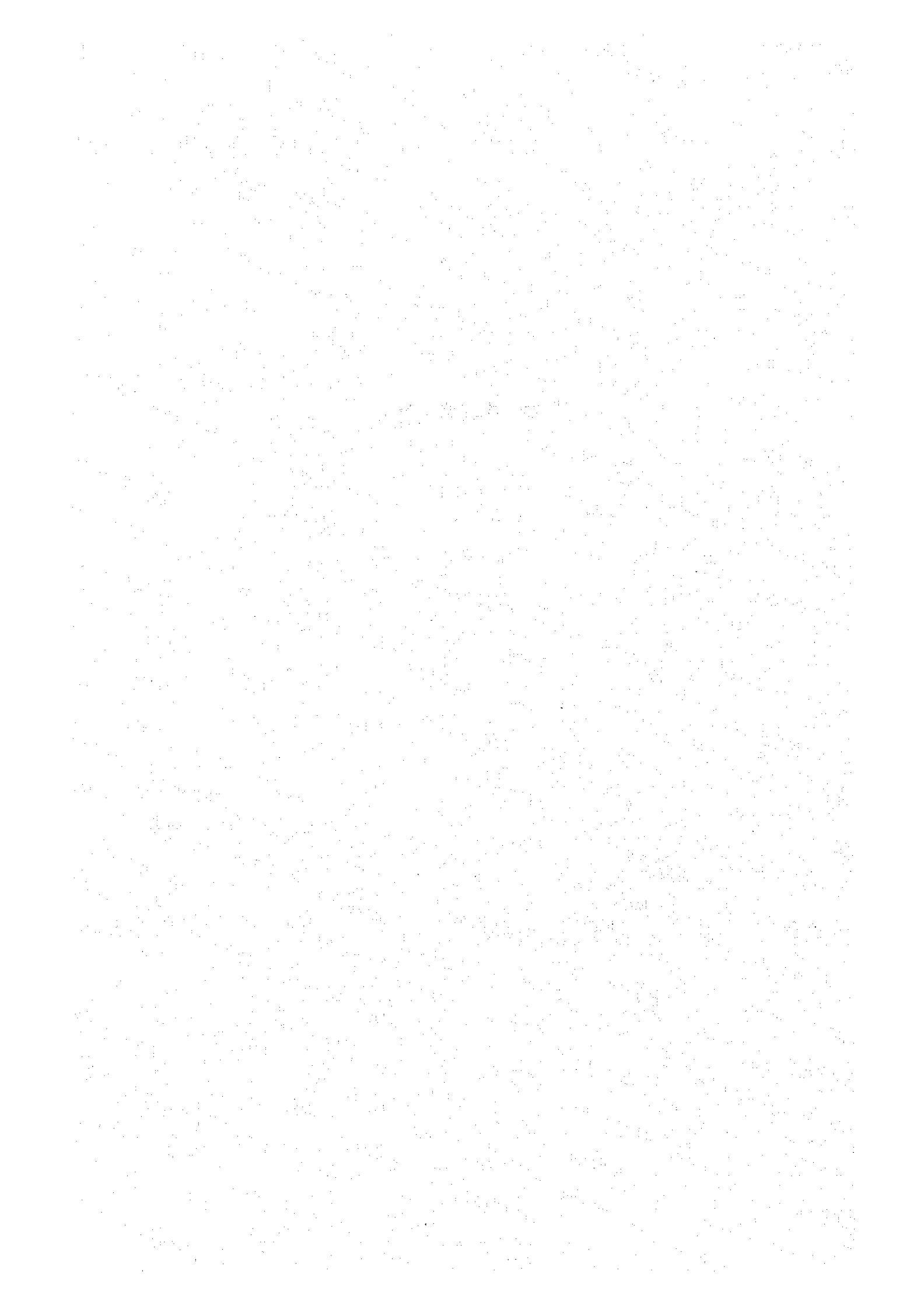


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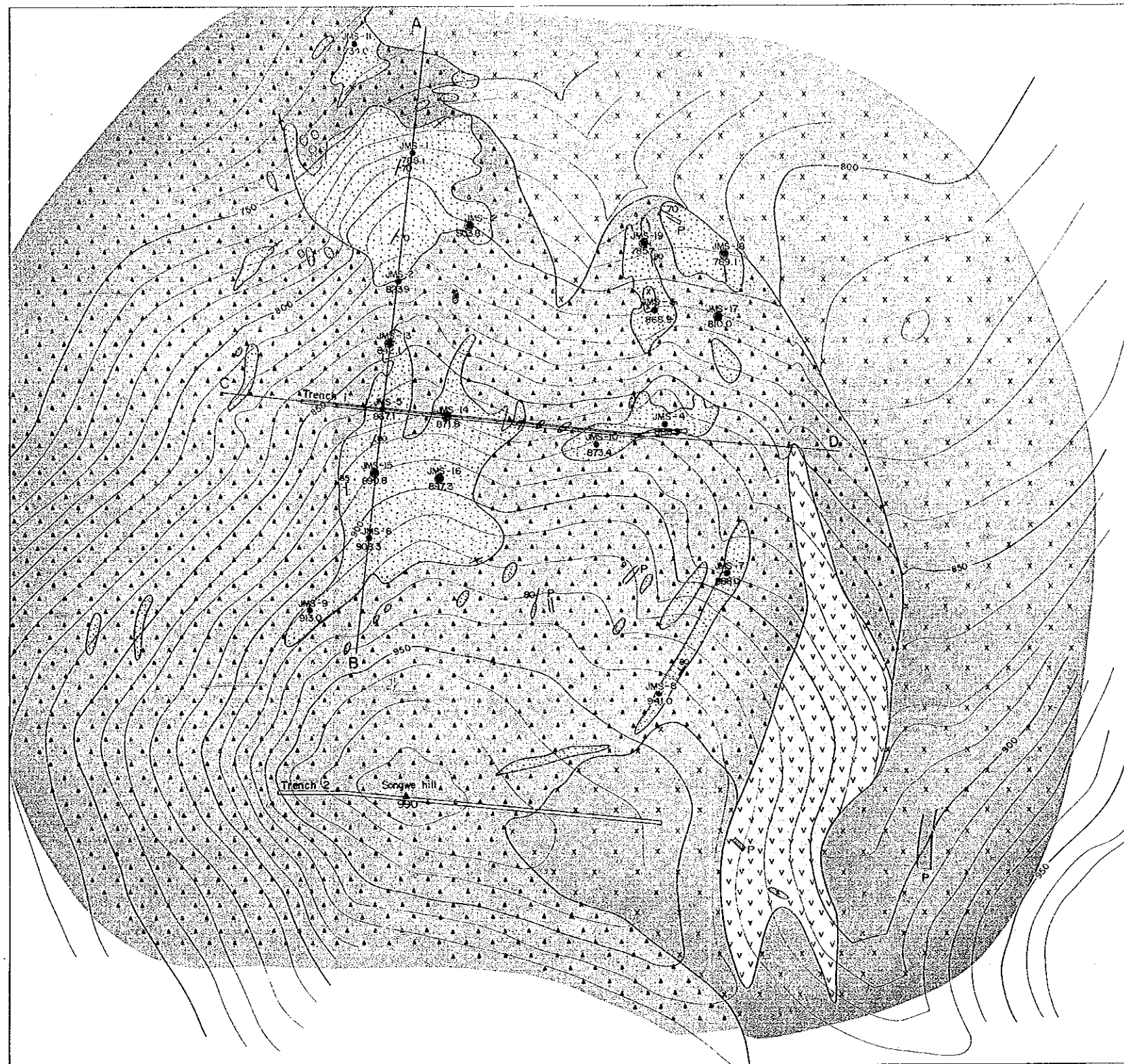
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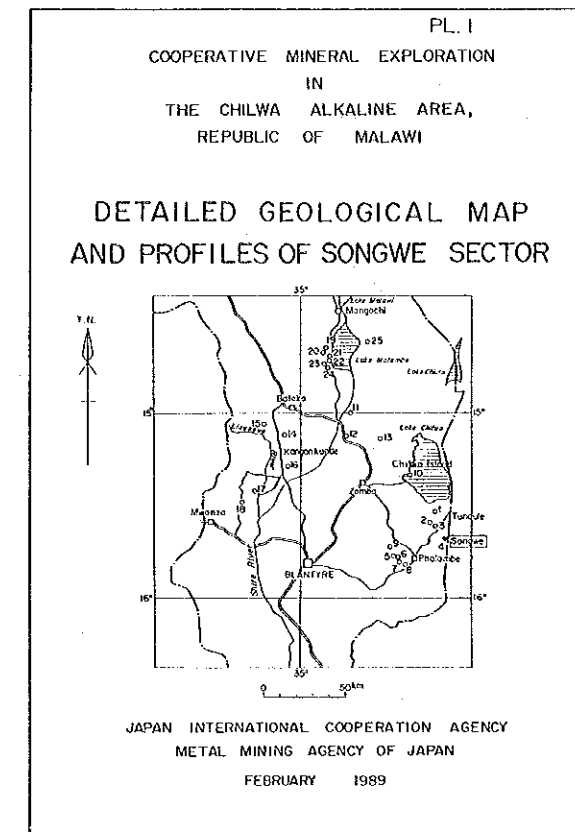
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This map accompanies Report on the Cooperative Mineral Exploration in the Chilwa Alkaline area, Republic of Malawi (Consolidated Report), 1989.

