

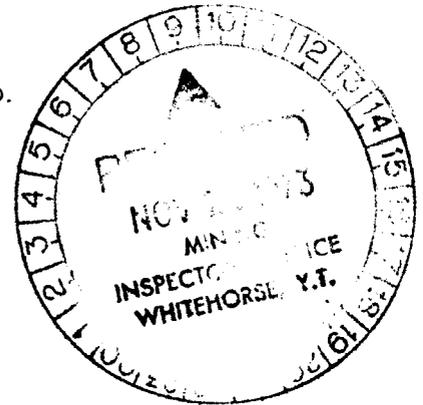
DOLMAGE CAMPBELL & ASSOCIATES LTD.
CONSULTING GEOLOGICAL & MINING ENGINEERS
1000 GUINNESS TOWER
VANCOUVER 1, B.C.

Geochemical Report

on the

MTX MINERAL CLAIMS
Nos. 1-63 inclusive

Claim Sheet No. 105 1 - 12



SUMMIT LAKE AREA

Watson Lake Mining Division

62° 35' N. Lat., 129° 45' W. Long.

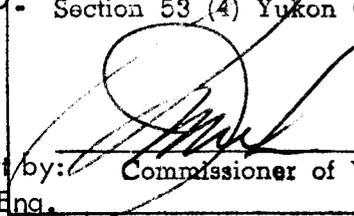
Owner of Claims:
NRD MINING CO. LTD.

Supervision and Report by:
R. S. Adamson, P. Eng.

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 4641.00

Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.


Commissioner of Yukon Territory

Work completed between August 23 and September 3, 1973.

October 9, 1973.

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INTRODUCTION

A geochemical soil survey was carried out on the MTX claim block by Dolmage Campbell and Associates Ltd. during the period August 27 to September 3, 1973. Four men were employed during the survey; G. Bequette, F. Diamond' C, L. MacDonald, and J. Sanford. The project was undertaken under the field direction of Mr. J.B. Kirkland and the supervision of the writer.

The property, comprising 63 mineral claims, is situated within a few miles of the boundary of the Yukon and Northwest Territories, approximately 200 miles north of Watson Lake, Y.T. Present access to the property consists of flying directly by helicopter usually from nearby Summit Lake which is suitable for float aircraft. The nearest road lies 50 miles southeast near the Canada Tungsten mine.

