85-262-13645

GEOLOGICAL BRANCH ASSESSMENT REPORT

13,645

Geological and Geochemical Assessment Report

on the

ATLIN 14 and ATLIN 15 Claims

ATLIN MINING DIVISION

N.T.S. 104-N-6/E and W

59°28'N, 133°15'W

D. B. Petersen

March, 1985

Owner: Daiwan Engineering Ltd.

Operator: Acheron Resources Ltd.
and
Trident Resources Inc.

Table of Contents

Illustrations

1. Introduction

This report describes the work that was done on the ATLIN 14 and ATLIN 15 claims between the 4th and the 10th of October, 1984.

G. Lohman* and H. Lougheed conducted a partial first-phase exploration program of the claims that included line flagging, reconnaissance soil geochemistry and mapping and prospecting.

Overall supervision of the field work was carried out by G. Lohman. Trident Resources Inc. and Acheron Resources Ltd. were the operators of the program.

2. Location and Access

The subject claims are located in the Atlin Mining Division, approximately 28km Southeast of the town of Atlin. Geographic co-ordinates are 59°28'N, 133°15'W. N.T.S. is 104-N-6/E and W. See Fig. 1, "Location Map".

Access is by dirt road that follows Slate Creek to past its head, just North of the claim group.

3. Topography and Vegetation

The claims straddle a smooth North-South trending height of land and the slopes to the East and West. Elevations vary between 1,080m and 1,440m a.s.l.

Vegetation consists of very sparse brush and willow at the upper elevations, and stunted conifers on the lower slopes.

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* Grad. geol., U of T, 1981; Lornex, Brinco ...