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0m 100m 200m

Scale 1:2,000

LEGEND

- Dyke
- Carbonatite
- Agglomerate feldspathic rock
- Calc-silicate rock
- Nepheline syenite
- P : phonolite

• Drilling site (1987)

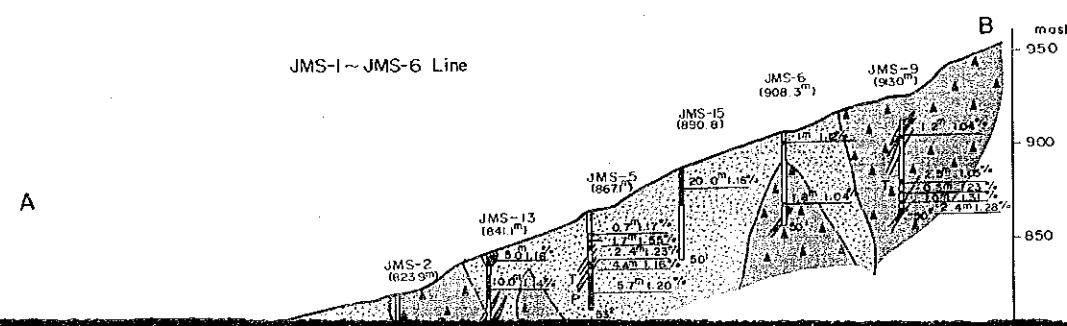
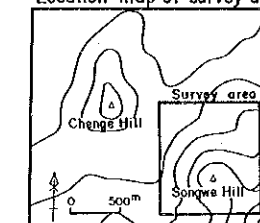
⊙ Drilling site (1988)