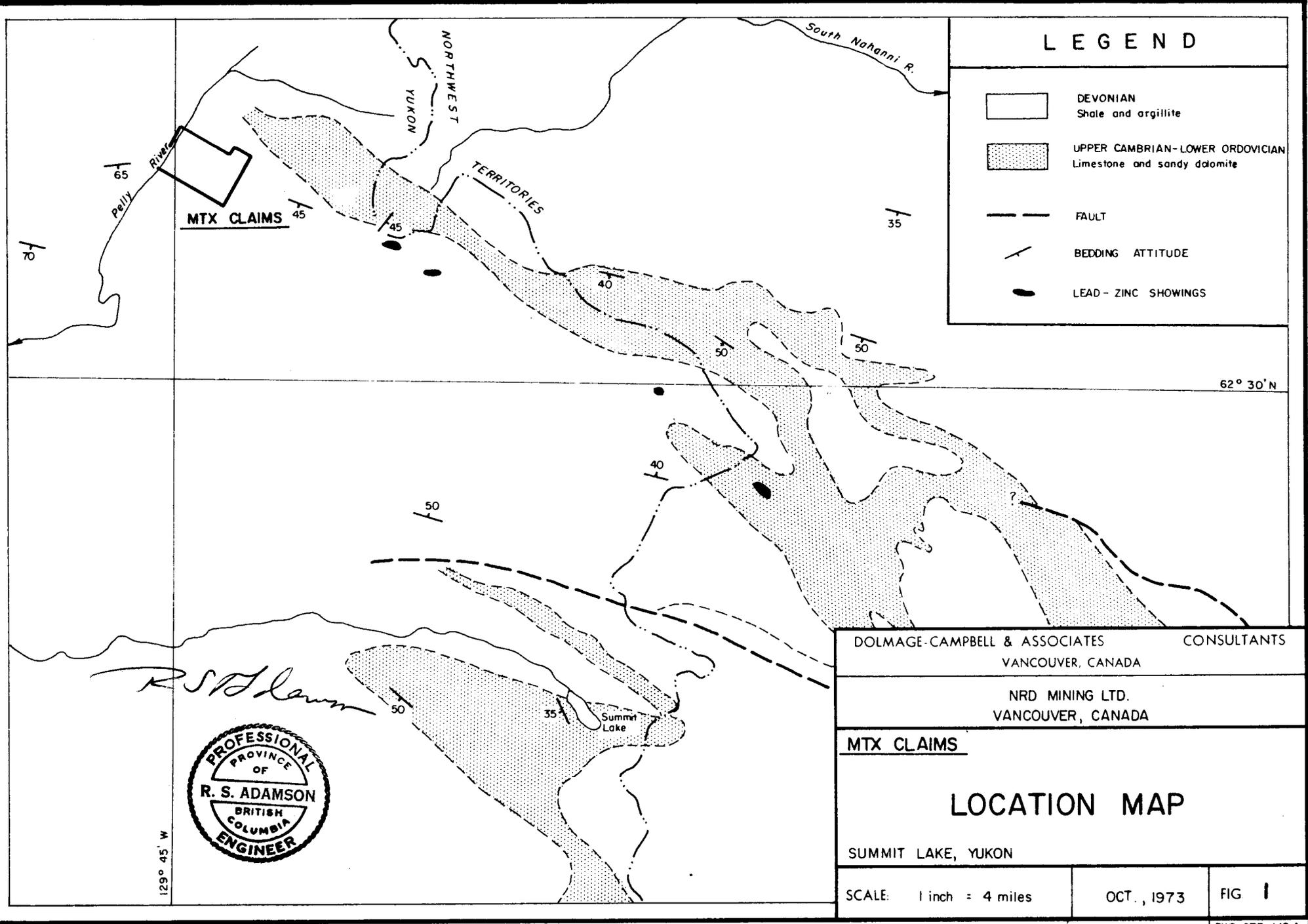
The topography on the property includes a broad, flat-topped hill that rises from the Pelly River to the southeastern quadrant of the claim group. Elevations range from 4000 feet at the Pelly River to just in excess of 5000 feet at the crest of the hill. A strong, northerly-flowing creek traverses the west half of the property.

The history of the property is a short one in that no previous work appears to have been done on the property prior to staking in late 1972. The property was staked on the basis of the discovery of zinc-lead deposits by Canex-Placer Ltd. a few miles to the southeast.

GEOLOGICAL SETTING

The geological setting of the Summit Lake zinc-lead district comprises essentially two rock formations; an argillaceous unit ranging in age possibly from the Upper Ordovician to the Mississippian (but predominately Devonian), and an older carbonaceous unit which is probably Cambrian in age.

The most extensive rock type in the area, the argillaceous unit, is black-grey shale that is extensively regionally metamorphosed to argillite with well developed foliation. The argillite is noticeably harder than the unmetamorphosed shale and is locally pyritic; otherwise, the two rock types are not readily distinguished in the field by casual observation. Most of the rock exposed in the area of the Summit Lake base metal occurrences is argillaceous and some is pyritic enough to have produced gossans. Local intense (isoclinal) folding of the shale-argillite sequence is common and, combined with the absence of distinct marker beds, makes precise stratigraphic positional determinations difficult in this sequence. Also, due



LEGEND

-  DEVONIAN
Shale and argillite
-  UPPER CAMBRIAN-LOWER ORDOVICIAN
Limestone and sandy dolomite
-  FAULT
-  BEDDING ATTITUDE
-  LEAD - ZINC SHOWINGS

