

4121

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

GEOCHEMICAL SURVEY
ON THE TOKETIC GROUP
SPENCES BRIDGE AREA
KAMLOOPS, M.D.

N.T.S. 92 I/6E

121° 15'W, 50° 28'N

18 JANUARY 1973

N. L. SZABO

PERIOD OF WORK

MAY 1, 1972 - DECEMBER 31, 1972

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 4121 MAP

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

STATEMENT OF QUALIFICATIONS

N. L. Szabo was responsible for conducting the geochemical survey described herein. Mr. Szabo has received his M.Sc. from the University of Connecticut and expects to receive his Ph.D. in the coming academic year from the University of New Brunswick. He has worked with the New Brunswick Mines Branch and the Geological Survey of Canada, and I consider him a competent and experienced geochemist.

Signed:

J. Richardson.

J. Richardson, P. Eng.

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 4121	MAP

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 4121



sheryl: plot from this one

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GEOCHEMICAL SURVEY

ON THE

TOKETIC GROUP

SUMMARY:

A survey consisting of soil sampling was carried out on the Toketic group. The size of the survey was limited by deep overburden conditions in some places and steep slopes in others. The ninety-three samples were analyzed for copper, lead, zinc, and molybdenum. No significant anomalies were found.

INTRODUCTION:

A soil sampling program was carried out on the suitable portions of the Toketic group of claims of Valley Copper Mines Ltd. in May 1972. The property is located on the western contact of the Guichon Batholith, about five miles northeast of Spences Bridge in South Central British Columbia. The size of the soil survey was limited by steep slopes and deep overburden over much of the property. Previous development work has consisted of trenching, diamond drilling, a soil orientation survey, mapping, ground magnetics and underground work in the form of drifting and shaft sinking.

GEOLOGY:

The property straddles the western contact of the Guichon Batholith of Upper Triassic age. The intrusive varies in composition from quartz monzonite to diorite. A so-called Hybrid Phase forms a nearly complete rim around the periphery of the batholith, and this, composed of quartz diorite and diorite, is the principal intrusive rock on the property.

There are three showings on the property. The showings consist of mica-ceous hematite with low associated copper values, and are associated with fracture zones.

GEOCHEMICAL SURVEY

a) Method

The soil survey was performed by R.U. Bruaset, and A.C. Freeze Jr. under the direction of the writer. Lines were run at 400' intervals with samples spaced at 100' along the lines. The baseline as well as the lines were run by chain and compass. With few exceptions the samples were collected from the B₁ horizon.

b) Sample Preparation and Analysis

All samples were dried and then sieved. The -80 mesh fraction was then analyzed for copper, lead, and zinc by atomic absorption using a hot nitric acid leach. Molybdenum was done colourimetrically. Threshold for copper and zinc was determined using log probability plots and was found

to be 140 ppm and 112 ppm respectively. No statistical treatment of lead and molybdenum was attempted as the results were judged to be in the background range in the area.

DATA PRESENTATION:

PLATE 1 - Location Map	1" = 4 miles
PLATE 2 - Copper Geochemistry	1" = 400 Feet
PLATE 3 - Lead Geochemistry	1" = 400 Feet
PLATE 4 - Zinc Geochemistry	1" = 400 Feet
PLATE 5 - Molybdenum Geochemistry	1" = 400 Feet

RESULTS:

Overburden and soil conditions were ideally suited for a soil geochemical survey in the grid areas. No significant anomalies were located with the exception of one very high copper value near one of the showings.

CONCLUSIONS:

The soil survey indicates no significant mineralization in the grid areas.

Report by: N. L. Szabo
 N.L. Szabo,
 Geochemist

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

Distribution: Administration (1)
 Mining Recorder (2)
 Valley Copper Mines Ltd. (1)
 Western District (1)

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of

STATUTORY DECLARATION RELATING
TO EXPENDITURES ON THE GEOCHEMICAL
SURVEY ON THE TOKETIC GROUP,
KAMLOOPS MINING DISTRICT.

