

84-#341-12263

GEOCHEMICAL REPORT

on the

PROSERPINE PROPERTY

BARKERVILLE, B.C.

CARIBOO MINING DIVISION

NTS 93H/4E

LATITUDE 53° 04' N

LONGITUDE 121° 31' W

CLAIM OWNERS: B.J. Price

R.J. Barclay

OPERATOR: CLIFTON RESOURCES LTD.

SUBMITTED: May 3, 1984.

## TABLE OF CONTENTS

|  |     |
|--|-----|
| LIST OF ILLUSTRATIONS                              | 111 |
| INTRODUCTION                                       | 1   |
| PREVIOUS WORK                                      | 1   |
| CLAIM OWNERSHIP                                    | 1   |
| GEOCHEMICAL SURVEY                                 | 1   |
| RESULTS: Gold Anomalies - West Map                 | 4   |
| Lead Anomalies - West Map                          | 5   |
| Gold Anomalies - East Map                          | 5   |
| Lead Anomalies - East Map                          | 6   |
| GEOCHEMISTRY - SE Reconnaissance Map               | 6   |
| CONCLUSIONS  | 6   |
| STATEMENT OF COSTS                                 | 8   |
| STATEMENT OF QUALIFICATIONS - K. Wayne Livingstone | 9   |
| APPENDIX I - MINERAL CLAIMS                        | 10  |

## LIST OF ILLUSTRATIONS

|                                    |           |
|------------------------------------|-----------|
| FIGURE 1 - PROPERTY LOCATION MAP   | 2         |
| 2 - CLAIM MAP                      | 3         |
| 3 - GEOCHEMISTRY - Gold - West Map | In Pocket |
| 4 - " - Lead - West Map            | In Pocket |
| 5 - " - Gold - East Map            | In Pocket |
| 6 - " - Lead - East Map            | In Pocket |
| 7 - " - Gold - SE Reconnaissance   | In Pocket |
| 8 - " - Lead - SE Reconnaissance   | In Pocket |

## INTRODUCTION

The Proserpine claim group is composed of 46 reverted crown granted claims located about 6 km southeast of Barkerville, B.C.. The claims are in open spruce forest with gentle topography at elevation about 1650 meters. Access to the claims is by two wheel drive vehicle from Barkerville.

## PREVIOUS WORK

The claim area has been prospected since the 1860s. The claim with the most interest, the WARSPITE, was staked in 1916. Extensive underground and surface trenching was carried out between 1933 and 1946. Subsequently, McIntyre Mines conducted a soil survey over part of the claim area. This survey is a continuation of this preliminary investigation.

## CLAIM OWNERSHIP

The claims are presently held under option to GEO-EX RESOURCES LTD. and CLIFTON RESOURCES LTD. from Mr. B. Price and Mr. R.J. Barclay.

Claim list: as appended.

## GEOCHEMICAL SURVEY

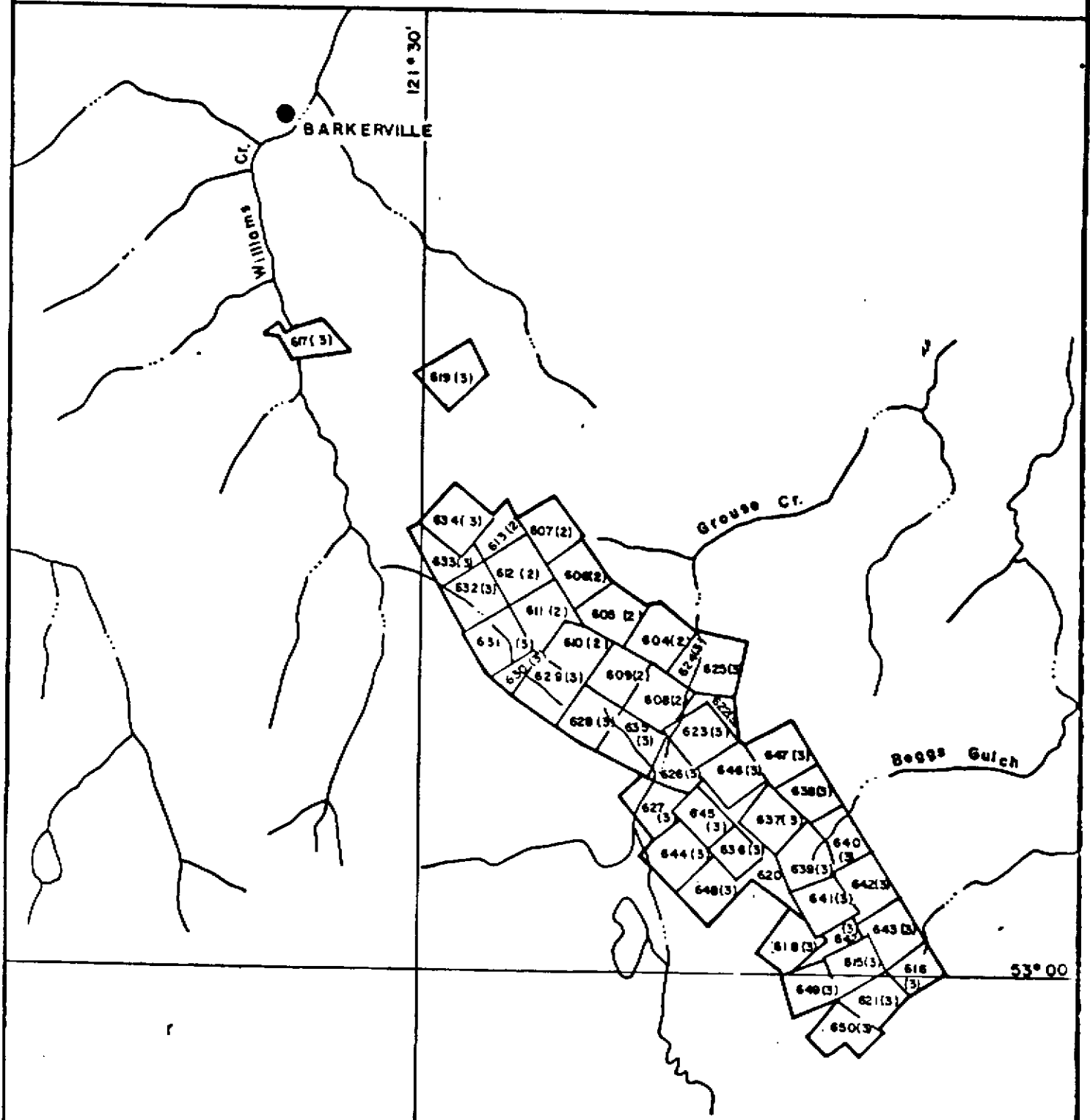
In the summer and fall of 1983, JMT SERVICES CORP. carried out a soil geochemical survey for CLIFTON RESOURCES LTD. on the PROSERPINE property. A baseline oriented 150° was chained and flagged every 25 meters. Cross-lines were run at 30 meters, 40 meters, 50 meters and 150 meter intervals on various parts of the property, based on the results



