

GEOCHEMICAL REPORT

TIM MINERAL CLAIM GROUP

SHELDON LAKE AREA
WATSON LAKE MINING DIVISION
YUKON TERRITORY

Longitude: 61°59' West
Latitude : 129°56' North

N.T.S. - 105-H-13

By

ROBERT J. DARNEY
ATLAS EXPLORATIONS LIMITED

January 16, 1968

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| <p>This report has been examined by the Geological Evaluation Unit. Approved as to technical worth by:</p> <p><i>[Signature]</i></p> <p>RESIDENT GEOLOGIST</p> <p>Approved as to cost in the amount of: \$ 2800.00</p> <p><i>[Signature]</i></p> <p>RESIDENT MINING ENGINEER</p> <p>Accepted as representation work under Section 53(4) Yukon Quartz Mining Act.</p> <p><i>[Signature]</i></p> <p>COMMISSIONER OF YUKON</p> |
|---|

LIST OF CLAIMS

| <u>Claim Numbers</u> | <u>Grant Numbers</u> | <u>Date Recorded</u> |
|----------------------|----------------------|----------------------|
| Tim 1-42 | Y17848 - Y17889 | July 6, 1967 |
| Tim 44-49 | Y19051 - Y19056 | August 22, 1967 |

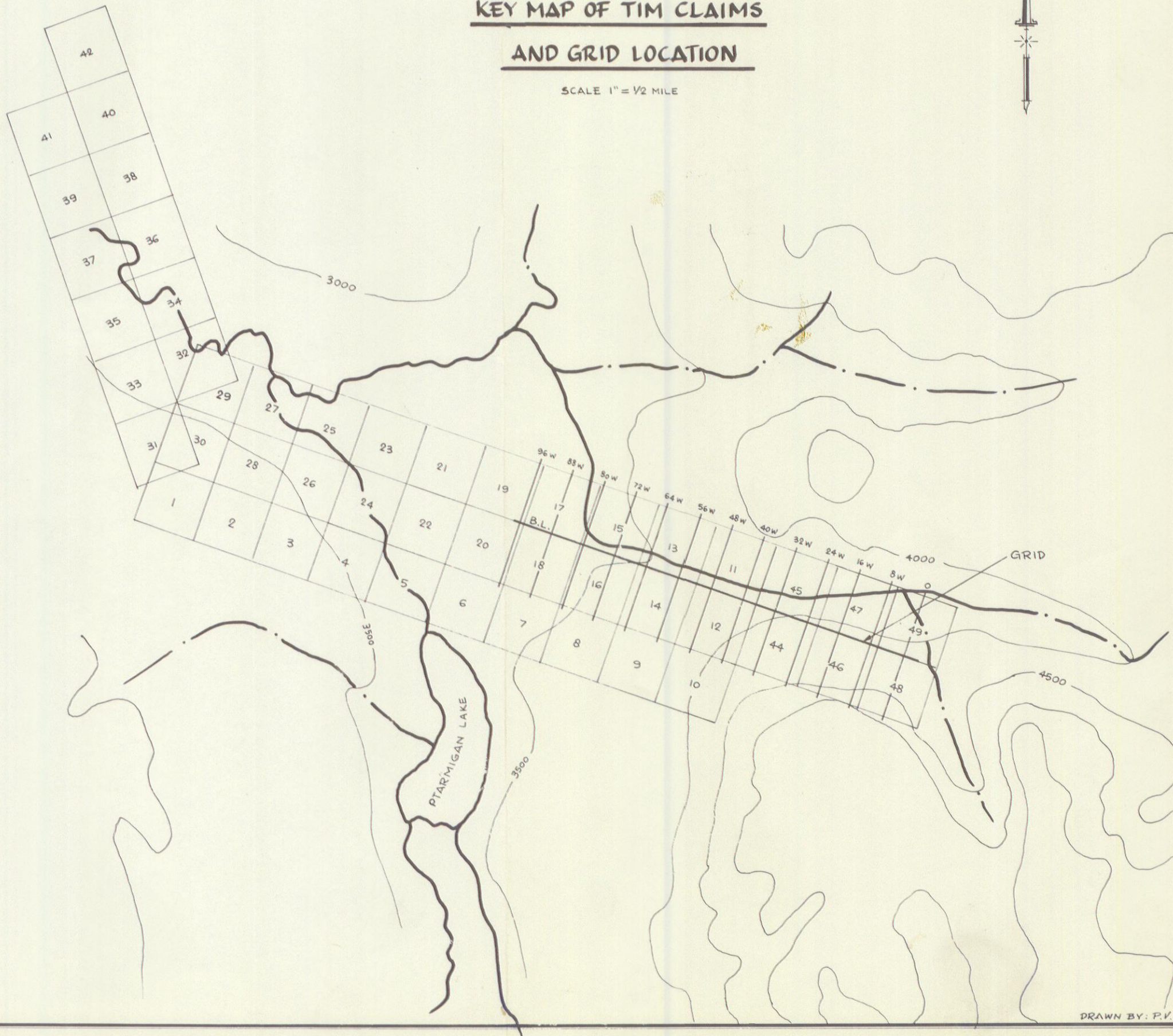
ATLAS EXPLORATIONS LTD.

