

COMINCO LTD.

EXPLORATION DIVISION

WESTERN DISTRICT

6201

REPORT OF GEOCHEMICAL SURVEY
ON THE MITTEN CLAIM

Golden Mining Division-34

Lat: 50°59' Long: 116°29'

82K/16 15E

MINERAL RESOURCES BRANCH ASSESSMENT REPORT NO. _____
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Report by:

G.L. WEBBER

COMINCO LTD.

Kootenay Exploration
Cranbrook, B.C.

under the supervision of:

D.W. HEDDLE
P. Eng.

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REPORT OF GEOCHEMICAL SURVEY
ON THE MITTEN CLAIM

Golden Mining Division

GENERAL STATEMENT

This report relates to a soil geochemical survey and expenditures on the Mitten Claim (9 units), recorded on the 11th day of August, 1975, Record No. 21.

The soil geochemical survey was conducted intermittently during August and September, 1976. The survey grid is located on the north-east corner of the Mitten Claim.

A total of 140 soil samples were taken and assayed by atomic absorption for ppm Pb, Zn and Cu. Total expenditures for this program were \$1,911. It is requested that \$900 of the \$1,911 be applied to the 9 units of the Mitten claim and the remainder \$1,011 be held for future assessment credits.

Affidavits on Application for Certificate of Work will accompany this report to be filed with the Mining Recorder at Golden, B.C.

INTRODUCTION

(a) Status of Ownership

The Mitten Claim is 100% Cominco Owned.

(b) Location and Access

The Mitten Claim consists of nine units and is located north-northwest of Jubilee Mountain and 4 km. southwest of Harrogate at Lat: 50°59' and Long: 116°29'.

Access to the south end of the property is by an old mining road from the Baroid of Canada Mine on Jubilee Mountain, a distance of 9.60 km.

(c) General Character of the Area

The Mitten Claim covers an area of moderate to low relief to the north of Jubilee ridge. The slopes are moderate with some dolomite bluffs, the highest point being 1325 m and the lowest point on the claim being 1143 m.

The area has been logged and/or burnt off, and is now covered mainly by second growth lodgepole pine, Douglas fir and low bush.

GEOCHEMISTRY

Soil samples were collected with a grub hoe, and stored in wet strength kraft bags. The samples were individually hung on racks and allowed to dry at atmospheric temperature. Upon drying, the samples were sieved through -80 mesh nylon screen, and assayed by atomic absorption methods.

Due to terrain, uniformity in sampling was generally maintained and collected from the "B" horizon. A number of samples were collected from a master horizon of active material subject to rapid downhill transport. No samples were collected from talus or till. (Average depth of soil samples was 6 inches). Material sampled was mainly from freely-drained soils.

ASSAY EQUIPMENT AND METHOD

(a) Equipment (Cominco Ltd.).

Soil samples were analyzed for Cu; Pb and Zn in Cominco's Kimberley Lab, by a Viarian Tectron, atomic absorption instrument made in Australia, Type AA3 (154).

(b) Method for Preparing Samples

Two grams of soil sieved to -80 mesh size, was weighed in a 250 ml beaker, 20 ml of HCL (conc.) was added and the samples digested on a hot plate for approximately 20 minutes. HNO₃ (conc.) added until sample was completely oxidized. Sample was taken up in 10% HCL, bulk to 100 ml and aspirated directly into the atomic absorption instrument. Blank determinations were used for background readings.

MITTEN GRID - description of survey and results

The Mitten Grid developed from a baseline 609 m long that was cut on a bearing of 312°. Soil samples were taken at 30.5m intervals on cross lines 60.9m apart. Eighty percent of the grid is over undulating topography with a maximum relief of 15 m; the southwest portion of the grid parallels the Mitten ridge. The Pb, Zn, Cu anomalies as outlined on Plates 1, 2 and 3 represent base of slope concentration from the Mitten prospects along the Mitten Ridge.

EXHIBIT "A"

Statement of Expenditures

Mitten Claim (9 units)

Golden Mining Division

Geochemical Soil Survey

As a result of this geochemical soil survey on the Mitten Claim, the following expenditures were incurred by Cominco Ltd.

