

REPUBLIC OF THE PHILIPPINES  
REPORT ON GEOLOGICAL SURVEY  
OF MINDORO ISLAND

PHASE I  
SEPT. 1983

JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN

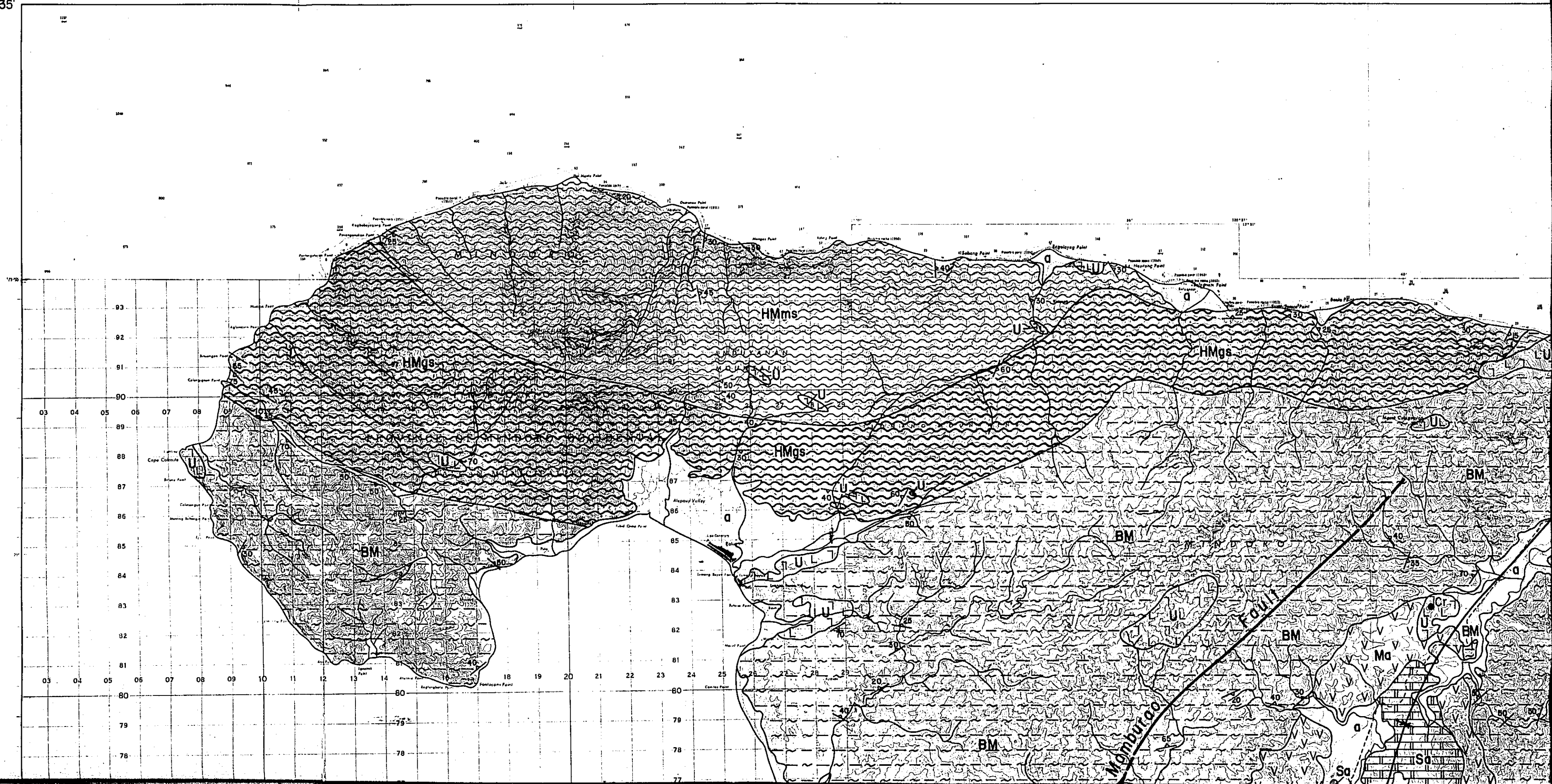
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118  
66.1  
MPN  
LIBRARY

JICA LIBRARY  
1046640[7]

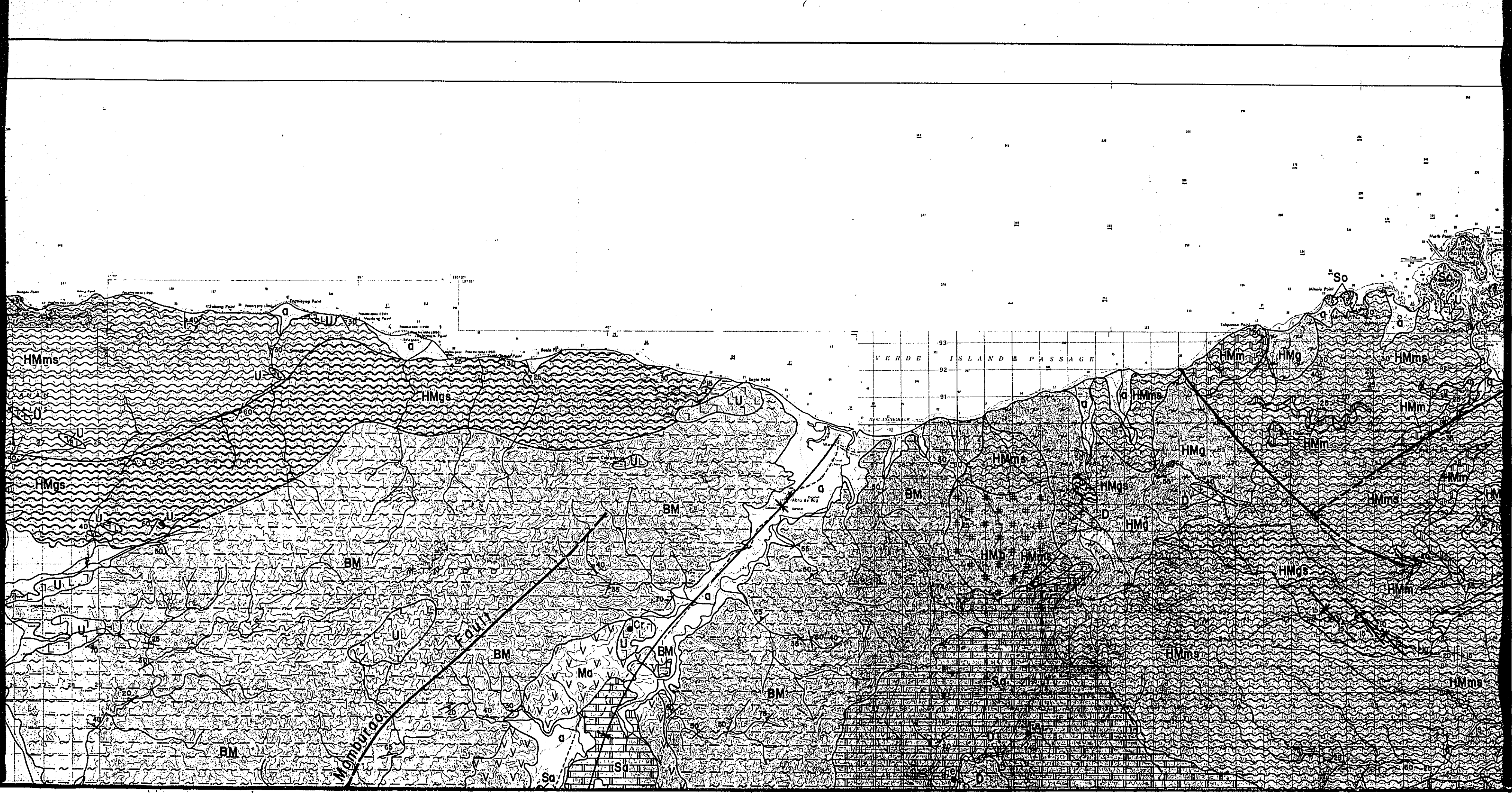
118  
66.1  
MPN  
14023

|                     |      |
|---------------------|------|
| 国際協力事業団             |      |
| 受入<br>月日 '84. 9. 21 | 118  |
| 登録No. 09811         | 66.1 |
|                     | MPN  |

13° 35' 120° 15'



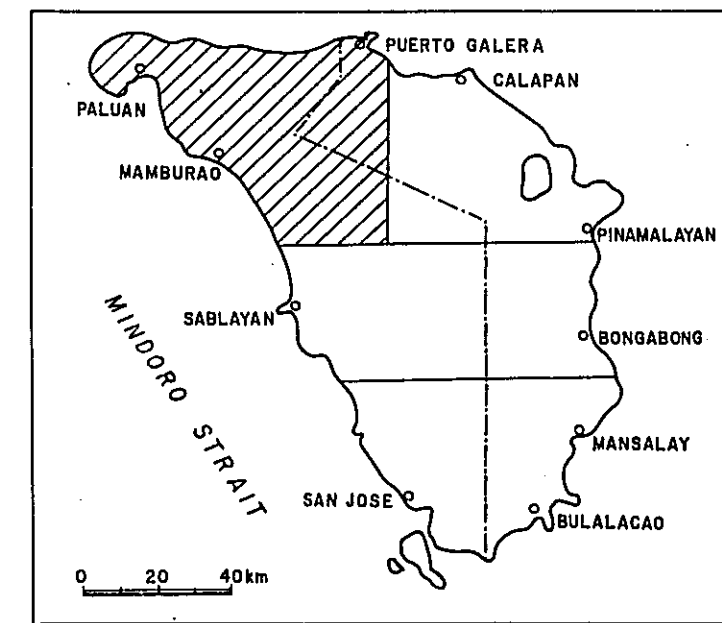




# GEOLOGICAL SURVEY OF MINDORO ISLAND, PHILIPPINES (PHASE II)

## Geological Map

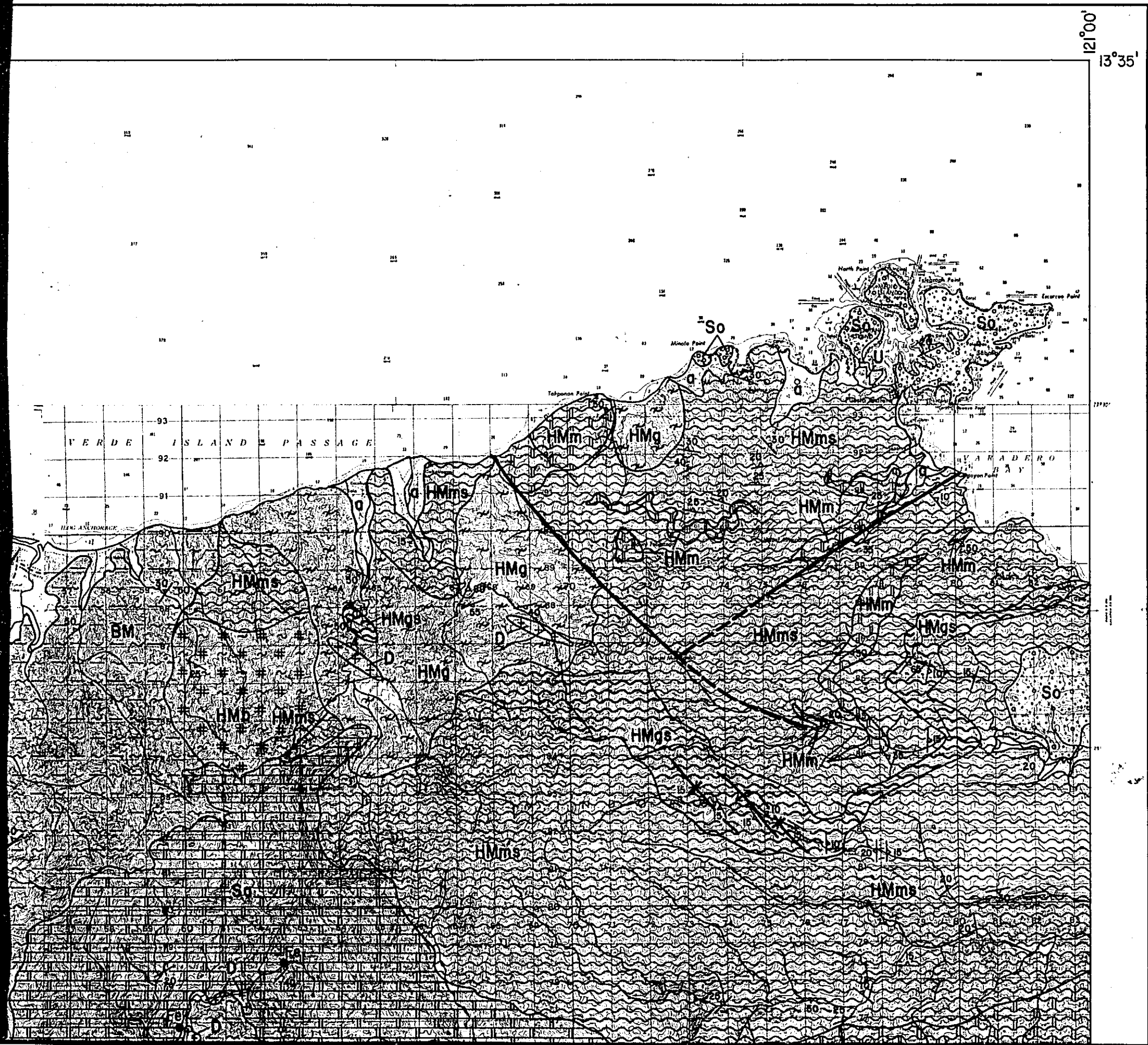
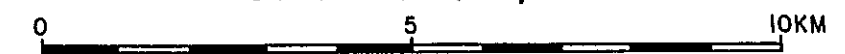
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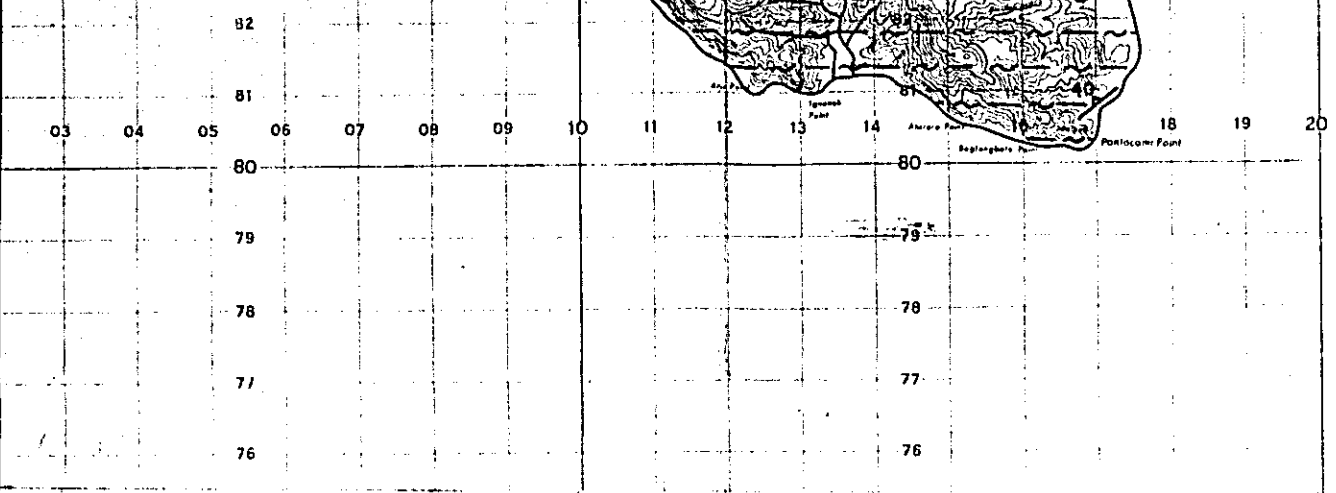
JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
July 1983

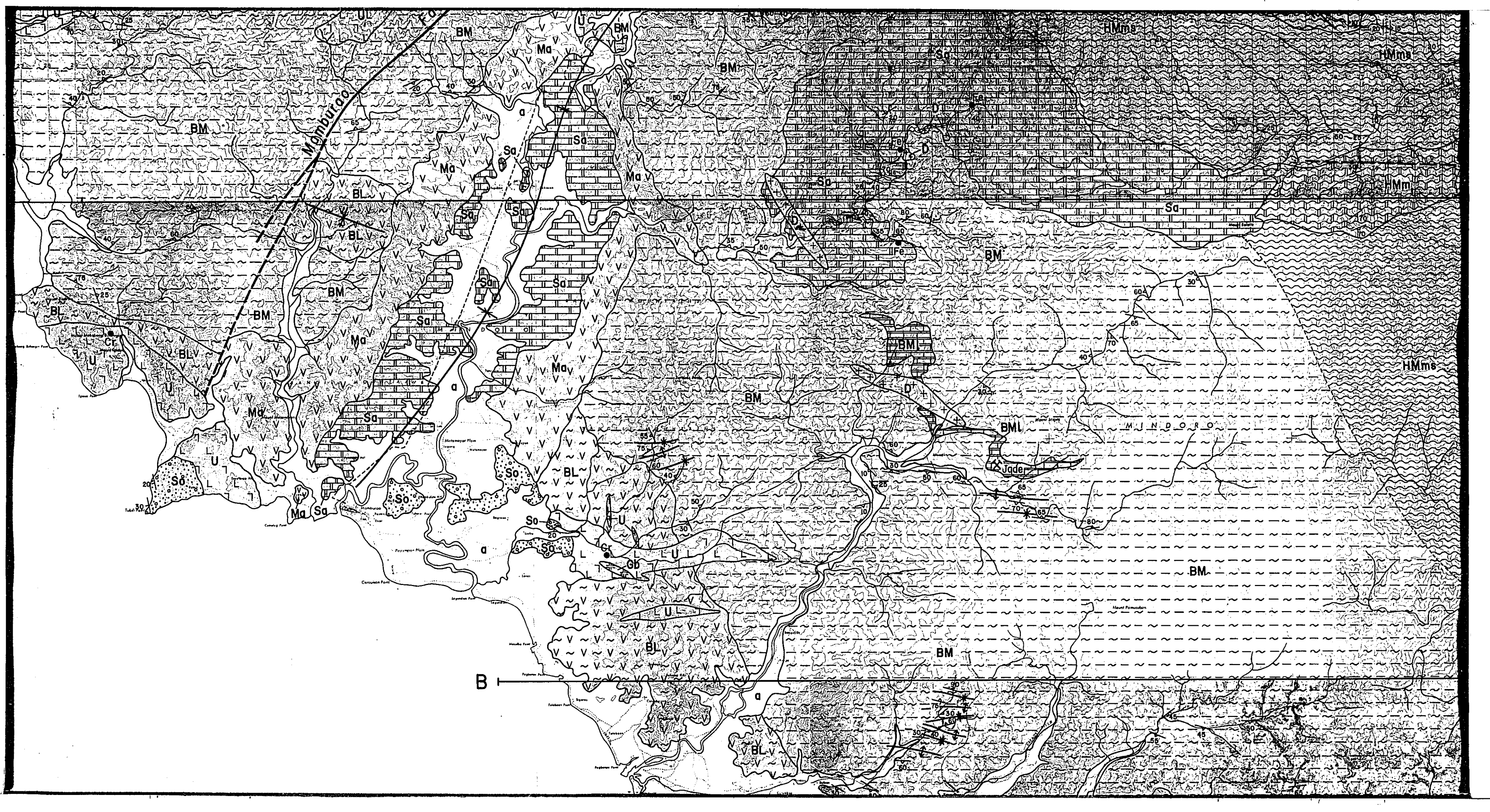
Prepared by Bishimetal Exploration Co., Ltd.

