

PL. I - 2

GEOLOGICAL SURVEY  
OF  
PIEDRANCHA AREA, COLOMBIA  
PHASE II

09 133  
地质協力事業  
国書科学館蔵

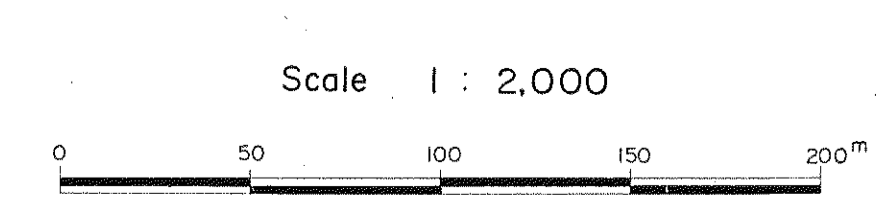
### GEOLOGIC MAP OF THE SURVEYED AREA (LA VERDE)

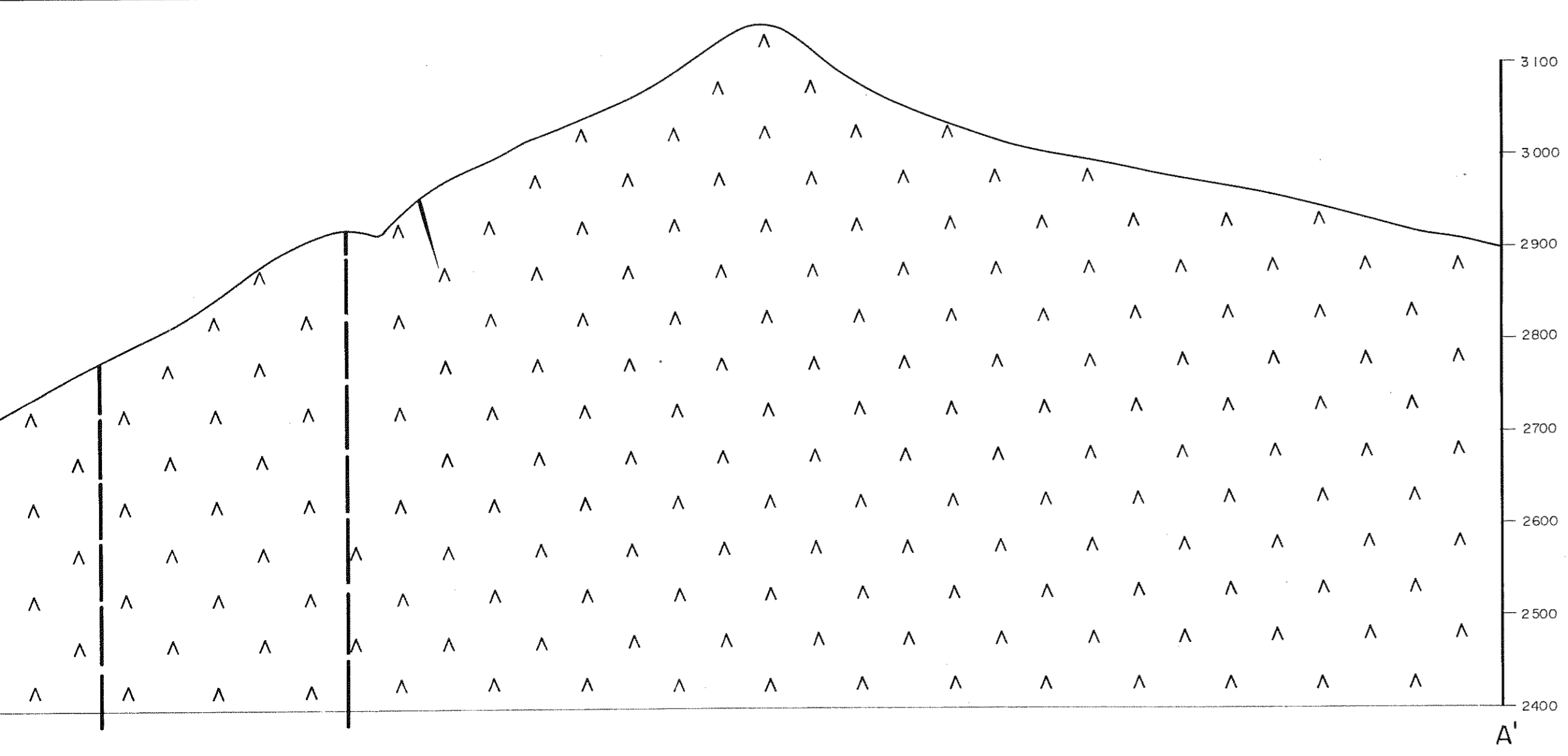