I, NICHOLAS LOUIS SZABO

of City of Vancouver

in the Province of British Columbia, do solemnly declare that

- 1) Copies of a report regarding a geochemical survey on certain mineral claims situated in the Kamloops Mining Division are being filed with the Mining Recorder in Vancouver.
- 2) Attached hereto, and marked with the letter "A" upon which I have signed my name at the time of declaring hereof, is a Statement of Expenditures incurred in connection with the geochemical survey of the said claims showing in addition the period during which those making the said survey performed their work.

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 20th
day of February 1973, A.D.

Nicholas L Szabo

John Paul SUB-MINING RECORDER
A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

In the Matter of

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Statutory Declaration
(CANADA EVIDENCE ACT)

C O M I N C O L T D.

EXPLORATION

WESTERN DISTRICT

EXHIBIT "A"

COST PER GEOCHEMICAL SAMPLE
TOKETIC GROUP, SPENCES BRIDGE
AREA, KAMLOOPS MINING DISTRICT

N.T.S. 92 1/6E

121° 15W, 50° 28'N

1. Five man days wages - \$65.00 per day	\$ 325.00
2. One man day at \$80.00	80.00
3. Report writing - 1 man day at \$80.00	80.00
4. Drafting	75.00
5. Transport	55.00
6. Domicile	50.00
7. Analytical costs - 93 x \$2.10	\$ <u>195.30</u>
TOTAL:	\$ 860.30