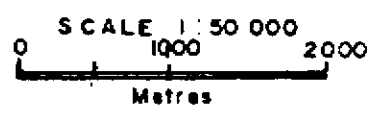
JMT SERVICES CORP.

PROPERTY LOCATION MAP

|  |                 |                     |                    |
|--|-----------------|---------------------|--------------------|
| <p>SCALE</p> <p>Mile 1:36 <span style="display: inline-block; width: 100px; border-bottom: 1px solid black;"></span> 1:36 Mile</p> |                 | <p>NTS MAP AREA</p> | <p>DRAWING No.</p> |
| <p>Prepared By:</p>  | <p>Date:</p>    |                     |                    |
| <p>Drawn By:</p>   | <p>Revised:</p> |                     |                    |



# PROSERPINE CLAIMS



of previous survey work and mapping. Detail sampling at 30 meter intervals was carried out over the area with known mineralized showings and old workings. More reconnaissance-type sampling was done elsewhere on the claim area.

A total of 1467 soil and 4 rock chips were taken. Soil was taken from the B horizon where possible. However, poor soil development was present in some of the claim area and C type soils were collected. Overburden is generally shallow, 3-5 meters, or less. The soils were collected in kraft sample bags. Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver did all the analyses. Gold determinations were done by neutron activation analysis. Lead was determined by nitric-perchloric digestion and atomic absorption analysis.

## RESULTS

### Gold Anomalies - West Map

There are five strong anomalous areas, greater than 20 ppb Au in soil with contourable peak values greater than 160 ppb. The WARSPITE anomaly appears to be related to a quartz vein structure which was explored underground in 1946 and prior thereto. This anomaly appears to swing southward into the TIPPERARY claim. This southward extension may be related to a north-south fault described in the old reports. It is difficult to pick the location of this fault precisely by field outcrop mapping. Some back-hoe trenching of these anomalies is warranted. The HARD CASH and INDEPENDENCE anomalies are broader and more diffuse. They are in an area of poor exposure on a hillside below the mineralized showings on the INDEPENDENCE claim. It is possible that these are down

slope transported anomalies. No bedrock directly below these anomalies is exposed.

#### Lead Anomalies - West Map

The mineralization where exposed in old pits, adits and trenches generally carries minor amounts of galena. Lead was assayed in the belief it might be a pathfinder to gold mineralization. Unfortunately the pattern of anomalous lead is so broad as to be effectively useless as a specific way to find a target. It does however outline very well that package of rocks which contains the bulk of the mineralized showings. This in a general way mimics the Baker-Rainbow contact described in earlier reports.

The anomalous area trends northwest off the claims. The zone is 4-500 meters wide and 2000 meters long, open in both directions on strike. When trenching the gold anomalies some consideration should be given to evaluate the bedrock in the area of the highest Pb anomalous zones, such as on the TIPPERARY claim.

#### Gold Anomalies - East Map

A large geochem anomaly trending north-south, centered on 22+00S 0+30E, is the main feature. The anomaly greater than 20 ppb is 800 meters long by 1-300 meters wide. There are several smaller satellitic anomalies up to 80 ppb. Within this anomaly are several well mineralized prospect pits and trenches, the most notable is on the GROUSE claim. The northwest part of this anomaly is on a hillside on the east of Grouse Creek, and may be partly transported. Some mineralized galena



float has been found in this area. Trenching in the overburden covered parts of this anomaly is recommended.

#### Lead Anomalies - East Map

The lead anomaly is very similar in pattern and distribution to the gold anomalies except broader. The area greater than 60 ppm is 1100 meters long and 1-300 meters wide. It also defines a strong north-south orientation.

#### GEOCHEMISTRY-- SE RECONNAISSANCE MAP

Soil samples were taken on 150 meter spaced lines. The results of the survey are not conclusive. There are a few anomalous spot highs for Pb and Au which would warrant further investigation only after the areas of anomalous geochem on the other map areas have been investigated.

#### CONCLUSIONS

The geochemical survey has outlined very large target areas for further exploration. The broad patterns are believed to reflect major structural and lithologic controls to the gold mineralization. The typical ore body in this area is however considerably smaller than these broad geochemically anomalous areas. These broad anomalous zones have outlined a general target area for detailed geological work. Areas of poor exposure will have to be opened up by trenching. Initially,

trenching should be done close to areas of known mineralization uncovered by the old timers. Focus should be given to the GROUSE claim area, INDEPENDENCE, TIPPERARY and WARSPITE claim areas.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read 'K. Wayne Livingstone', written in black ink.