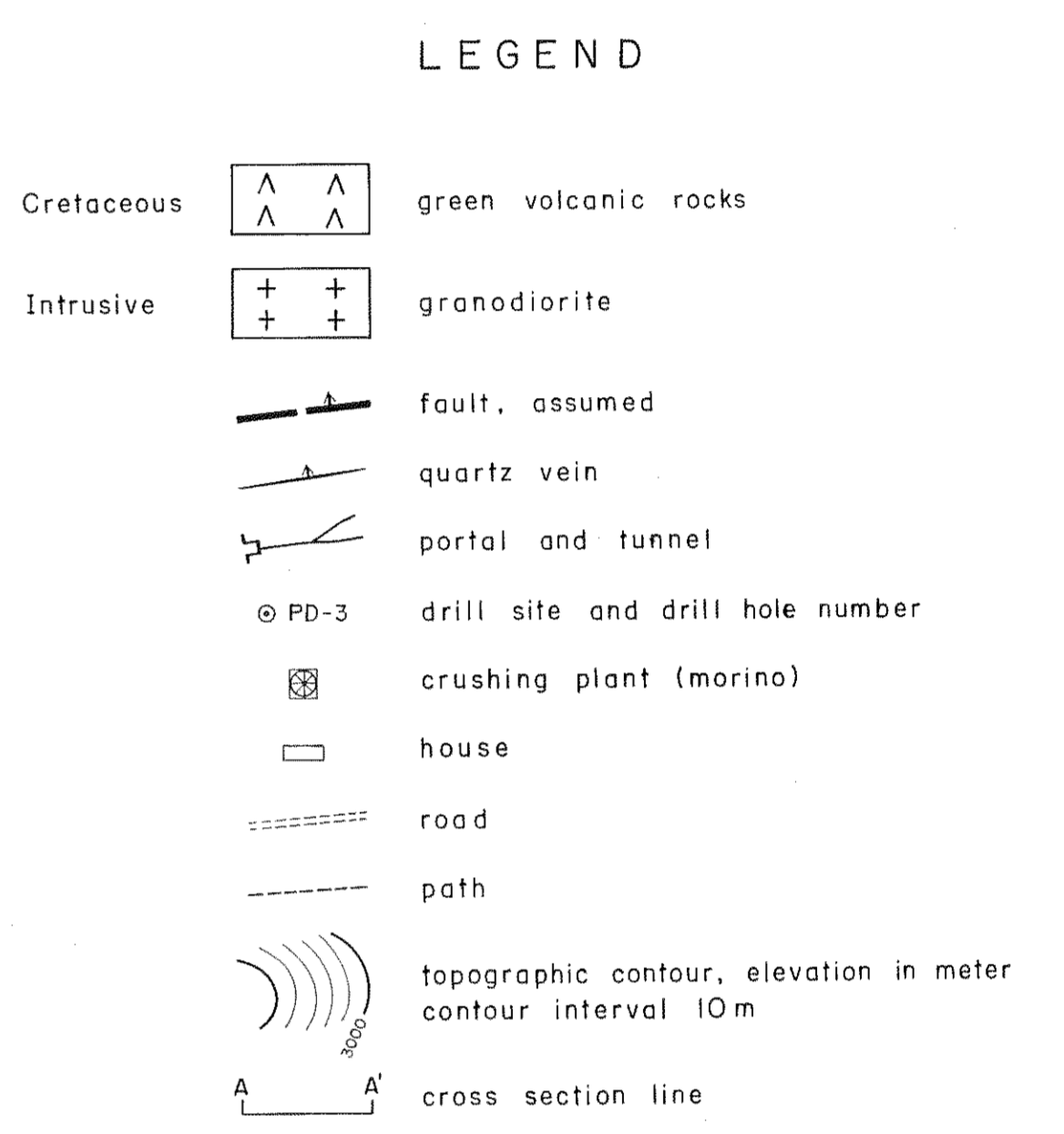
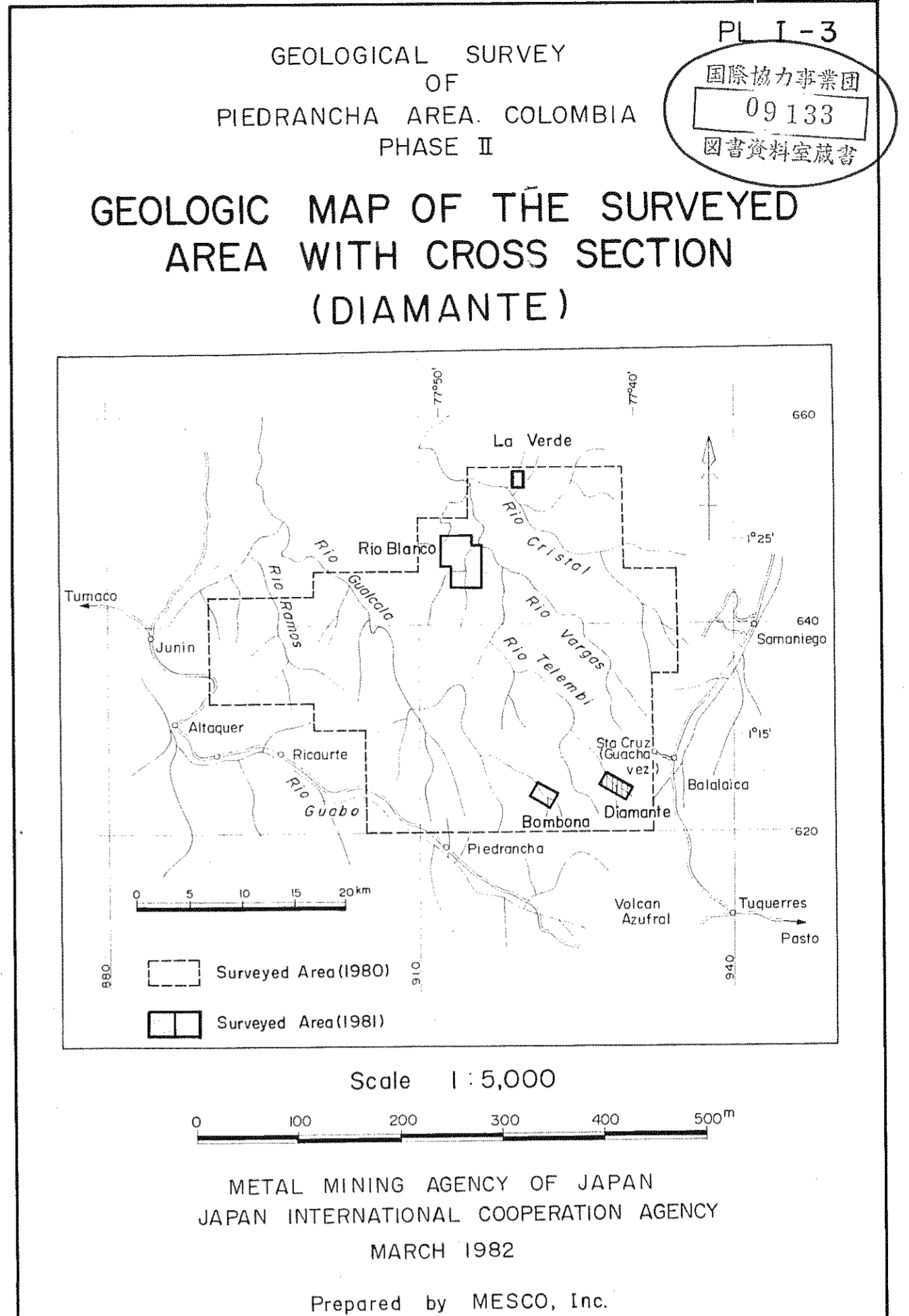
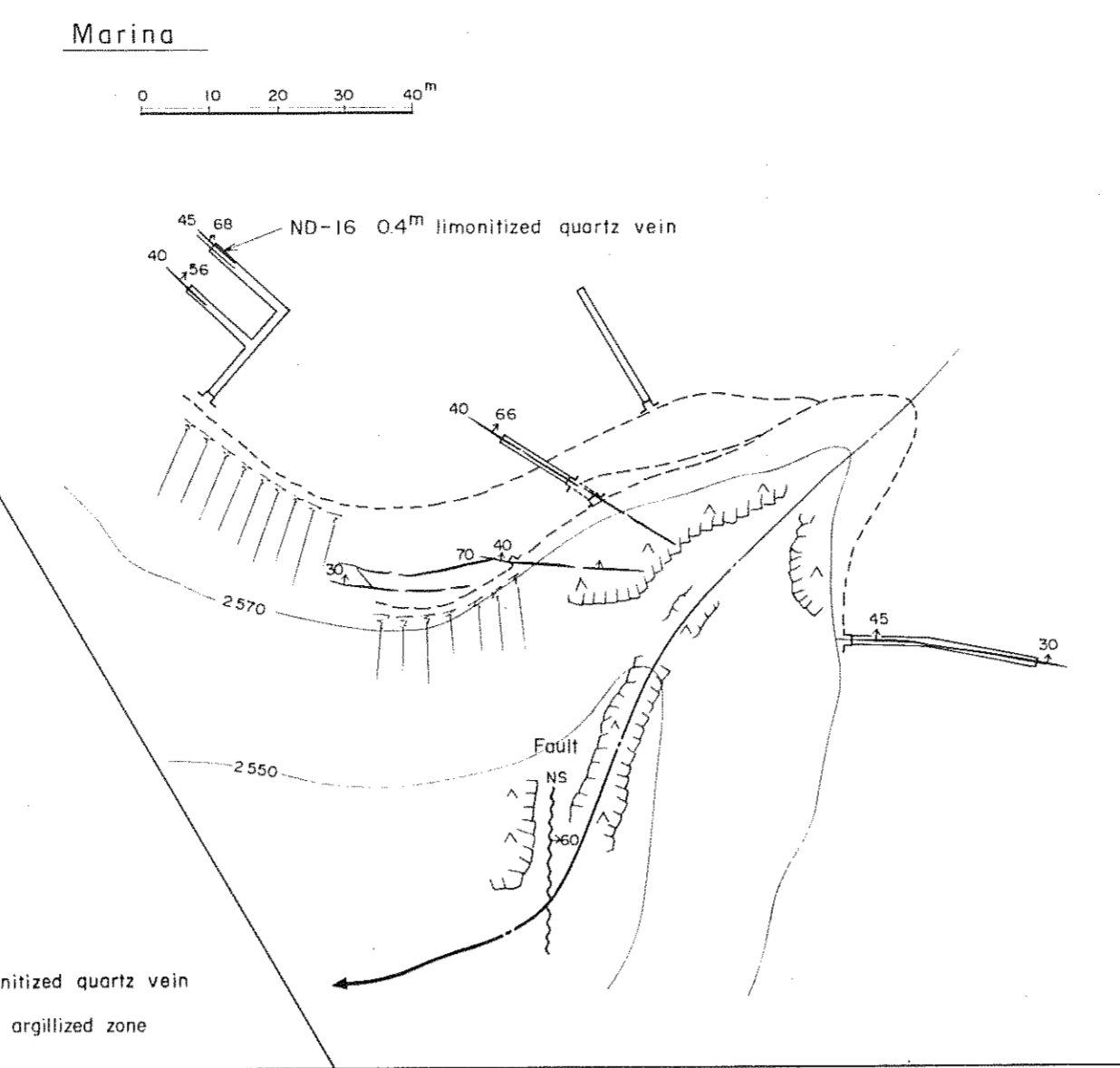
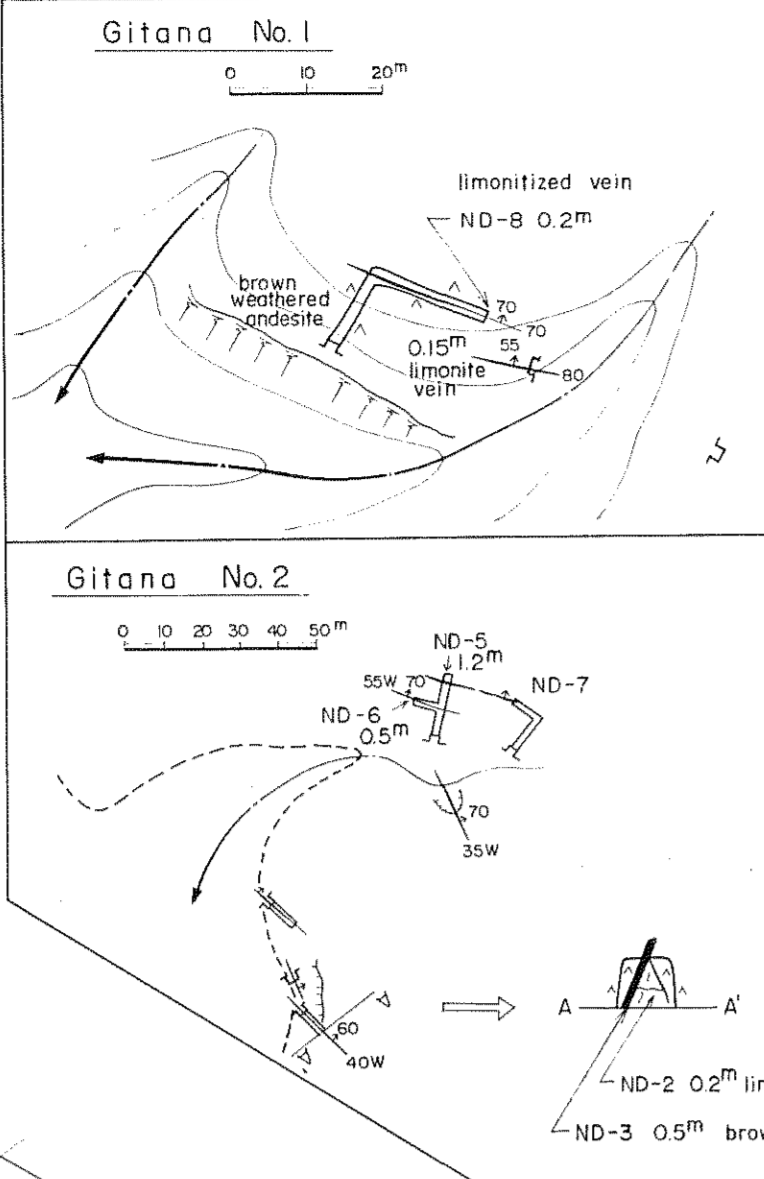
Scale 1 : 2,000

