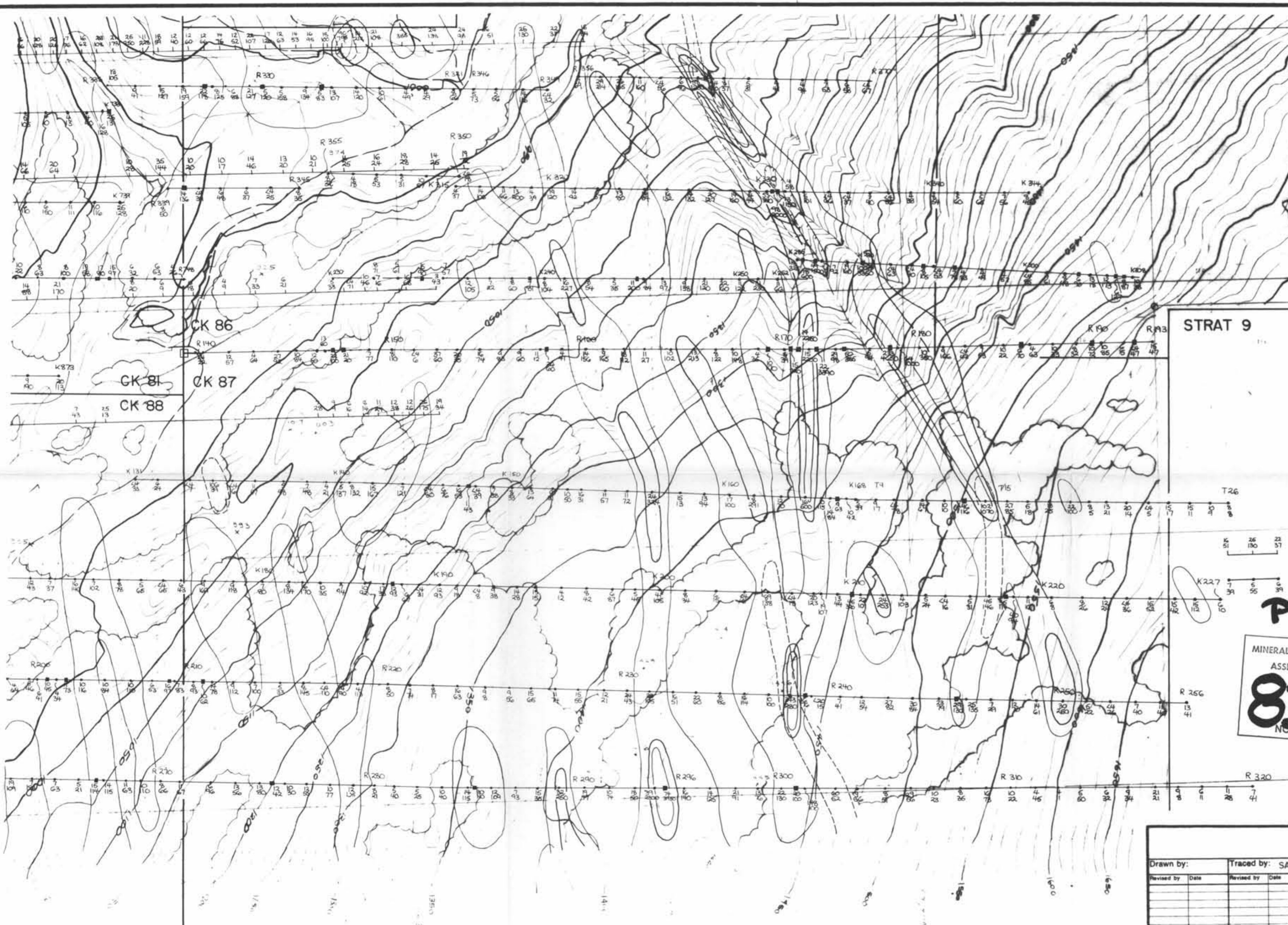


MINERAL RESOURCES BRANCH
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*Part 1
 of 4*



CK PROPERTY			
Drawn by: _____ Revised by: _____ Date: _____		Traced by: SAW Revised by: _____ Date: _____	
GEOCHEMISTRY 1980 SHEET 2a			
Scale: 1 : 5000		Date: October 1980	Plate: 3a



