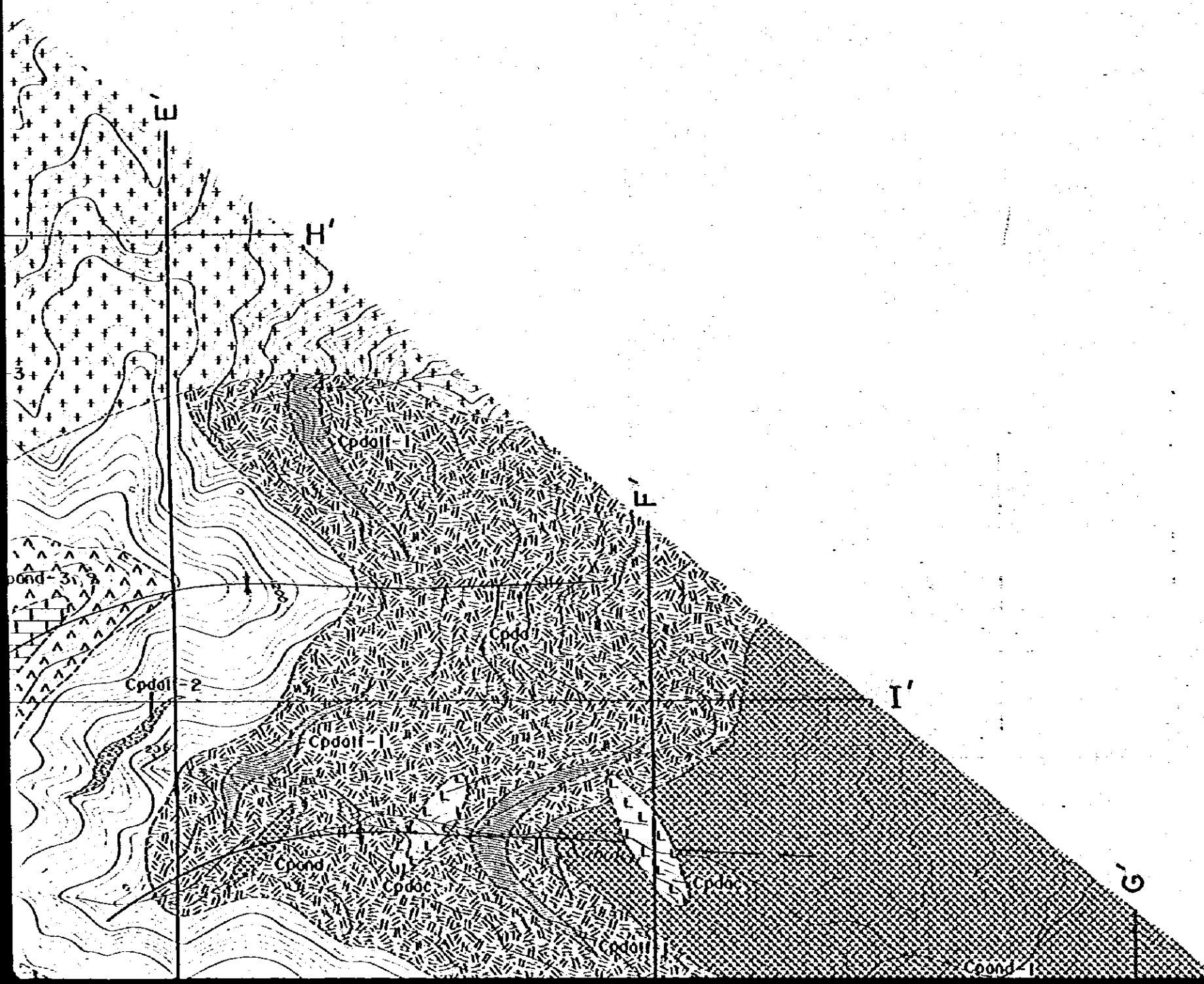


+90 +100 +110 +120 +130



METAL MINING AGENCY OF JAPAN

DIRECTORATE OF MINERAL RESOURCES

JAPAN INTERNATIONAL

DIRECTORATE GENERAL OF MINES

COOPERATION AGENCY

MINISTRY OF MINES AND ENERGY

REPUBLIC OF INDONESIA

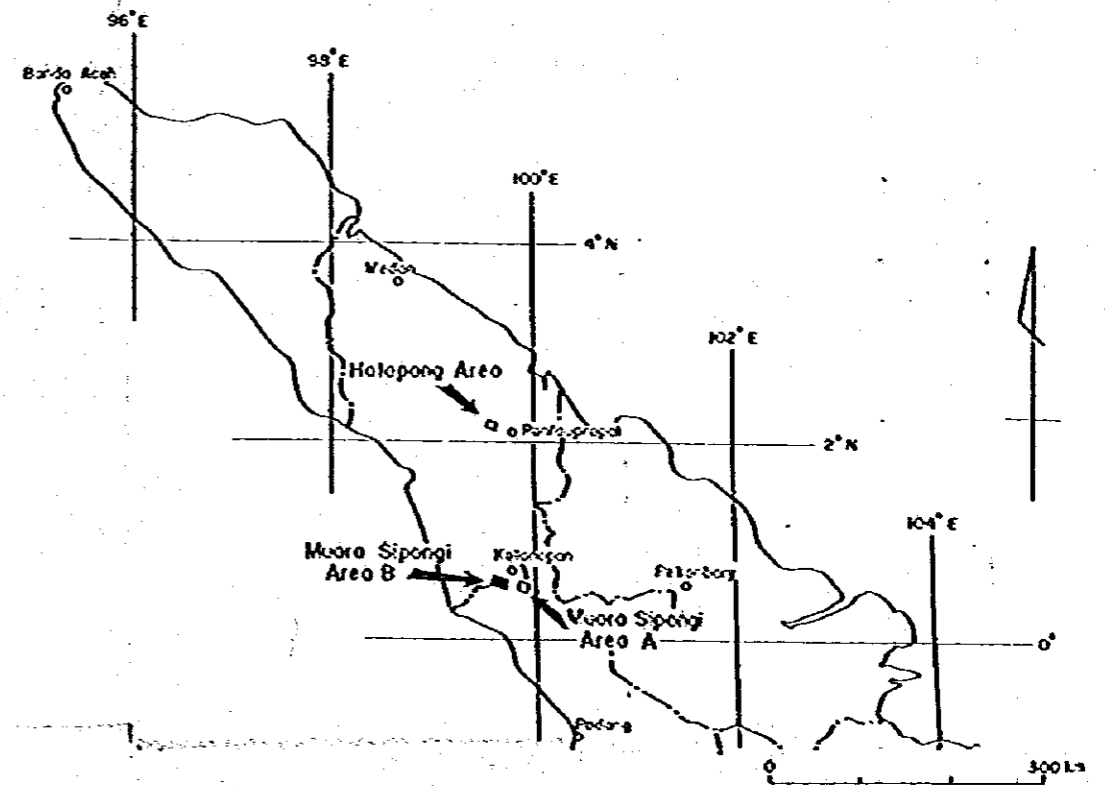
MINERAL EXPLORATION IN NORTHERN SUMATRA

REPUBLIC OF INDONESIA

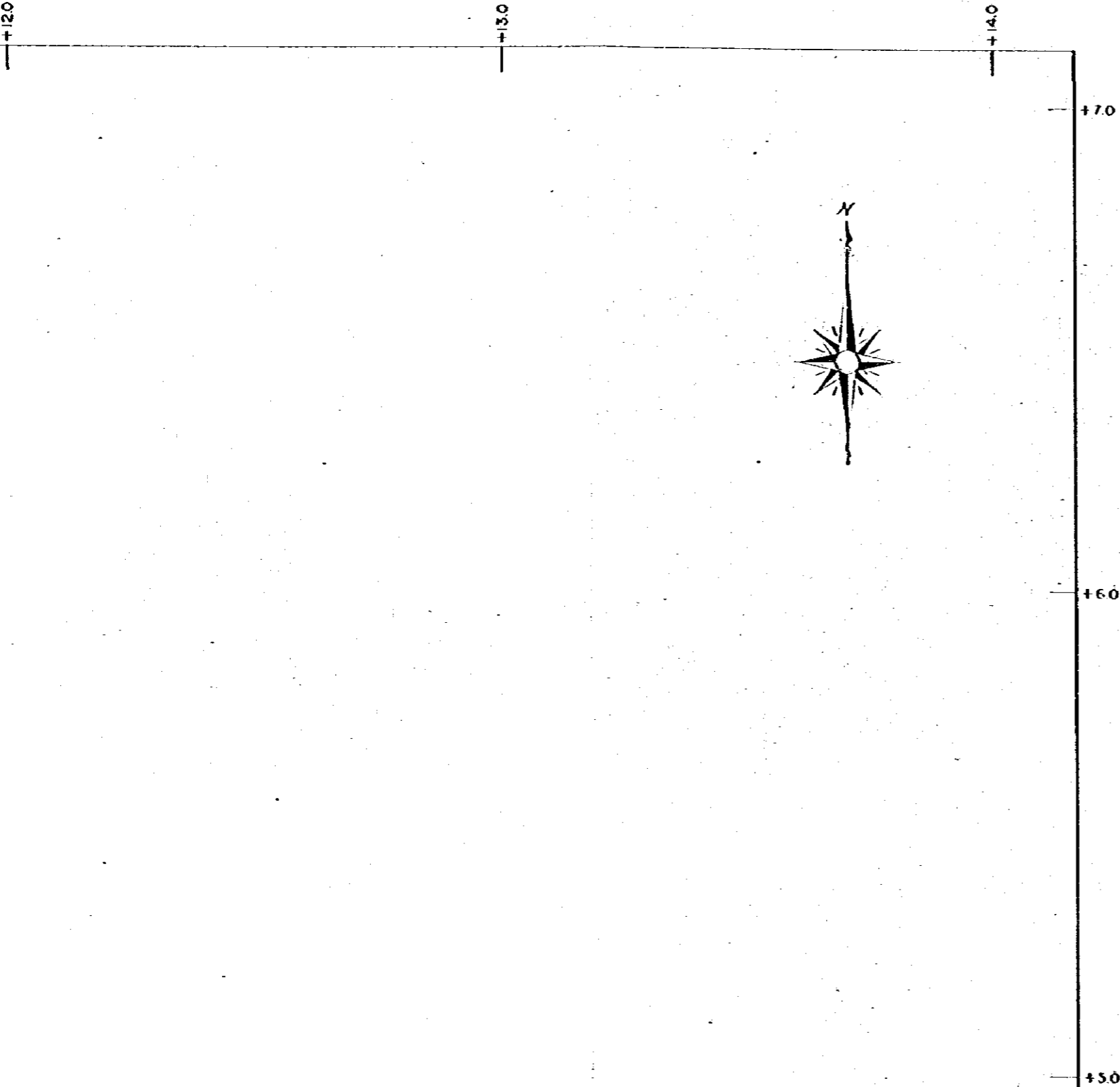
GEOLOGICAL MAP OF MUARA SIPONGI AREA B

Scale 1:10,000

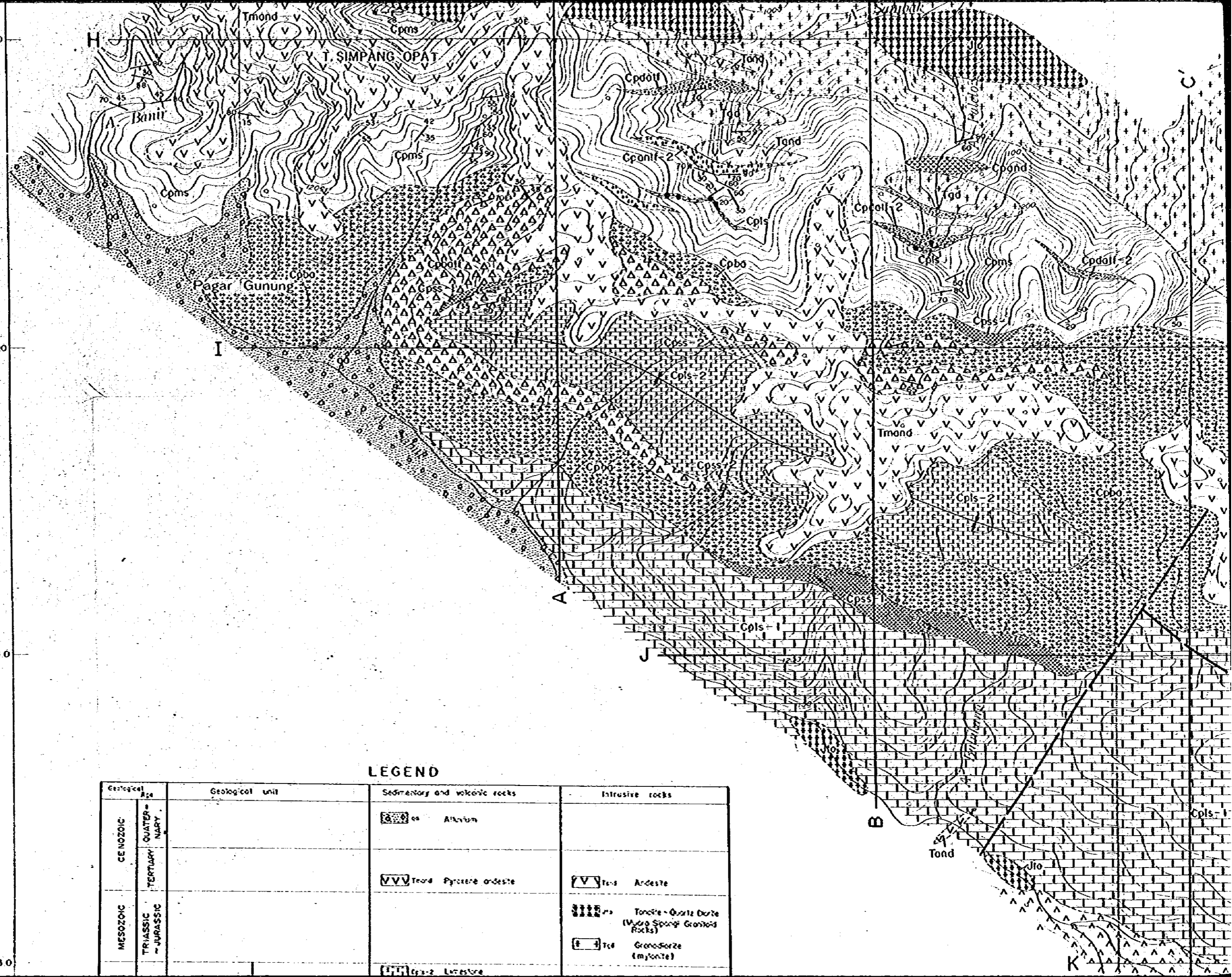
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February · 1984

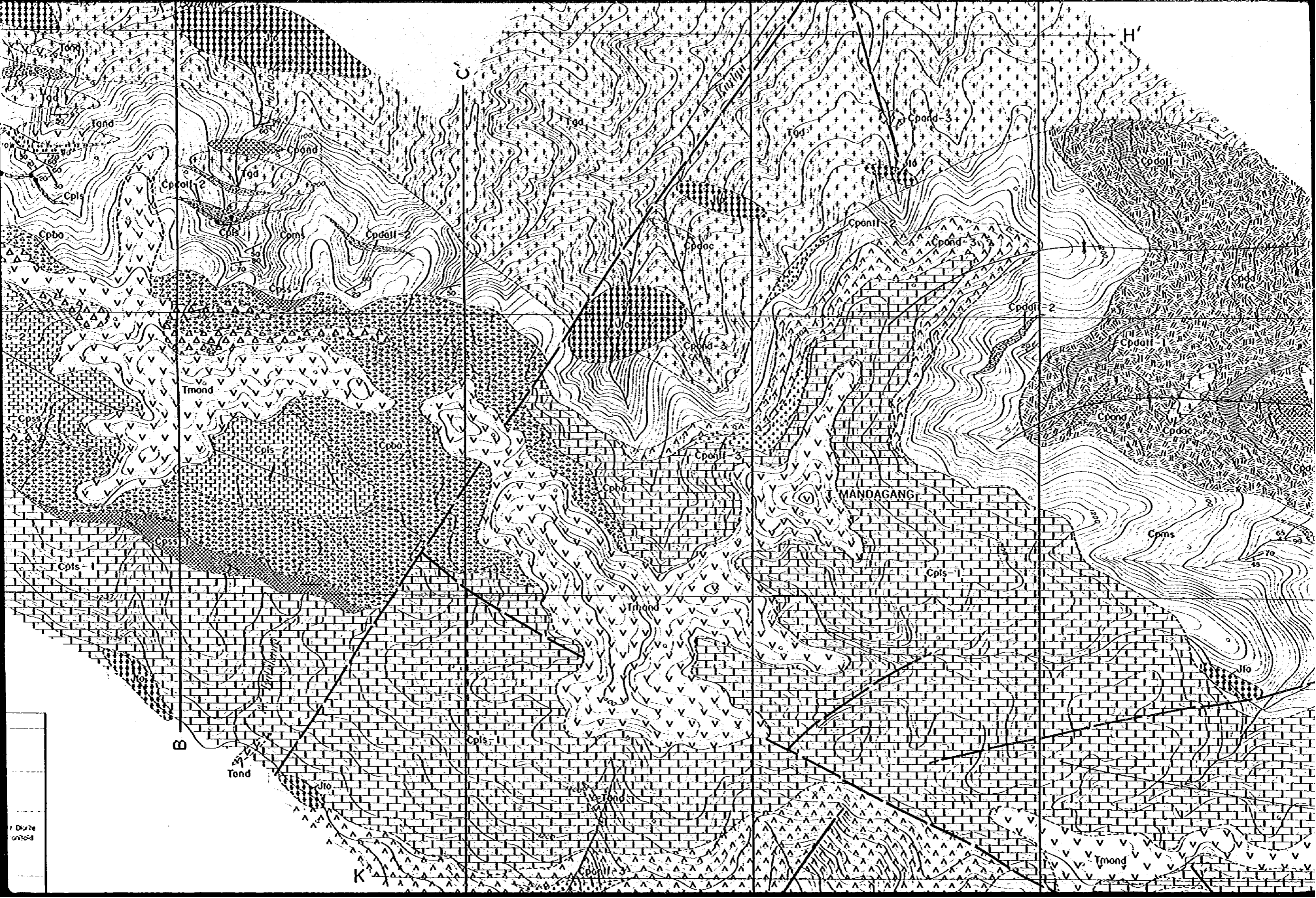


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15.0
14.0
13.0

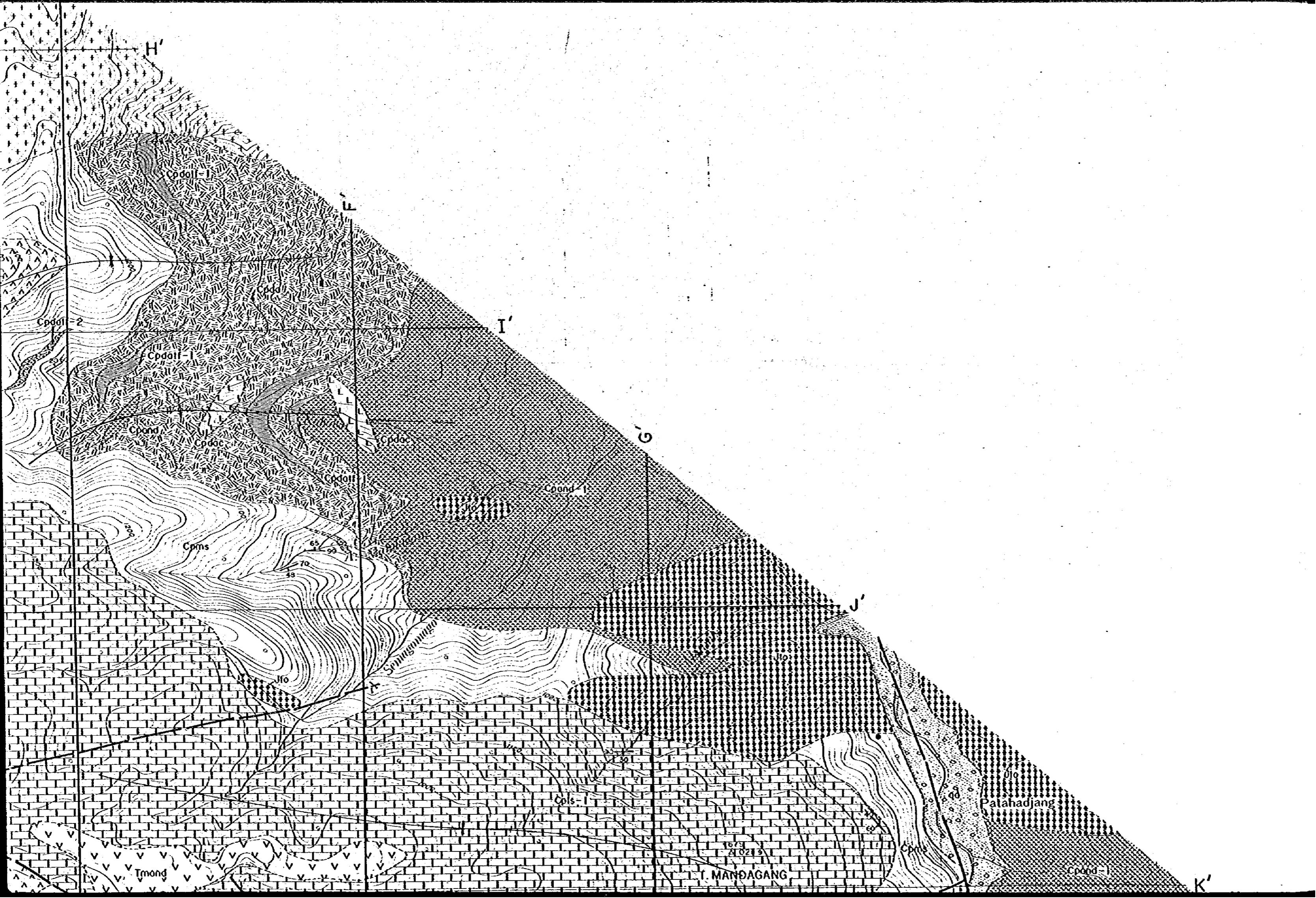


LEGEND

Geological Age		Geological unit	Sedimentary and volcanic rocks		Intrusive rocks		
CENOZOIC	QUATERNARY TERTIARY		Aluvium	Tand Pyroxene andesite	Tand Andesite	Tand Tonalite - Quartz Diorite (Mura Simpang Granitoid Rocks)	Tand Gneiss (mylonite)
MESOZOIC	TRIASSIC - JURASSIC						



