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CRANBROOK, B.C. MINING RECORDER

Cominco 1td.

and the second

EXPLORATION DIVISION

WESTERN DISTRICT

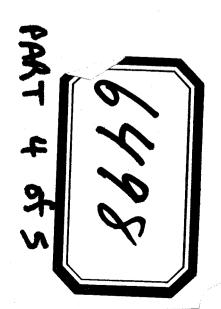
REPORT OF GRID "C" GEOCHEMICAL SURVEY ON VINE 1 CLAIM, VINE 1, 25, 27 CLAIM GROUP Fort Steele Mining Division

> Submitted by: E.W. BATCHELOR

Cominco Ltd. Kootenay Exploration 2450 Cranbrook Street Cranbrook, B.C.

Under the supervision of:

D.W. HEDDLE P. Eng.



6498 Part 4 of 5

WESTERN DISTRICT

COMINCO LTD.

EXPLORATION DIVISION

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STATEMENT OF QUALIFICATIONS

COMINCO LTD.

EXPLORATION DIVISION

WESTERN DISTRICT

1.00 GENERAL STATEMENT

This report describes a detailed soil geochemical survey on Vine 1 Claim (20 units), recorded on September 3, 1976. For assessment work reporting, Vine 1, Vine 25 (12 units) and Vine 27 (6 units) have been grouped. The survey was undertaken to explore for Cu/ Pb/Zn deposits in the Aldridge Formation.

The survey was conducted intermittently between April 13th and June 10th, 1977. A total of 297 samples were collected and analyzed by atomic absorption for ppm Cu, Pb and Zn.

Total expenditures for soil geochemical program on Grid "C" were \$2,380.14. An "Affidavit on Application to Record Work" which includes these expenditures was filed on September 1, 1977, with the Mining Recorder at Cranbrook, B.C.

2.00 INTRODUCTION

2.10 Status of Ownership

All Vine claims are 100% Cominco owned.

2.20 Location and Access

Vine 1 is located approximately 10 km SSW of Cranbrook, B.C., and access is via Highway 3/95 and good gravel road. Plate 1 is a location map showing Grid "C" relative to claim boundaries.

N.T.S.	82G/5
M.D.	Fort Steele
Long:	116013'
Lat:	490251

2.30 Topography and Vegetation

Vine 1 claim covers an area of moderate relief ranging in elevation from 940 to 1390 m. Relief within the survey area is approximately 75 m.

Vegetation varies from grassy open slopes to second growth lodgepole pine and Douglas fir.

3.00 GEOCHEMISTRY

3.10 Sampling Procedure

A detailed soil geochemistry survey was conducted over an area of 50 m by 260 m. A baseline, with azimuth 120° , was cut and flagged sample lines were established at 10 m intervals along the baseline. The sample interval along the lines was 5 m. Samples were collected from the "B" horizon of the soil profile using a grub hoe and were stored in wet strength kraft bags.

3.20 Sample Preparation and Analysis

Samples were dried at atmospheric temperature and were then sieved through a -80 mesh nylon screen. The samples were then shipped to Cominco's Exploration Research Lab in Vancouver for analysis. Two grams of the -80 mesh fraction were digested in concentrated HCl and HNO3 by heating on a hot plate. The sample was then taken up in 10% HCl and bulked to 100 ml with distilled water. The samples were then analyzed by atomic absorption.

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4.00 INTERPRETATION AND RESULTS

Plates 2, 3 and 4 are contoured maps for Cu, Pb and Zn in ppm, from soils collected from Grid "C" on Vine 1 claim.

Figures 1, 2 and 3 are graphs of percent cummulative frequency vs metal concentration plotted on log probability paper. The background and threshold values determined for each element are:

	Cu	Pb	Zn	
Background (ppm)	50	150	165	
Threshold (ppm)	270	800	800	

East of line 14E, the Cu, Pb and Zn concentrations in soil samples decreases rapidly. This is thought to reflect increasing thickness of glacial till in that direction. Consequently, transported overburden may be obscuring any concentrations of Cu, Pb and Zn in bedrock.

5.00 STATEMENT OF EXPENDITURES

The following summary of expenditures is taken from Form B, "Affidavit on Application to Record Assessment", for the St. Joe claim group, which was filed on September 1, 1977.