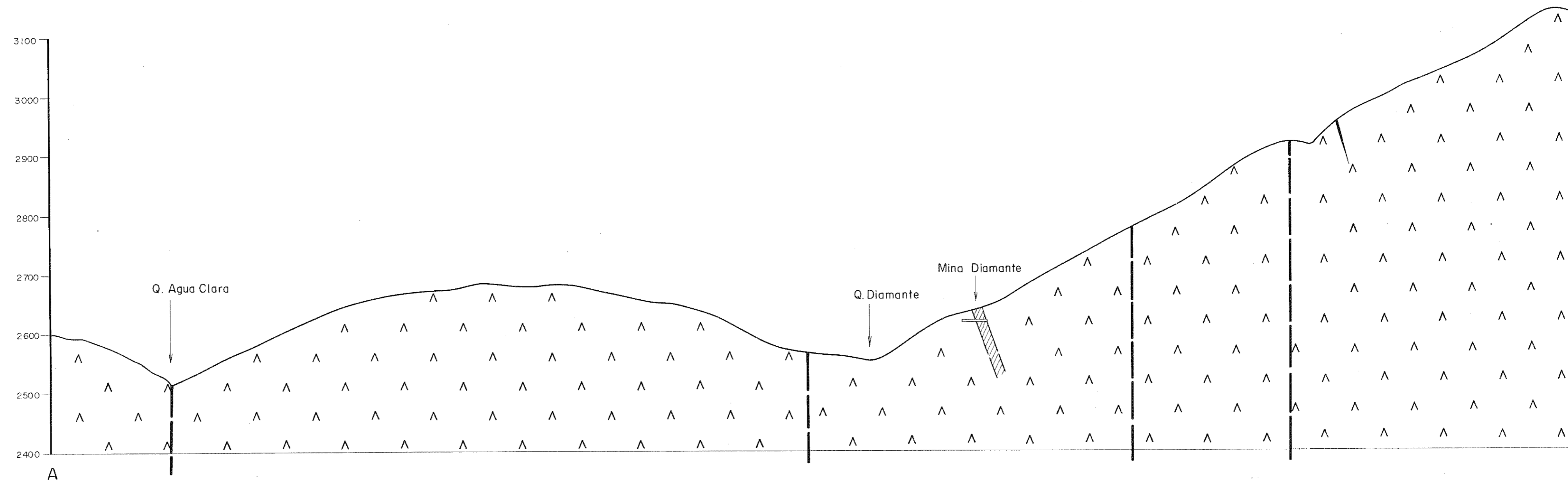
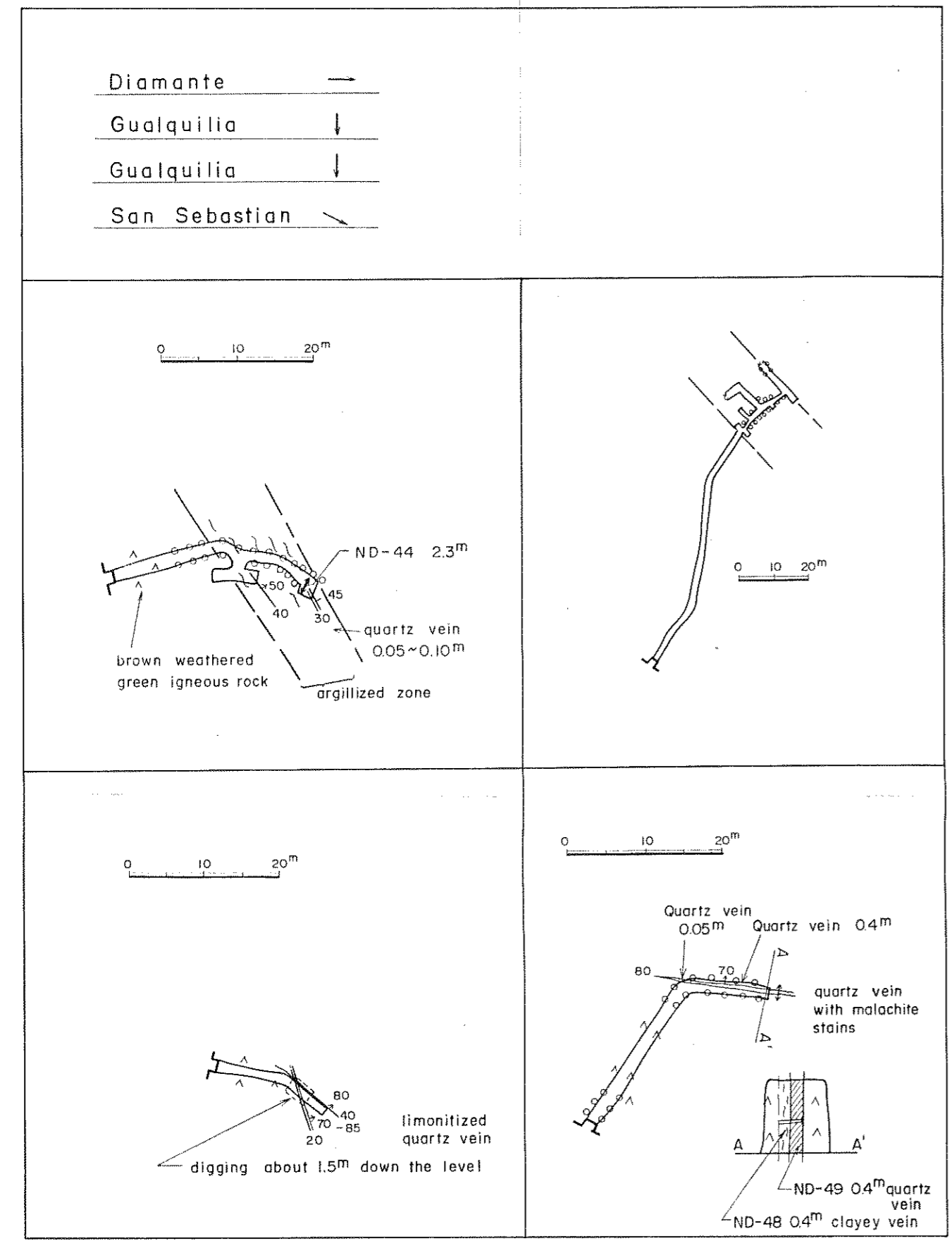
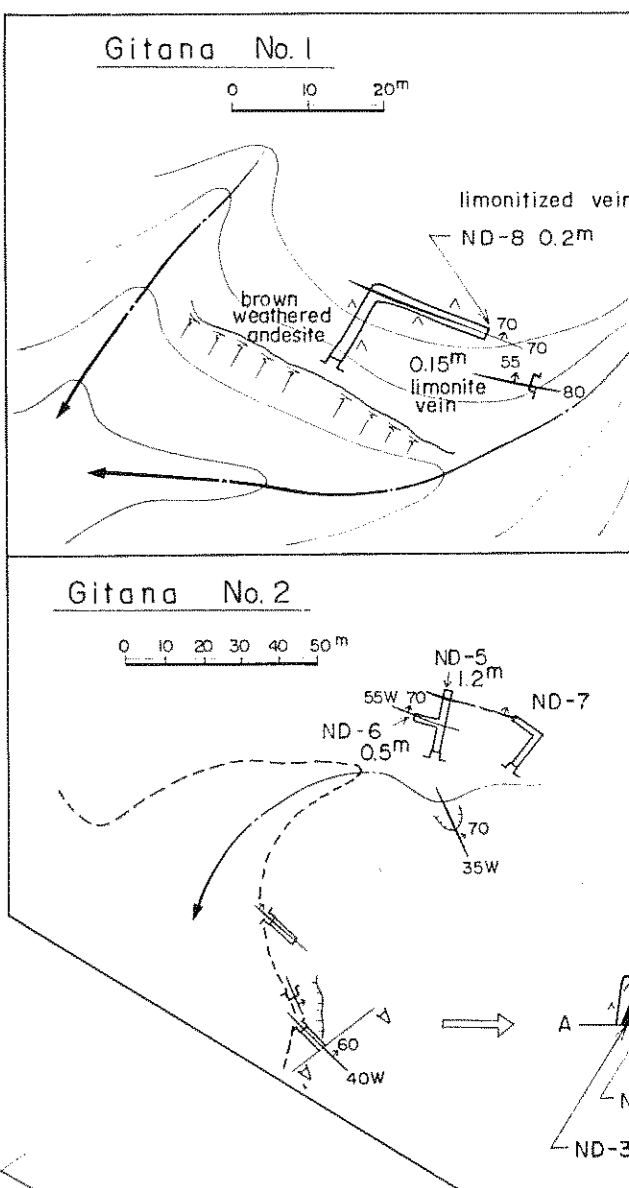
