

5855

A GEOCHEMICAL REPORT

on the

ZZ # 2-8, 16, 18, 20

and the Will # 1 & 7 fractions of
HORSESHOE MINES LTD (NPL)

Situated 7 miles West of Kamloops
in the Kamloops Mining Division
of British Columbia

N.T.S. 92 I/10(E), 9(W)

Lat: $50^{\circ}41'N$ Long: $120^{\circ}30'W$

on behalf of

HORSESHOE MINES LTD (NPL)

by

D.R. Morgan, P. Eng

Dates of Survey: 24 - 31 August 1975

Date of Report: 19 April 1976

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 5855 MAP.....

TABLE OF CONTENTS

	page	
1 - 0	SUMMARY	1
2 - 0	CONCLUSIONS	1
3 - 0	INTRODUCTION	2
	3 - 1 Scope & Dates of Report	2
	3 - 2 Title	2
4 - 0	GEOGRAPHY	2
	4 - 1 Location	2
	4 - 2 Access	2
	4 - 3 Topography	3
5 - 0	SURVEY PROCEDURE	3
6 - 0	SURVEY RESULTS & INTERPRETATION	3
	6 - 1 Copper	3
	6 - 2 Lead	4
	6 - 3 Zinc	4
	6 - 4 Molybdenum	4
	6 - 5 Silver	4
7 - 0	DECLARATION OF COSTS	5

Maps Accompanying this report:

#1	Property location map - 1" - 100 miles	1a
#2	Property location map - 1" - 1.25 miles	1b
#3	Claim Diagram L : 25,000	2a
#4	Geochemical Survey Maps 1" - 300 feet (One each for Cu, Pb, Zn, Mo & Ag)	pocket

*4 - COPPER

#5 - LEAD

#6 - ZINC

#7 - MOLYBDENUM

#8 - SILVER

1 - 0 SUMMARY:

A detailed geochemical survey was carried out along the southern part of the ZZ claims adjacent to the Afton property in the fall of 1975. Soil samples were taken at 100 foot intervals along lines spaced 100 feet apart and were analyzed for copper, lead, zinc, molybdenum and silver.

No areas underlain by significant concentrations of copper, lead, zinc or molybdenum were detected.

A NE trending zone of anomalous silver values occurs in ZZ 5, 7 and 20.

2 - 0 CONCLUSIONS:

Exploration follow-up is considered justified only in the case of the silver anomaly. A gulley draining the salt swamp in ZZ 7 cuts across the central of the three silver anomalies and exposes a green fragmental andesite. Detailed sampling and rock geochemistry for silver should be carried out in this gulley.

**BRITISH
COLUMBIA**

Horseshoe Mines Ltd

"ZZ" Claims

near Kamloops, B.C.