LEGEND

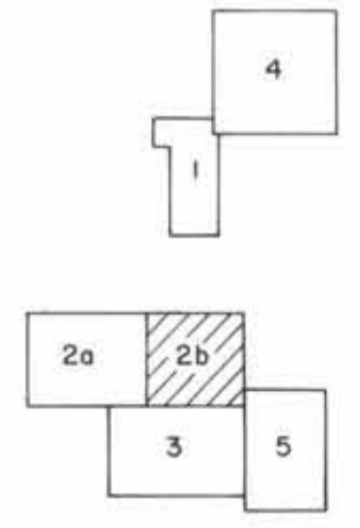
- Rio Tinto sampling
- Cominco sampling
- Sample no. beginning with:
- K / R / T 1980 sampling
- S / P / I 1979 sampling
- 4
 28 Pb / Zn
- Zn (ppm)
- 100
- 200
- 500
- Pb (ppm)
- 40

NOTE: Silt samples not included in the contouring.

STRAT 9

CK 86
CK 87
CK 88

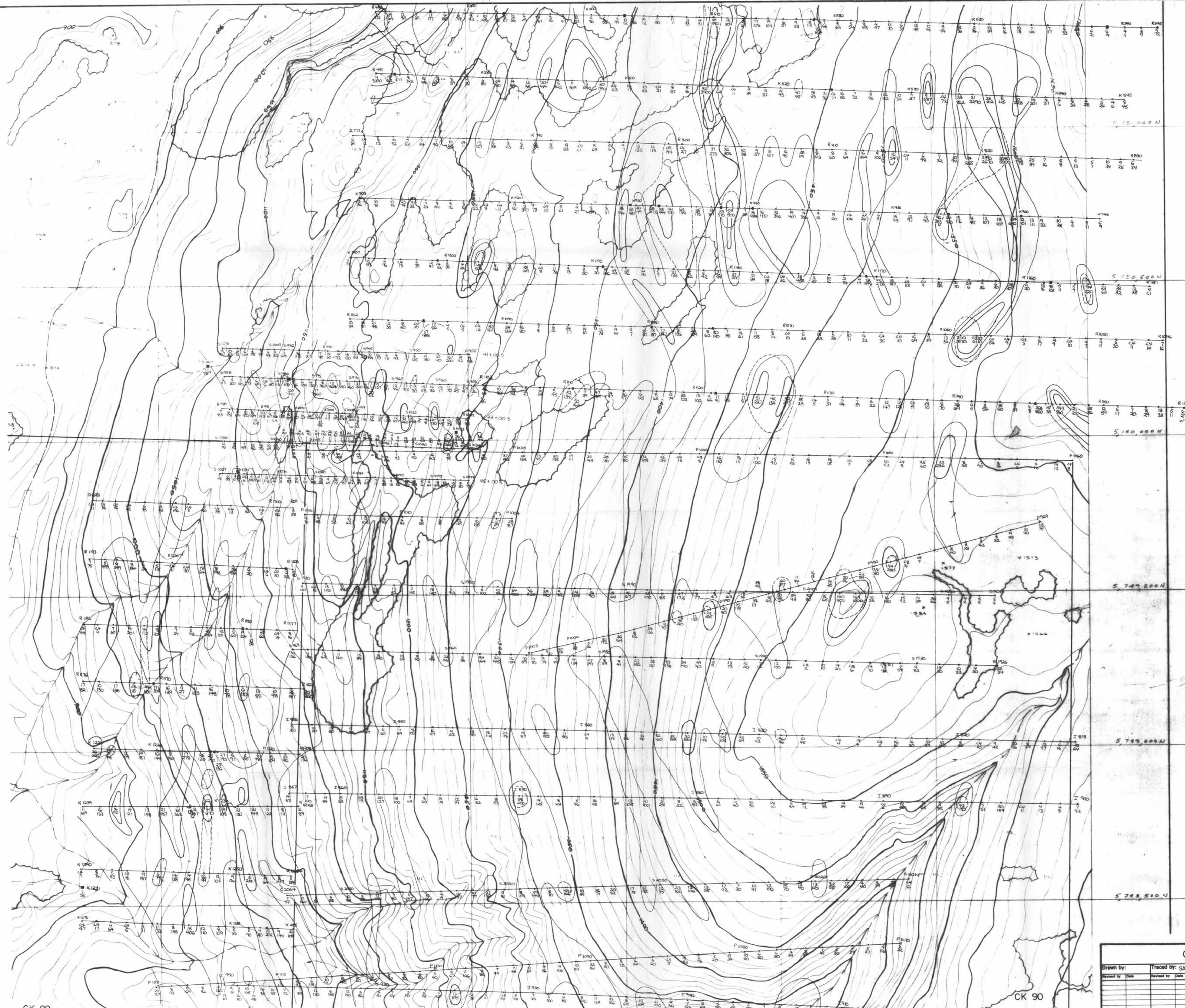
Part 1 of 4
MINERAL RESOURCES BRANCH
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SHEET INDEX



