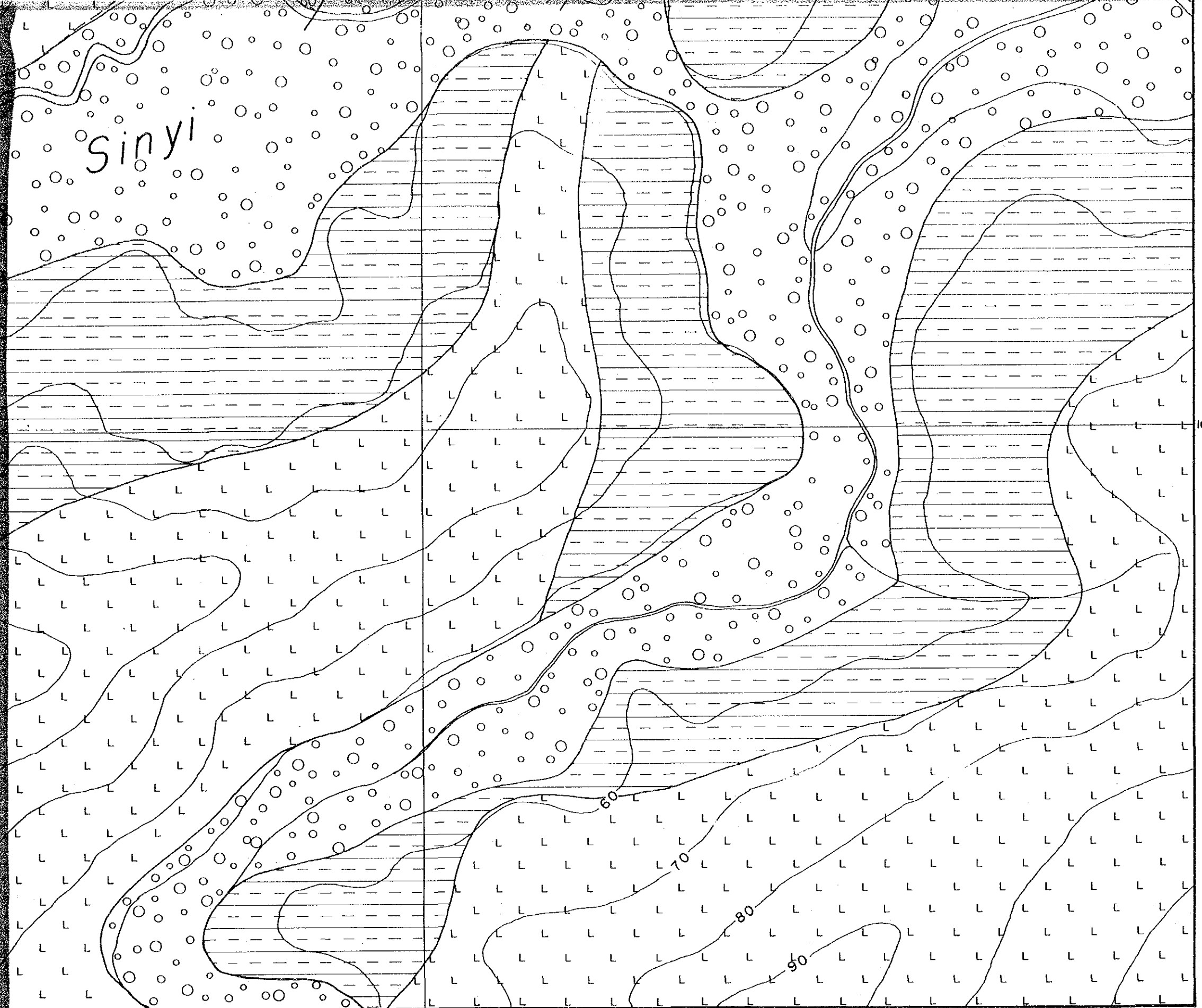


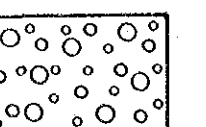
Sinyi
Sungai

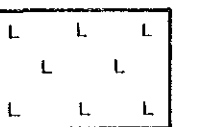
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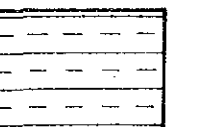
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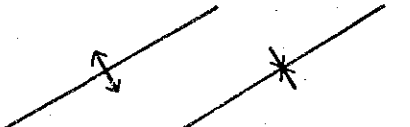


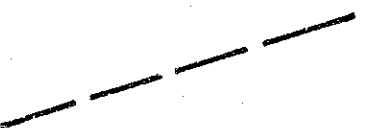
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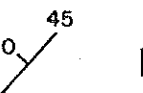
Quaternary
 Alluvium
 gravel and sand

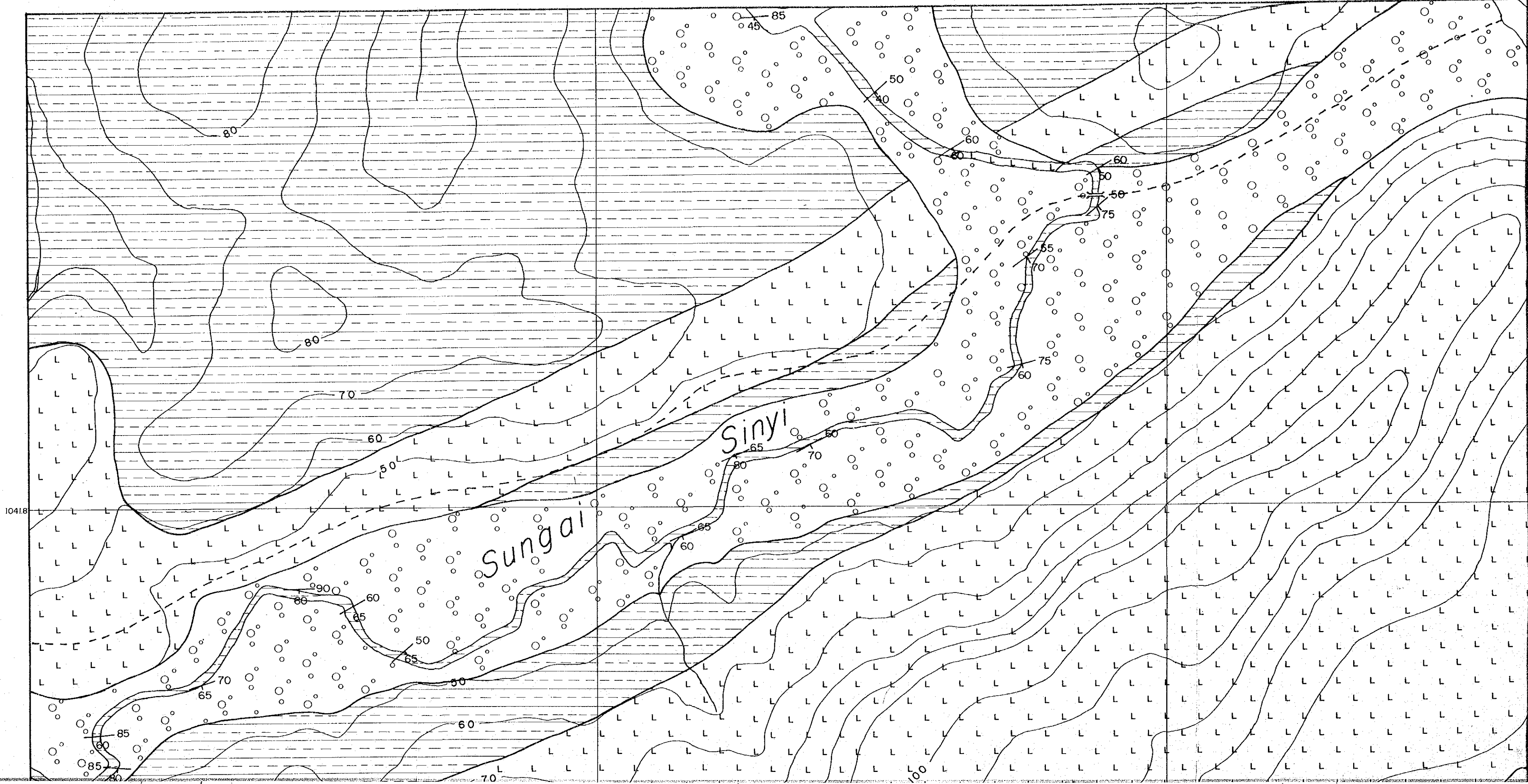
Neogene Tertiary
 Acidic Intrusive
 dacite

Cretaceous Pedawan Formation
 bedded
 fine-grained sandstone
 siltstone and shale