Salaries:

D.L. Pighin - sampling and supervision
5 days @ \$81.49 \$ 407.45

D.P. Meeks (Field Assistant)
5 days @ \$47.54 237.70

D.E. MacDonald (Field Assistant)
6 days @ \$30.95 185.70

J.L. Livingstone (Field Assistant)
8 days @ \$44.67 357.36

Transportation:

4 x 4 - 1/2 month @ \$650/mo (includes gas) 325.00

Geochemical Analyses:

140 determinations @ \$.70 98.00

Salaries (office):

G.L. Webber - report and map preparation
3 days @ \$100 300.00

TOTAL EXPENDITURES \$ 1,911.21

SIGNED: G.L. Webber
G.L. WEBBER

This Exhibit "A" to the Statutory Declaration of G.L. Webber declared before me this 28 day of February, 1977.

J. B. Ratcliffe
A Commissioner for taking Affidavits for the Province of British Columbia.

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A GEOCHEMICAL PROGRAMME
CARRIED OUT ON THE MITTEN MINERAL CLAIM

Located on Jubilee Ridge
in the Golden Mining Division of the
Province of British Columbia
More Particularly N.T.S. 82K/16

A F F I D A V I T

I, G.L. WEBBER, of the City of Kimberley in the Province of British Columbia, make Oath and say:

1. That I am employed as a Geologist by Cominco Ltd. and as such, have a personal knowledge of the facts to which I hereinafter depose;
2. That annexed hereto and marked as Exhibit "A" to this my Affidavit is a true copy of expenditures incurred on a soil geochemical program, on the Mineral Claim Mitten.
3. That the said expenditures were incurred between the 1st day of August, 1976 to the 31st day of September, 1976, for the purpose of mineral exploration on the above noted claims.

Sworn Before Me at the Kimberley)
of _____ in the Province)
of British Columbia, this 28 day)
of February, 1977.)

J. G. Gatliffe
A Commissioner for taking Affidavits
in the Province of British Columbia.)

G.L. Webber
G.L. WEBBER

ATTACHMENTS

- Plate 1. Mitten Claim and soil grid, Pb values, Scale 1"=400'
- Plate 2. Mitten claim and soil grid, Zn values, Scale 1"=400'
- Plate 3. Mitten claim and soil grid, Cu values, Scale 1"=400'

Statement of Expenditures

Declaration

Statement of Qualifications

Reported by: G. L. Webber
G.L. WEBBER

Endorsed by: D. W. Heddle
D.W. HEDDLE, P. Eng.
Assistant Manager
Western District

Approved for
Release by: W. T. Irvine per D. W. H.
W.T. IRVINE, P. Eng.
Manager, Exploration
Western District

cc:- Mining Recorder, Golden, B.C.
Vancouver, Administration
Cranbrook Office

COMINCO LTD.