Scale 1 : 100,000





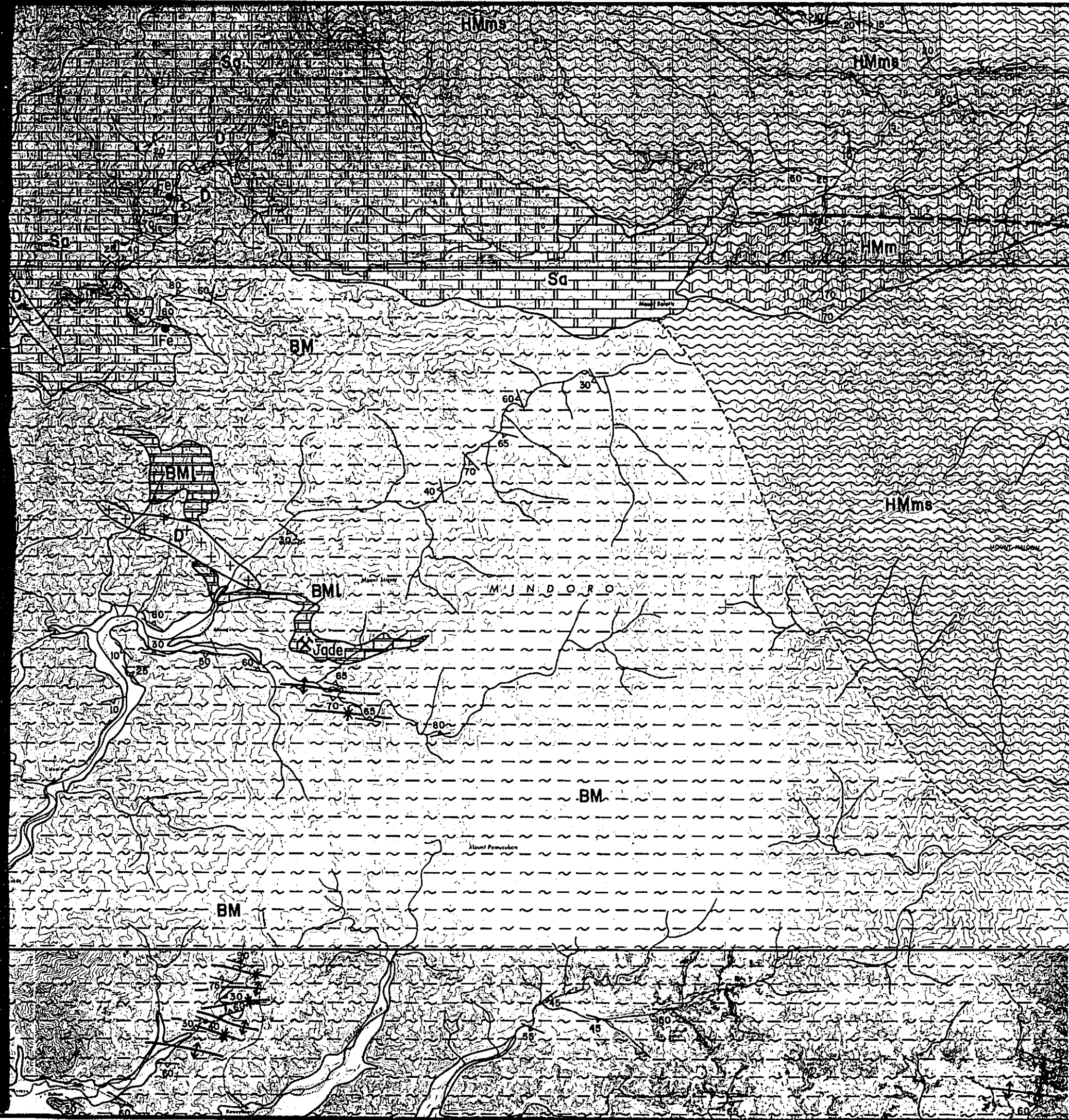






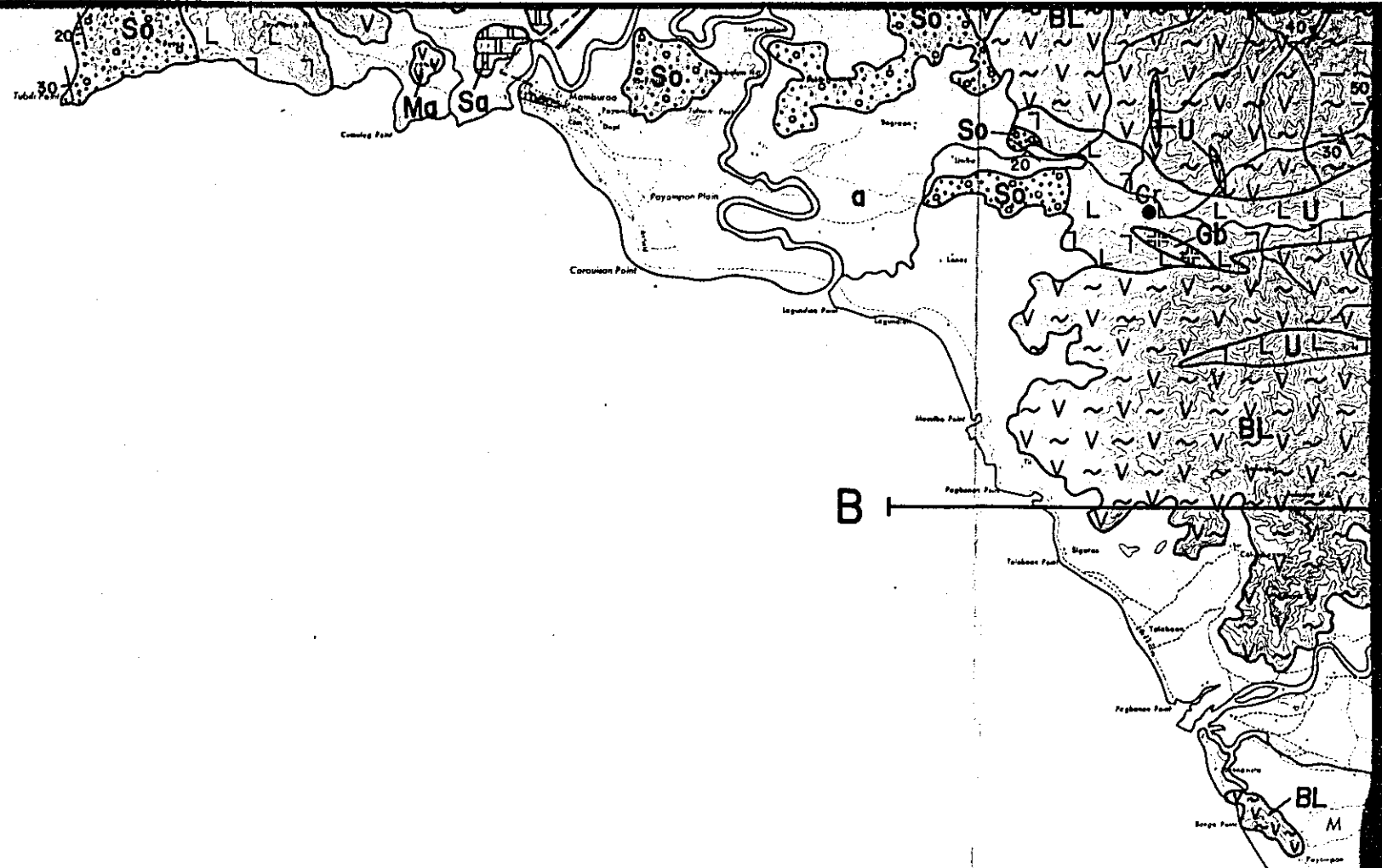
Prepared by Bishimetal Exploration Co., Ltd.

Scale 1:100,000



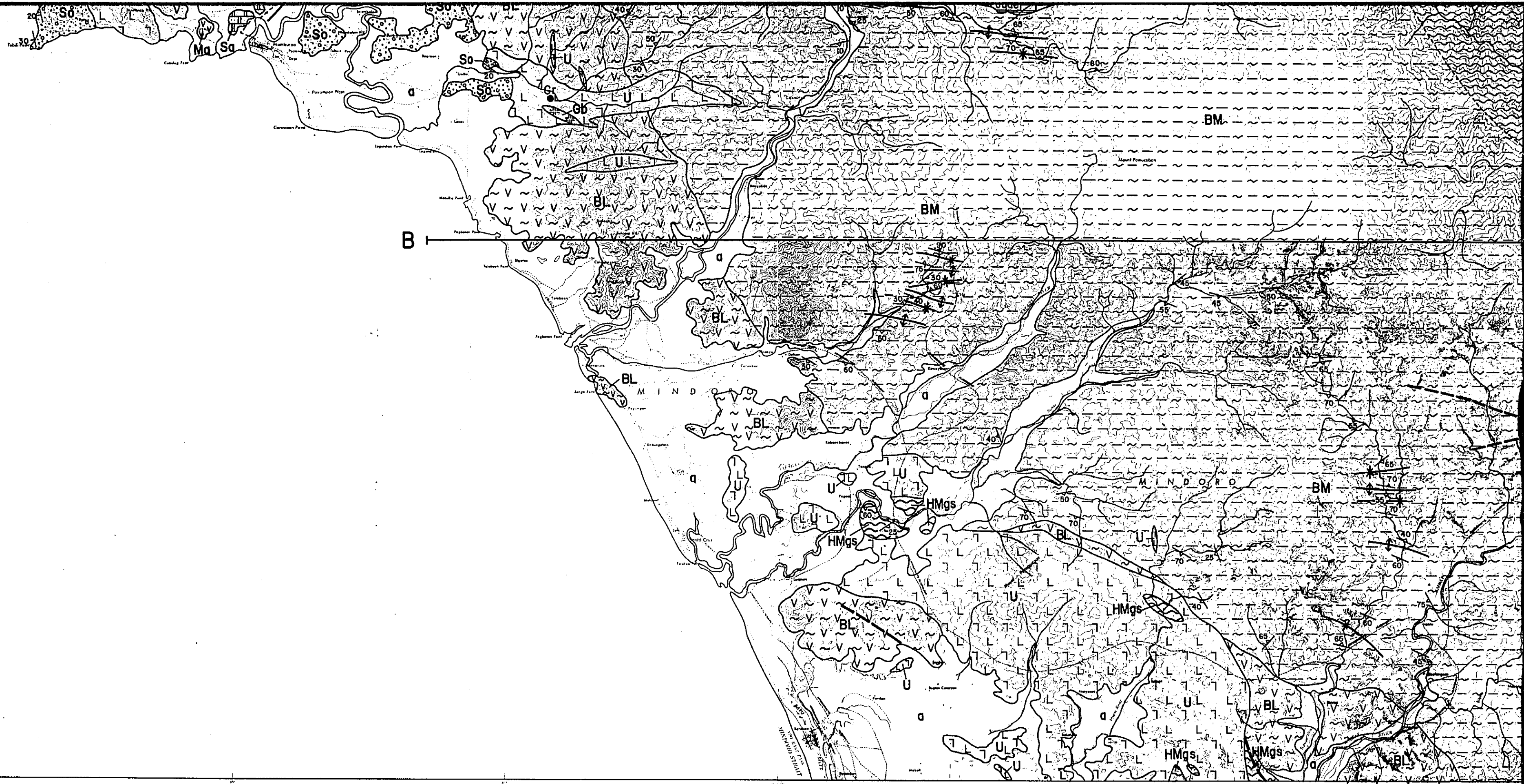
LEGEND

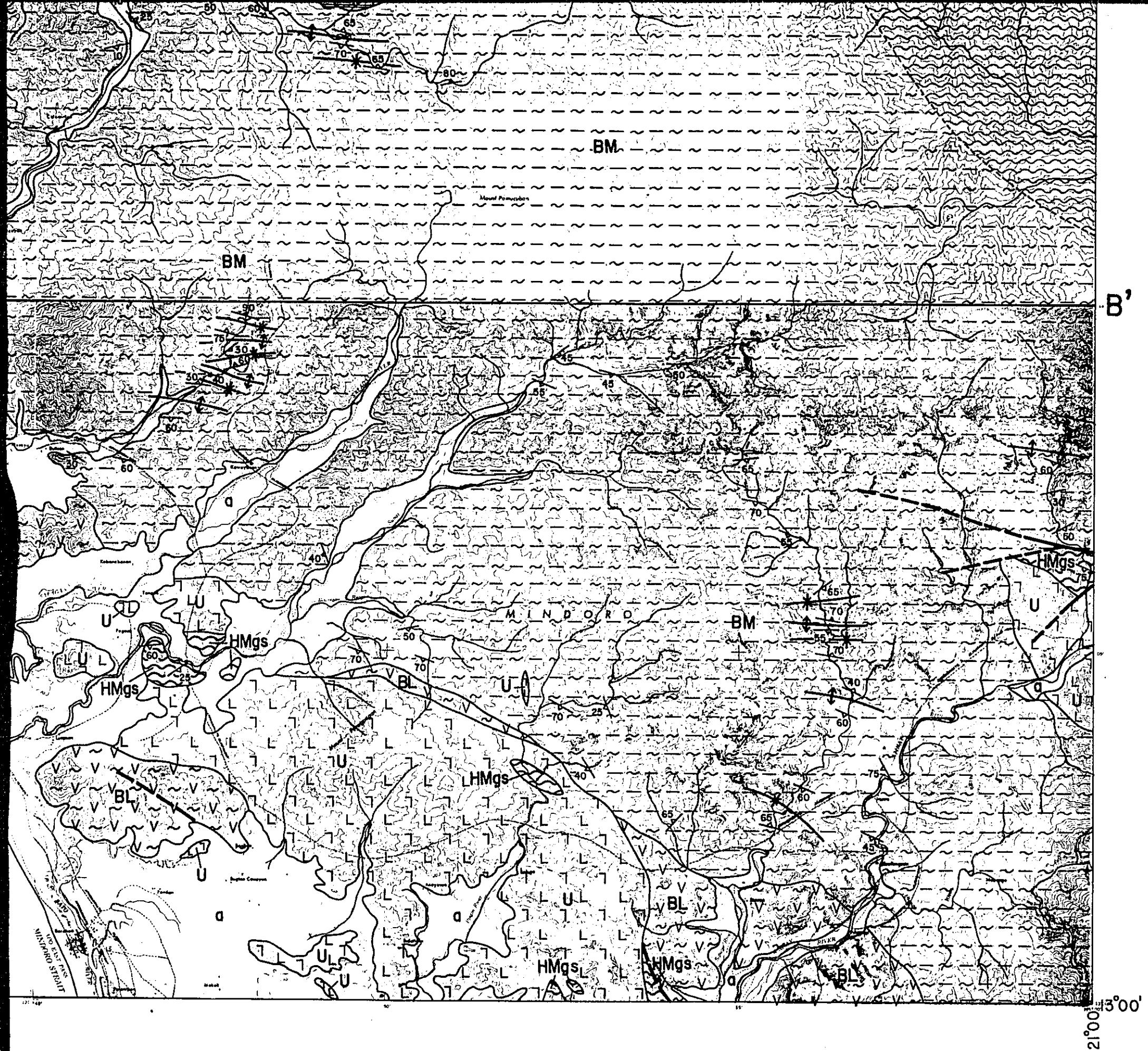
|                     |      |  |
|---------------------|------|--|
| Alluvial deposits   | a    | silt, sand and gravel  |
| Socorro Group       | So   | terrace deposits (sand, gravel), tuffaceous silt and andesitic tuff                      |
|                     | Sol  | limestone  |
|                     | Sov  | andesite and basalt  |
| Bongabong Group     | Bo   | conglomerate, calcareous sandstone, calcareous siltstone to mudstone with andesitic tuff |
| Sablayan Group      | Sa   | limestone, calcareous sandstone, calcareous mudstone with andesite and andesitic tuff    |
|                     | Sam  | calcareous mudstone with limestone   |
| Mamburao Group      | Ma   | basalt   |
| Baco Group          | BL   | basalt with basaltic tuff, sandstone, shale; slate to phyllite                           |
|                     | BML  | limestone  |
|                     | BM   | shale, sandstone, slate to phyllite, phyllitic sandstone with basalt and basaltic tuff   |
| Halcon Metamorphics | HMms | mica schist with green schist  |
|                     | HMgs | green schist with amphibolite and mica schist  |
|                     | HMm  | marble   |



13°00'  
120°15'







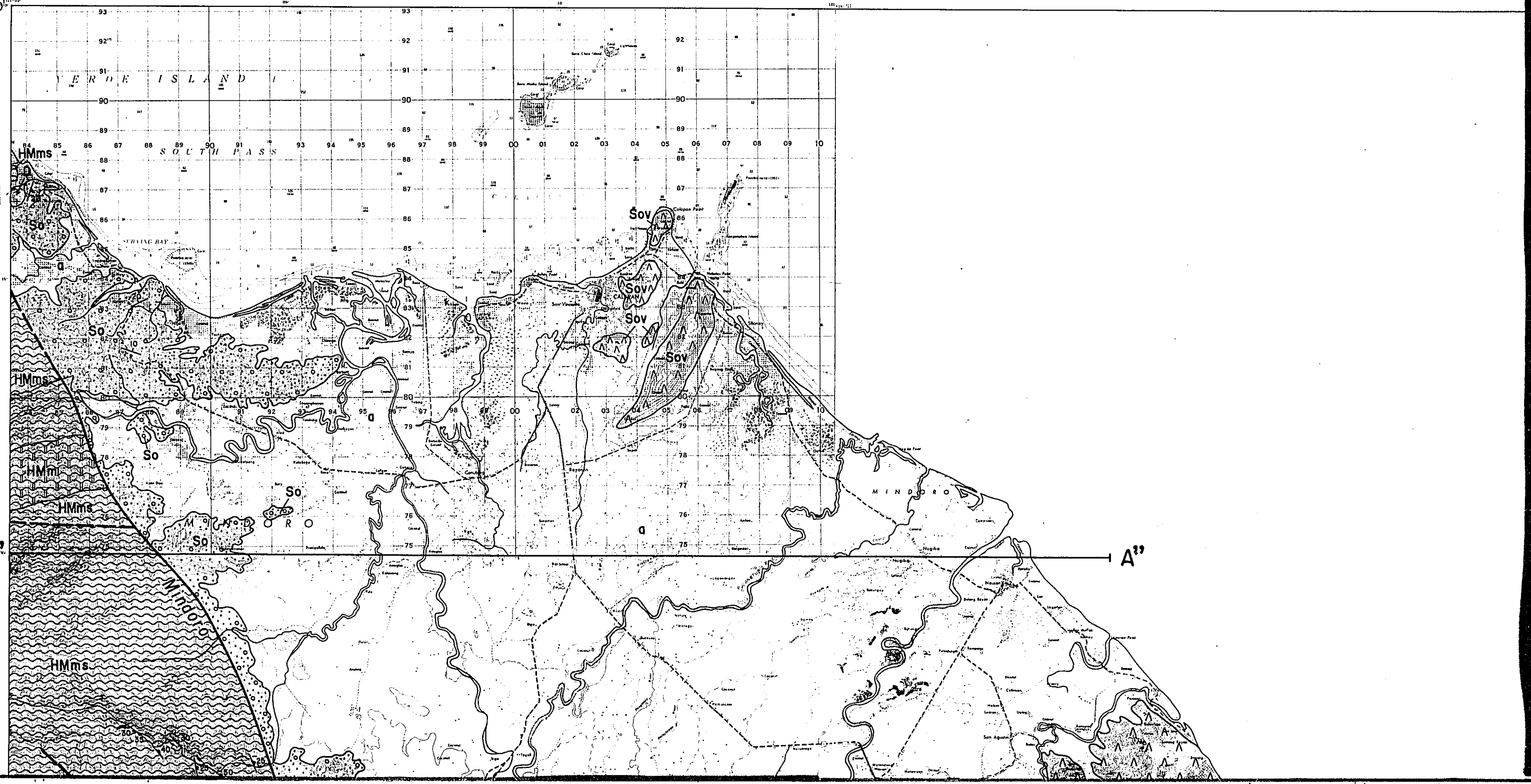
B'