 anticlinal and
 synclinal axes

 fault

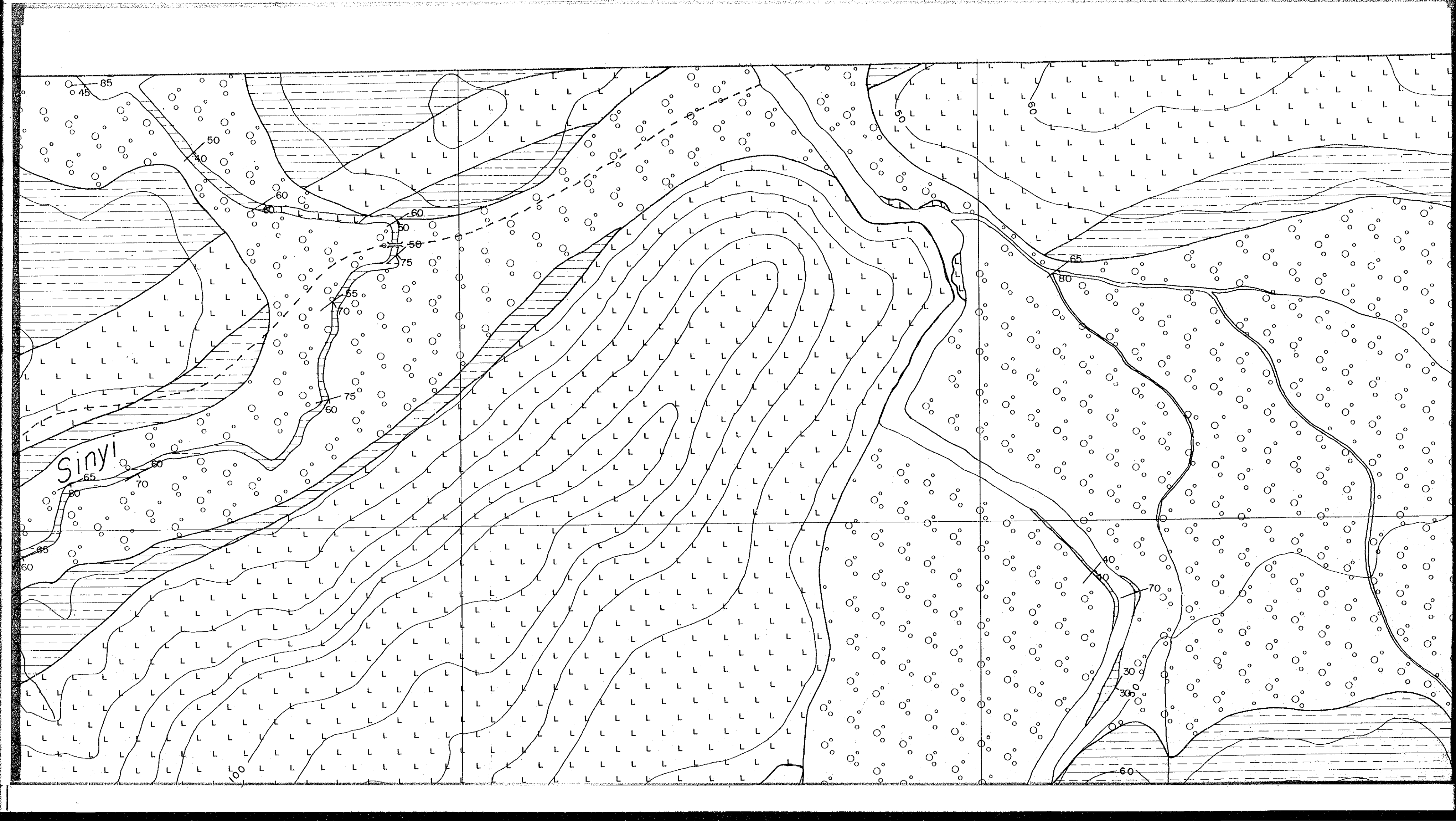
 bedding plane



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Sungai

Sinyi



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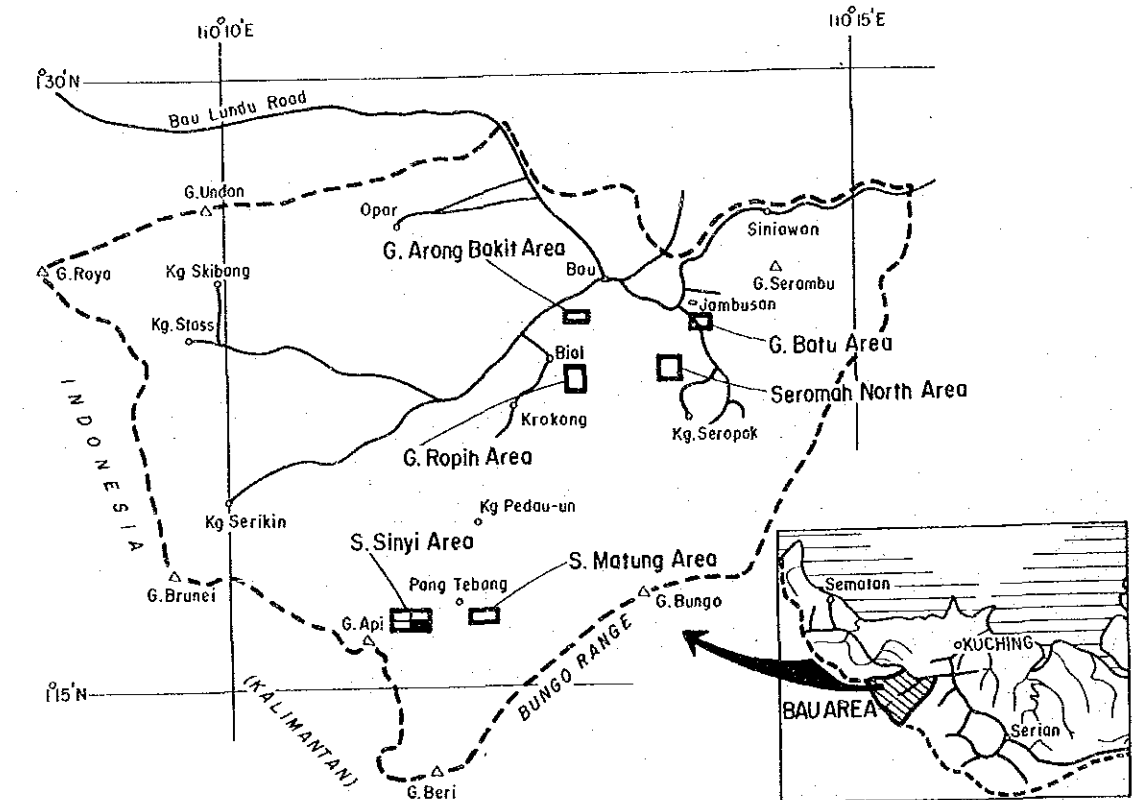
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Map 4-4

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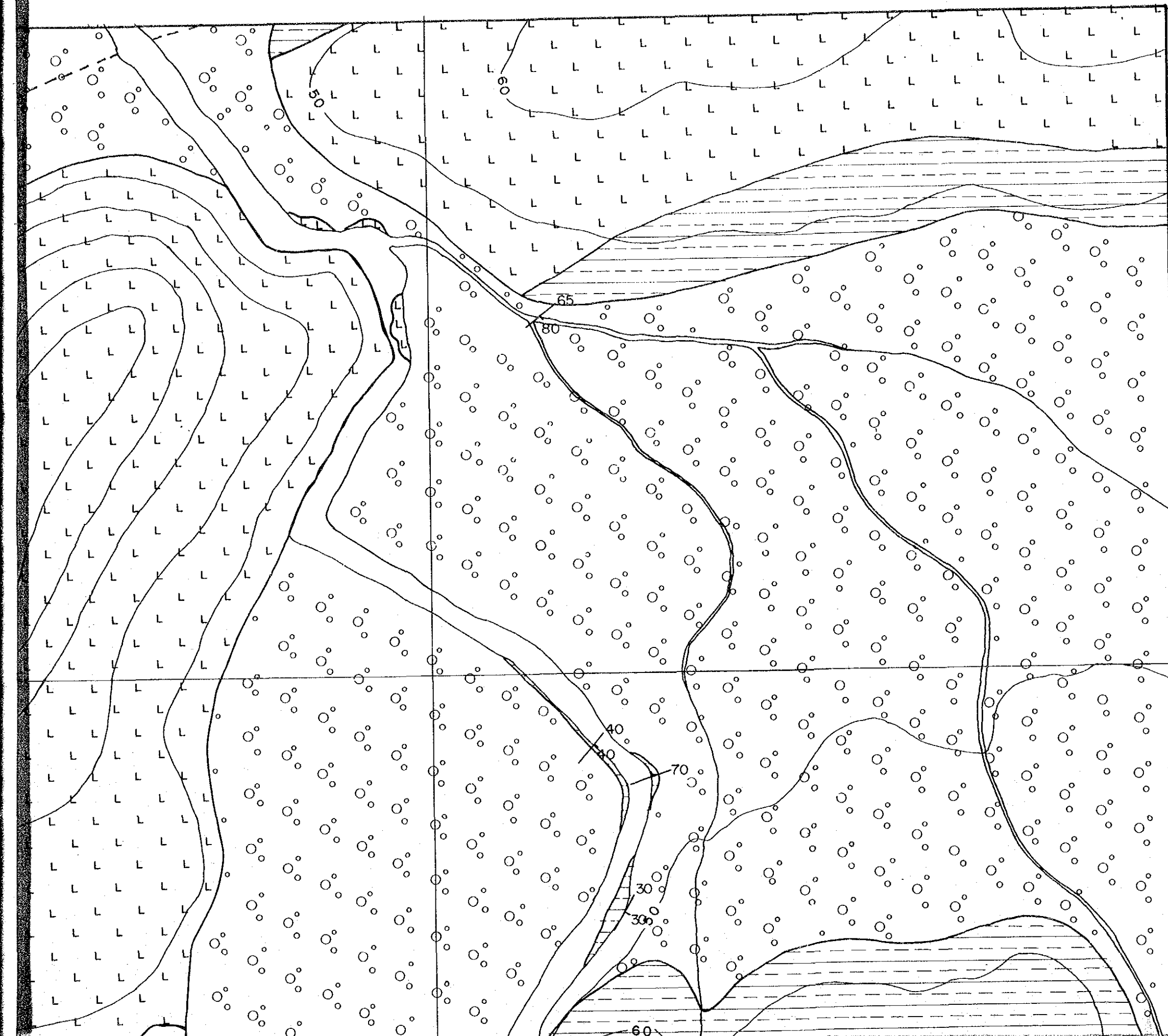
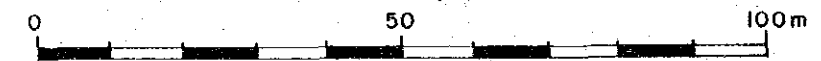
MINERAL EXPLORATION
BAU AREA
WEST SARAWAK, MALAYSIA
PHASE III

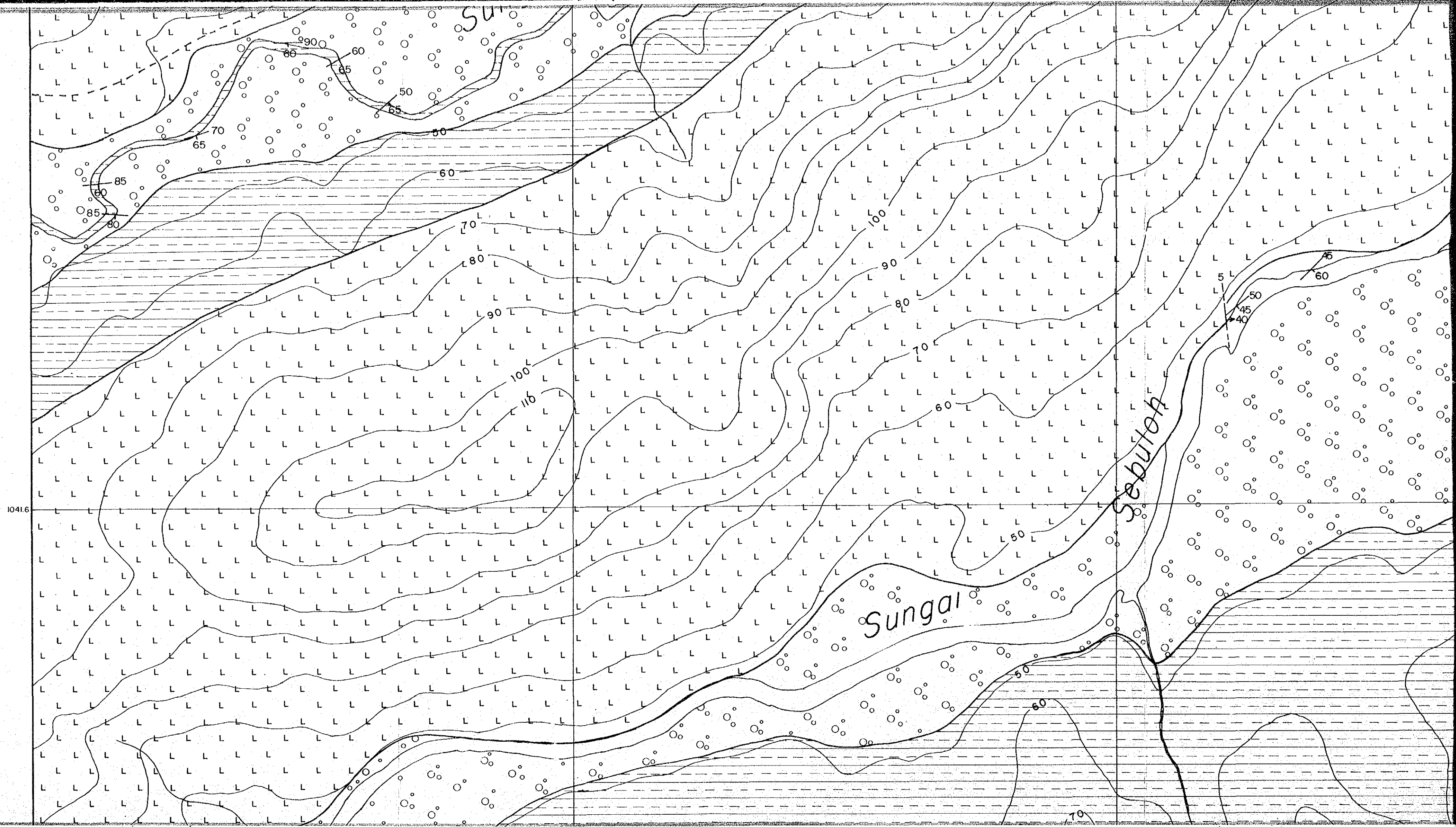
Geology of
Sungai Sinyi Area (4)