1. Establishing Grid C:

G. McDonald, Tech April 13, 14, 15, 18	¢	140.00
4 days @ \$35/day D. MacDonald, Asst April 13, 14, 15, 18	ф	140.00
D. MacDonard, ASSC April 13, 14, 13, 10 4 days $@$ \$25.83/day		103.32

2. Sampling Grid C:

G. McDonald, Tech May 5, 6, 16, 18	140.00
4 days @ \$35/day	140.00
D. MacDonald, Asst May 5, 6, 16, 18	
4 days @ \$25.83/day	103.32
D. Byford, Asst June 3, 4, 6	
3 days @ \$25.83/day	77.50
B. Fisher, Asst June 3, 4, 6	
3 days @ \$25.83/day	77,50
5 days e #25.05/ day	11.50

3. Sieving Geochem Samples:

D. Byford, Asst	June 7, 8, 9	
	3 days @ \$25.83/day	77.50
B. Fisher, Asst	June 7, 8, 9	
· · · · · · · · · · · · · · · · · · ·	3 days @ \$25.83/day	77.50

4. Map Preparation:

G. McDonald, Tech	June 7, 8, 9	
	3 days @ \$35/day	105.00

5. Supervision:

E.W. Batchelor,	Geologist, June 9, 10, 13	
,	3 days @ \$100/day	300.00

EXPENDITURES - continued --

6.	Analysis:	297 samples @ \$2.50/sample	\$ 742.50
7.	Domicile:	18 man days @ \$10/day	180.00
8.	Transporta	tion: 4 wheel drive rental, gas, repairs 8 days @ \$32/day	256.00
		TOTAL EXPENDITURES	\$2,380.14

SUBMITTED BY:

E.W. BATCHELOR

ENDORSED BY:

D.W. HEDDLE, P. Eng., Assistant Manager, Exploration Western District

APPROVED BY: (1) W Meddle fe G. HARDEN Manager, Exploration Western District le for O Harden.

September 15, 1977

- 3 -

EXHIBIT "A"

Statement of Expenditures

Geochemical Survey - Vine Group - Grid C

Establishing Grid C: G. McDonald, Tech. - April 13, 14, 15, 18 4 days @ \$35/day. . . 140.00 \$ D. MacDonald, Asst.- April 13, 14, 15, 18 4 days @ \$25.83/day . . . 103.32 Sampling Grid C: G. McDonald, Tech. - May 5, 6, 16, 18 4 days @ \$35/day 140.00 D. MacDonald, Asst.- May 5, 6, 16, 18 4 days @ \$25.83/day. . . . 103.32 June 3, 4, 6
3 days @ \$25.83/day. . .
June 3, 4, 6
3 days @ \$25.83/day. . . D. Byford, Asst. 77.50 B. Fisher, Asst. 77.50 Sieving Geochem Samples: - June 7, 8, 9 3 days @ \$25.83/day. . . D. Byford, Asst. 77.50 - June 7, 8, 9 3 days @ \$25.83/day. . . B. Fisher, Asst. 77.50 Map Preparation: G. McDonald, Tech. - June 7, 8, 9 3 days @ \$35/day. . . . 105.00 Supervision: E.W. Batchelor, Geologist June 9, 10, 13 3 days @ \$100/day. . . . 300.00 Analysis: 297 samples @ \$2.50/sample. 742.50 Domicile: 180.00 Transportation: 4 wheel drive rental, gas, reparis 8 days @ \$32/day. 256.00

TOTAL EXPENDITURES \$ 2,380.14

SIGNED: BATCHELOR

This is Exhibit "A" to the Statutory Declaration of E.W. Batchelor declared before me this ______ day of 1977.

•

EPTEMBER Jacak.

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A GEOCHEMICAL PROGRAMME

CARRIED OUT ON THE VINE MINERAL CLAIMS (GRID C)

in the Fort Steele Mining Division of the Province of British Columbia

More Particularly N.T.S. 82G/5

AFFIDAVIT

I, E.W. BATCHELOR, of the City of Cranbrook in the Province of British Columbia, make Oath and say:

That I am employed as a Geologist with Cominco Ltd. 1. and as such, have a personal knowledge of the facts to which I hereinafter depose;

That annexed hereto and marked as Exhibit "A" to this 2. my Affidavit is a true copy of expenditures incurred on a geochemical survey program, on the Vine Group of mineral claims.