CK PROPERTY				
Drawn by:	Traced by: SAW			GEOCHEMISTRY 1980
Revised by:	Date:	Revised by:	Date:	
SHEET 2b				36
Scale: 1 : 5000		Date: October 1980		



LEGEND

- Rio Tinto sampling
- Cominco sampling
- Sample no beginning with:
 K / R / T 1980 sampling
 S / P / I 1979 sampling
- Pb / Zn
 Zn (ppm)
 100
 200
 500
 Pb (ppm)
 40

NOTE: Silt samples not included in the contouring.

Part 2
of 4

SHEET INDEX

1	2a	2b	3	4	5
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MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8317

0 100 200
METRES

CK 89

CK 90

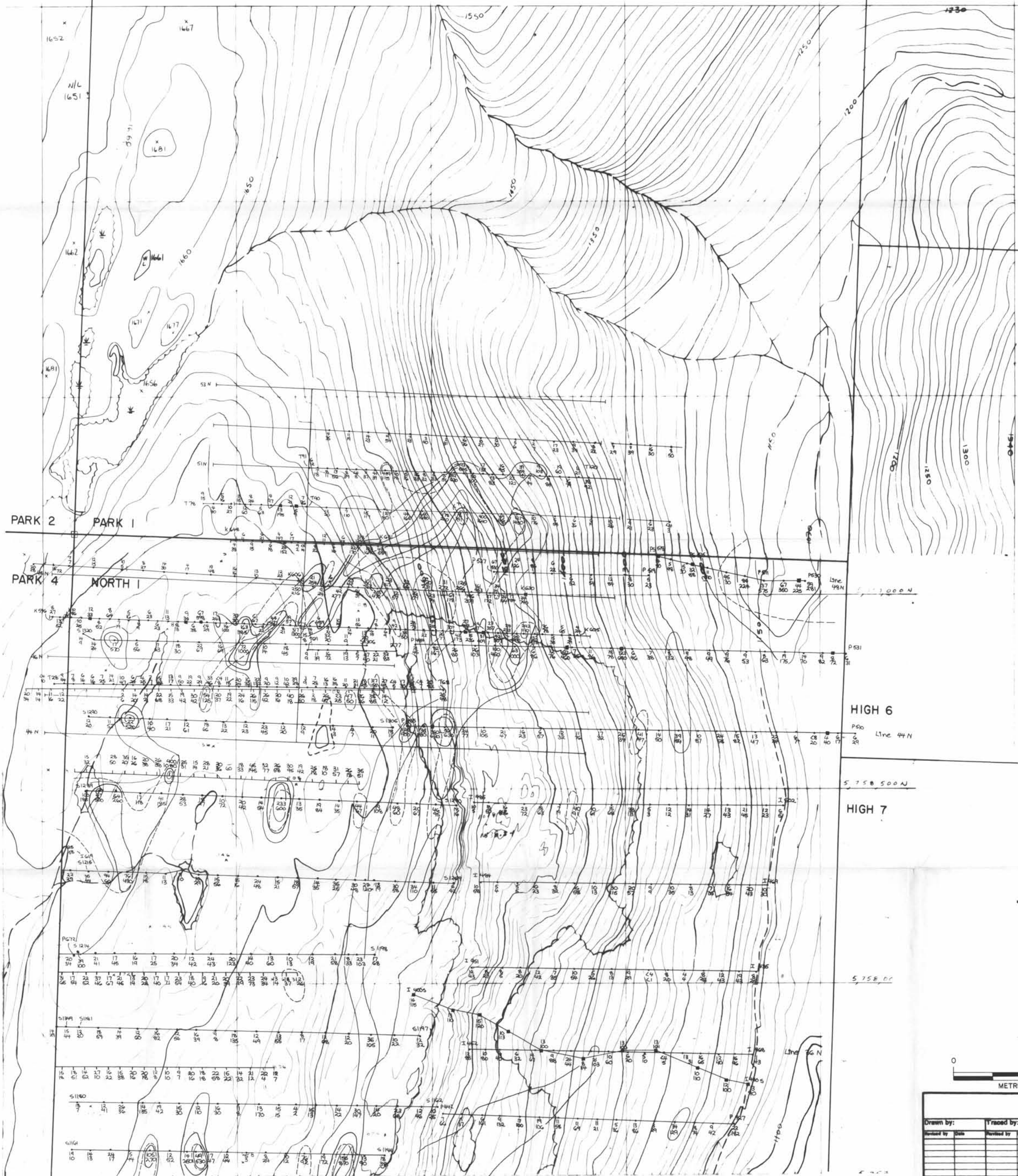
CK PROPERTY

Drawn by:	Traced by: SAW
Checked by:	Reviewed by:

GEOCHEMISTRY 1980

SHEET 3

Scale: 1:5000 Date: Oct 1980 Plate: 4



HIGH 5

HIGH 6

HIGH 7

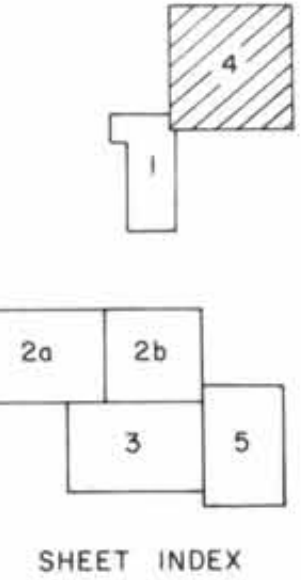


- LEGEND**
- Rio Tinto sampling
 - Cominco sampling
- Sample no. beginning with:
- K/R/T 1980 sampling
 - S/P/I 1979 sampling
- Pb/Zn
- Zn (ppm)
 - 100
 - 200
 - 500
 - Pb (ppm)
 - 40