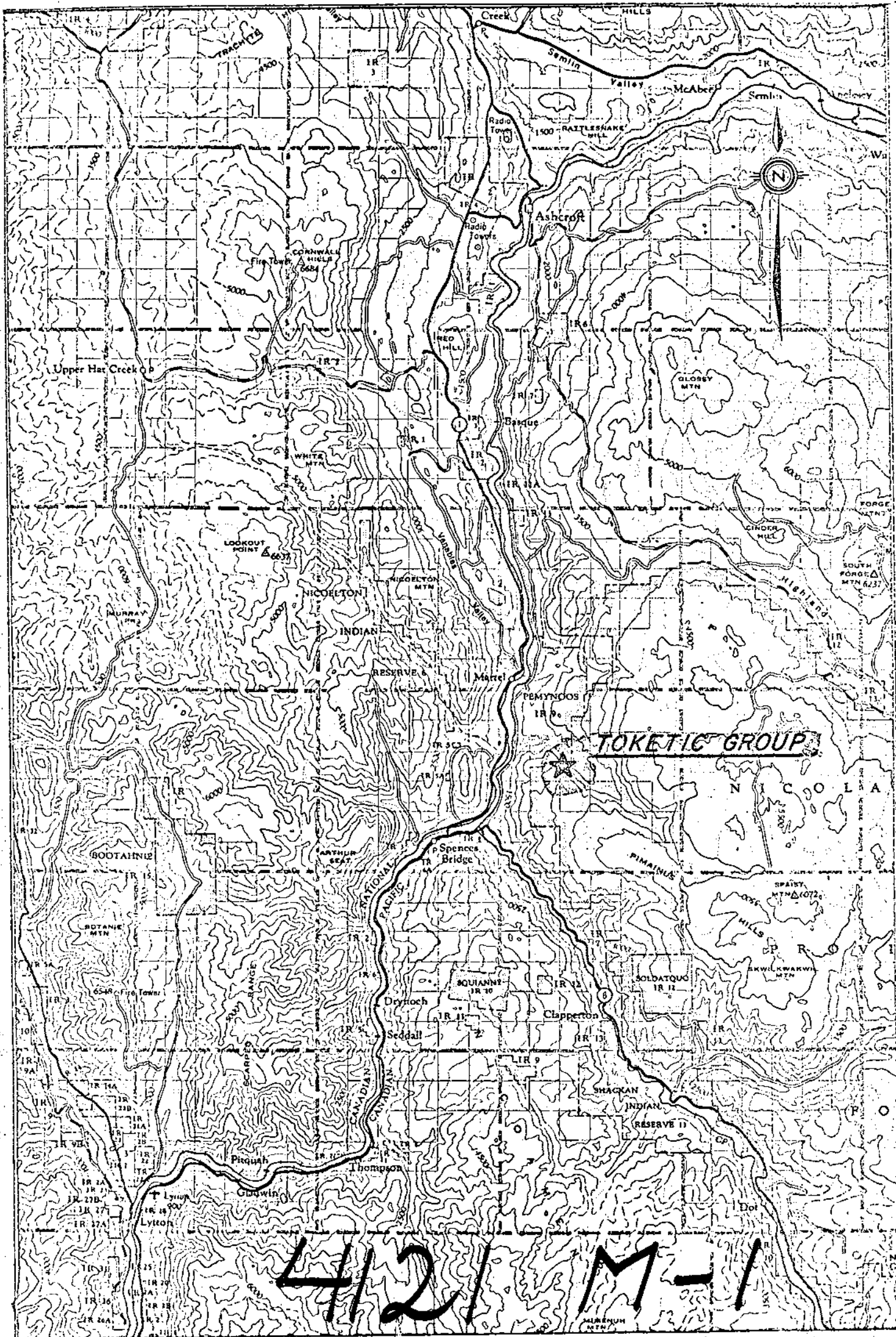
SAMPLING AND ANALYSIS WERE DONE BETWEEN


MAY 1, 1972 - DECEMBER 31, 1972

Signed: Nicholas L Szabo
N. L. Szabo,
Geochemist

THIS IS EXHIBIT "A" TO THE STATUTORY DECLARATION OF NICHOLAS L. SZABO
DECLARED BEFORE ME THIS 20 DAY OF February 1973.