That the said expenditures were incurred between the 13th day of April, 1977 and the 10th day of June, 1977, for the purposes of mineral exploration on the above 3. claims.

Sworn Before Me at <u>CRONBROOK</u>) in the Province of British Columbia, this) <u>28</u> day of <u>SEPTEMBER</u> , 1977.)	
	E.W.
A Commissioner for taking Affidavits in the)	

BATCHELOR

Province of British Columbia. ĵ

COMINCO LTD.

EXPLORATION DIVISION

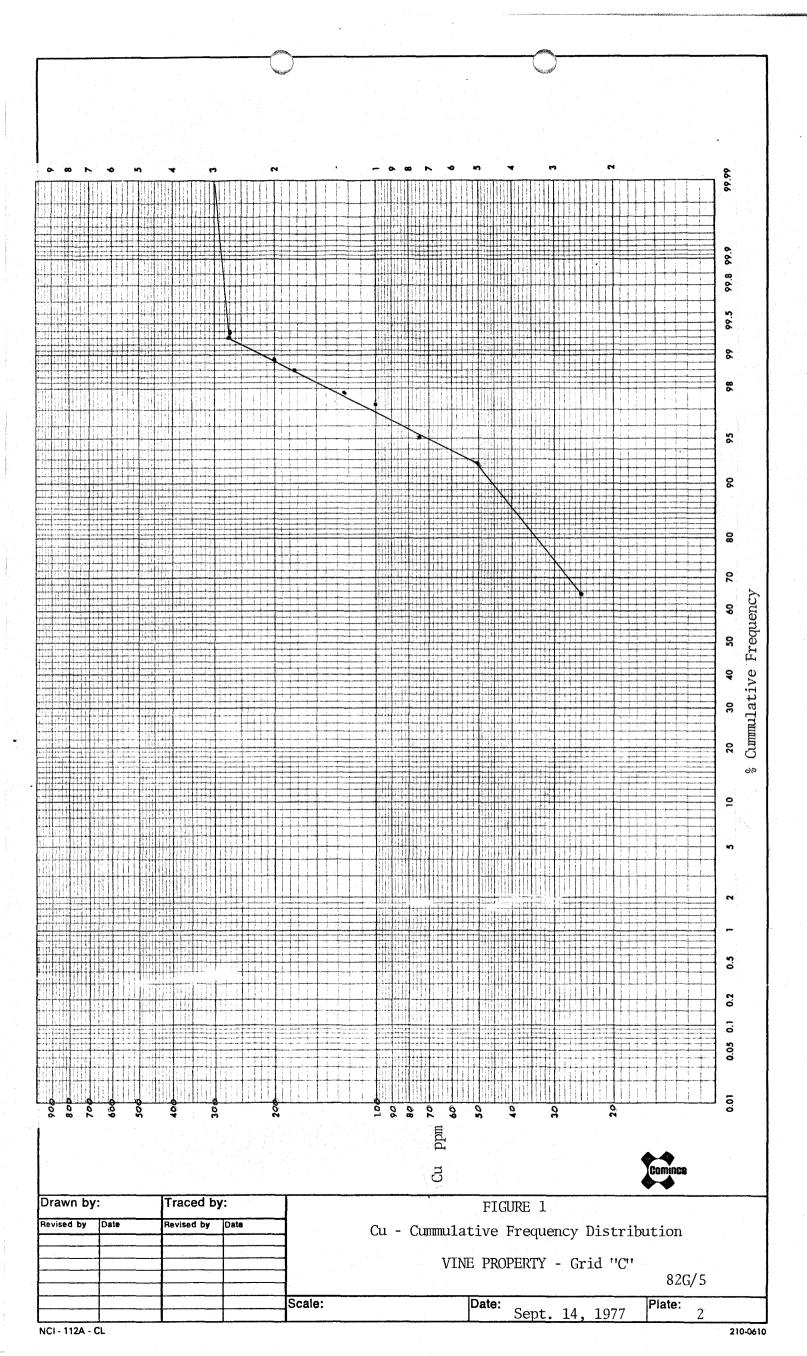
WESTERN DISTRICT

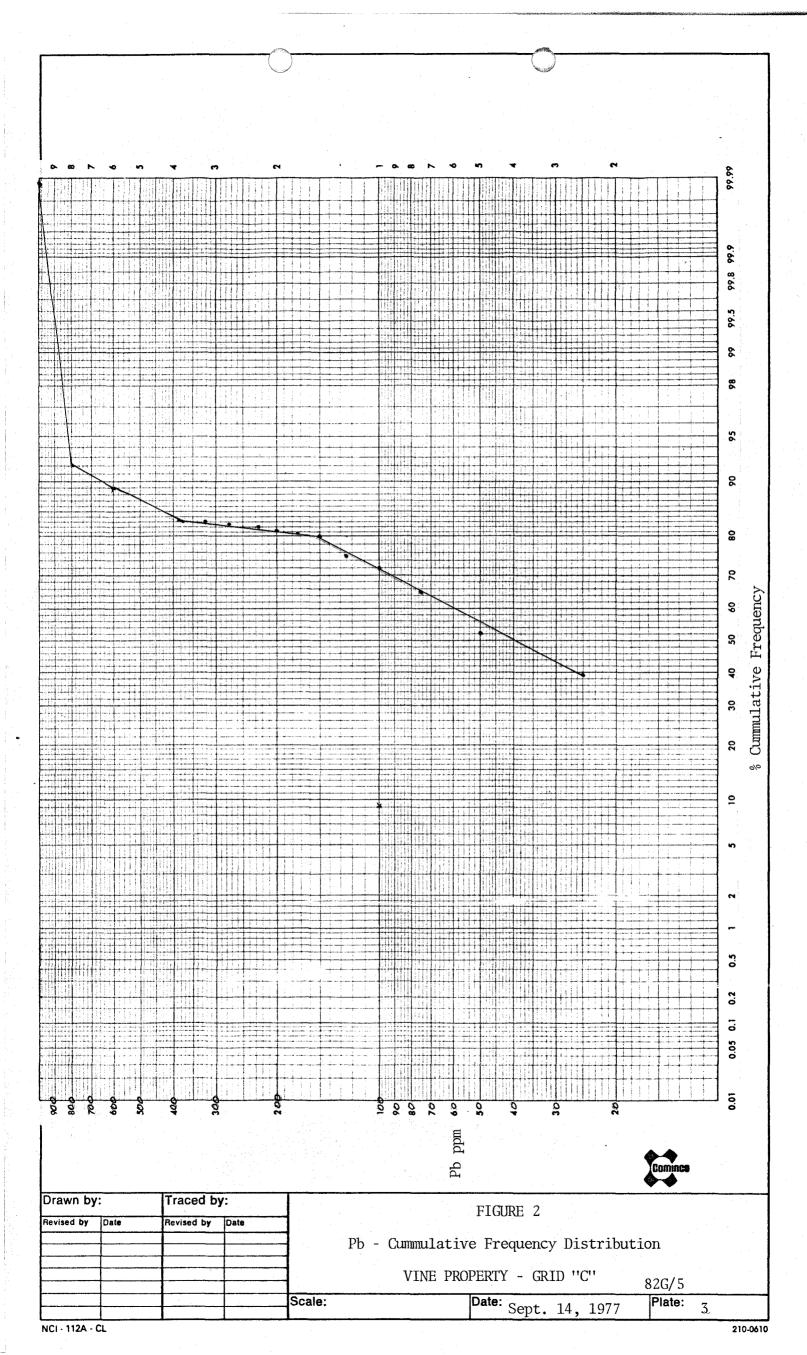
