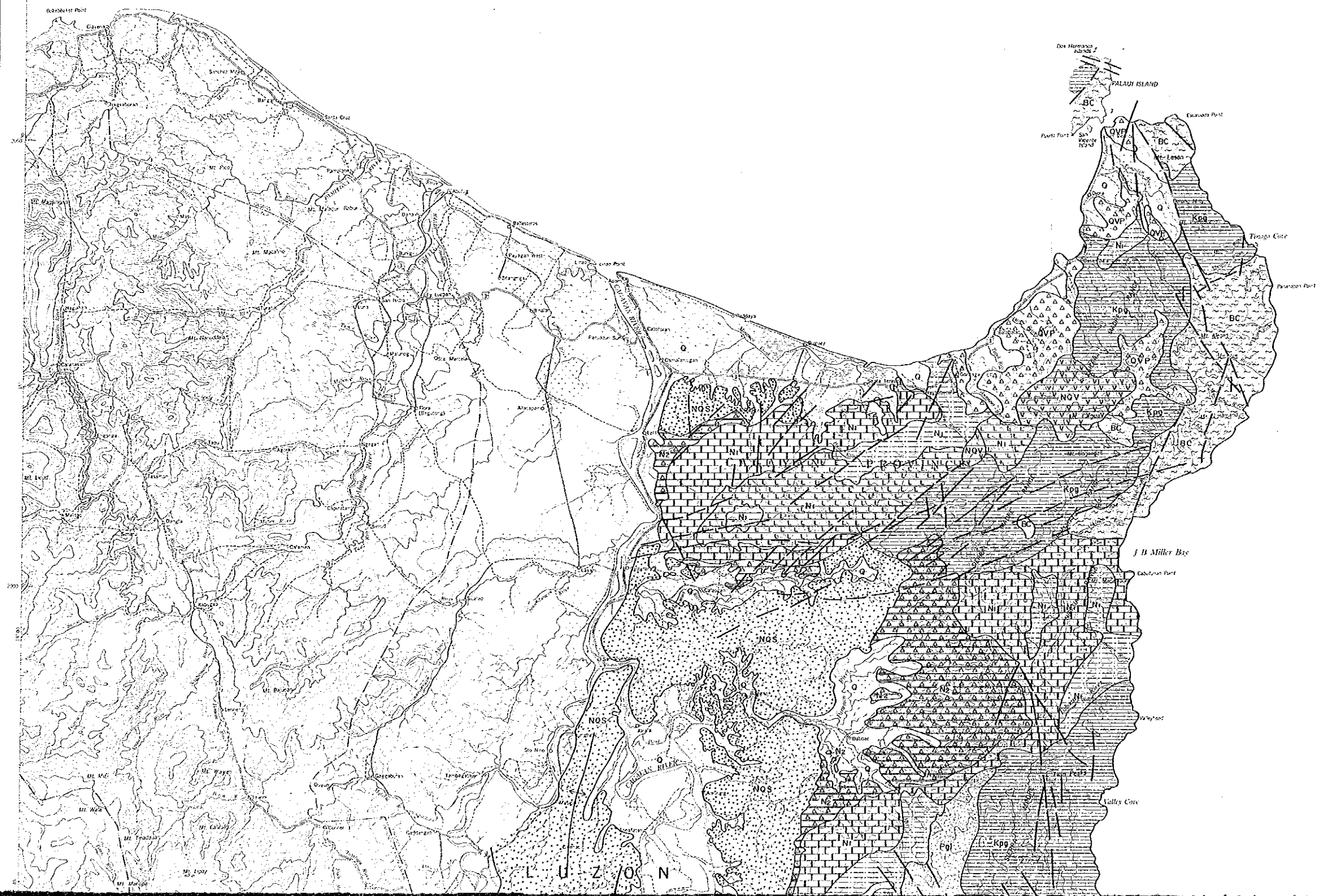
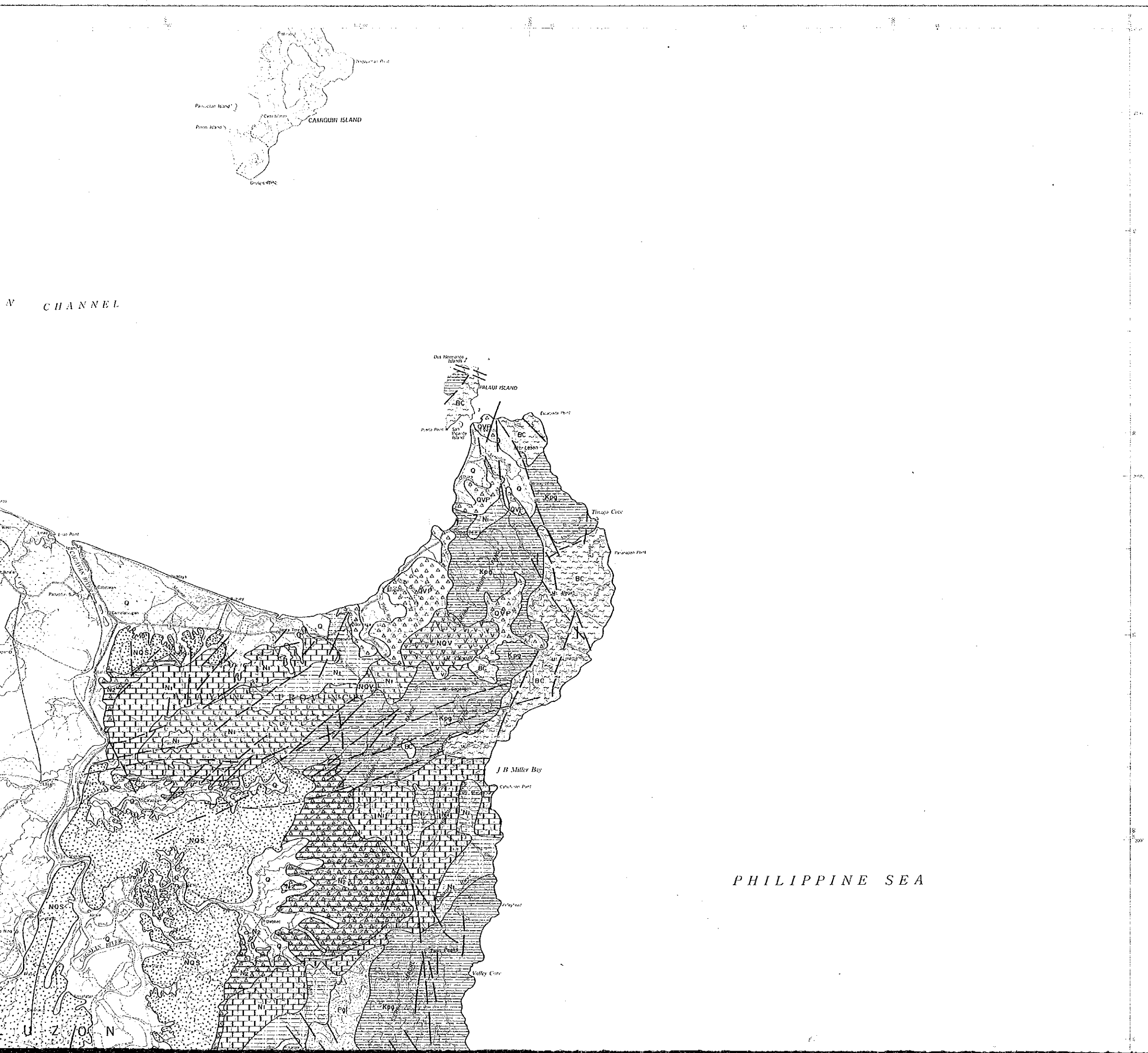