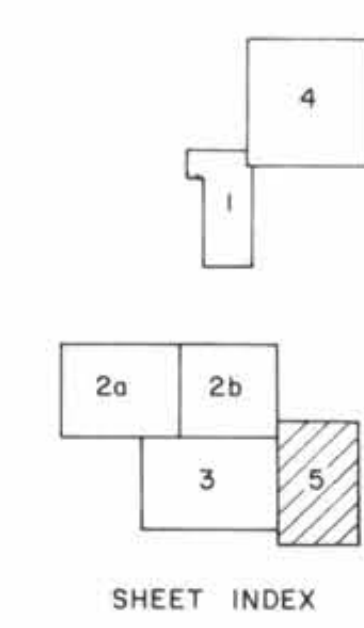
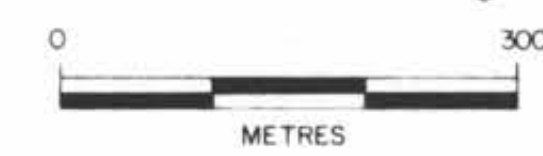
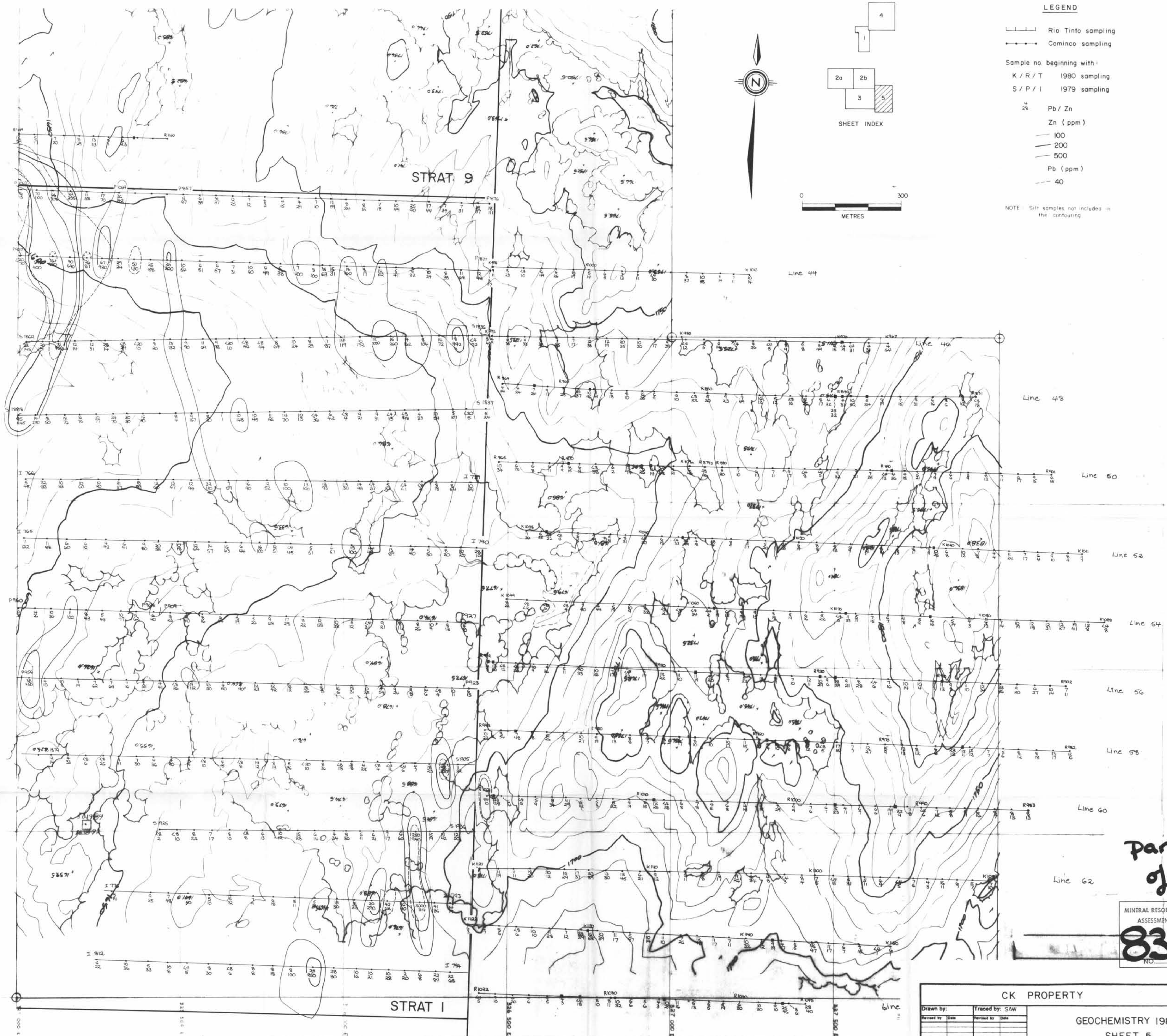
NOTE: Silt samples not included in the contouring.

part 2 of 4

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
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NO.



CK PROPERTY	
Drawn by:	Traced by: SAW
Checked by: DIM	Reviewed by: DIM
GEOCHEMISTRY 1980 SHEET 4	
Scale: 1:5000	Date: Oct. 1980
	Plate: 5



- LEGEND**
- Rio Tinto sampling
 - Cominco sampling
- Sample no beginning with:
- K / R / T 1980 sampling
 - S / P / I 1979 sampling
- 4 Pb / Zn
 - 2% Zn (ppm)
 - 100
 - 200
 - 500
 - Pb (ppm)
 - 40
- NOTE: Silt samples not included in the contouring.

Part 1
of 4

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8317
NO.

CK PROPERTY		GEOCHEMISTRY 1980 SHEET 5	
Drawn by:	Traced by: SAW	Scale: 1:5000	Date: October 1980
Revised by:	Revised by:		Plate: 6