Date: 19 April 1976

By: D.R. Morgan, P.Eng

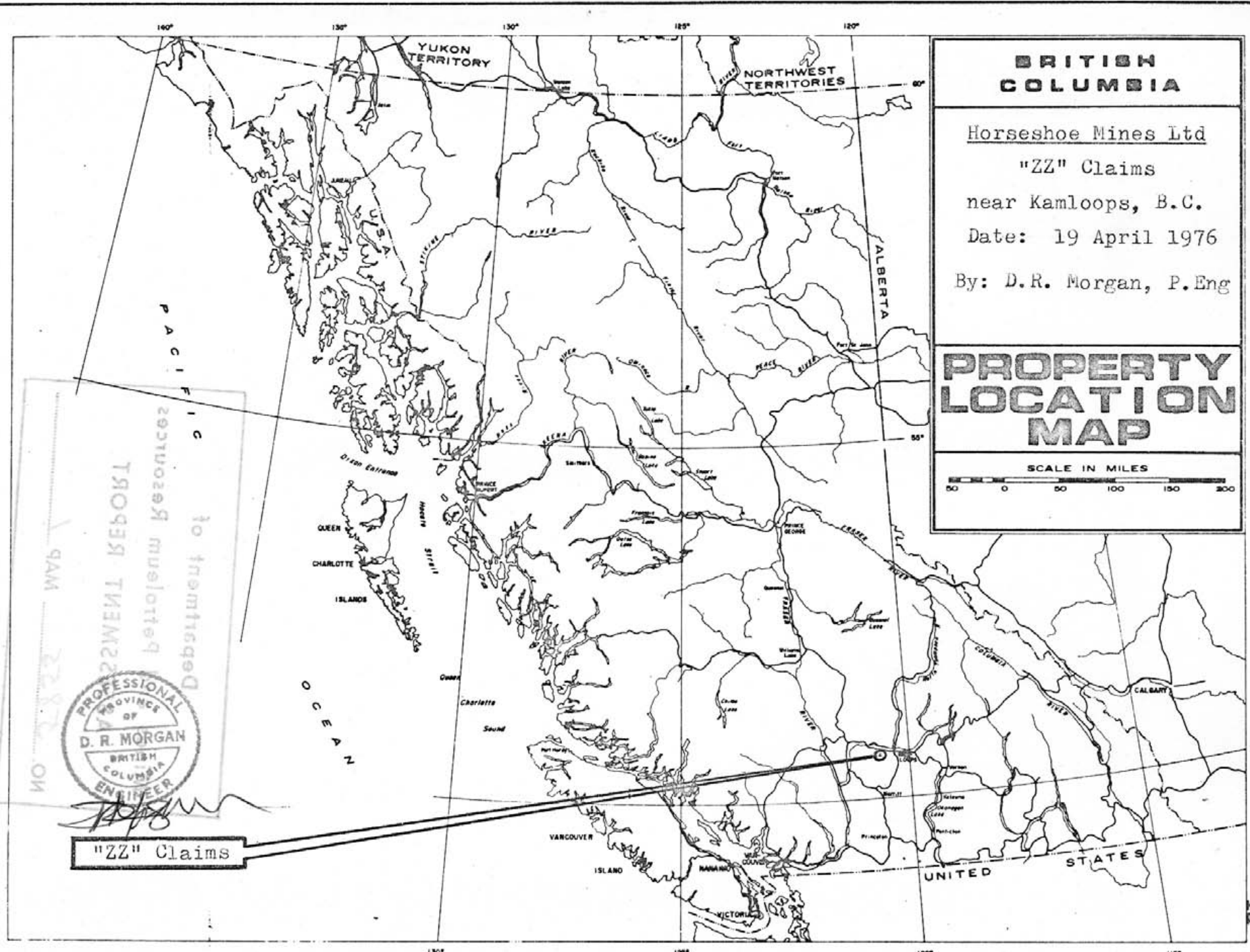
**PROPERTY
LOCATION
MAP**

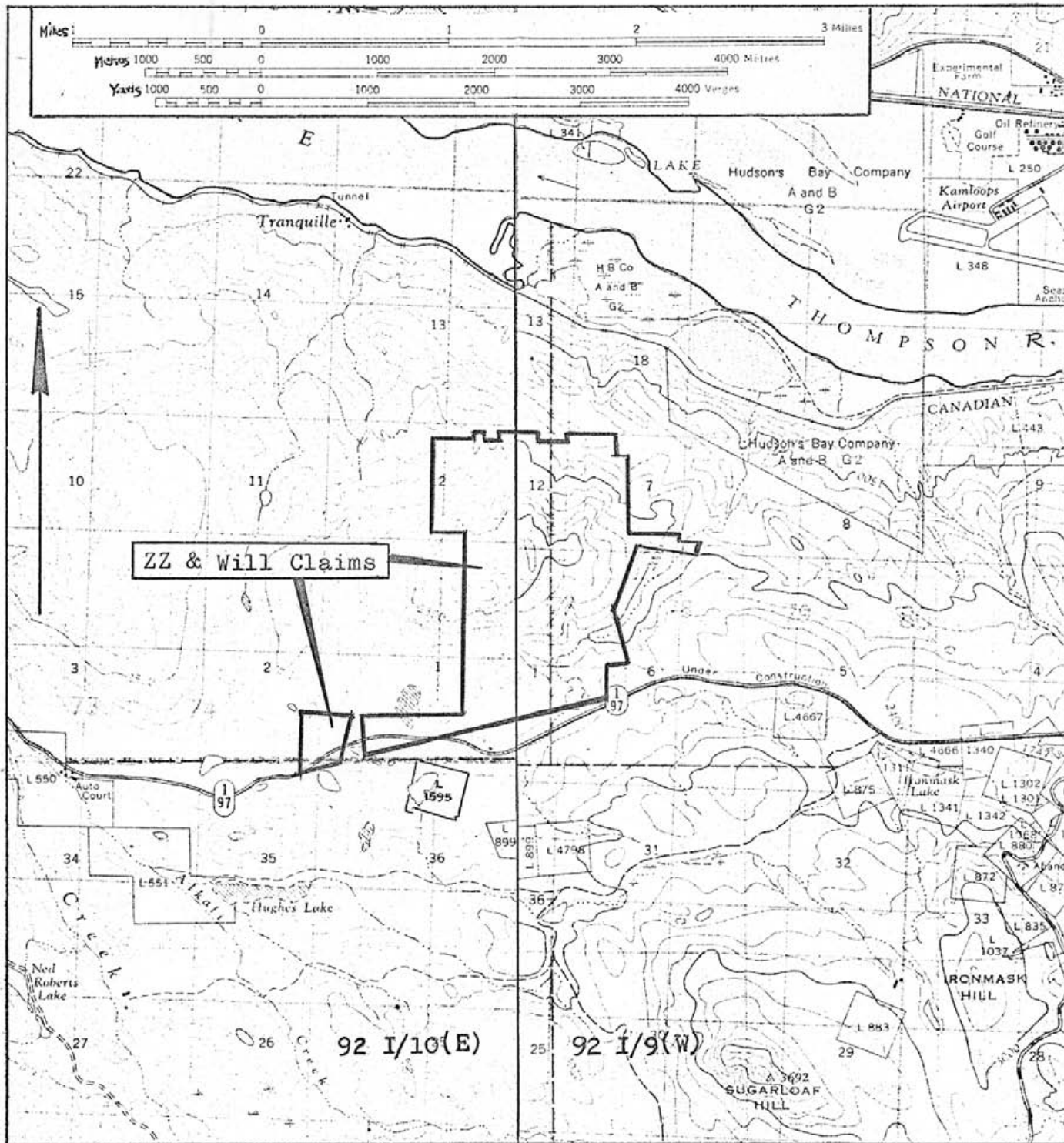
SCALE IN MILES



"ZZ" Claims

NO 2282 WAB
PROFESSIONAL REPORT
Department of Resources
FIG
PACIFIC





HORSESHOE MINES LTD (NPL)

Property Location Map

for

ZZ & Will Claims

Scale: 1 : 50,000

Date: 19 April 1976

By: D.R. Morgan, P. Eng.

Department of
 Provincial Resources
 MINING REPORT
 TROQUEL REPORT
 MAP 8

PROFESSIONAL
 PROVINCE OF
 D. R. MORGAN
 BRITISH COLUMBIA
 ENGINEER

NO. 10

3 - 0 INTRODUCTION:

3 - 1 Scope & Dates of Report: On the 22nd of August 1975 the writer was asked by Mr. A. Joe, President of Horseshoe Mines Ltd., (NPL), to carry out a geochemicals survey on the south part of the Company's ZZ claims in the Kamloops area.