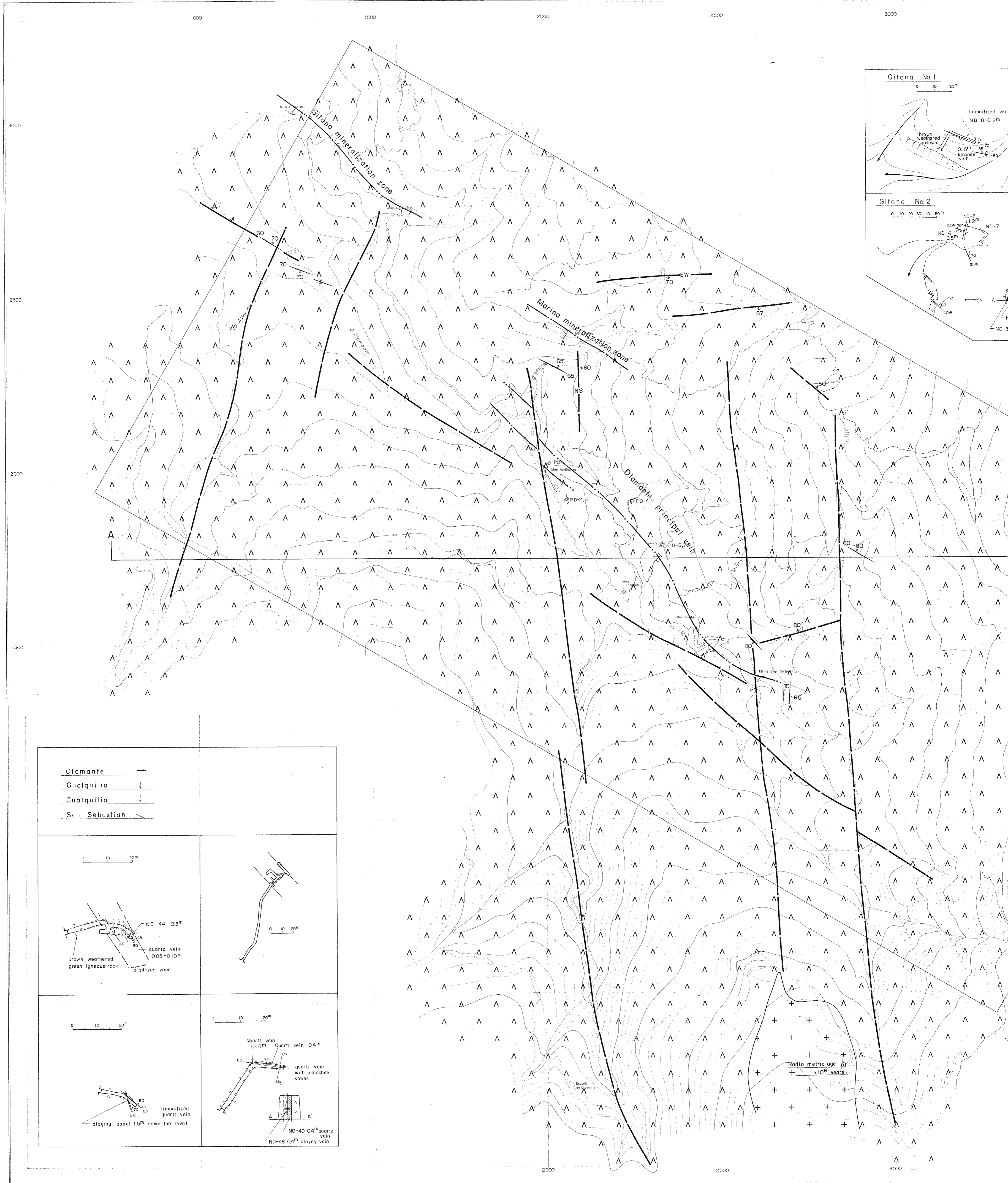
METAL MINING AGENCY OF JAPAN  
JAPAN INTERNATIONAL COOPERATION AGENCY  
MARCH 1982  
Prepared by MESCO, Inc.