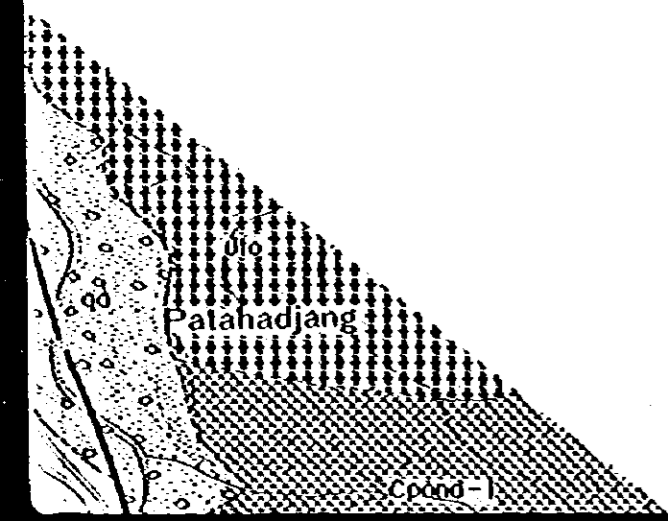
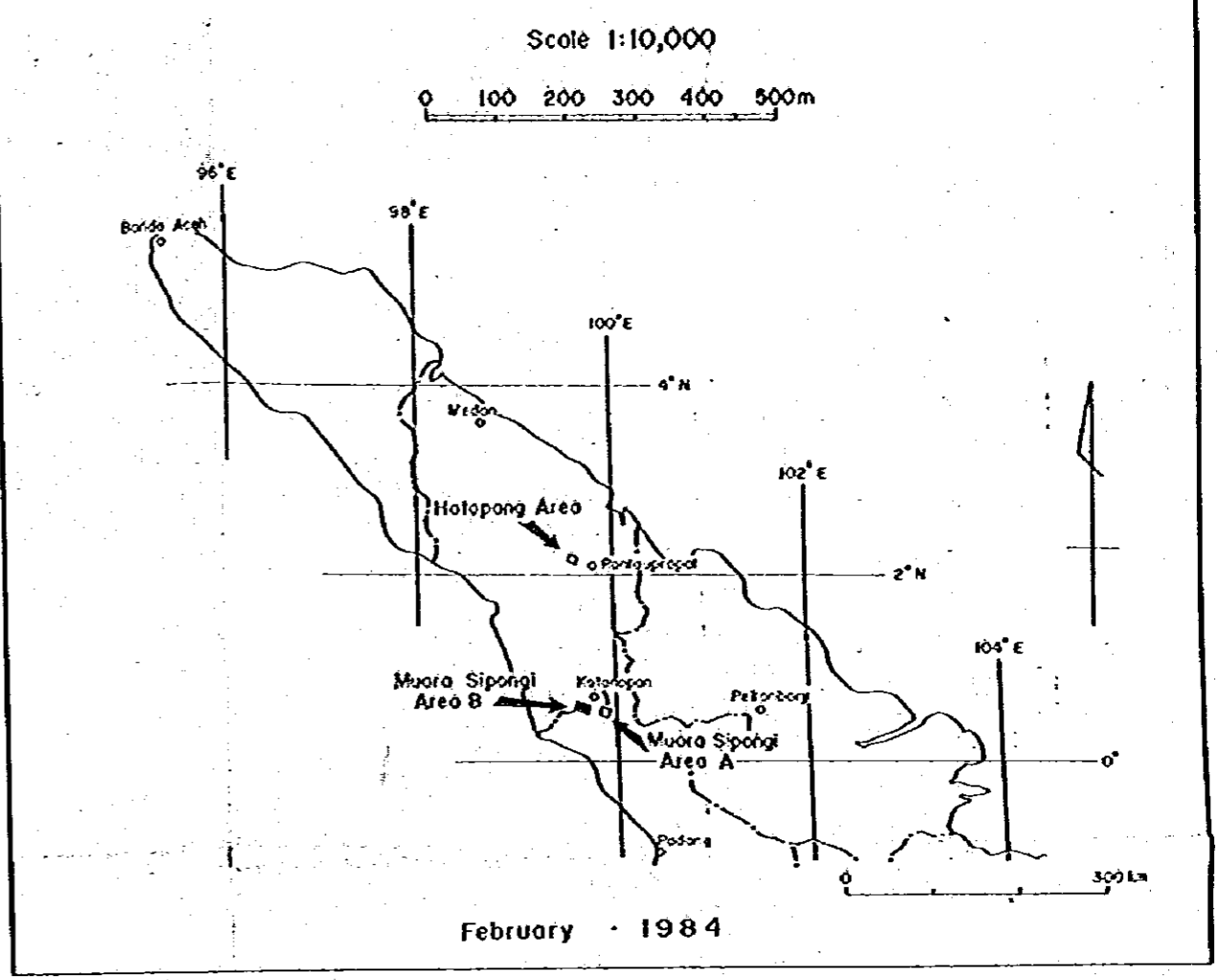
Scale
1:50,000



+6.0

+5.0

+4.0



LEGEND

Geological Age		Geological unit	Sedimentary and volcanic rocks		Intrusive rocks	
CENOZOIC	QUATERNARY		Alluvium			
	TERTIARY		Pyroclastic andesite	Andesite		
MESOZOIC	TRIASSIC ~ JURASSIC			Tonalite-Quartz Diorite (Micro Spongi Granitoid Rocks)	Granodiorite (mylonite)	
PALEOZOIC	CARBONIFEROUS ~ PERMIAN	Potohajang Formation	Upper Limestone Member	Cps-2 Limestone		
				Cps-2 Sandstone		
			Basic Volcanic rock Member	Cpsb1 Basic pyroclastic rock		
				Cpsb2 Basic volcanic rock		
			Lower Limestone Member	Cps-1 Sandstone		
				Cps-1 Limestone		Cpsd Andesite
			Andesite Member	Cpsd-3 Andesite		
				Cpsd-3 Andesite tuff		
			Alternated Member of Clastic rock and Volcanic rock	Cpsd-2 Dacitic tuff		Cpsd Dacite
				Cpsd-2 Andesitic tuff		
Cpsd-2 Andesite						
Cps Limestone						
	Cps Mudstone & Sandstone					
Docite Member	Cpd Docite					
	Cpsd-1 Dacitic tuff					
	Micro Botung Formation	Andesite Member	Cpsd-1 Andesite			

- Dip and strike
- Fault confirmed
- Fault inferred

- Anticinal axis
- Synclinal axis
- Outcrop of ore

+40

+30

+20

+40

+50

+60

+70

Tmond

Cps-2

Cps

Cps-1

Cps-1

B

Tond

Jlo

Cps-1

K

C

+40

+30

+20

LEGEND

Geological Age		Geological unit	Sedimentary and volcanic rocks		Intrusive rocks	
CENOZOIC	QUATERNARY		Alluvium			
	TERTIARY		Tertiary andesite	Andesite		
MESOZOIC	TRIASSIC ~ JURASSIC			Tonalite-Quartz Diorite (Muara Botung Granitoid Rocks)	Granodiorite (mylonite)	
PALEOZOIC	CARBONIFEROUS ~ PERMIAN	Pelehajang Formation	Upper Limestone Member	Cps-2 Limestone		
				Cps-2 Sandstone		
			Basic Volcanic rock Member	Cpsb1 Basic pyroclastic rock		
				Cpsb Basic volcanic rock		
			Lower Limestone Member	Cps-1 Sandstone		
				Cps-1 Limestone	Cpsd Andesite	
			Andesito Member	Cpsd-3 Andesite		
				Cpsd-3 Andesitic tuff		
			Alternated Member of Clastic rock and Volcanic rock	Cpsd-2 Dacitic tuff	Cpsdc Dacite	
				Cpsd-2 Andesitic tuff		
Cpsd-2 Andesite						
Cps Limestone						
	Cps Mudstone & Sandstone					
Dacite Member	Cpsd Dacite					
	Cpsd-1 Dacitic tuff					
	Myara Botung Formation	Andesito Member	Cpsd-1 Andesite			

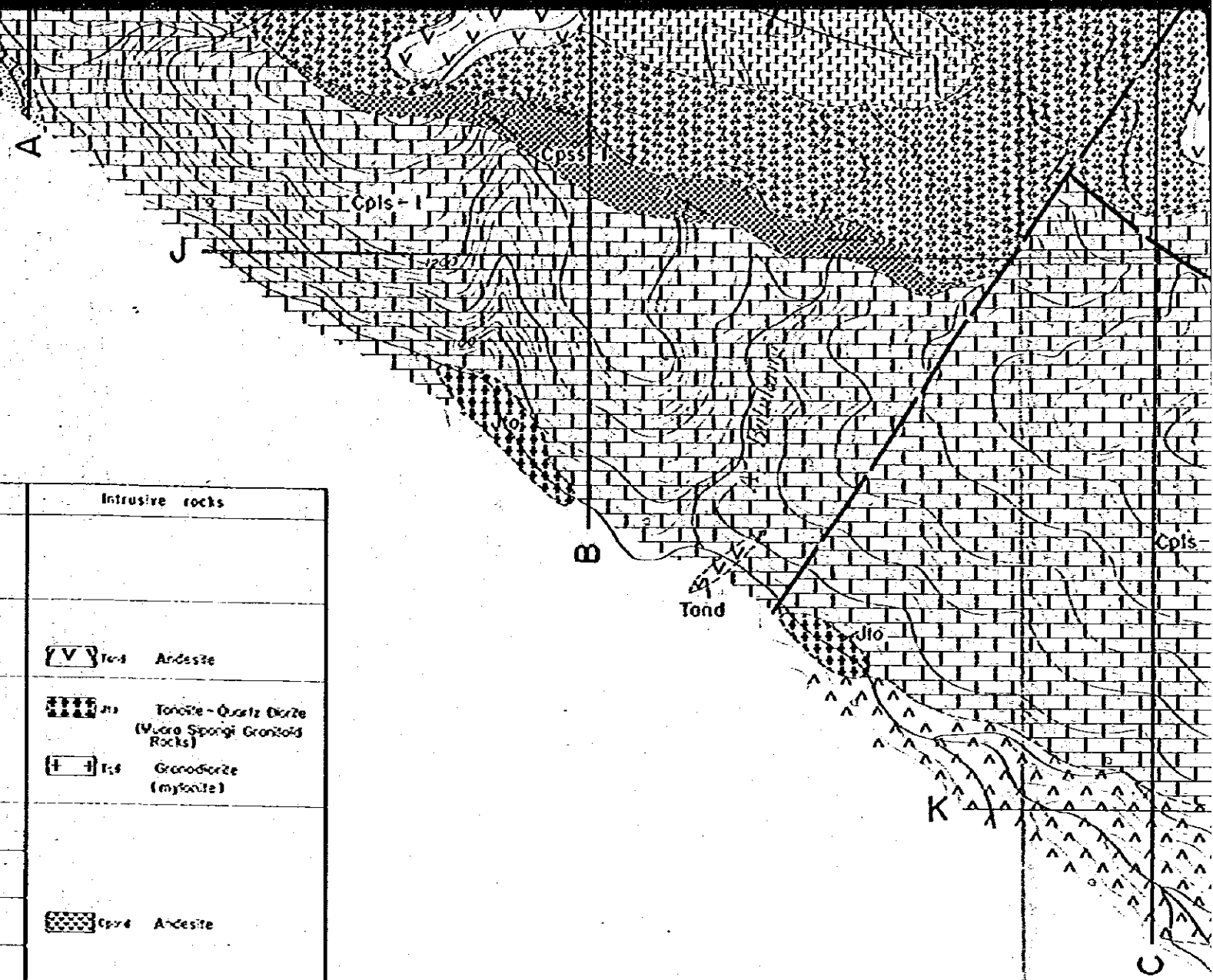
- Dip and strike
- Fault confirmed
- Fault inferred
- Anticline axis
- Syncline axis
- Outcrop of ore

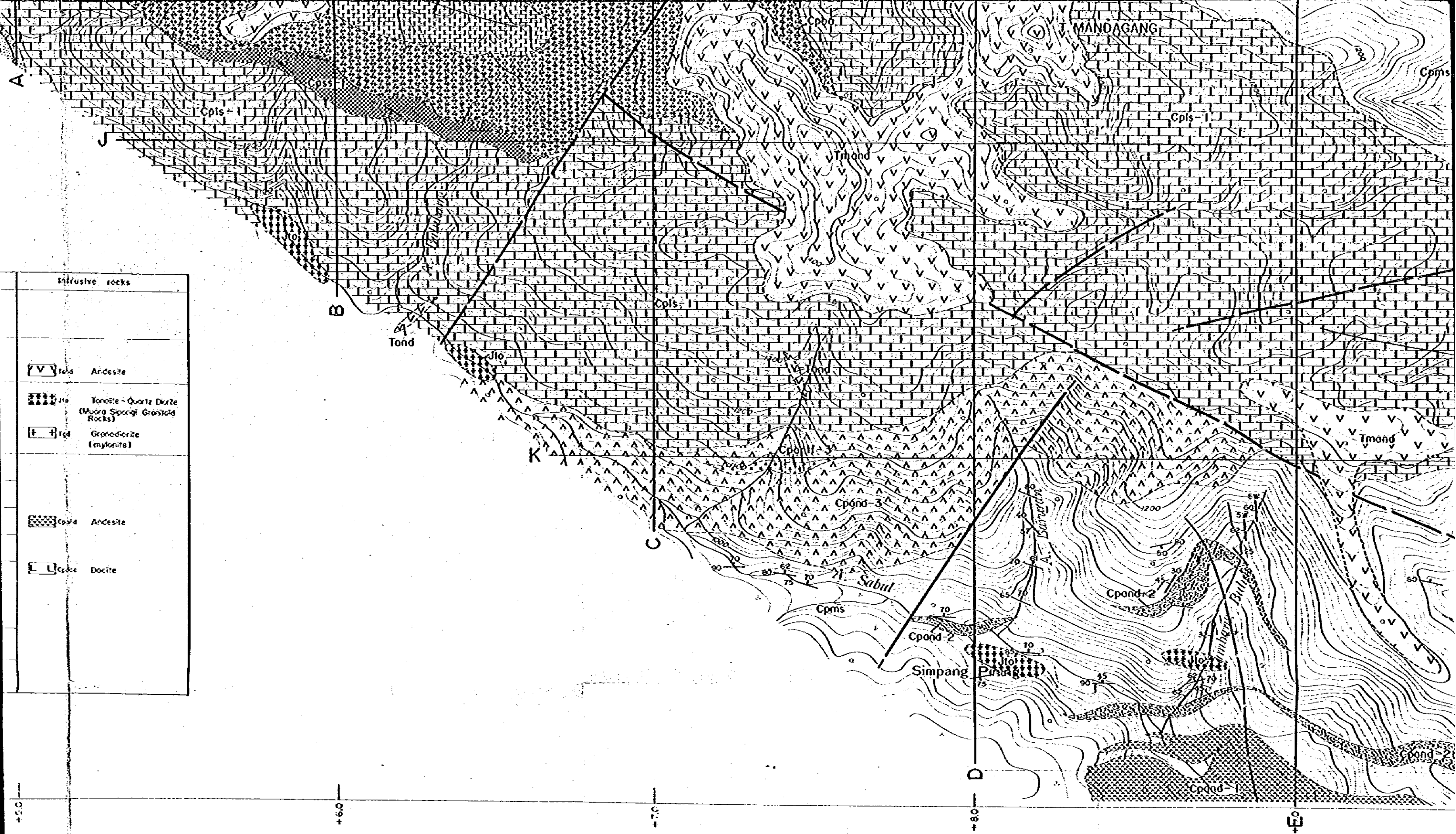
+40

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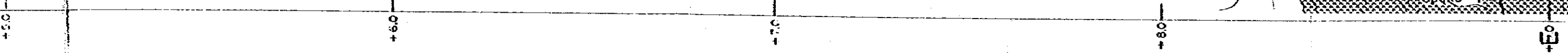
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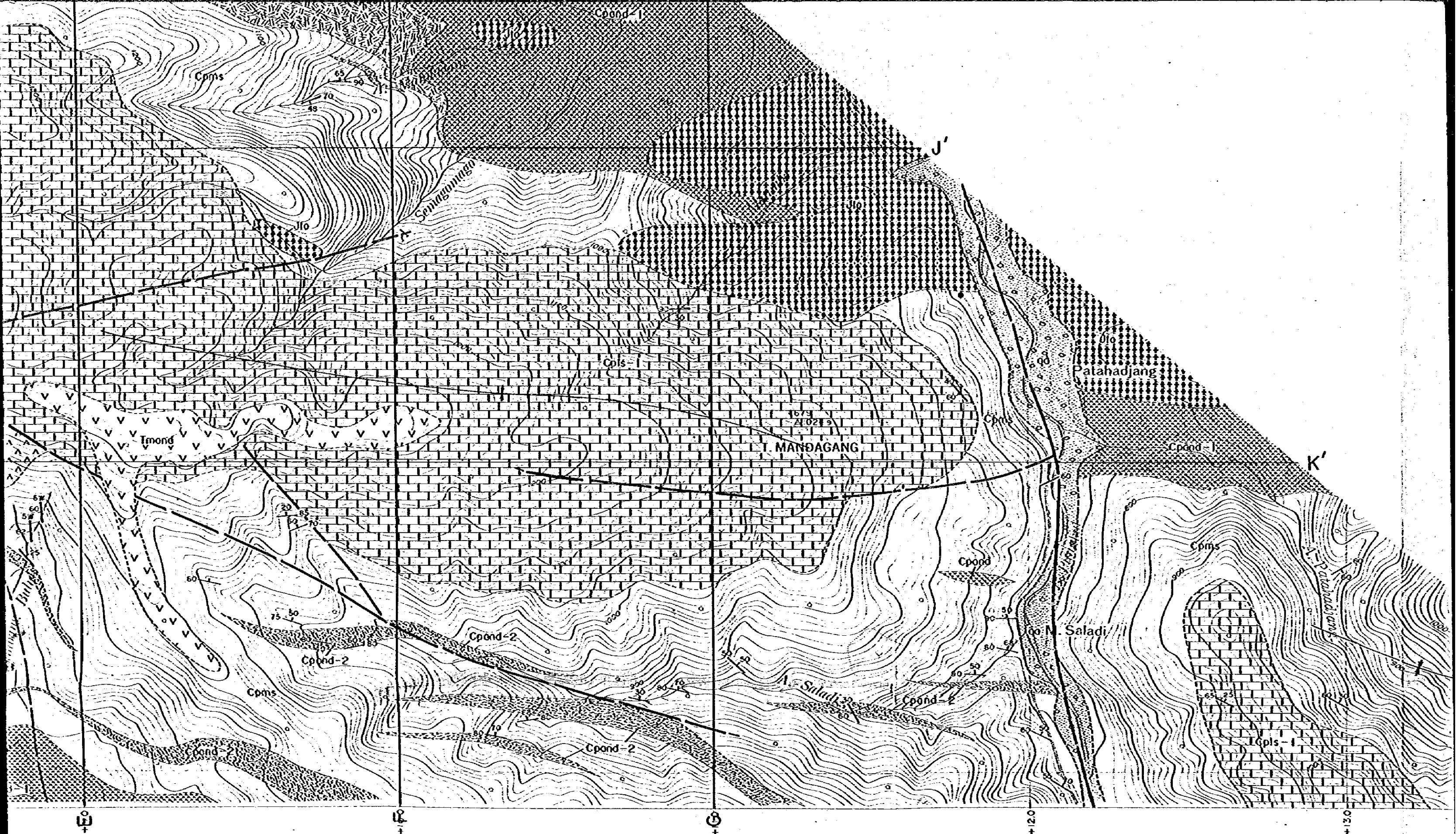
+10