K. Wayne Livingstone,

## STATEMENT OF COSTS

## JMT Services Corp.

8827 HUDSON STREET · VANCOUVER, B.C. V6P 4N1 · TELEPHONE 266-1811



JAMES S. CHRISTIE, PhD 228-8054  
 K. WAYNE LIVINGSTONE, MSc 266-4208  
 GORDON G. RICHARDS, M.A.Sc., P.Eng. 274-2839  
 GERALD LAUZON, Mgr. 277-4778  
 W.A. HOWELL, Geol. 277-7082

August 25, 1983

Cliffton Resources Ltd.  
 960 - 675 Howe Street  
 Vancouver, B.C.  
 V6C 2T6

INVOICE #83-730-051

INTERIM INVOICE  
 RE: PROSERPINE GEOCHEM  
 AND GEOLOGY

*Received  
 Sept 8/83*

TIME

|                              |  |             |
|------------------------------|--|-------------|
| W. A. Howell, geologist      | 7 days @ \$250.00                          | \$ 1,750.00 |
|                              | 3 days no charge                           |             |
| K. W. Livingstone, geologist | July 26,27, Aug 1-8 10 days @ \$250.00     | 2,500.00    |
| M. Carr, geologist           | Aug 1(1/2), 2-8 7 1/2 days @ \$250.00      | 1,875.00    |
| M. Hagemoen, geochem sampler | July 26-31,<br>Aug. 1-8 14 days @ \$135.00 | 1,890.00    |
| J. Vezina, geochem sampler   | July 26-31<br>Aug 1-8 14 days @ \$135.00   | 1,890.00    |

DISBURSEMENTS

|                             |  |          |
|-----------------------------|--|----------|
| Food                        | 50 mandays in field @ \$35.00  | 1,750.00 |
| Vehicle rental JMT          | July 26 - August 8 14 days @ \$40.00 (including insurance), mileage (to be billed later) | 560.00   |
| PWA Freight                 | #82715F \$ 23.50   |          |
| D-Line                      | #616946 18.00  |          |
| M. Hageomen, expenses       | 60.22  |          |
| PWA Freight                 | #99921 19.00   |          |
|                             | #80946 41.80   |          |
|                             | #49553 116.82  |          |
| Min of Finance (air photos) | 85.60  |          |
| " "                         | 29.96  |          |
| Kingsway Courier            | 17.00  |          |
| Hudson Buildings Supplies   | #46199 278.74  |          |
|                             | #46230 95.65   |          |
| Gold Flake Motel            | 32.64  |          |
| W. A. Howell expenses       | - gas 185.06   |          |
|                             | - motel 38.16  |          |
|                             | 60.91  |          |
|                             | - vehicle rental 245.00  |          |
| K. W. Livingstone, expenses | - miscellaneous 125.37   |          |
|                             | - fuel & motel 294.54  |          |
|                             | - " " 212.82   |          |

|   |           |       |               |                    |
|---|-----------|-------|---------------|--------------------|
| Richmond Reproducers                        | #3258     | \$    | 13.05         |                    |
|   | #3166     |       | 79.54         |                    |
| Sample bags consumed                        |           |       | 250.00        |                    |
| Northern Mountain Helicopters               | #23064    |       | 704.06        |                    |
|   | #23072    |       | <u>754.35</u> |                    |
|   | Sub total | \$    | 3,781.79      |                    |
|   | Plus 10%  |       | <u>378.18</u> |                    |
|   |           |       |               | \$ 4,159.97        |
| Advance for assays - 1300 samples @ \$10.00 |           |       |               | <u>13,000.00</u>   |
|   |           | TOTAL |               | <u>\$29,374.97</u> |

PLEASE REMIT \_ \$29,374.97

Yours truly,

KWL:gmb  
enclosures

K. Wayne Livingstone  
Geologist

STATEMENT OF QUALIFICATIONS

I, K. WAYNE LIVINGSTONE of Vancouver, British Columbia do hereby certify that,

1. I am a Professional Geologist, working in British Columbia and residing at 6775 West Blvd., Vancouver, B.C.
2. I am a graduate of CARLETON UNIVERSITY, Ottawa, Ontario with a B.Sc. honours geology, 1966.
3. I am a graduate of the UNIVERSITY OF BRITISH COLUMBIA with a M.Sc. geology, 1968.
4. I have practiced my profession as a mining exploration geologist since 1965.
5. I am a Member of the Geological Association of Canada.
6. I am a Member of the C.I.M.M.
7. This report is based on personal knowledge of the geology and mineral potential of the claim area.