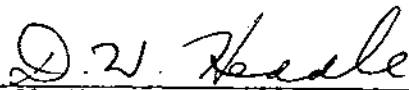
EXPLORATION DIVISION

WESTERN DISTRICT

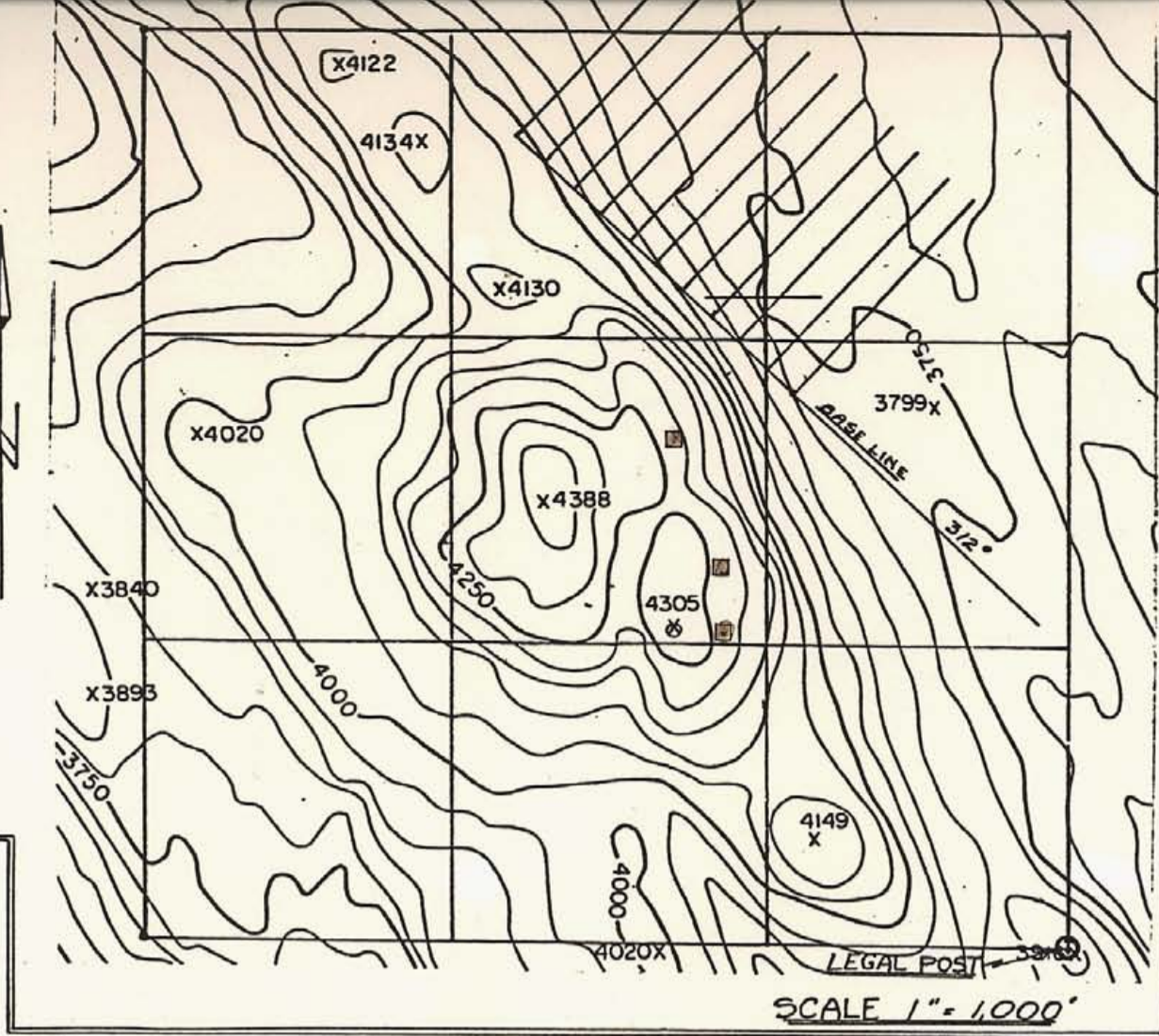
STATEMENT OF QUALIFICATIONS

G.L. WEBBER has been involved in various types of mineral