The geochemical survey field work began on 24 August and was completed on 31 August 1975

3 - 2 Title: The property consists of 25 claims in which China Commercial Corporation Ltd holds a 75% interest and Horseshoe Mines Ltd holds a 25% interest. An application for a Certificate of work was filed on 11 March 1976. Claim Data is summarized below:

<u>Number</u>	<u>Name of Claims</u>	<u>Record Number</u>	<u>Years Applied</u>	<u>New C of W Due</u>
7	ZZ # 2 - 8	78062 - 78068	1 each	21 March 1977
6	ZZ # 15 - 20	78073 - 78078	1 each	21 March 1977
6	ZZ # 27 - 32	78083 - 78088	1 each	21 March 1977
5	Will # 1-5 Frs	119464-119468	1 each	7 June 1977
1	Will # 7 Fr	119470	1	7 June 1977
25	Total			

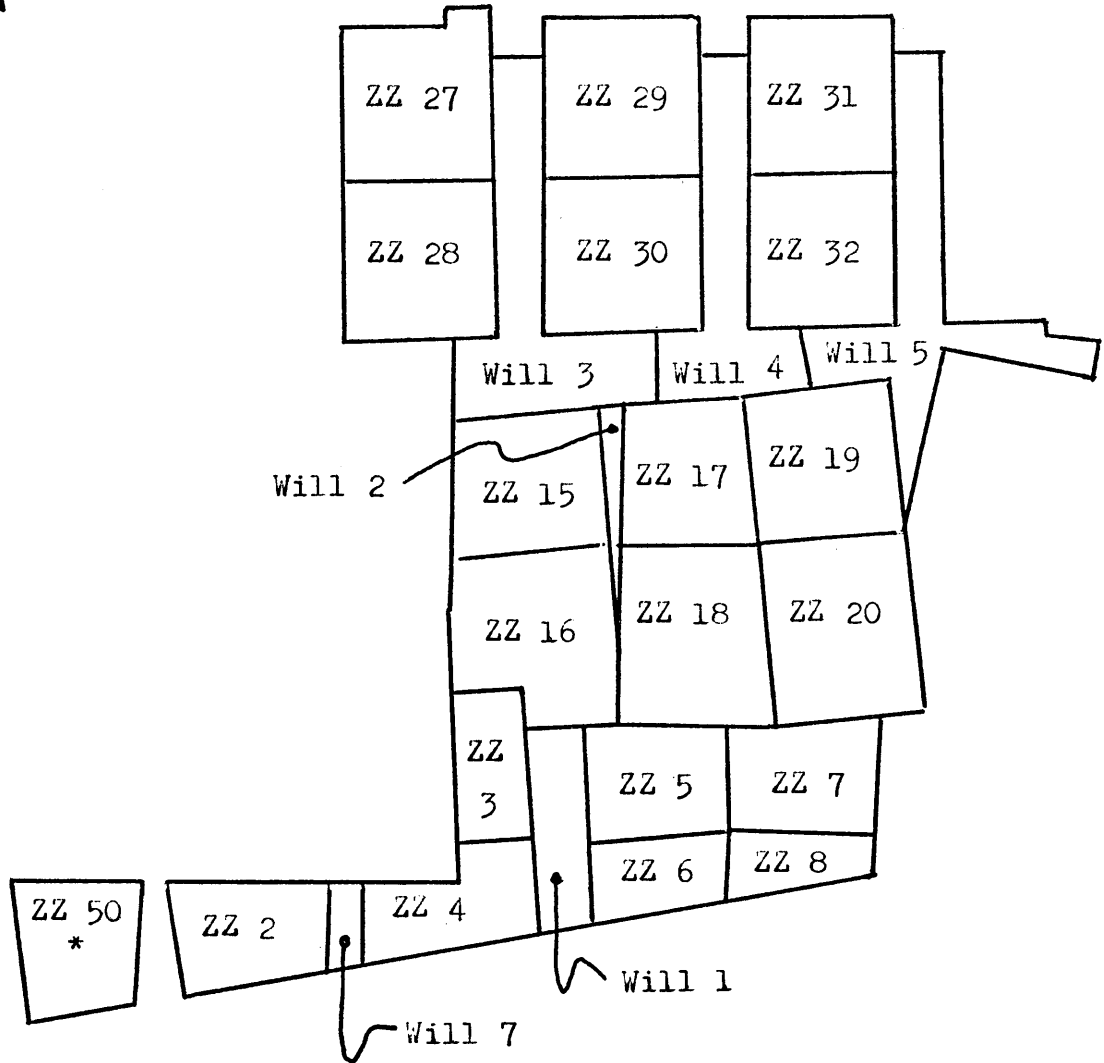
The ZZ # 50 claim was forfeit due to non payment of \$10. tax in 1975. At the time that the writer did the field work for the survey it was assumed that this claim was in good standing. Over \$200. worth of work was therefore performed on this claim and the results appear in this report.