Jan. Paul SUB-MINING RECORDER
A COMMISSIONER FOR TAKING
AFFIDAVITS FOR BRITISH COLUMBIA



To accompany a report by N.L. Szabo *N.L. Szabo* 

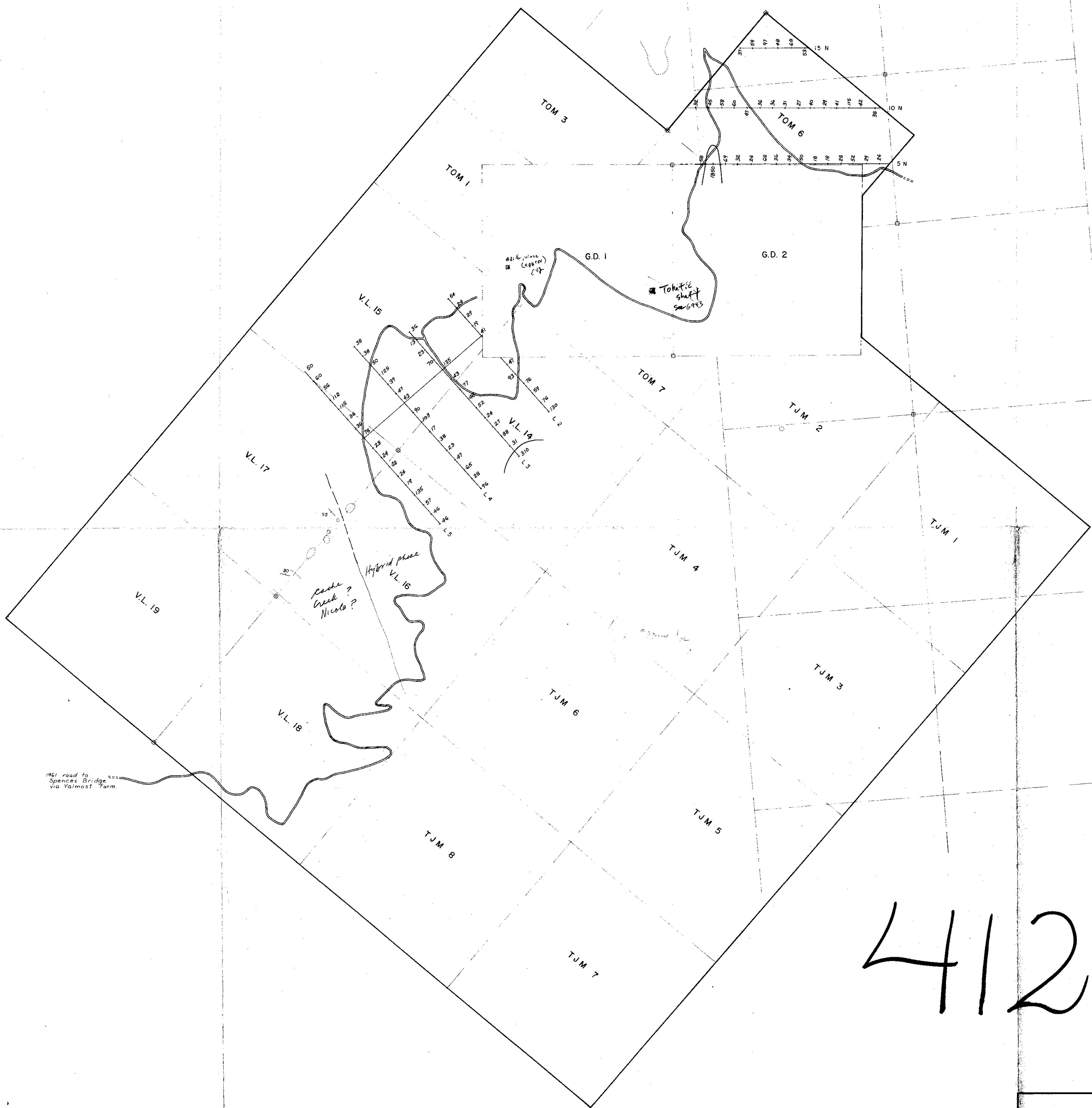
Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

TOKETIC GROUP LOCATION MAP

Scale: 1 : 250,000 Date: January, 1973 Plate: 1

1 M 1214

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4121 MAP #1

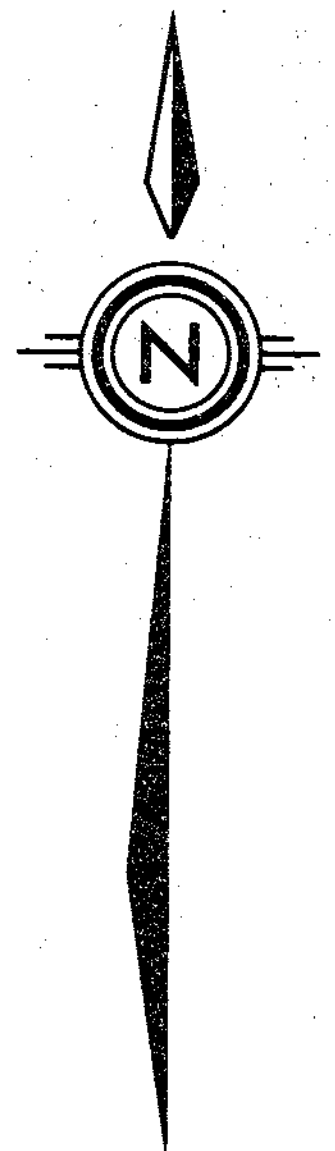


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NOTE:
140 ppm — threshold

To accompany a report by N.L. Szabo *N.L. Szabo*

TOKETIC GROUP			
Drawn by:	Traced by: T.G.B.	COPPER GEOCHEMISTRY (in ppm.)	
Revised by:	Revised by:	Scale: 1" = 400'	Date: January, 1973
			Plate: 2