ROSS RIVER (Y.T.)

KEY MAP OF TIM CLAIMS

AND GRID LOCATION

SCALE 1" = 1/2 MILE



INTRODUCTION

In June, 1967, the Tim 1-43 mineral claims were staked over an elongate aeromagnetic anomaly located north and northwest of Ptarmigan Lake and southeast of Pelly Lakes. Further work developed a favourable geochemical anomaly, thus, Tim 44-49 were staked in August of 1967.

Follow-up work on the Tim Group was carried out during August 1967, consisting of geologic mapping, geochemical soil sampling, linecutting and geophysical surveys.

LOCATION AND ACCESS

The Tim mineral claims, approximately 80 air miles from Ross River and 12 air miles from Pelly Lakes trading post, are located in the north-west portion of claim sheet 105-H-13.

Access to the property can be made by float equipped aircraft to Ptarmigan Lake, one mile south of the claims. Helicopter support is required from this lake to the property.

GEOLOGY

Strong overburden cover in the area of the claims prevented completion of a geologic map. However, a few isolated outcrops of black chert, quartzite and limestone indicated that a steeply-dipping sequence of limestone, limestone-chert, quartzite, and minor black slate (which is exposed to the southeast) underlies the grid area. This sequence is folded into a northwesterly-plunging syncline which appears to be on-strike with the geochemical anomaly.

One small showing in the grid area near L32, 7+005 consisted of a dark green skarn with minor chalcopryrite and pyrite.

All mapping was done by R. Dunsmore on air photo overlays, scale 1:2730.

TOPOGRAPHY AND GROUND CONDITIONS

The main portion of the Tim Group grid and geochemical anomaly lies at the base of a valley between steep north and south facing slopes. The valley acts as a westerly-trending drainage basin for the immediate area.

Vegetation on the valley walls is generally thick and consists of spruce and dwarf birch, there is limited growth near areas of outcrop on the south side of the valley. Muskeg and swamp conditions prevail in the basin.

GEOCHEMISTRY

Method of Analysis

All samples were analyzed at a complete testing laboratory at Ross River. Each sample was dried in its kraft bag container, then screened to 80 mesh, weighed out to 0.5 grams and digested in hot aqua regia. Samples were then diluted, clarified for 20 hours, then tested for copper, lead and zinc content by atomic absorption spectrophotometer analysis. The 'AA' unit used was a Perkins Elmer Model 303 and accuracy of the instrument ideally is 1% of the amount of metal present.

Geochemical Results

During the period June 30, 1967, to July 6, 1967, a two-man reconnaissance prospecting and geochemical team was sent to the claim group for preliminary investigation. Geochemical soil samples (total 272) were taken at 150' intervals on pace and compass lines bearing N.30°W., approximately 1500' apart.

Favourable results led to the cutting of a grid during the middle of August, 1967. This grid consisted of a 9,600' central base line with 3,200' long cross lines at 800' spacings. Stations at 100' intervals were marked on all cross lines. A total of 51,200' of line was cut.

A total of 360 soil samples were collected during a geochemical soil survey for Cu, Pb, Zn over the grid area. From this survey, a 4,000' long elongate zinc geochemical anomaly was outlined in the north half of the grid. This anomaly has a width of 200'-800', with peak values of over 1300 p.p.m. Zn. No significant Cu or Pb values are associated with the zinc anomaly.