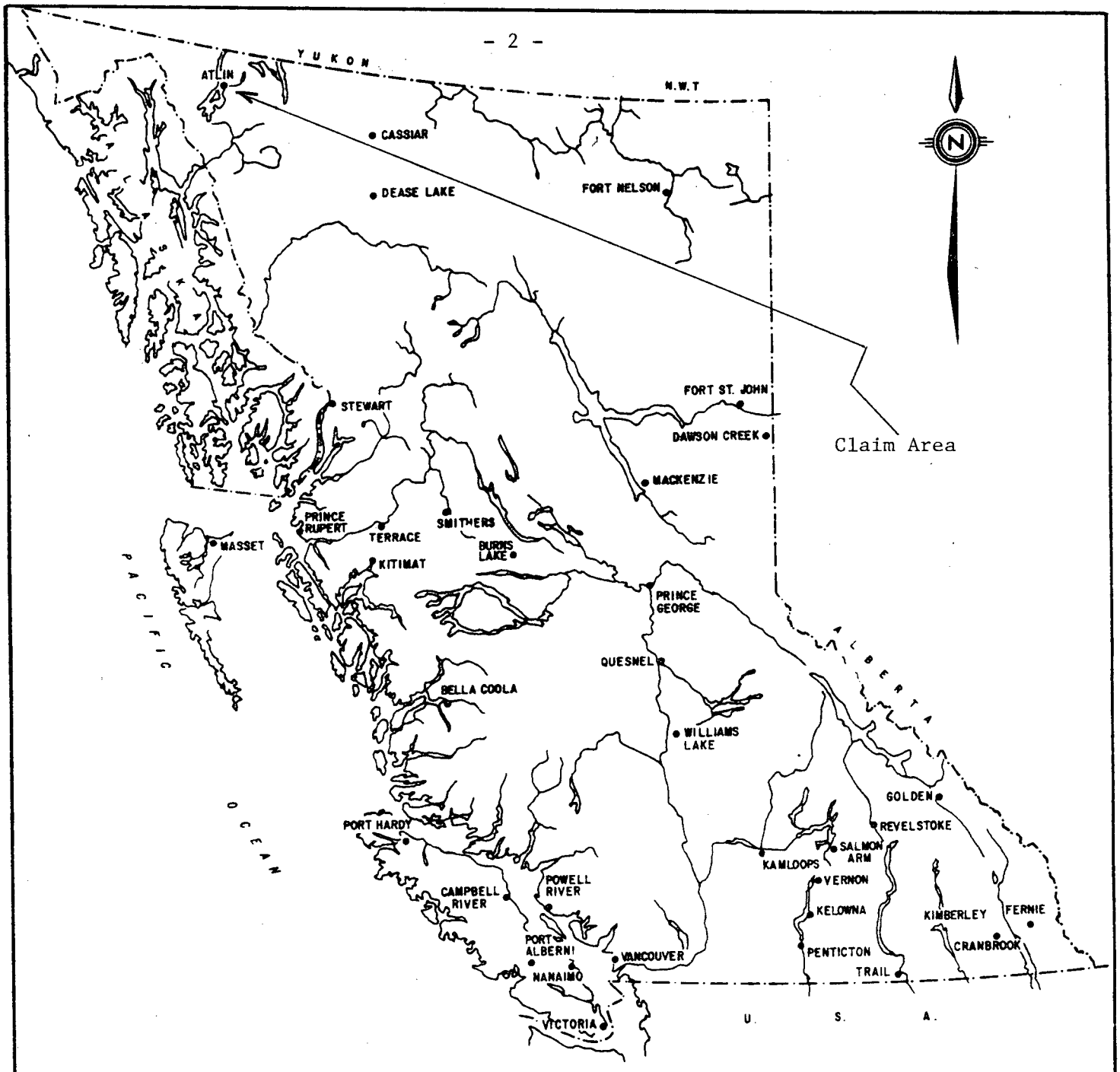


FIGURE 1

Daiwan Engineering Ltd.
ATLIN 14 and 15 Claims
LOCATION MAP
KILOMETRES 0 100 200 300 400 1:8,000,000

D.B. Petersen

4. General Geology

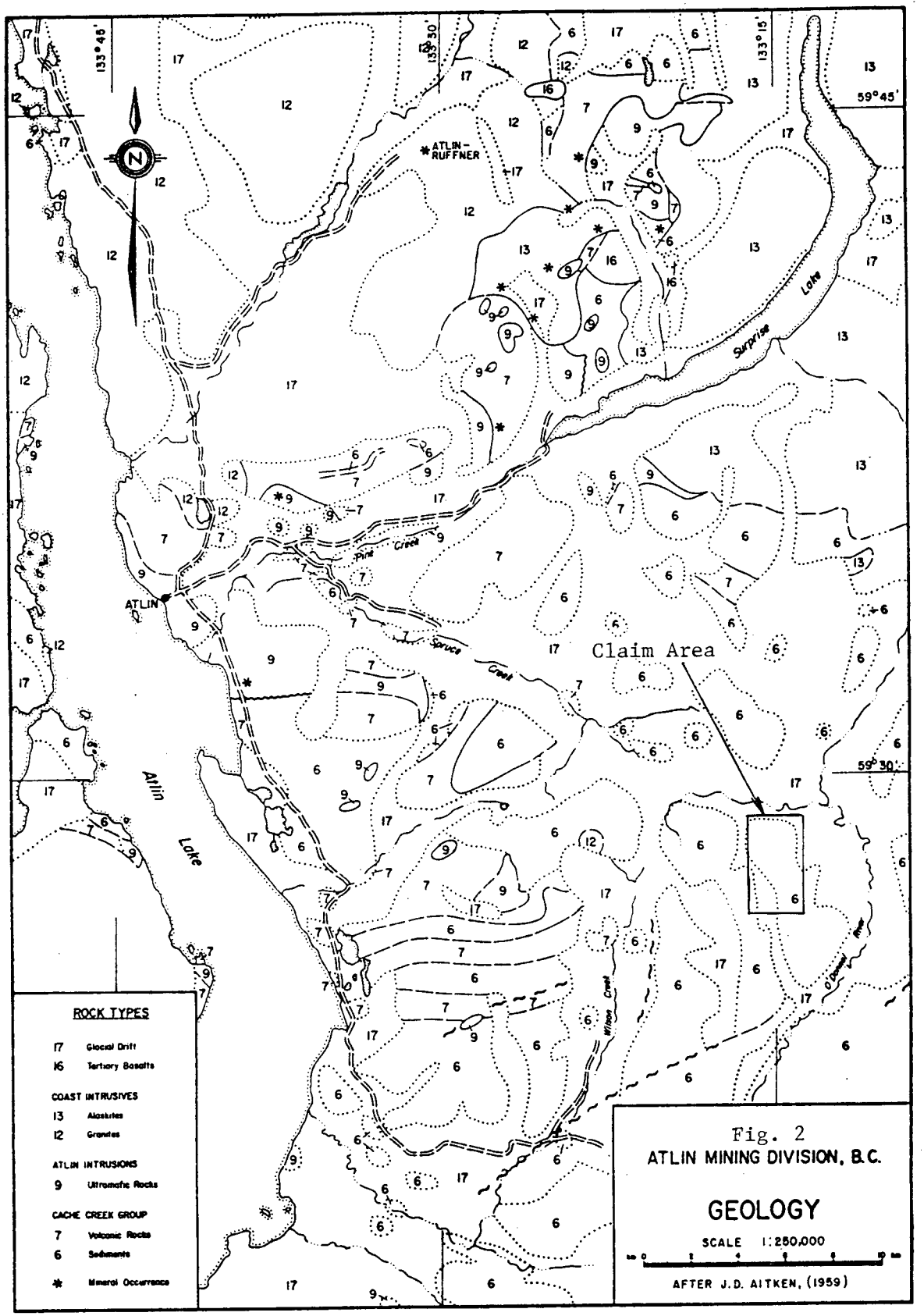
According to Aitken (1959), see Fig. 2, "Atlin Area Geology", the oldest rocks in the area are pre-Permain schists and gneisses that are known as the Yukon Group which were followed by sedimentary and volcanic rocks of the Cache Creek Group in Permian times. These rocks were intruded by the Atlin intrusives, a group of rocks that are ultramafic in composition and consist principally of serpentinized peridotites and dunites. In the Jurassic period, the Laberge group of marine sedimentary rocks were laid down which, in turn, were followed by emplacement of the siliceous Coast intrusives consisting of granodiorites, quartz monzonites, granites and alaskites. Tertiary rocks include olivine basalts, minor sediments and various intrusive rocks.