4121M-4

NOTE:
112 ppm - threshold

To accompany a report by N.L. Szabo *N.L. Szabo*

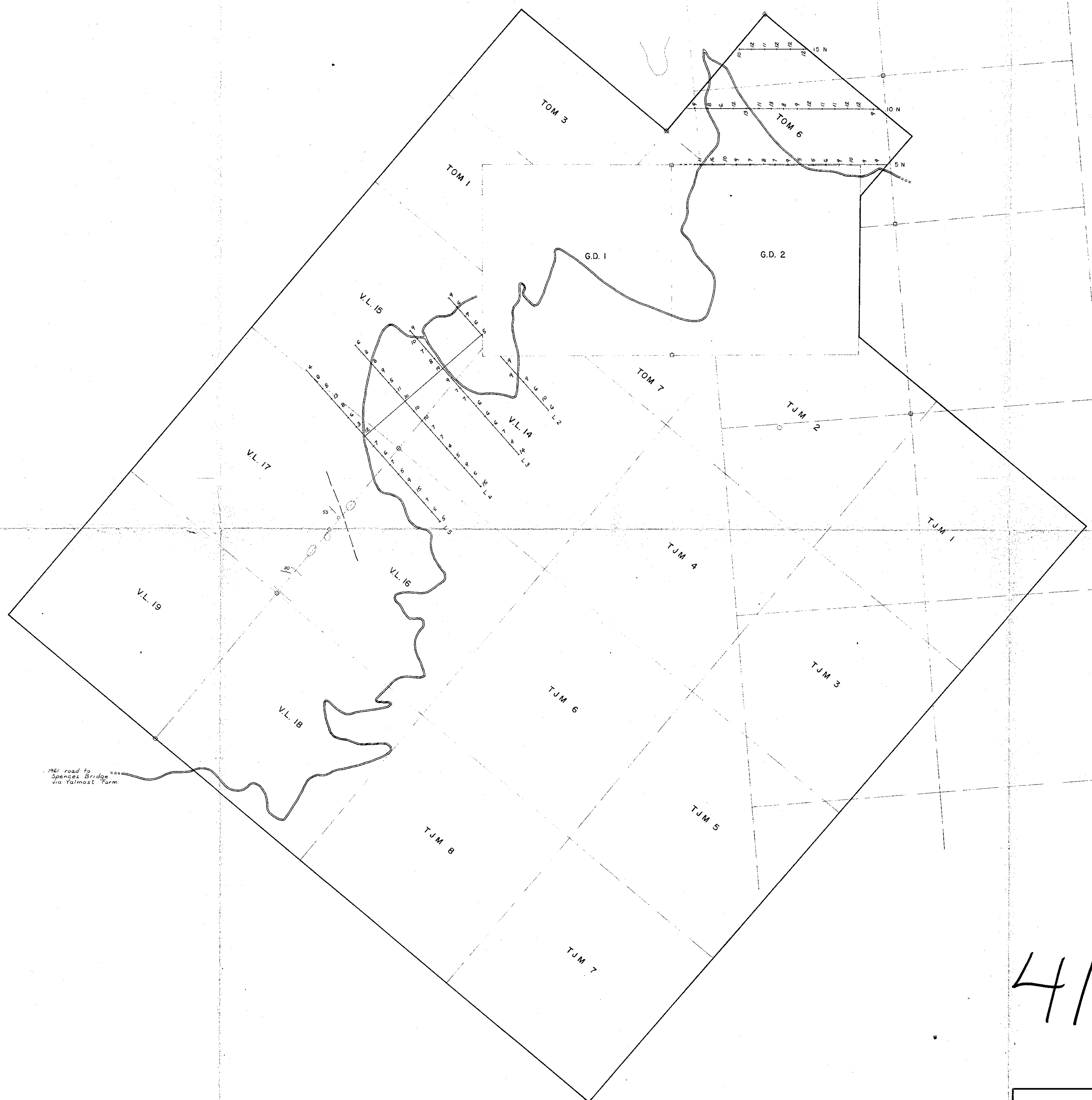
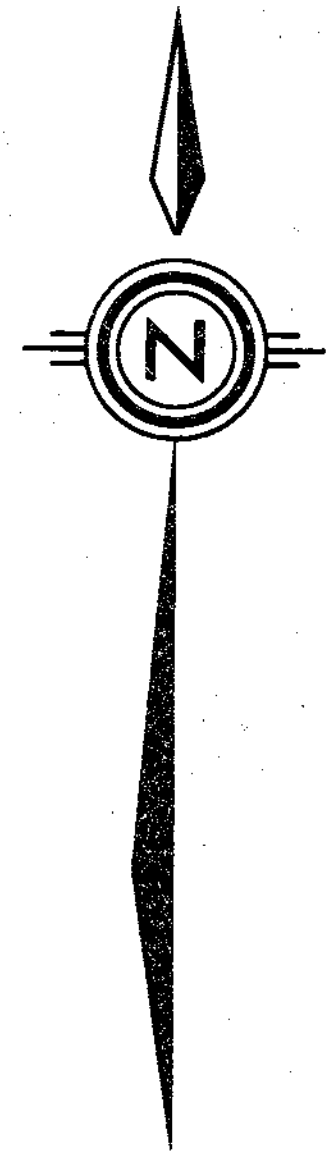
TOKETIC GROUP