Intrusive rocks	
	Ardesite
	Tonalite - Quartz Diorite (Muara Springi Granitoid Rocks)
	Granodiorite (mylonite)
	Andesite
	Diorite





Cpond-1

Cpms

Semangung

J'

Cpls-1

T. MANDAGANG

Patahadjang

Cpond-1

K'

Imong

Cpond

Cpond-2

Saladi

Cpms

Cpms

Cpond-2

Cpond-2

Cpond-2

Cpls-1

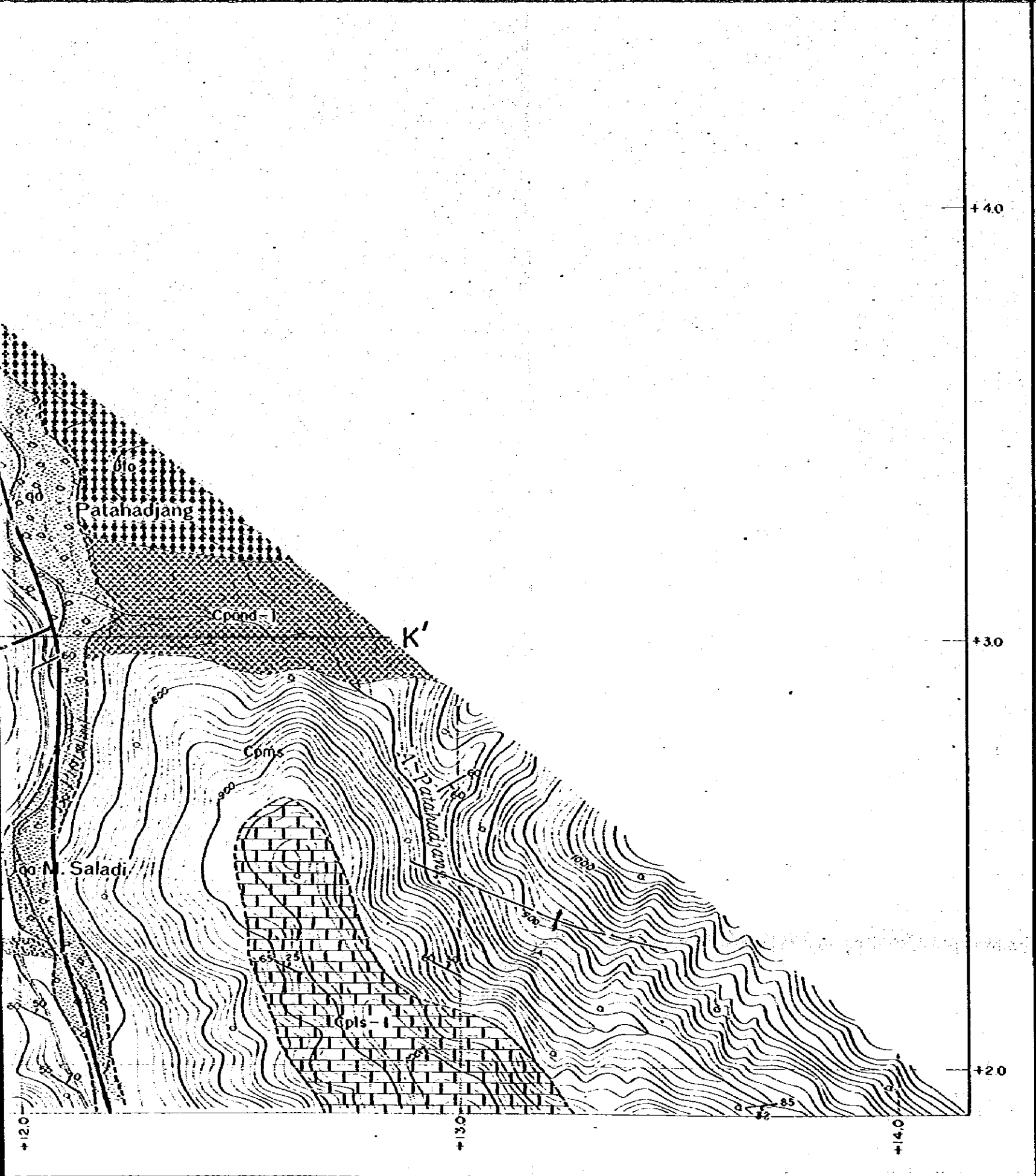
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+125

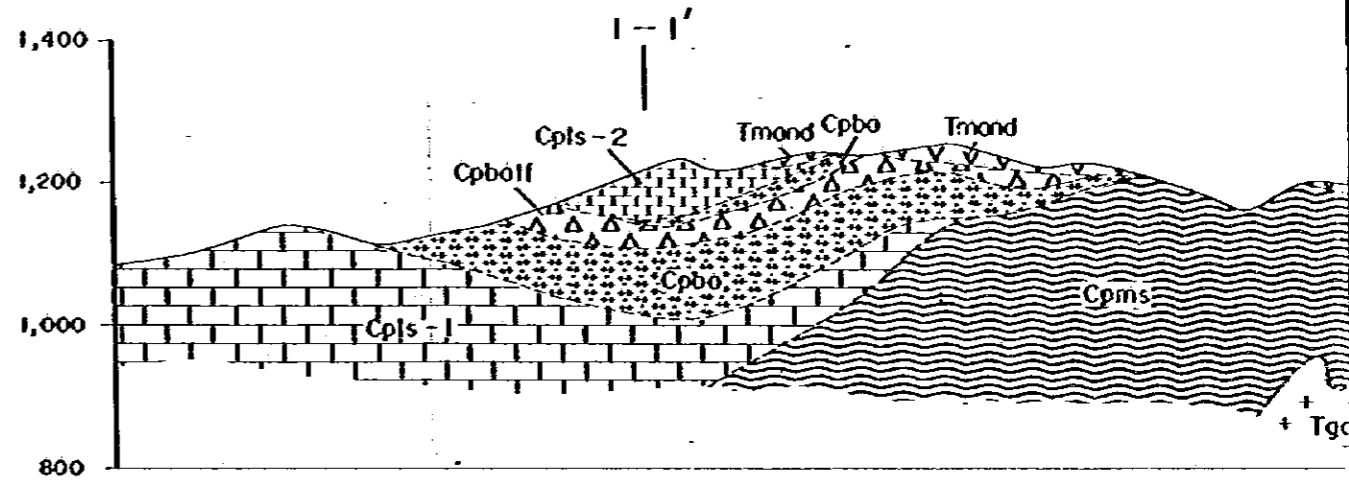
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+135

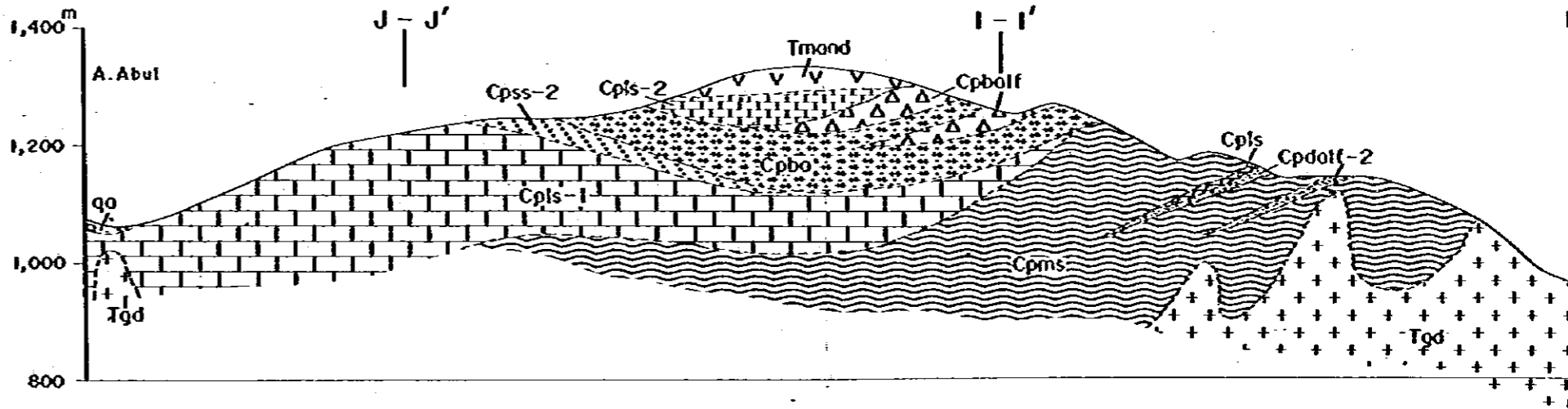
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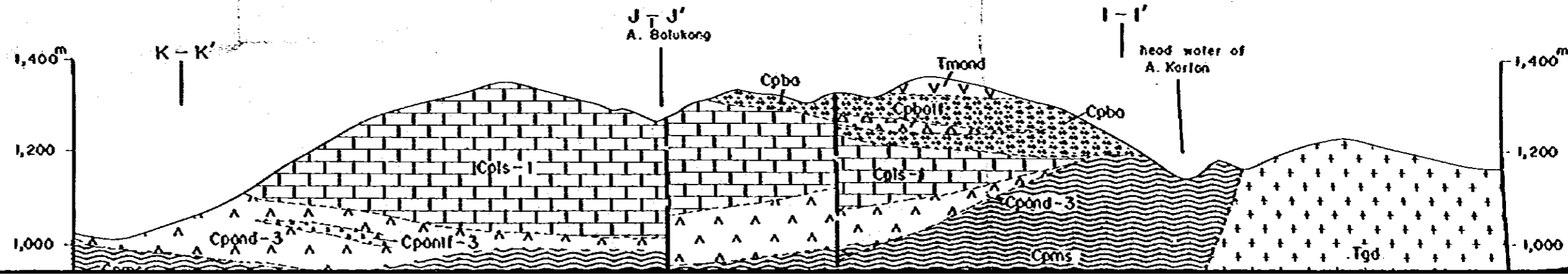
A - A'

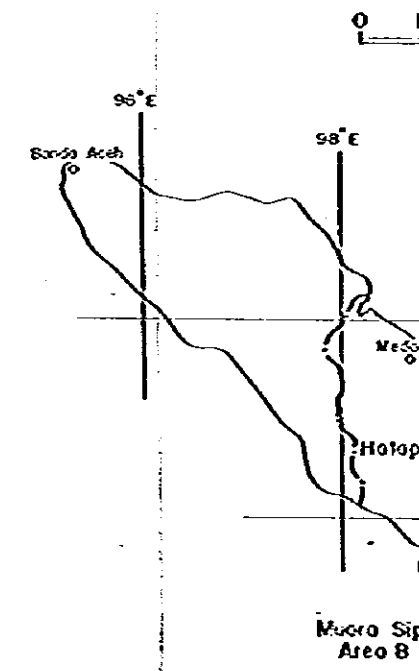
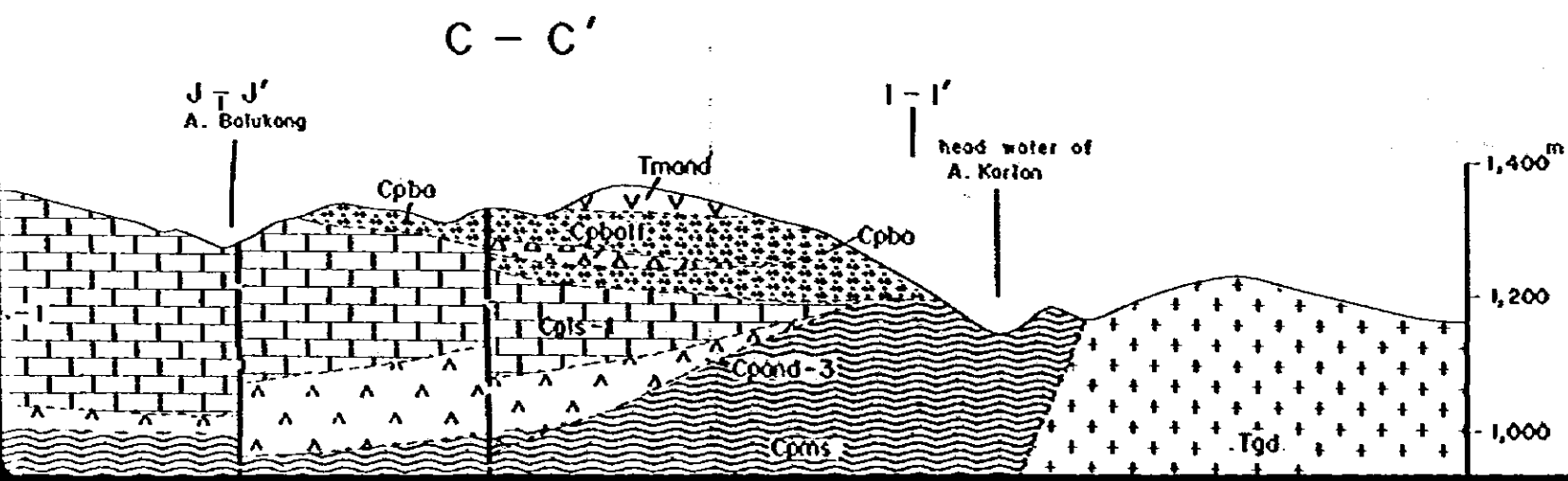
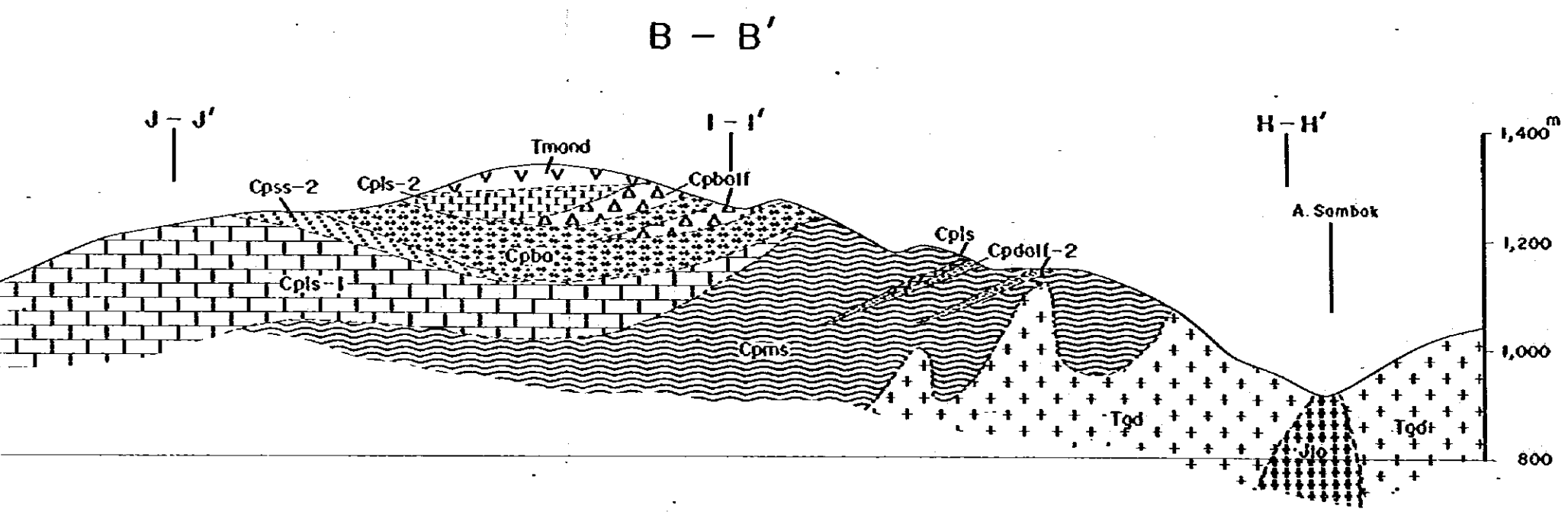
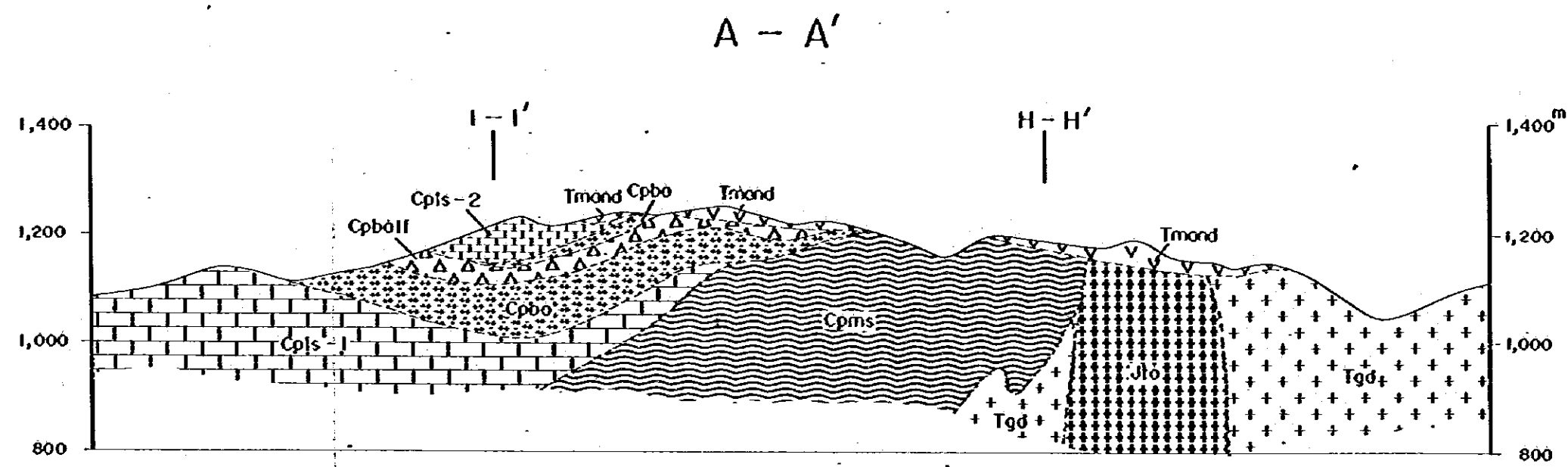


B - B'



C - C'