K. Wayne Livingstone, M.Sc.

A P P E N D I X 11

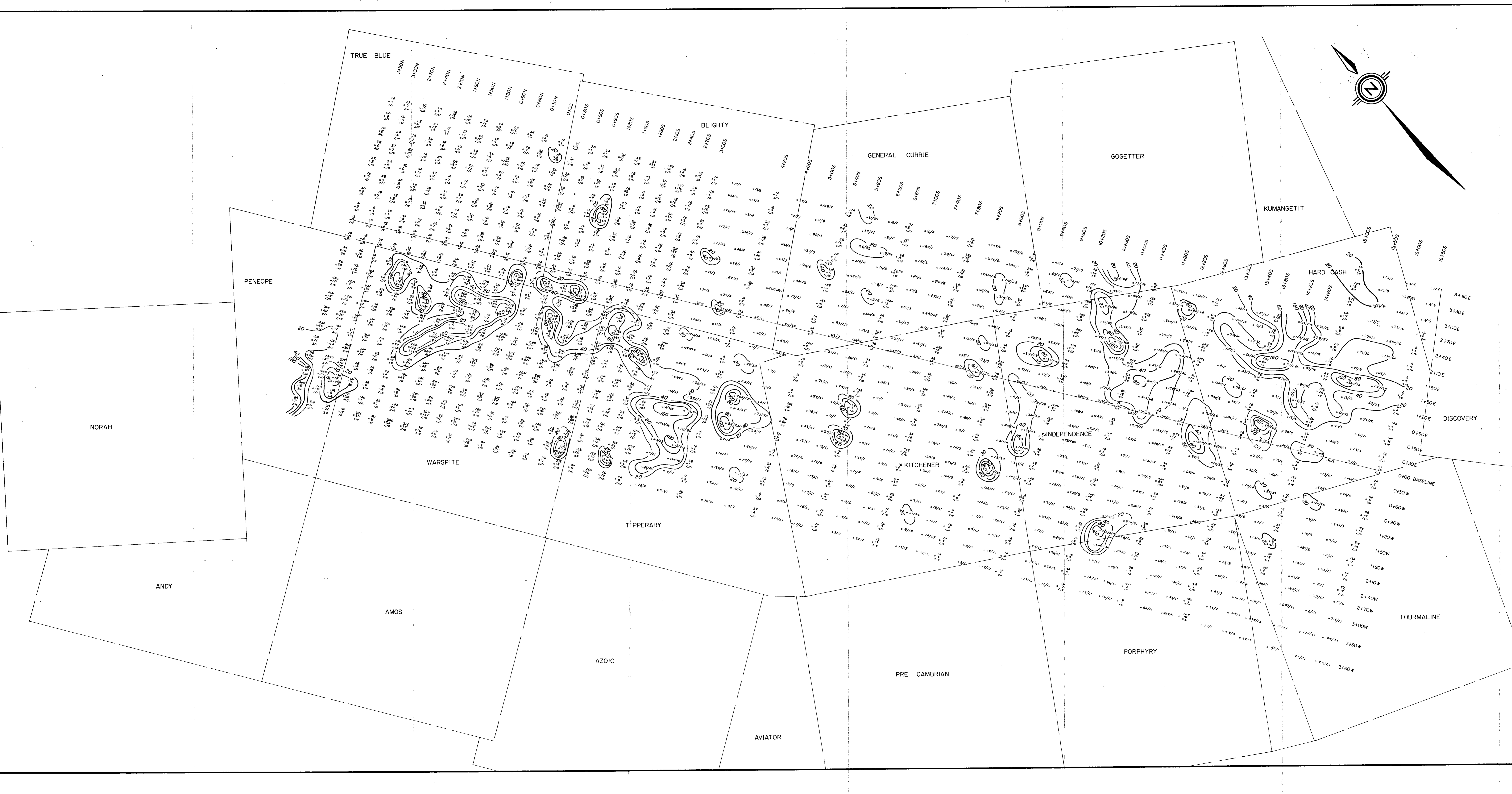
MINERAL CLAIMS

| <u>CLAIM NAME</u> | <u>RECORD NUMBER</u> | <u>RECORD DATE</u> |
|-------------------|----------------------|--------------------|
| GOETTER           | 604                  | February 20, 1978  |
| GENERAL CURRIE    | 605                  | February 20, 1978  |
| BLIGHTY           | 606                  | February 20, 1978  |
| TRUE BLUE         | 607                  | February 20, 1978  |
| HARD CASH         | 608                  | February 20, 1978  |
| INDEPENDENCE      | 609                  | February 20, 1978  |
| KITCHENER         | 610                  | February 20, 1978  |
| TIPPERARY         | 611                  | February 20, 1978  |
| WARSPITE          | 612                  | February 20, 1978  |
| PENELOPE          | 613                  | February 20, 1978  |
| MARS              | 615                  | March 16, 1978     |
| AM NO. 6          | 616                  | March 16, 1978     |
| KING FRACTURE     | 617                  | March 16, 1978     |
| ANTLER No. 2      | 618                  | March 16, 1978     |
| PIN MONEY         | 619                  | March 16, 1978     |
| STAR FRACTION     | 620                  | March 16, 1978     |
| LUNA              | 621                  | March 16, 1978     |
| PTARMIGAN FRACT   | 622                  | March 16, 1978     |
| DISCOVERY         | 623                  | March 16, 1978     |
| KUMANGETIT        | 624                  | March 16, 1978     |
| HACKLE            | 625                  | March 16, 1978     |
| LUFF              | 626                  | March 16, 1978     |
| TOR               | 627                  | March 16, 1978     |
| PORPHYRY          | 628                  | March 16, 1978     |
| PRE CAMBRIAN      | 629                  | March 16, 1978     |
| AVIATOR           | 630                  | March 16, 1978     |
| AXOIC             | 631                  | March 16, 1978     |
| AMOS              | 632                  | March 16, 1978     |
| ANDY              | 633                  | March 16, 1978     |
| NORAH             | 634                  | March 16, 1978     |
| GRANITE FRACTION  | 635                  | March 16, 1978     |
| TOURMALINE        | 635                  | March 16, 1978     |
| ANTLER            | 636                  | March 16, 1978     |
| VENUS             | 637                  | March 16, 1978     |
| AM No. 2          | 638                  | March 16, 1978     |

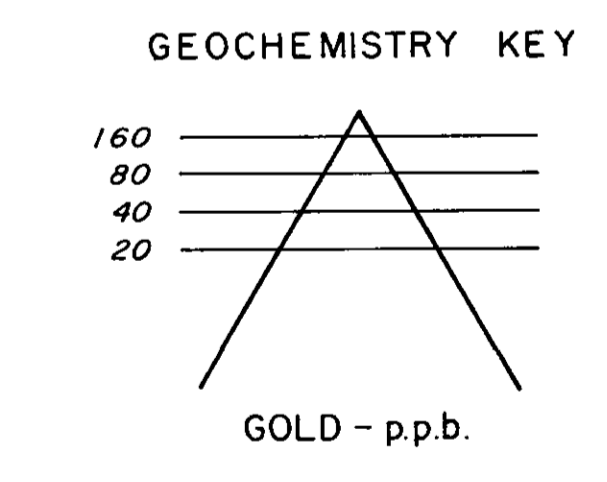
|              |      |                |
|--------------|------|----------------|
| MERCURY      | 639  | March 16, 1978 |
| AM No. 3     | 640  | March 16, 1978 |
| SATURN       | 641  | March 16, 1978 |
| AM No. 4     | 642) | March 16, 1978 |
| NUT FR.      | 642} | March 16, 1978 |
| AM No. 5     | 643  | March 16, 1978 |
| TWEEDSMUIR   | 644  | March 16, 1978 |
| GROUSE       | 645  | March 16, 1978 |
| JUBITOR      | 646  | March 16, 1978 |
| AM No. 1     | 647  | March 16, 1978 |
| TRIUMPH      | 648  | March 16, 1978 |
| ANTLER No. 3 | 649  | March 16, 1978 |
| ANTLER No. 4 | 650  | March 20, 1978 |

↓





- LEGEND:**
- △ ROCK SAMPLE LOCATION
  - SOIL SAMPLE LOCATION
  - LEAD - p.p.m.
  - ARSENIC - p.p.m.
  - GOLD - p.p.b.
  - LEAD - p.p.m. / GOLD - p.p.b.