STATEMENT OF QUALIFICATIONS

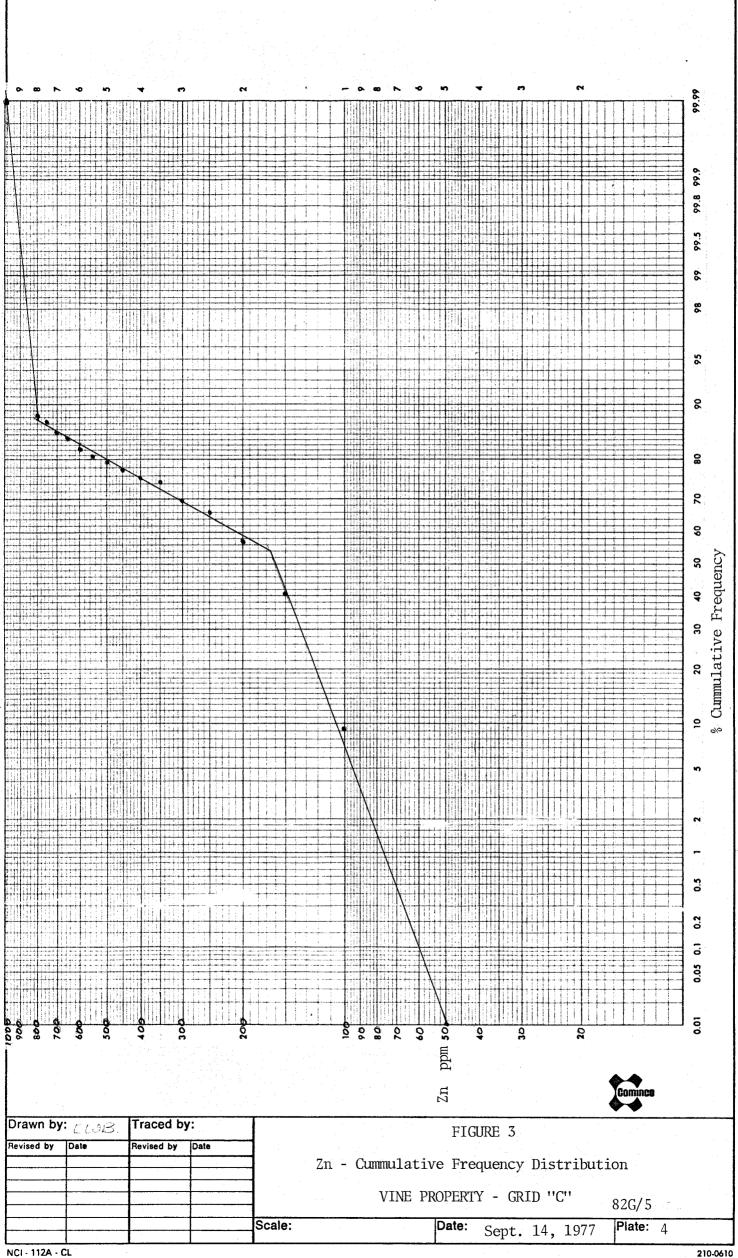
E.W. BATCHELOR graduated from U.B.C. during 1966 with a B.A.Sc degree in Geological Engineering.

Since that time he has been employed in various phases of base metal exploration.