121°00' 3'00"

- |                         |                    |   |  |
|-------------------------|--------------------|---|--|
| Sablayan Group          | Sa                 | limestone, calcareous sandstone, calcareous mudstone with andesite and andesitic tuff |  |
|                         | Sam                | calcareous mudstone with limestone  |  |
| Mamburao Group          | Ma                 | basalt  |  |
| Baco Group              | Lumintao Formation | BL  | basalt with basaltic tuff, sandstone, shale; slate to phyllite                         |
|                         | Mansalay Formation | BMI   | limestone  |
|                         |                    | BM  | shale, sandstone, slate to phyllite, phyllitic sandstone with basalt and basaltic tuff |
| Halcon Metamorphics     | HMms               | mica schist with green schist   |  |
|                         | HMgs               | green schist with amphibolite and mica schist   |  |
|                         | HMm                | marble  |  |
|                         | HMG                | gneiss  |  |
|                         | HMb                | metagabbro  |  |
| <b>Intrusive Rocks</b>  |                    |   |  |
| Ultramafic rocks        | U                  |   |  |
| Gabbro                  | Gb                 |   |  |
| Granodiorite to diorite | D                  |   |  |
| Anticline               | ∩                  |   |  |
| Syncline                | ∪                  |   |  |
| Fault (certain)         | — —                |   |  |
| Fault (inferred)        | - - -  - - -       |   |  |
| Uncertain boundary      | - · - · -          |   |  |
| Strike and dip          | ↘ <sub>30</sub>    |   |  |
| Schistosity             | ↘ <sub>50</sub>    |   |  |
| Overtured bed           | ↘ <sub>70</sub>    |   |  |
| Jade, Ba                | ▲                  | Operating mines   |  |
| Cr, Fe, Cu              | ●                  | Main ore deposits   |  |
| A — A'                  |                    | Geological profile line   |  |



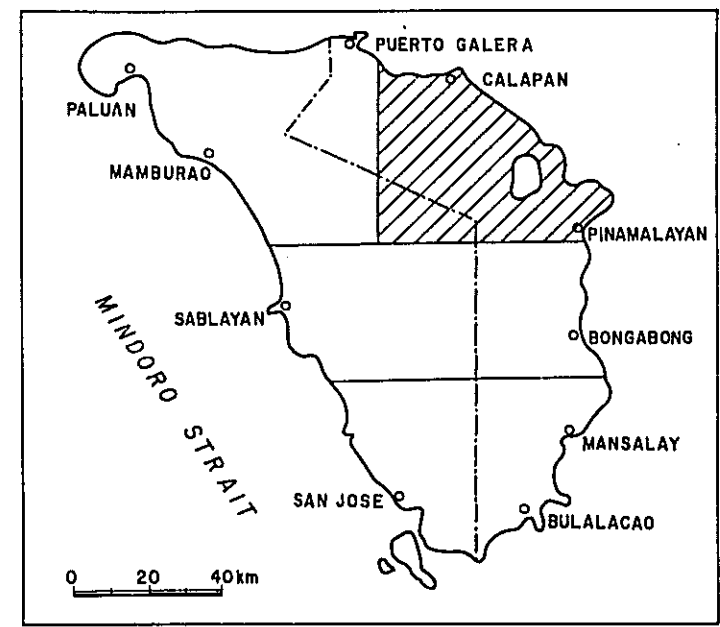
13° 30' 21" 00'



# GEOLOGICAL SURVEY OF MINDORO ISLAND, PHILIPPINES (PHASE II)

## Geological Map

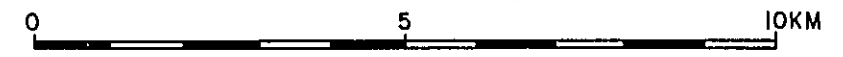
### LOCATION INDEX



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METAL MINING AGENCY OF JAPAN  
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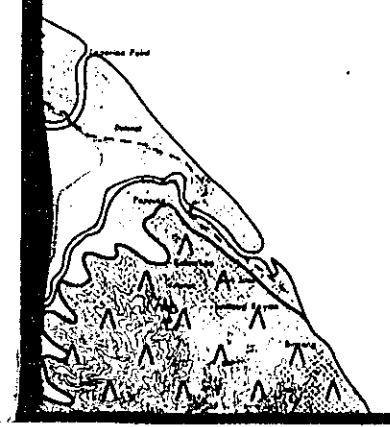
Prepared by Bishimetal Exploration Co., Ltd.

Scale 1 : 100,000

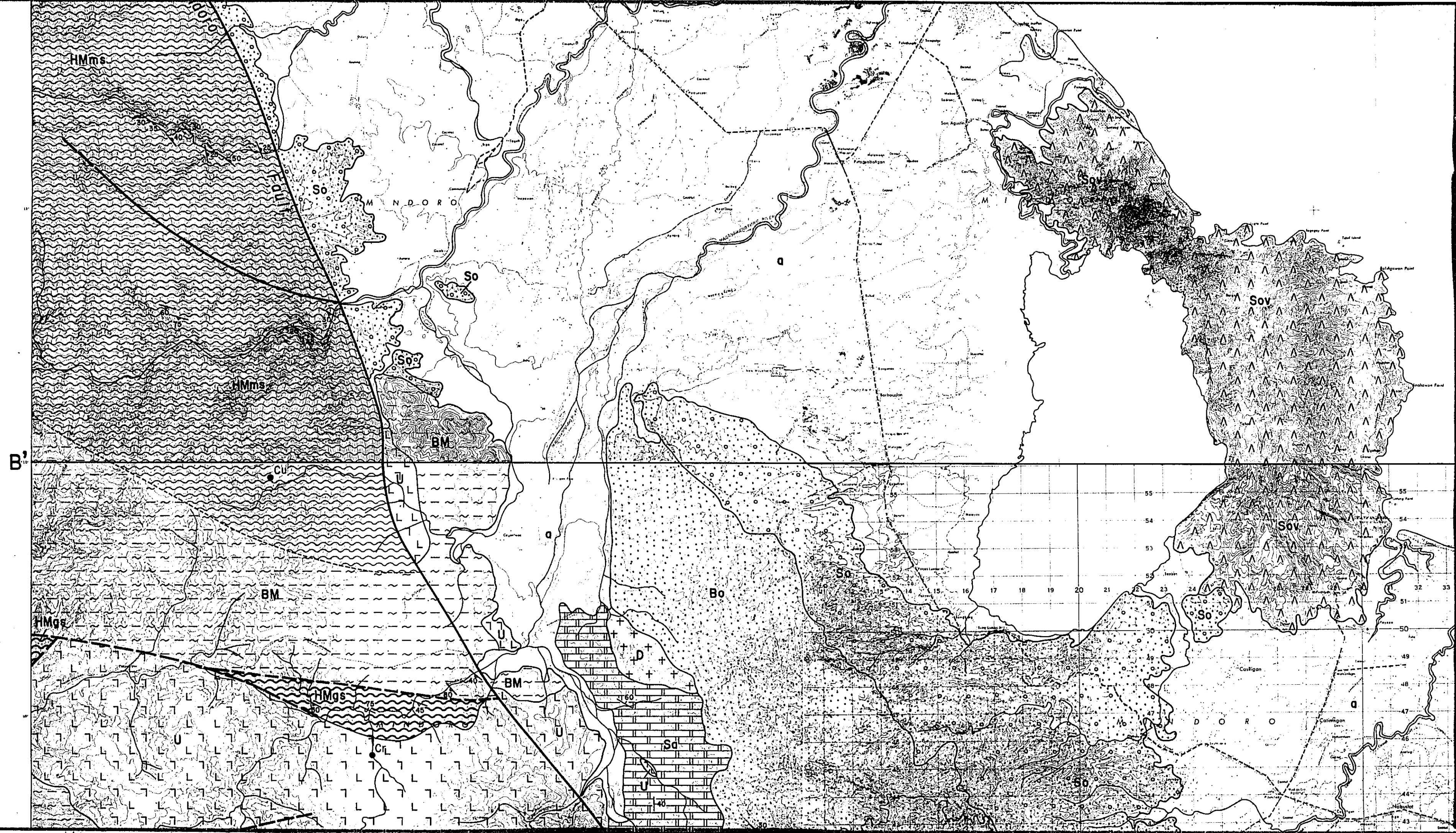


12°35'  
13°30'

A''



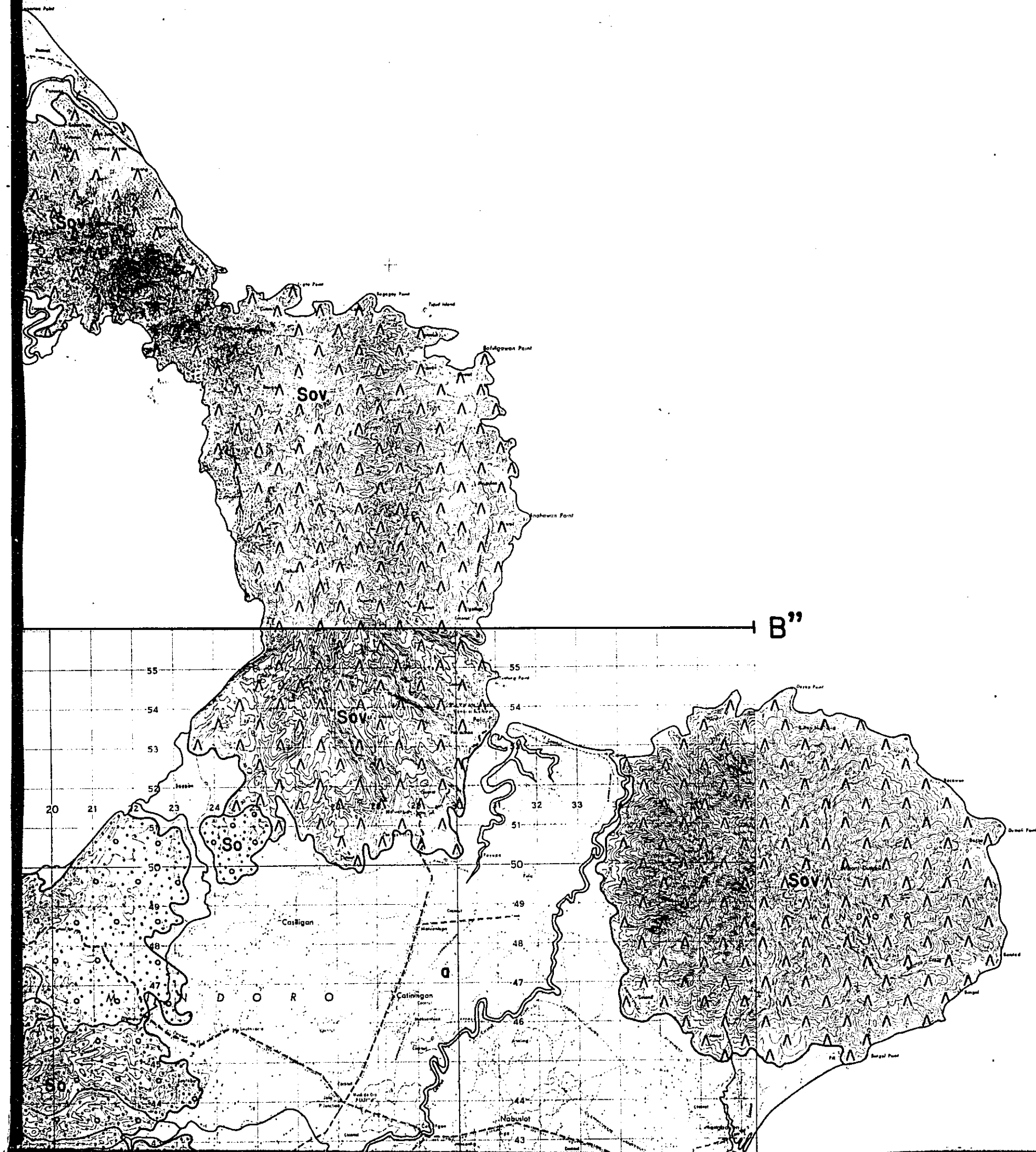
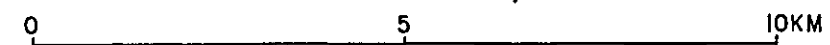




July 1983

Prepared by Bishimetal Exploration Co., Ltd.

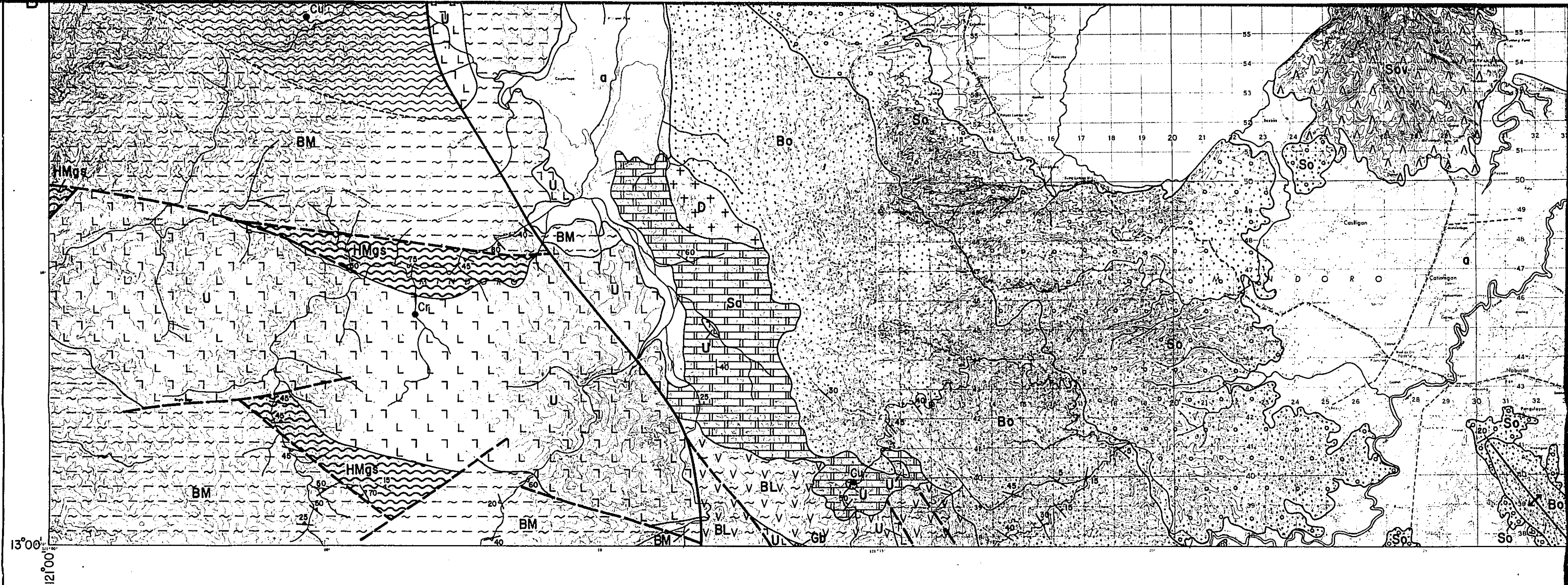
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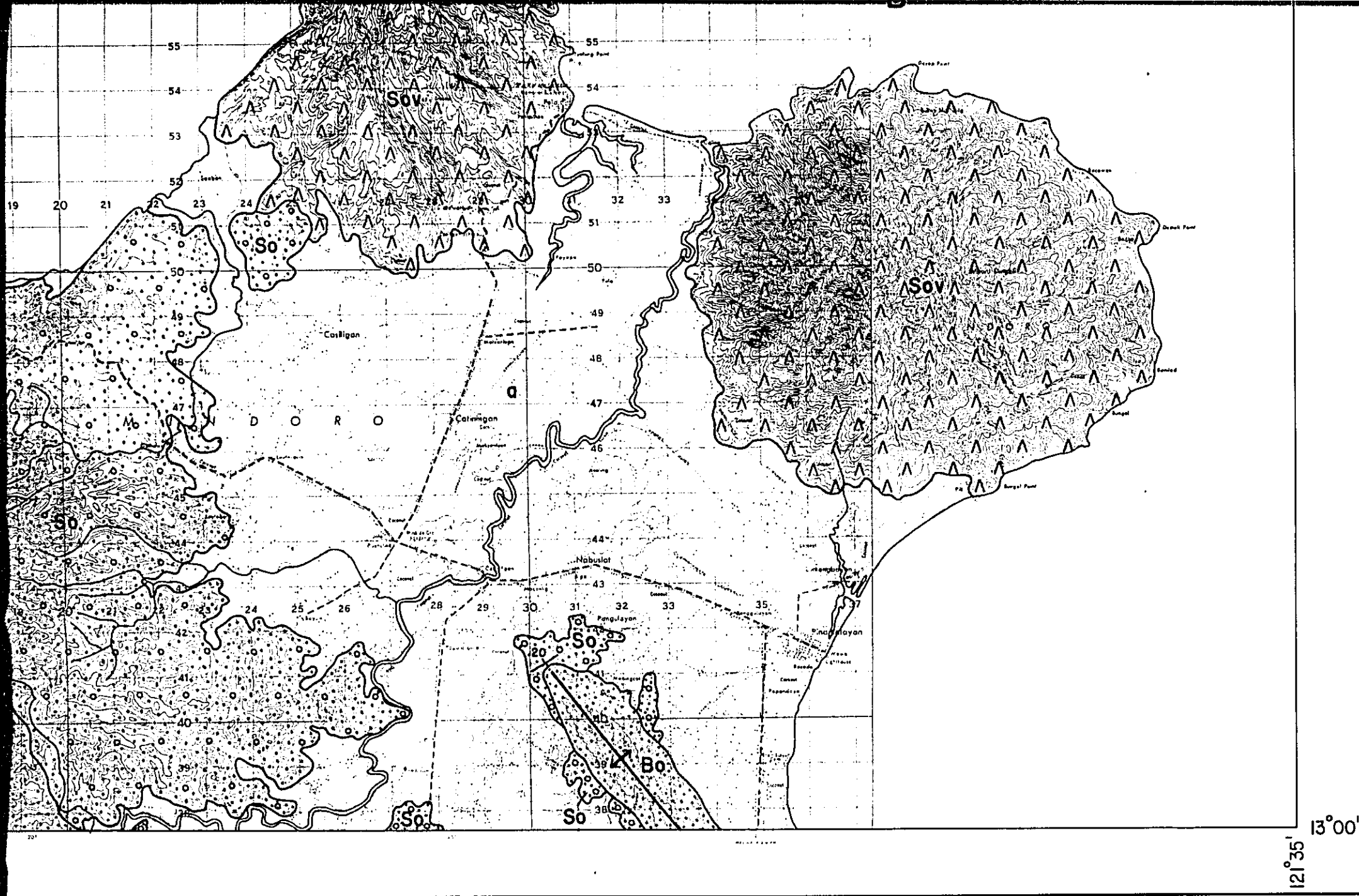