Mineralization is of four main types:

1. a porphyry type stockwork molybdenum deposit located near the centre of an alaskitic intrusive, the Ruby Creek deposit, 24km Northeast of Atlin.
2. placer gold deposits whose origin is thought by Aitken to be eroded quartz vein systems and lodes.
3. silver-lead-gold lode deposits in lamprophyre dykes, such as the Atlin-Ruffner mine.
4. wolframite showings in comb quartz in sericitized alaskite.

5. Local Geology

According to Aitken (1959), the claims are underlain by sediments of the Cache Creek Group and by glacial drift.


133°45'
133°30'
133°15'
59°45'
59°30'
N
ATLIN-RUFFNER
ATLIN
Claim Area
Surprise Lake
Pine Creek
Spruce Creek
Atlin Lake
Wilson Creek
ROCK TYPES
17 Glacial Drift
16 Tertiary Basalts
COAST INTRUSIVES
13 Alaskites
12 Granites
ATLIN INTRUSIONS
9 Ultramafic Rocks
CACHE CREEK GROUP
7 Volcanic Rocks
6 Sediments
* Mineral Occurrence
Fig. 2
ATLIN MINING DIVISION, B.C.
GEOLOGY
SCALE 1:250,000
AFTER J.D. AITKEN, (1959)

6. Work Done in 1984

G. Lohman and H. Lougheed, from the 4th to the 10th of October, spent a total of 14 man-days performing the following work:

1. Line Flagging

A total of 20.7km of East-West baseline and North-South grid line was flagged. Lines were a nominal 250m apart. Station spacing was 50m along the lines.

2. Prospecting and Reconnaissance Mapping

Prospecting and reconnaissance mapping was conducted along the lines during the course of the gridding and on ridges where the chance of finding outcrop was thought to be good.

3. Geochemical Soil Sampling

During the course of the gridding and the prospecting, a total of 402 soil samples were taken. Because the property is predominantly covered by talus and by till, soil development is poor and sampling consisted mainly of taking material from the 'C' horizon. 15cm dep. Samples were taken by placing approximately 200g of soil in a Kraft paper bag numbered with the station co-ordinates and sending these to Acme Analytical Laboratories Ltd. in Vancouver where they were dried, sieved to -80 mesh and a 0.5g sample of the residue digested in 3ml of aqua regia at 95°C for 1 hour. After diluting to 10ml with demineralized water, the Ag, As, Cu, Pb, and Zn content was determined by ICP analysis.