BABUYAN CHANNEL



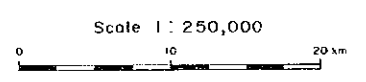
PHILIPPINE SEA



PL. 4 - 1

THE MINERAL EXPLORATION
- MINERAL DEPOSITS AND TECTONICS OF TWO
CONTRASTING GEOLOGIC ENVIRONMENTS -
IN
THE REPUBLIC OF THE PHILIPPINES 国際協力事業団
PHASE I 15160
COMPILED GEOLOGICAL MAP 国営資源調査

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
JUNE 1985, FIRST EDITION










- ### LEGEND
- LITHOLOGY**
- IGNEOUS ROCKS**
- Pliocene, Pleistocene and Recent volcanic deposits; mostly andesites and basalts with associated dacites and rhyodacites in places, occurring mainly as lava flows in volcanic centers and pyroclastics in their aprons.
 - Plateau basalt.
 - Intermediate to acidic, mainly diorite, granodiorite, quartz diorite and monzonite; tonalite, adamellite, gabbro, syenite and granite are localized facies.
 - Mostly submarine andesite and or basalt intercalated with pyroclastics and clastics sedimentary rocks.
 - Basic to ultrabasic; mainly peridotite, dunite and layered gabbro; peridotite and dunite are generally serpentinized; troctolite, norite, trondhjemite.
- SEDIMENTARY ROCKS**
- Quaternary alluvial, lacustrine, beach and residual deposits.
 - Pliocene to Pleistocene sediments both marine and terrestrial; includes extensive reef limestone and water-laid pyroclastics; also localized terrace gravel deposits.
 - Upper Miocene sediments and volcanics; largely marine clastics, reef limestone and andesitic-basaltic pyroclastics and lavas.
 - Late Oligocene to Middle Miocene sediments and volcanics; mainly marine sandstone, shale and reef limestone; some conglomerate, coal measure and marine andesitic-basaltic pyroclastics and lavas.
 - Paleocene to Oligocene sediments and volcanics; mainly marine sandstone, shale and limestone, dacite and andesite lavas and pyroclastics.
 - Undifferentiated Cretaceous to Paleogene strata, commonly mapped as a metavolcanics and metasediments consisting mainly of spilites, chert, pelagic to hemipelagic sediments and turbidites.
 - This pattern indicates major limestone bodies of N₁.
- METAMORPHIC ROCK**
- Schist, phyllite, gneiss, marble and quartzite ranging from the greenschist to pyroxenite facies.




PHILIPPINE SEA





SEDIMENTARY ROCKS

-  Quaternary alluvial, lacustrine, beach and residual deposits.
-  Pliocene to Pleistocene sediments both marine and terrestrial, includes extensive reef limestone and water-laid pyroclastics; also localized terrace gravel deposits.
-  Upper Miocene sediments and volcanics; largely marine clastics, reef limestone and andesitic-basaltic pyroclastics and lavas.
-  Late Oligocene to Middle Miocene sediments and volcanics; mainly marine sandstone, shale and reef limestone; some conglomerate, coal measure and marine andesitic-basaltic pyroclastics and lavas.
-  Paleocene to Oligocene sediments and volcanics; mainly marine sandstone, shale and limestone, dacite and andesite lavas and pyroclastics.
-  Undifferentiated Cretaceous to Paleogene strata; commonly mapped as a metavolcanics and metasediments consisting mainly of spilitic chert, pelagic to hemipelagic sediments and turbidites.
-  This pattern indicates major limestone bodies of N₁.

METAMORPHIC ROCK

-  Schist, phyllite, gneiss, marble and quartzite ranging from the greenschist to pyroxenite facies.