exploration work for Cominco Ltd. over the last twenty-five years.

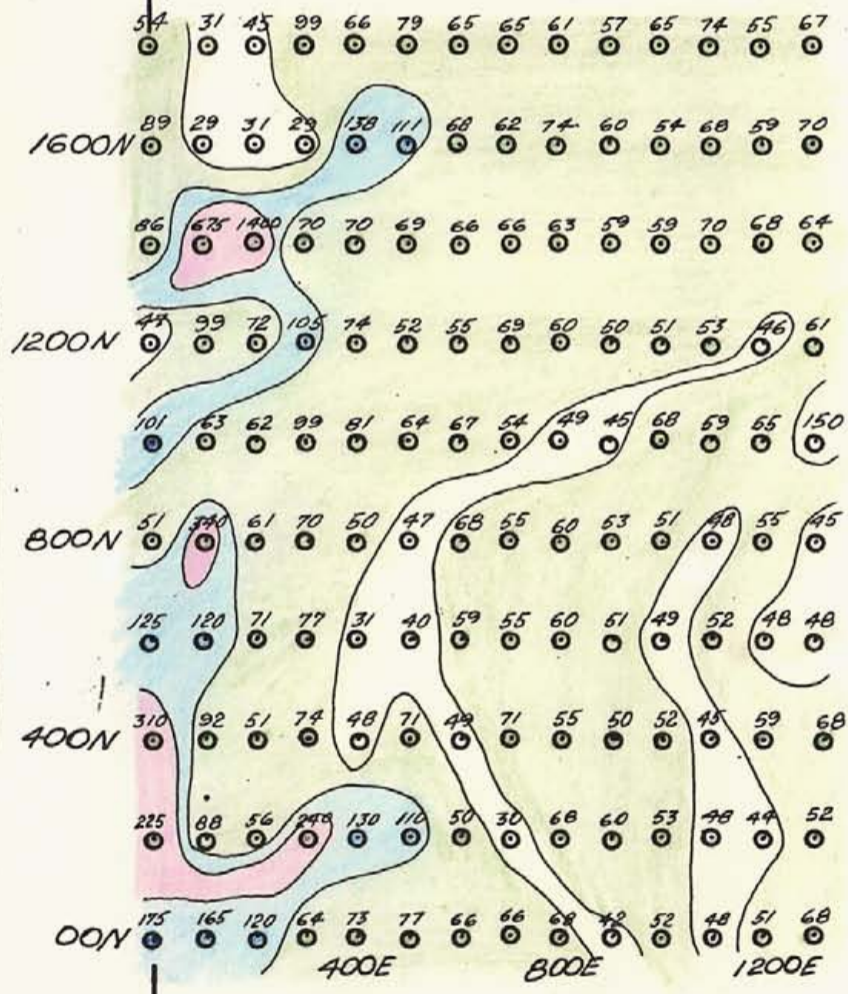
I consider him well qualified to carry out the reporting on all phases of geological exploration work.