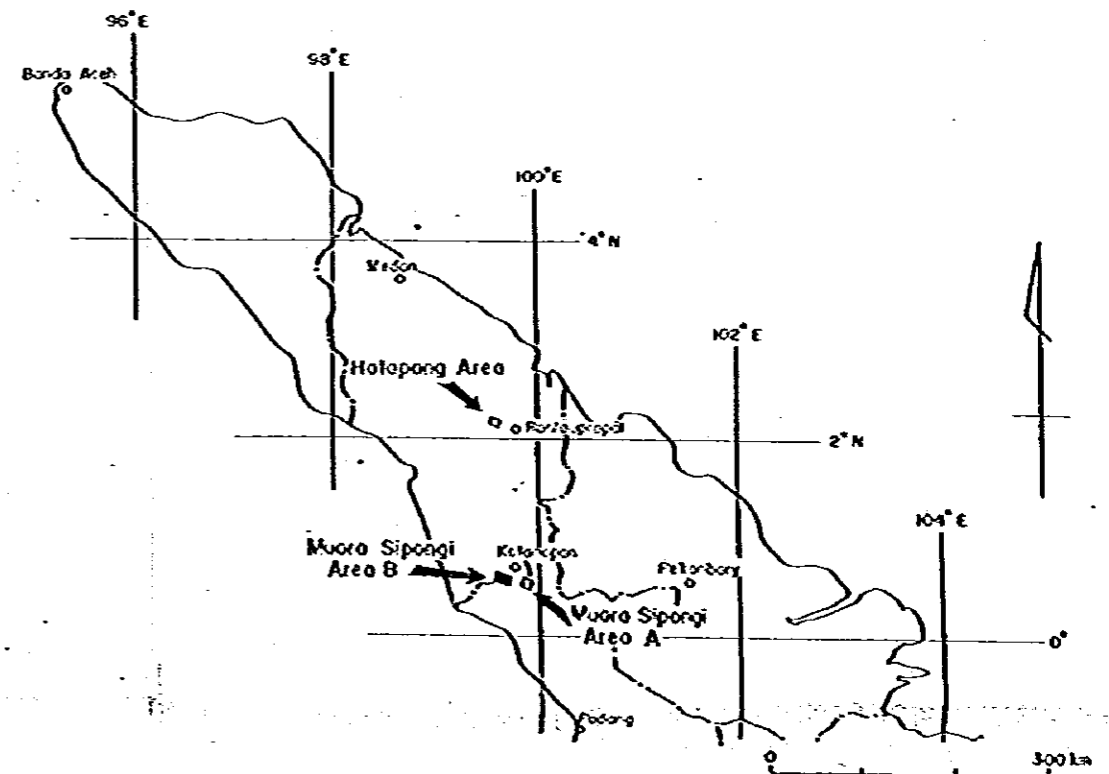
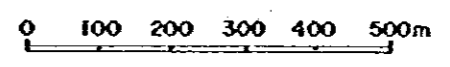
METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL
 COOPERATION AGENCY

DIRECTORATE OF MINERAL
 RESOURCES
 DIRECTORATE GENERAL
 OF MINES
 MINISTRY OF MINES
 AND ENERGY
 REPUBLIC OF INDONESIA

MINERAL EXPLORATION IN NORTHERN SUMATRA
 REPUBLIC OF INDONESIA

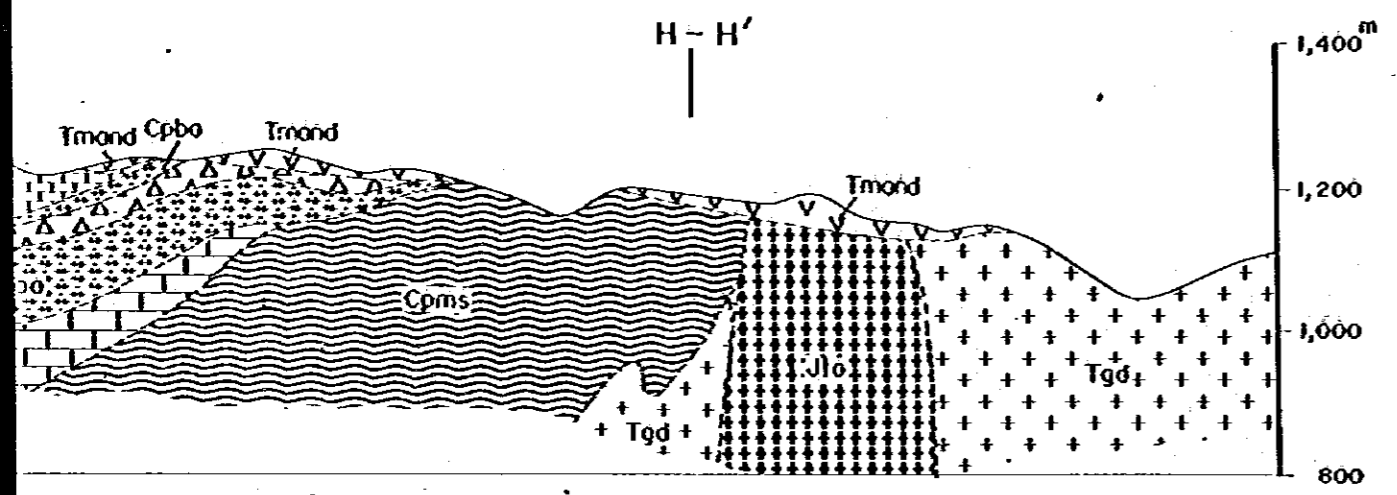
GEOLOGICAL PROFILE
 OF MUARA SIPONGI AREA B
 (N - S SECTION)

Scale 1:10,000

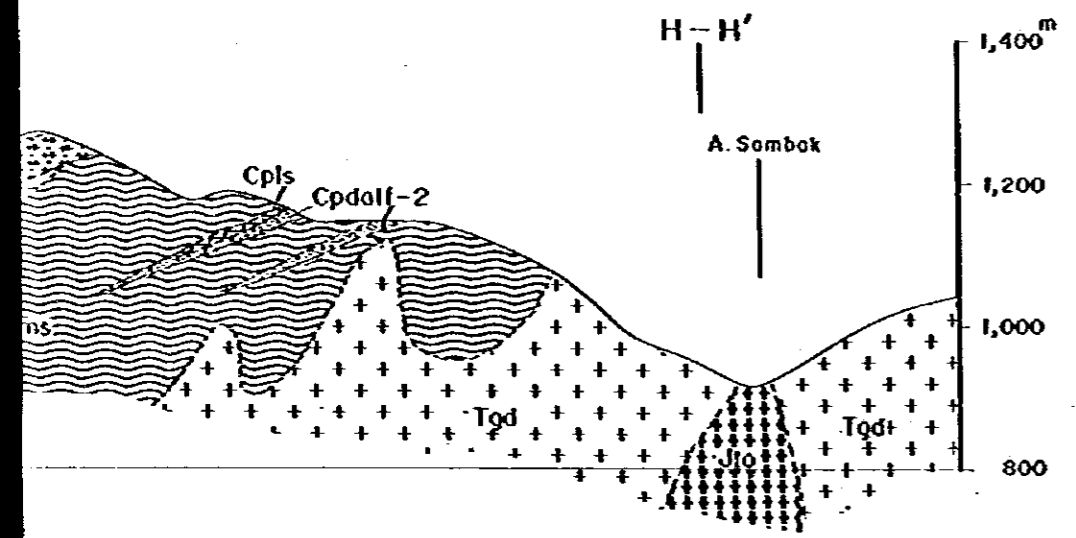


February - 1984

A - A'

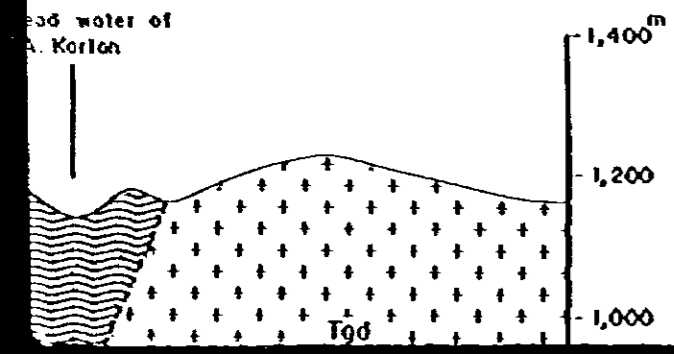


H - H'



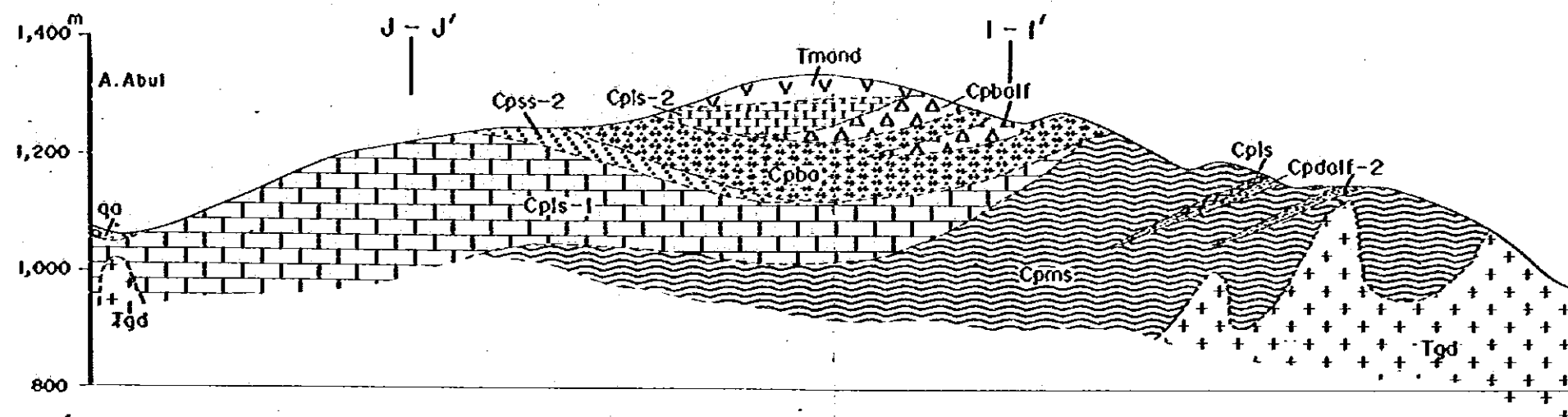
H - H'

A. Sambok

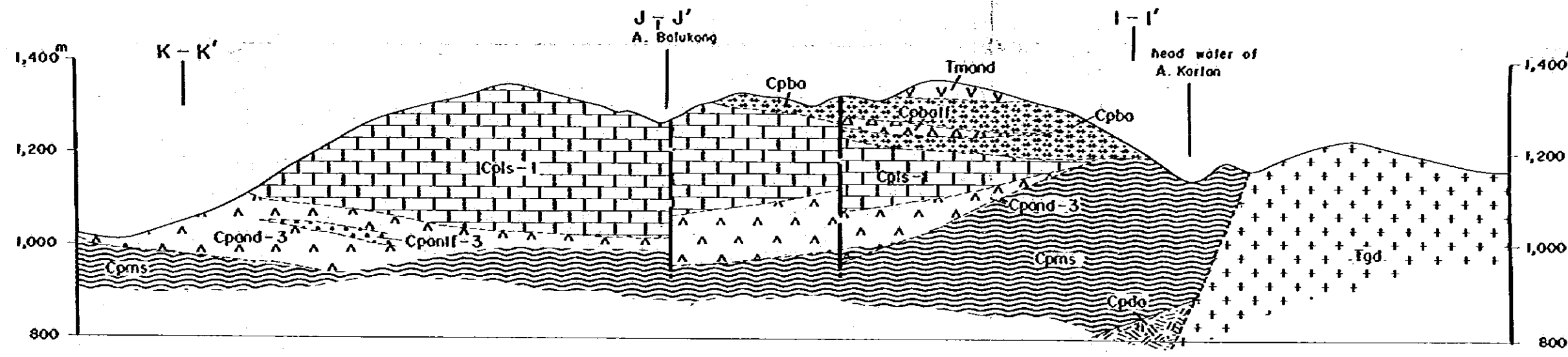


head water of A. Korlan

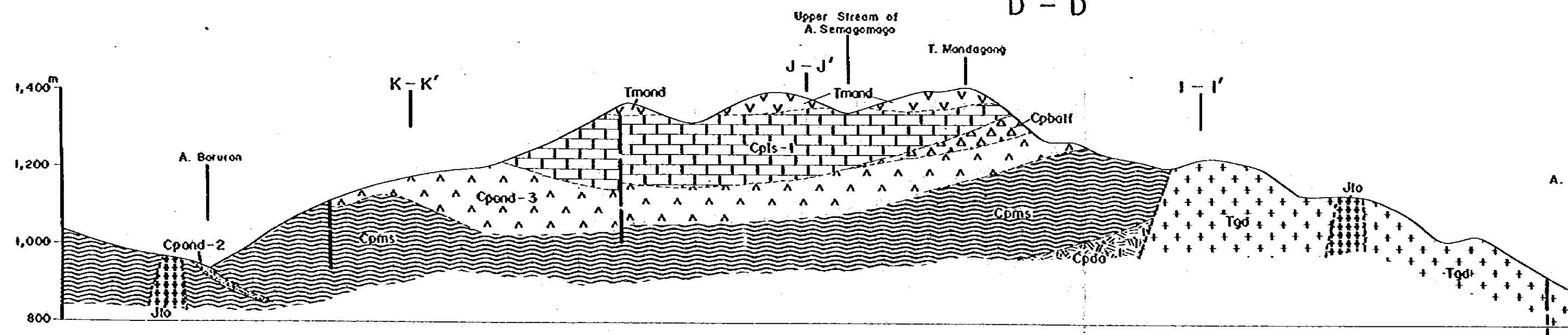
B - B'



C - C'

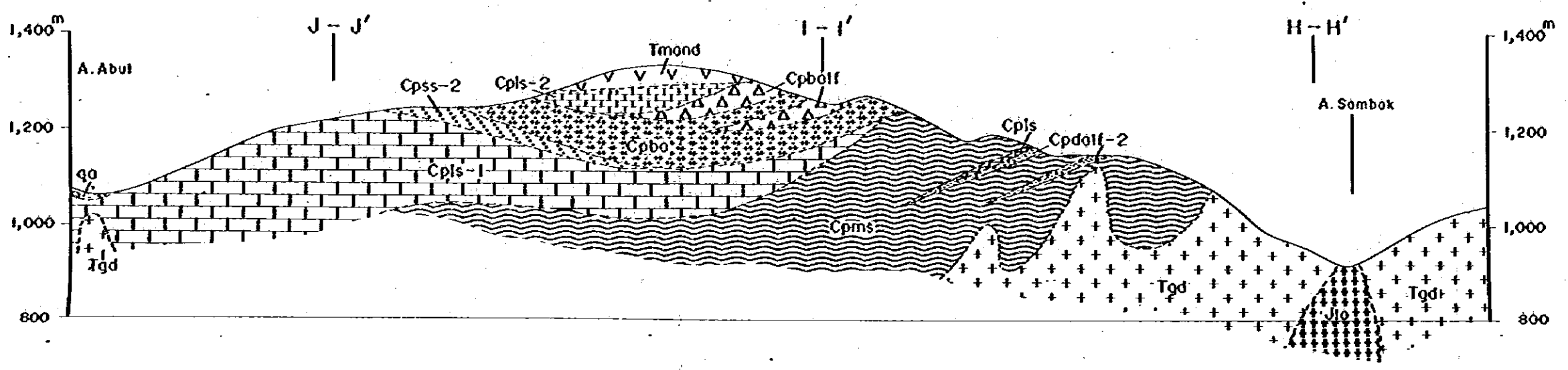


D - D'

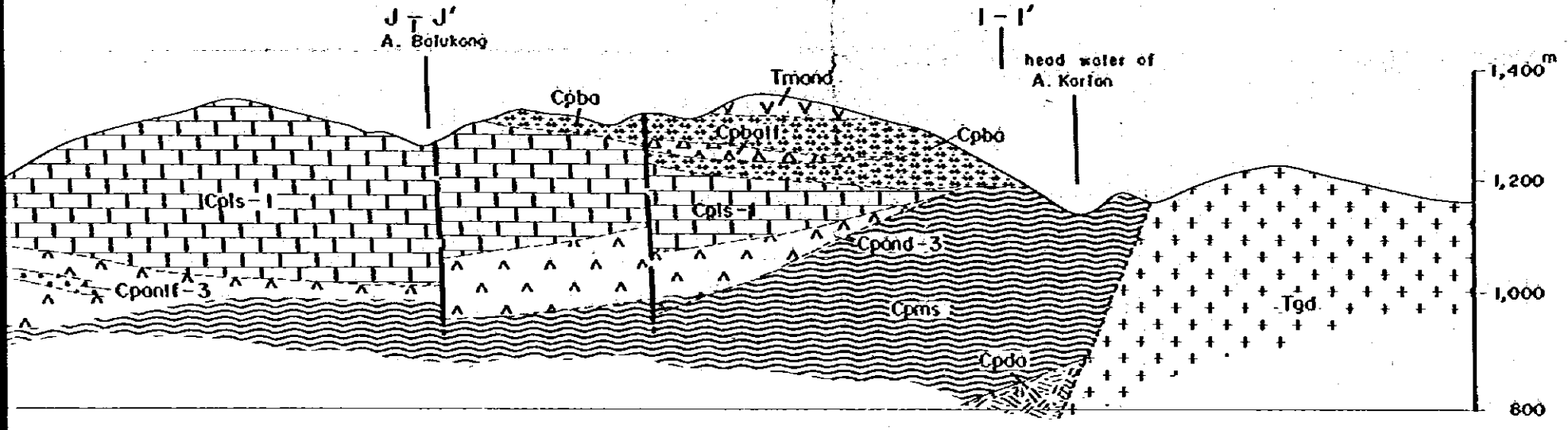


E - E'

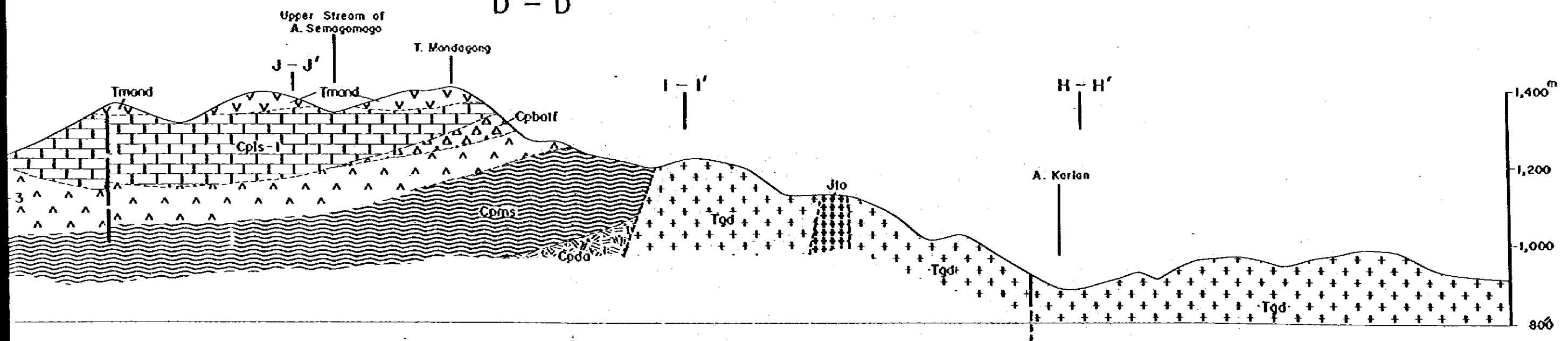
B - B'



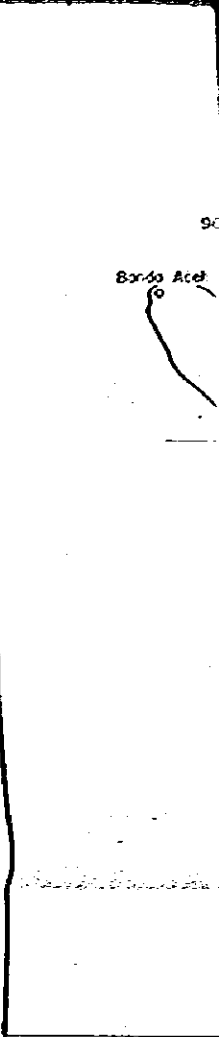
C - C'