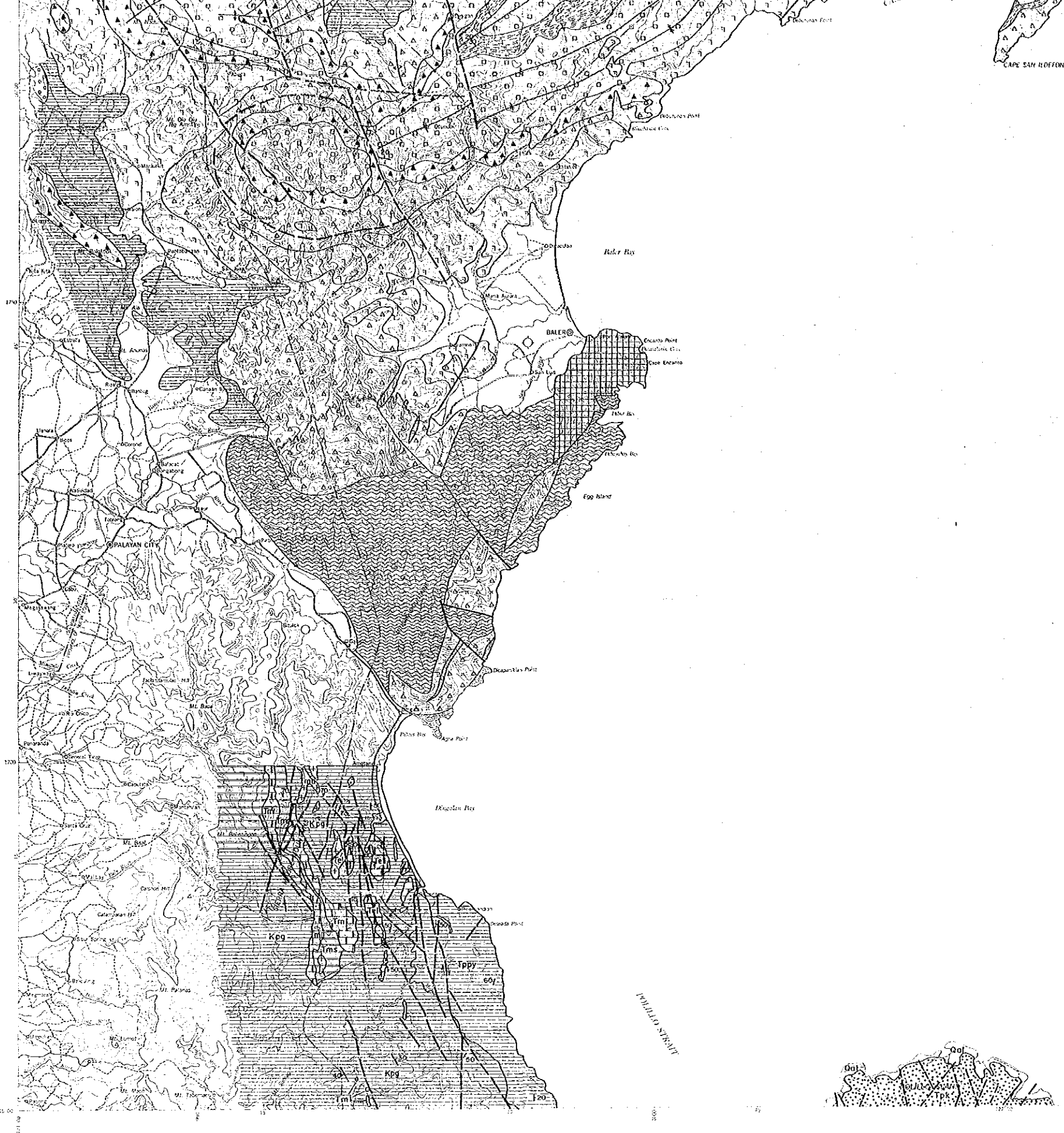
GEOLOGIC SYMBOLS

-  Geologic contact.
-  Anticline axis.
-  Syncline axis.
-  High angle fault.

Compiled from Geological Map (1:250,000) by BMG Regional Office No.1; Cogoyon (Oct. 1984), Kalinga-Apoayao (Mar. 1982), Mt. Province (Mar. 1982), Ifugao (Mar. 1982), Isabela (Oct. 1984), Nueva Vizcaya and Quirino (Oct. 1984).

CAPE SAN ROFFONSO

PHILIPPINE SEA



LEGEND

- MOUNTAINS
- BAYS
- RIVERS
- TOWNS
- VILLAGES
- TEMPLES
- MONASTRIES
- CASTLES
- FORTS
- LIGHTHOUSES
- Lighthouses
- Churches
- Mosques
- Schools
- Hospitals
- Prisons
- Cemeteries
- Public Buildings
- Railways
- Roads
- Canals
- Bridges
- Ferries
- Airports
- Harbors
- Piers
- Wharves
- Quays
- Docks
- Breakwaters
- Piers
- Wharves
- Quays
- Docks
- Breakwaters



PHILIPPINE SEA

LUZON STRAIT

LUZON BAY

LAGUNA DE BAY

LUZON

TAYABAS BAY

ALABAT ISLAND

Luzon Bay

Cristobal Bay

MACUARO ISLAND

GALESW ISLAND

ALOTIKOAN ISLAND

WALIDAI ISLAND

KATAMAN GRANDE ISLAND

JANUARY

MACUARO ISLAND

MACUARO ISLAND

MACUARO ISLAND

MACUARO ISLAND

MACUARO ISLAND

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MACUARO ISLAND



LEGEND

Geological Formations:

- Palawan Formation:** Paleozoic rocks, including the Palawan Group.
- Patanjala Formation:** Paleozoic rocks, including the Patanjala Group.
- Anakan Formation:** Paleozoic rocks, including the Anakan Group.
- Siquijuan Formation:** Paleozoic rocks, including the Siquijuan Group.
- Zamboanga Formation:** Paleozoic rocks, including the Zamboanga Group.