D.W. HEDDLE, P. Eng. Assistant Manager, Exploration Western District

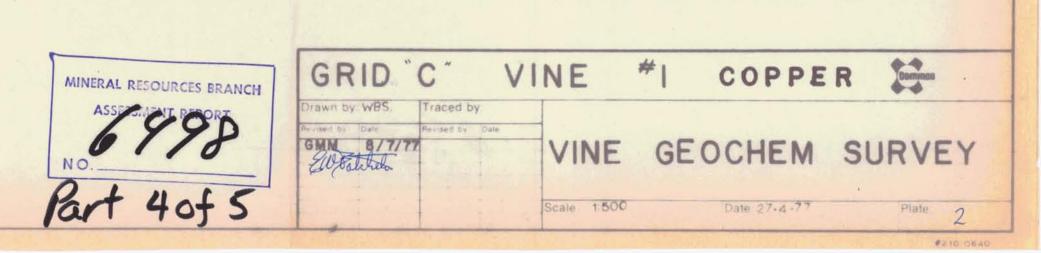






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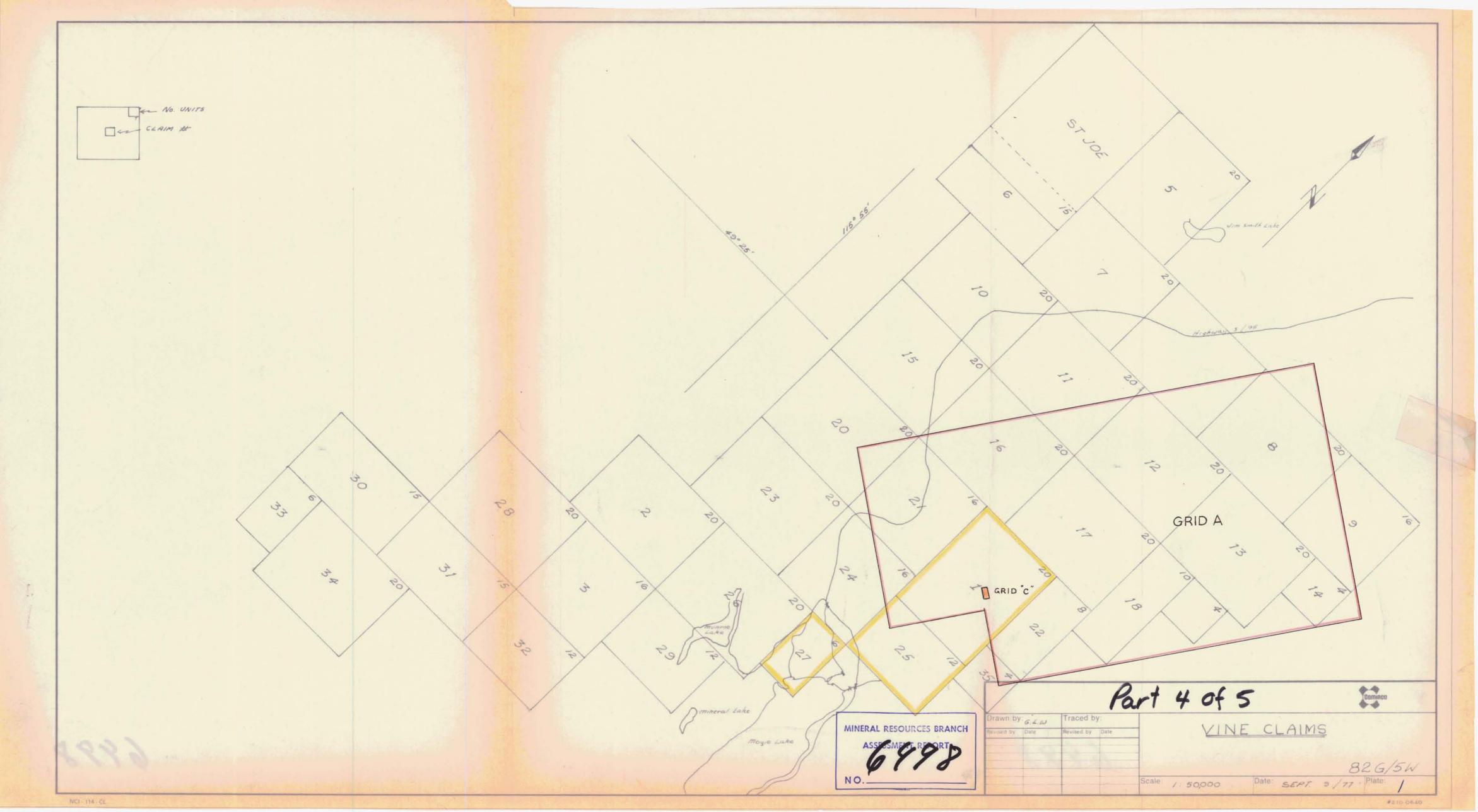


METERS

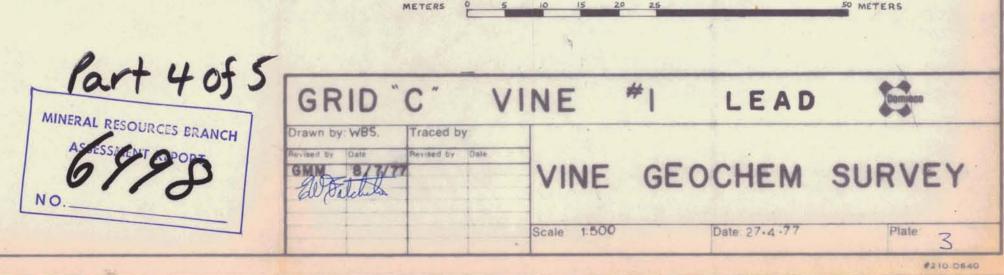
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METERS

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