CONCLUSIONS AND RECOMMENDATIONS

The large anomalous zone of zinc geochemistry lies on strike with a favourable limestone sequence which is believed to underly the grid area. This anomaly is also coincident with geophysical anomalies in the north portion of the grid.


It is recommended that further geochemical surveys be carried out along strike of the limestone sequence in conjunction with detailed prospecting for evidence of sulphide mineralization and float occurrences. Diamond drilling of anomalous areas should be considered following a thorough investigation of geochemical and geophysical information.

Respectfully submitted,



R. J. DARNEY,
Geologist

January 16, 1968

Approved


SUMMARY OF COSTSGeochemical Survey, Tim Mineral Claims

| | | | | |
|----|-----|---------------------------------------|--|--------------|
| 1. | (a) | Footage Sampled: | 63,200 feet. | |
| | (b) | Samples Taken : | 632 samples. | |
| | (c) | Samples : | M. Acklack, J. Ollie, M. Simpson, B. Etzel, P. Practico. | |
| 2. | (a) | Wages: | 6 man days x \$20.00, daily wage of M. Asklack | \$ 120.00 |
| | | | 6 man days x \$20.00, daily wage of B. Etzel | 120.00 |
| | | | 2 man days x \$20.00, daily wage of J. Ollie | 40.00 |
| | | | 9 man days x \$15.50, daily wage of V. Practico | 139.50 |
| | | | 2 man days x \$17.50, daily wage of M. Simpson | <u>35.00</u> |
| | | | | \$ 454.50 |
| | (b) | Helicopter Support: | | |
| | | | 3.2 hours at \$112.00 per hour | \$ 358.40 |
| | (c) | Fixed Wing Support: | | |
| | | | 1 trip, one way, Ross River to Pelly Camp = 1 (76 mi. x \$.85/mi.) = 1 x \$64.60 | \$ 64.60 |
| | (d) | Subsistence Cost: | | |
| | | | 25 man days x \$8.00 per man day | \$ 200.00 |
| | (e) | Analysis Cost: | | |
| | | | 632 samples x \$2.50 per sample processing cost | \$1,580.00 |
| | (f) | Supplies and Misc. Equipment: | | \$ 50.00 |
| | (g) | Travel from Vancouver and Ross River: | | \$ 75.00 |
| | | | \$15.00 per man x 5 men | |
| | (h) | Supervision Cost: | | |
| | | | 25 man days x \$1.20 | \$ 30.00 |

(i) Interpretation and Report Presentation:

Drafting: 1 man day x \$30.20,
daily wage of P.
Vlasvelt = \$30.20

Interpretation: C. Smith and
J. Brock -
1 day x \$75.00 \$75.00 \$ 105.20

(j) Overhead:

15% of Total - 15% x \$2,917.00 \$ 437.65

TOTAL COST OF TIM GEOCHEMICAL \$3,355.35


TELEPHONE 685-4331

ATLAS EXPLORATIONS LIMITED
(N. P. L.)

330 MARINE BUILDING
355 BARRARD STREET
VANCOUVER 1, B.C.


AFFIDAVIT SUPPORTING SUMMARY OF COSTS

I, Robert J. Darney, Geologist, Atlas Explorations Limited, of Ross River, Yukon Territory, do hereby state that, to the best of my knowledge and belief, the statement of costs as presented in this report "Geological, Geochemical, and Geophysical Surveys - Tim Mineral Claim Group" (Appendix I) is both correct and true.

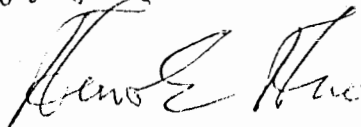


Robert J. Darney

April 17, 1966
Date



A Commissioner of Oaths
in and for the Yukon
Territory

Approved


PERSONNEL

Tim Mineral Claims

| | | |
|-------------|-----------------|------------------|
| R. Dunsmore | Geologist | Vancouver, B.C. |
| A. Lake | Prospector | Vancouver, B.C. |
| J. Ollie | Geochem Sampler | Ross River, Y.T. |
| B. Etzel | Geochem Sampler | Ross River, Y.T. |
| M. Acklack | Geochem Sampler | Ross River, Y.T. |
| V. Pratico | Geochem Sampler | Vancouver, B.C. |
| M. Simpson | Geochem Sampler | Tofina, B.C. |

ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

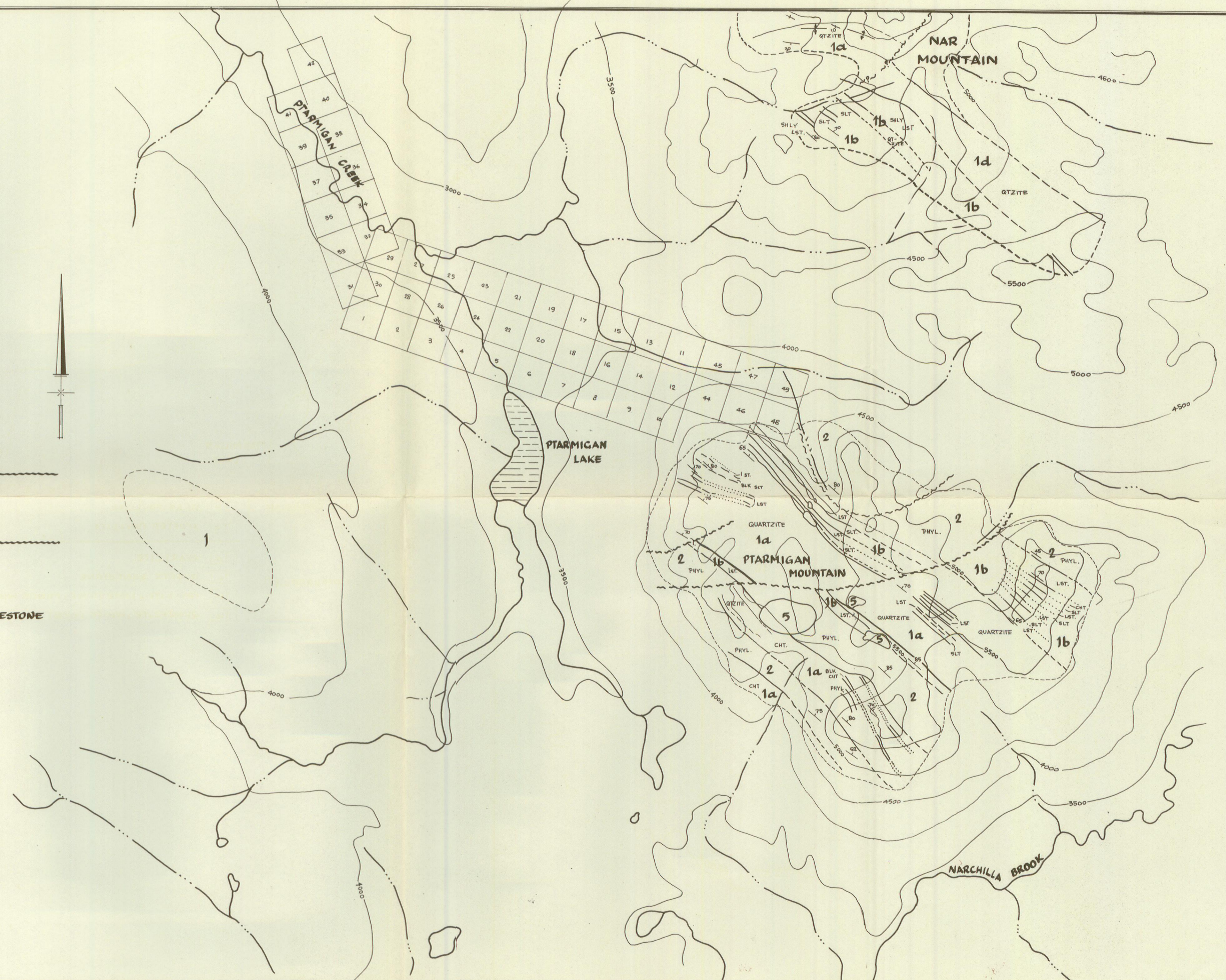
SHELDON REGION