Structural Symbols:

- Fault:** Indicated by a line with a dash.
- Strike-slip fault:** Indicated by a line with a dash and a perpendicular tick.
- Normal fault:** Indicated by a line with a dash and a perpendicular tick pointing down.
- Reverse fault:** Indicated by a line with a dash and a perpendicular tick pointing up.
- Unconformity:** Indicated by a line with a series of small triangles.

Geologic Structures:

- Anticline:** Indicated by a line with a series of small triangles pointing up.
- Syncline:** Indicated by a line with a series of small triangles pointing down.
- Diapir:** Indicated by a line with a series of small triangles pointing up and down.

Other Symbols:

- Topographic contour:** Indicated by a line with a series of small circles.
- Water body:** Indicated by a line with a series of small circles.

Scale: 1:50,000

Map Information:

Compiled from Geologic Map of Luzon, Philippine Islands, 1:50,000, U.S. Geological Survey, 1930.

Compiled from Geologic Map of the Philippine Islands, Division of Geology, U.S. Geological Survey, 1930.

EXPLANATION

STRATIGRAPHY

Geological Formations:

- Palawan Formation:** Paleozoic rocks, including the Palawan Group.
- Patanjala Formation:** Paleozoic rocks, including the Patanjala Group.
- Anakan Formation:** Paleozoic rocks, including the Anakan Group.
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Structural Symbols:

- Fault:** Indicated by a line with a dash.
- Strike-slip fault:** Indicated by a line with a dash and a perpendicular tick.
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PHILIPPINE SEA

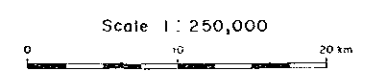


PL. 4 - 4

THE MINERAL EXPLORATION
- MINERAL DEPOSITS AND TECTONICS OF TWO
CONTRASTING GEOLOGIC ENVIRONMENTS
IN
THE REPUBLIC OF THE PHILIPPINES
PHASE I

COMPILED GEOLOGICAL MAP

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
JUNE 1985, FIRST EDITION



LEGEND

(A) Compiled from Geological Map of Bicol Region
1:250,000 by BMG Regional Office V.
(B) Compiled from Geologic Map Quadrangles of
Sheet No. 3860 - I, W, 3861 - I, II, IV,
3862 - II.