LEGEND

|                     |      |  |
|---------------------|------|--|
| Alluvial deposits   | a    | silt, sand and gravel  |
| Socorro Group       | So   | terrace deposits (sand, gravel), tuffaceous silt and andesitic tuff                      |
|                     | Sol  | limestone  |
|                     | Sov  | andesite and basalt  |
| Bongabong Group     | Bo   | conglomerate, calcareous sandstone, calcareous siltstone to mudstone with andesitic tuff |
| Sablayan Group      | Sa   | limestone, calcareous sandstone, calcareous mudstone with andesite and andesitic tuff    |
|                     | Sam  | calcareous mudstone with limestone   |
| Mamburao Group      | Ma   | basalt   |
| Baco Group          | BL   | basalt with basaltic tuff, sandstone, shale, slate to phyllite                           |
|                     | BML  | limestone  |
|                     | BM   | shale, sandstone, slate to phyllite, phyllitic sandstone with basalt and basaltic tuff   |
| Halcon Metamorphics | HMms | mica schist with green schist  |
|                     | HMgs | green schist with amphibolite and mica schist  |
|                     | HMm  | marble   |



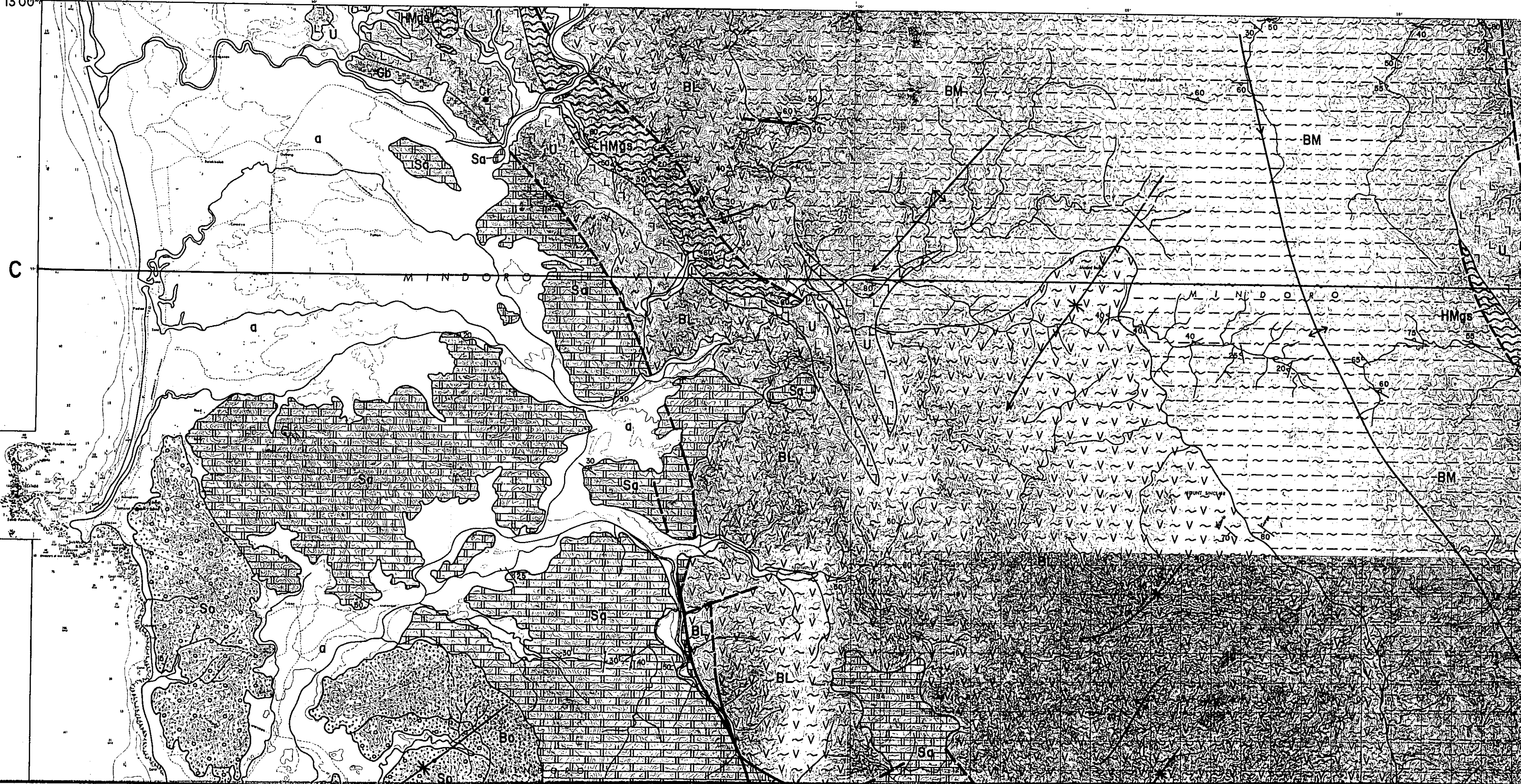




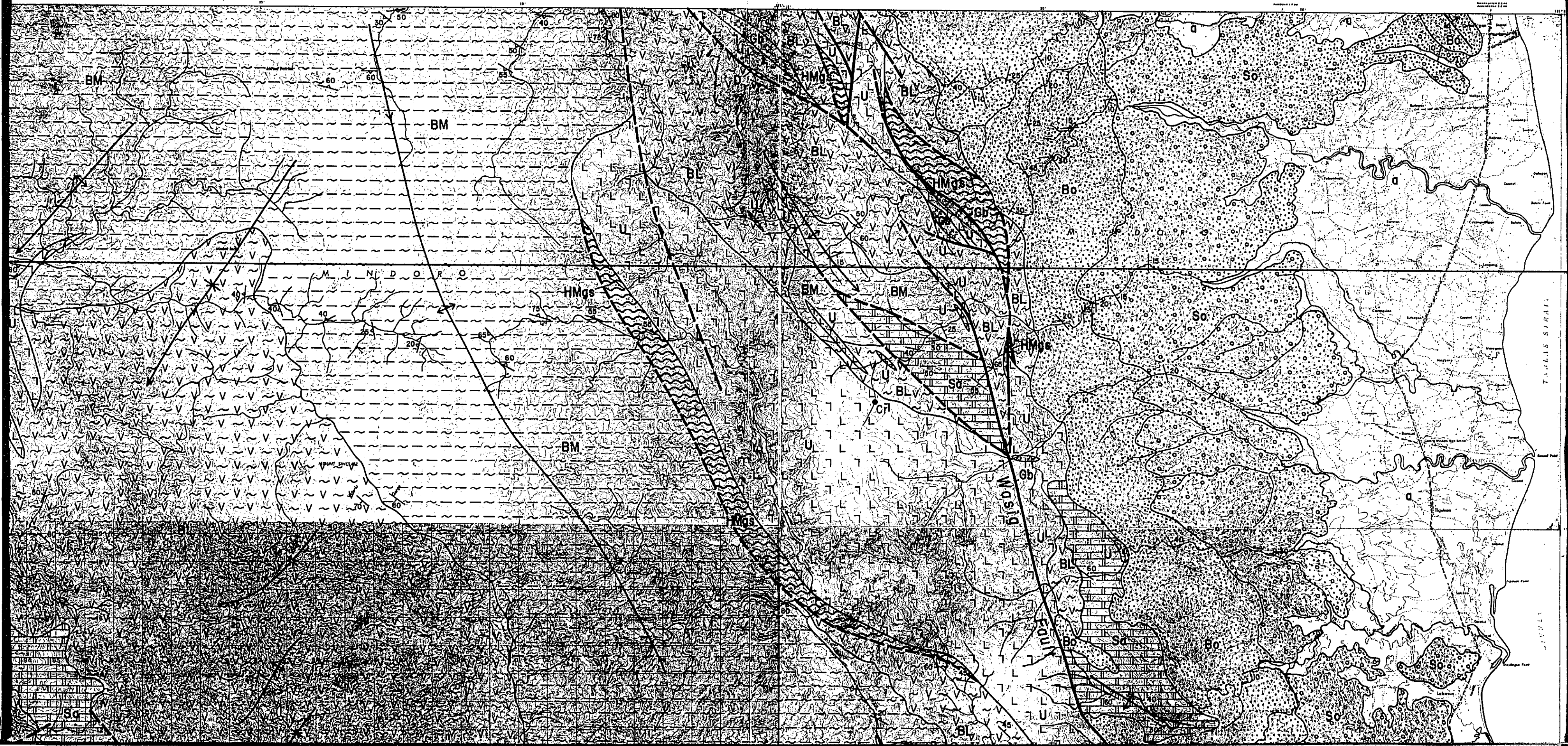
- |                         |                              |   |                   |
|-------------------------|------------------------------|---|-------------------|
| Group                   |                              | andesitic tuff  |                   |
| Sablayan Group          |                              | limestone, calcareous sandstone, calcareous mudstone with andesite and andesitic tuff |                   |
|                         |                              | calcareous mudstone with limestone  |                   |
| Mamburao Group          |                              | basalt  |                   |
| Baco Group              |                              | Lumintao Formation  |                   |
|                         |                              | Mansalay Formation  |                   |
|                         |                              | Mansalay Formation  |                   |
| Halcon Metamorphics     |                              | HMms mica schist with green schist  |                   |
|                         |                              | HMgs green schist with amphibolite and mica schist                                    |                   |
|                         |                              | HMm marble  |                   |
|                         |                              | HMg gneiss  |                   |
|                         |                              | Hmb metagabbro  |                   |
| <b>Intrusive Rocks</b>  |                              |   |                   |
| Ultramafic rocks        |                              | U   |                   |
| Gabbro                  |                              | Gb  |                   |
| Granodiorite to diorite |                              | D   |                   |
|                         | Anticline                    |   | Syncline          |
|                         | Fault (certain)              |   | Fault (inferred)  |
|                         | Uncertain boundary           |   | 30 Strike and dip |
|                         | 50 Schistosity               |   | 70 Overturned bed |
|                         | Jade, Ba Operating mines     |   |                   |
|                         | Cr, Fe, Cu Main ore deposits |   |                   |
| A — A'                  | Geological profile line      |   |                   |



13°00' 120°45'





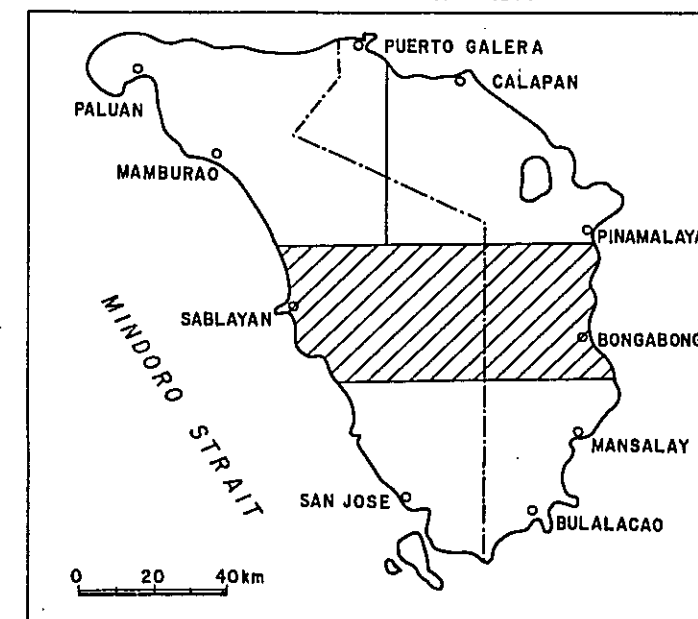




GEOLOGICAL SURVEY  
OF  
MINDORO ISLAND, PHILIPPINES  
(PHASE II)

Geological Map

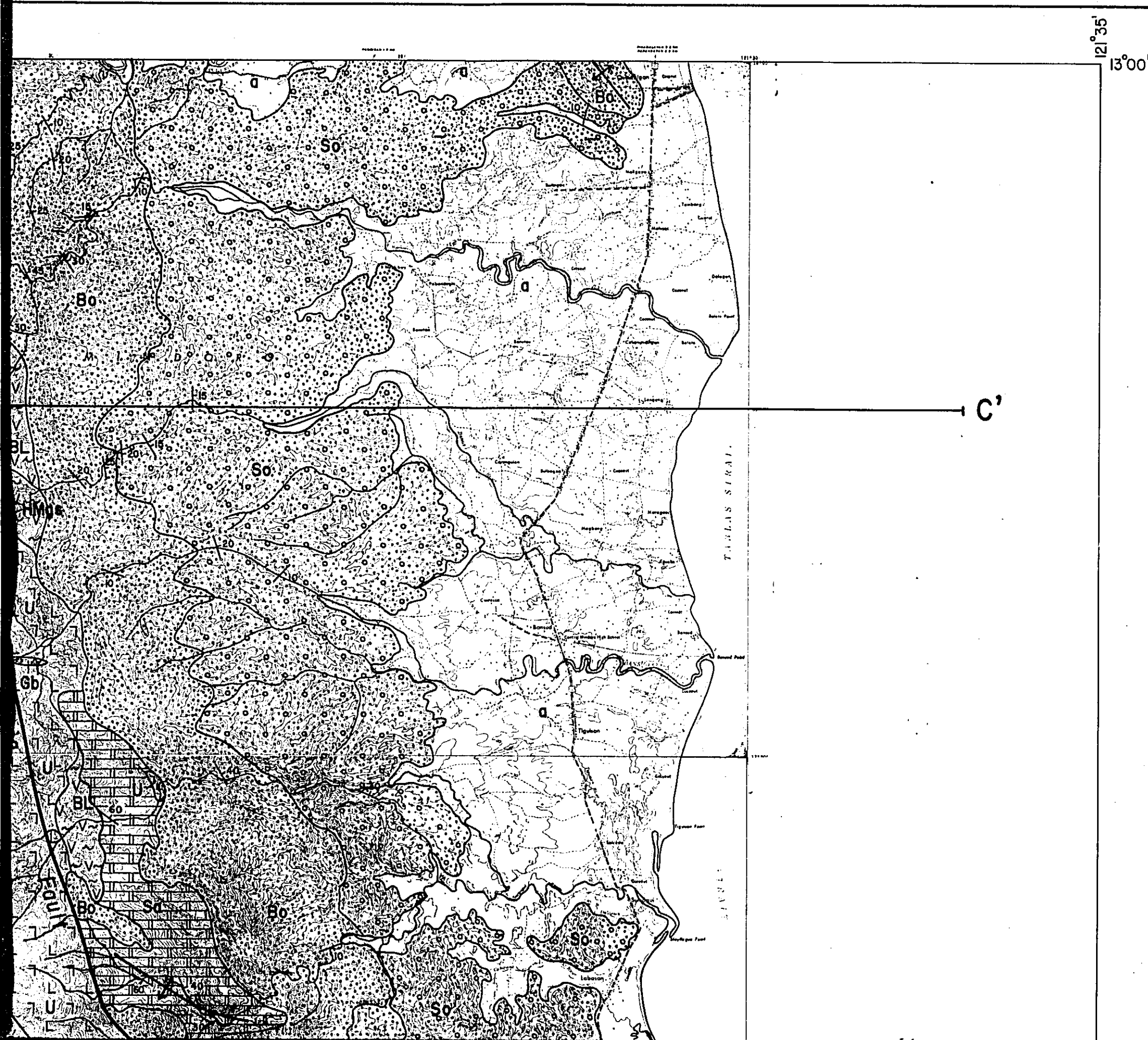
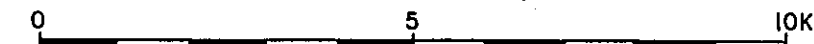
LOCATION INDEX