4 - 0 GEOGRAPHY:

4 - 1 Location: The property is located 7 miles due west of Kamloops, B.C. and adjoins and lies to the north of the Afton Mines property and the Trans Canada Highway. The property is in the Kamloops Mining District, straddles National Topographic System areas 92I/10(E) and 92I/9(W) and has a latitude of 50°41' N and a longitude of 120°30½'W.

4 - 2 Access: The property is accessible from the Trans Canada Highway which skirts its southern margin. Dirt roads provide access to much of the property and the open rangeland is mostly accessible

N



* Forfeit

HORSESHOE MINES LTD (NPL)

Claim Diagram

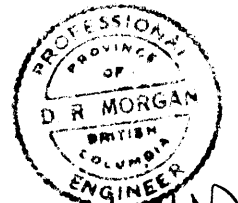
of

ZZ & Will Claims

Scale: 1 : 25,000 (approx:)

Date: 19 April 1976

By: D.R. Morgan, P. Eng.



[Handwritten signature]

to four wheel drive vehicles without road building.

4 - 3 Topography: The area covered by the survey in general has a gentle slope to the west. This is modified by an East-West trending gully in the vicinity of baseline 34 North. A salt swamp at 15 N - 30 E and also the one shown on ZZ 7 & 8 prevented sampling in those areas.

SURVEY PROCEDURE:

A total of 907 samples were collected at intervals of 100 feet along lines spaced 100 feet apart. These lines were run between East West base lines at 15 N and 34 N.

Samples were taken at the upper part of the "B" soil horizon at a depth of approximately 6 inches. These samples were placed in high wet strength metal-free paper envelopes and processed by Bondar Clegg at 1500 Pemberton Avenue, North Vancouver, B.C.

The samples were analyzed for Copper, Lead, Zinc, Silver and Molybdenum as follows:

1. Dried in infra red dryers.
2. Sieved to -80 mesh.
3. Weighed.
4. Digested in LeFort aqua regia for 3 hours.
5. Bulked to volume and homogenized.
6. Analyzed by atomic absorption in constant comparison with both synthetic and matrix standards.

6 - 0 SURVEY RESULTS & INTERPRETATION:

6 - 1 Copper: In view of the fact that the southern boundary of the surveyed area is within 1000 feet of a major copper orebody, copper values are significantly low. Background values centred around 50 ppm are exceeded only in 5 limited areas whose values exceed 70 ppm. The most interesting anomaly is the one on ZZ 2. This anomaly is partially coincident with increased silver and molybdenum values and occurs in an

area lacking outcrop, however deep drill holes 500 feet to the west and 600 feet to the south were negative. A minor anomaly occurs in ZZ 3 adjacent to an outcrop of buff weathering dacite. A fairly extensive but weakly anomalous area occurs in the south of ZZ 18. Outcrops of massive green andesite lie to the south of this anomaly and a purple fragmental andesite lies on its northern margin. Minor malachite occurs in fractures in this latter variety in the central part of ZZ 20.

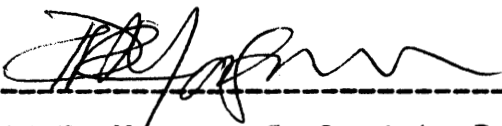
6 - 2 Lead: Very weakly anomalous lead values occur in areas adjacent to the 34 N base line. These areas lie in the floor of the east-west trending gulley and are not considered significant.

6 - 3 Zinc: Very weakly anomalous zinc values also follow the east-west gulley and tributary gulleys at its western end, These values are not considered significant.

6 - 4 Molybdenum: Very weak values occur in two places. These 'anomalies' are small, weak and are considered insignificant.