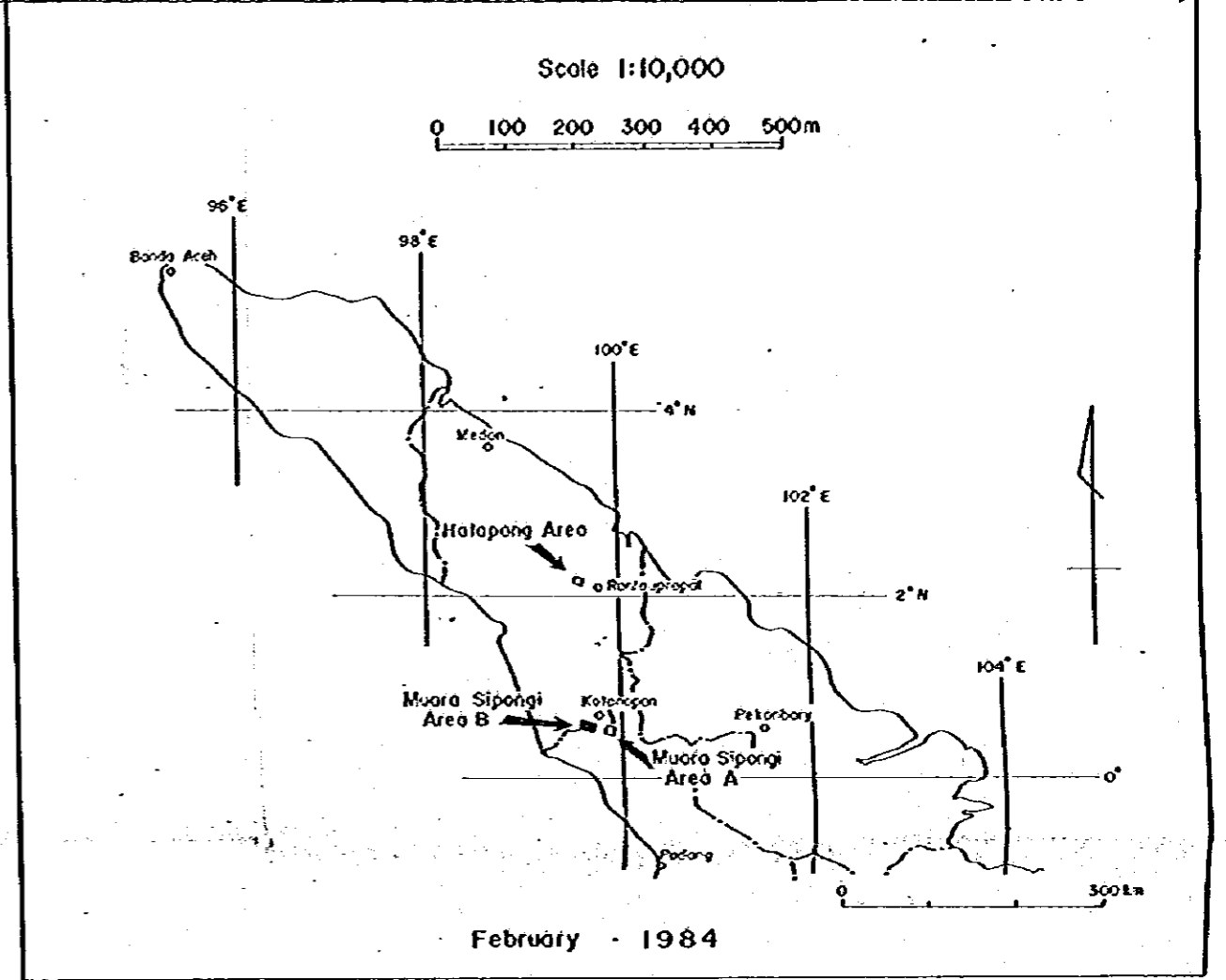
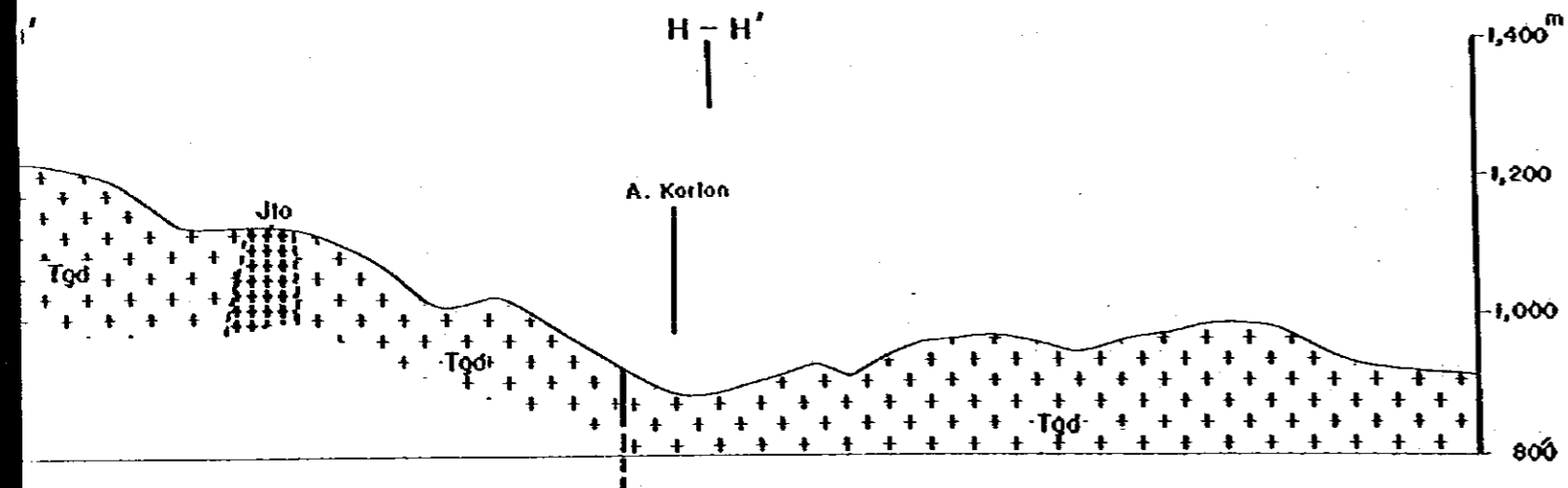
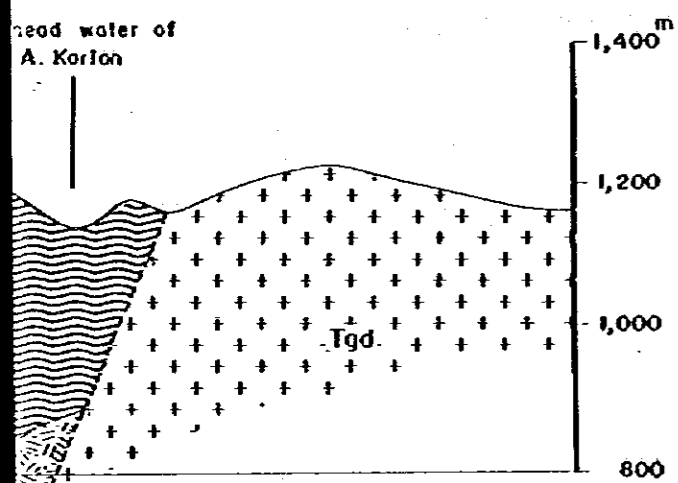
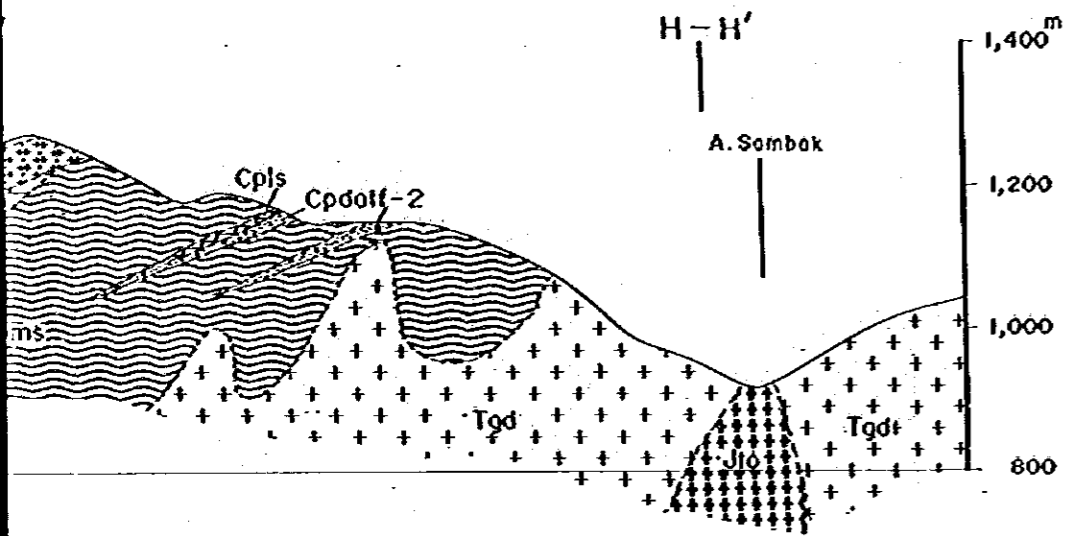


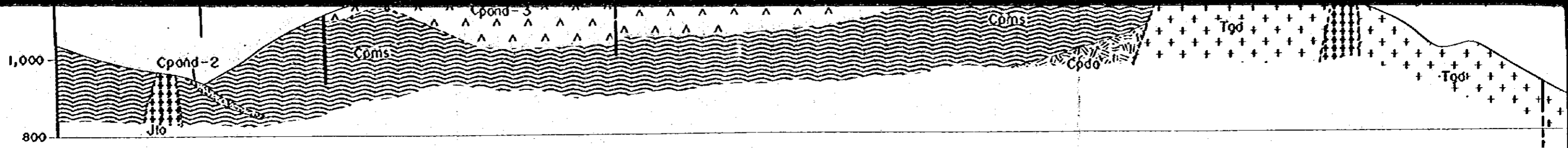
D - D'



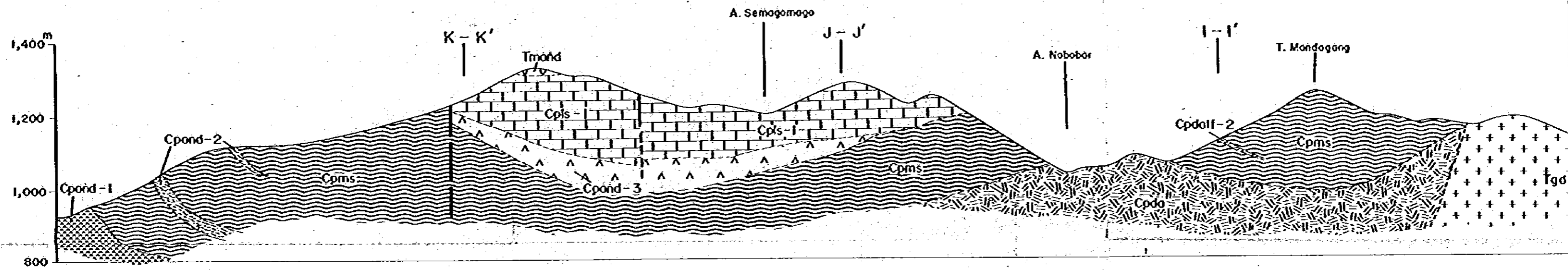
E - E'



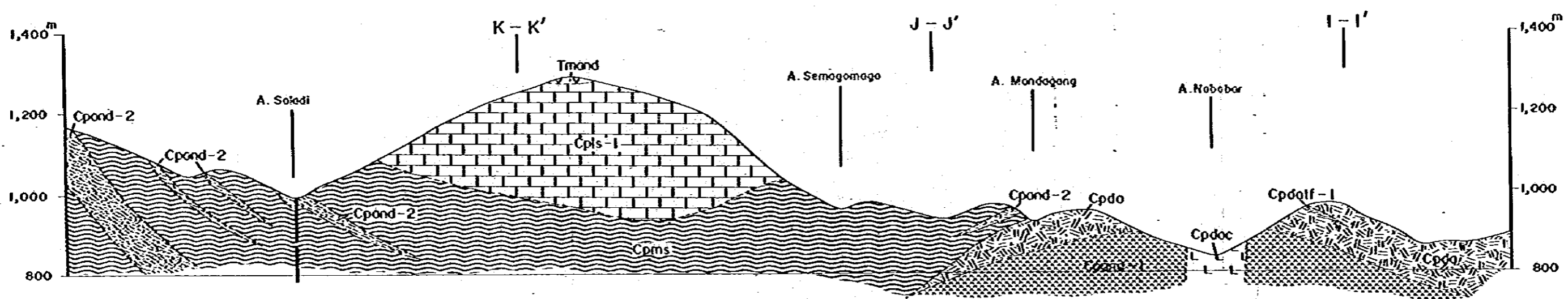




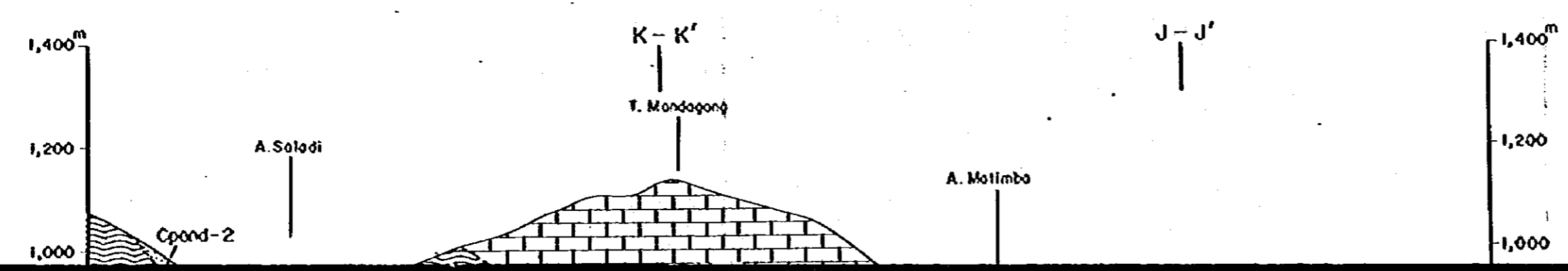
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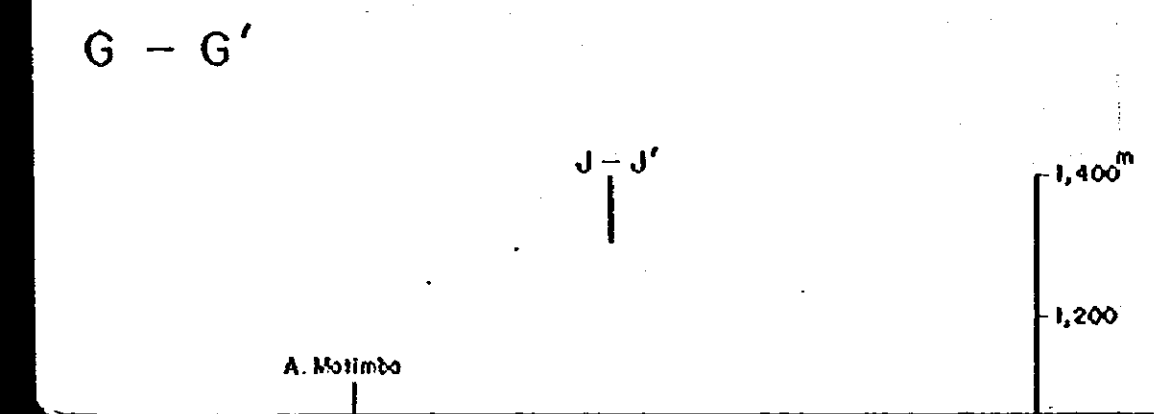
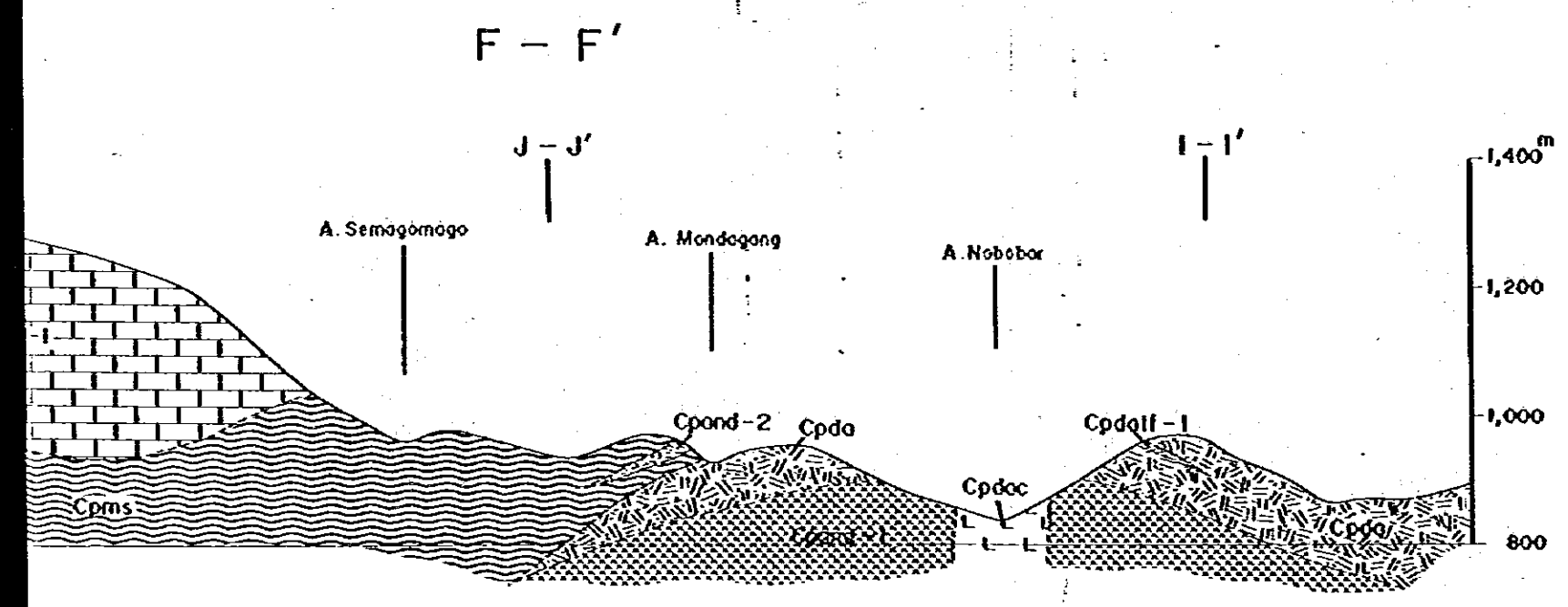
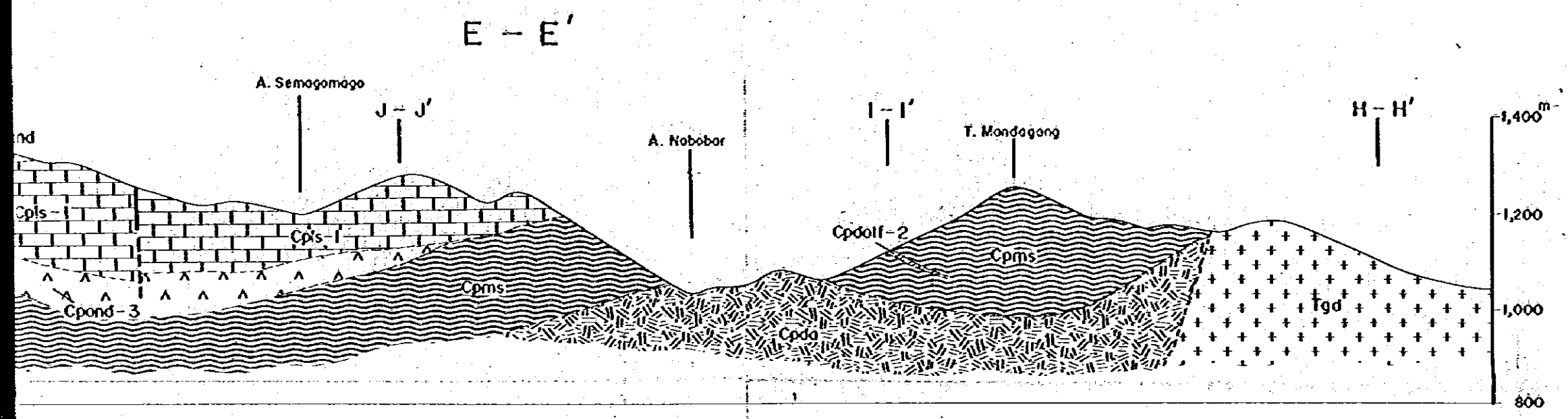
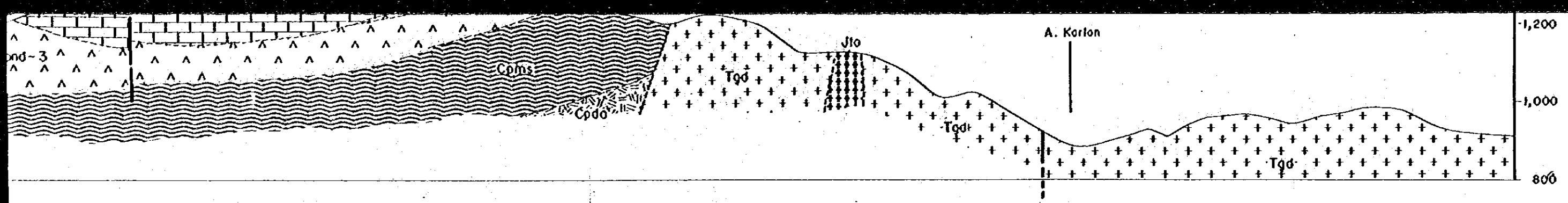