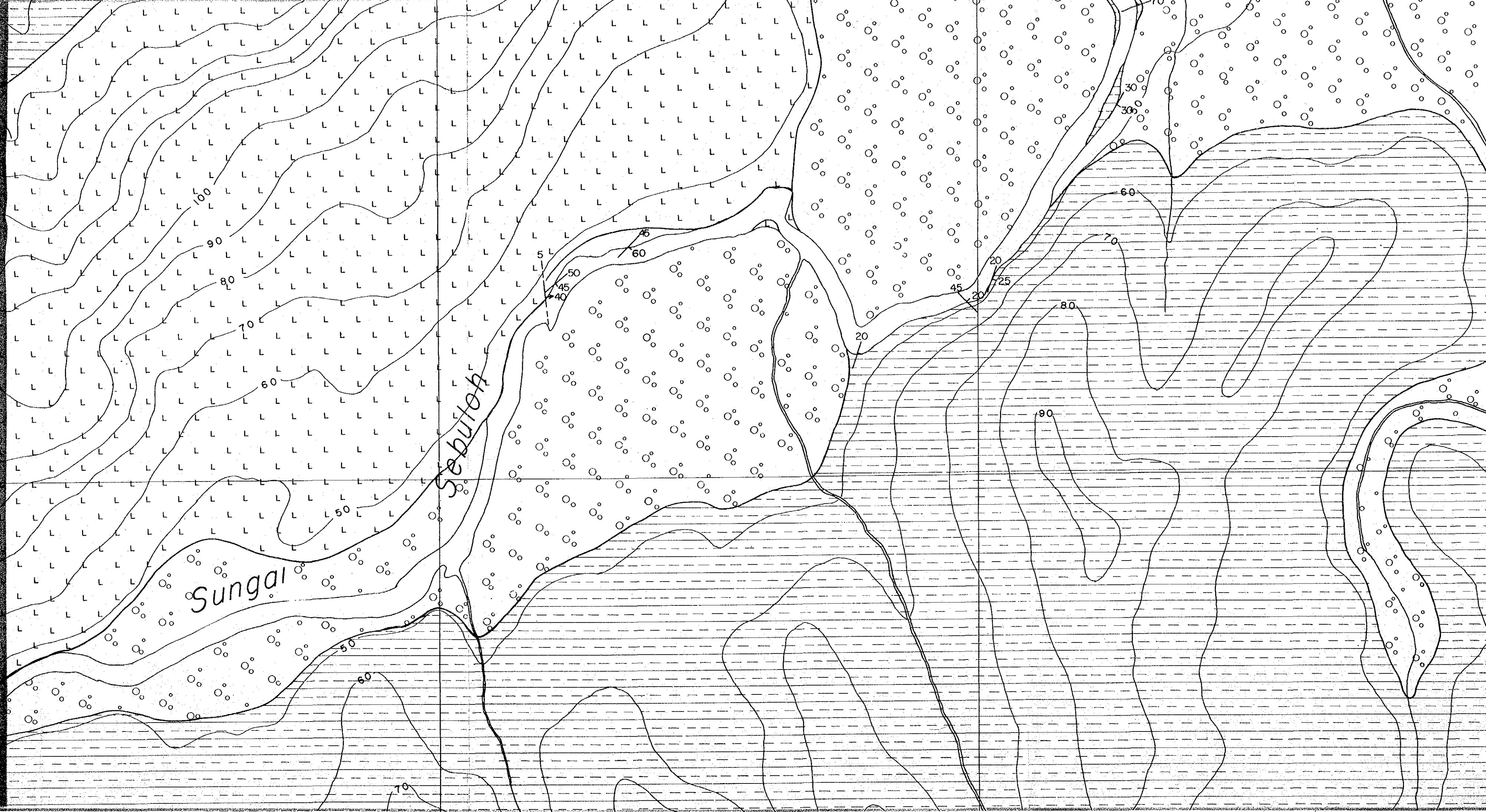


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METAL MINING AGENCY OF JAPAN
GEOLOGICAL SURVEY OF MALAYSIA

Scale 1:1,000

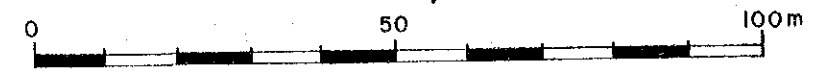






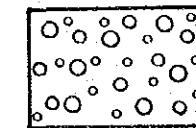
JAPAN INTERNATIONAL COOPERATION AGENCY
 METAL MINING AGENCY OF JAPAN
 GEOLOGICAL SURVEY OF MALAYSIA

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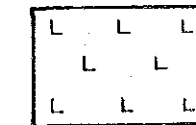
LEGEND

Quaternary



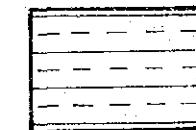
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gravel and sand

Neogene Tertiary

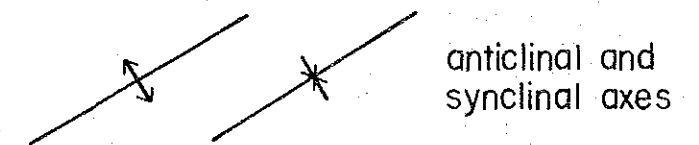


Acidic Intrusive
dacite

Cretaceous Pedawan Formation



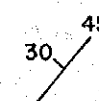
bedded
fine-grained sandstone
siltstone and shale



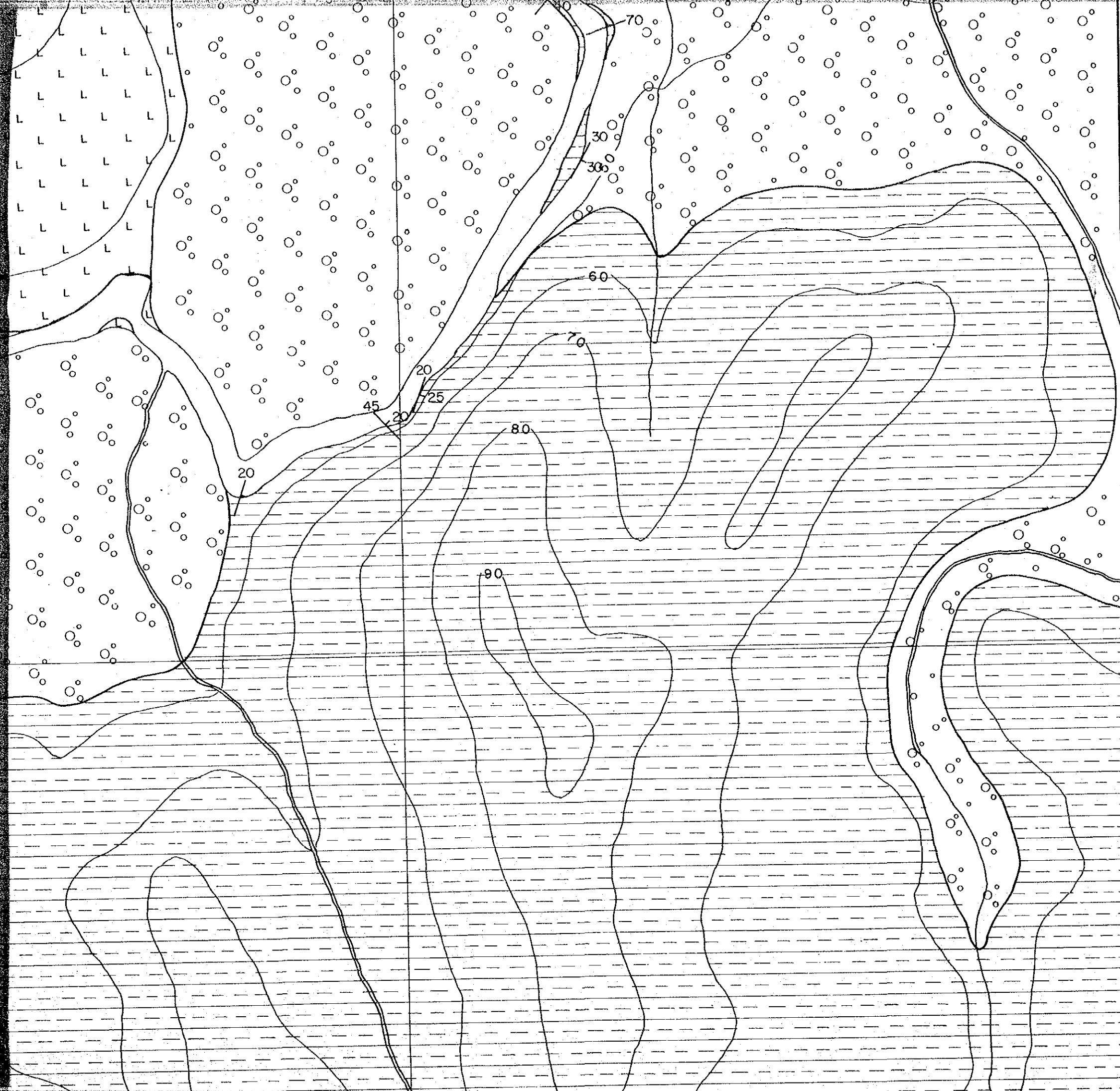
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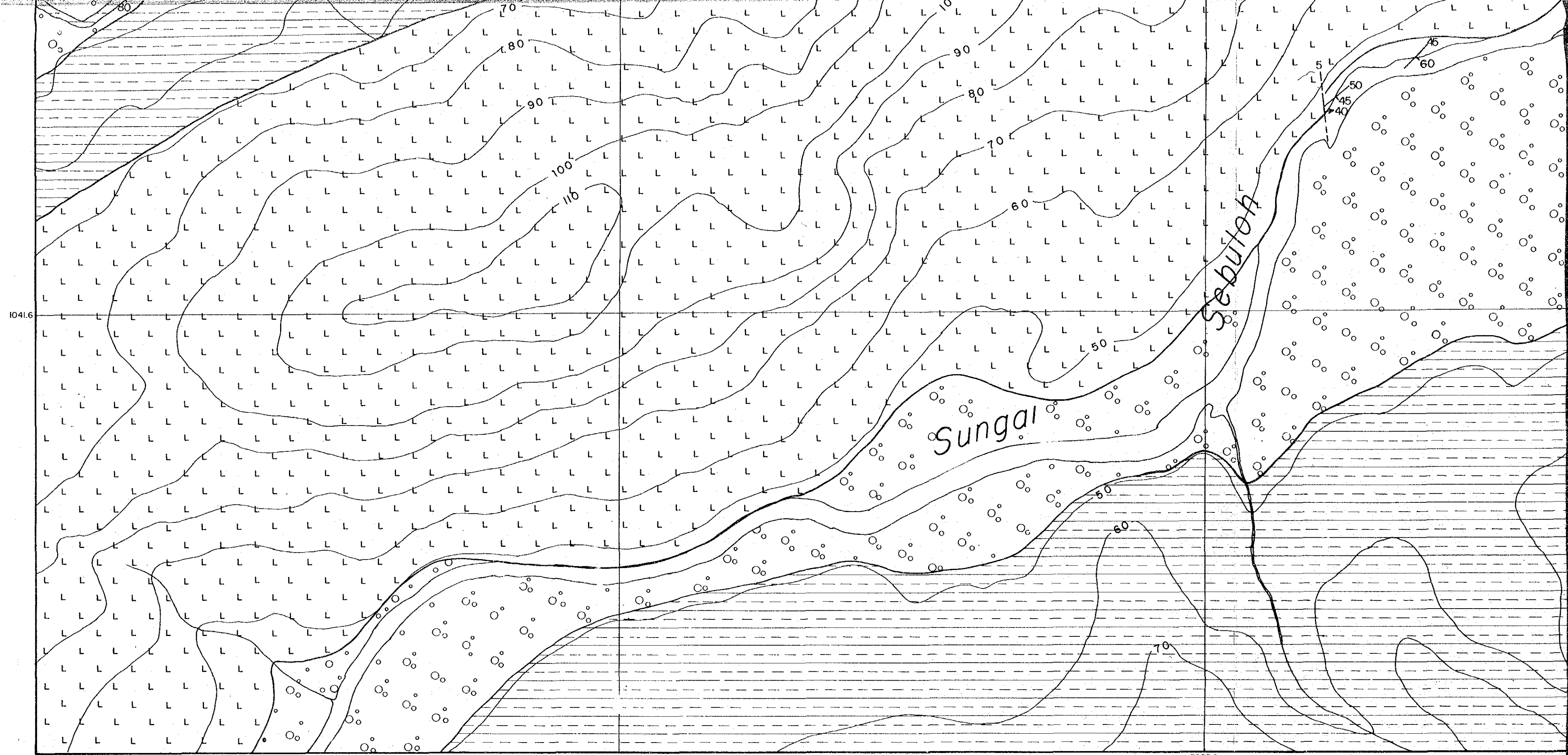