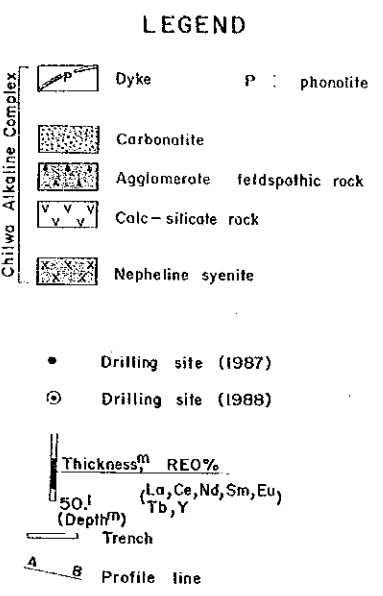
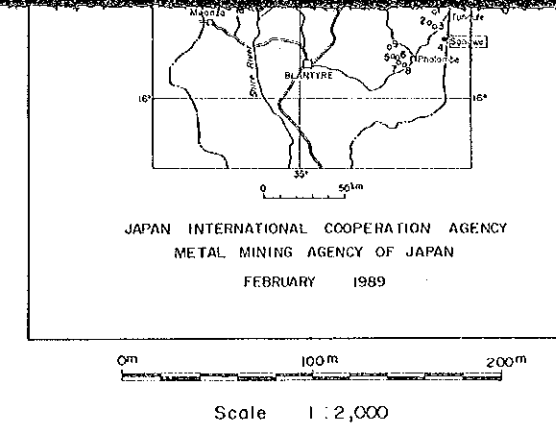
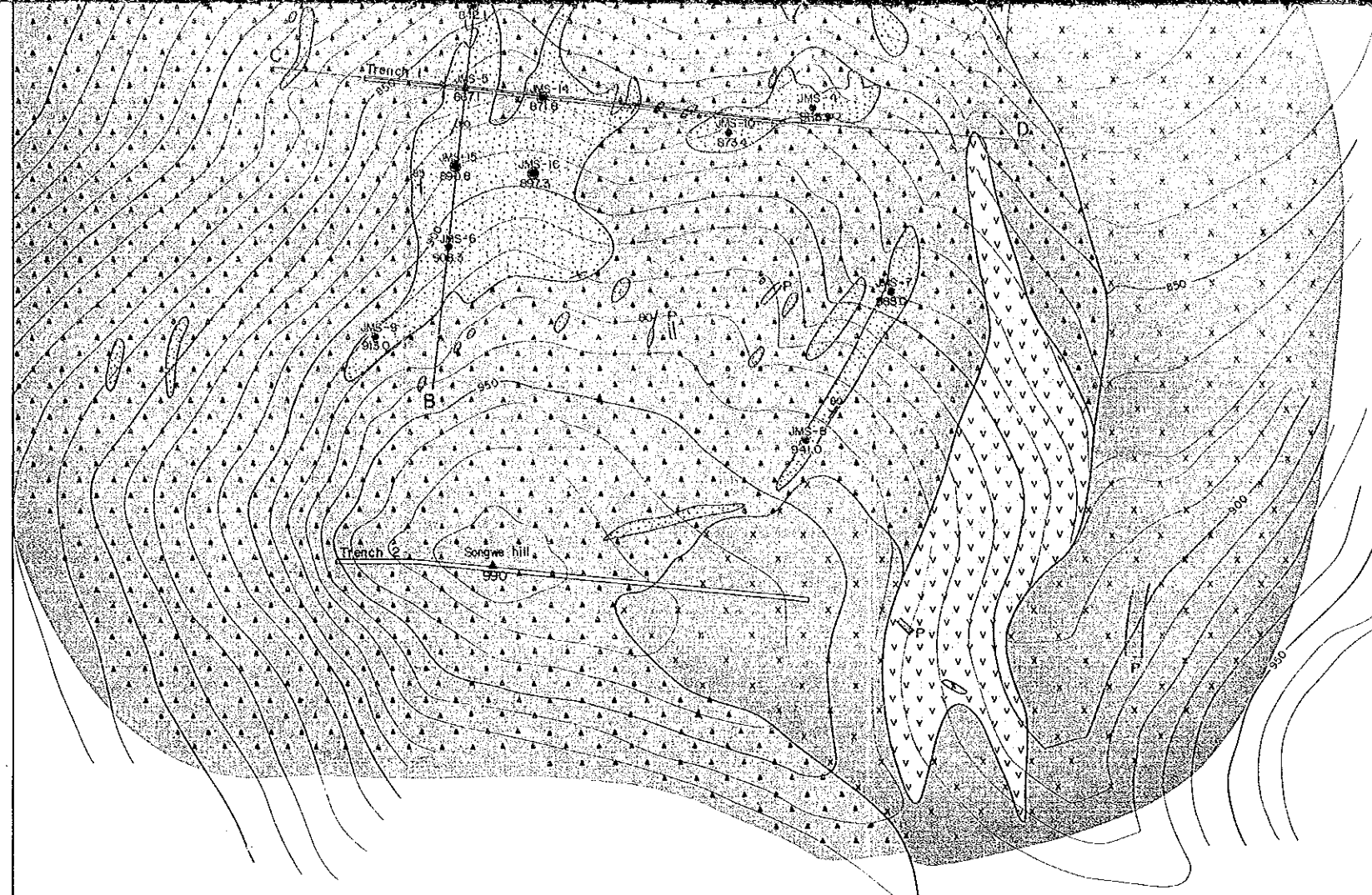
Thickness^m REO%
50! (La, Ce, Nd, Sm, Eu,
Tb, Y)
(Depth^m)

— Trench

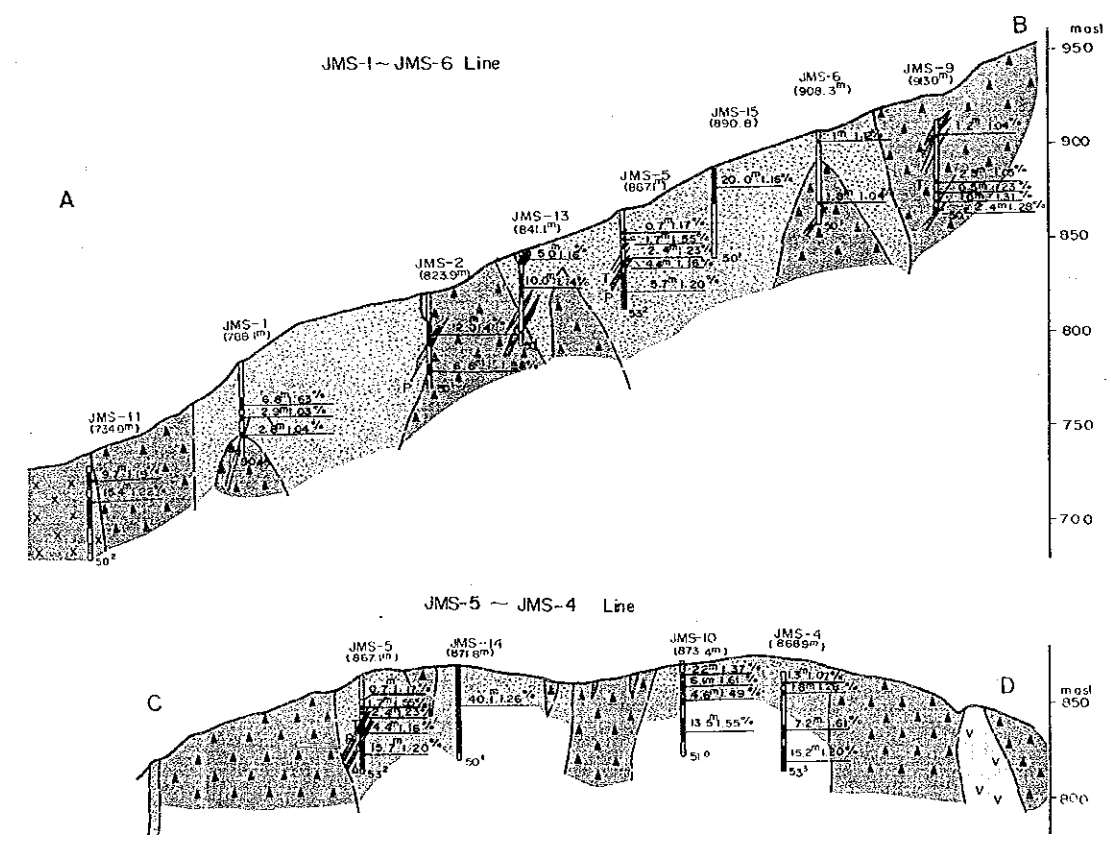
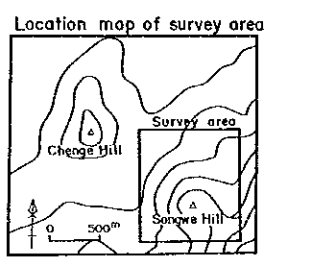
A-B Profile line