	SEDIMENTARY ROCKS	IGNEOUS & METAMORPHIC ROCKS
RECENT	Qs1	
PLEISTOCENE	Qp1, Qp2, Qp3, Qp4, Qp5, Qp6, Qp7, Qp8, Qp9, Qp10, Qp11, Qp12, Qp13, Qp14, Qp15, Qp16, Qp17, Qp18, Qp19, Qp20, Qp21, Qp22, Qp23, Qp24, Qp25, Qp26, Qp27, Qp28, Qp29, Qp30, Qp31, Qp32, Qp33, Qp34, Qp35, Qp36, Qp37, Qp38, Qp39, Qp40, Qp41, Qp42, Qp43, Qp44, Qp45, Qp46, Qp47, Qp48, Qp49, Qp50, Qp51, Qp52, Qp53, Qp54, Qp55, Qp56, Qp57, Qp58, Qp59, Qp60, Qp61, Qp62, Qp63, Qp64, Qp65, Qp66, Qp67, Qp68, Qp69, Qp70, Qp71, Qp72, Qp73, Qp74, Qp75, Qp76, Qp77, Qp78, Qp79, Qp80, Qp81, Qp82, Qp83, Qp84, Qp85, Qp86, Qp87, Qp88, Qp89, Qp90, Qp91, Qp92, Qp93, Qp94, Qp95, Qp96, Qp97, Qp98, Qp99, Qp100	
PLIOCENE	Qp101, Qp102, Qp103, Qp104, Qp105, Qp106, Qp107, Qp108, Qp109, Qp110, Qp111, Qp112, Qp113, Qp114, Qp115, Qp116, Qp117, Qp118, Qp119, Qp120, Qp121, Qp122, Qp123, Qp124, Qp125, Qp126, Qp127, Qp128, Qp129, Qp130, Qp131, Qp132, Qp133, Qp134, Qp135, Qp136, Qp137, Qp138, Qp139, Qp140, Qp141, Qp142, Qp143, Qp144, Qp145, Qp146, Qp147, Qp148, Qp149, Qp150, Qp151, Qp152, Qp153, Qp154, Qp155, Qp156, Qp157, Qp158, Qp159, Qp160, Qp161, Qp162, Qp163, Qp164, Qp165, Qp166, Qp167, Qp168, Qp169, Qp170, Qp171, Qp172, Qp173, Qp174, Qp175, Qp176, Qp177, Qp178, Qp179, Qp180, Qp181, Qp182, Qp183, Qp184, Qp185, Qp186, Qp187, Qp188, Qp189, Qp190, Qp191, Qp192, Qp193, Qp194, Qp195, Qp196, Qp197, Qp198, Qp199, Qp200	
UPPER MIOCENE	Qm1, Qm2, Qm3, Qm4, Qm5, Qm6, Qm7, Qm8, Qm9, Qm10, Qm11, Qm12, Qm13, Qm14, Qm15, Qm16, Qm17, Qm18, Qm19, Qm20, Qm21, Qm22, Qm23, Qm24, Qm25, Qm26, Qm27, Qm28, Qm29, Qm30, Qm31, Qm32, Qm33, Qm34, Qm35, Qm36, Qm37, Qm38, Qm39, Qm40, Qm41, Qm42, Qm43, Qm44, Qm45, Qm46, Qm47, Qm48, Qm49, Qm50, Qm51, Qm52, Qm53, Qm54, Qm55, Qm56, Qm57, Qm58, Qm59, Qm60, Qm61, Qm62, Qm63, Qm64, Qm65, Qm66, Qm67, Qm68, Qm69, Qm70, Qm71, Qm72, Qm73, Qm74, Qm75, Qm76, Qm77, Qm78, Qm79, Qm80, Qm81, Qm82, Qm83, Qm84, Qm85, Qm86, Qm87, Qm88, Qm89, Qm90, Qm91, Qm92, Qm93, Qm94, Qm95, Qm96, Qm97, Qm98, Qm99, Qm100	
MIDDLE MIOCENE	Qm101, Qm102, Qm103, Qm104, Qm105, Qm106, Qm107, Qm108, Qm109, Qm110, Qm111, Qm112, Qm113, Qm114, Qm115, Qm116, Qm117, Qm118, Qm119, Qm120, Qm121, Qm122, Qm123, Qm124, Qm125, Qm126, Qm127, Qm128, Qm129, Qm130, Qm131, Qm132, Qm133, Qm134, Qm135, Qm136, Qm137, Qm138, Qm139, Qm140, Qm141, Qm142, Qm143, Qm144, Qm145, Qm146, Qm147, Qm148, Qm149, Qm150, Qm151, Qm152, Qm153, Qm154, Qm155, Qm156, Qm157, Qm158, Qm159, Qm160, Qm161, Qm162, Qm163, Qm164, Qm165, Qm166, Qm167, Qm168, Qm169, Qm170, Qm171, Qm172, Qm173, Qm174, Qm175, Qm176, Qm177, Qm178, Qm179, Qm180, Qm181, Qm182, Qm183, Qm184, Qm185, Qm186, Qm187, Qm188, Qm189, Qm190, Qm191, Qm192, Qm193, Qm194, Qm195, Qm196, Qm197, Qm198, Qm199, Qm200	
LOWER MIOCENE	Qm201, Qm202, Qm203, Qm204, Qm205, Qm206, Qm207, Qm208, Qm209, Qm210, Qm211, Qm212, Qm213, Qm214, Qm215, Qm216, Qm217, Qm218, Qm219, Qm220, Qm221, Qm222, Qm223, Qm224, Qm225, Qm226, Qm227, Qm228, Qm229, Qm230, Qm231, Qm232, Qm233, Qm234, Qm235, Qm236, Qm237, Qm238, Qm239, Qm240, Qm241, Qm242, Qm243, Qm244, Qm245, Qm246, Qm247, Qm248, Qm249, Qm250, Qm251, Qm252, Qm253, Qm254, Qm255, Qm256, Qm257, Qm258, Qm259, Qm260, Qm261, Qm262, Qm263, Qm264, Qm265, Qm266, Qm267, Qm268, Qm269, Qm270, Qm271, Qm272, Qm273, Qm274, Qm275, Qm276, Qm277, Qm278, Qm279, Qm280, Qm281, Qm282, Qm283, Qm284, Qm285, Qm286, Qm287, Qm288, Qm289, Qm290, Qm291, Qm292, Qm293, Qm294, Qm295, Qm296, Qm297, Qm298, Qm299, Qm300	
OLIGOCENE	Qo1, Qo2, Qo3, Qo4, Qo5, Qo6, Qo7, Qo8, Qo9, Qo10, Qo11, Qo12, Qo13, Qo14, Qo15, Qo16, Qo17, Qo18, Qo19, Qo20, Qo21, Qo22, Qo23, Qo24, Qo25, Qo26, Qo27, Qo28, Qo29, Qo30, Qo31, Qo32, Qo33, Qo34, Qo35, Qo36, Qo37, Qo38, Qo39, Qo40, Qo41, Qo42, Qo43, Qo44, Qo45, Qo46, Qo47, Qo48, Qo49, Qo50, Qo51, Qo52, Qo53, Qo54, Qo55, Qo56, Qo57, Qo58, Qo59, Qo60, Qo61, Qo62, Qo63, Qo64, Qo65, Qo66, Qo67, Qo68, Qo69, Qo70, Qo71, Qo72, Qo73, Qo74, Qo75, Qo76, Qo77, Qo78, Qo79, Qo80, Qo81, Qo82, Qo83, Qo84, Qo85, Qo86, Qo87, Qo88, Qo89, Qo90, Qo91, Qo92, Qo93, Qo94, Qo95, Qo96, Qo97, Qo98, Qo99, Qo100	
Eocene	Qe1, Qe2, Qe3, Qe4, Qe5, Qe6, Qe7, Qe8, Qe9, Qe10, Qe11, Qe12, Qe13, Qe14, Qe15, Qe16, Qe17, Qe18, Qe19, Qe20, Qe21, Qe22, Qe23, Qe24, Qe25, Qe26, Qe27, Qe28, Qe29, Qe30, Qe31, Qe32, Qe33, Qe34, Qe35, Qe36, Qe37, Qe38, Qe39, Qe40, Qe41, Qe42, Qe43, Qe44, Qe45, Qe46, Qe47, Qe48, Qe49, Qe50, Qe51, Qe52, Qe53, Qe54, Qe55, Qe56, Qe57, Qe58, Qe59, Qe60, Qe61, Qe62, Qe63, Qe64, Qe65, Qe66, Qe67, Qe68, Qe69, Qe70, Qe71, Qe72, Qe73, Qe74, Qe75, Qe76, Qe77, Qe78, Qe79, Qe80, Qe81, Qe82, Qe83, Qe84, Qe85, Qe86, Qe87, Qe88, Qe89, Qe90, Qe91, Qe92, Qe93, Qe94, Qe95, Qe96, Qe97, Qe98, Qe99, Qe100	
PALEOCENE	Qpc1, Qpc2, Qpc3, Qpc4, Qpc5, Qpc6, Qpc7, Qpc8, Qpc9, Qpc10, Qpc11, Qpc12, Qpc13, Qpc14, Qpc15, Qpc16, Qpc17, Qpc18, Qpc19, Qpc20, Qpc21, Qpc22, Qpc23, Qpc24, Qpc25, Qpc26, Qpc27, Qpc28, Qpc29, Qpc30, Qpc31, Qpc32, Qpc33, Qpc34, Qpc35, Qpc36, Qpc37, Qpc38, Qpc39, Qpc40, Qpc41, Qpc42, Qpc43, Qpc44, Qpc45, Qpc46, Qpc47, Qpc48, Qpc49, Qpc50, Qpc51, Qpc52, Qpc53, Qpc54, Qpc55, Qpc56, Qpc57, Qpc58, Qpc59, Qpc60, Qpc61, Qpc62, Qpc63, Qpc64, Qpc65, Qpc66, Qpc67, Qpc68, Qpc69, Qpc70, Qpc71, Qpc72, Qpc73, Qpc74, Qpc75, Qpc76, Qpc77, Qpc78, Qpc79, Qpc80, Qpc81, Qpc82, Qpc83, Qpc84, Qpc85, Qpc86, Qpc87, Qpc88, Qpc89, Qpc90, Qpc91, Qpc92, Qpc93, Qpc94, Qpc95, Qpc96, Qpc97, Qpc98, Qpc99, Qpc100	
CRETACEOUS	Qc1, Qc2, Qc3, Qc4, Qc5, Qc6, Qc7, Qc8, Qc9, Qc10, Qc11, Qc12, Qc13, Qc14, Qc15, Qc16, Qc17, Qc18, Qc19, Qc20, Qc21, Qc22, Qc23, Qc24, Qc25, Qc26, Qc27, Qc28, Qc29, Qc30, Qc31, Qc32, Qc33, Qc34, Qc35, Qc36, Qc37, Qc38, Qc39, Qc40, Qc41, Qc42, Qc43, Qc44, Qc45, Qc46, Qc47, Qc48, Qc49, Qc50, Qc51, Qc52, Qc53, Qc54, Qc55, Qc56, Qc57, Qc58, Qc59, Qc60, Qc61, Qc62, Qc63, Qc64, Qc65, Qc66, Qc67, Qc68, Qc69, Qc70, Qc71, Qc72, Qc73, Qc74, Qc75, Qc76, Qc77, Qc78, Qc79, Qc80, Qc81, Qc82, Qc83, Qc84, Qc85, Qc86, Qc87, Qc88, Qc89, Qc90, Qc91, Qc92, Qc93, Qc94, Qc95, Qc96, Qc97, Qc98, Qc99, Qc100	
PRE-CRETACEOUS	Qpr1, Qpr2, Qpr3, Qpr4, Qpr5, Qpr6, Qpr7, Qpr8, Qpr9, Qpr10, Qpr11, Qpr12, Qpr13, Qpr14, Qpr15, Qpr16, Qpr17, Qpr18, Qpr19, Qpr20, Qpr21, Qpr22, Qpr23, Qpr24, Qpr25, Qpr26, Qpr27, Qpr28, Qpr29, Qpr30, Qpr31, Qpr32, Qpr33, Qpr34, Qpr35, Qpr36, Qpr37, Qpr38, Qpr39, Qpr40, Qpr41, Qpr42, Qpr43, Qpr44, Qpr45, Qpr46, Qpr47, Qpr48, Qpr49, Qpr50, Qpr51, Qpr52, Qpr53, Qpr54, Qpr55, Qpr56, Qpr57, Qpr58, Qpr59, Qpr60, Qpr61, Qpr62, Qpr63, Qpr64, Qpr65, Qpr66, Qpr67, Qpr68, Qpr69, Qpr70, Qpr71, Qpr72, Qpr73, Qpr74, Qpr75, Qpr76, Qpr77, Qpr78, Qpr79, Qpr80, Qpr81, Qpr82, Qpr83, Qpr84, Qpr85, Qpr86, Qpr87, Qpr88, Qpr89, Qpr90, Qpr91, Qpr92, Qpr93, Qpr94, Qpr95, Qpr96, Qpr97, Qpr98, Qpr99, Qpr100	