fault



bedding plane





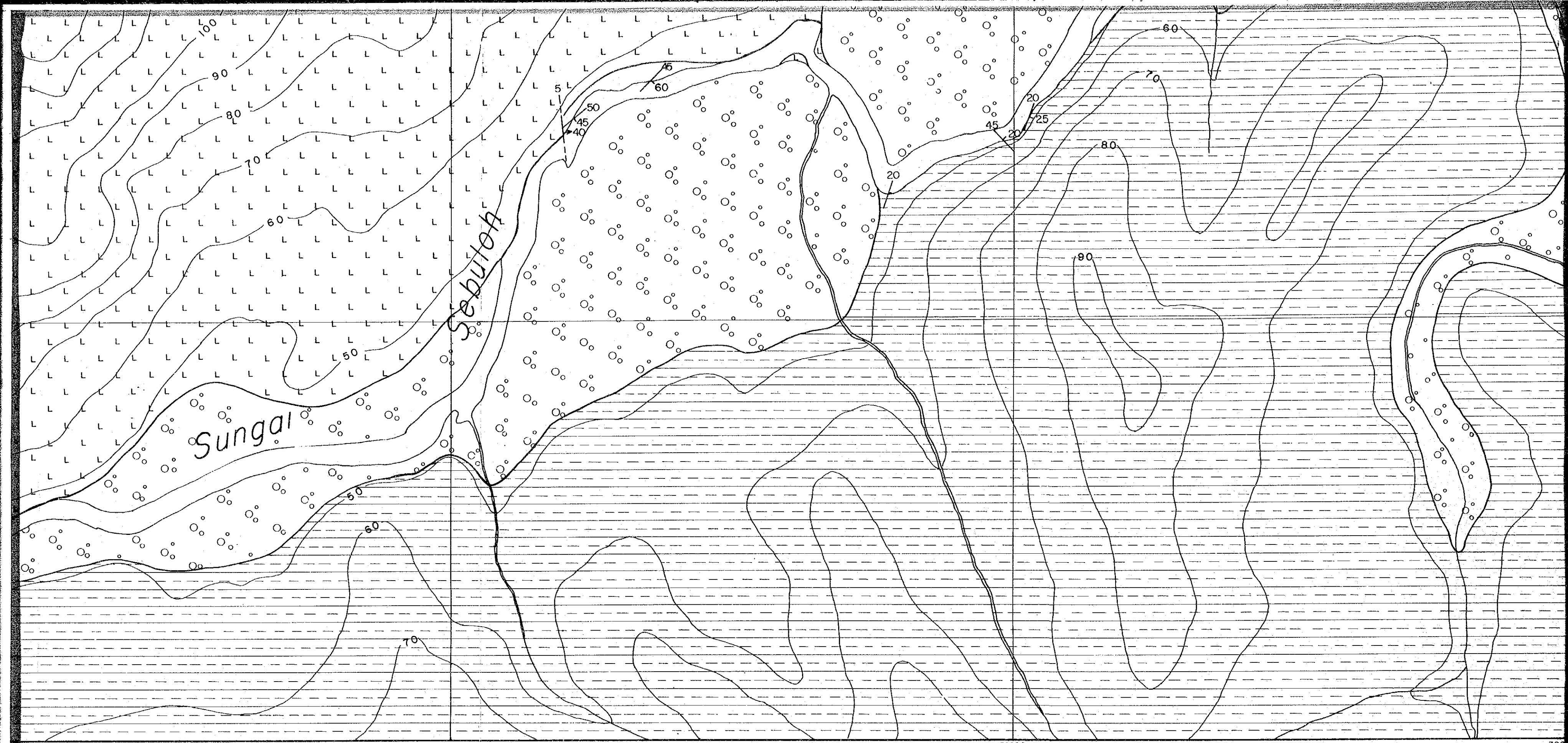
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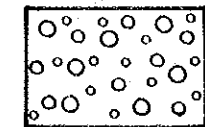
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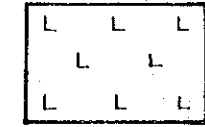
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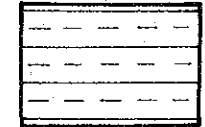
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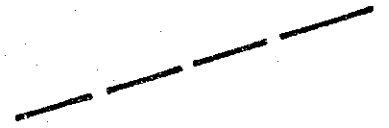
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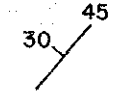
Quaternary
 Alluvium
 gravel and sand

Neogene Tertiary
 Acidic Intrusive
 dacite

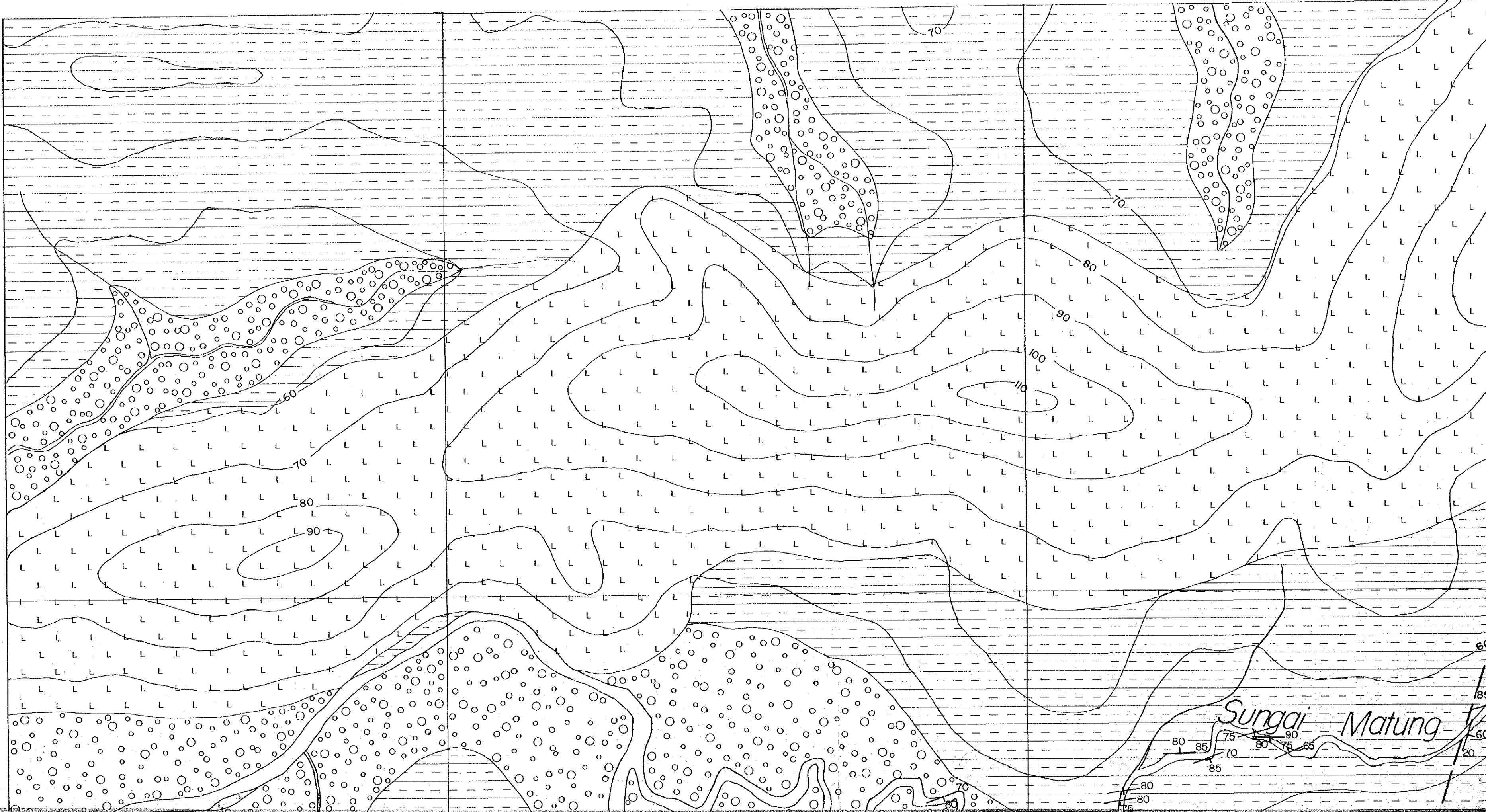
Cretaceous Pedawan Formation
 bedded
 fine-grained sandstone
 siltstone and shale