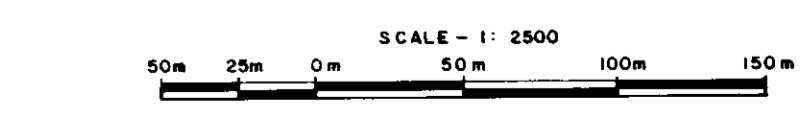


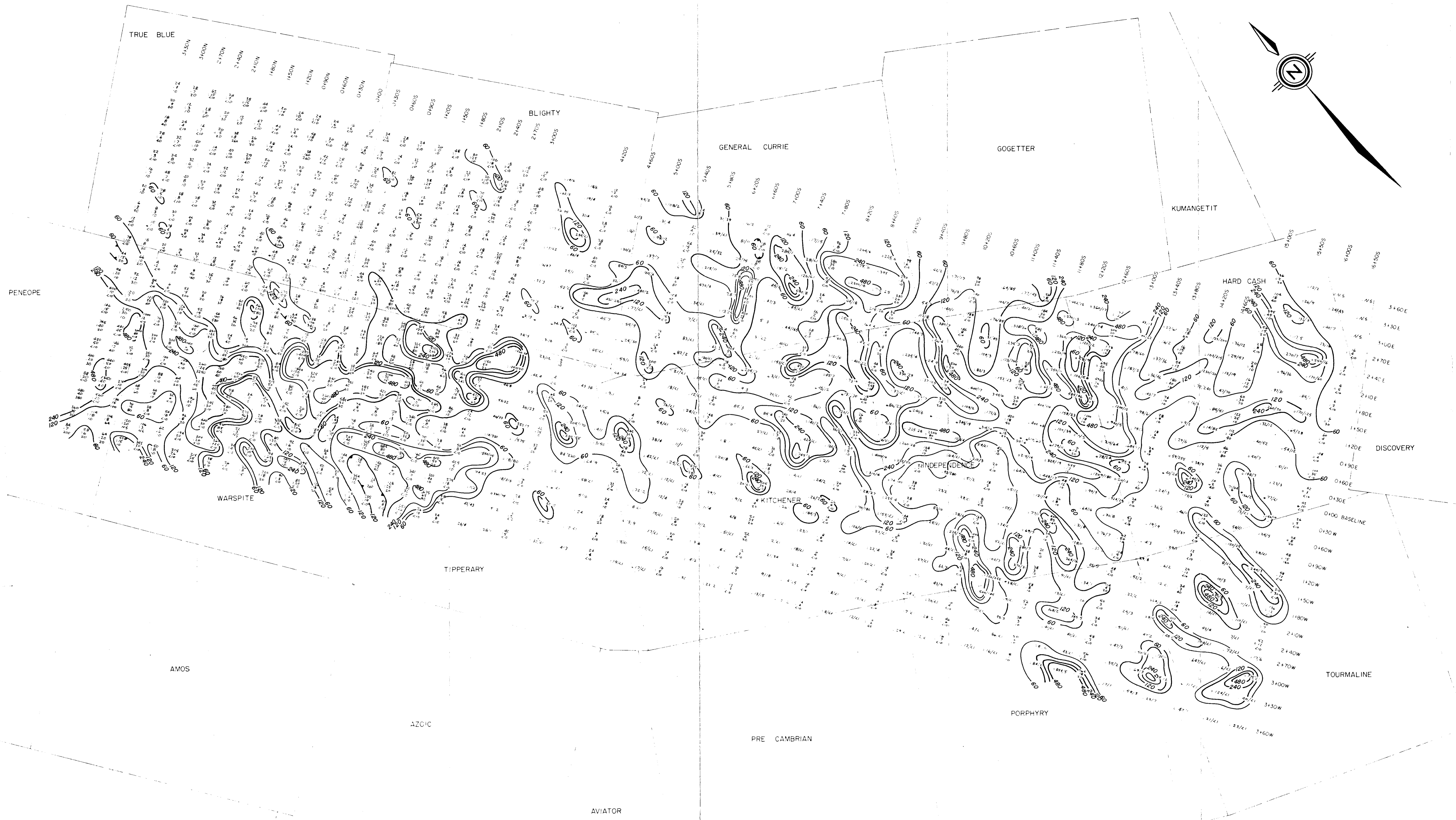
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,263**

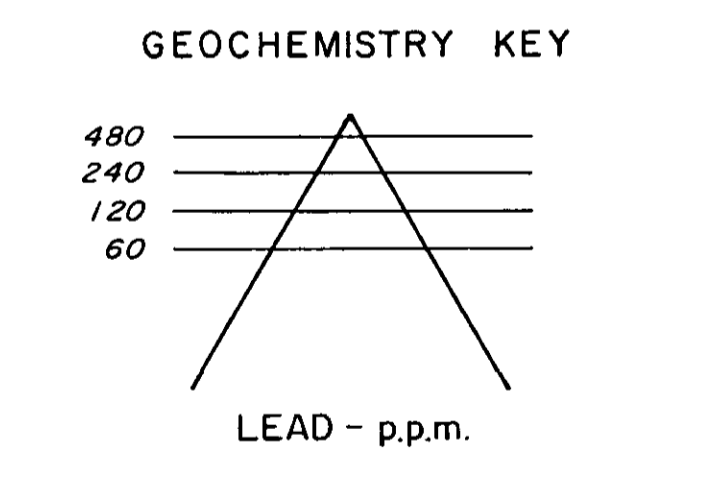
JMT SERVICES CORP.