D.W. HEDDLE
P. Eng.
Chief Geologist, Exploration
Western District



SCALE 1" = 1000'



- PPM** **ZN**
- 200 +
 - 100 - 200
 - 50 - 100
 -
 - MINERALIZED O.C.



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Revised by	Date	Revised by	Date

MITTEN
SOIL GEOCHEMICAL GRID

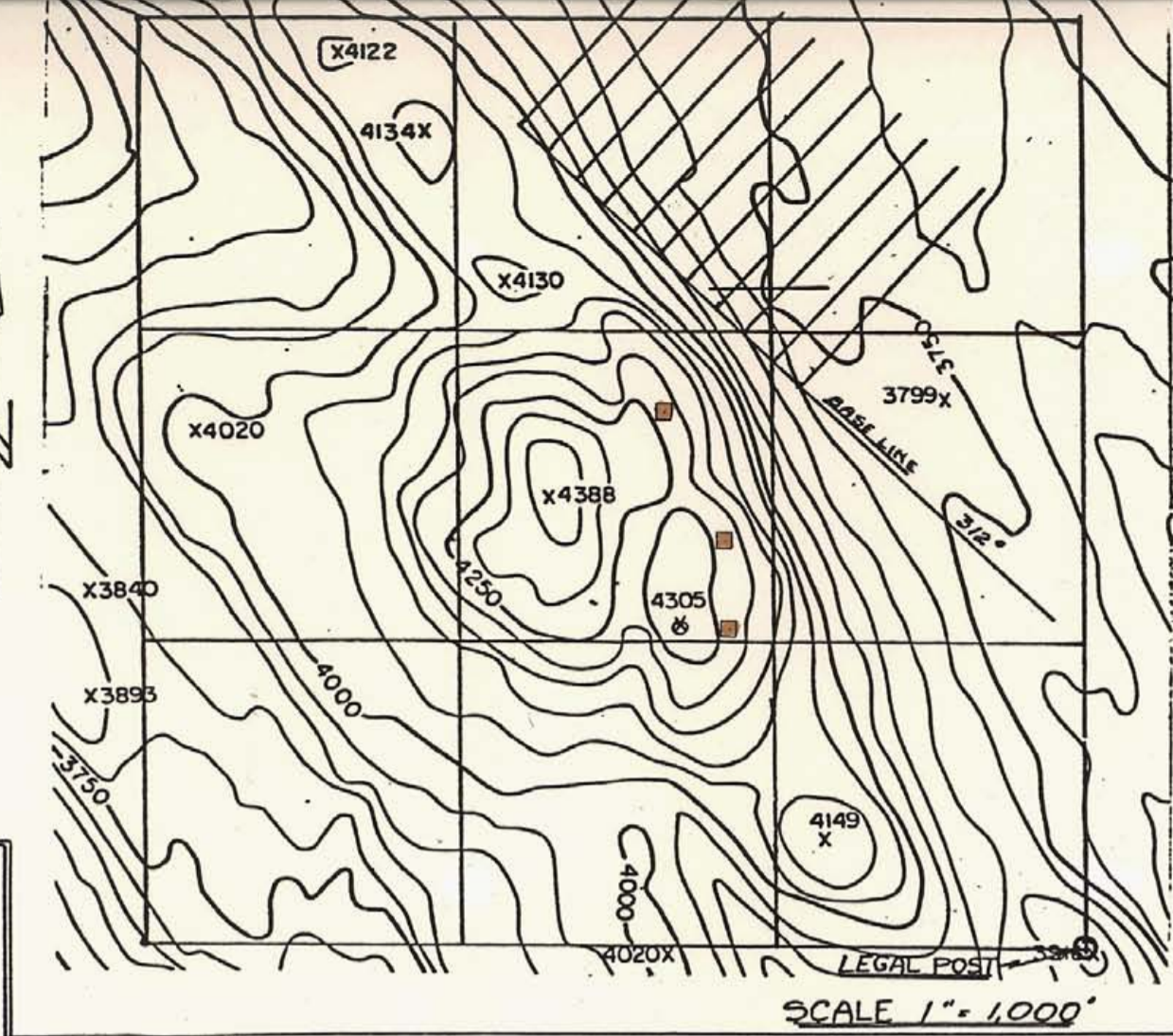
ZN

NTS B2K/15E16

Scale: 1" = 400'

Date: JAN 1977

Plate:



SCALE 1" = 1,000'

22 87 25 23 22 21 24 19 22 26 23 31 22 20

1600N 21 16 26 18 30 23 23 24 26 26 24 24 21 22

26 35 29 25 21 23 20 20 20 21 28 25 21

1200N 26 21 26 22 27 24 20 28 25 26 25 25 23 22

39 25 35 30 30 21 24 25 24 21 26 28 23 22

800N 56 34 20 28 51 23 26 24 21 25 28 24 26 23

24 20 26 30 46 25 30 25 23 21 24 25 25 27

400N 34 21 19 26 27 32 24 27 21 19 21 23 23 25

56 24 18 19 30 21 20 28 20 21 17 24 21 24

00N 72 140 30 34 24 22 23 21 21 31 21 17 32 25

400E 800E 1200E

- PPM Pb**
- 100+
 - 50-100
 - 30-50
 -
 - MINERALIZED O.C.