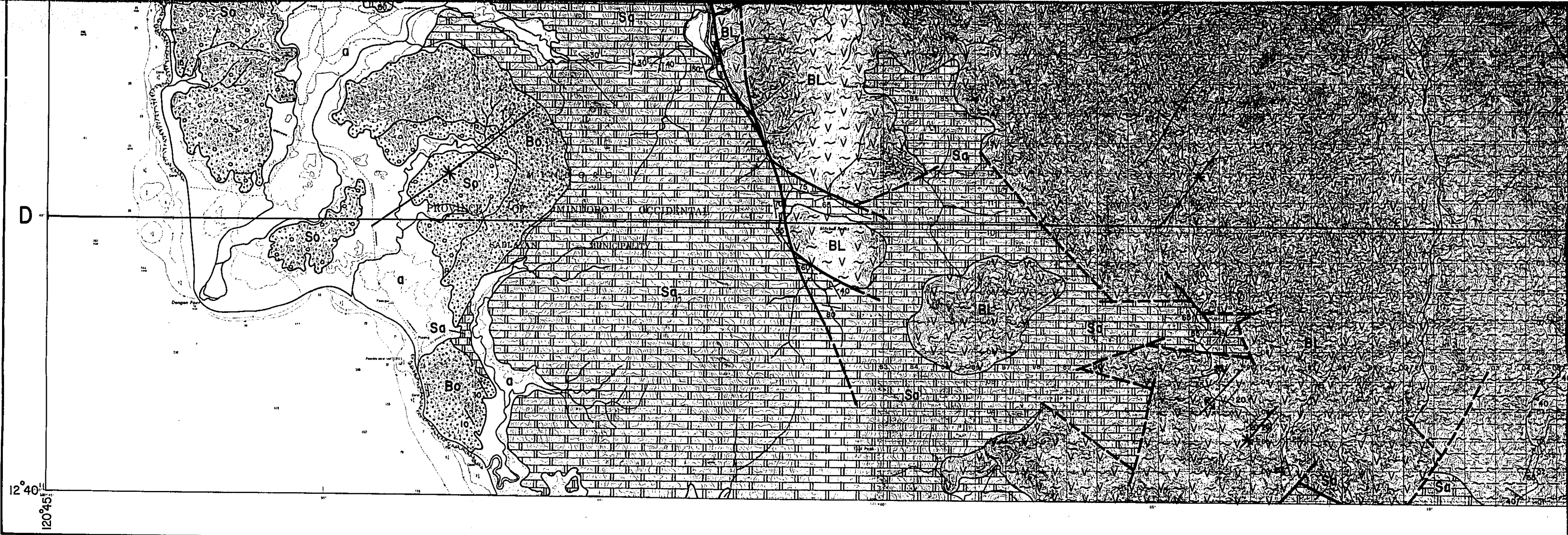


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July 1983

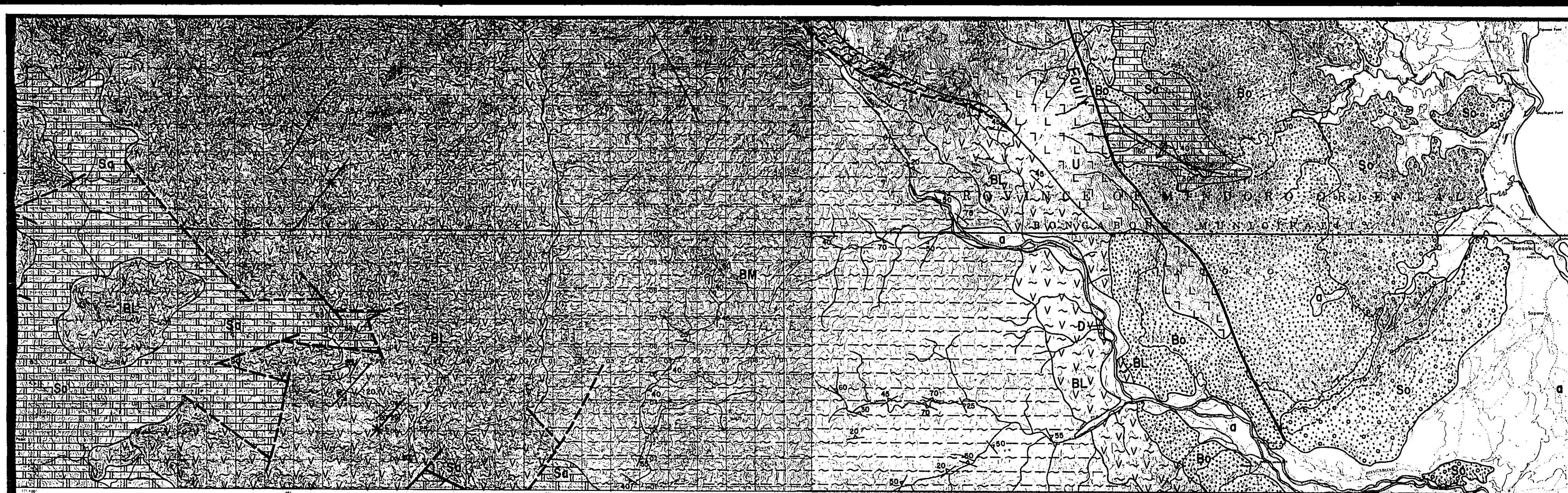
Prepared by Bishimetal Exploration Co., Ltd.

Scale 1:100,000



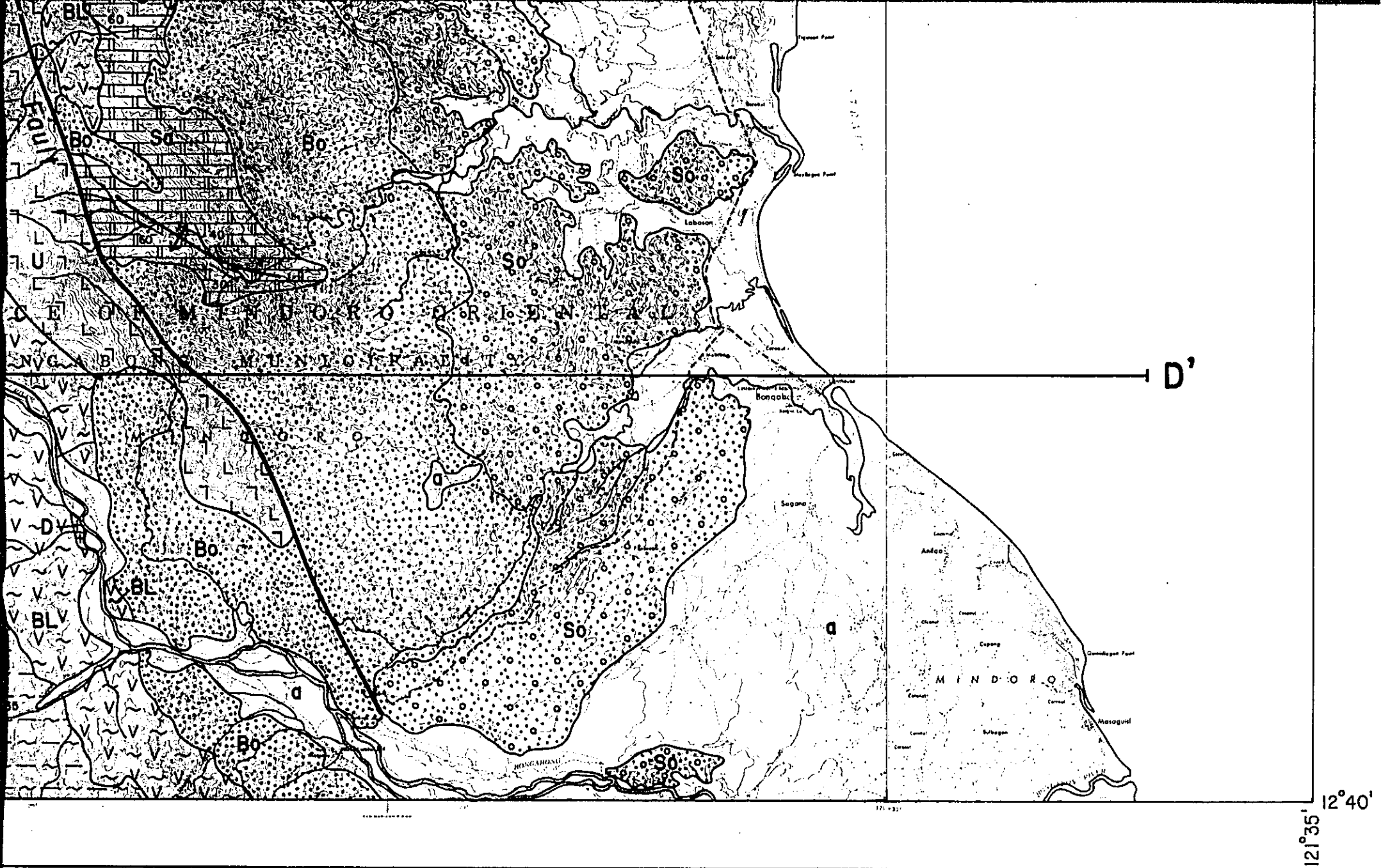
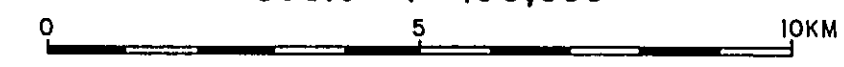






Prepared by Bishimetal Exploration Co., Ltd.

Scale 1 : 100,000



LEGEND

|                   |             |  |
|-------------------|-------------|--|
| Alluvial deposits | <b>a</b>    | silt, sand and gravel  |
|                   | <b>So</b>   | terrace deposits (sand, gravel),<br>tuffaceous silt and andesitic tuff                         |
| Socorro Group     | <b>Sol</b>  | limestone  |
|                   | <b>Sov</b>  | andesite and basalt  |
|                   | <b>Bo</b>   | conglomerate, calcareous sandstone,<br>calcareous siltstone to mudstone with<br>andesitic tuff |
| Sablayan Group    | <b>Sa</b>   | limestone, calcareous sandstone, calcareous<br>mudstone with andesite and andesitic tuff       |
|                   | <b>Sam</b>  | calcareous mudstone with limestone   |
| Mamburao Group    | <b>Ma</b>   | basalt   |
| Baco Group        | <b>BL</b>   | basalt with basaltic tuff, sandstone,<br>shale, slate to phyllite                              |
|                   | <b>BML</b>  | limestone  |
|                   | <b>BM</b>   | shale, sandstone, slate to phyllite,<br>phyllitic sandstone with basalt and basaltic tuff      |
| Halcon            | <b>HMms</b> | mica schist with green schist  |
|                   | <b>HMgs</b> | green schist with amphibolite and mica schist  |
|                   | <b>HMl</b>  | marble   |



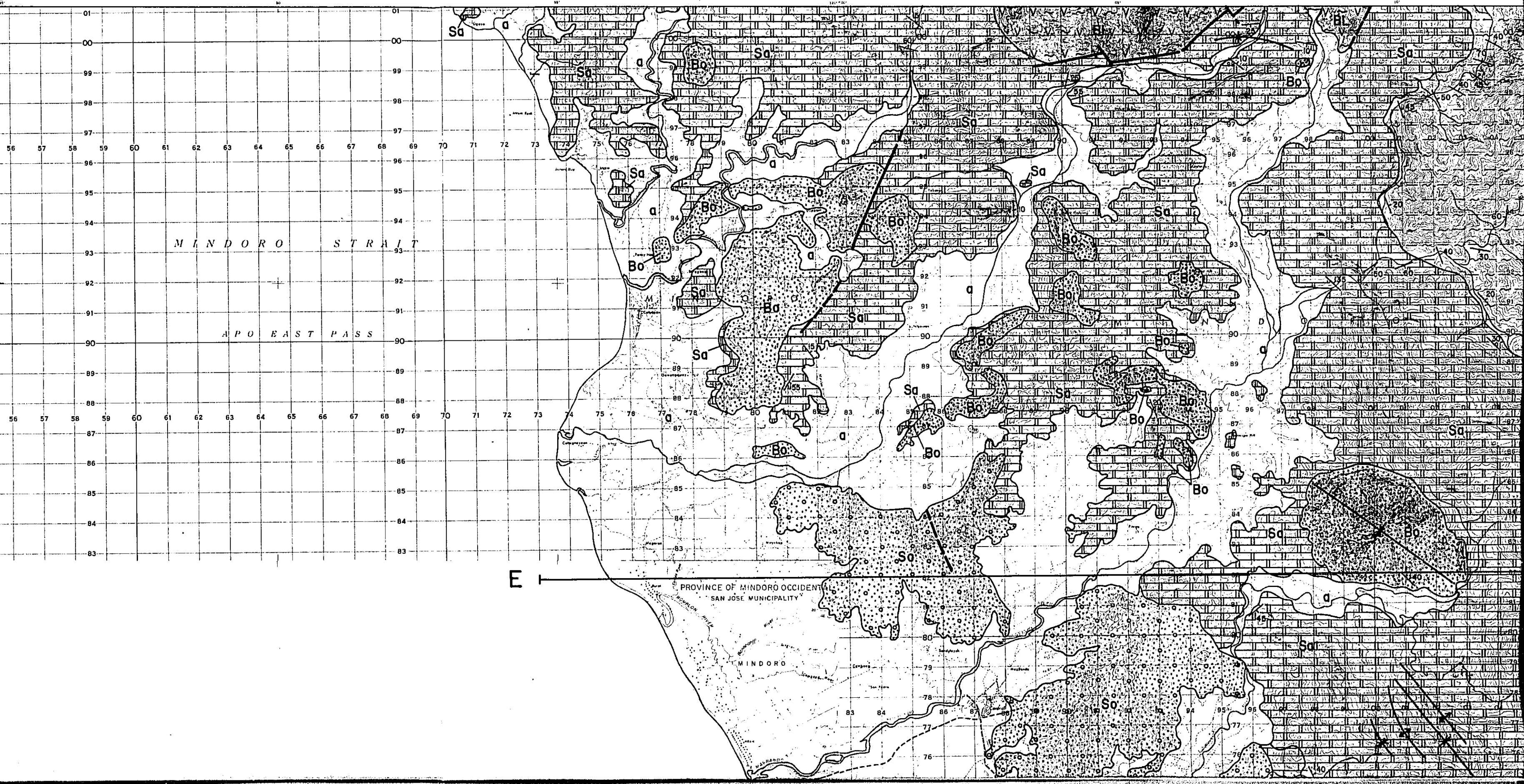
|                     |  |  |
|---------------------|--|--|
| Sablayan Group      |  | limestone, calcareous sandstone, calcareous mudstone with andesite and andesitic tuff  |
|                     |  | calcareous mudstone with limestone   |
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| Halcon Metamorphics |  | mica schist with green schist  |
|                     |  | green schist with amphibolite and mica schist  |
|                     |  | marble   |
|                     |  | gneiss   |
|                     |  | metagabbro   |

**Intrusive Rocks**

|                         |  |
|-------------------------|--|
| Ultramafic rocks        |  |
| Gabbro                  |  |
| Granodiorite to diorite |  |

- Anticline
- Syncline
- Fault (certain)
- Fault (inferred)
- Uncertain boundary
- $30^\circ$  Strike and dip
- $50^\circ$  Schistosity
- $70^\circ$  Overturned bed
- Jade, Ba Operating mines
- Cr, Fe, Cu Main ore deposits
- A — A' Geological profile line

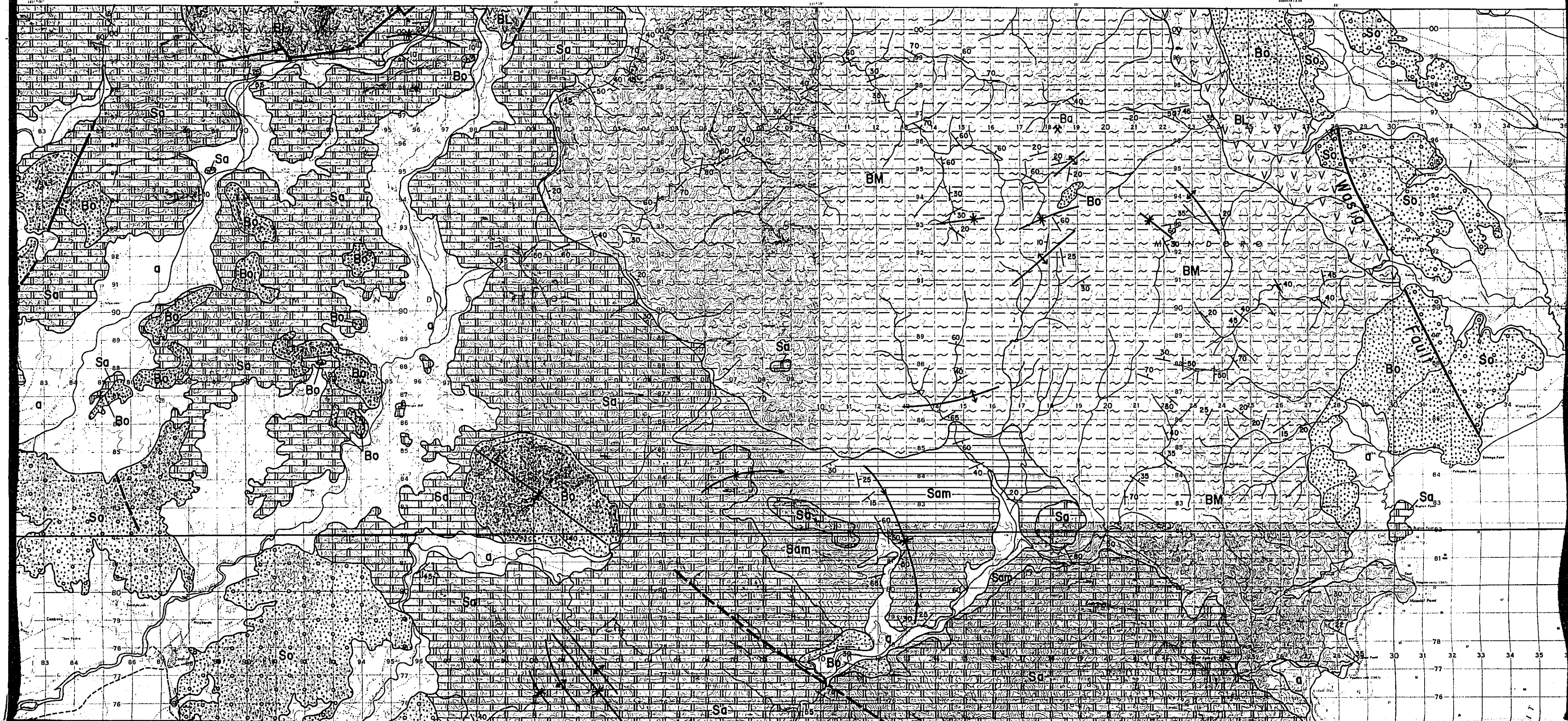
12°40' 120°45'