6 - 5 Silver: The most interesting silver anomalies lie in a generally NE trending pattern in ZZ 5, 7 and 20. This area is underlain by a green fragmental andesite. The small area of higher silver values in ZZ 2 is not considered significant.

Respectfully submitted,



David R. Morgan, Geologist, P. Eng.



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

In the Matter of the GEOCHEMICAL SURVEY on the
ZZ #s 2-8, 16, 18, 20, former
ZZ 50 & Will #s 1 & mineral claims held by
Horseshoe Mines Ltd, 7 miles west of Kamloops, B.C.,

I, David R. Morgan, Geologist, P. Eng.,

of 3424 West 6th Avenue, Vancouver, B.C. V6R 1T3

in the Province of British Columbia, do solemnly declare that the following costs were incurred in carrying out the geochemical survey work:

Field Work:

Sample Collection & line survey by D.R. Morgan	
August 24-31, 1975, 8 days at \$75/day	600.
Room & board: 8 days at \$15/day	90.
Transportation: 8 days at \$15/day	90.

Sample Processing:

Processing of 907 samples and analysis for 5 metals by Bondar Clegg, North Vancouver	3,265.
---	--------

Report Writing:

Report writing & drafting by D.R. Morgan, 8 days at \$200/day	<u>1,600.</u>
	5,645.

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 *5*
day of *May*, 1976, A.D.



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

Subscribing Recorder



5855 M-4

Map # 1 of 5

LEGEND

>70 ppm

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5855 MAP 4

HORSESHOE MINES LTD(N.P.L.)

"ZZ" Claims Kamloops B.C.

GEOCHEMICAL SURVEY: Cu

Scale: 1 to 300 feet

Date: 19 April 1976

By: D.R.Morgan, P.Eng.

Survey: Underhill

To accompany a Geochemical Report on the "ZZ" Claims, Kamloops M.D. by D.R. Morgan, P.Eng., Dated: 19 April 1976

N



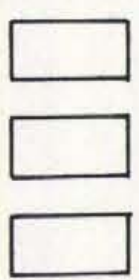
5855 M-5

2822 W-2

Map #2 of 5

LEGEND

> 20 ppm



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5855 MAP 5

HORSESHOE MINES LTD (N.P.L.)

"ZZ" Claims Kamloops B.C.