**CLIFTON RESOURCES LTD.**  
— PROSERPINE PROSPECT —  
WEST MAP  
GEOCHEMISTRY MAP ①  
GOLD - p.p.b.





- LEGEND:**
- △ ROCK SAMPLE LOCATION
  - SOIL SAMPLE LOCATION
  - LEAD - ppm.
  - ARSENIC - ppm.
  - GOLD - ppb.
  - LEAD - ppm. / GOLD - ppb.



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,263**

JMT SERVICES CORP.  
**CLIFTON RESOURCES LTD.**  
— PROSERPINE PROSPECT —  
WEST MAP  
**GEOCHEMISTRY MAP** ②  
LEAD - ppm.

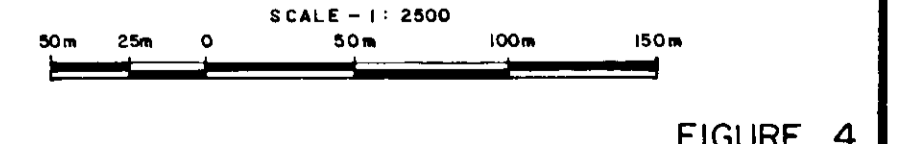
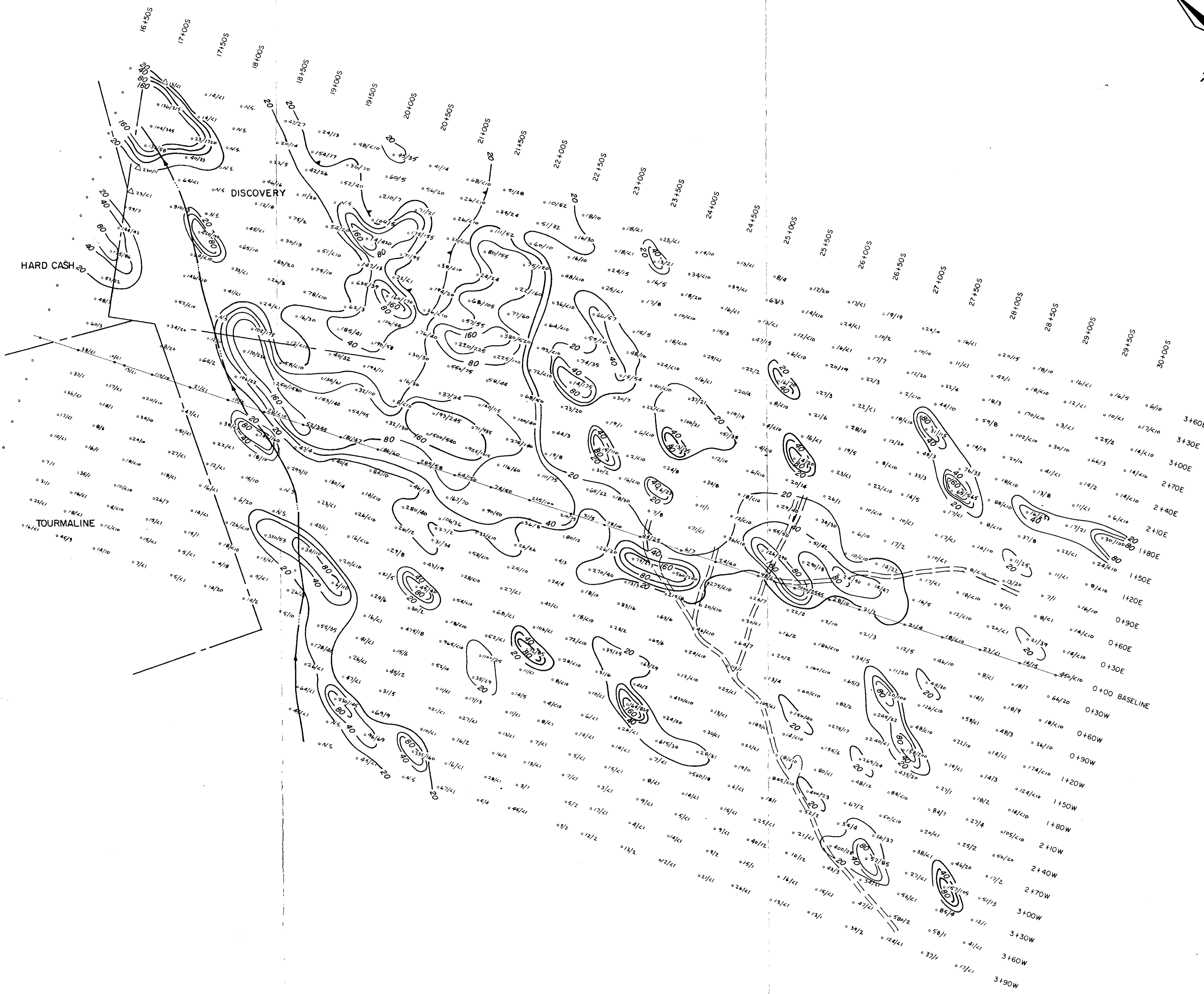
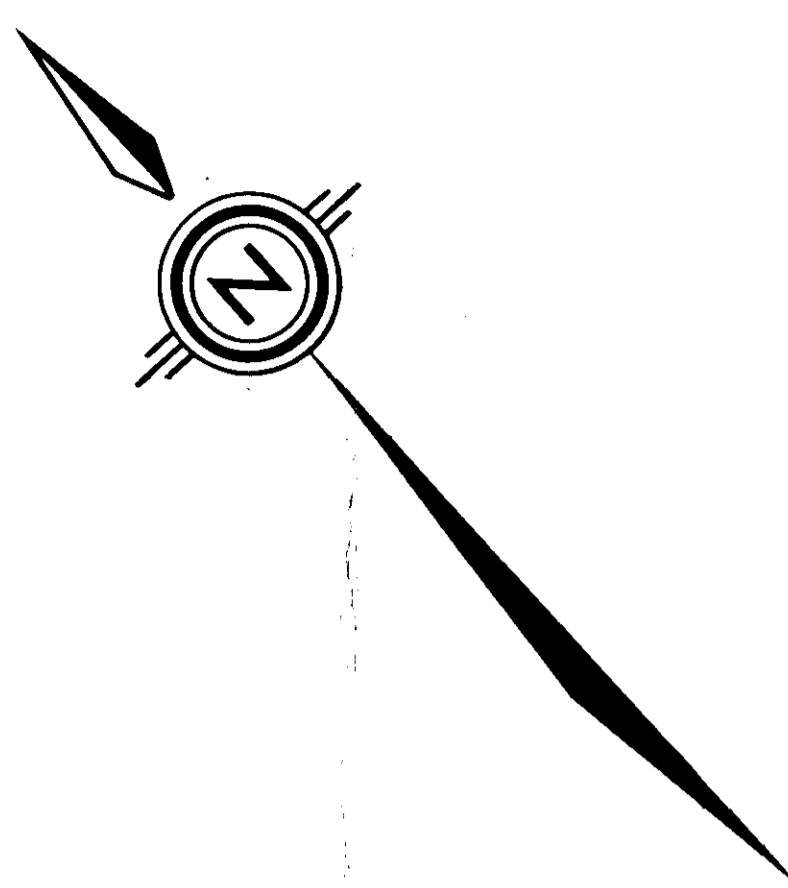
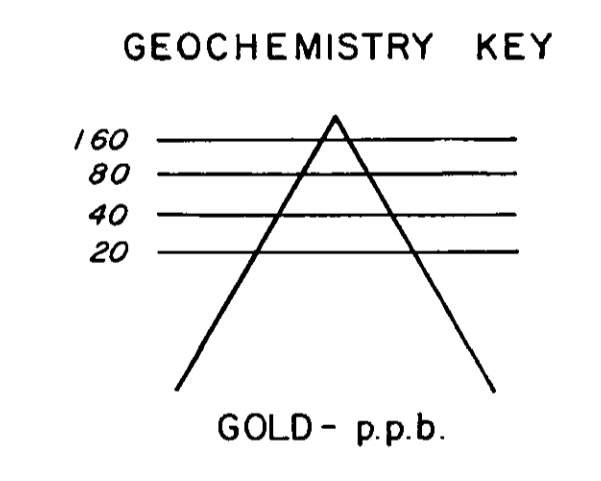