 anticlinal and
 synclinal axes

 fault

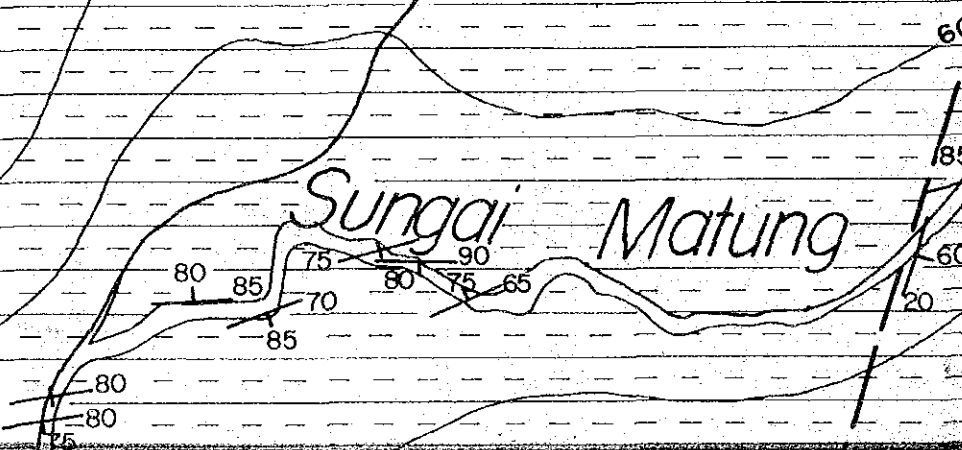
 30 45
 bedding plane

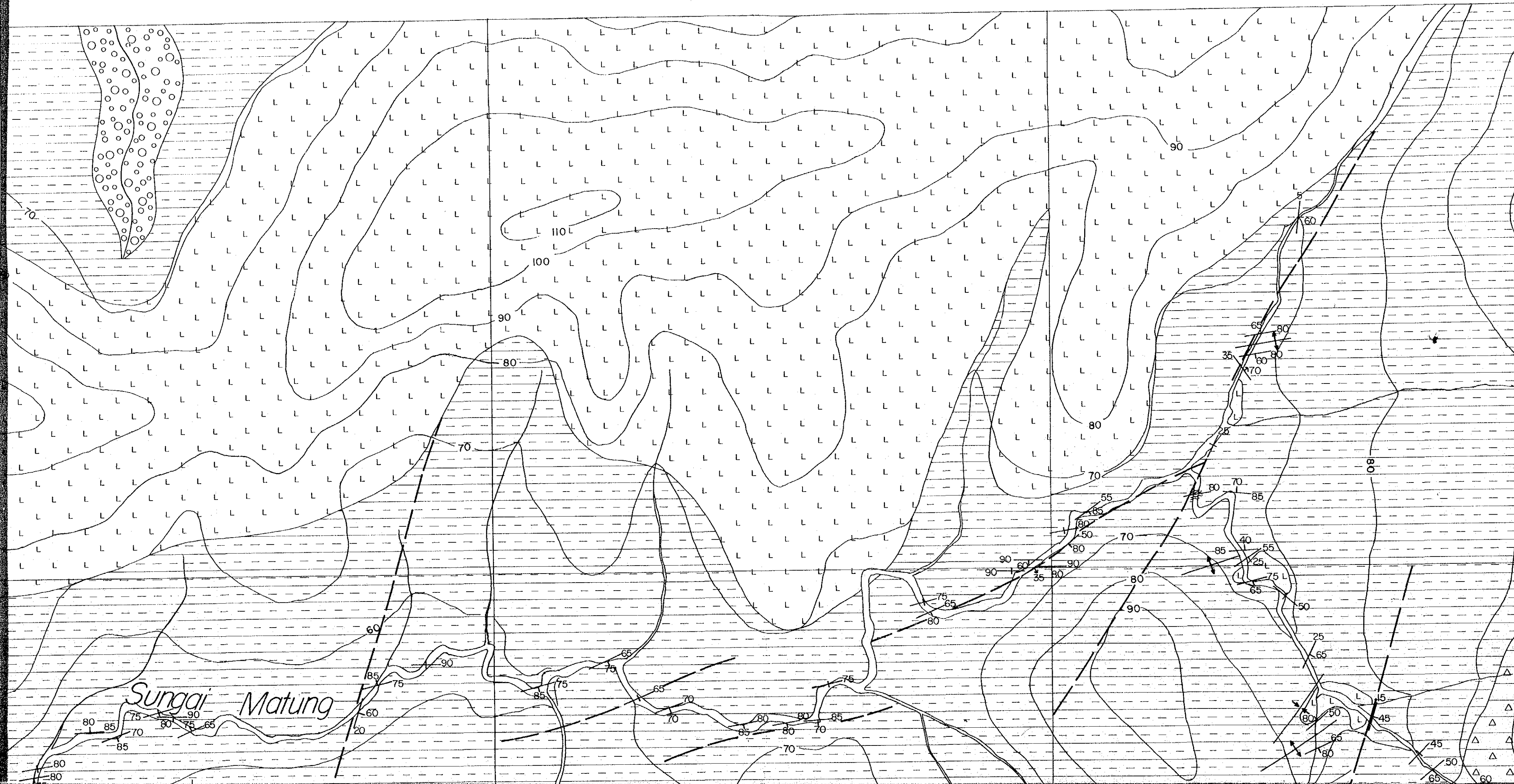
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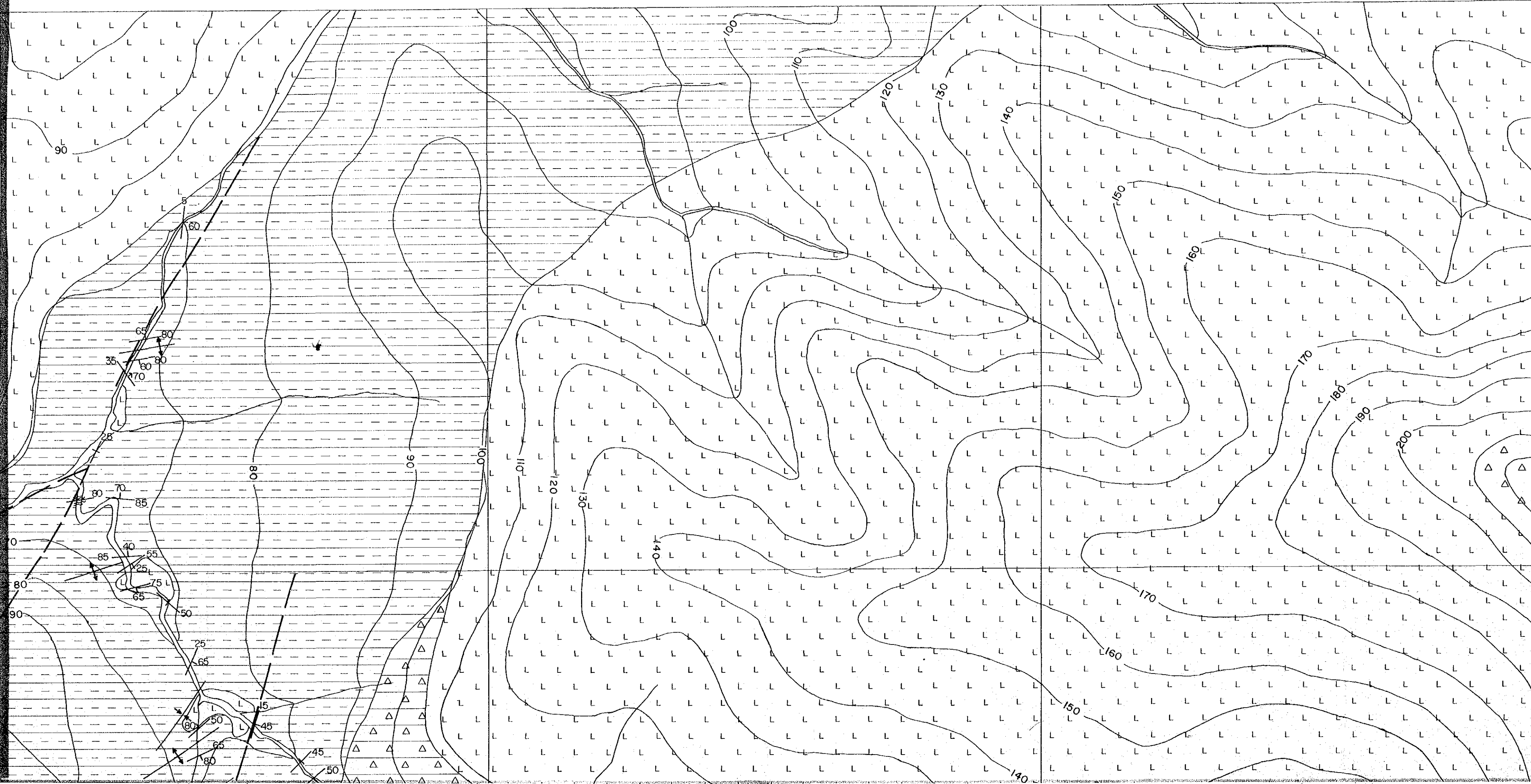
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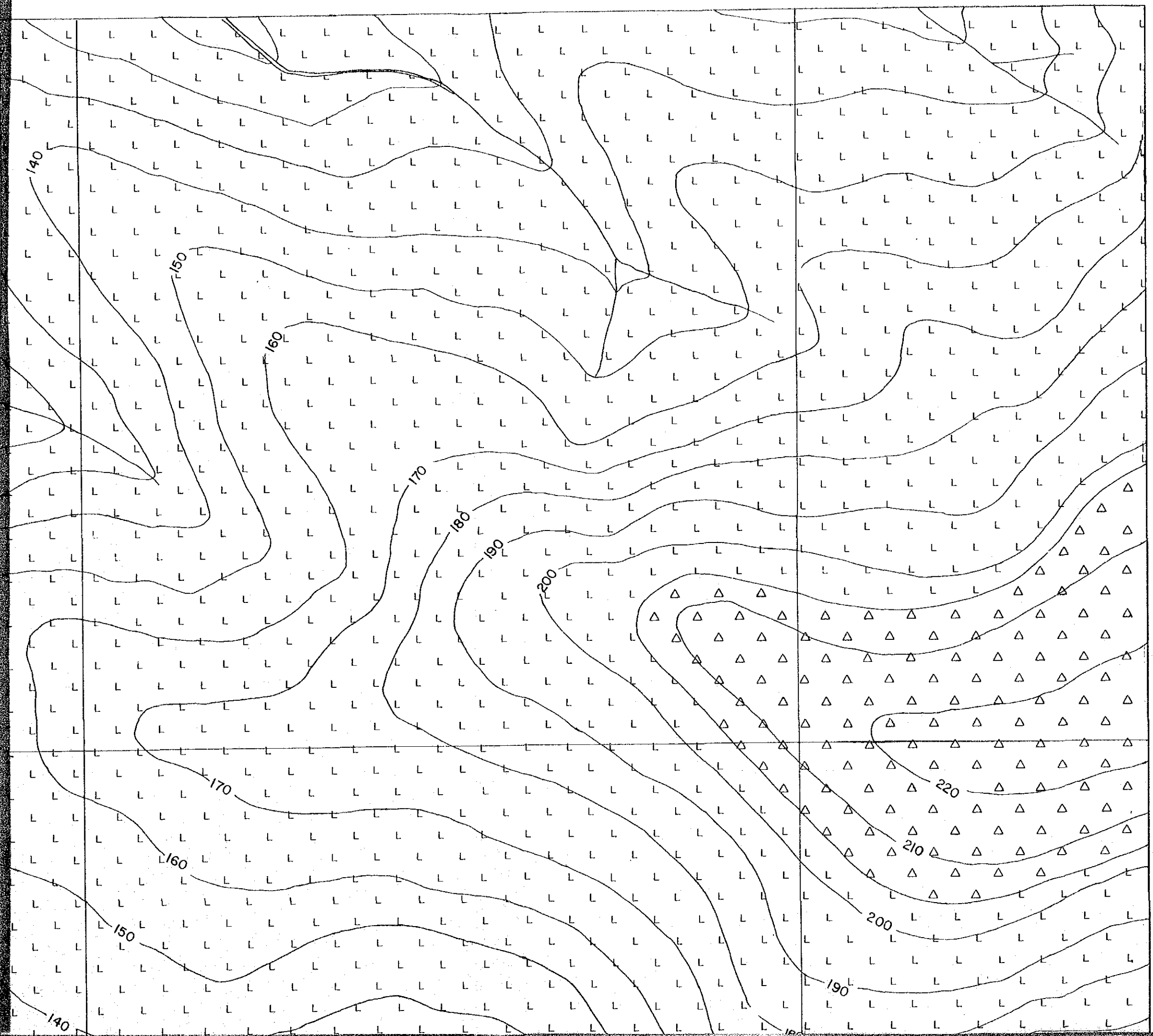
Sungai Matung