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PROVINCE OF MINDORO OCCIDENTAL  
SAN JOSE MUNICIPALITY

MINDORO

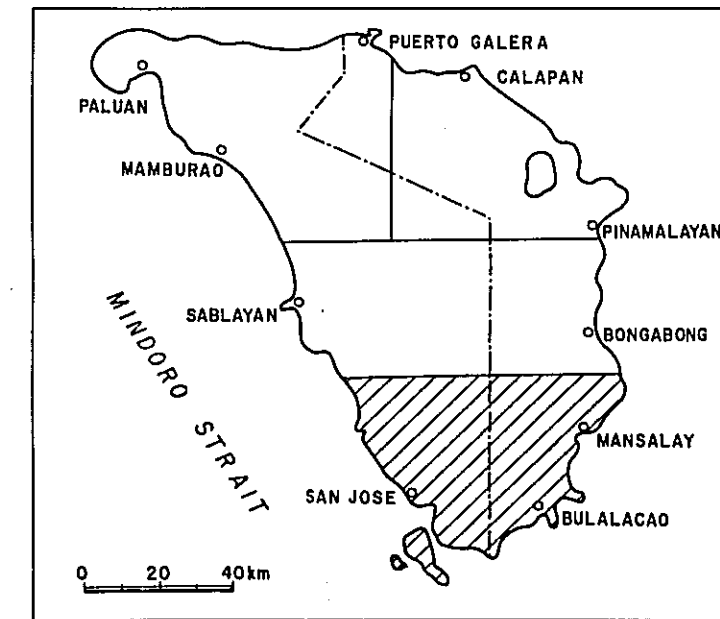




# GEOLOGICAL SURVEY OF MINDORO ISLAND, PHILIPPINES (PHASE II)

## Geological Map

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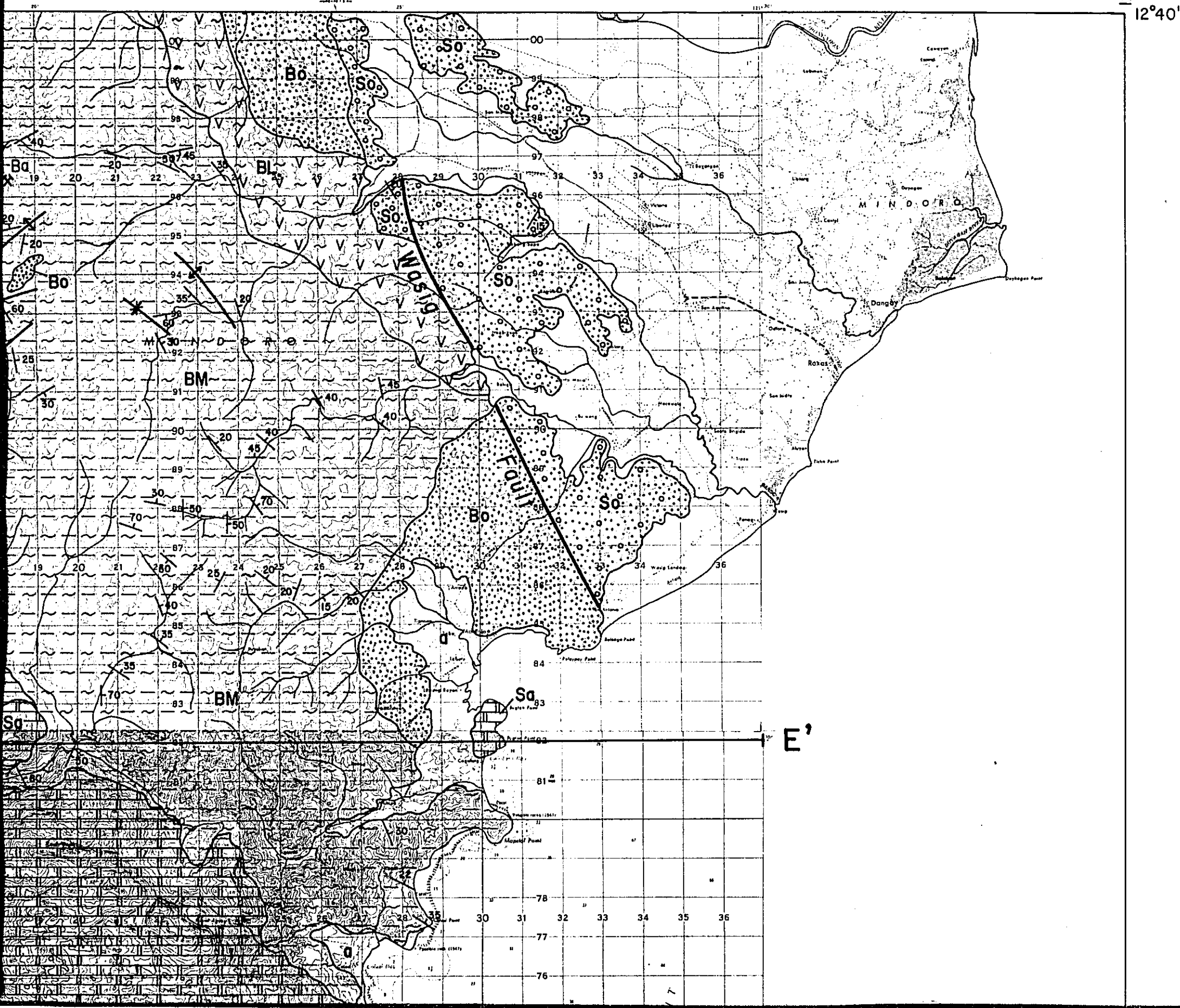
JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
July 1983

Prepared by Bishimetal Exploration Co., Ltd.

Scale 1 : 100,000



12°35'  
12°40'



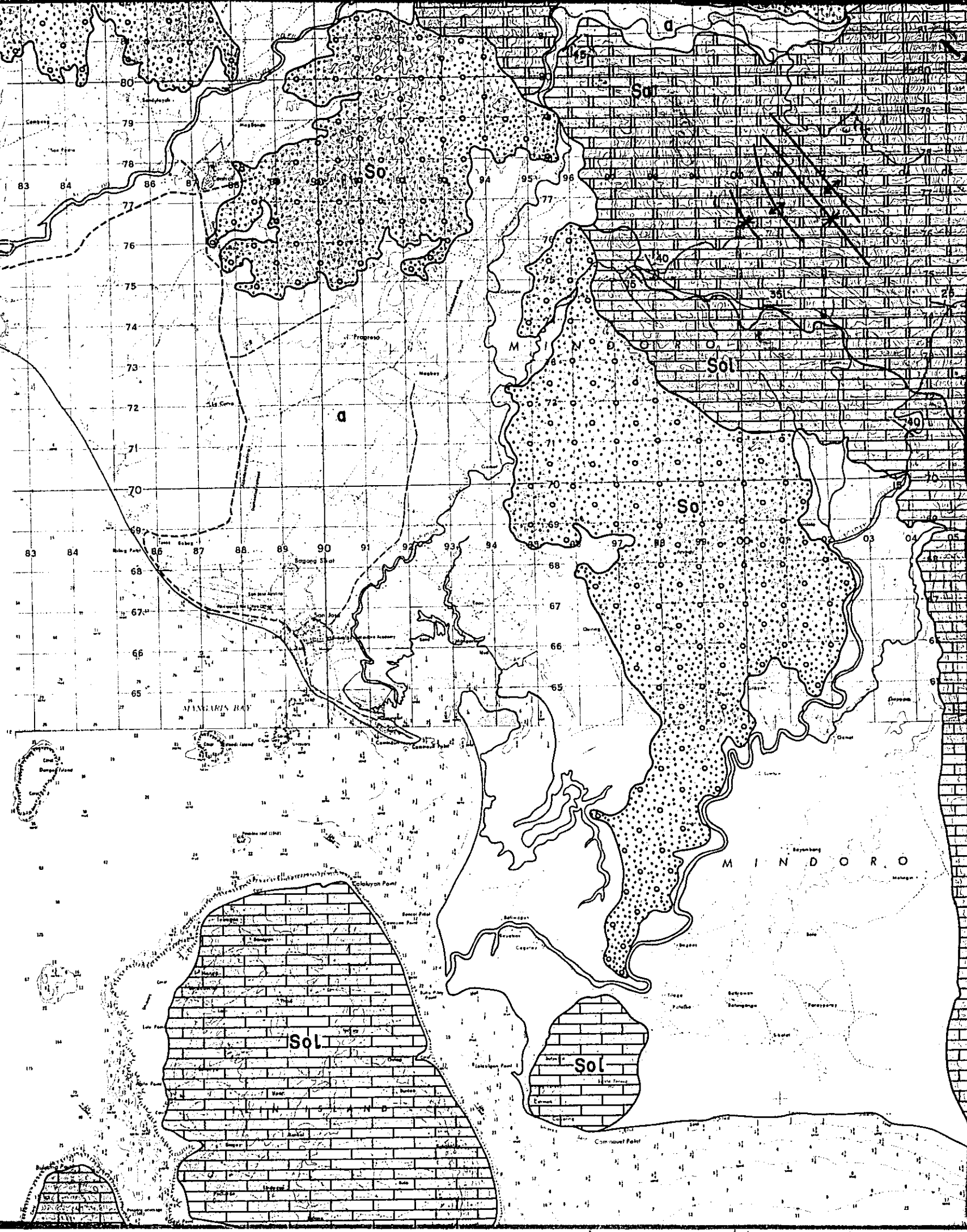


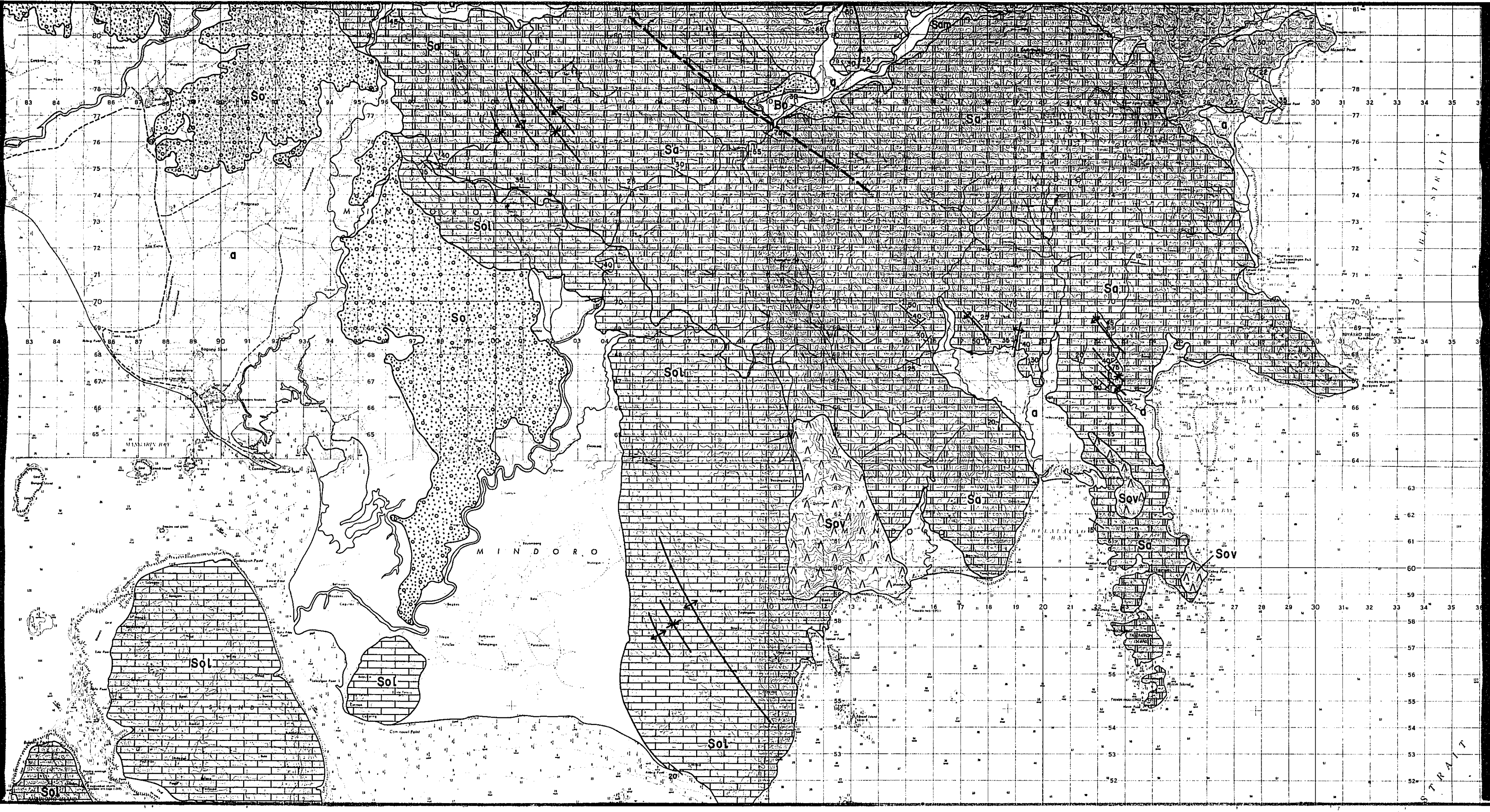
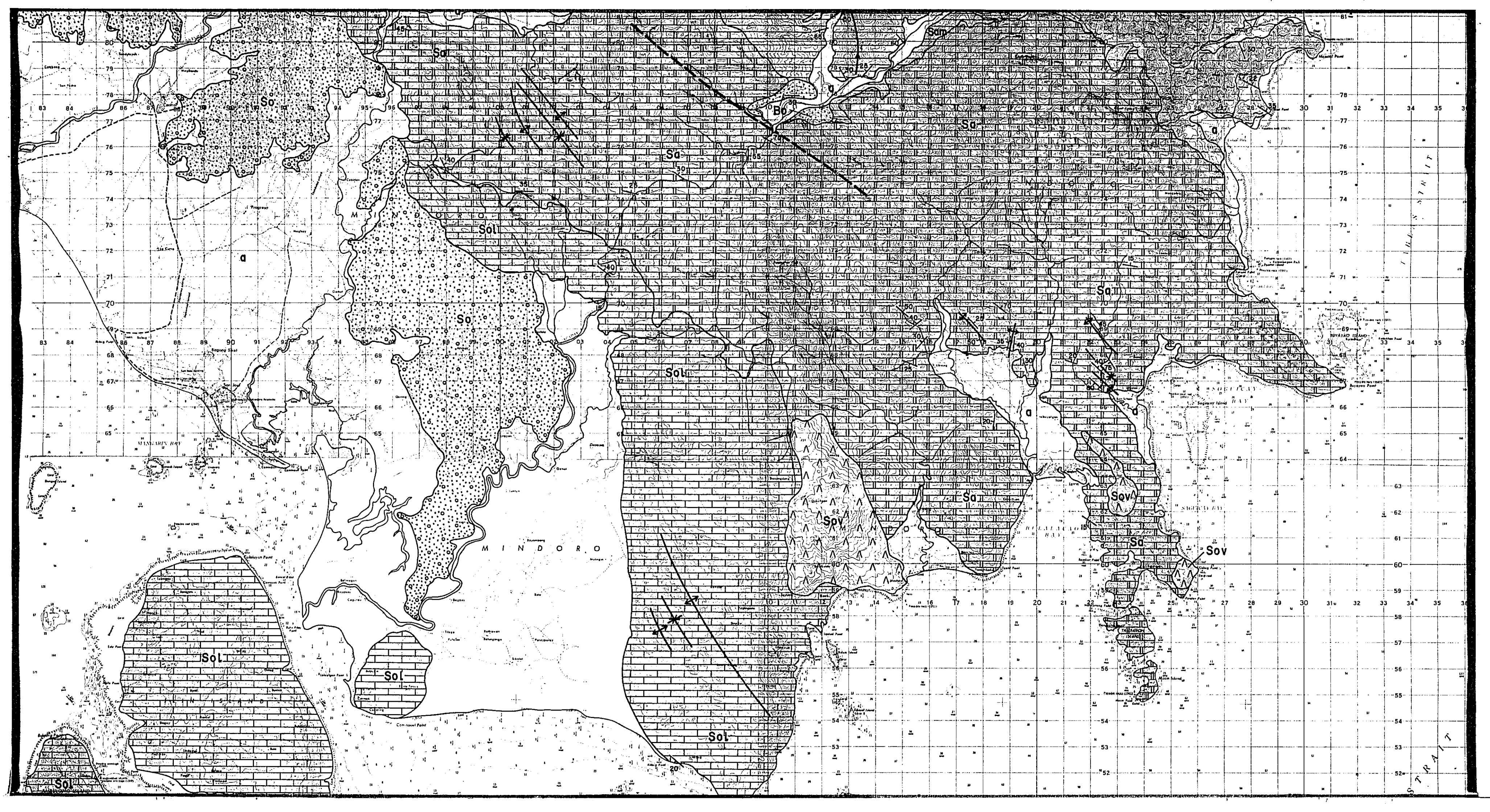
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PROVINCE OF MINDORO OCCIDENTAL  
SAN JOSE MUNICIPALITY

MINDORO

MINDORO





PHILIPPINE STRAIT

PHILIPPINE STRAIT



JAPAN INTERNATIONAL COOPERATION AGENCY  
 METAL MINING AGENCY OF JAPAN  
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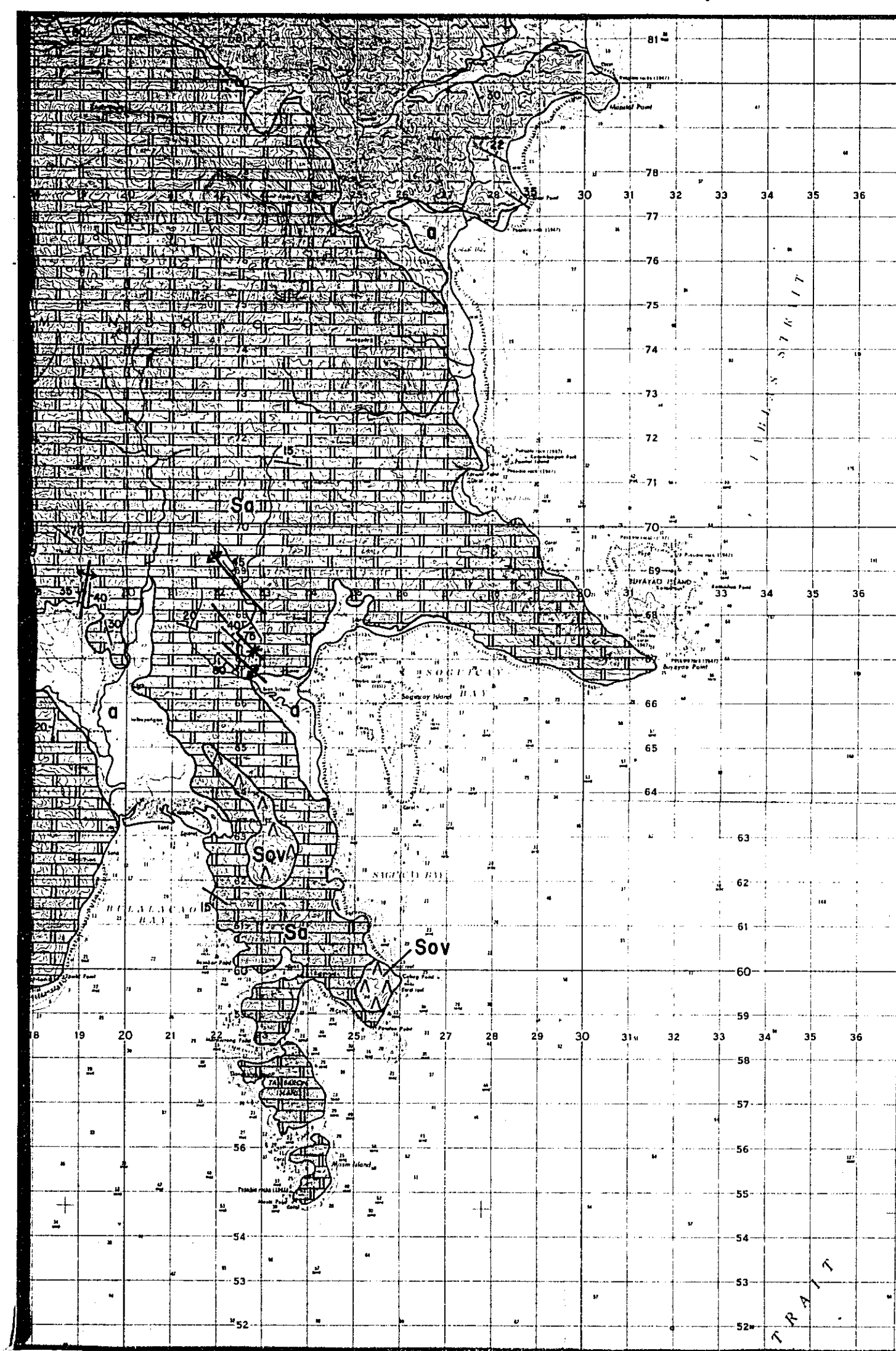
Prepared by Bishimetal Exploration Co., Ltd.