The results are shown plotted in Fig's. 3, 4, 5, 6, and 7, "ppm Ag", "ppm As", "ppm Cu", "ppm Pb", and "ppm Zn", respectively.

7. Results of Work Done in 1984

The results of the work done are as follows:

1. Geological Mapping

The mapping along the lines and on the height of land to the centre of the claims showed that glacial till predominates and that minor argillite is present to the North of the property. Limestone is principal rock type composing the ridge area.

No mineralization or alteration was noted.

2. Geochemical Soil Sampling

The results show that background values of approximately 0.2ppm Ag, 9ppm As, 30ppm Cu, 10ppm Pb and 70ppm Zn are present. No anomalous values are apparent.

8. Conclusions

It is concluded that the geochemical soil sampling, and the mapping and prospecting, has failed to find any zones of interest.

9. Recommendations

Further work does not appear warranted on the claims.

10. Statement of Costs

The following costs were incurred in the program:

Salaries			
G. Lohman, Geologist	4-10 October 7 days @ $175	$ 1,225	
H. Lougheed, Sampler/Prospector	4- 10 October 7 days @ $126	882	
			$ 2,107
Field Costs			
Sampling and Freight	438 samples @ $7	$ 3,066	
Transport		229	
Supplies		89	
Groceries		172	
			$ 3,556
Reporting			
G. Lohman, Geologist	1 day @ $175	$ 175	
D. Petersen, Geologist	3 days @ $275	825	
S. Wheat, Typist	5 hours @ $15	75	
Drafting & Printing		85	
			$ 1,160
	TOTAL:		$ 6,823

11. Title

Particulars of the claims are as follows:

Name of Claim	No. of Units	Record No.	Owner	Date of Record
ATLIN 14	20	2253	Daiwan Engineering Ltd.	28 March, 1984
ATLIN 15	20	2254	Daiwan Engineering Ltd.	28 March, 1984

12. References

Aitken, J.D., 1959, Atlin Map-Area, British Columbia; GSC Mem. 307.

D.B. Petersen

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
TO WIT:

In the Matter of the geological and geochemical surveys on the ATLIN 14 and 15 Claims:

I, David B. Petersen

of Daiwan Engineering Ltd.
#1010 - 409 Granville Street, Vancouver, B. C. V6C 1W9

in the Province of British Columbia, do solemnly declare that the following costs were incurred in conducting the surveys:

SALARIES

G. Lohman, Geologist	7 days @ $175	$ 1,225	
H. Lougheed, Sampler/ Prospector	7 days @ $126	882	$ 2,107

FIELD COSTS

Analyses and Freight	$ 3,066	
Transport and Travel	229	
Supplies	89	
Groceries	172	3,556

REPORTING

G. Lohman, Geologist	1 day	@ $175	$ 175
D. Petersen, Geologist	3 days	@ $275	825
S. Wheat, Typing	5 hours	@ $ 15	75
Drafting and Printing			85
			1,160