L U Z O N S E A

APO ISLANDS

APO WEST PASS

APO EAST PASS

MINDORO STRAIT

MINDORO

CALAMIAN GROUP

BUSUANGA ISLAND

CABLAUAN ISLAND

LABON ISLAND

CULION ISLAND

BULALAGA ISLAND

TARA ISLAND

BANTAC ISLAND

TAMBOW ISLAND

HONDONAN ISLAND

MARANAN ISLAND

MARANAN ISLAND

MARANAN ISLAND

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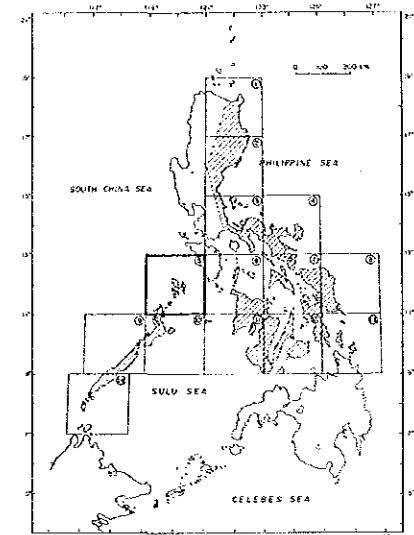
MARANAN ISLAND

MARANAN ISLAND

THE MINERAL EXPLORATION
 - MINERAL DEPOSITS AND TECTONICS OF TWO
 CONTRASTING GEOLOGIC ENVIRONMENTS
 IN
 THE REPUBLIC OF THE PHILIPPINES
 PHASE I