F - F'



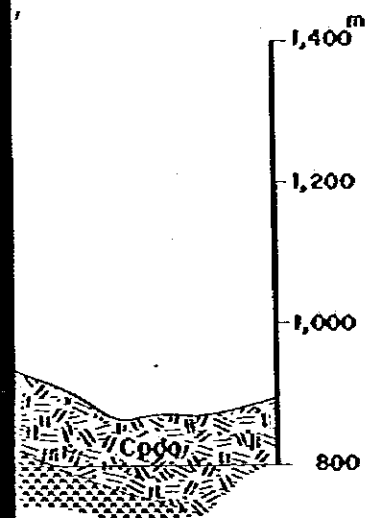
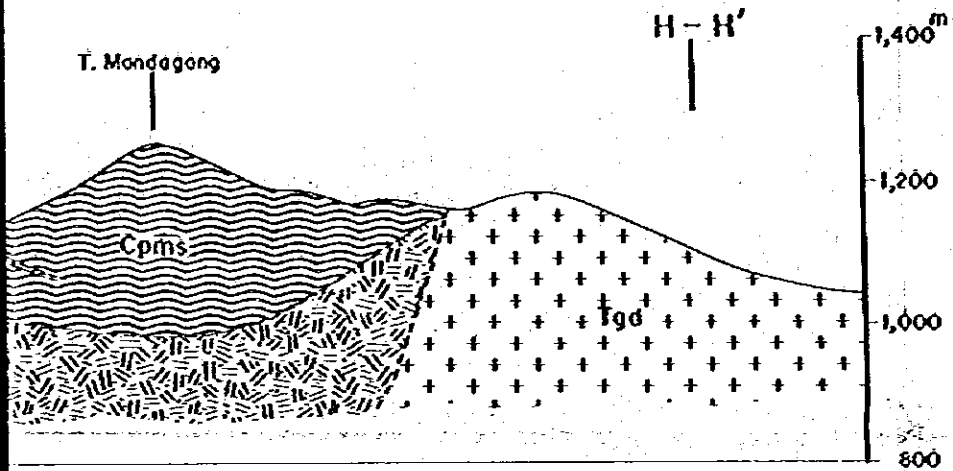
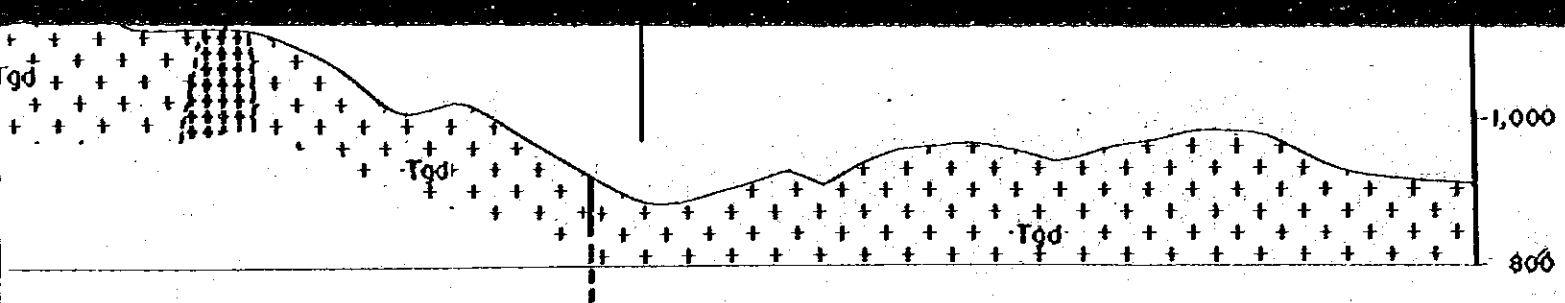
G - G'





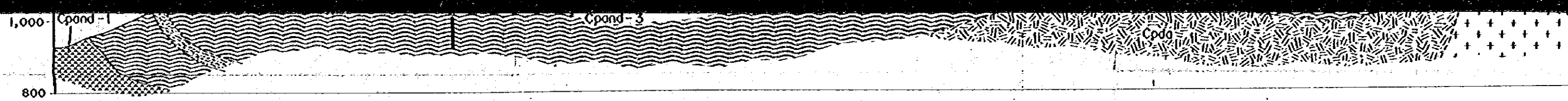
LEGEND

Geological Age	Geological unit	Sedimentary and volcanic rocks		Intrusive rocks
		Symbol	Description	
CENOZOIC		[Symbol]	Alluvium	
		[Symbol]	Pyroxene andesite	Andesite
MESOZOIC	TRIASSIC - JURASSIC	[Symbol]		Tonalite - Quartz (Micro Spongi Rocks)
		[Symbol]		Granodiorite (mylonite)
PALEOZOIC	Patahajong Formation	[Symbol]	Cps-2 Limestone	
		[Symbol]	Cps-2 Sandstone	
		[Symbol]	Cps-1 Basic pyroclastic rock	
		[Symbol]	Cps-1 Basic volcanic rock	
		[Symbol]	Cps-1 Sandstone	
		[Symbol]	Cps-1 Limestone	
		[Symbol]	Cps-3 Andesite	Andesite
		[Symbol]	Cps-3 Andesitic tuff	
CARBONIFEROUS - PERMIAN		[Symbol]	Cps-2 Dacitic tuff	
		[Symbol]	Cps-2 Andesitic tuff	
		[Symbol]	Cps-2 Andesite	
		[Symbol]	Cps Limestone	
		[Symbol]	Cps Mudstone & Sandstone	
		[Symbol]	Cps Dacite	
		[Symbol]	Dacite	Dacite

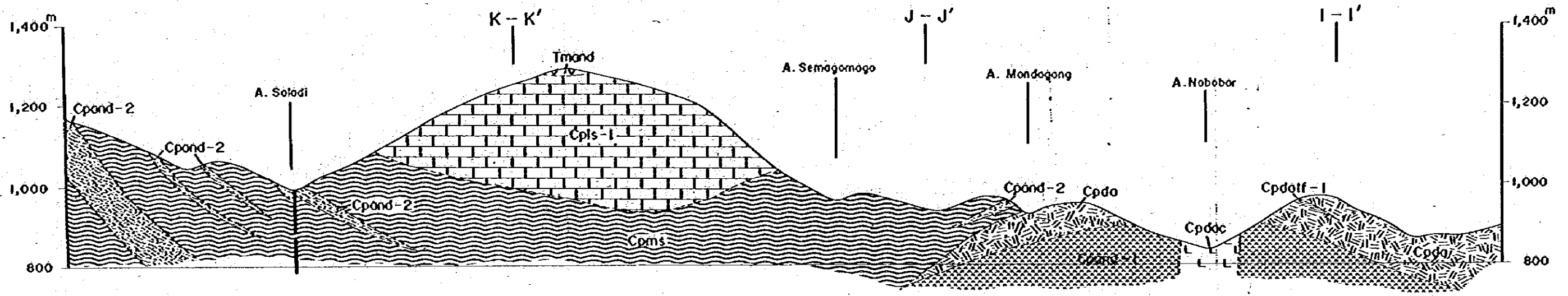


LEGEND

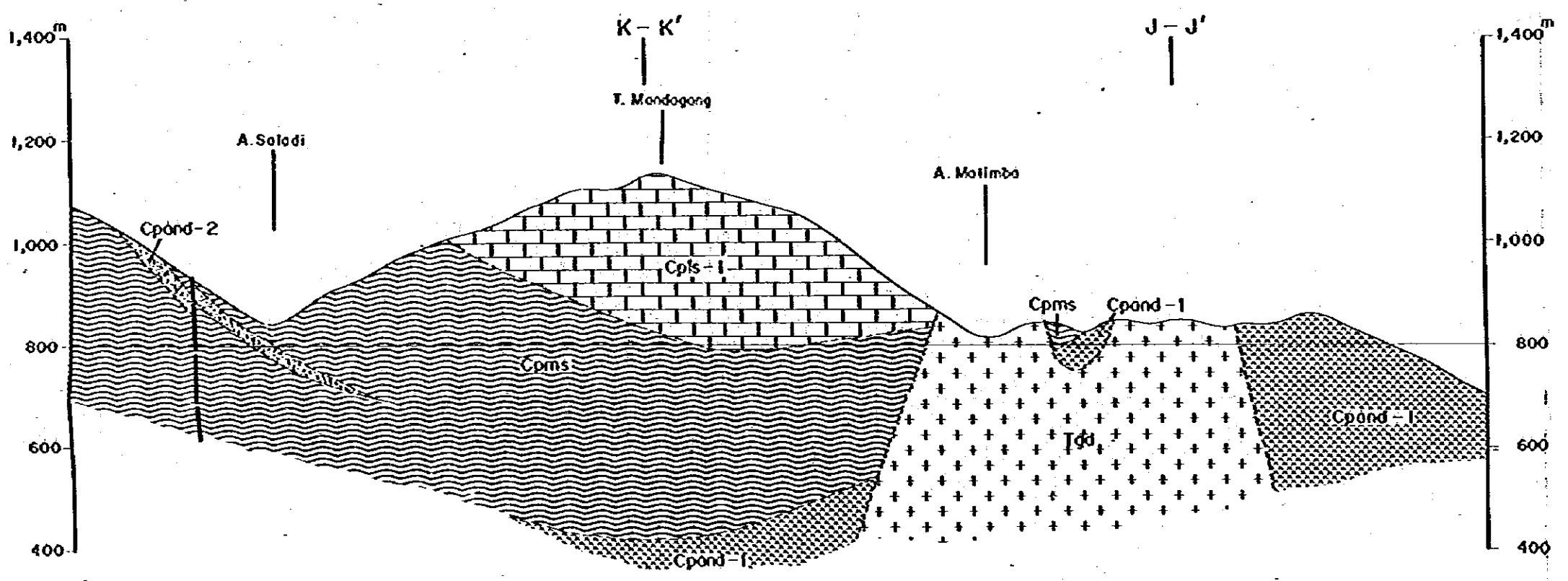
Geological Age	Geological unit		Sedimentary and volcanic rocks		Intrusive rocks		
	Geological Age	Geological unit	Symbol	Description	Symbol	Description	
CENOZOIC	QUATERNARY		[Dotted]	Aluvium			
	TERTIARY		[V-shaped]	Tand Pyroxene andesite	[V-shaped]	Tand Andesite	
MESOZOIC	TRIASSIC ~ JURASSIC		[Cross-hatch]	Tand Quartz Diorite (Micro Spongi Granoid Rocks)	[Cross-hatch]	Tand Quartz Diorite (Micro Spongi Granoid Rocks)	
				[Cross-hatch]	Tand Granodiorite (monzite)	[Cross-hatch]	Tand Granodiorite (monzite)
PALEOZOIC	CARBONIFEROUS ~ PERMIAN	Potohajong Formation	[Limestone pattern]	Cp's-2 Limestone			
			[Sandstone pattern]	Cp's-2 Sandstone			
			[Pyroclastic pattern]	Cp'at Basic pyroclastic rock			
			[Volcanic pattern]	Cp'ba Basic volcanic rock			
			[Sandstone pattern]	Cp's-1 Sandstone			
			[Limestone pattern]	Cp's-1 Limestone			
			[Andesite pattern]	Cp'ad-3 Andesite		[Andesite pattern]	Cp'ad Andesite
			[Andesite tuff pattern]	Cp'at-3 Andesite tuff			
[Andesite tuff pattern]	Cp'at-2 Andesite tuff						
[Andesite tuff pattern]	Cp'at-2 Andesite tuff						
[Andesite pattern]	Cp'ad-2 Andesite						
[Limestone pattern]	Cp's Limestone						
[Mudstone & Sandstone pattern]	Cp's Mudstone & Sandstone						
[Dacite pattern]	Cp'de Dacite						
[Dacite tuff pattern]	Cp'at-1 Dacite tuff						
				[Dacite pattern]	Cp'de Dacite		

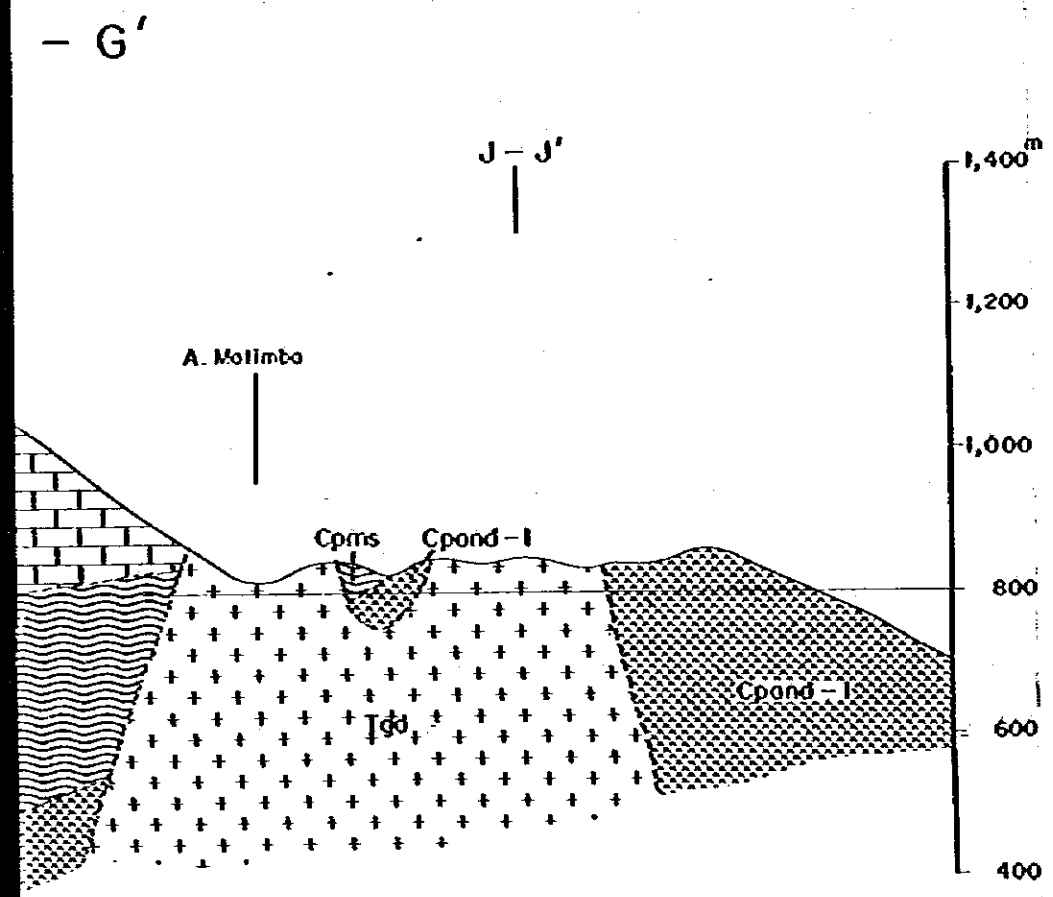
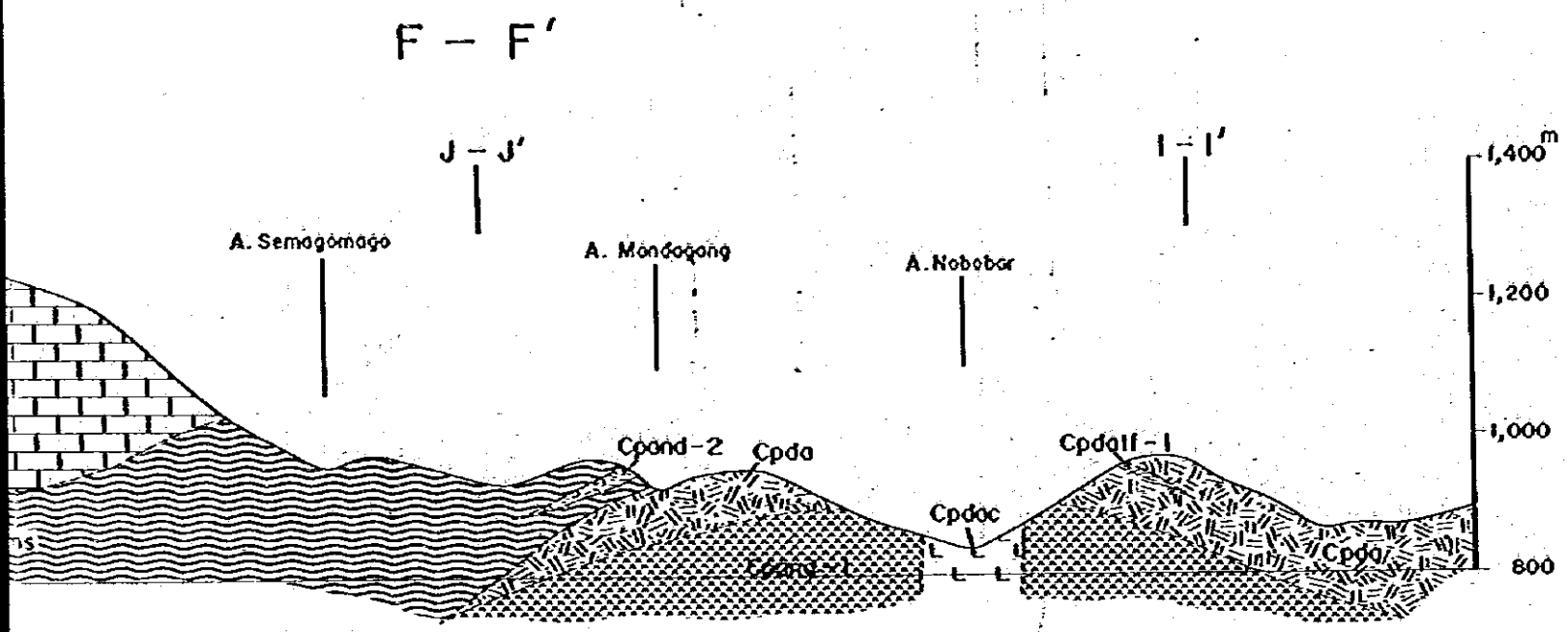


F - F'



G - G'

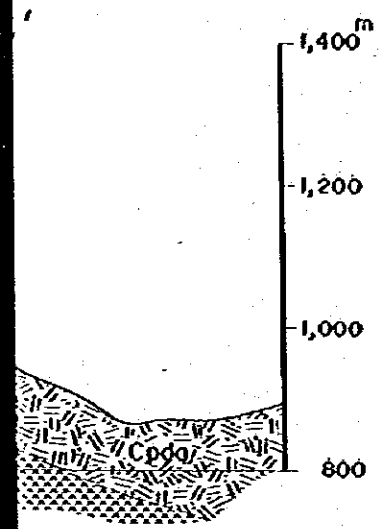




LEGEND

Geological Age	Geological unit		Sedimentary and volcanic rocks		Intrusive rocks	
	Geological Age	Geological unit	Symbol	Description	Symbol	Description
CENOZOIC	QUATERNARY		[Symbol]	Alluvium		
	TERTIARY		[Symbol]	Trond Pyroxene andesite	[Symbol]	Andesite
MESOZOIC	TRIASSIC ~ JURASSIC		[Symbol]	Tonalite-Quartz Diorite (Mura Spongi Granite Rocks)	[Symbol]	Granodiorite (mylonite)
PALEOZOIC	CARBONIFEROUS ~ PERMIAN	Patahojong Formation	[Symbol]	Cps-2 Limestone		
			[Symbol]	Cps-2 Sandstone		
			[Symbol]	Cps-2 Basic pyroclastic rock		
			[Symbol]	Cps-2 Basic volcanic rock		
			[Symbol]	Cps-1 Sandstone		
			[Symbol]	Cps-1 Limestone		
			[Symbol]	Cps-3 Andesite	[Symbol]	Andesite
			[Symbol]	Cps-3 Andesitic tuff		
			[Symbol]	Cps-2 Dacitic tuff		
			[Symbol]	Cps-2 Andesitic tuff		
[Symbol]	Cps-2 Andesite					
[Symbol]	Cps Limestone					
[Symbol]	Cps Mudstone & Sandstone					
[Symbol]	Cps Dacite	[Symbol]	Dacite			
[Symbol]	Cps-1 Dacitic tuff					
	Mura Botung Formation			[Symbol]	Cps-1 Andesite	