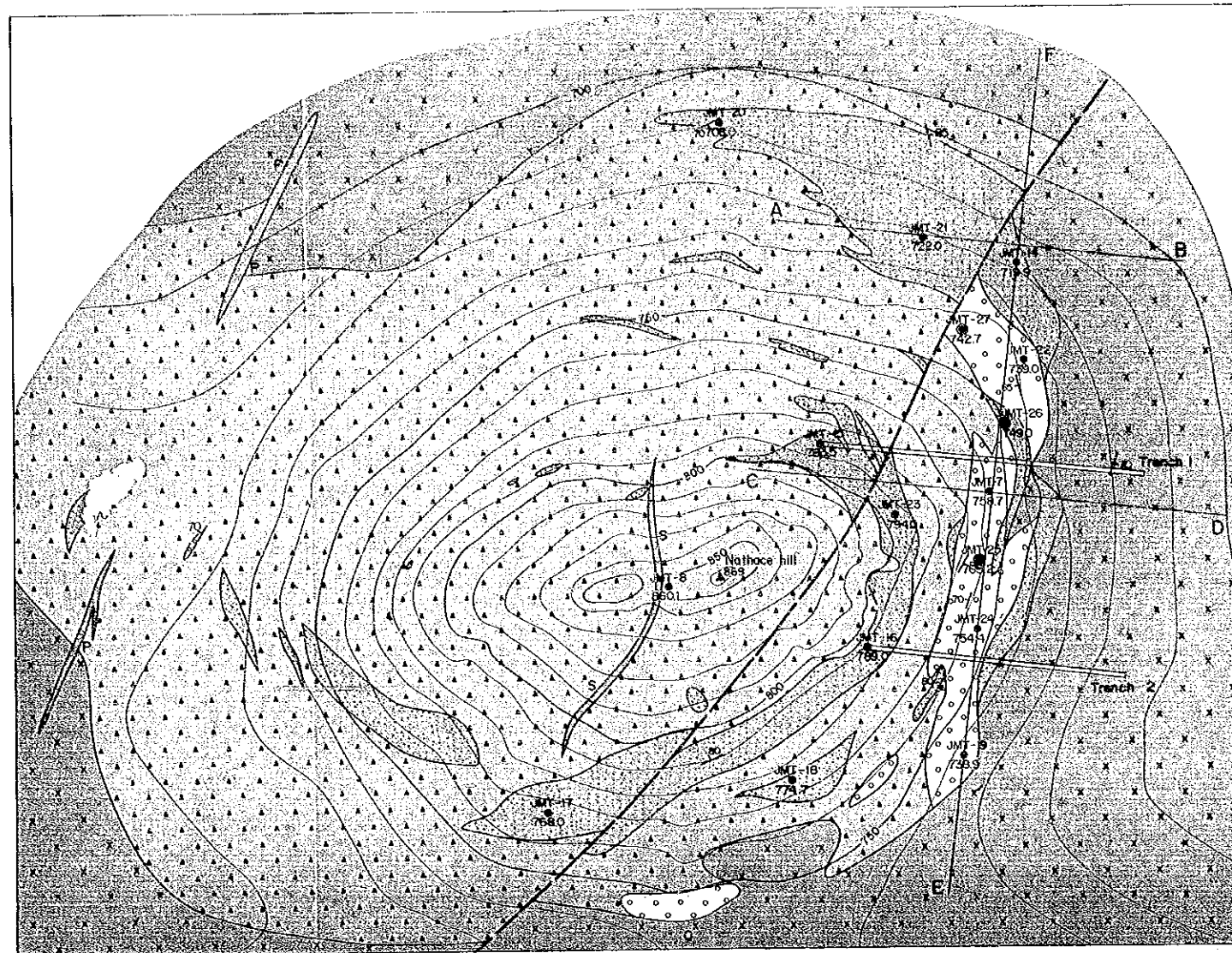
Location map of survey area





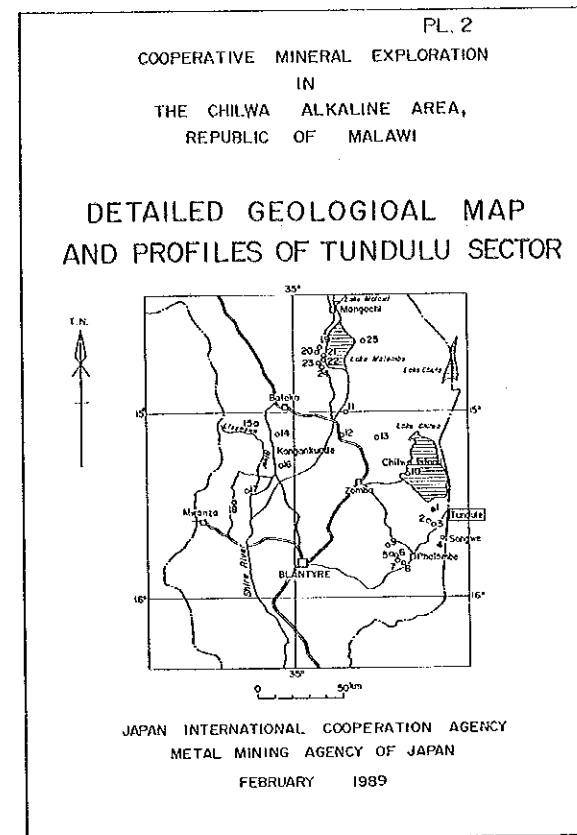
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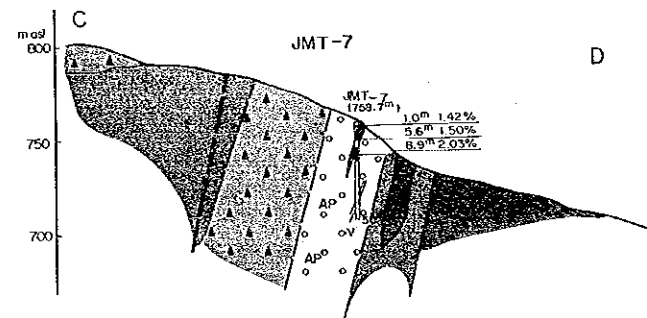
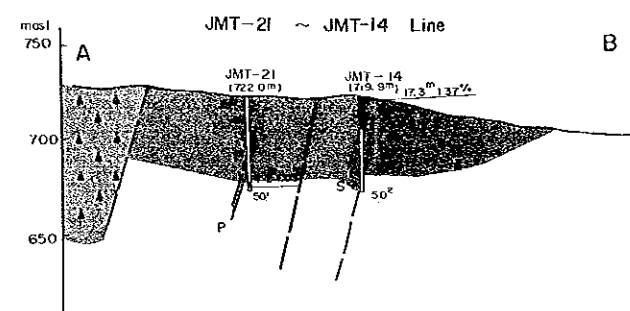