GEOCHEMICAL SURVEY: Pb

Scale: 1 to 300 feet

Date: 19 April 1976

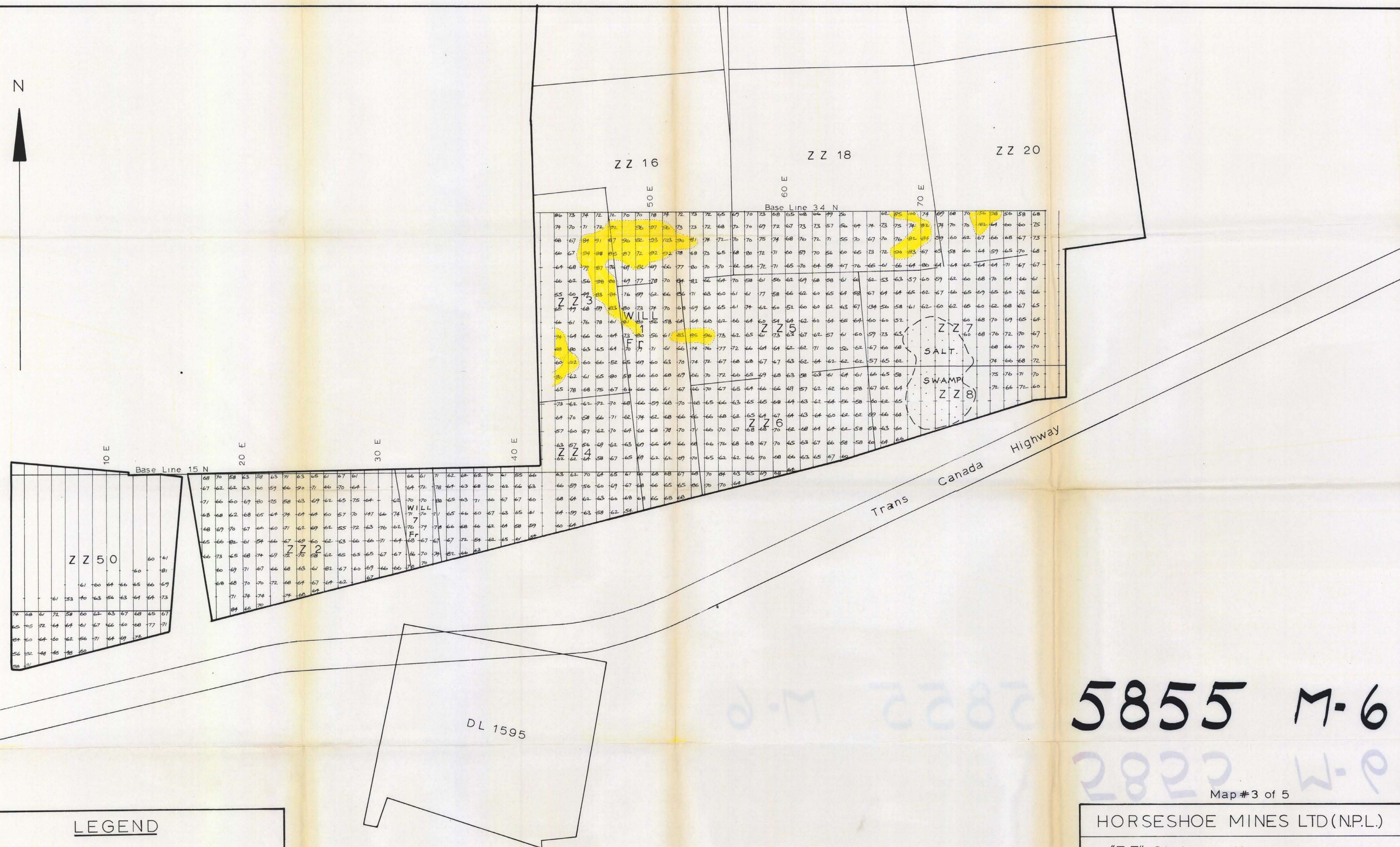
By: D.R. Morgan, P. Eng.

Survey: Underhill

To accompany a Geochanical Report on
the "ZZ" Claims, Kamloops M.D. by
D.R. Morgan, P. Eng., Dated: 19 April 1976