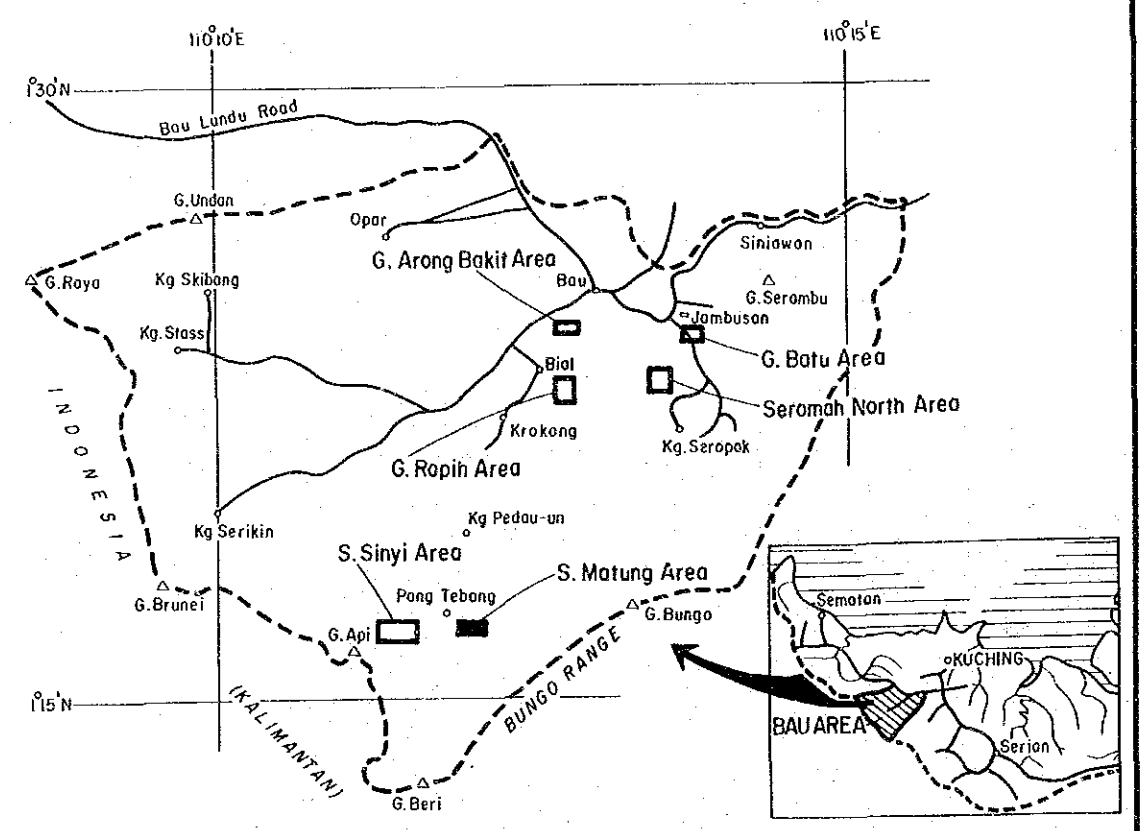
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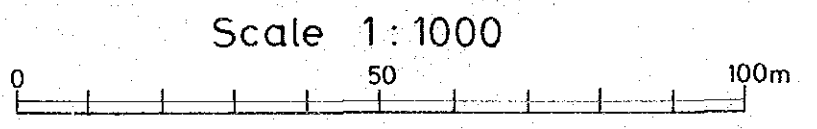


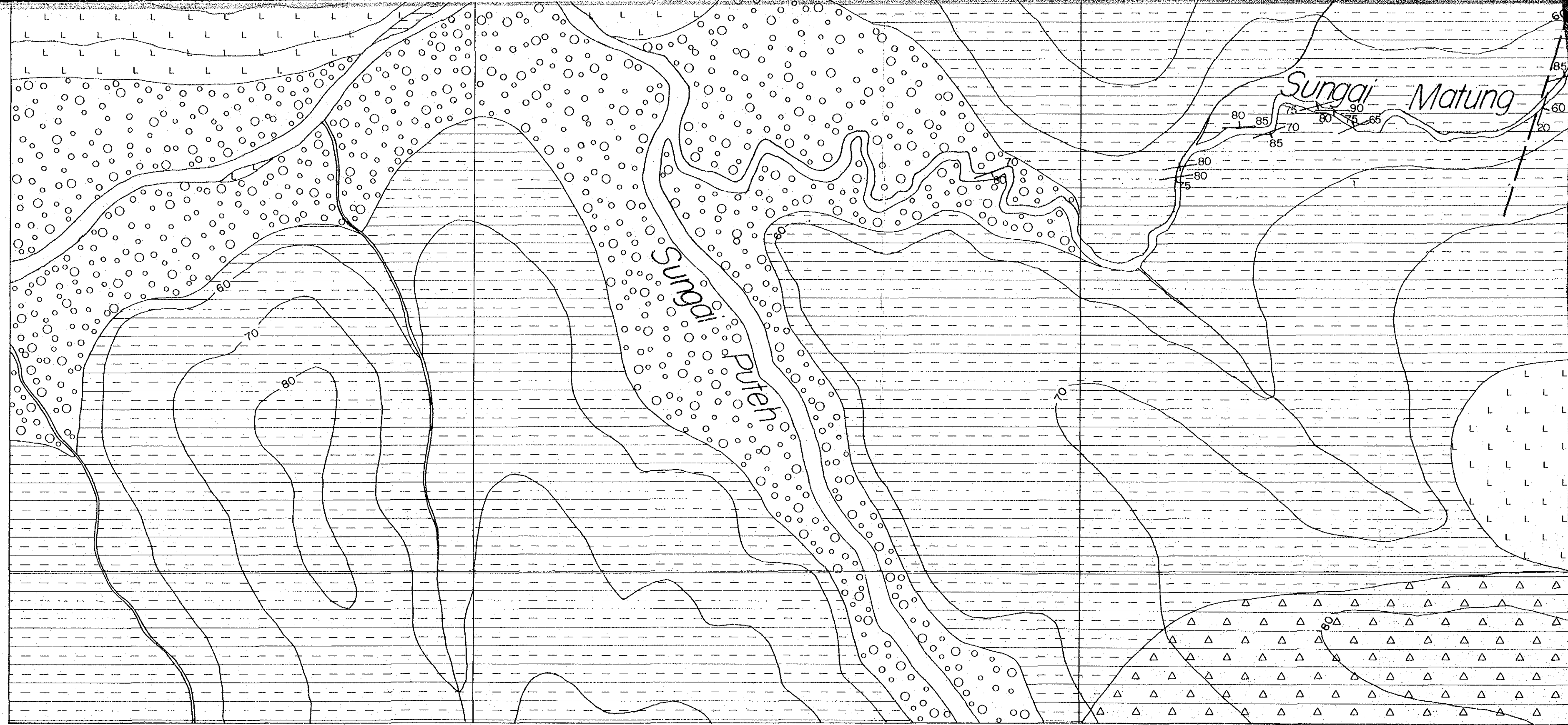
国際協力事業団
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 Map 5
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MINERAL EXPLORATION
 BAU AREA
 WEST SARAWAK, MALAYSIA
 PHASE III
 Geology of
 Sungai Matung Area



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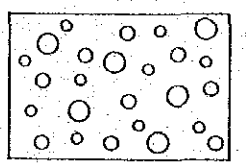
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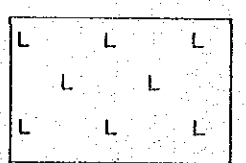
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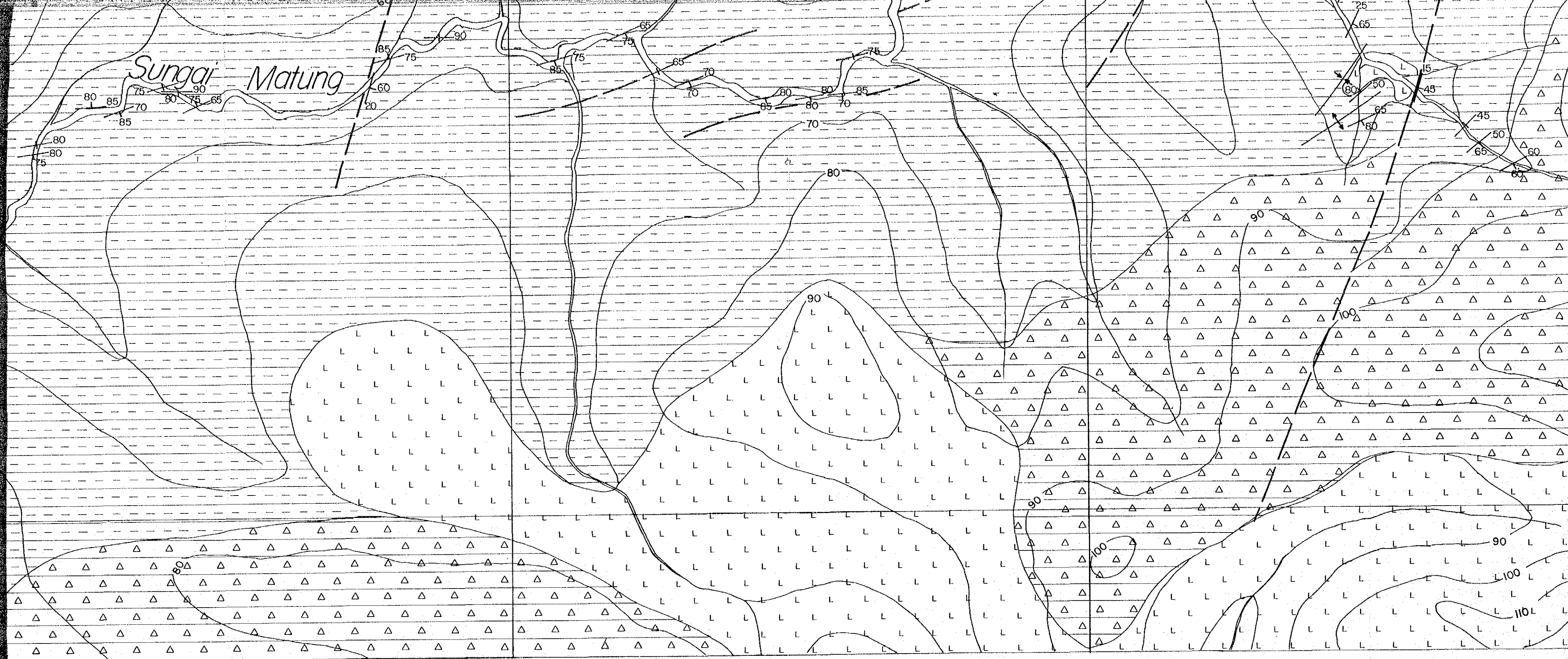
Quaternary



Alluvium
gravel and sand



Acidic Intrusive
dacite



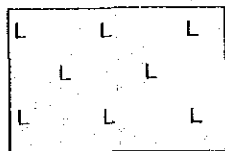
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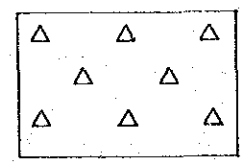
ry