0m 100m 200m

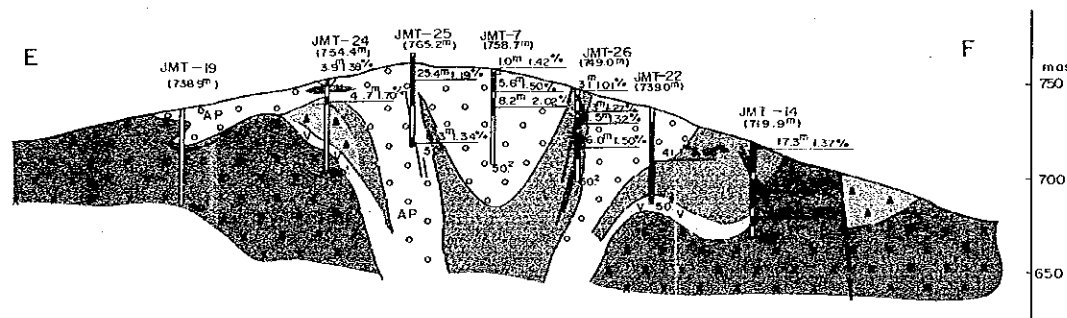
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LEGEND

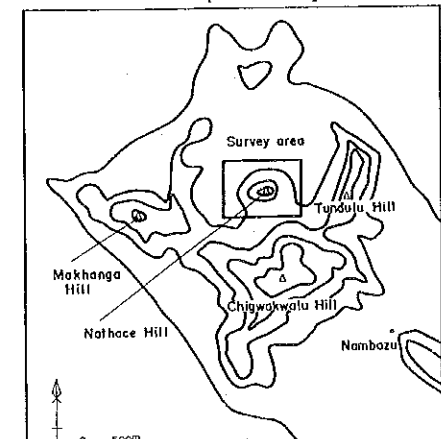
- Dyke plug
 - Carbonatite
 - Apatite rock
 - Agglomerate / feldspathic rock
 - Calc-silicate rock
 - Nepheline syenite
 - Fault
 - Drilling site (1987)
 - Drilling site (1980)
- Chilwa Alkaline Complex
- P : phonolite
S : solvsbergite
- Thickness^m REQ%
(Lo, Ce, Nd, Sm, Eu)
(Depth^m)
Tb, Y
- Trench
- Profile line