FIGURE 4



- LEGEND:**
- △ ROCK SAMPLE LOCATION
  - SOIL SAMPLE LOCATION
  - LEAD - ppm
  - ARSENIC - ppm
  - GOLD - ppb
  - LEAD - ppm. / GOLD - ppb.



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JMT SERVICES CORP.

CLIFTON RESOURCES LTD.  
— PROSERPINE PROSPECT —  
EAST MAP

GEOCHEMISTRY MAP (3)  
GOLD - ppb.

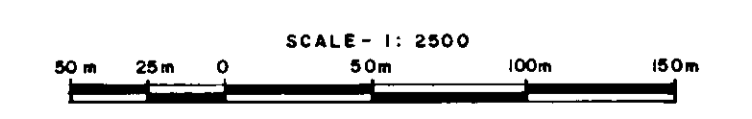
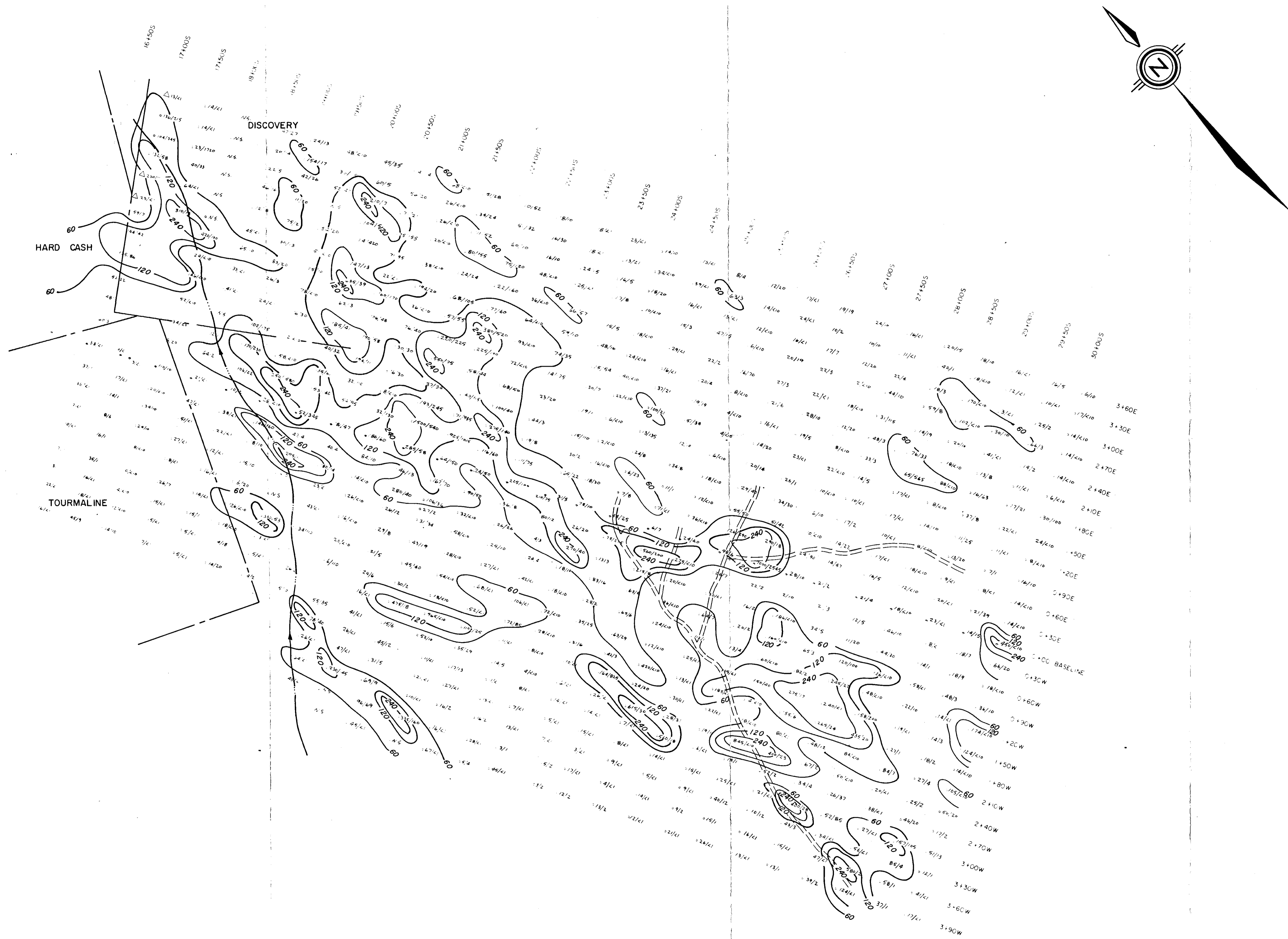