and sand

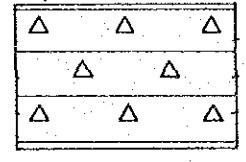


Acidic Intrusive dacite

Neogene Tertiary

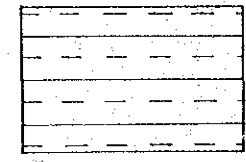


Acidic Volcanic dacitic tuff ~ tuff breccia

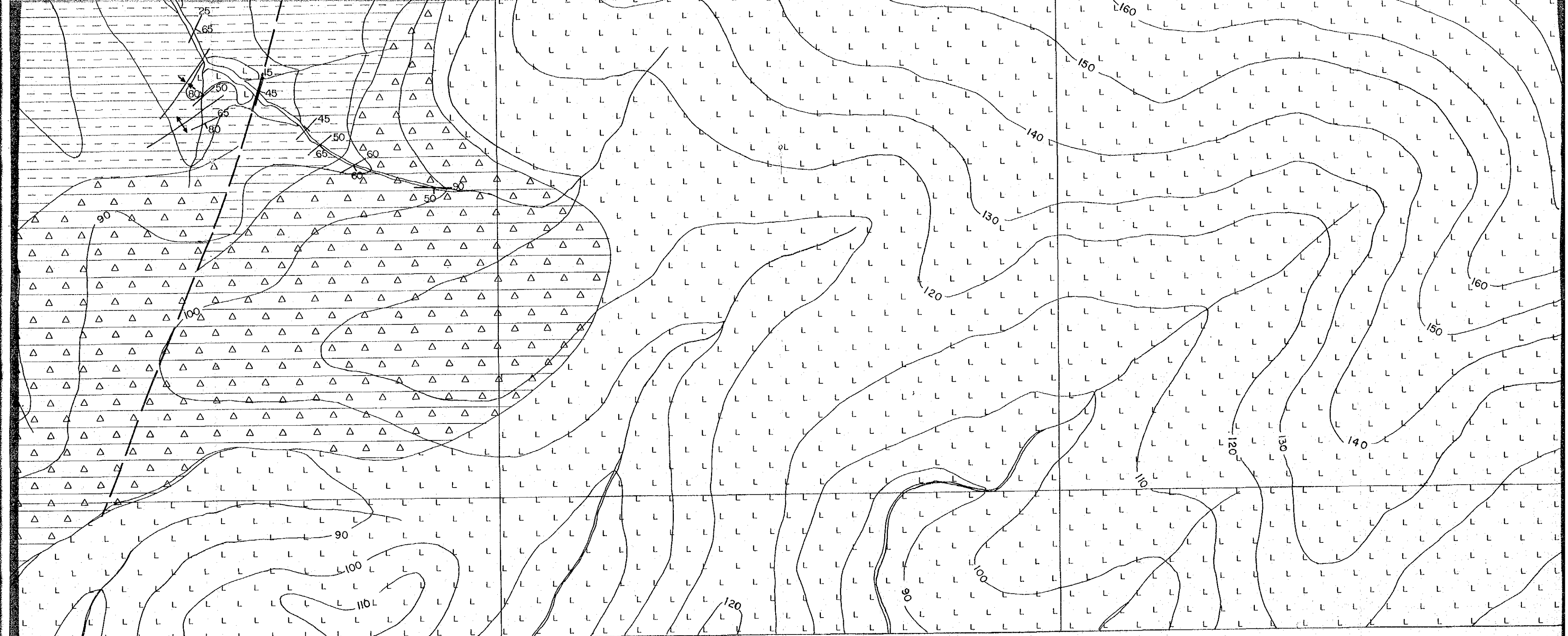


bedded sandy tuff and tuffaceous mudstone

Cretaceous Pedawan Formation



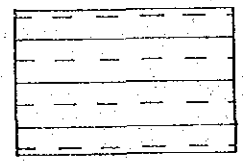
bedded fine-grained sandstone, siltstone and shale



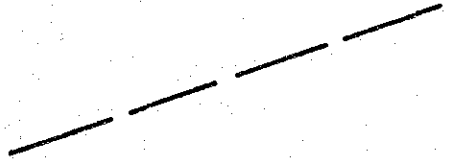
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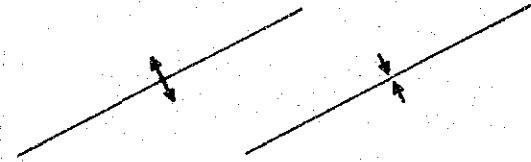
van Formation



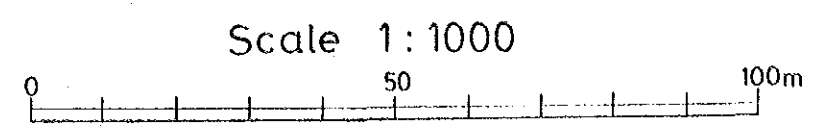
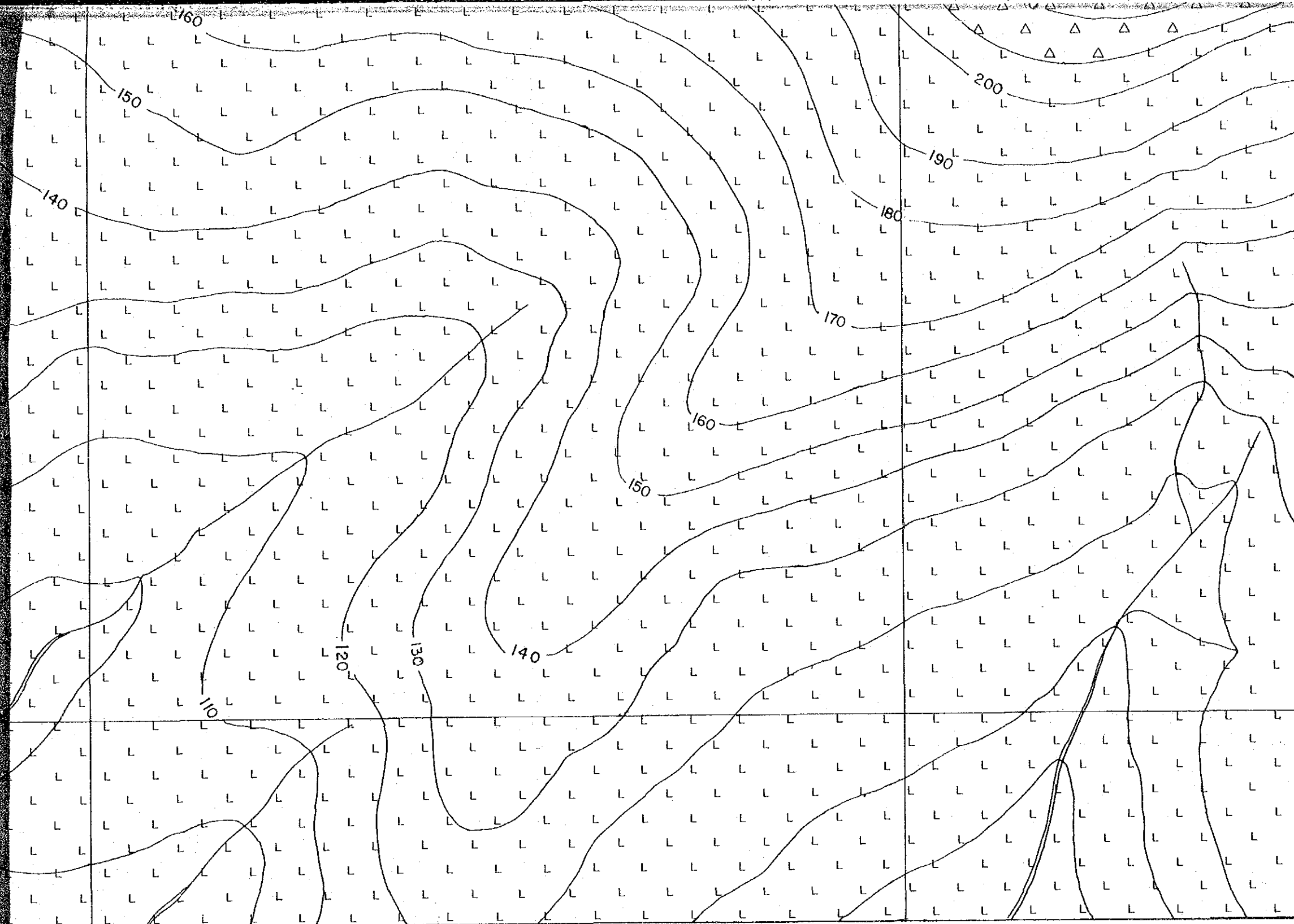
bedded
fine-grained sandstone,
siltstone and shale



fault



anticlinal and
synclinal axes

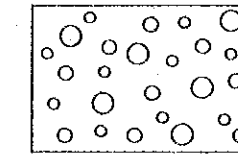


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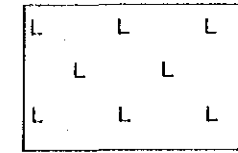
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anticlinal and
synclinal axes

Quaternary



Alluvium
gravel and sand

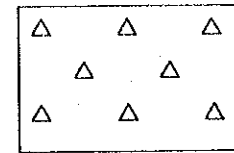


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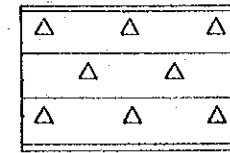
Neogene Tertiary



Acidic Intrusive
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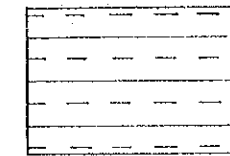
Acidic Volcanic
dacitic tuff ~ tuff breccia



bedded
sandy tuff and
tuffaceous mudstone

LEGEND

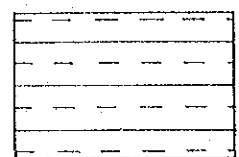
Cretaceous Pedawan Formation



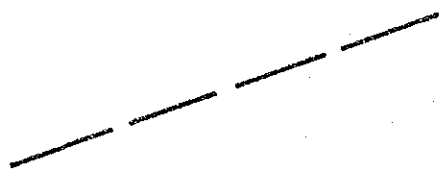
bedded
fine-grained sandstone,
siltstone and shale