TOTAL: $ 6,823

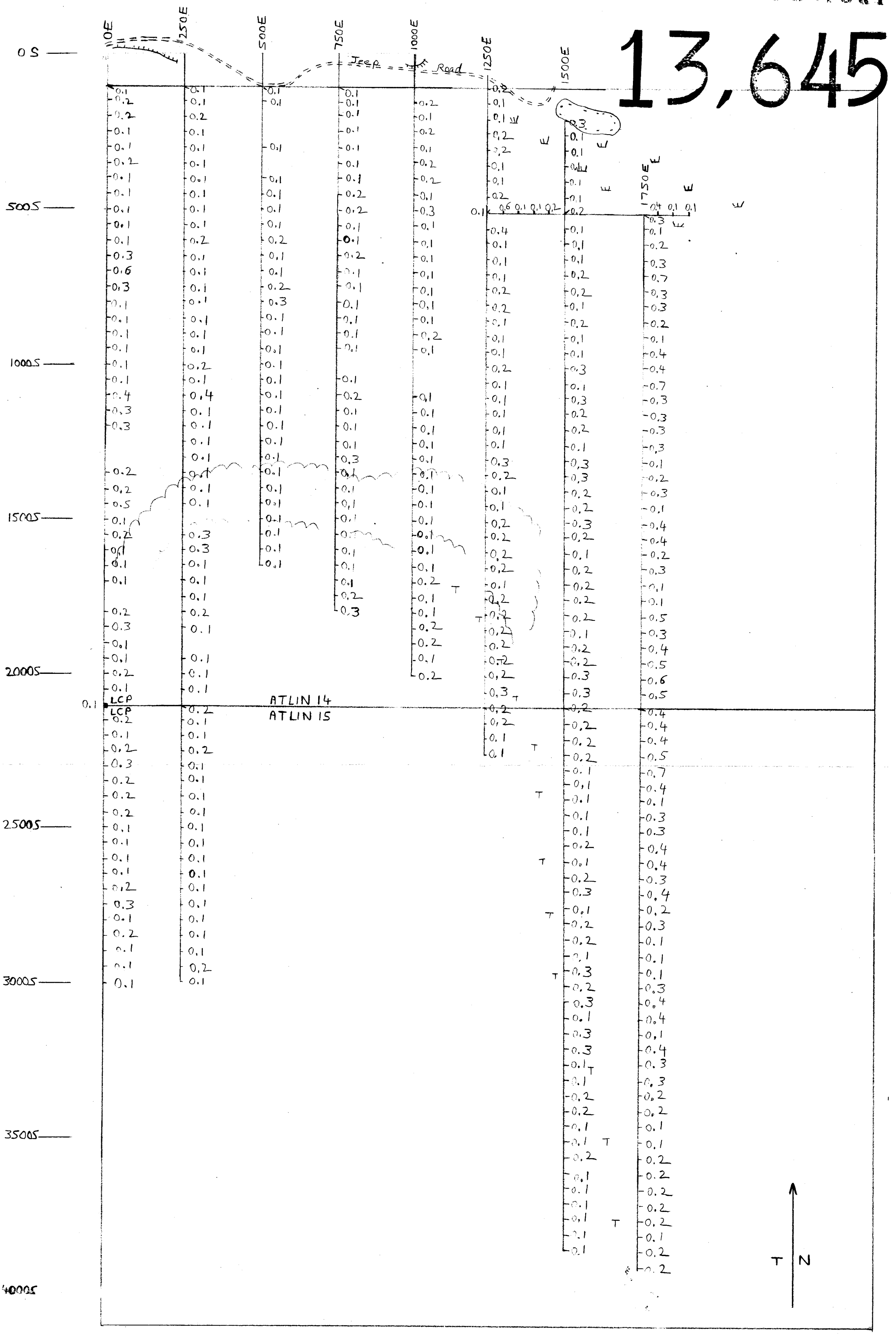
And I make this solemn declaration conscientiously believing it to be true, and knowing that it is the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver, in the Province of British Columbia, this 18th day of April 1985, A.D.

D.B. Petersen

eday (CDAY)