62° 30' N

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MTX CLAIMS

LOCATION MAP

SUMMIT LAKE, YUKON

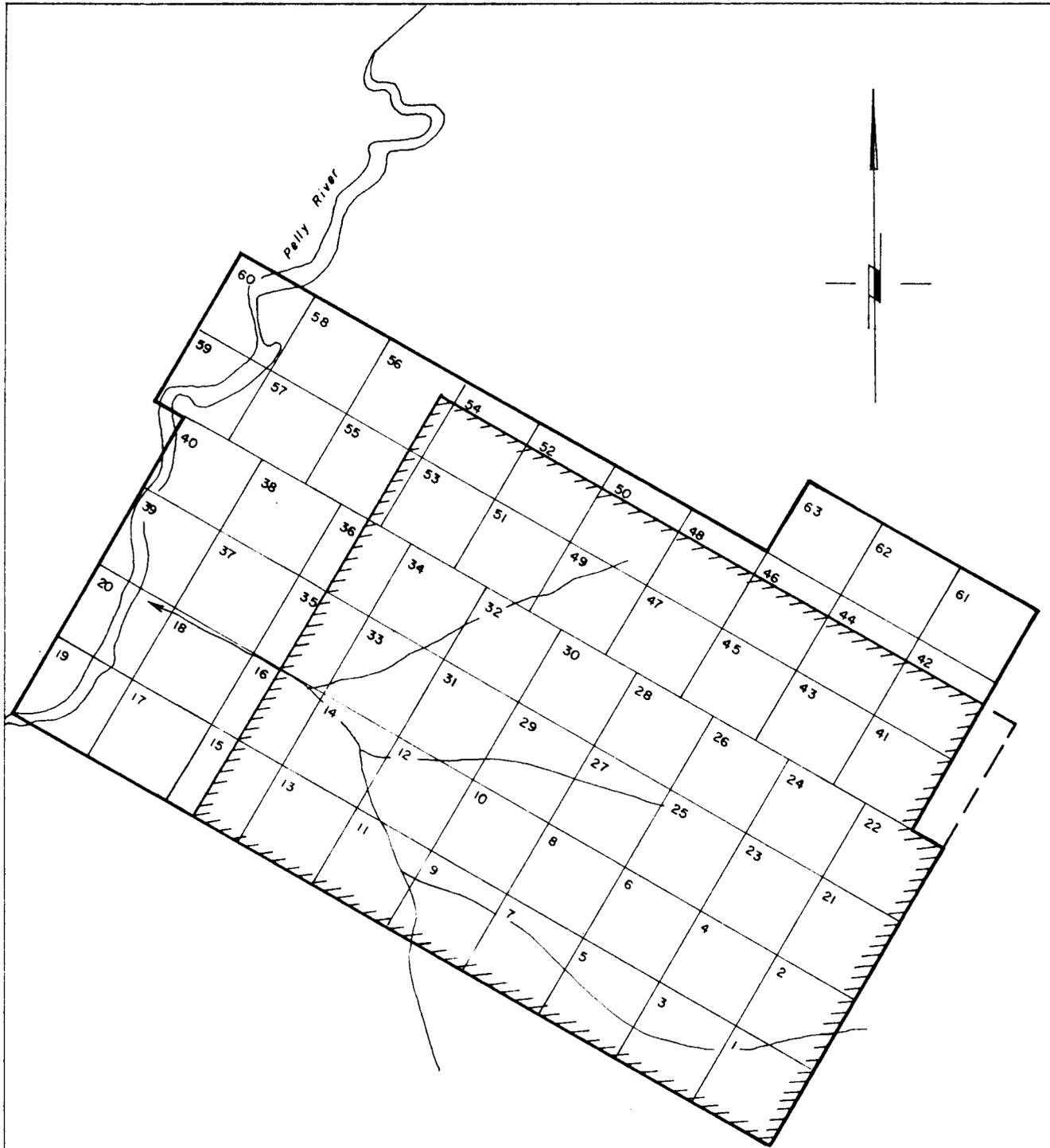
SCALE: 1 inch = 4 miles

OCT., 1973

FIG 1



129° 45' W



Surveyed Area



R. S. Adamson

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VANCOUVER, CANADA

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MTX CLAIMS

CLAIM MAP

SCALE. 1 inch = 1/2 mile

OCT., 1973

FIG. 2

to this difficulty of determining the proper sequence in the shale-argillite rocks it is likely that some of the rock units included in it may be as old as Ordovician and thus represent an orderly sequence from the underlying Cambrian rocks.

Of direct potentially-economic significance is a distinctive graptolitic shale formations that occurs near the base of the argillaceous sequence. It is this formation, Upper Ordovician in age, which hosts the presently known deposits on the nearby Canex-Placer claims. The distribution of this key formation throughout the district is, at best, relatively unknown, due primarily to its highly-erodable characteristics.

The Cambrian carbonaceous rocks, limestone and minor dolomite, that underlie the shale-argillite sequence are exposed as windows in the lower flanks of the ridges in northwest-trending bands. This relatively simple relationship is complicated by steep folding, by possible thrust faulting parallel to the northwest-trending contacts, and by topography because of the gentle southwest dip of the argillite-carbonate contact.

The geology of the MTX property is best revealed by extensive rock exposures that crop out on the hill that lies on the southeastern quadrant. Approximately one-third of the claim group contains outcrops. The overburdened-covered valleys of the Pelly River to the north and the previously-discussed creek mask the geology on the remaining two-thirds of the property.

Outcrops consist of grits, sandstone, conglomerates, and slaty shales which comprise a formation within the Upper Ordovician to Mississippian predominately argillaceous unit discussed above. The sedimentary rocks have been broadly folded along east-west axes, essentially in synclinal fashion.

The critical graptolitic shale formation should occur stratigraphically-lower than the above sedimentary rocks, hence may be capped on the property by the above arenaceous rocks at higher elevations or may be masked by unconsolidated sediments in the valleys.

GEOCHEMISTRY

The soil survey was carried out over flagged lines spaced at 800 foot intervals, perpendicular to a northwest-striking flagged baseline which was established along the central location line of the property. Sample stations were marked at 200 foot intervals using topofill chain and compass for control.

SAMPLING AND ASSAYING TECHNIQUES:

Soil samples were taken by first digging a hole with a mattock; a small handful of soil was then taken and packaged in a standard high wet-strength brown kraft paper sample bag. Wherever possible, samples were taken from the "B" soil horizon. If the "B" horizon could not be reached the samples were taken from the "A" horizon and noted as such. The samples were sent to Chemex Labs Ltd. in North Vancouver for analysis.

At the assay laboratory the samples were dried at 110° F and then sieved to -80 mesh consistency through a nylon and stainless steel sieve. One-half gram of the dry pulp was weighed into a calibrated test tube and 3 mls. of perchloric acid and 1 ml. of nitric acid was added. The samples were digested initially at low heat and then at a temperature of 203° C. Digestion time was two to three hours. The digested samples were cooled, made up to 25 ml. volume with distilled water and the solutions thoroughly mixed. Analysis for lead and zinc were then done by Atomic Absorption procedures.

The results of the lead and zinc soil assays were interpreted visually.

INTERPRETATION OF RESULTS:

With reference to the zinc soil geochemistry map, (Figure 3), four anomalous areas (A, B, C, and D) have been outlined, where values range to in excess of 1000 ppm zinc. These four anomalies lie at lower elevations on the property and are masked by overburden. The nature of the underlying rock is unknown.

The lead soil geochemical map, (Figure 4), has been contoured at 30 and 45 ppm lead; however, no definitive anomalous patterns are revealed. The relationship of the lead results with the above zinc anomalies remains unclear and probably insignificant.

CONCLUSIONS

The cause of the four zinc soil anomalies defined on the MTX property remains to be established. Regional geological mapping suggests the possibility of the key argillite-dolomite contact near which the graptolitic shale horizon that hosts zinc-lead deposits elsewhere in the district occurs east of the MTX property and may therefore dip at a low angle beneath the MTX claims. Therefore, the zinc anomalies could be economically significant.

RECOMMENDATIONS:

The writer proposes that the following program be implemented with a view to more clearly ascertaining the nature (residual or transported) and the cause of the anomalies.

- a) Carry out more definitive soil surveys over each of the four anomalies (100 foot sample stations at 200 foot line intervals).
- b) Initiate hand trenching to bedrock at or near peak values within these more precisely-defined anomalies.

Respectfully submitted,
DOLMAGE CAMPBELL & ASSOCIATES LTD.



A handwritten signature in cursive script that reads "R. S. Adamson".

R. S. Adamson, P. Eng.

Vancouver, Canada.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

In the Matter of

To WIT:

NRD Mining Ltd. - MTX MINERAL CLAIMS
NOS. 1-63 inclusive

I, R. S. ADAMSON

of #1000 - 1055 W. Hastings St., Vancouver 1, B.C.

in the Province of British Columbia, do solemnly declare that

Expenditures for work performed on the MTX mineral claims between August 23 and September 3, 1973 are as follows:

WAGES - 14 days @ \$39.25	\$549.50	
4 days @ \$32.20	128.80	
5 days @ \$35.00	175.00	
	<hr/>	\$853.30
MAINTENANCE - 23 Man days @ \$15.00		\$345.00
TRANSPORTATION - Helicopter - 9 Hrs. 25 Mins @ \$160/Hr.		\$1503.00
ASSAYING - 568 samples @ \$1.70		\$965.60
TYPING, SECRETARIAL, DRAUGHTING		\$150.00
SUPERVISION AND REPORT		\$825.00
		<hr/>
	TOTAL:	<u>\$4641.90</u>

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 14
day of November, 1973, A.D.



A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia

APPENDIX No. 2

DETAILED ACCOUNT OF EXPENDITURES

WAGES

G. Bequette - Box 4509 Whitehorse, Y.T. 6 days @ \$39.25	\$235.50
F. Diamond'C - Box 4509 Whitehorse, Y.T. 8 days @ \$39.25	\$314.00
L. McDonald - General Delivery Norman Wells, N.W.T. 4 days @ \$32.20	\$128.80
J. Sanford - 4598 W. 14th Ave. Vancouver 8, B.C. 4 days @ \$35.00	\$140.00
C. Ollie - General Delivery Ross River, Y.T. 1 day @ \$35.00	\$35.00
TOTAL:	<u>\$853.30</u>



LEGEND

- 640 Soil Sample Location ppm Zn
- 1400
- Claim Post
- Property Boundary

To accompany Geochemical Report on the MTX mineral claims in the Summit Lake Area, Watson Lake Mining Division, dated Oct. 9, 1973 by R. S. Adamson, P. Eng.



R. S. Adamson

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VANCOUVER, CANADA
NRD MINING CO. LTD.
VANCOUVER, CANADA

MTX CLAIMS
**SOIL GEOCHEMISTRY
ZINC**

SCALE: 1" = 800'
OCT, 1973
FIG. 3

DWG. 673-142



LEGEND

- 45 Soil Sample Location ppm Pb
- 30
- Claim Post
- Property Boundary

To accompany Geochemical Report
on the MTX mineral claims in the
Summit Lake Area, Watson Lake
Mining Division, dated Oct 9, 1973,
by R. S. Adamson, P. Eng.



R. S. Adamson

DOLMAGE-CAMPBELL & ASSOCIATES VANCOUVER, CANADA		CONSULTANTS
NRD MINING CO. LTD. VANCOUVER, CANADA		
MTX CLAIMS		
SOIL GEOCHEMISTRY LEAD		
SCALE: 1" = 800'		DWG. G73-143
OCT, 1973		FIG. 4