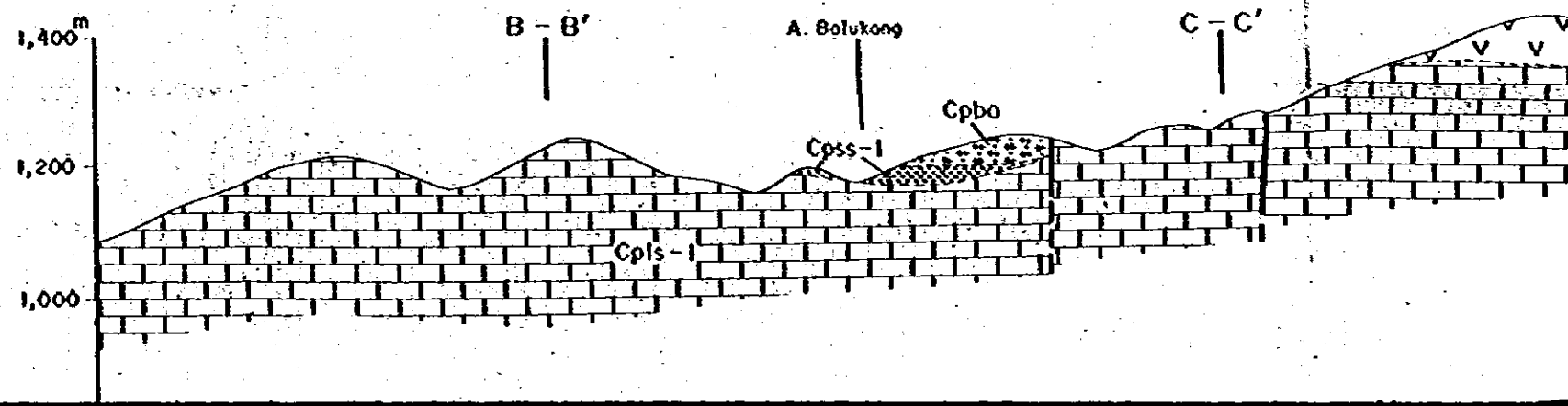
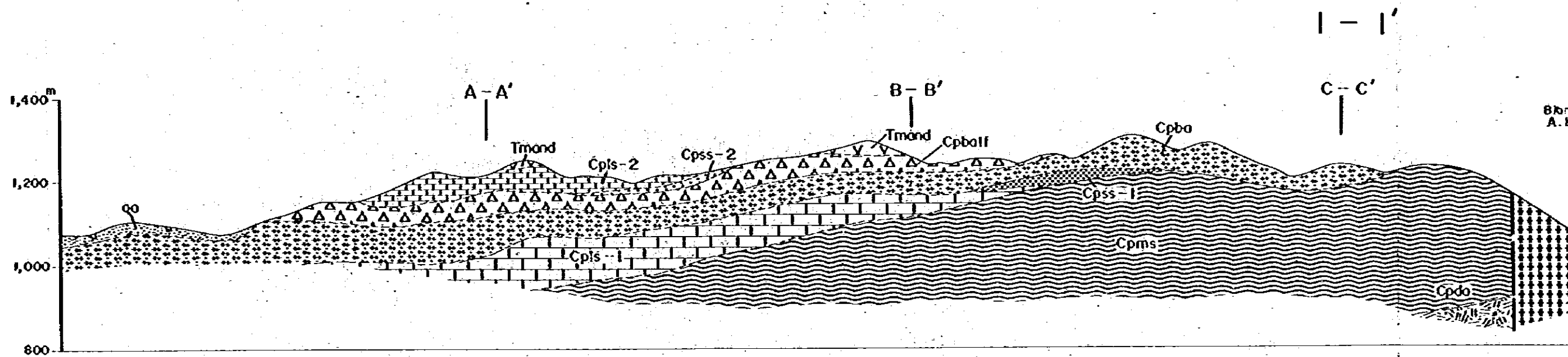
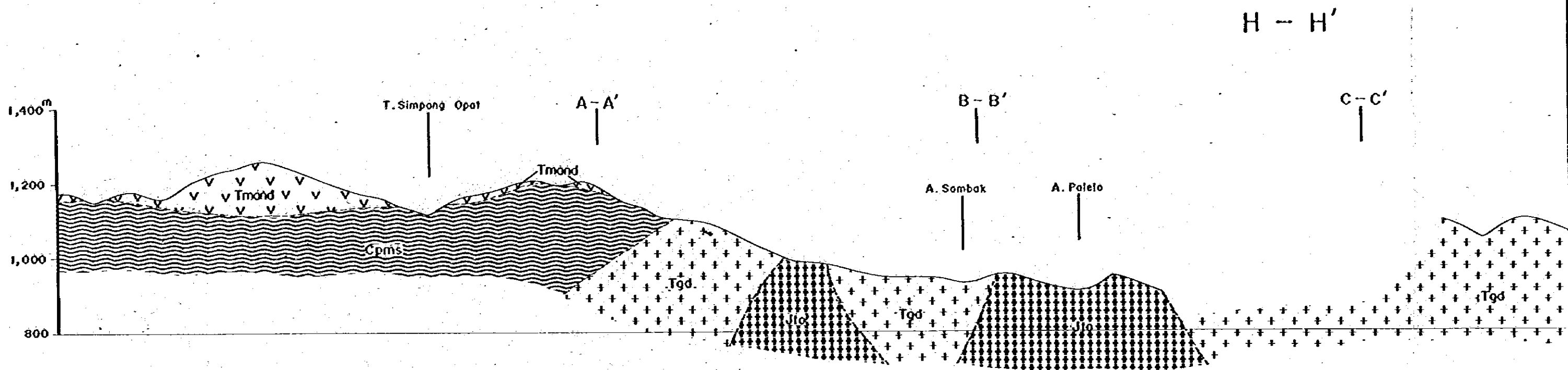
- ↘ Dip and strike
- ↘ Fault confirmed
- ↘ Fault inferred
- ⋈ Anticline axis
- ⋈ Syncline axis
- Outcrop of ore



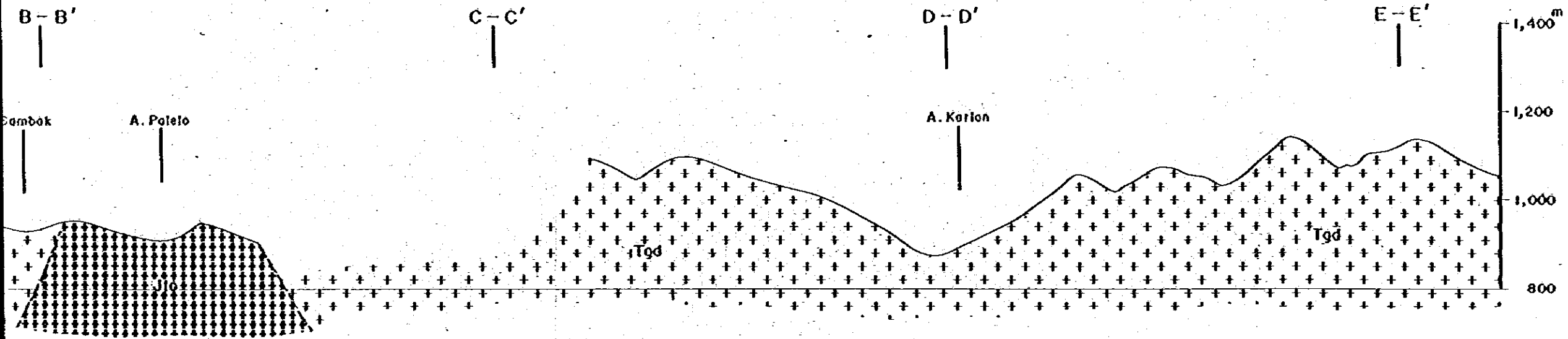
LEGEND

Geological Age		Geological unit	Sedimentary and volcanic rocks		Intrusive rocks	
CENOZOIC	QUATERNARY		Alluvium			
	TERTIARY		Tertiary Pyroxene andesite		Andesite	
MESOZOIC	TRIASSIC - JURASSIC				Tonalite-Quartz Diorite (Muara Spongi Granitoid Rocks)	Granodiorite (mylonite)
PALEOZOIC	CARBONIFEROUS - PERMIAN	Patahojong Formation	Upper Limestone Member	Limestone Sandstone		
			Basic Volcanic rock Member	Basic pyroclastic rock Basic volcanic rock		
			Lower Limestone Member	Sandstone Limestone		Andesite
			Andesite Member	Andesite Andesite tuff		
			Alternated Member of Clastic rock and Volcanic rock	Dacite tuff Andesite tuff Andesite		Dacite
				Limestone Mudstone & Sandstone		
				Dacite Dacite tuff		
			Muara Bohung Formation	Andesite Member	Andesite	

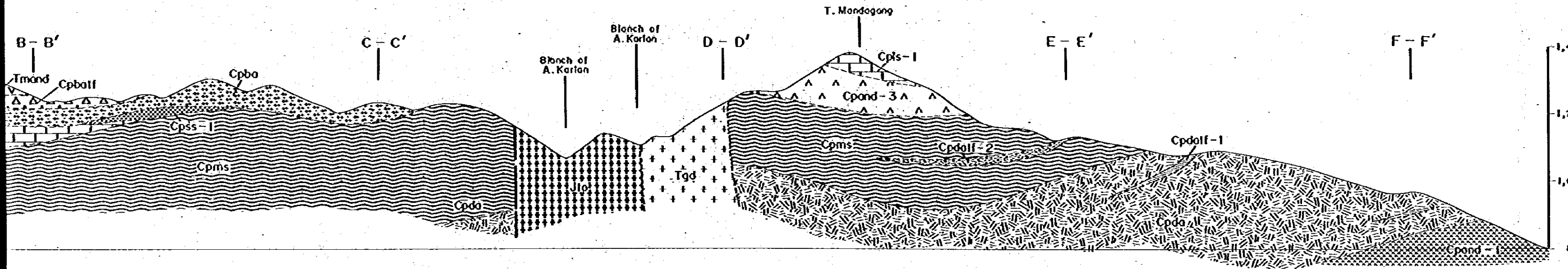
- Dip and strike
- Fault confirmed
- Fault inferred
- Anticline axis
- Syncline axis
- Outcrop of ore



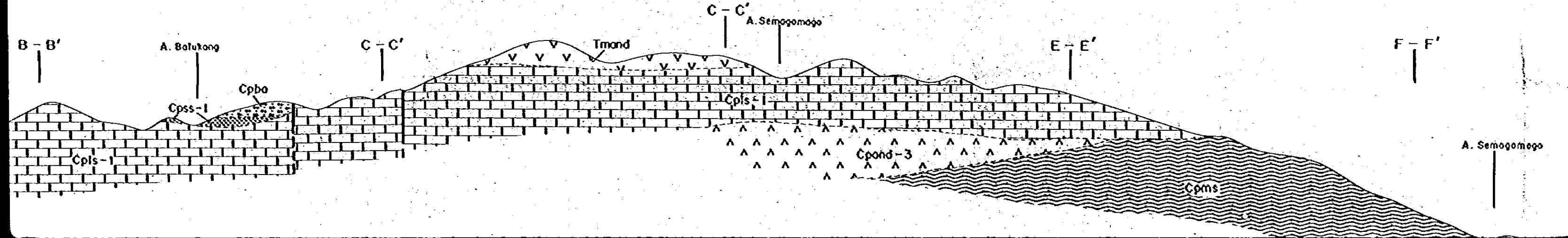
H - H'

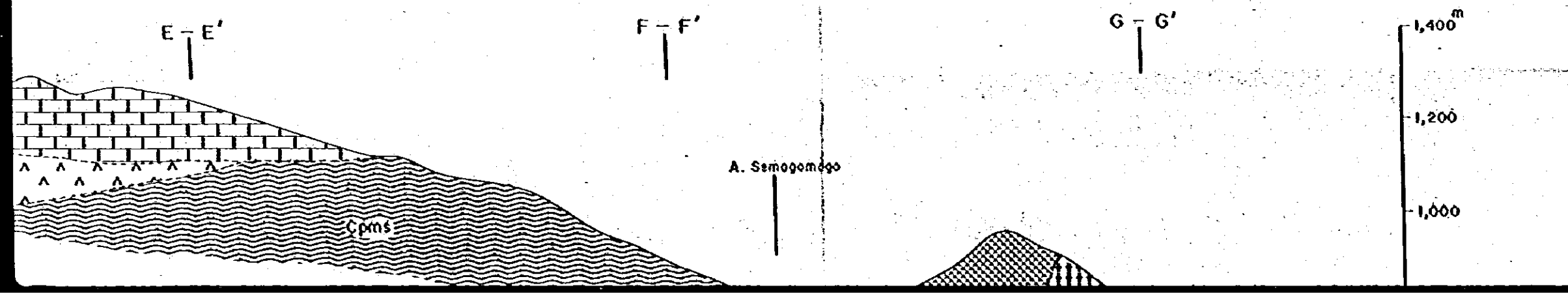
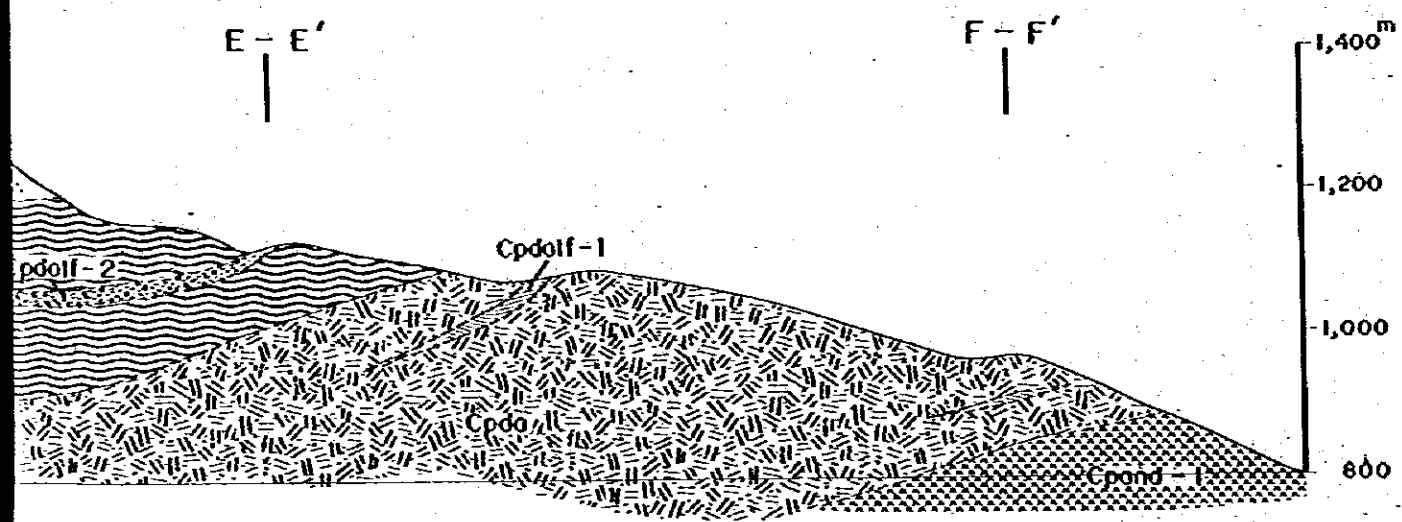
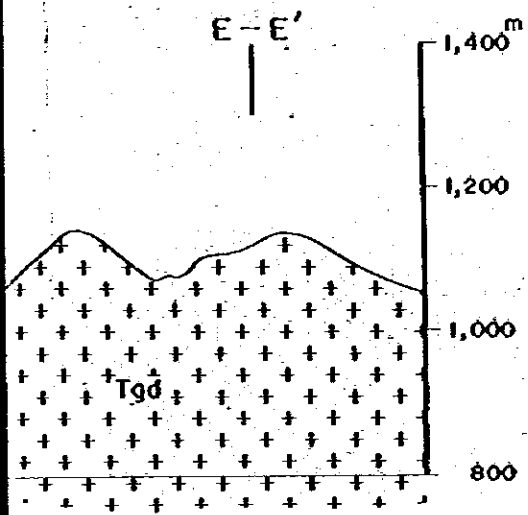


I - I'



J - J'





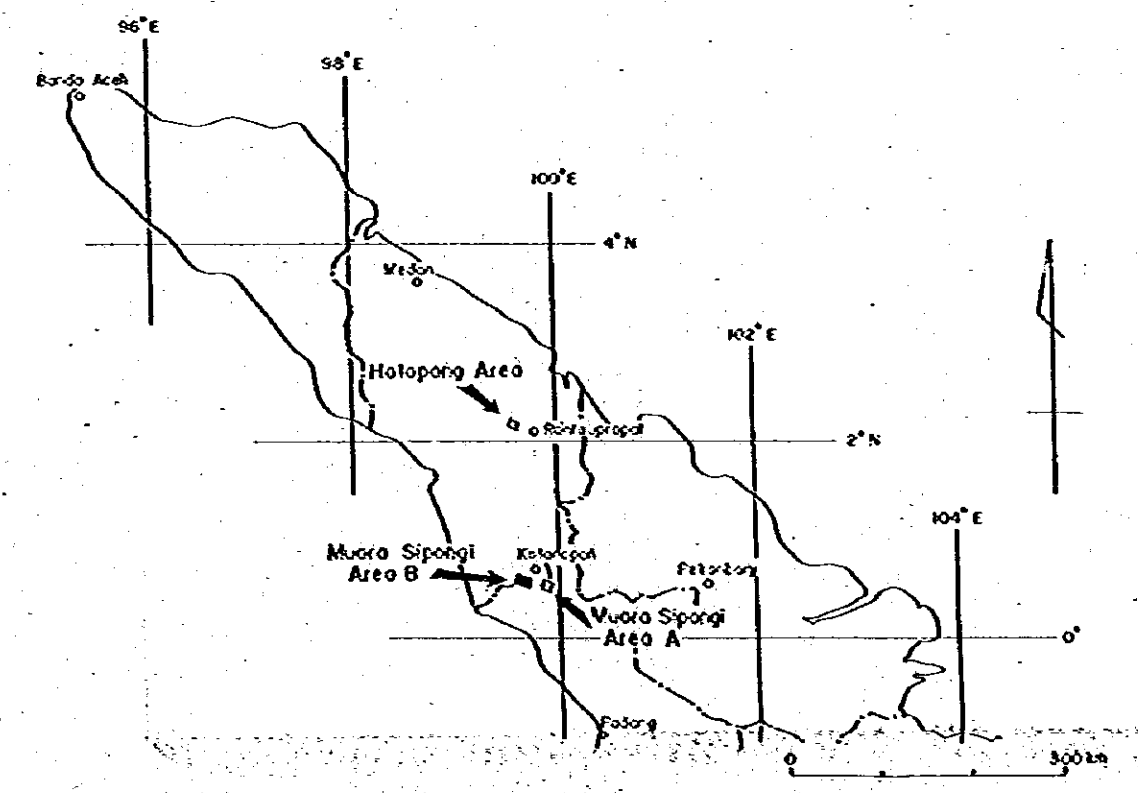
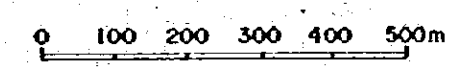
METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL
COOPERATION AGENCY