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



Talus
Swamp
Cliff
Sample Location
T Timberline

Fig 3

DAIWAN ENGINEERING LTD

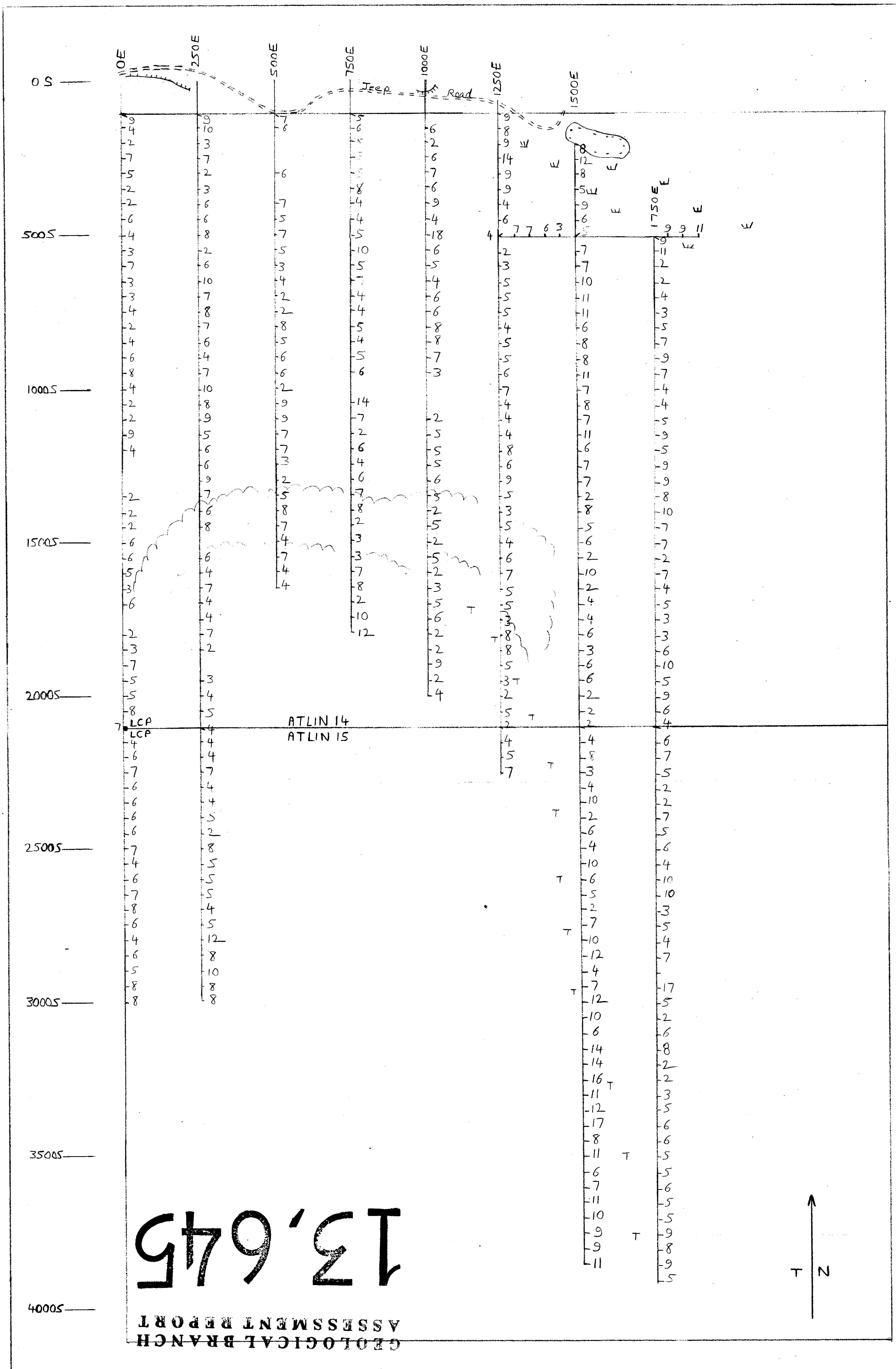
ATLIN 14,15 CLAIMS

ppm Ag

Scale 1:10,000

200 0 100 200 300 400 500m

D.B. Peterson



Talus
Swamp
Cliff
Sample Location
Timberline

D B Petersen

Fig 4

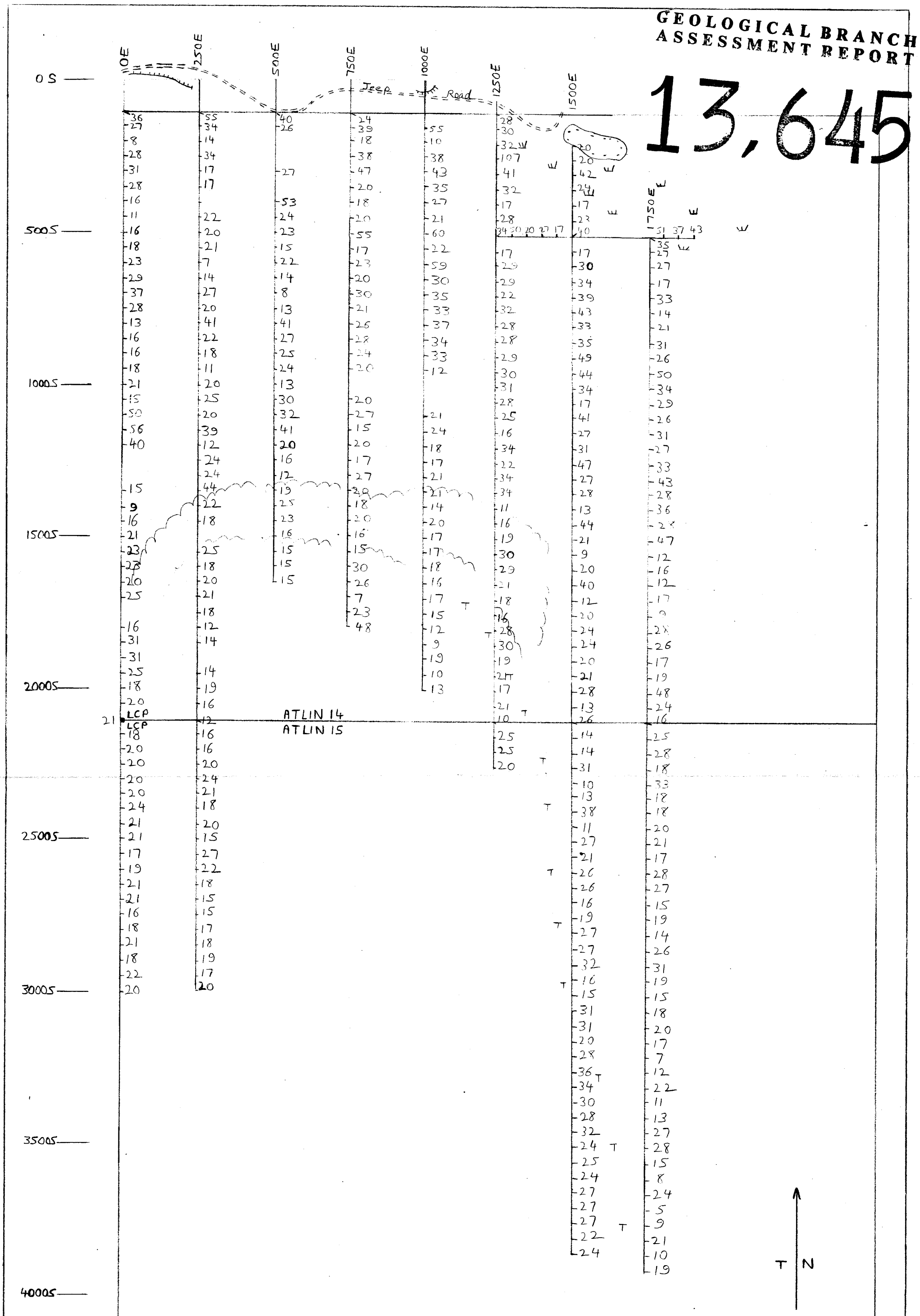
DAIWAN ENGINEERING LTD

ATLIN 14,15 CLAIMS

ppm As

Scale 1:10,000

200 0 100 200 300 400 500m



Talus
Swamp
Cliff
Sample Location
T Timberline

D.B. Petersen

Fig 5

DAIWAN ENGINEERING LTD

ATLIN 14, 15 CLAIMS

ppm Cu

Scale 1:10,000

200 0 100 200 300 400 500m

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0S
500S
1000S
1500S
2000S
2500S
3000S
3500S
4000S