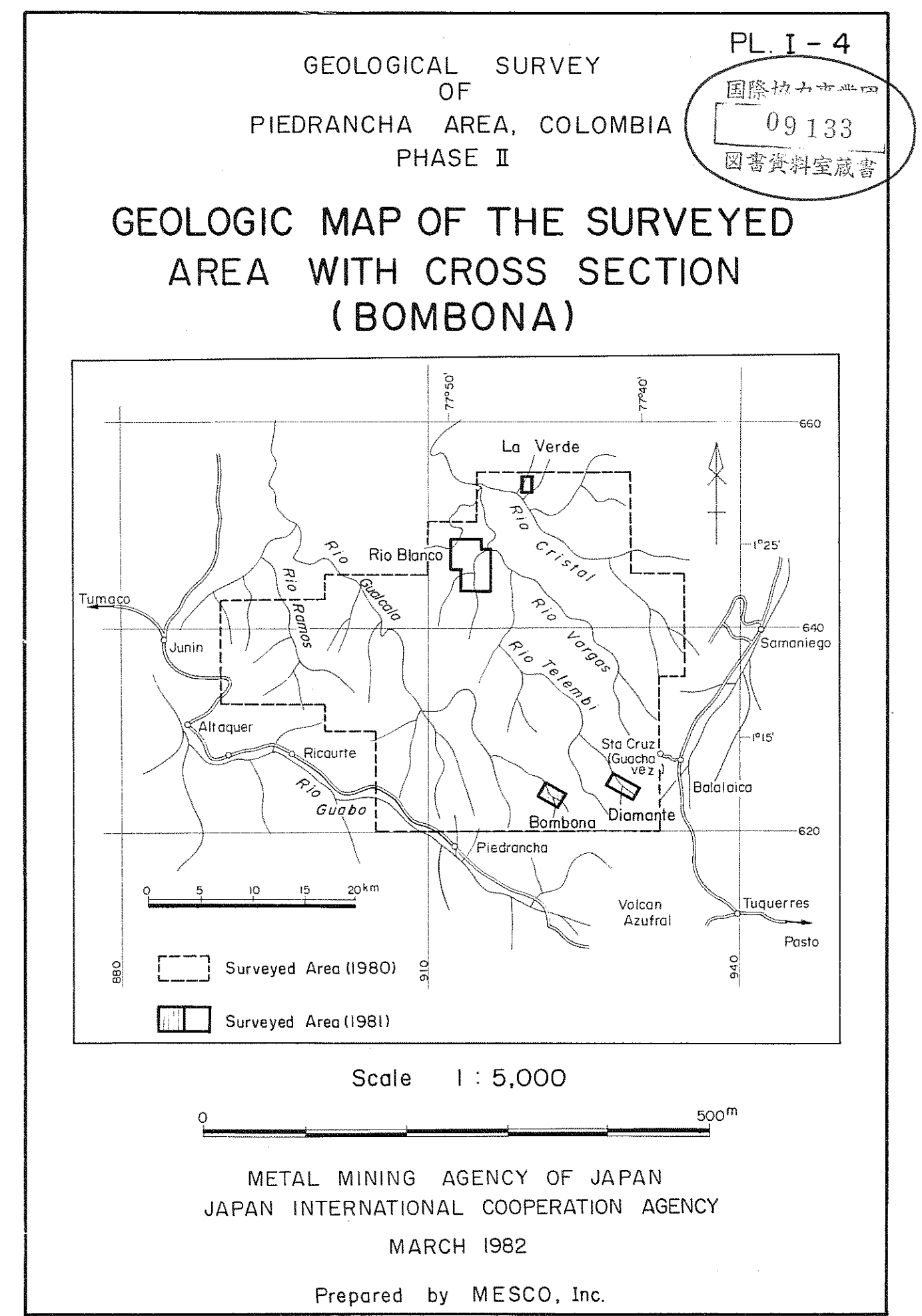
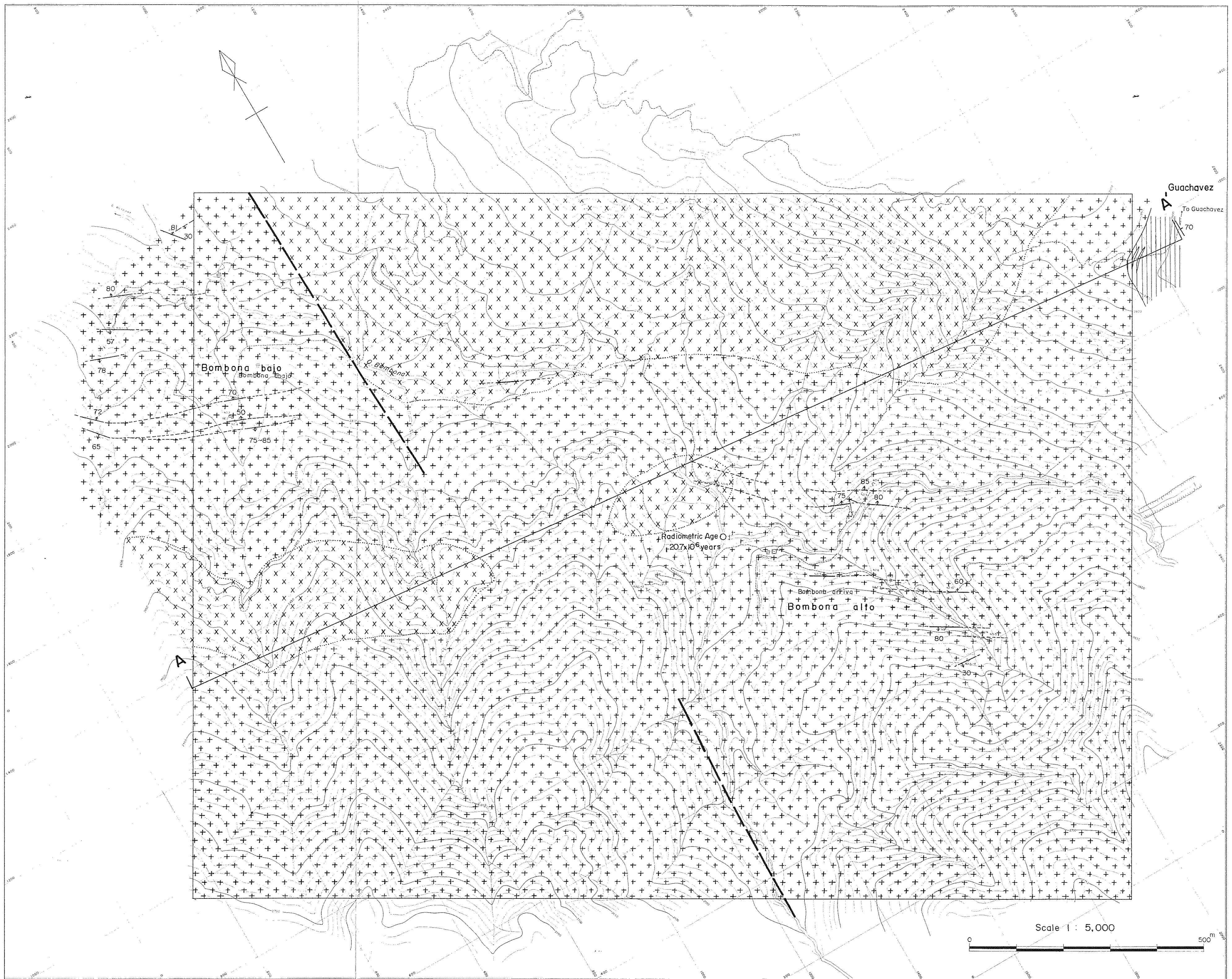
#### LEGEND