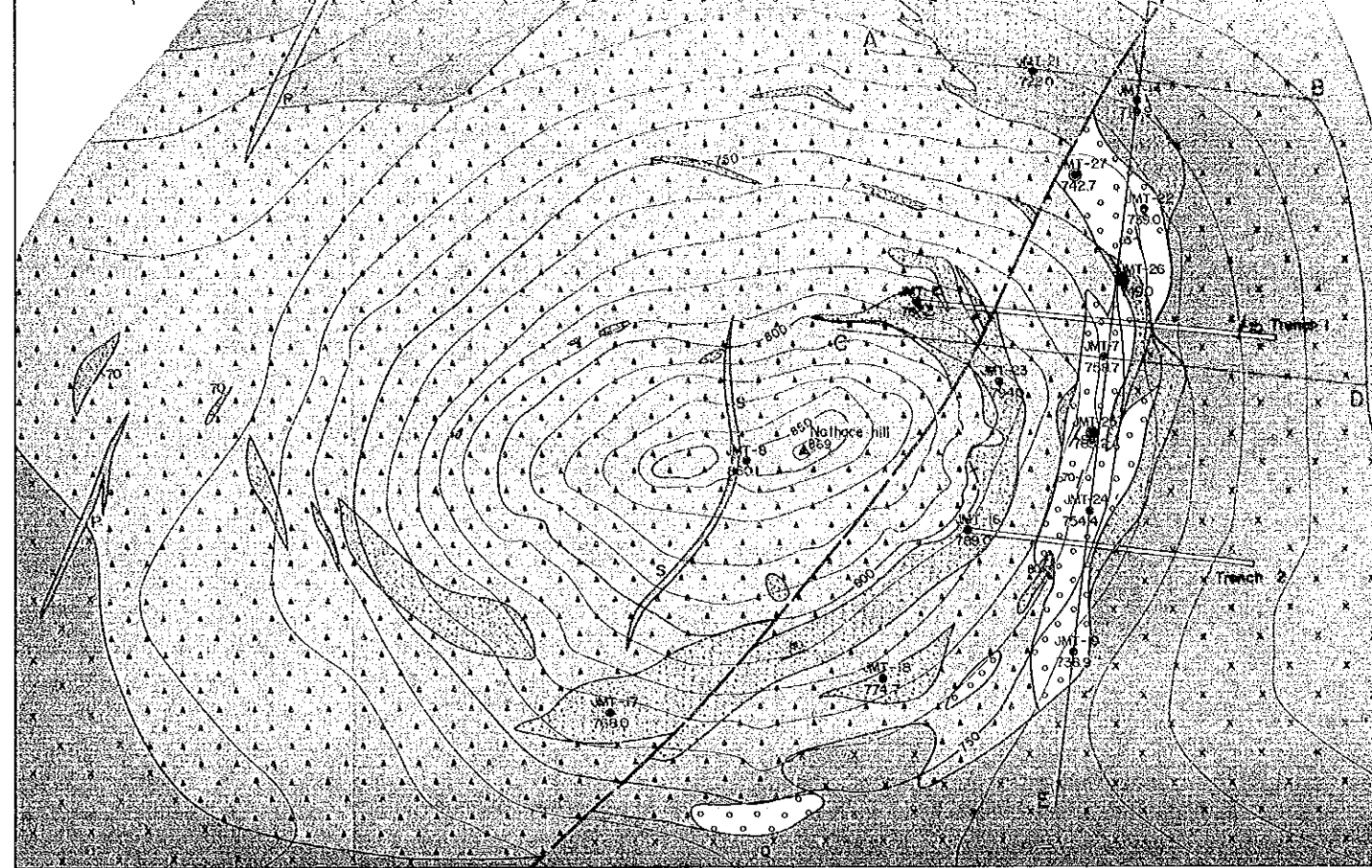


JMT-19 JMT-14 Line



Location map of survey area

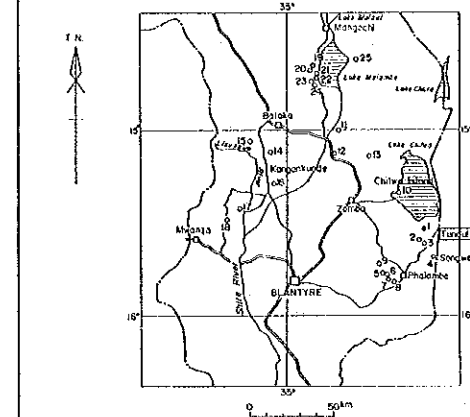




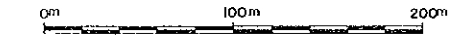
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Department of Geological Survey

DETAILED GEOLOGICAL MAP AND PROFILES OF TUNDULU SECTOR



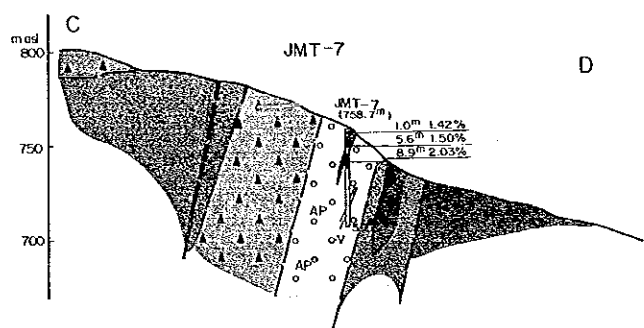
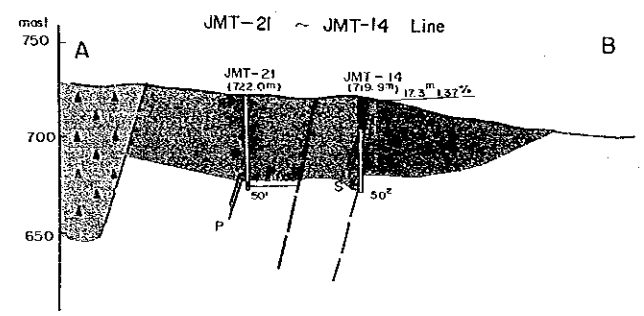
JAPAN INTERNATIONAL COOPERATION AGENCY
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FEBRUARY 1989



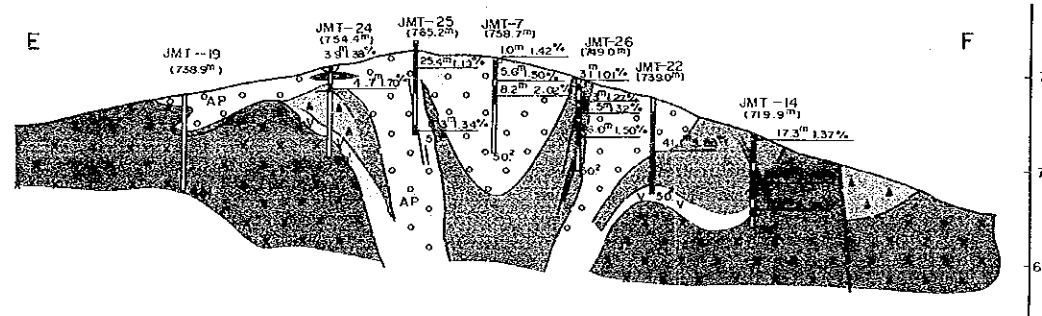
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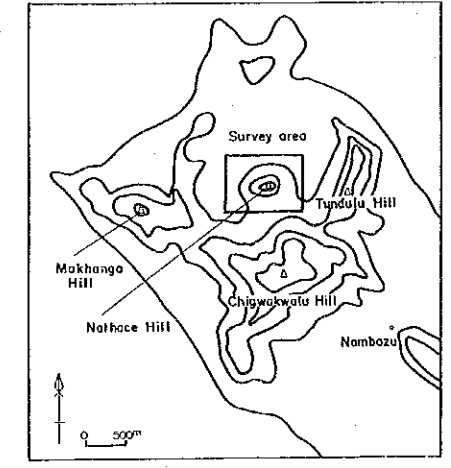
- Dyke plug
- Carbonatite
- Apatite rock
- Agglomerate / feldspathic rock
- Calc-silicate rock
- Nephelina syenite
- Fault
- Drilling site (1987)
- Drilling site (1980)
- Thickness, REO%
(Lo, Ce, Nd, Sm, Eu)
(Depth)
(Tb, Y)
- Trench
- Profile line