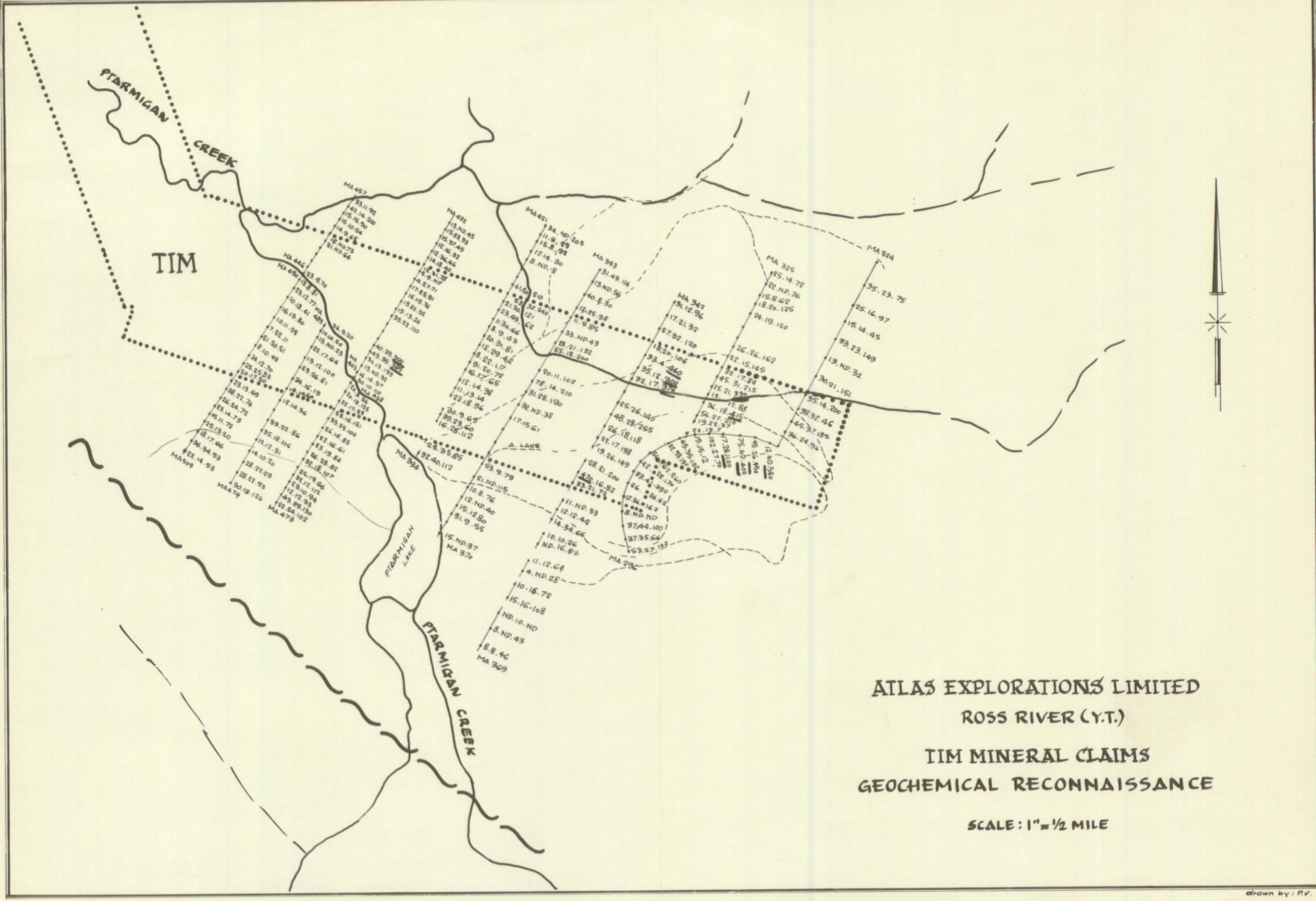
**TIM MINERAL CLAIMS
REGIONAL GEOLOGY**

SCALE 1" = 1/2 MI.