- |                        |  |  |
|------------------------|--|--|
| Mesozoic<br>Cretaceous |  | sandstone - alternation of sandstone & shale |
|                        |  | black shale                                  |
|                        |  | basalt lava                                  |
| intrusive              |  | micro diorite                                |
|                        |  | porphyritic micro diorite                    |
|                        |  | pyrite                                       |
|                        |  | chalcopyrite                                 |
|                        |  | epidote                                      |
|                        |  | zeolite veinlets                             |
|                        |  | argillized zone                              |
|                        |  | bedding                                      |
|                        |  | joint  |
|                        |  | vein   |
|                        |  | fault, visible & presumed                    |
|                        |  | geological boundary                          |
|                        |  | cross section line                           |



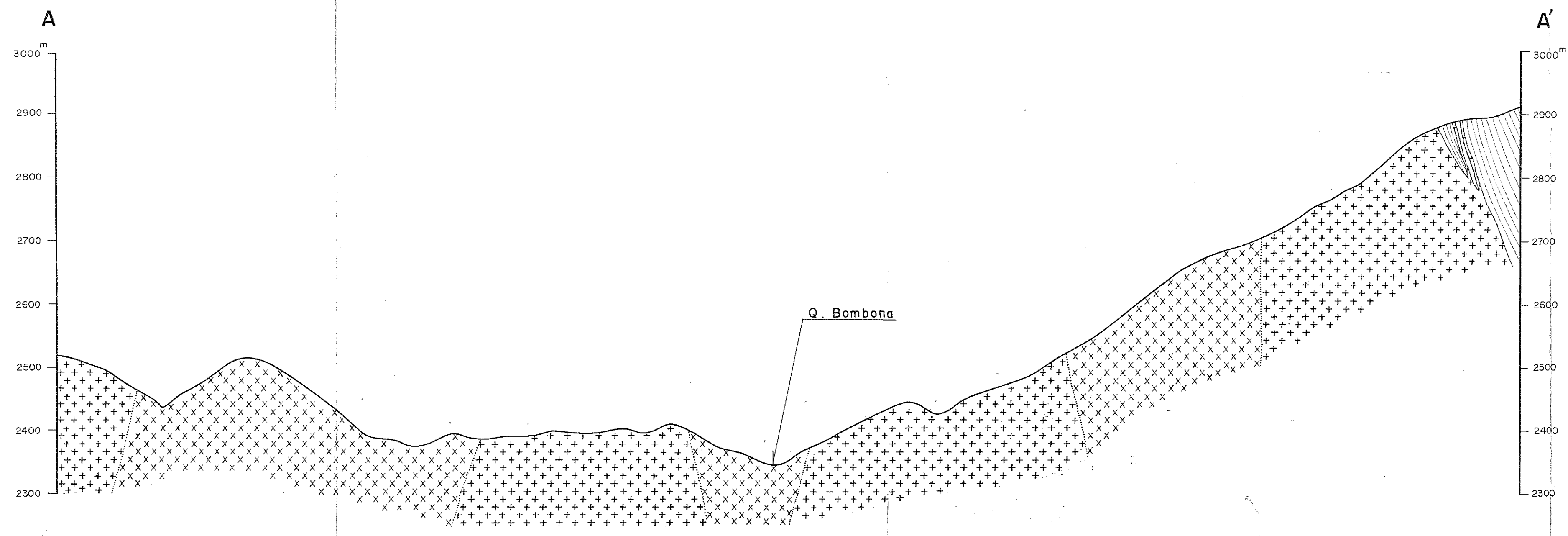




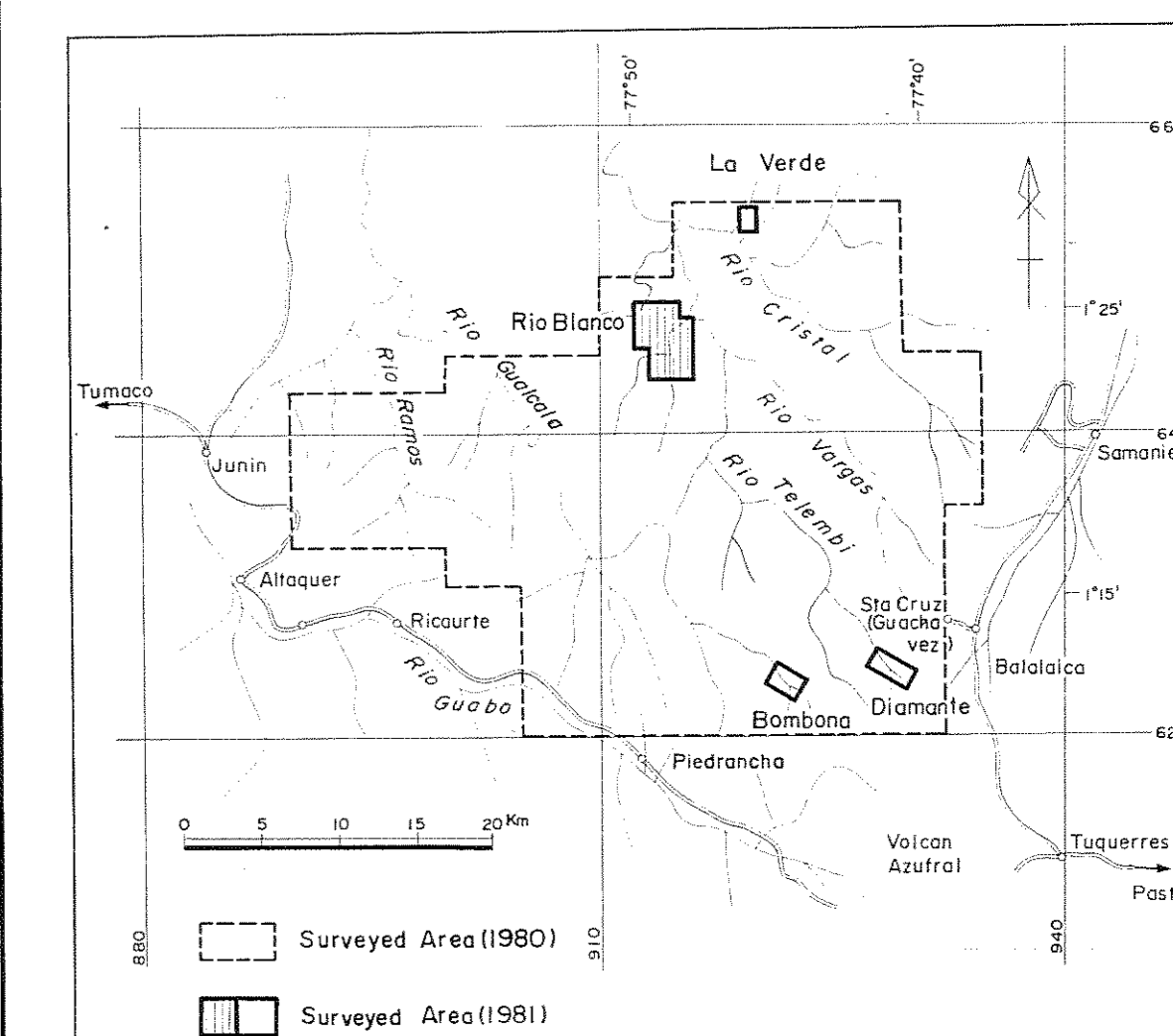


LEGEND

- Mesozoic Cretaceous
  - siliceous rock (Chert)
- Eozoic Tertiary
  - medium grained granodiorite
  - fine grained porphyritic granodiorite
- bedding
- vein
- joint
- fault, presumed
- geologic boundary
- cross section line
- portal and tunnel
- mining plant
- cabin



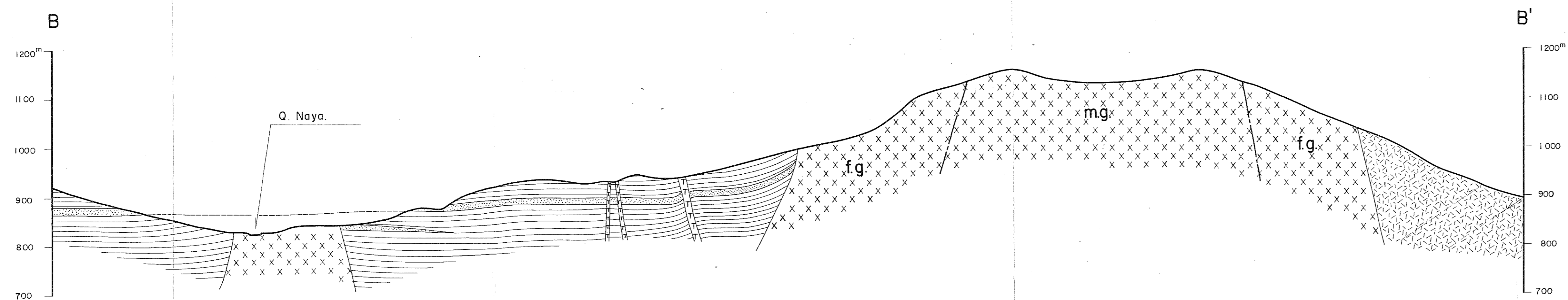
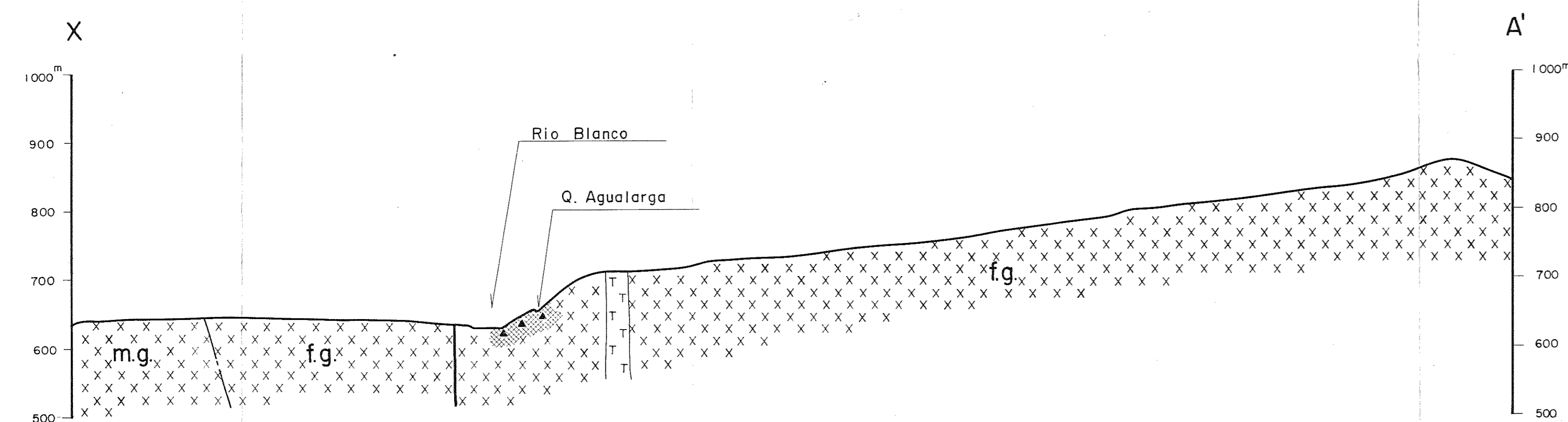
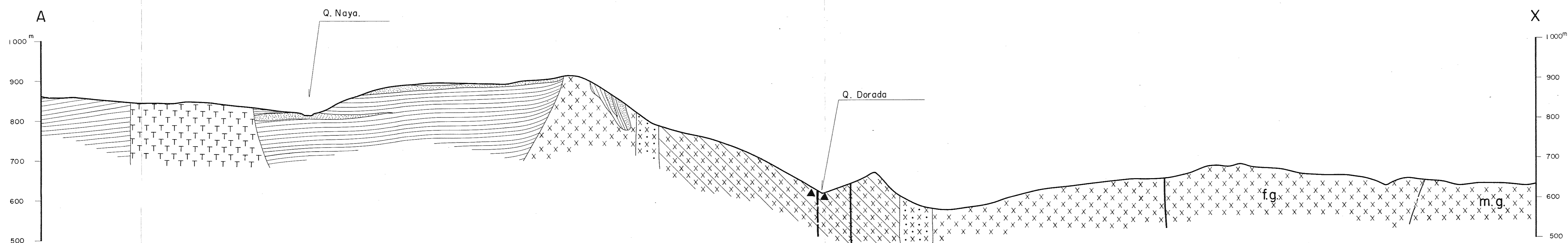
CROSS SECTIONS (RIO BLANCO)