N



5855 M-6

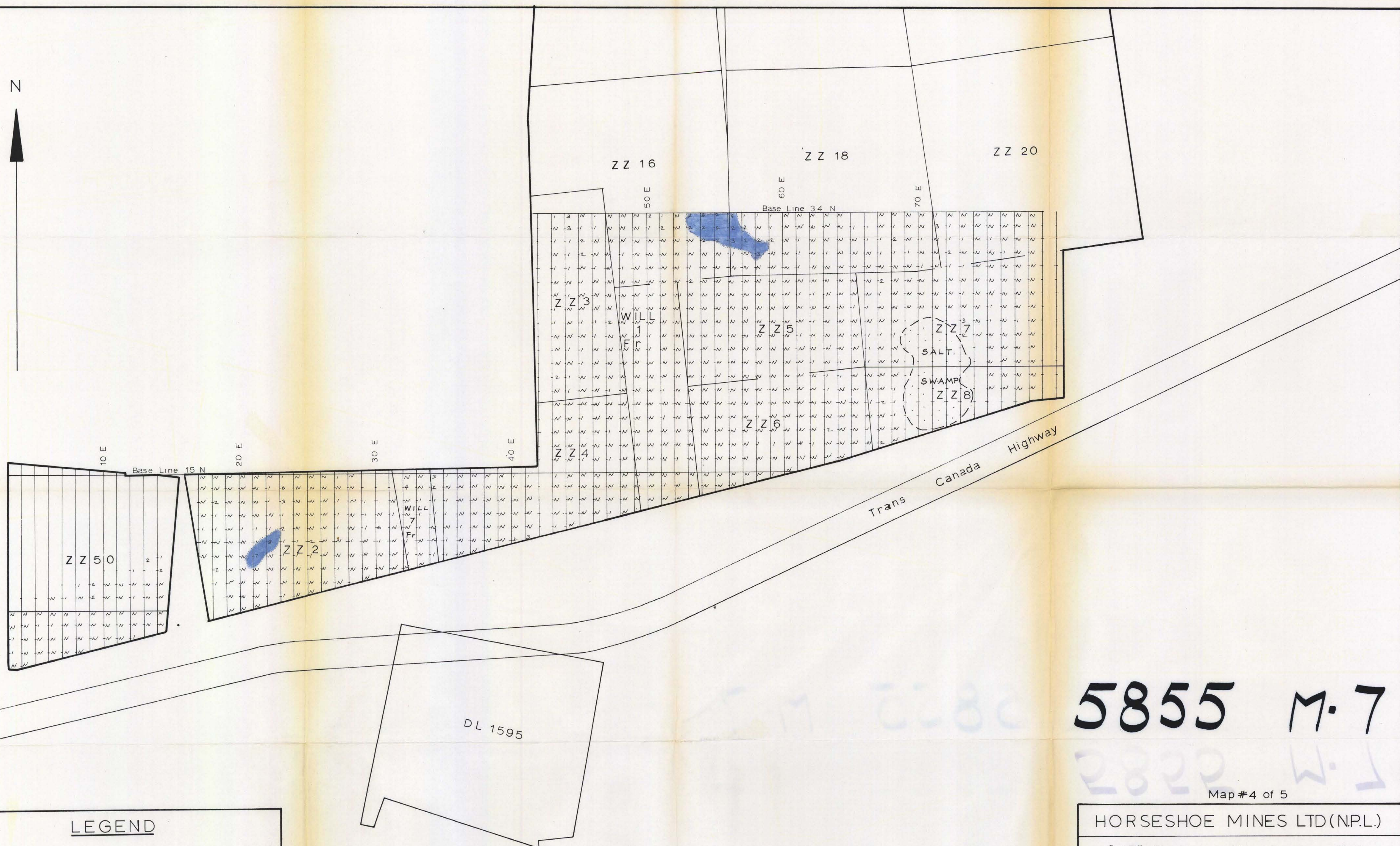
2822 W-9
Map #3 of 5

LEGEND

- > 80 ppm
-
-
-

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
No. 5855 MAP 6

HORSESHOE MINES LTD(N.P.L.)	
"ZZ" Claims Kamloops B.C.	
GEOCHEMICAL SURVEY: Zn	
Scale: 1 to 300 feet	To accompany a Geochemical Report on the "ZZ" Claims, Kamloops M.D. by D.R. Morgan, P.Eng., Dated 19 April 1976
Date: 19 April 1976	
By: D.R. Morgan, P.Eng.	
Survey: Underhill	



LEGEND

- > 2 ppm
- Not detected
-
-

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5855 MAP 7

5855 M-7

2822 W.J

Map #4 of 5

HORSESHOE MINES LTD(N.P.L.)	
"ZZ" Claims Kamloops B.C.	
GEOCHEMICAL SURVEY: Mo	
Scale: 1 to 300 feet	To accompany a Geochemical Report on the "ZZ" Claims, Kamloops M.D. by D.R. Morgan, P.Eng., Dated: 19 April 1976
Date: 19 April 1976	
By: D.R.Morgan, P.Eng.	
Survey: Underhill	





5855 M-8

Map # 5 of 5

LEGEND

> 0.4 ppm

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 5855 MAP P

HORSESHOE MINES LTD (N.P.L.)	
"ZZ" Claims Kamloops B.C.	
GEOCHEMICAL SURVEY: Ag	
Scale: 1 to 300 feet	To accompany a Geochemical Report on the "ZZ" Claims, Kamloops M.D. by D.R. Morgan, P.Eng., Dated 19 April 1976
Date: 19 April 1976	
By: D.R. Morgan, P. Eng.	
Survey: Underhill	