JMT-19 JMT-14 Line



Location map of survey area



PL. 3
 COOPERATIVE MINERAL EXPLORATION
 IN
 THE CHILWA ALKALINE AREA,
 REPUBLIC OF MALAWI

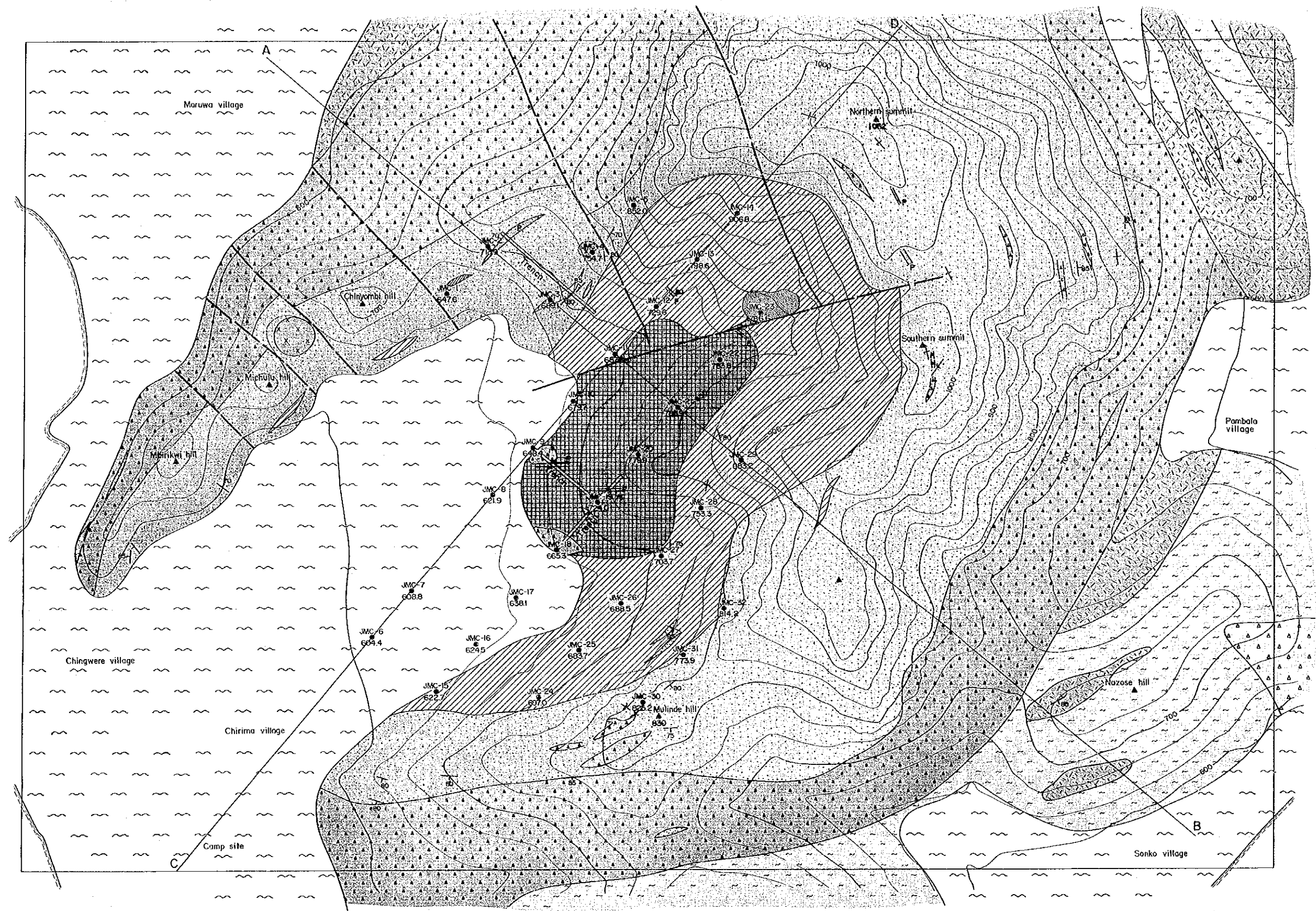
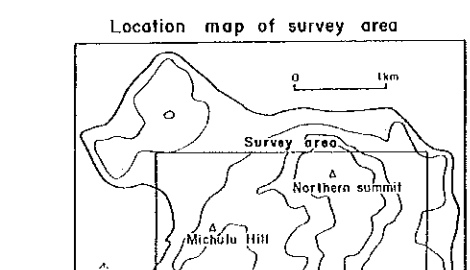
**GEOLOGICAL MAP AND PROFILES
 OF CHILWA ISLAND SECTOR**

JAPAN INTERNATIONAL COOPERATION AGENCY
 METAL MINING AGENCY OF JAPAN
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Scale 1 : 5,000

- LEGEND**
- Drift
 - Dyke P: phonolite
 - Lamprophyre
 - Ankeritic sövite
 - Ankeritic sövite and Sideritic carbonatite mixed zone
 - Sövite
 - Feldspathic breccia
 - Agglomerate
 - Nepheline syenite
 - Fenitized gneiss
 - Fenitized syenite
 - Fault

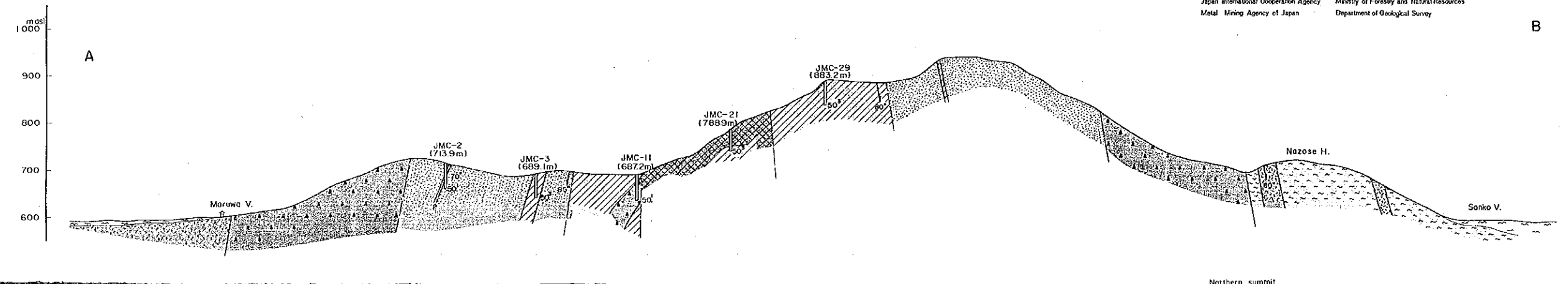
- Drilling site (1988)
- Trench
- Profile line

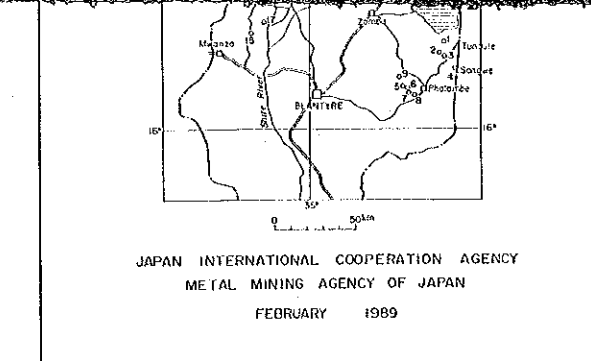


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Japan International Cooperation Agency
 Metal Mining Agency of Japan