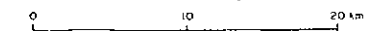
1985
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COMPILED GEOLOGICAL MAP



JAPAN INTERNATIONAL COOPERATION AGENCY
 METAL MINING AGENCY OF JAPAN
 JUNE 1985, FIRST EDITION

Scale 1 : 250,000



LEGEND

STRATIFIED ROCKS

Recent		Alluvium and beach deposits
		Coral reefs
Pliocene- Pleistocene		Marine and terrestrial sediments associated with extensive reef limestone and sporadic terrace gravel deposits.
Upper Miocene		Largely marine clastics and dacite and/or andesite flows, generally with pyroclastics. Associated with silty limestone.
Lower-Middle Miocene		Conglomerate, wackes, shale and reef limestone, associated with basic to intermediate flows and pyroclastics.
		Limestone.
Paleocene- Eocene		Marine deposits, largely wackes and shale, associated with minor basalt, conglomerate, reef limestone and calcarenite, sometimes with dacitic and/or andesitic flows and pyroclastics.
Cretaceous- Paleogene		Undifferentiated graywackes and metamorphosed shale with siltite, basic flows and pyroclastics.
Cretaceous		Extensive, transgressive graywackes and shale, intercalated with siltites. Associated with tuffaceous clastics and limestone.
Basement Complex		Undifferentiated schist and quartzite.

INTRUSIVE ROCKS

Neogene		Quartz diorite, granodiorite and andesite porphyry.
Cretaceous- Paleogene		Ultramafic and mafic plutonic rocks, generally thrust or upfaulted.

GEOLOGIC SYMBOLS





Paleocene-Eocene		Marine deposits, largely wackes and shale, associated with minor basalt, conglomerate, reef limestone and calcarenite, sometimes with dacitic and/or andesitic flows and pyroclastics.
Cretaceous-Paleogene		Undifferentiated graywackes and metamorphosed shale with siltite, basic flows and pyroclastics.
Cretaceous		Extensive, transgressive graywackes and shale, intercalated with siltites. Associated with tuffaceous clastics and limestone.
Basement Complex		Undifferentiated schist and quartzite.

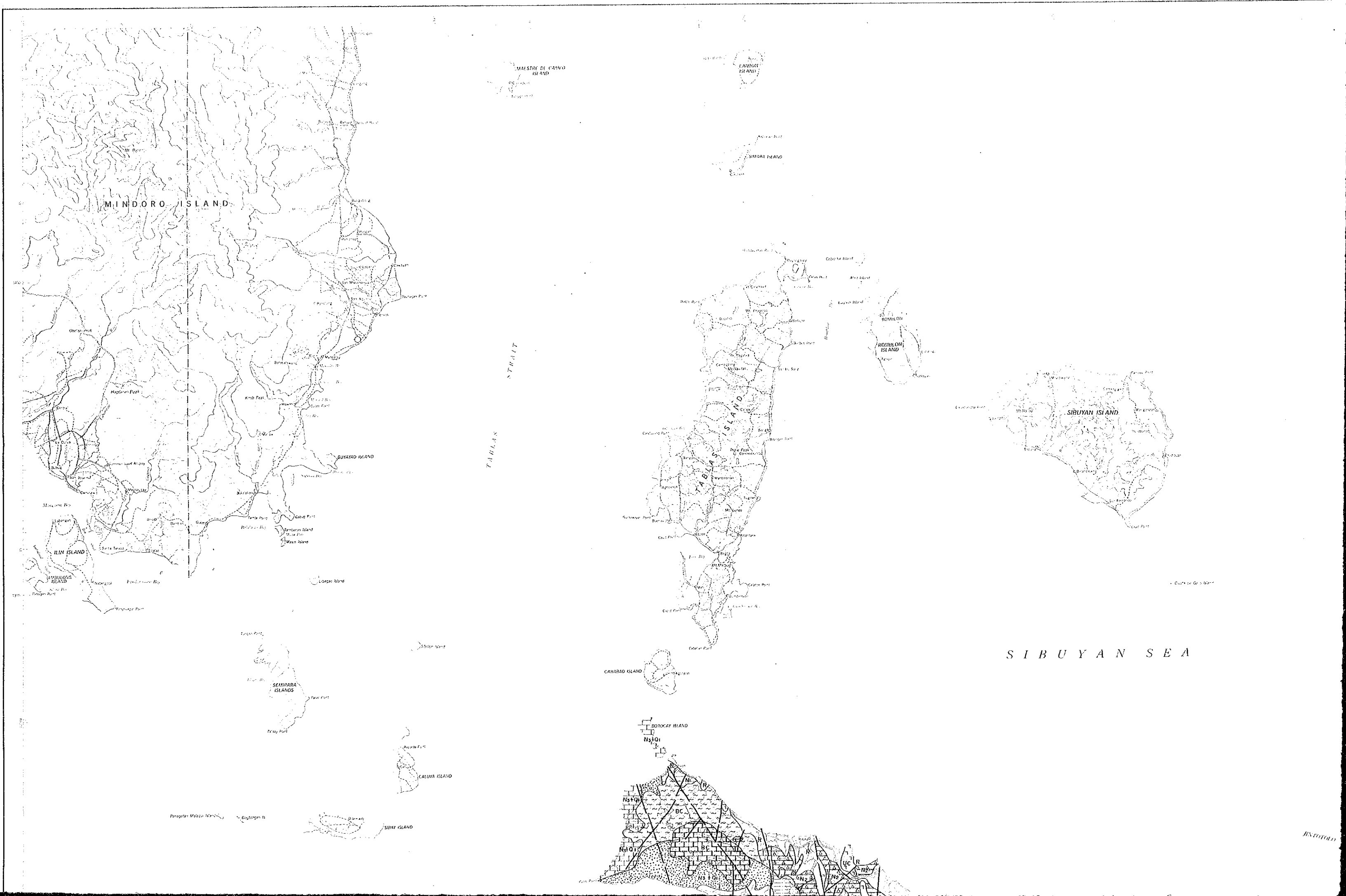
INTRUSIVE ROCKS

Neogene		Quartz diorite, granodiorite and andesite porphyry.
Cretaceous-Paleogene		Ultramafic and mafic plutonic rocks, generally thrust or uplifted.