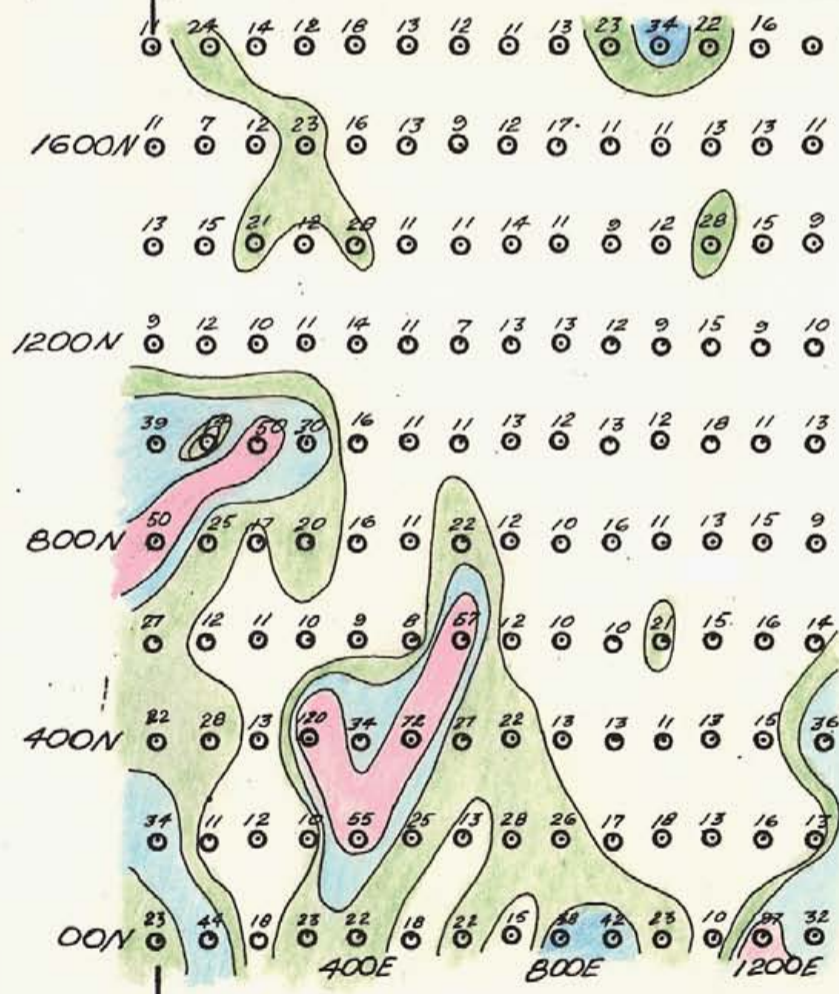
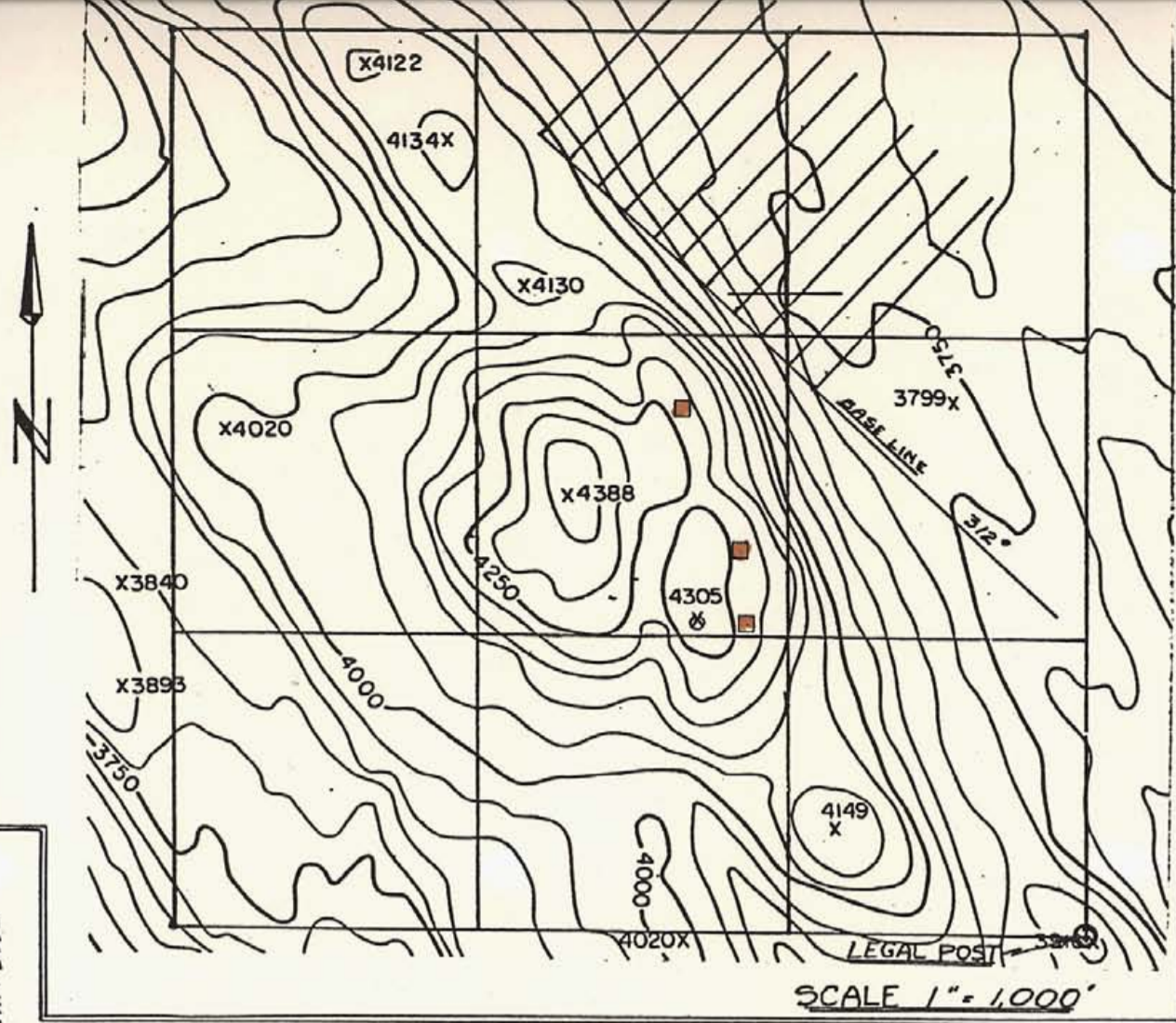
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Revised by	Date	Revised by	Date

MITTEN
SOIL GEOCHEMICAL GRID

Pb

NTS B2K/15#16

Scale: 1" = 400' Date: JAN 1977 Plate:



- PPM** CU
- 50-100
 - 30-50
 - 20-30
 -
 - MINERALIZED D.C.