Scale 1:100,000



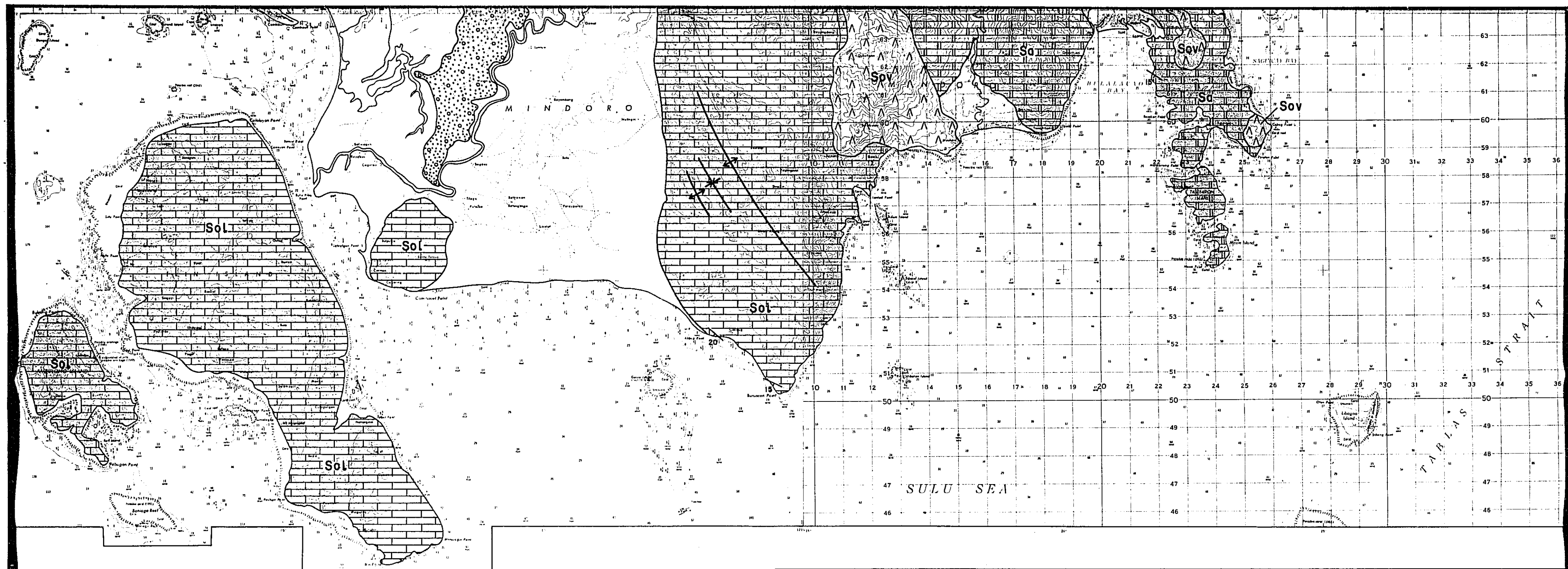
LEGEND

|                   |             |  |
|-------------------|-------------|--|
| Alluvial deposits | <b>a</b>    | silt, sand and gravel  |
|                   | <b>So</b>   | terrace deposits (sand, gravel),<br>tuffaceous silt and andesitic tuff                         |
| Socorro Group     | <b>Sol</b>  | limestone  |
|                   | <b>Sov</b>  | andesite and basalt  |
| Bongabong Group   | <b>Bo</b>   | conglomerate, calcareous sandstone,<br>calcareous siltstone to mudstone with<br>andesitic tuff |
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| Baco Group        | <b>BL</b>   | basalt with basaltic tuff, sandstone,<br>shale; slate to phyllite                              |
|                   | <b>BML</b>  | limestone  |
|                   | <b>BM</b>   | shale, sandstone, slate to phyllite,<br>phyllitic sandstone with basalt and basaltic tuff      |
|                   | <b>HMms</b> | mica schist with green schist  |
|                   | <b>HMgs</b> | green schist with amphibolite and mica schist  |







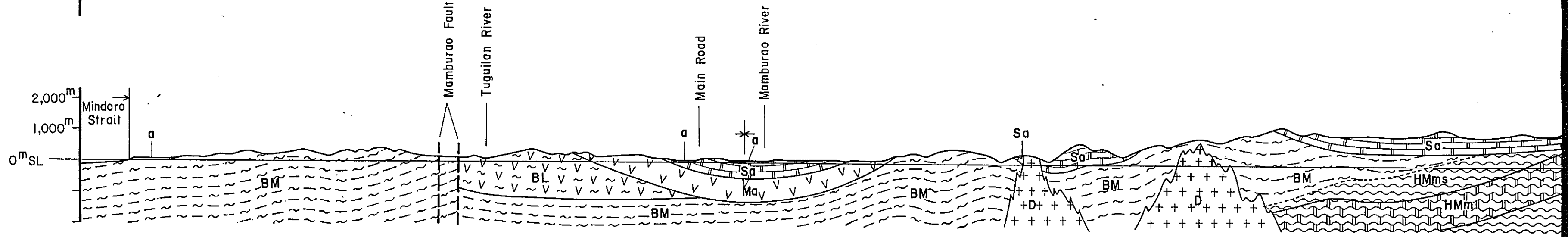




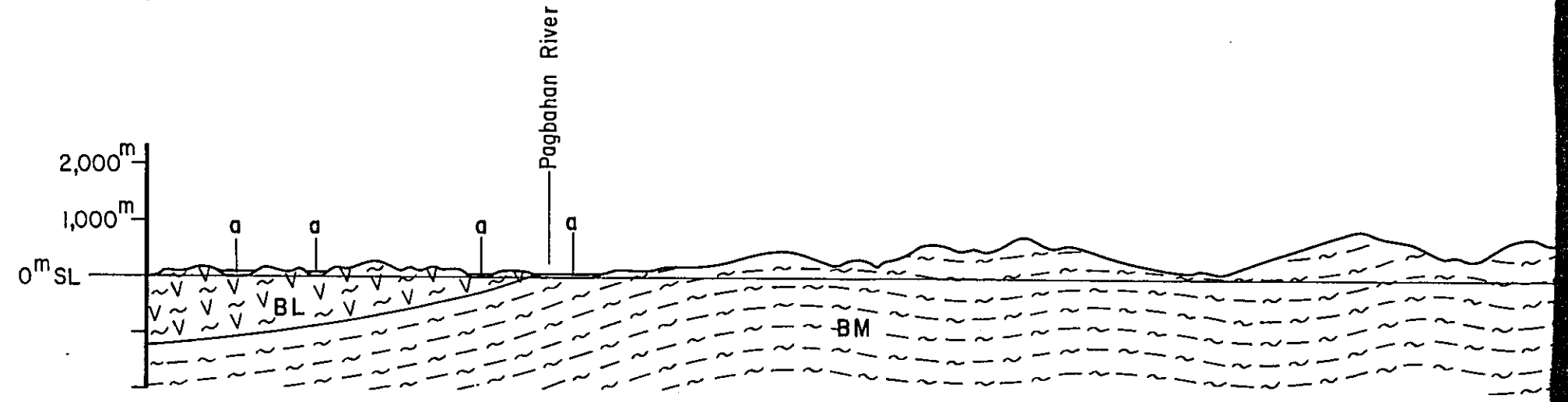


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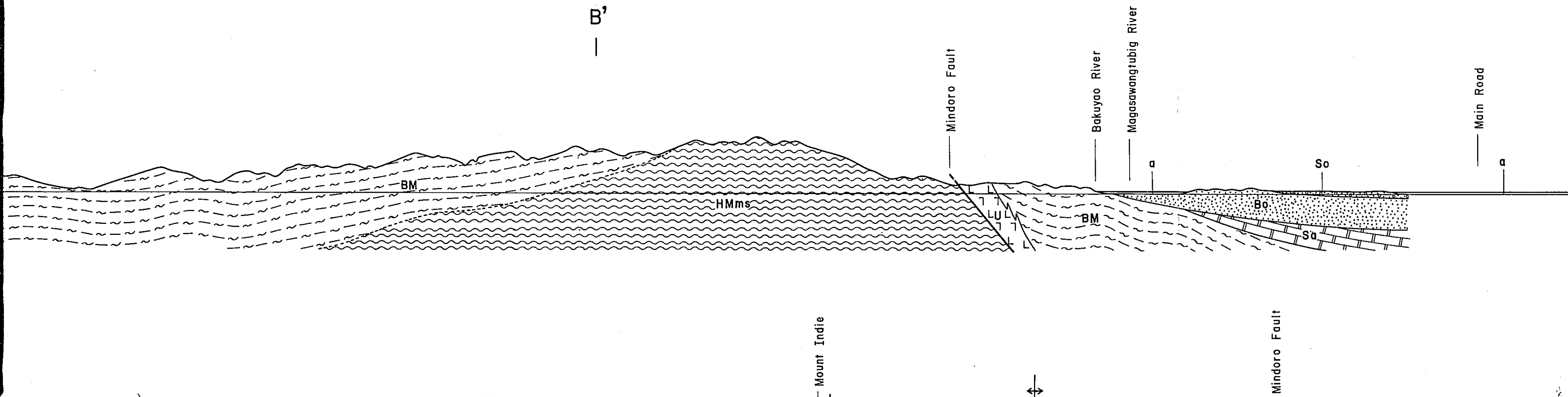
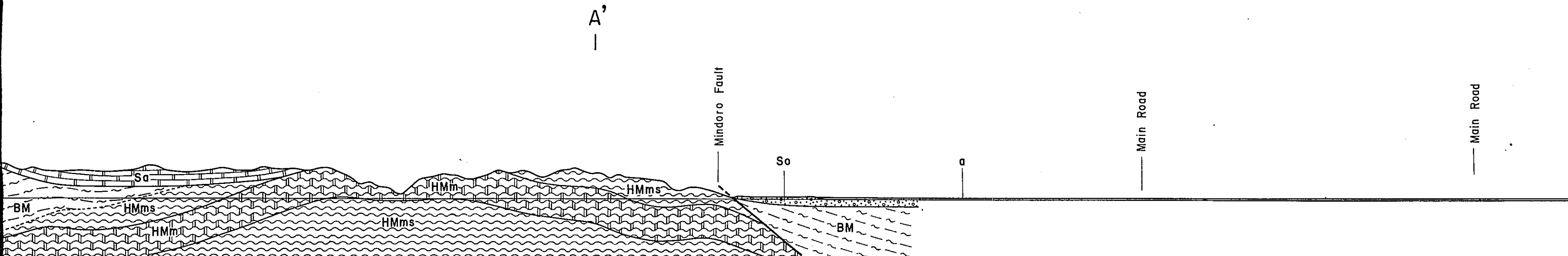
A  
|



B  
|



C  
|

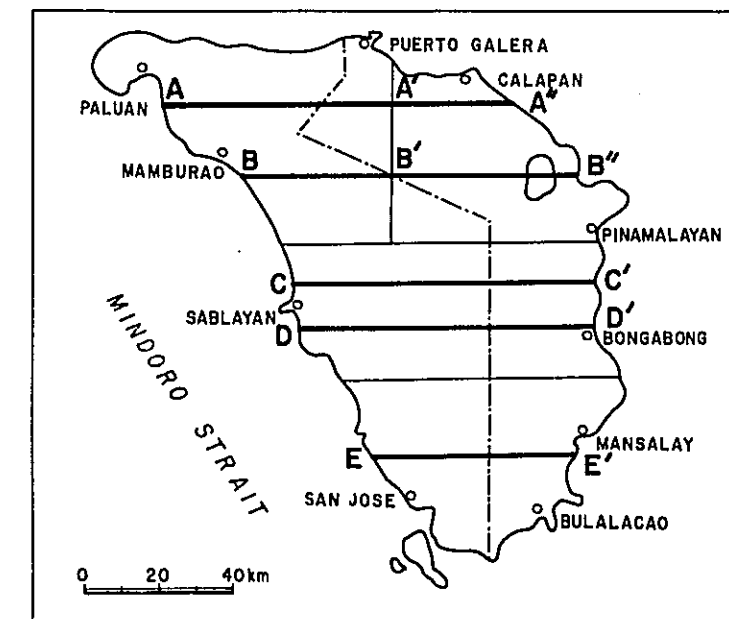




# GEOLOGICAL SURVEY OF MINDORO ISLAND, PHILIPPINES (PHASE II)

## Geological Profile

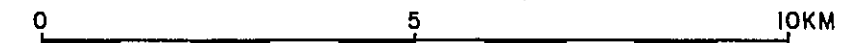
LOCATION INDEX



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Prepared by Bishimetal Exploration Co., Ltd.