DIRECTORATE OF MINERAL
RESOURCES
DIRECTORATE GENERAL
OF MINES
MINISTRY OF MINES
AND ENERGY
REPUBLIC OF INDONESIA

MINERAL EXPLORATION IN NORTHERN SUMATRA
REPUBLIC OF INDONESIA

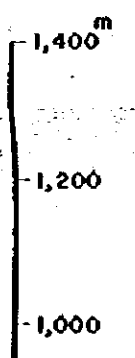
GEOLOGICAL PROFILE
OF MUARA SIPONGI AREA B
(E - W SECTION)

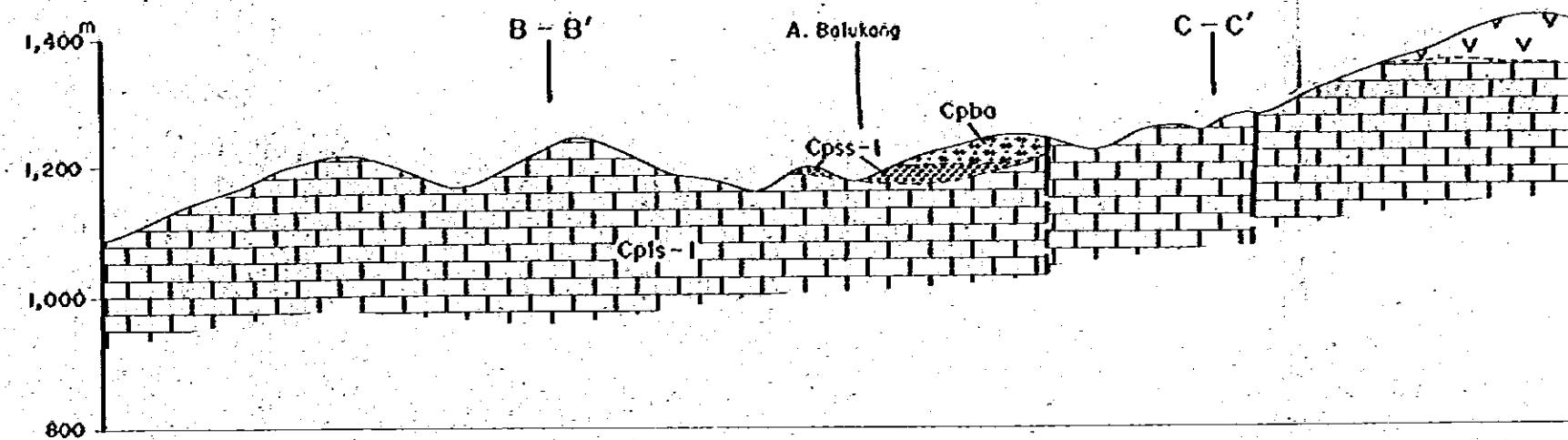
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February 1984

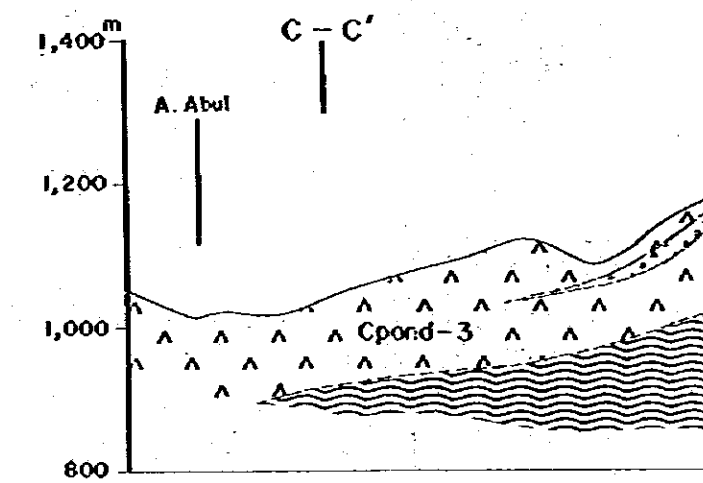
G - G'



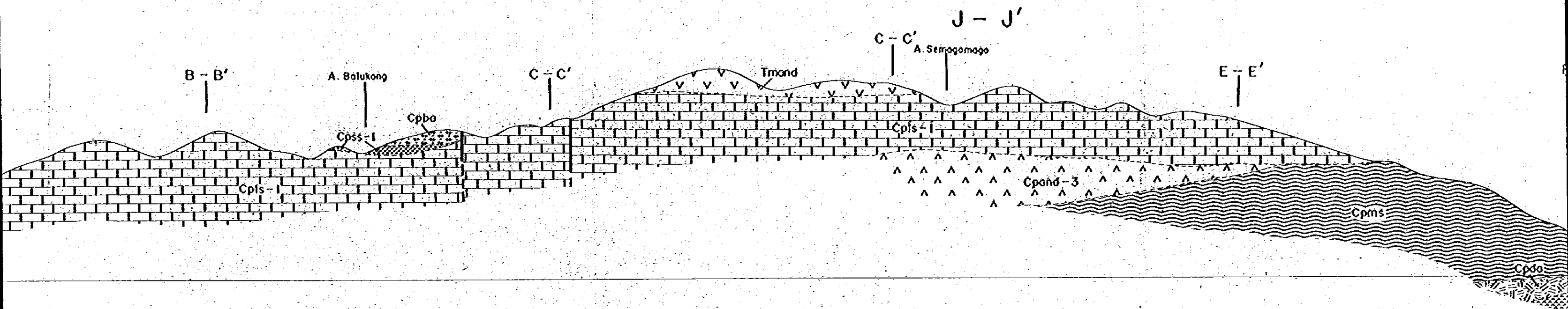


LEGEND

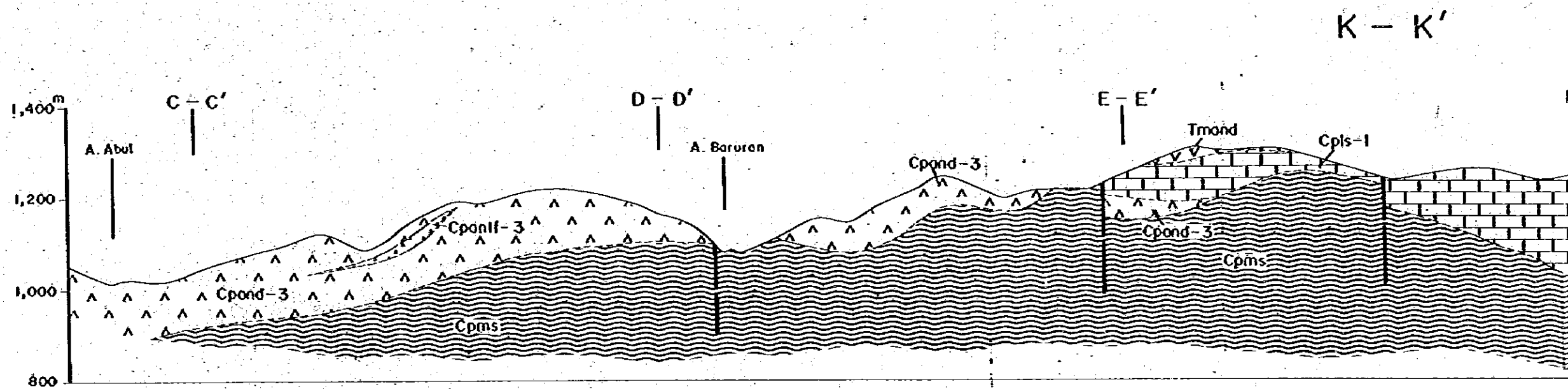
Geological Age		Geological unit		Sedimentary and volcanic rocks		Intrusive rocks	
GENOZOIC	QUATERNARY			Alluvium			
	TERTIARY			Tertiary Pyroxene andesite		Andesite	
MESOZOIC	TRIASSIC - JURASSIC			Tonalite-Quartz Diorite (Mura Spangit Granitoid Rocks)		Granodiorite (mylonite)	
PALEOZOIC	CARBONIFEROUS - PERMIAN	Patahojong Formation	Upper Limestone Member	Cp's-2 Limestone			
				Cpss-2 Sandstone			
			Basic Volcanic rock Member	Cpbat Basic pyroclastic rock			
				Cpba Basic volcanic rock			
			Lower Limestone Member	Cpss-1 Sandstone			
				Cp's-1 Limestone		Cpand Andesite	
			Andesite Member	Cpand-3 Andesite			
				Cpand-3 Andesitic tuff			
			Alternated Member of Clastic rock and Volcanic rock	Cpand-2 Docitic tuff		Cpdoc Docite	
				Cpand-2 Andesitic tuff			
Cpand-2 Andesite							
Cp's Limestone							
Docite Member	Cpms Mudstone & Sandstone						
	Cpdoc Docite						
	Cpand-1 Docitic tuff						
	Mura Bahung Formation	Andesite Member	Cpand-1 Andesite				

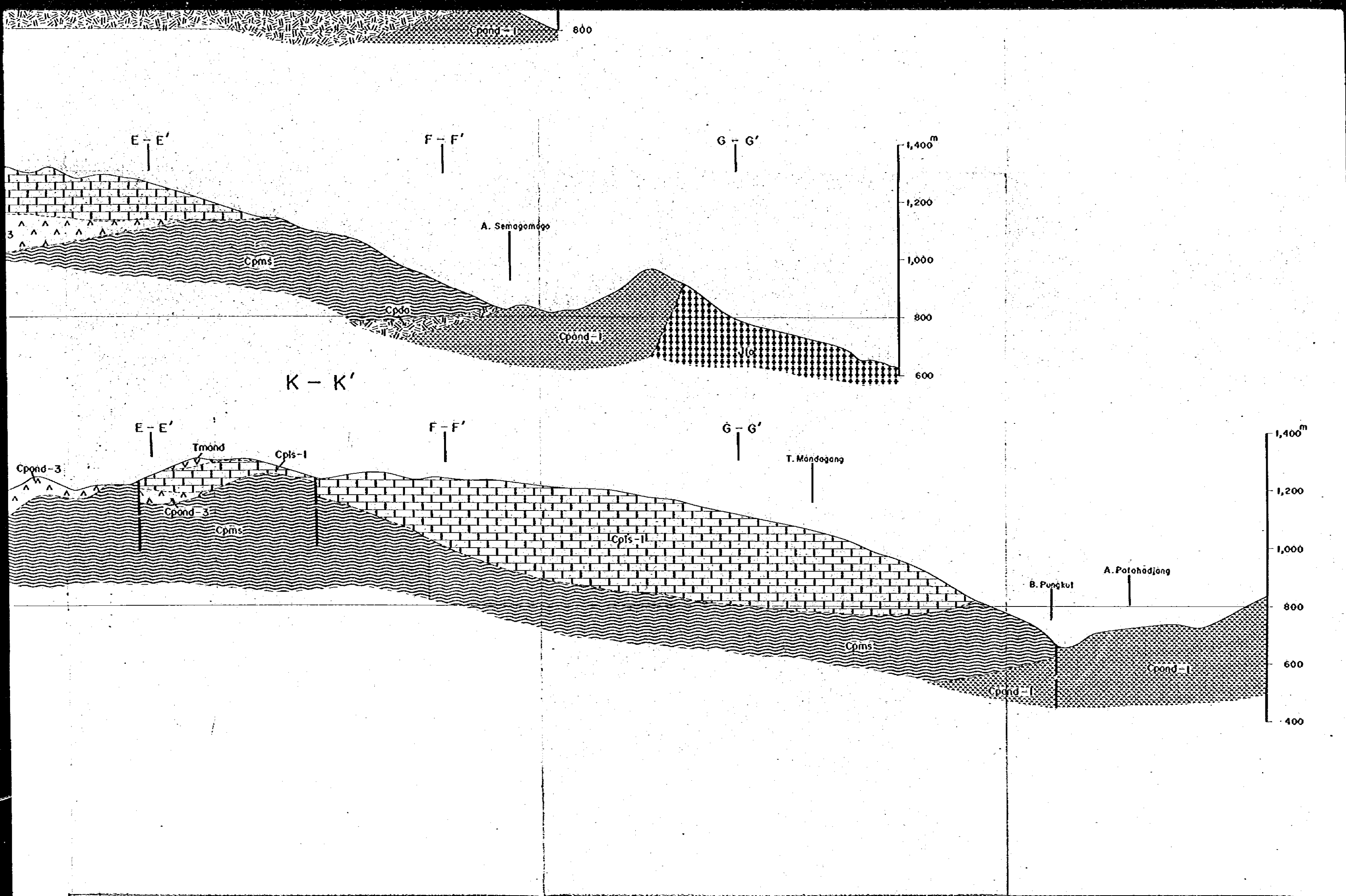


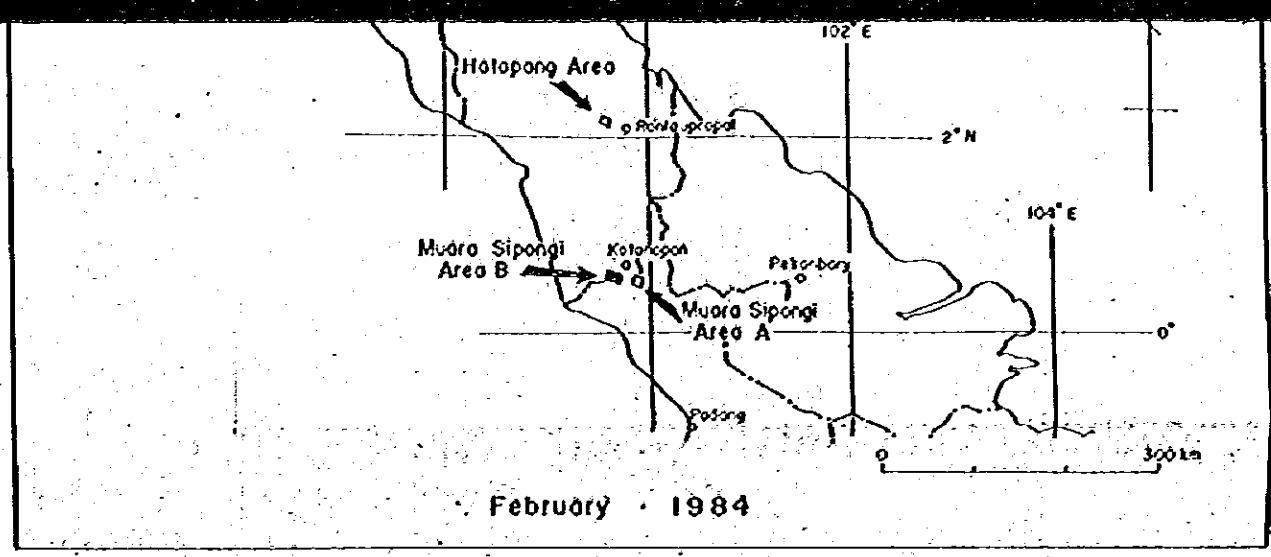
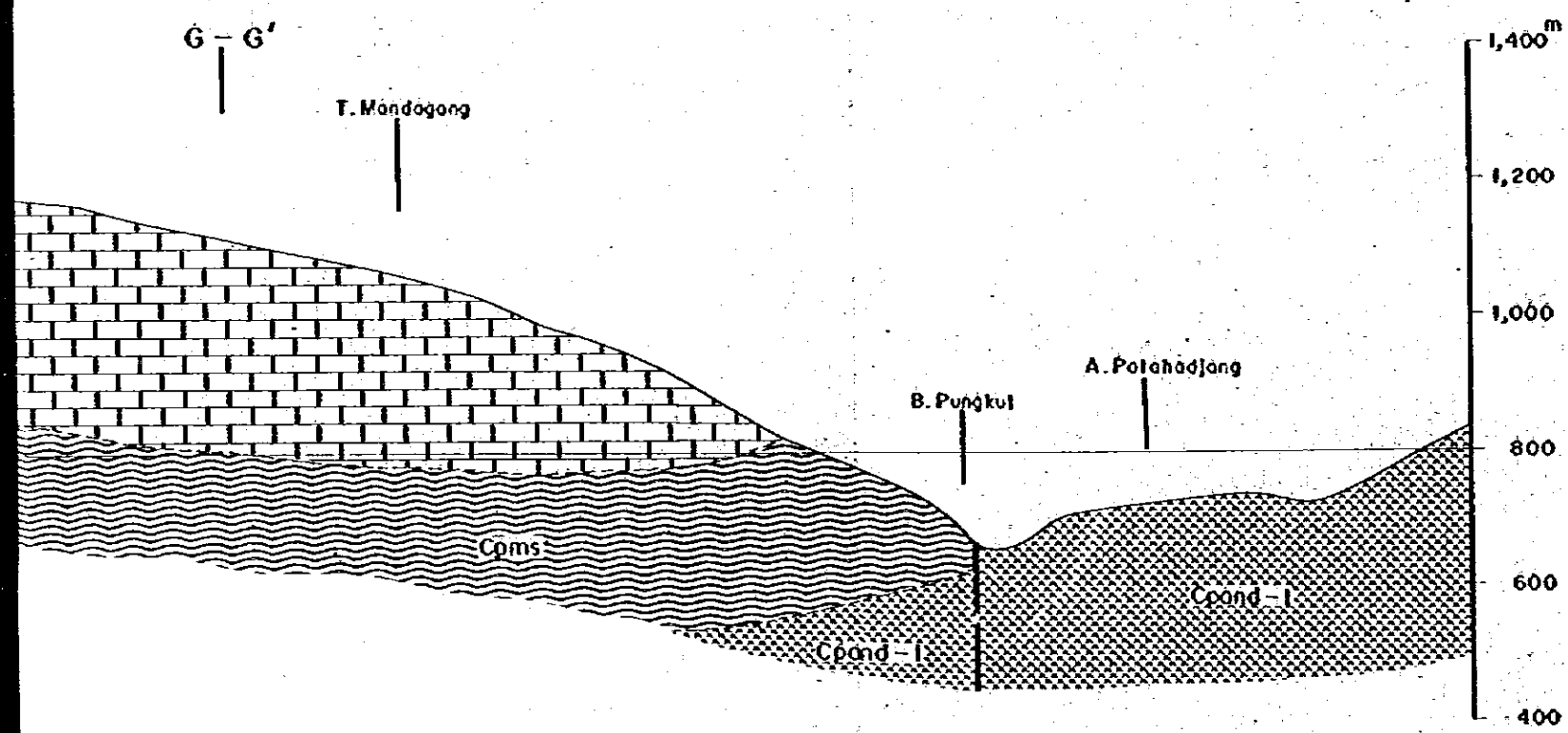
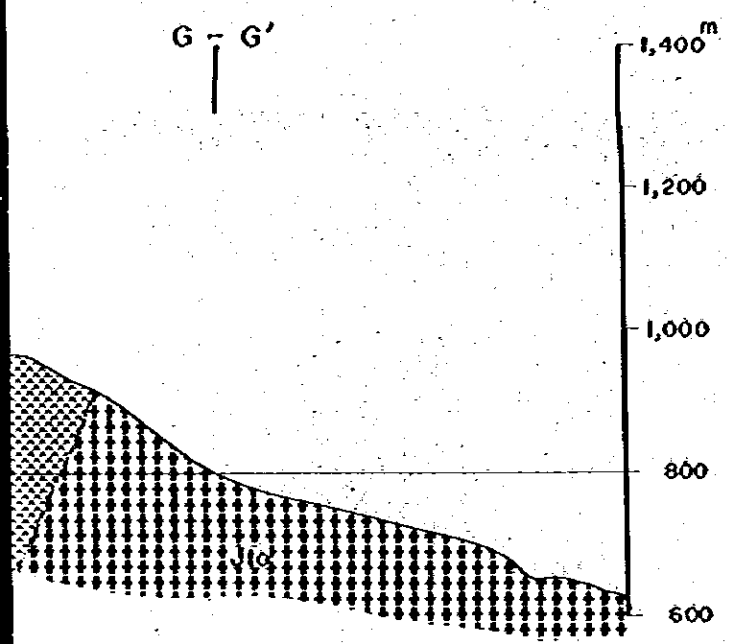
- Dip and strike
- Fault confirmed
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- Outcrop of ore



Intrusive rocks	
	Tond Andesite
	Tondite - Quartz Diorite (Mura Spongi Granitoid Rocks)
	Tps Granodiorite (mylonite)
	Cpnd Andesite
	Cpdc Diorite







The document contains a dense, repetitive pattern of characters and symbols, likely representing a corrupted scan or a highly degraded document. The text is illegible due to extreme noise and low contrast. The visible content consists of a chaotic arrangement of letters, numbers, and special characters, with no discernible structure or meaning. The overall appearance is that of a severely damaged or corrupted digital file.