LEGEND:

- | | | |
|-----------------|----|--|
| CRETACEOUS (?) | 5b | GRANODIORITE |
| | 5a | BIOTITE QUARTZ MONZONITE PORPHYRY |
| | 5 | GRANITIC INTRUSIVES |
| <hr/> | | |
| M-U CAMBRIAN | 2c | SERICITIC PHYLLITE |
| | 2b | GRAY PHYLLITE |
| | 2a | SPOTTED PHYLLITE |
| <hr/> | | |
| PROTEROZOIC (?) | 1d | QUARTZITE |
| | 1c | QUARTZ SANDSTONE |
| | 1b | PHYLLITE, LIMESTONE, MINOR WHITE CHERT |
| | 1a | QUARTZITE, WHITE CHERT, MINOR PHYLLITE AND LIMESTONE |





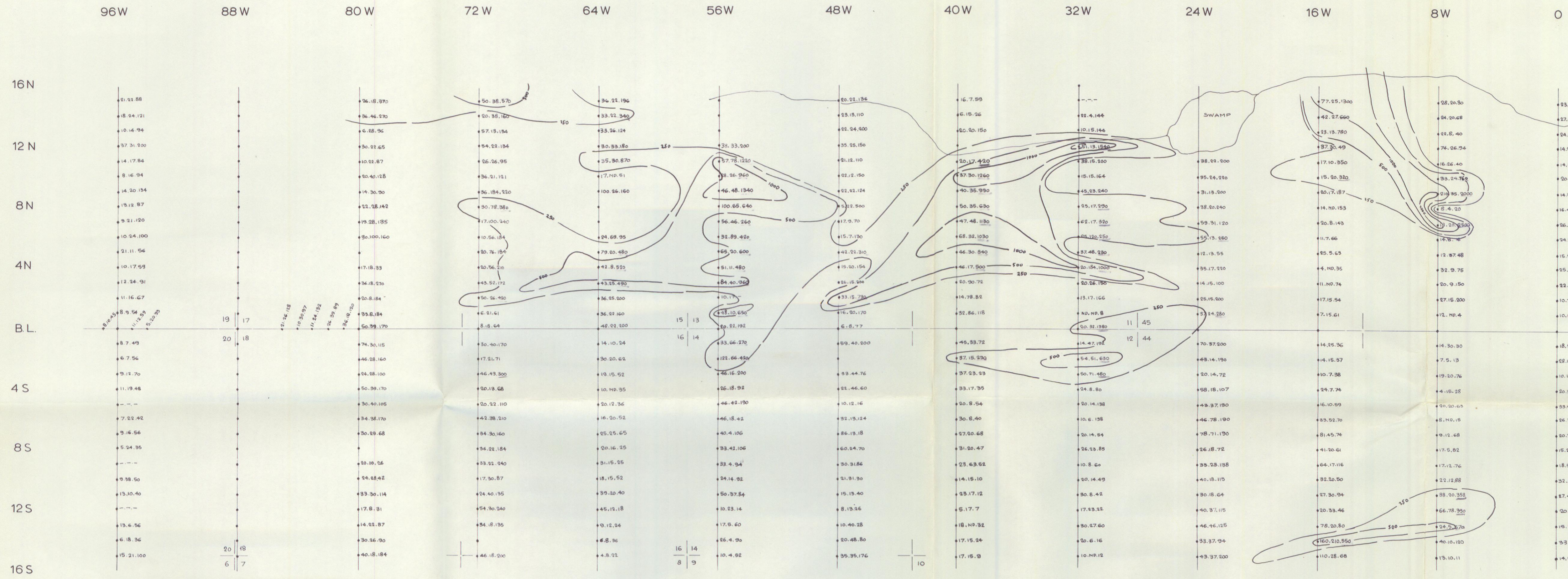
TIM

PTARMIGAN CREEK

PTARMIGAN LAKE
PTARMIGAN CREEK

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (Y.T.)
TIM MINERAL CLAIMS
GEOCHEMICAL RECONNAISSANCE

SCALE: 1" = 1/2 MILE



N.B. ZN RESULTS CONTOURED

ATLAS EXPLORATIONS LIMITED
 ROSS RIVER (Y.T.)
 SHELDON REGION
 TIM MINERAL CLAIMS
 GEOCHEMICAL SOIL SAMPLING SURVEY, COPPER, LEAD & ZINC
 RESULTS BY ATOMIC ABSORPTION
 SPECTROPHOTOMETER ANALYSIS

SOIL SAMPLER: B. ETZEL, J. LADUE and J. OLLIE
 DATE: AUGUST 1967
 DRAWN BY: R.J. F. VLASVELD

400 0 400 800
 Scale in feet