and sand

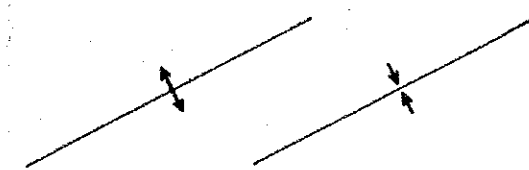
an Formation



bedded
fine-grained sandstone,
siltstone and shale

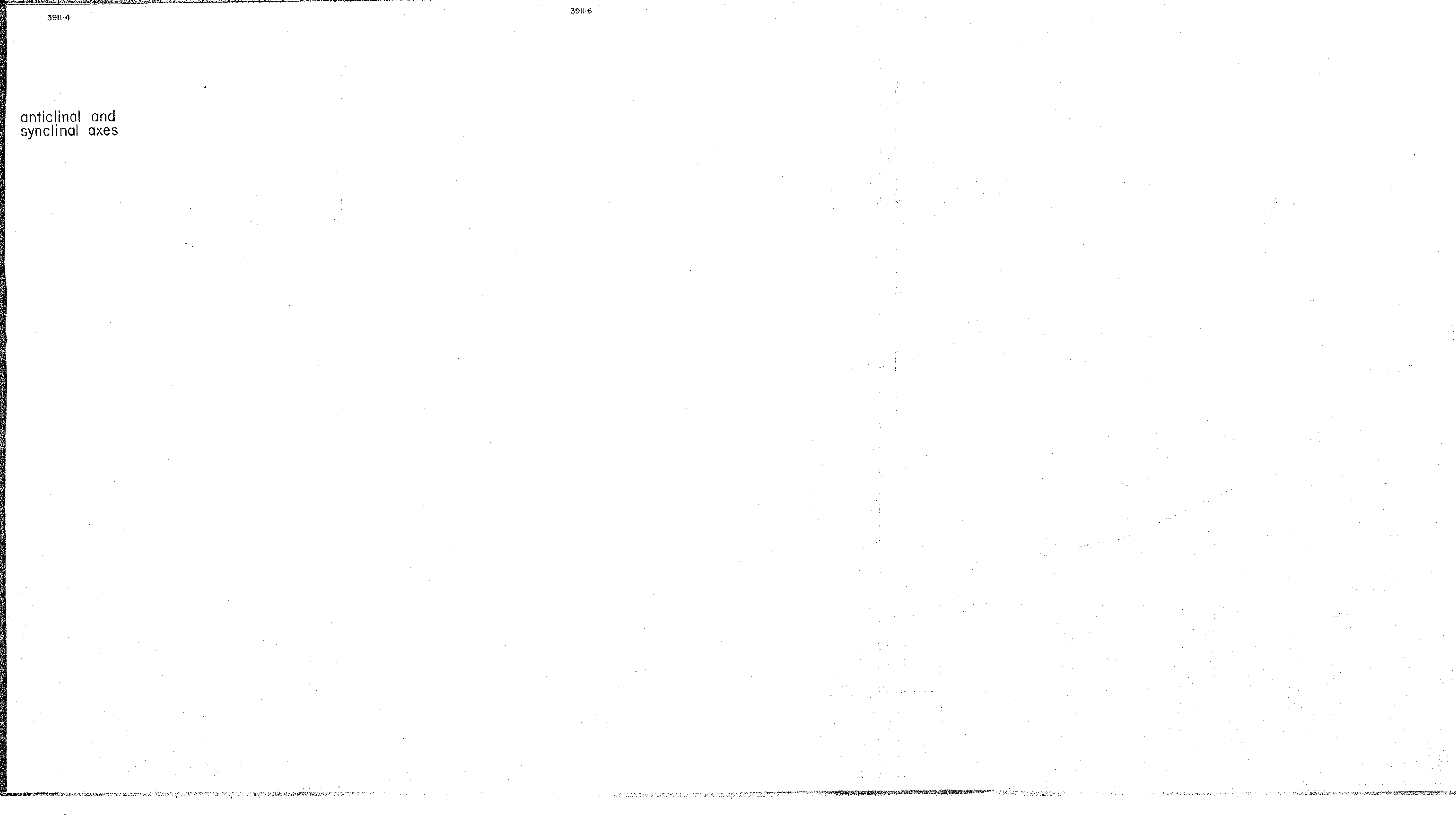


fault



anticlinal and
synclinal axes

anticlinal and
synclinal axes



MALAYSIA
REPORT ON THE COLLABORATIVE
MINERAL EXPLORATION OF
THE BAU AREA, WEST SARAWAK

PHASE III

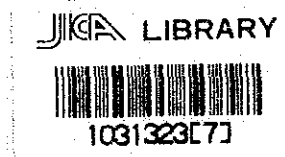
MARCH 1985

METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY

MALAYSIA

**REPORT ON THE COLLABORATIVE
MINERAL EXPLORATION OF
THE BAU AREA, WEST SARAWAK**

PHASE III



MARCH 1985

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN

国際協力事業団	
受入 月日 '85. 8. 22	113
登録No. 11856	66.1
	MPN

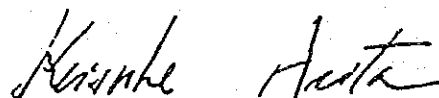
PREFACE

The Government of Japan in response to a request from the Government of Malaysia agreed to conduct a collaborative mineral exploration programme with the Geological Survey of Malaysia in the Bau Area, West Sarawak, Malaysia. The programme forms part of a Fourth Malaysia Plan project proposed by the Geological Survey of Malaysia and was designed to be carried out in three phases spaced over three years commencing at the end of July 1982. The Government of Japan entrusted the implementation of its assistance to the Japan International Cooperation Agency and Metal Mining Agency of Japan.

Phase I of the Project was completed in March 1983 and Phase II in February 1984. The results of these two phases are summarized in two interim reports which had been submitted to the Government of Malaysia.

This report records the results of the final Phase III work of the collaborative endeavour and forms part of the final consolidated report. Phase III work comprising mainly detailed follow-up geochemical, geological and geophysical surveys, and exploration drilling in six selected areas was completed jointly by a Japanese aid team and staff of the Geological Survey of Malaysia, Sarawak in March 1985.

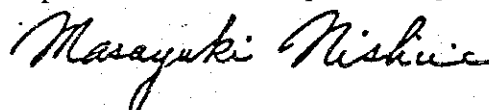
The cooperation which exists between the implementing agencies of the Japanese and Malaysian Governments has been mutually beneficial and we wish to express our appreciation to the various organisations, particularly the government departments in Kuching, Sarawak and the local people in the project area for any assistance rendered during the course of the project.



Keisuke Arita

President

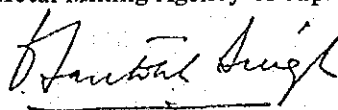
Japan International Cooperation Agency



Masayuki Nishiie

President

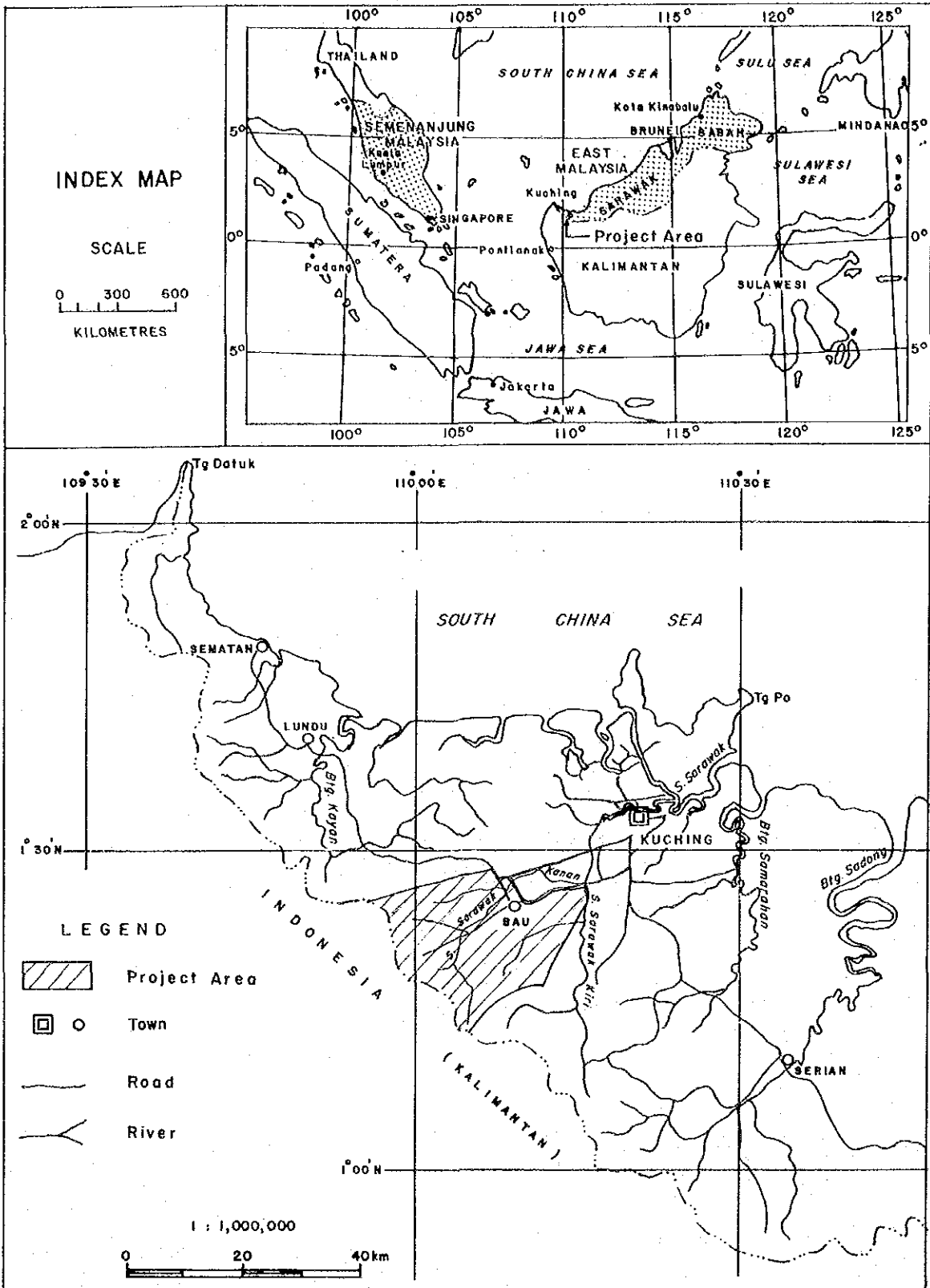
Metal Mining Agency of Japan



D. Santokh Singh

Director-General

Geological Survey of Malaysia



SM 1220/1/83

Fig. I-1 Location Map of Project Area

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NOTES

The following Malay and Dayak geographical words are used in this report:

Batang	....	Main river
Pangkalan	....	Jetty
Bukit (Bt)	....	Hill
Arong	....	Valley
Kampung (Kg)	....	Village
Plaman (Plm)	....	New Village
Sungai (S)	....	River
Gunung (G)	....	Mountain
Ulu (U)	....	Headwaters of river or surrounding country
Besar (B)	....	Large
Kecil (K)	....	Small
Kanan	....	Right
Kiri	....	Left

ABSTRACT

Based on the recommendations of Phase II work of the Collaborative Mineral Exploration Project in the Bau Area, six areas covering 4.8 km² were selected for further follow-up during the final phase, Phase III. Work undertaken during this phase included detailed geochemical, geological and geophysical surveys, and exploration drilling.

Detailed geological mapping and channel lithogeochemical sampling were undertaken in the Seromah North and Gunung Batu areas, in order to investigate further the indications for gold and antimony mineralization obtained during Phase II. A total of 423 channel rock chip samples over the area of 1.6 km² were collected and analysed for Au, As, Sb, Mn, Ag and Hg. The analytical results and correlation with field observations including the density of recorded calcite veinlets in limestone exposures, suggest that three anomalous zones with potentials for gold and antimony mineralization exist, two in the Seromah North area and one in the Gunung Batu area. The anomalous zone in the northwestern part of the former area is recommended for further work by means of very detailed mapping and channel sampling of the extensions of the thick calcite veins found in this area.

In the Gunung Arong Bakit area, detailed mapping and channel sampling were undertaken to trace the extensions of gold ore veins of three old working sites. The results indicate that the vein of one old working, denoted as old working No. 2, extends along strike for a distance of about 71 m with an average thickness of 4.3 m. The average grade of the ore, is calculated from analyses of channel samples to be 6.3 g/t Au and 10.2 g/t Ag. Assuming a down dip extension equal to and half of the strike length, ore reserves available are 55,800 and 27,000 tonnes respectively. Calculations also show that the higher grade section of the vein with a strike length of about 26.4 m and an average thickness of 5.1 m, has a grade of 14.7 g/t Au and 21.4 g/t Ag, and based on the same assumptions, reserves of 9,200 and 4,600 tonnes of ore. Very detailed mapping and rock sampling are recommended in the area underlain by marble immediately west and north of the Gunung Juala intrusive to explore for gold ore veins similar to that of the old working No. 2.

In the Sungai Sinyi and Sungai Matung areas, detailed geochemical soil sampling over an area of 2.0 km², detailed geological mapping, panned concentrate sampling and trenching to explore for primary gold mineralization were carried out. A total of 897 soil samples on a grid pattern of 100 m x 25 m were collected and analysed for Au, As, Sb, Mn, Ag and Hg. Stream sediments and weathered soft bedrock were panned and 120 m of trenches were dug in an effort to trace the primary source of the placer gold found in the streams. In the Sungai Sinyi area, the probable primary source has been traced by the geochemical soil survey and panned concentrate sampling

to an anomalous area in the upper reaches of Sungai Sinyi. Initial detailed geochemical soil survey to be followed by trenching and exploration drilling, to determine the extent of this open-ended anomaly and to explore for bedrock gold mineralization is proposed. In the Sungai Matung area, a probable primary source of the placer gold was indicated to be in the upper reaches of Sungai Matung. The source, if present, is however, suggested to be of very small extent.

In the Gunung Ropih Area, 9.9 line km were covered by an IP and a magnetic ground survey. Based on the results of these surveys and on geological field observations and previous geochemical soil survey, three exploratory holes with a total depth of 693 m were drilled in the western and southern slopes of Gunung Ropih to confirm copper-molybdenum mineralization of the porphyry copper type at depth. The results prove that subeconomical disseminated copper mineralization of the porphyry type exists in the southwestern part of the area. Two of the holes drilled intersected copper mineralization with an average grade of about 0.18% Cu between a depth of 139 m and 190 m in one hole and 0.23% Cu between a depth of 50 m and 114 m in the other hole. Further exploration drilling is recommended in the southern and eastern parts of Gunung Ropih in order to examine the extent and grade of copper mineralization.