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MITTEN

SOIL GEOCHEMICAL GRID

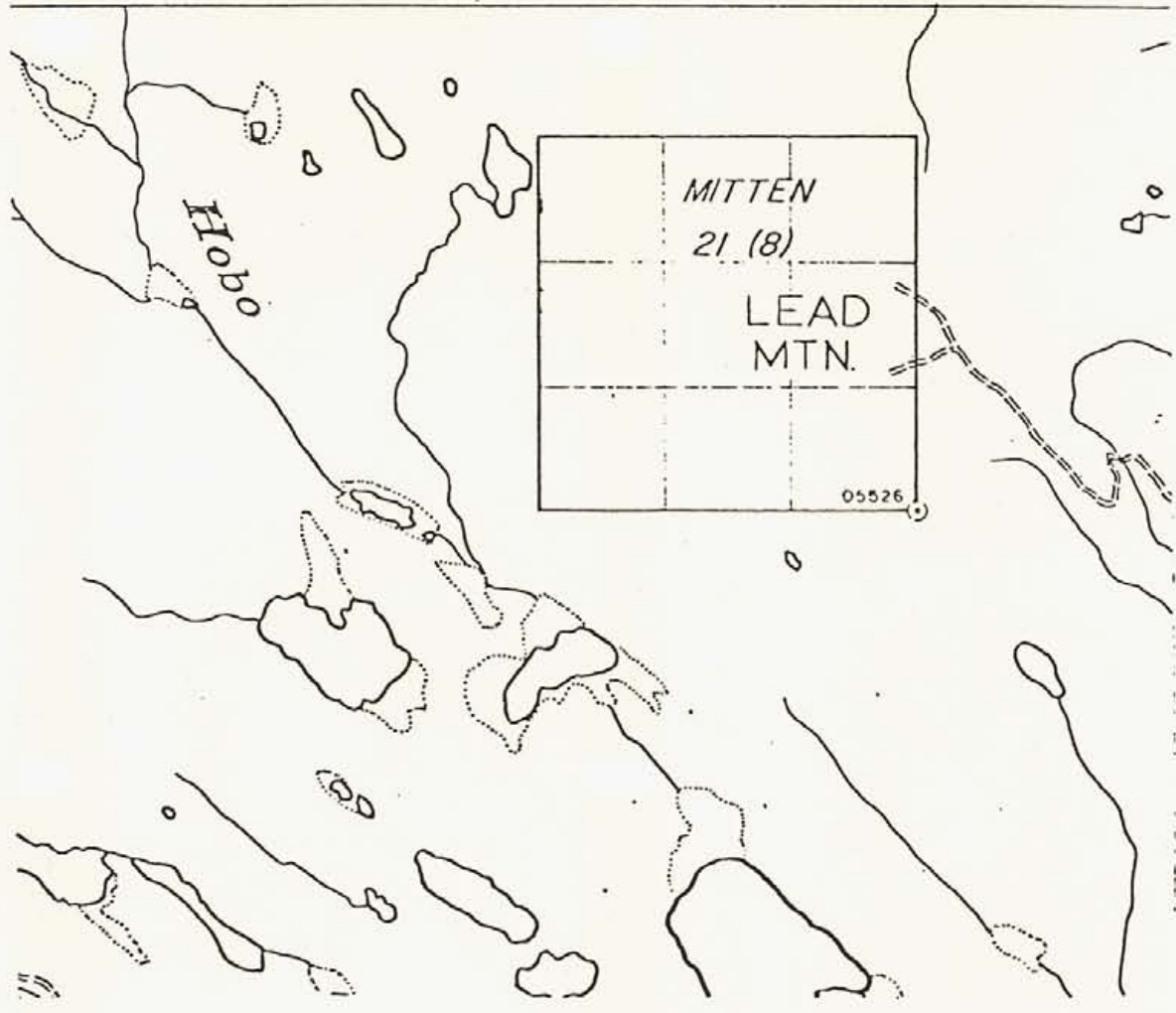
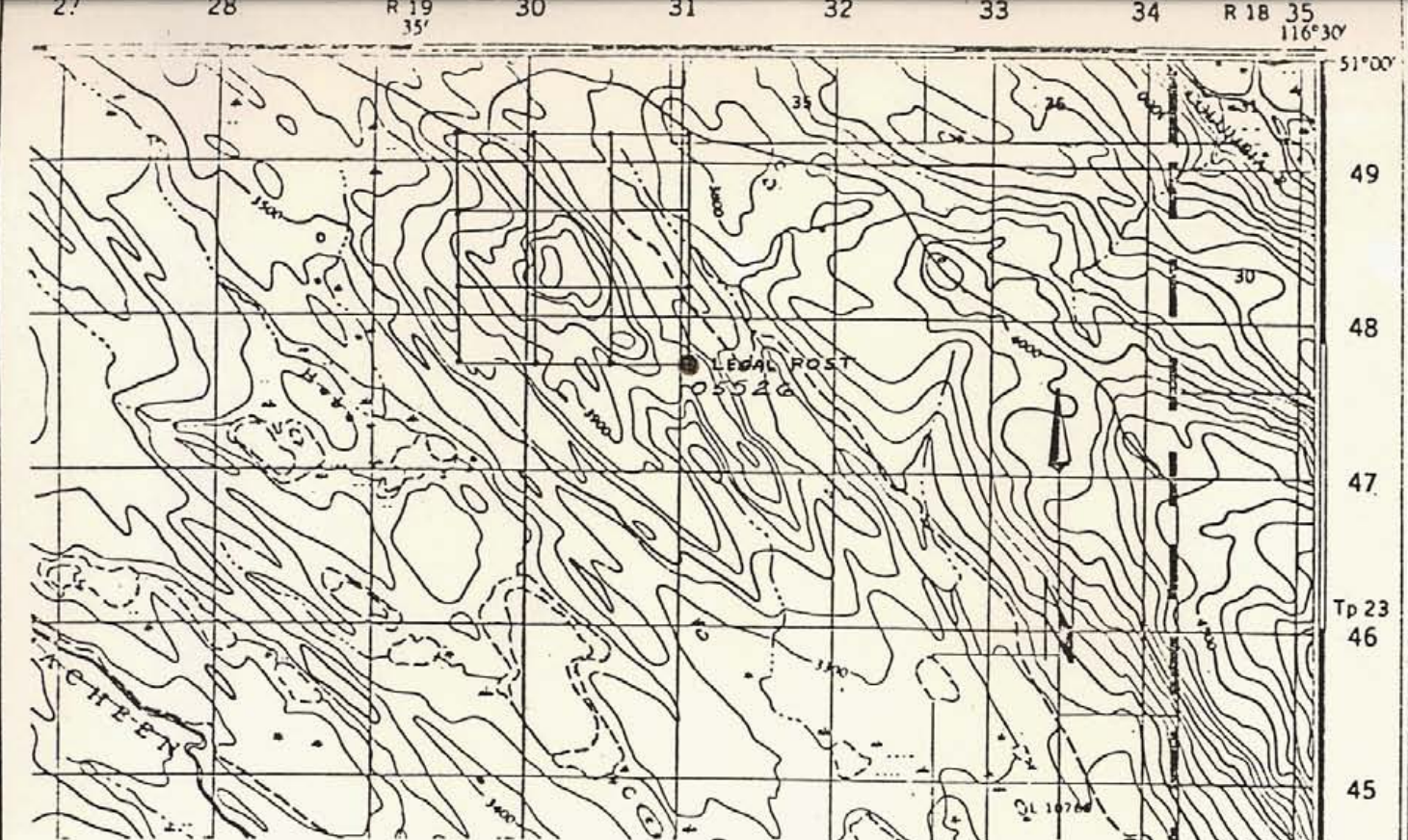
CU

NTS 82K/15&16

Scale: 1" = 400'

Date: JAN 1977

Plate:



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Revised by	Date	Revised by	Date

MITTEN CLAIM
LOCATION MAP

15F
82K/16W

Scale: 1 : 50,000
1/2 mile = 1 INCH

Date: Nov. 1976

Plate: