

4890

93L/6E

GEOLOGICAL ASSESSMENT REPORT

ON 93L/6E

HOUSTON TOMMY PROPERTY - RUDY CLAIMS

MAHARAJA MINERALS LIMITED. (N.P.L.)

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 4890 MAP.....

GEOLOGICAL ASSESSMENT REPORT

ON

HOUSTON TOMMY PROPERTY - RUDY CLAIMS

FOR: MAHARAJA MINERALS LTD., (N.P.L.)

1102 - 207 W. HASTINGS STREET, VANCOUVER, B.C.

OWNER: MAHARAJA MINERALS LTD., (N.P.L.)

LOCATION:	LATITUDE:	54° 25' N
	LONGITUDE:	127° 09' W
	N. T. S.	93-L

Vancouver, B. C.
February 22, 1974

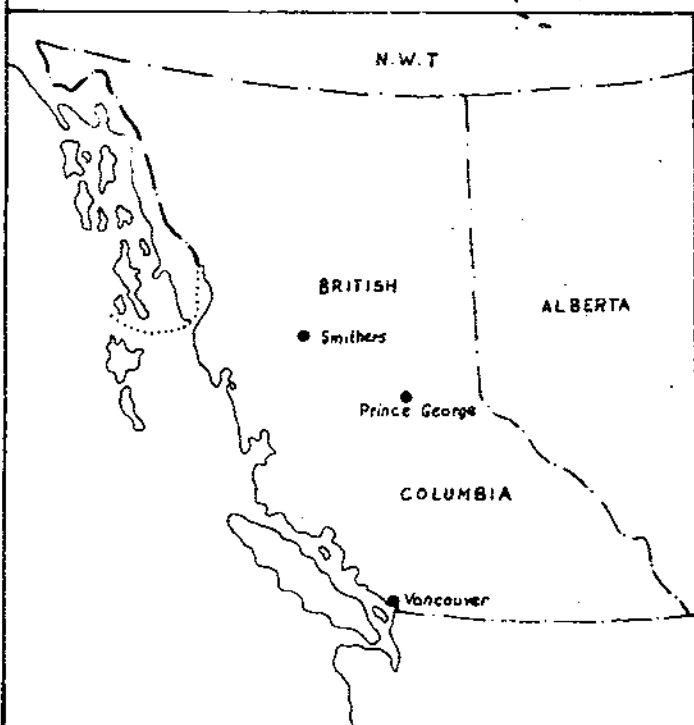
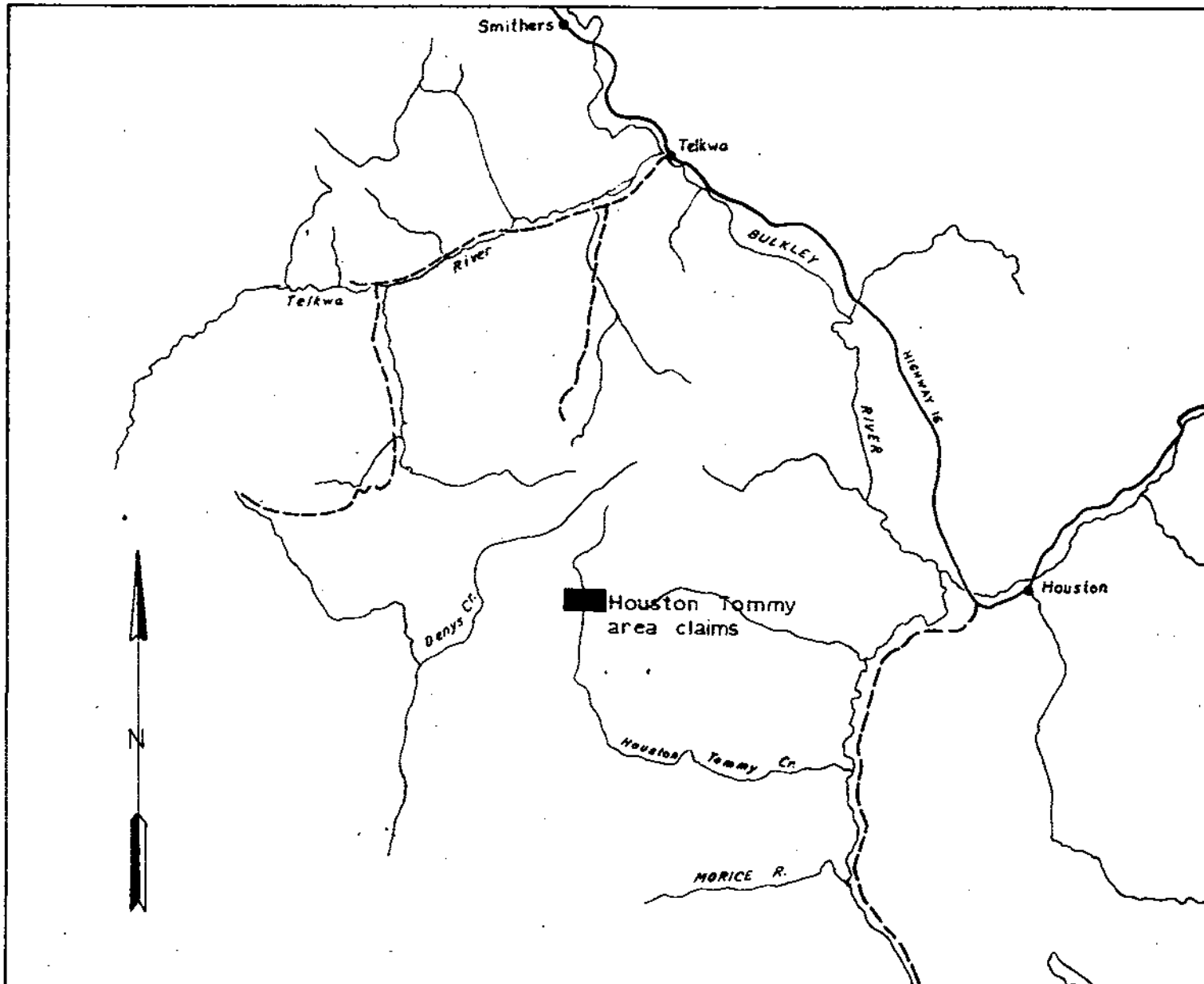
J. McAndrew

TABLE OF CONTENTS

	Page
INTRODUCTION	4
I. LOCATION AND ACCESS	6
II. GEOLOGY.....	6
III. PURPOSE OF THE SURVEY AND THE RESULTS.....	7
IV. RECOMMENDATIONS AND CONCLUSIONS.....	8
V. APPENDIX - EXPENDITURES.....	11
VI. CERTIFICATIONS:	
(i) J. M. McAndrew.....	10
(ii) R. Biss.....	9

LIST OF MAPS

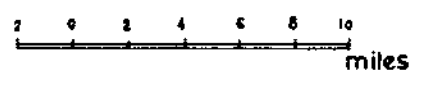
#1 1. GENERAL LOCATION MAP.....	3
#2 2. MINERAL CLAIM LOCATION MAP.....	5
#3 3. GEOLOGICAL MAP	(In Pocket)



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **4890** MAP **#1**

MAHARAJA MINERALS LTD (NPL)
 OMINECA MINING DIVISION

MINERAL CLAIM LOCATION MAP



GEOLOGICAL REPORT
ON
RUDY CLAIMS - HOUSTON TOMMY CREEK AREA
1973 - 74

INTRODUCTION

The Rudy mineral claims referred to in this report are located approximately thirty miles south of Smithers, British Columbia (see location map).

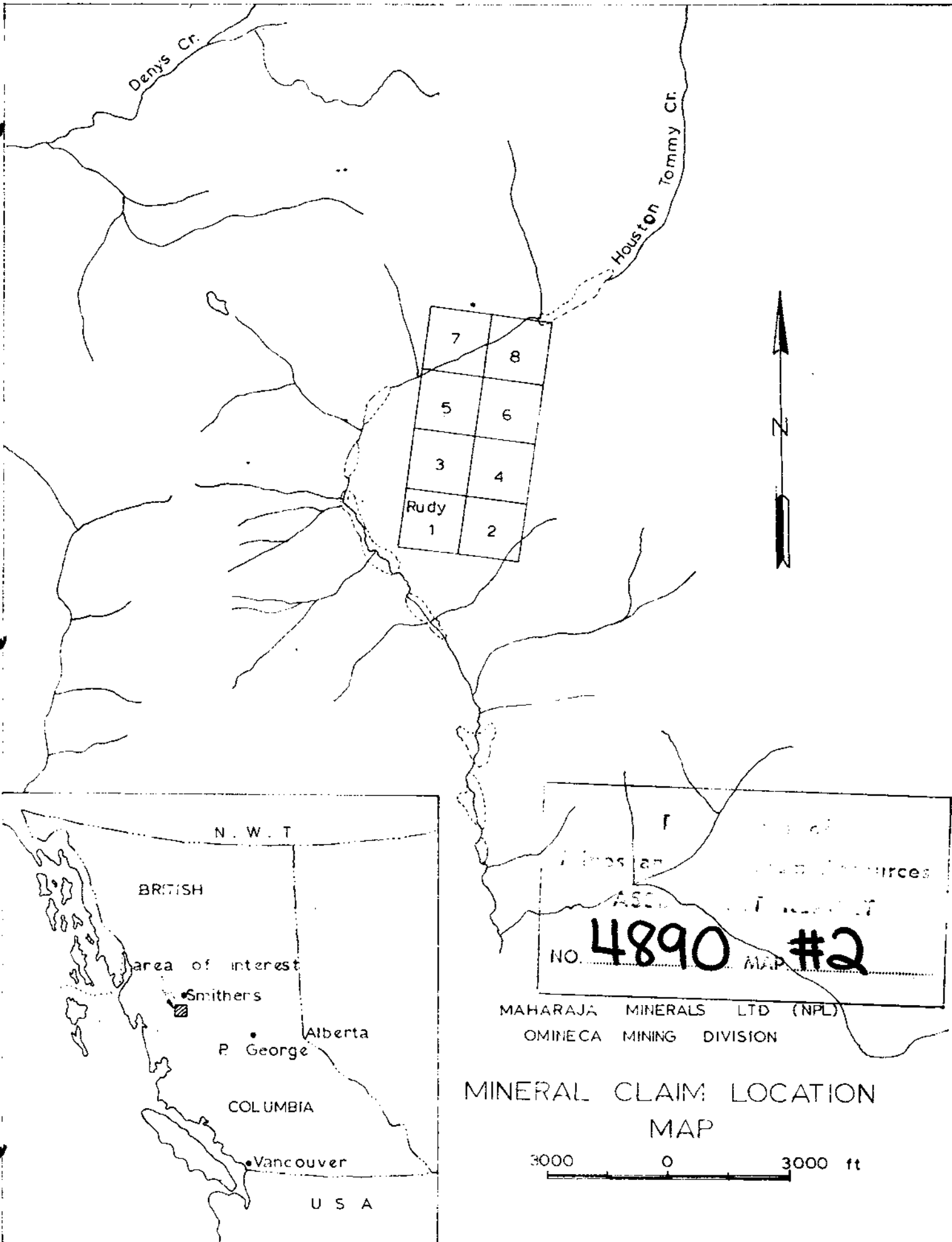
The property consists of eight claims with the following numbers:

<u>Claim</u>	<u>Record Number</u>
Rudy 1 - 8	129034 - 129041

Within the claim group boundaries there are two known significant mineral occurrences. One is a vein of quartz carrying tetrahedrite and silver values and the other a mineralized shear zone carrying copper and silver.

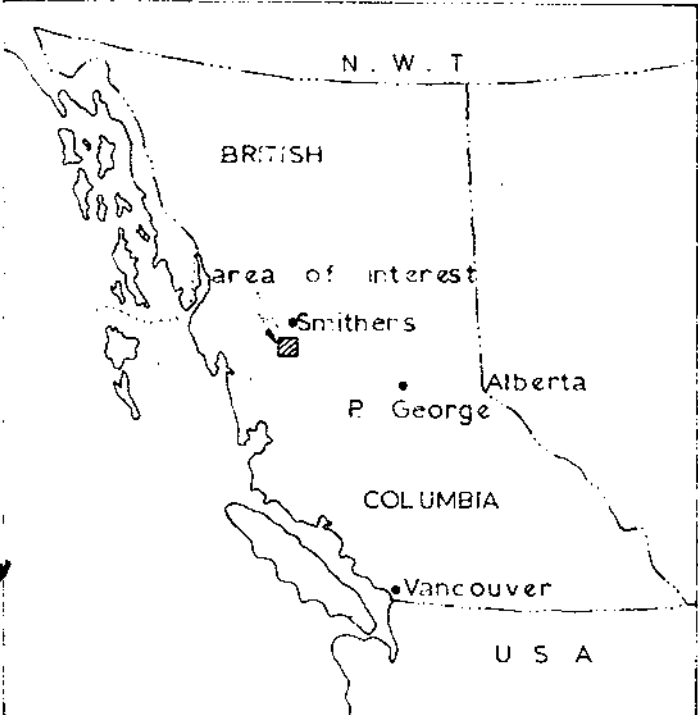
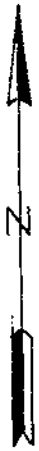
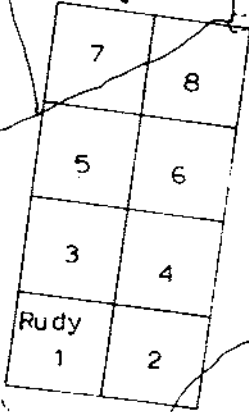
The exploration work consisted of prospecting, reconnaissance geological mapping and sampling during the months of October and November, 1973.

The rugged nature of the terrain made field exploration work slow and difficult. The mineralized showings, described in this report carry high values of copper, silver and zinc.



Denys Cr.

Houston Tommy Cr.



British Columbia
 Mineral Resources
 ASSOCIATION OF MINING COMPANIES
 NO. **4890** MAP **#2**

MAHARAJA MINERALS LTD (NPL)
 OMINECA MINING DIVISION

**MINERAL CLAIM LOCATION
 MAP**

3000 0 3000 ft

I. LOCATION AND ACCESS

The Rudy 1 - 8 mineral claims are located at $54^{\circ} 25'$ north latitude and $127^{\circ} 09'$ west longitude. (see location map). The nearest road to the property is located about eight miles south-west of the property. The claim group is accessible by helicopter from Smithers or Houston. Good camp sites with tree protection are found in the Houston Tommy Creek valley close to the claims. A trail which has been used by bulldozers comes within approximately one mile of the property.

II. GEOLOGY

The only published geological work on the area is set out on the B. C. Department of Mines and Petroleum Resources map 69 - 1.

The claim area is underlain by sedimentary and volcanic rocks of the Hazelton Group from Middle Jurassic to Lower Cretaceous in age. This group consists principally of andesitic and rhyolitic flows with tuffs and breccias.

Small masses of granodiorite quartz-monzonite intrusives occur in the regional map area and are cross-cut by block type faulting. The mineral occurrences on the Rudy claims are found in close proximity to igneous intrusives in the form of dikes and they appear to be intimately associated with them.

The mineralized assemblages associated with the dikes consist of pyrite, magnetite, bornite, chalcopyrite, chalcocite, some galena, sphalerite and molybdenite. The "gangue" is composed of quartz, epidote with some calcite.

On a regional basis the rock types as observed in outcrops (most outcrops occur above the 4,500 foot level) are mainly fine to medium grained red and green andesites, diorites, feldspar porphyrys and rhyolites.

- Andesites: They are fine and medium grained. Sometimes they are cut by quartz veins carrying appreciable epidote. Their color is from red, maroon to grey, green.
- Diorites: They are fine to medium grained and dark grey in color. They are impregnated by pyrite. The concentration of the pyrite seems to be more pronounced in association with small local faults. In some places the rock is altered and takes on a yellow rusty coloration.
- Feldspar porphyry: They are found east of the Rudy claims. The porphyry is highly magnetic and contains phenocrysts of plagioclase, some mafic mineral and usually is buff colored.
- Rhyolites: They are light in color and in some places were seen to carry a little copper mineralization in form of malachite.

III. PURPOSE OF THE SURVEY AND THE RESULTS.

The purpose of the geological survey was to map and sample the mineral showings. Several mineralized zones occur on the claims (see map in pocket). The main mineralization occurs in the form of bornite, chalcopryrite, chalcocite, malachite, azurite with some pyrite.

There are two separate main mineralized outcrops.

The first outcrop is a vein of quartz. It is exposed for 30 - 40 feet and about $\frac{1}{2}$ a foot thick. It occurs in a dike of green andesite. The strike of the vein is N 75° E. with a southerly dip. The vein carries some zinc and chalcopryrite with secondary malachite and azurite. The zinc mineralization consists of dark, almost black sphalerite with some epidote.

The second showing lies in a shear zone about 3 feet in width and 8 feet in length. The mineral showing occurs in a series of fissures filled by bornite with secondary malachite. The presence of other copper minerals was not noticed. The mineralized zone bears approximately north-east, south-west. Chip samples taken across the mineralized zones were assayed for copper, silver, gold, zinc and lead. The assays for copper range from 0.87% to 2.40% for the quartz vein and from 30.70% to 32.80% for the shear zone. The silver values are from 0.78 oz/t to 2.10 oz/t in the vein and from 140.0 oz/t to 188.4 oz/t in the shear. Weighted averages are as follows:

NORTH SHOWINGS

Samples	1 - 3	4 - 5
Cu%	1.638	31.750
Ag oz/t	1.454	164.200
Au oz/t	0.023	0.107
Zn	2.482	

IV. RECOMMENDATION AND CONCLUSIONS

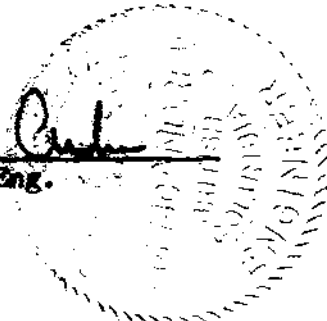
The mineralized showings in the Houston Tommy area carry high values of copper and silver. This area appears to be favourable for vein and porphyry-type deposits.

Although no mineralization of economic significance has been outlined to date, all types of occurrences show promise of further development. It would appear that more detailed geological mapping and geo-surveys to determine the geological and structure nature of the showings is in order. Bulldozer trenching could be used to open up the known showings and explore them along strike. Bulldozers have been walked into the general area in the past and worked on claims about one mile away.

Dated this 22 day of February, 1974 at Vancouver, B. C.

SIGNED:


John McAndrew. P. Eng.



CERTIFICATION OF JOHN M. McANDREW

#212, 14840 - 105 Avenue, Surrey, B. C. Phone: 588-8072

- 1 - Registered as a Professional Engineer by the Association of Professional Engineers of B. C.
- 2 - A fellow of the Geological Association of Canada
- 3 - B. Sc. in Geology from the University of Alberta, Edmonton, Alberta: post graduate courses in surveying, McGill University, Montreal, Quebec.
- 4 - Prior to consulting the author spent seventeen years in exploration, property evaluation, mine geology, and production with the following companies.

Anaconda American Brass Limited - Copper, Molybdenum

Silver Titan Mines - Silver, Lead, Zinc.

Columbia Iron Mining Co. - Coal

Newmont Exploration Ltd. - Nickel, Copper

Iron Ore Company of Canada Ltd. - Direct Shipping Iron Ore.

N. W. Byrne Company - Gold

Quebec Cartier Mining Comp. Ltd. - Concentrating Iron Ore.

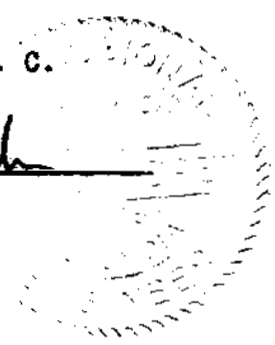
Eldorado Mining and Refining Co. - Uranium

International Nickel Co. - Nickel, Copper.

- 5 - I have no direct or indirect interest in the properties covered by this report.
- 6 - I inspected a portion of the work while the program was being carried out. I have read this report and personally endorse the facts and concepts contained in the text.

DATED this 22 day of Feb, 1974, in Vancouver, B. C.

SIGNED: 
John McAndrew. P. Eng.



APPENDIX "A"

V. EVIDENCE OF EXPENDITURE INCURRED

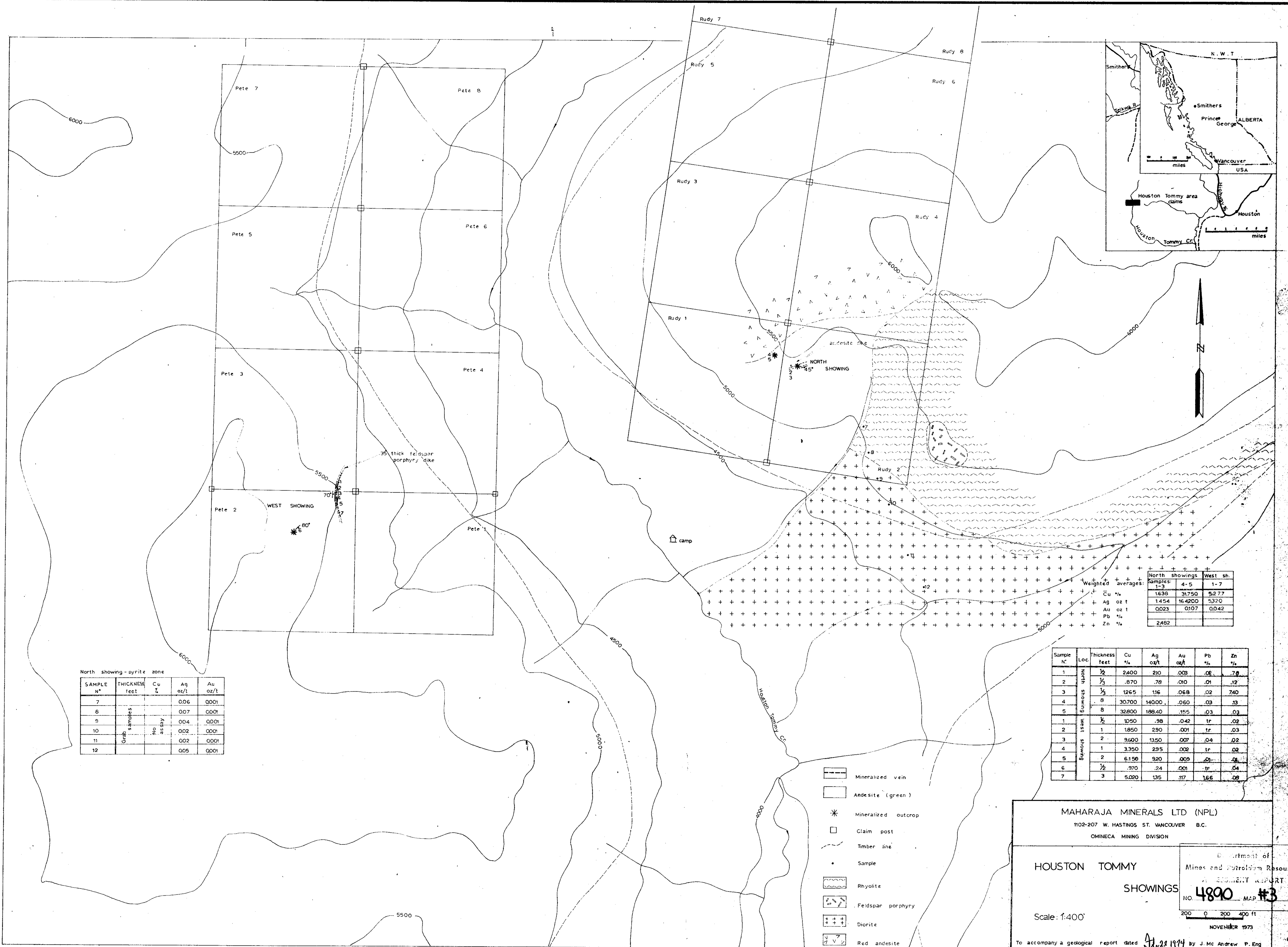
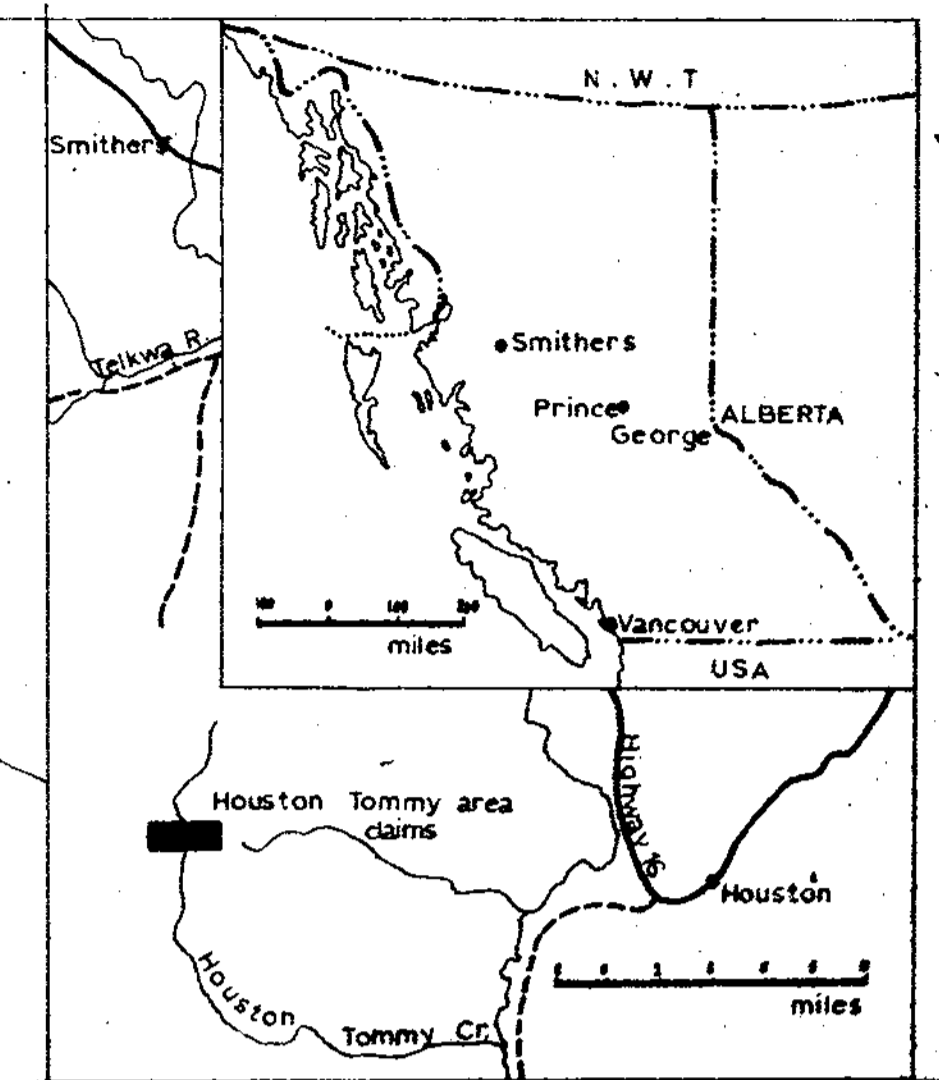
<u>NAME:</u>	<u>CATEGORY:</u>	<u>RATE:</u>	<u>DAYS PERIOD:</u>	<u>WAGE:</u>
A. George	Assistand	\$800/mo	15	\$ 200.
R. Biss	Geologist (Split with Pete Claims)	\$800/mo	15	200.
Okanagan Helicopters	Mobilization (Split with Pete Claims)		4 hrs (\$1,048)	524.
John McAndrew	Consulting	\$150/day	1 day	150.
Man Maintenance		\$25/day/man	30 man days (\$750)	375.
Overhead (Assays Vehicles, office etc.)		50% of labor & maintenance. (\$776) (Split with Pete Claims)		388.
TOTAL				<u><u>\$ 1,837.</u></u>

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 *26th*
day of *February*, 1974, A. D.

James A. Rutherford

Jan Paul Sub-mining Recorder



North showing - pyrite zone

SAMPLE N°	THICKNESS feet	Cu %	Ag oz/t	Au oz/t
7			0.06	0.001
8			0.07	0.001
9	samples		0.04	0.001
10		no assay	0.02	0.001
11	Grab		0.02	0.001
12			0.05	0.001

Weighted averages:

Sample	4-5	1-7
Cu %	1639	31750
Ag oz/t	1.454	16.4200
Au oz/t	0.023	0.107
Pb %		0.042
Zn %	2.482	

Sample N°	Loc	Thickness feet	Cu %	Ag oz/t	Au oz/t	Pb %	Zn %
1	North showing	1/2	2.400	210	0.03	.08	.78
2		1/2	.870	.78	.010	.01	.12
3		1/2	1265	116	.068	.02	7.40
4	8		30.700	140.00	.060	.03	.13
5			32.800	188.40	.155	.03	.03
1	West showing	1/2	1050	.98	.042	tr	.02
2		1	1.850	2.90	.001	tr	.03
3		2	9.600	1350	.007	.04	.02
4	1		3.350	2.95	.002	tr	.02
5			6.150	9.20	.009	.01	.01
6	1/2		.970	.24	.001	tr	.04
7		3	5.020	135	.117	1.66	.08

- Mineralized vein
- Andesite (green)
- Mineralized outcrop
- Claim post
- Timber line
- Sample
- Rhyolite
- Feldspar porphyry
- Diorite
- Red andesite

MAHARAJA MINERALS LTD (NPL)
 1102-207 W. HASTINGS ST. VANCOUVER B.C.
 OMINECA MINING DIVISION

HOUSTON TOMMY SHOWINGS

Scale: 1:400'

To accompany a geological report dated Jan 21 1974 by J. Mc Andrew P. Eng

Department of
 Mines and Petroleum Resources
 EXPLORATION REPORT
 NO. **4890** MAP #3
 200 0 200 400 ft
 NOVEMBER 1973

4890 M3