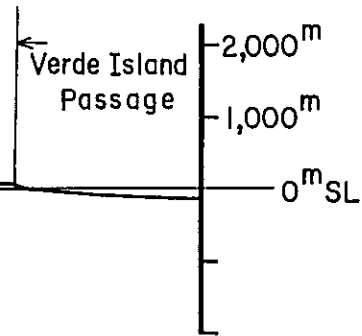
Scale 1 : 100,000



E

A''  
|

Main Road



Main Road

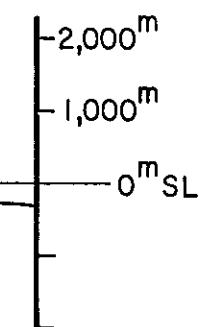
a

Lake Naujan

Sov

Pola Bay

B''  
|

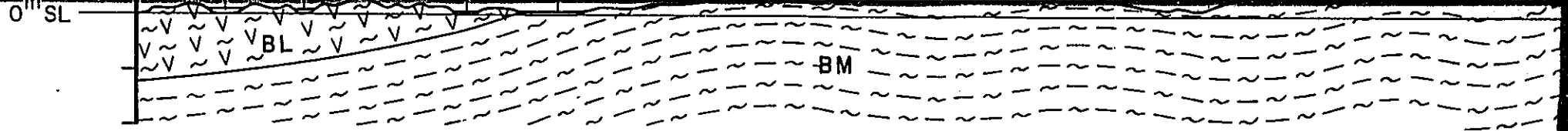


C'  
|

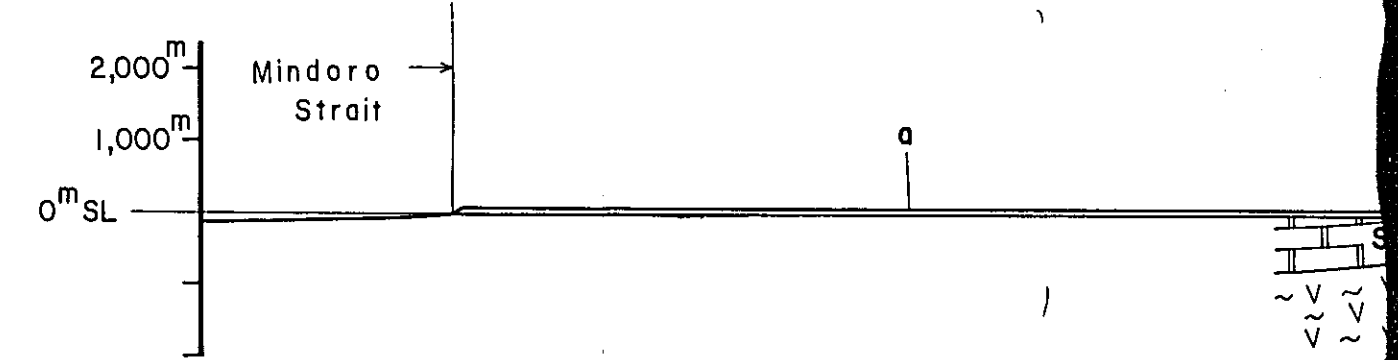
us River

us River

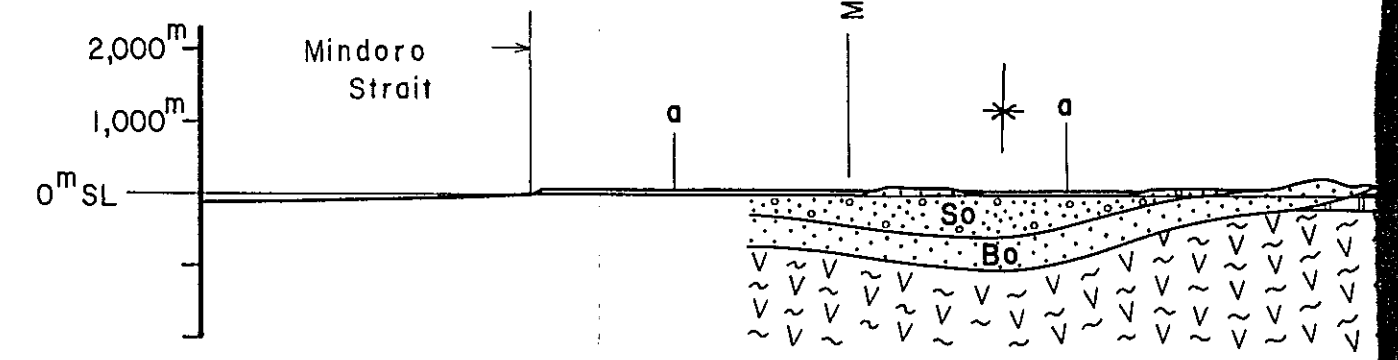
n Road



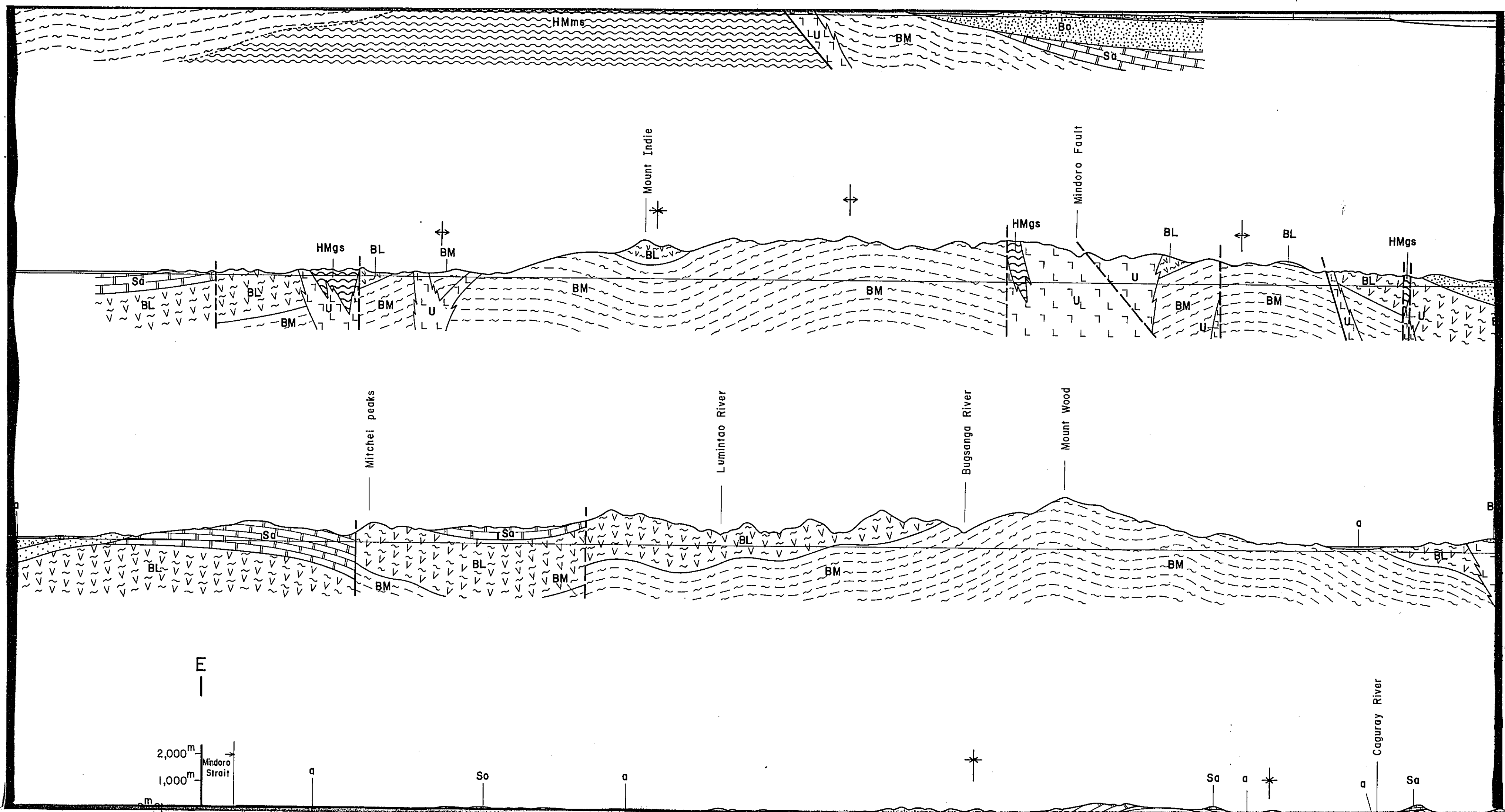
C  
|



D  
|



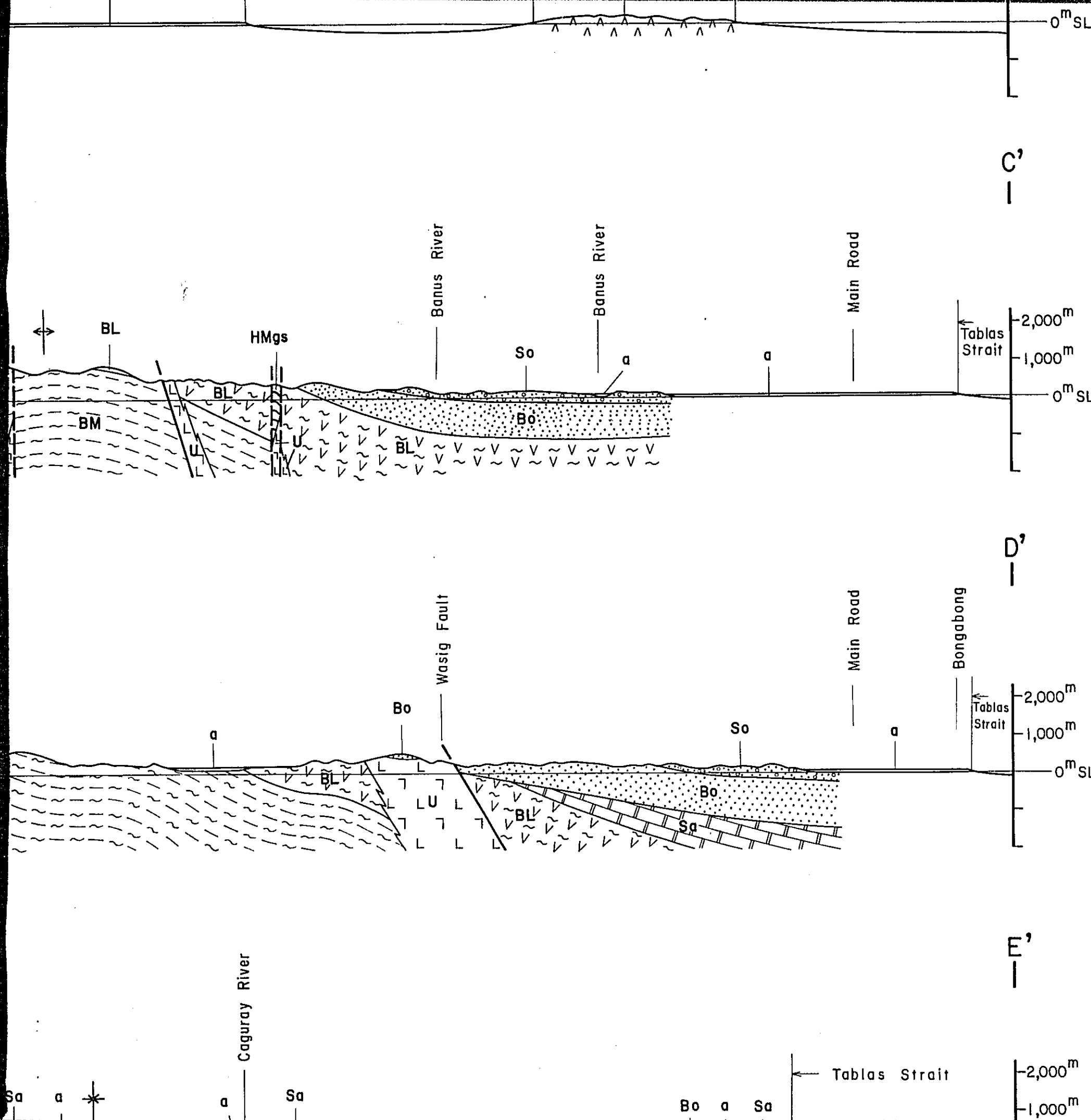




JAPAN INTERNATIONAL COOPERATION AGENCY  
 METAL MINING AGENCY OF JAPAN  
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Prepared by Bishimetal Exploration Co., Ltd.

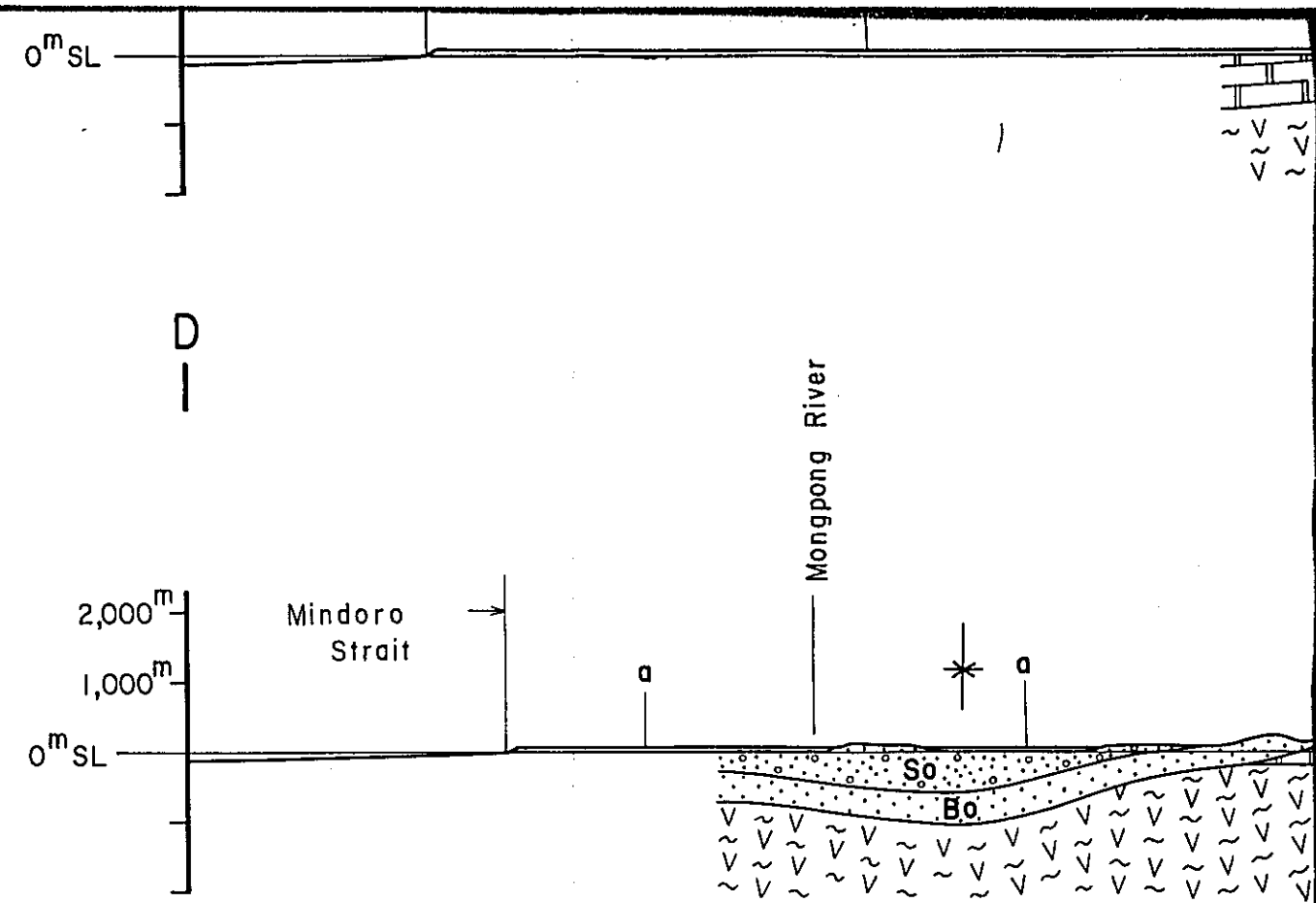
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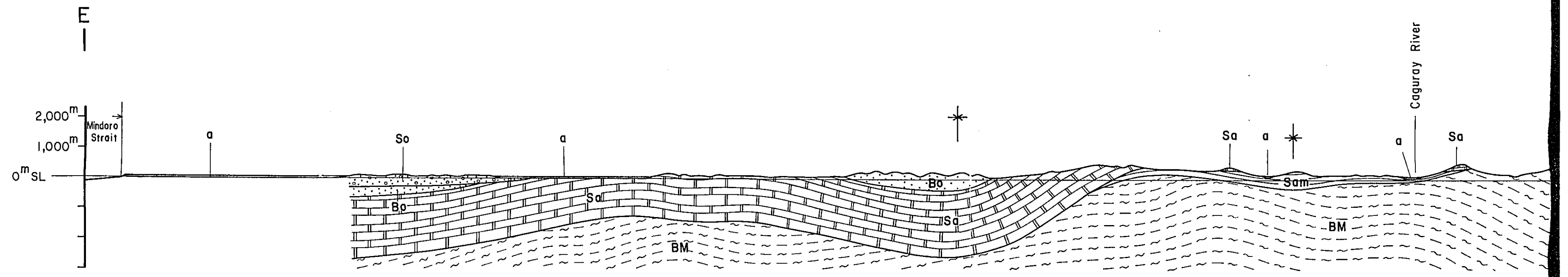
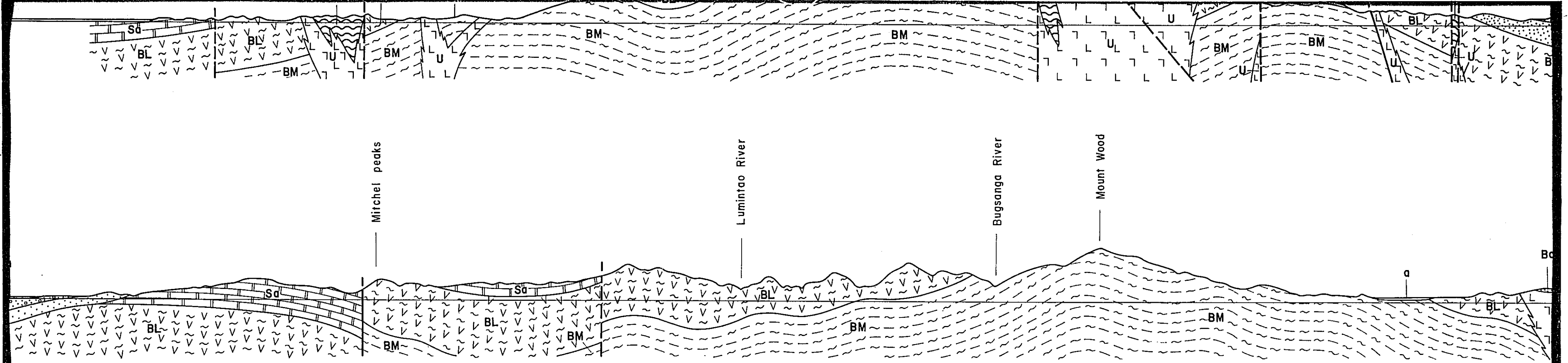


LEGEND

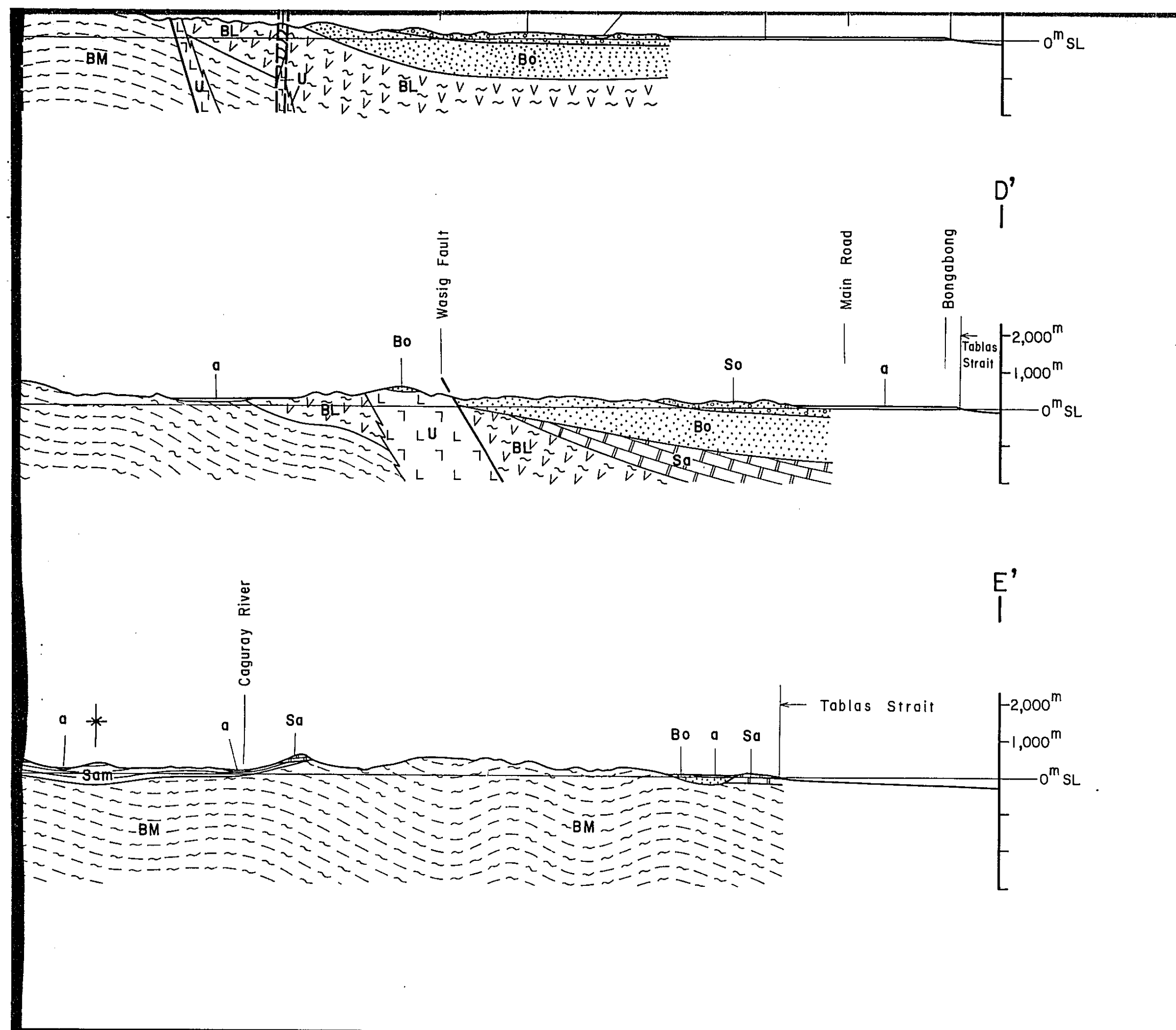
- |                   |      |  |
|-------------------|------|--|
| Alluvial deposits | a    | silt, sand and gravel  |
| Socorro Group     | So   | terrace deposits (sand, gravel), tuffaceous silt and andesitic tuff                      |
|                   | Sol  | limestone  |
|                   | Sov  | andesite and basalt  |
| Bongabong Group   | Bo   | conglomerate, calcareous sandstone, calcareous siltstone to mudstone with andesitic tuff |
| Sablayan Group    | Sa   | limestone, calcareous sandstone, calcareous mudstone with andesite and andesitic tuff    |
|                   | Sam  | calcareous mudstone with limestone   |
| Mamburao Group    | Ma   | basalt   |
| Baco Group        | BL   | basalt with basaltic tuff, sandstone, shale, slate to phyllite                           |
|                   | BML  | limestone  |
|                   | BM   | shale, sandstone, slate to phyllite, phyllitic sandstone with basalt and basaltic tuff   |
|                   | HMms | mica schist with green schist  |
|                   | HMgs | green schist with amphibolite and mica schist  |











### LEGEND

- |                         |             |  |
|-------------------------|-------------|--|
| Alluvial deposits       | <b>a</b>    | silt, sand and gravel  |
| Socorro Group           | <b>So</b>   | terrace deposits (sand, gravel), tuffaceous silt and andesitic tuff                      |
|                         | <b>Sol</b>  | limestone  |
|                         | <b>Sov</b>  | andesite and basalt  |
| Bongabong Group         | <b>Bo</b>   | conglomerate, calcareous sandstone, calcareous siltstone to mudstone with andesitic tuff |
| Sablayan Group          | <b>Sa</b>   | limestone, calcareous sandstone, calcareous mudstone with andesite and andesitic tuff    |
|                         | <b>Sam</b>  | calcareous mudstone with limestone   |
| Mamburao Group          | <b>Ma</b>   | basalt   |
| Baco Group              | <b>BL</b>   | basalt with basaltic tuff, sandstone, shale; slate to phyllite                           |
|                         | <b>BML</b>  | limestone  |
|                         | <b>BM</b>   | shale, sandstone, slate to phyllite, phyllitic sandstone with basalt and basaltic tuff   |
| Halcon Metamorphics     | <b>HMms</b> | mica schist with green schist  |
|                         | <b>HMgs</b> | green schist with amphibolite and mica schist  |
|                         | <b>HMm</b>  | marble   |
|                         | <b>HMG</b>  | gneiss   |
|                         | <b>HMb</b>  | metagabbro   |
| <b>Intrusive Rocks</b>  |             |  |
| Ultramafic rocks        | <b>U</b>    |  |
| Gabbro                  | <b>Gb</b>   |  |
| Granodiorite to diorite | <b>D</b>    |  |