Scale 1:5,000

METAL MINING AGENCY OF JAPAN  
JAPAN INTERNATIONAL COOPERATION AGENCY  
1982

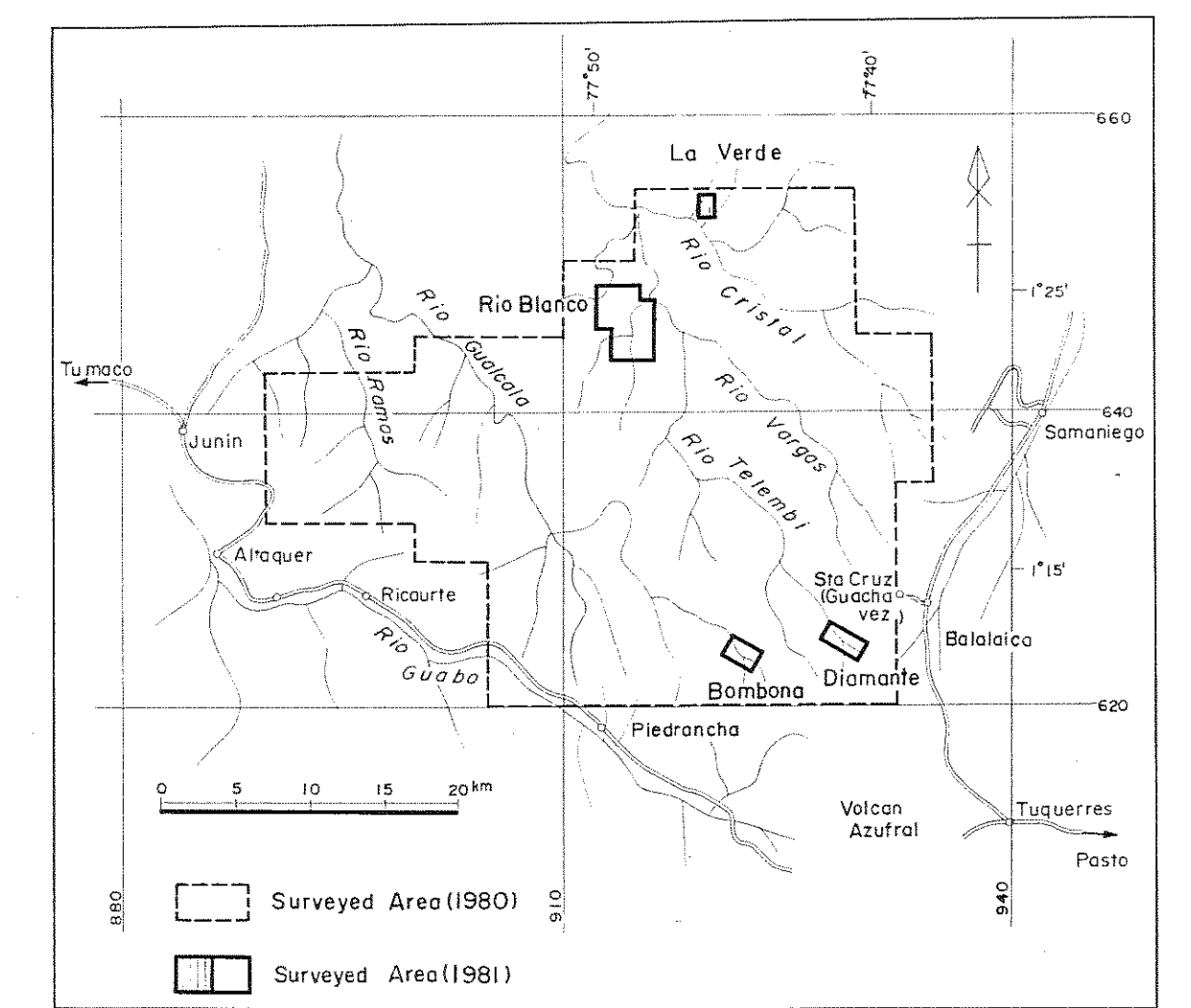
Prepared by MESCO, Inc.



LEGEND

- Sedimentary rocks**
- Mesozoic Cretaceous
    - Alternation of sandstone & shale
    - Black shale
  - Volcanic rock
    - Green volcanic rock (Siliceous green tuff)
- Intrusive rocks**
- Cenozoic Tertiary
    - Porphyrite
    - Silicified~chloritized micro diorite
    - Epidotized~chloritized micro diorite
    - Micro diorite (monzonitic)
- Other features**
- Rock fractured
  - Pyritization: weak (<1%), medium (1-2%), strong (2-5%)
  - Geological boundary
  - Fault: visible & presumed
- Grain sizes**
- f.g. Fine grained (Porphyritic)  $\phi < 2^{mm}$
  - m.g. Medium grained (Porphyritic)  $\phi 3^{mm}$
  - c.g. Coarse grained  $\phi 3 \sim 5^{mm}$

CROSS SECTION (LA VERDE)



Scale 1 : 2,000

METAL MINING AGENCY OF JAPAN  
JAPAN INTERNATIONAL COOPERATION AGENCY  
1982

Prepared by MESCO, Inc.

- LEGEND
- Mesozoic Cretaceous
    - sandstone - alternation of sandstone & shale
    - ▨ black shale
    - ▧ basalt lava
  - intrusive
    - ××× micro diorite
    - ×××× porphyritic micro diorite
  - fault, visible & presumed
  - - - geological boundary