GEOLOGIC SYMBOLS

- Geologic contact.
- High angle fault. Dashed where inferred; arrow indicates strike-slip movement.
- Thrust fault. Dashed where inferred; saw-teeth on overriding side.
- Anticlinal axis with plunge.
- Synclinal axis with plunge.

Compiled from geology and mineral resources map of palawan province (1:250,000)



MINDORO ISLAND

TABBIAN STRAIT

LUZON ISLAND

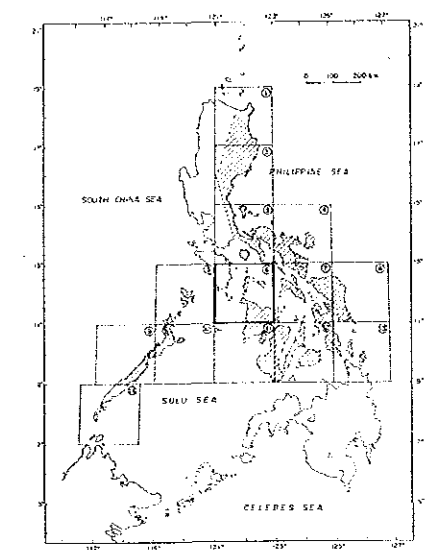
SIBUYAN ISLAND

SIBUYAN SEA

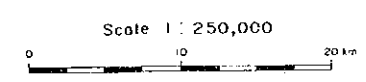
INTRODUCTION

THE MINERAL EXPLORATION
 - MINERAL DEPOSITS AND TECTONICS OF TWO
 CONTRASTING GEOLOGIC ENVIRONMENTS -
 IN
 THE REPUBLIC OF THE PHILIPPINES
 PHASE I

COMPILED GEOLOGICAL MAP



JAPAN INTERNATIONAL COOPERATION AGENCY
 METAL MINING AGENCY OF JAPAN
 JUNE 1985, FIRST EDITION



LEGEND

SEDIMENTARY AND METAMORPHIC ROCKS		
R	Recent	Alluvium, beach deposits, and raised coral reef.
N ₃ +Q ₁	Pliocene - Pleistocene	Marine and terrestrial sediments associated with extensive reef limestone and sporadic terrace gravel deposits.
N ₃ +Q ₁		Limestone.
U ₁ N ₂	Upper Miocene	Largely marine clastic overlain by pyroclastics associated with silty limestone.
U ₁ N ₂		Limestone.
L ₁ N ₁	Lower Miocene	Conglomerate, wackes, shales and reef limestone associated w/basic to intermediate flows and pyroclastics.
P ₁ E ₁	Paleocene Eocene	Marine deposits, largely wackes and shales associated with minor basalt, conglomerate, reef limestone and calcarenite, sometimes w/dacite and/or andesite flows and pyroclastics.
K	Cretaceous	Extensive, graywacke-shale sequence intercalated w/ siltites. Associated w/luffaceous clastic and limestone lenses.
B ₁ C ₁	Basement	Undifferentiated schist and quartzite.
B ₁ C ₁		Limestone.
IGNEOUS ROCKS		
INTRUSIVES		
+N ₁ +	Neogene	Quartz diorite, granodiorite and andesite porphyry.
U ₁ C ₁	Cretaceous	Ultramafic and mafic plutonic rock, generally thrust or upfaulted.
EXTRUSIVES		



SIBUYAN SEA

BANTOG CHANNEL



TABARA STRAIT

MAESTRI DE CAMBO ISLAND

HATI-HATI ISLAND

MIRARA ISLAND

ROMBLON ISLAND

SIBUYAN ISLAND

CARABAO ISLAND

BOROCAY ISLAND

CALUYAN ISLAND



	Lower Miocene	associated w/basic to intermediate flows and pyroclastics.
	Paleocene-Eocene	Marine deposits, largely wackes and shales associated with minor basalt, conglomerate, reef limestone and calcarenite, sometimes w/dacite and/or andesite flows and pyroclastics.
	Cretaceous	Extensive, graywacke-shale sequence intercalated w/spillites. Associated w/tuffaceous clastic and limestone lenses.
	Basement	Undifferentiated schist and quartzite.
	Limestone	

IGNEOUS ROCKS

INTRUSIVES

	Neogene	Quartz diorite, granodiorite and andesite porphyry.
	Cretaceous	Ultramafic and mafic plutonic rock, generally thrust or upfaulted.

EXTRUSIVES

	Upper Miocene-Pliocene	Principally dacite and/or andesite flow generally w/pyroclastics, associated w/reef limestone lenses.
	Paleocene (?)	Limited dacite and andesite flows and dikes generally intercalated w/and/or intrude Eocene clastics.
	Cretaceous-Paleogene	Essentially spilitic and basic flows intercalated flows transgressive on basement rocks.

GEOLOGIC SYMBOLS

	Geologic contact.
	Thrust fault dashed where inferred saw teeth overriding side.
	Anticlinal axis with plunge.
	Synclinal axis with plunge.

Compiled from Geology and Mineral Resources Map of Antique Province (1:250,000), Iloilo Province (1:250,000) and Aklan-Capiz Province (1:250,000) and Geologic Map of Southwestern Panay (1:250,000).