10E 250E 500E 750E 1000E 1250E 1500E 1750E

Jeep Road

ATLIN 14
ATLIN 15

LCP
LCP

T

N

Talus
Swamp
Cliff
Sample Location
Timberline

D.B. Peterson

Fig 6

DAIWAN ENGINEERING LTD

ATLIN 14, 15 CLAIMS

ppm Pb

Scale 1:10,000

200 0 100 200 300 400 500m

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,645

Jeep Road

0S
500S
1000S
1500S
2000S
2500S
3000S
3500S
4000S

0E 250E 500E 750E 1000E 1250E 1500E 1750E

ATLIN 14
ATLIN 15

LCP
LCP

T

N

Talus
Swamp
Cliff
Sample Location
Timberline

Fig 7

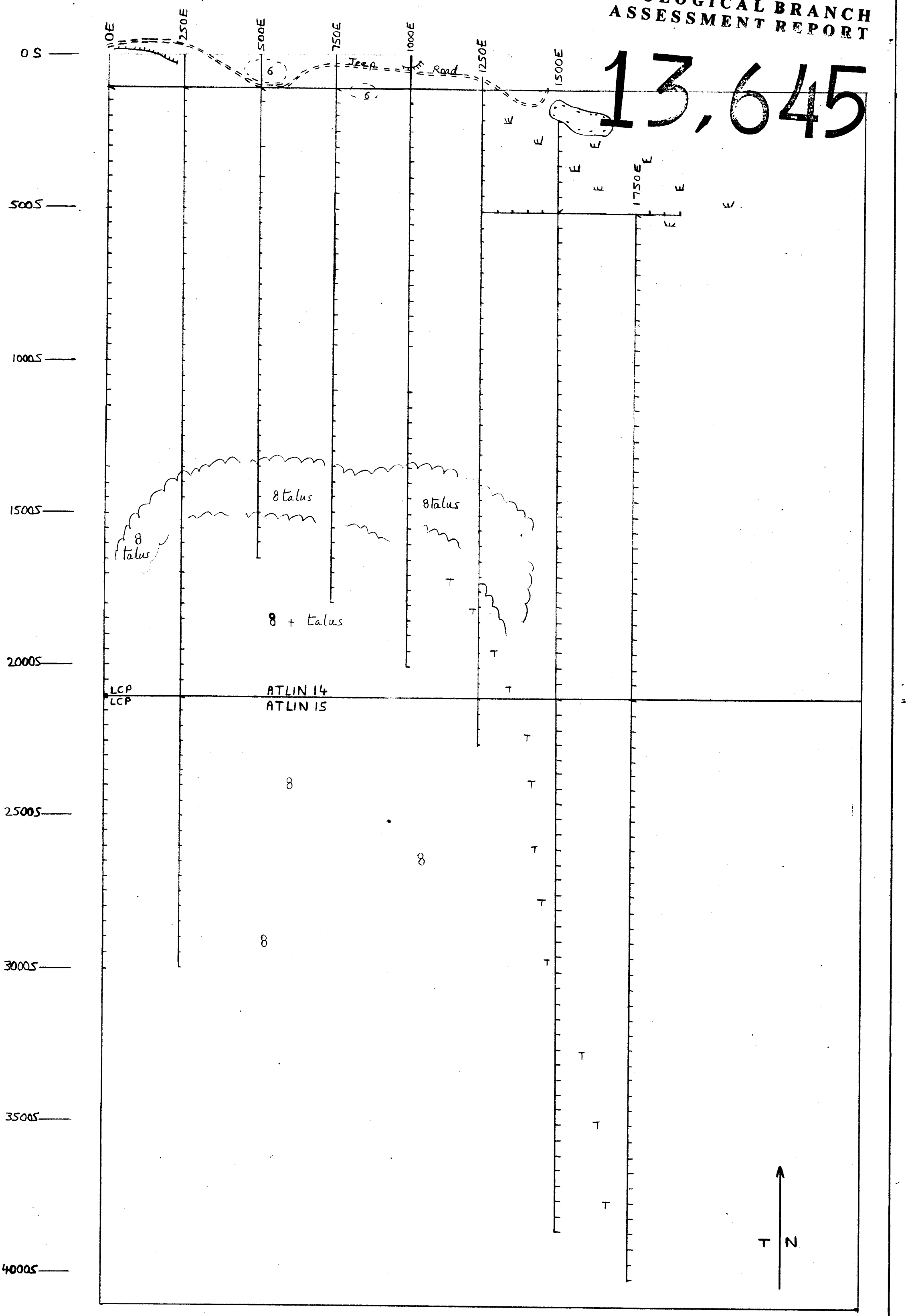
DAIWAN ENGINEERING LTD

ATLIN 14,15 CLAIMS

ppm Zn

Scale 1:10,000

200 0 100 200 300 400 500m



Cache Creek Group
8 Limestone
6 Argillite, Chert

Talus
Swamp
Cliff
Sample Location
T Timberline

D.B. Petersen

Fig 8

DAIWAN ENGINEERING LTD

ATLIN 14, 15 CLAIMS

Geology

Scale 1:10,000

200 0 100 200 300 400 500m