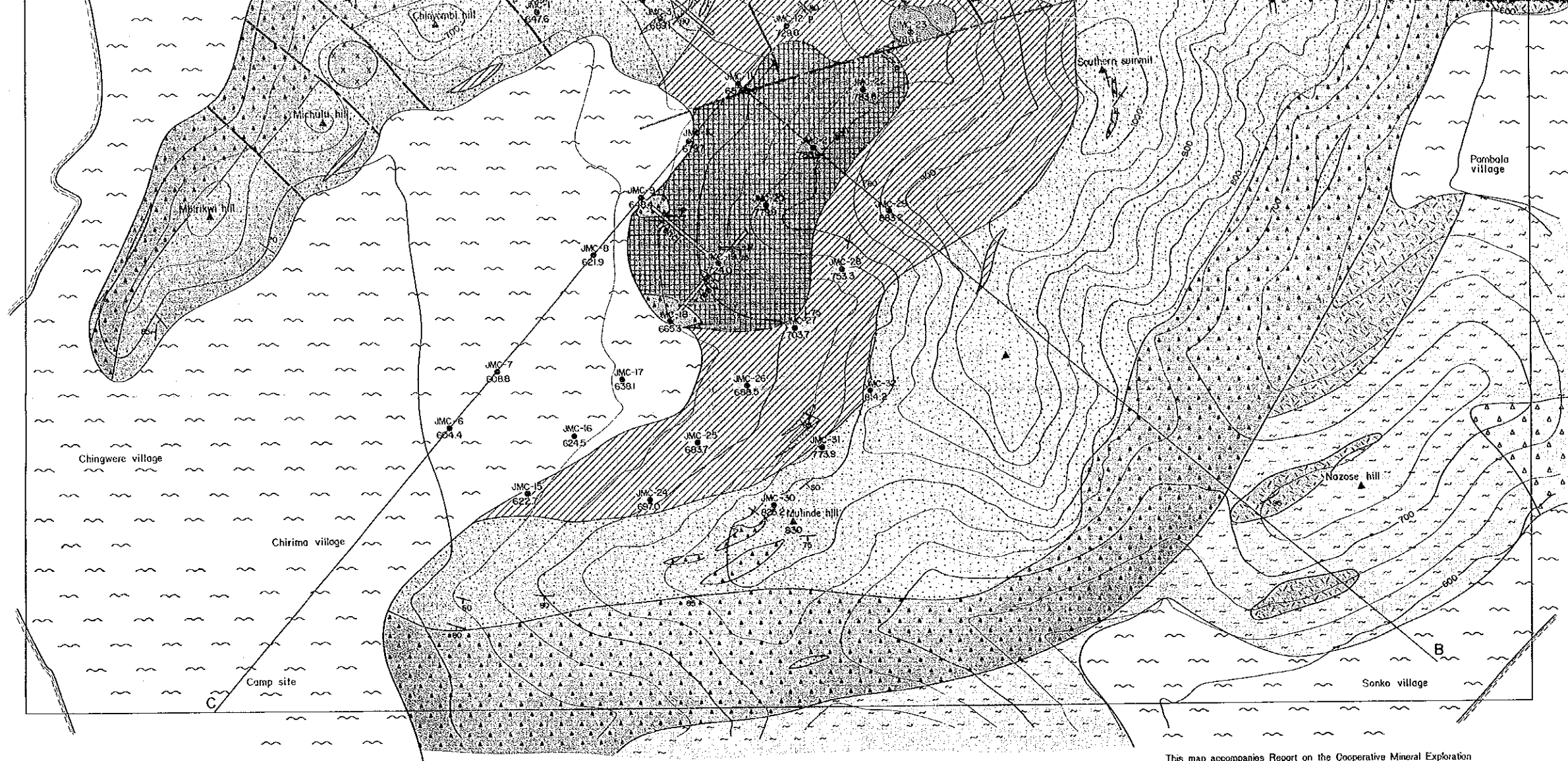
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METAL MINING AGENCY OF JAPAN
FEBRUARY 1989

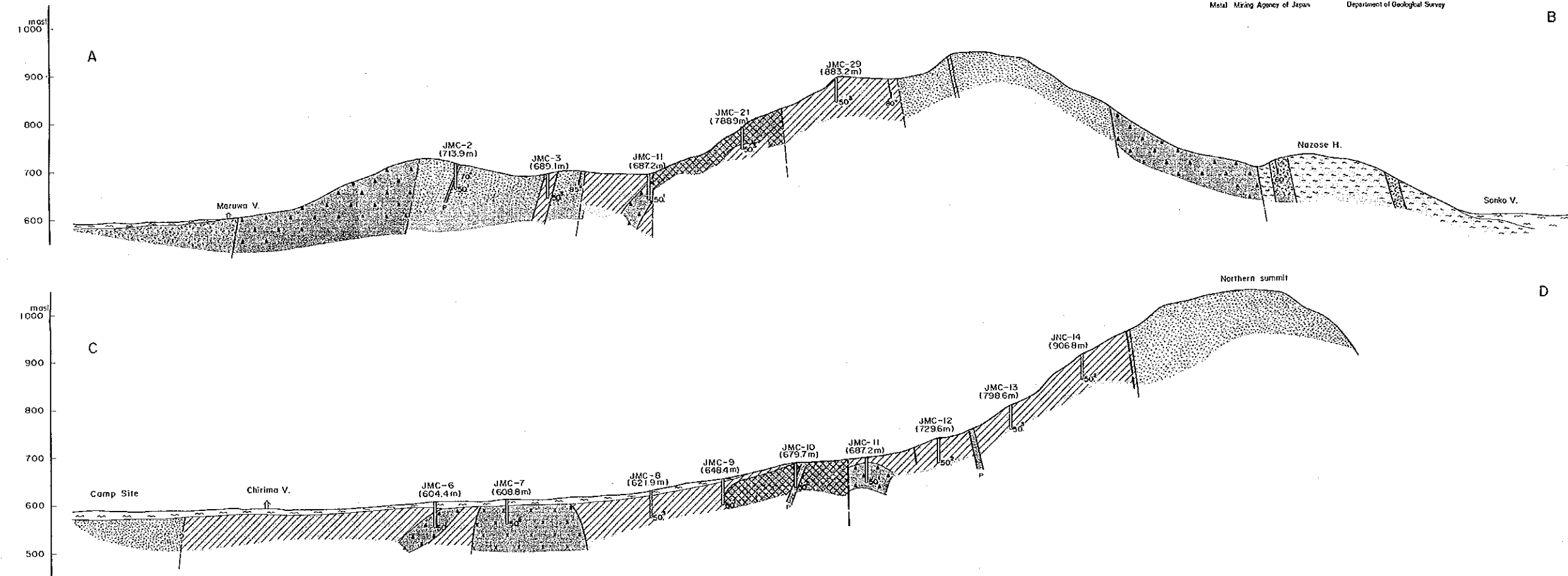
Scale 1 : 5,000



LEGEND

- Drift
- Dyke P : phonolite
- Lamprophyre
- Ankeritic sövite
- Ankeritic sövite and Sideritic carbonatite mixed zone
- Sövite
- Feldspathic breccia
- Agglomerate
- Nepheline syenite
- Basement Complex
- Fentized gneiss
- Fentized syenite
- Fault
- Drilling site (1988)
- Trench
- Profile line

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Location map of survey area