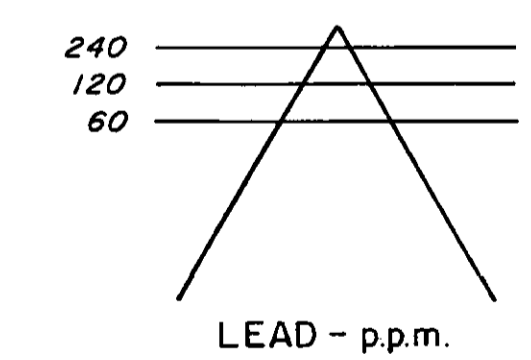
FIGURE 5



**LEGEND:**

- △ ROCK SAMPLE LOCATION
- SOIL SAMPLE LOCATION
- LEAD - ppm.
- ARSENIC - ppm.
- GOLD - ppb.
- LEAD - ppm. / GOLD - ppb.

**GEOCHEMISTRY KEY**



**GEOLOGICAL BRANCH ASSESSMENT REPORT**

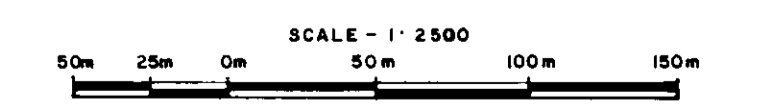
**12.263**

JMT SERVICES CORP.

**CLIFTON RESOURCES LTD.**  
— PROSERPINE PROSPECT —

EAST MAP  
GEOCHEMISTRY MAP  
LEAD - ppm.

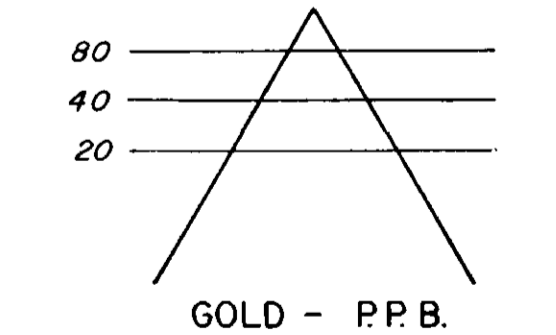
④





- LEGEND:**
- SOIL SAMPLE LOCATION
  - ▲ ROCK SAMPLE LOCATION
  - 21/12 LEAD - PPM./ GOLD - PPB.

**GEOCHEMISTRY KEY**

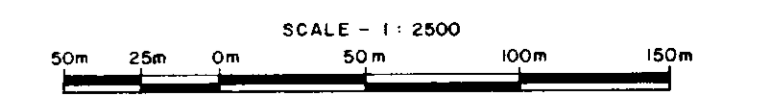


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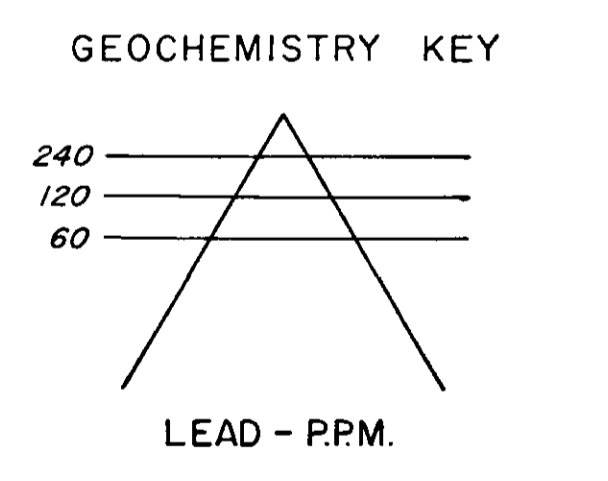
JMT SERVICES CORP.

**CLIFTON RESOURCES LTD.**  
 - PROSPERINE PROSPECT -  
 S.E. RECONNAISSANCE GRID  
 GEOCHEMISTRY MAP  
 GOLD - pp.b.





**LEGEND:**  
 • SOIL SAMPLE LOCATION  
 Δ ROCK SAMPLE LOCATION  
 2 1/2 LEAD - PPM / GOLD - PPB.



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**CLIFTON RESOURCES LTD.**  
 - PROSERPINE PROSPECT -  
 S.E. RECONNAISSANCE GRID  
 GEOCHEMISTRY MAP  
 LEAD - ppm.