Drawn by:	Traced by: T.G.B.
Revised by: Date	Revised by: Date

ZINC GEOCHEMISTRY (in ppm.)

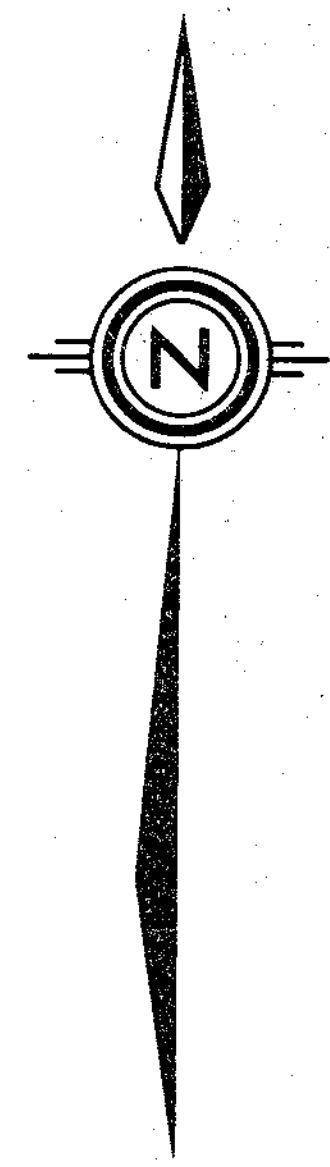
Scale: 1" = 400' Date: January, 1973 Plate: 4



4121M-3

To accompany a report by N.L. Szabo *N.L. Szabo*

DRAWN BY:		TRACED BY: T.G.B.	
REVIEWED BY:	DATE:	REVIEWED BY:	DATE:
LEAD GEOCHEMISTRY (in ppm.)			
Scale:	1" = 400'	Date:	January, 1973
Plate:	3	FORM 210-0660	



4121 M-5

To accompany a report by N.L. Szabo *N.L. Szabo*

Drawn by:		Traced by: T.G.B.	
Revised by:	Date:	Revised by:	Date:
Scale: 1" = 400'		Date: January, 1973	Plate: 5

TOKETIC GROUP

MOLY. GEOCHEMISTRY (in ppm.)