

**The Catalogue of Core Logging Sheets for Sediments
of the Western Gulf of Thailand and Eastern
Peninsular Malaysia in April 1996**



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ACC. NO. **1764**
Date Received **28 APR 1997**
Call No. **TD/RES/40**

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Preface

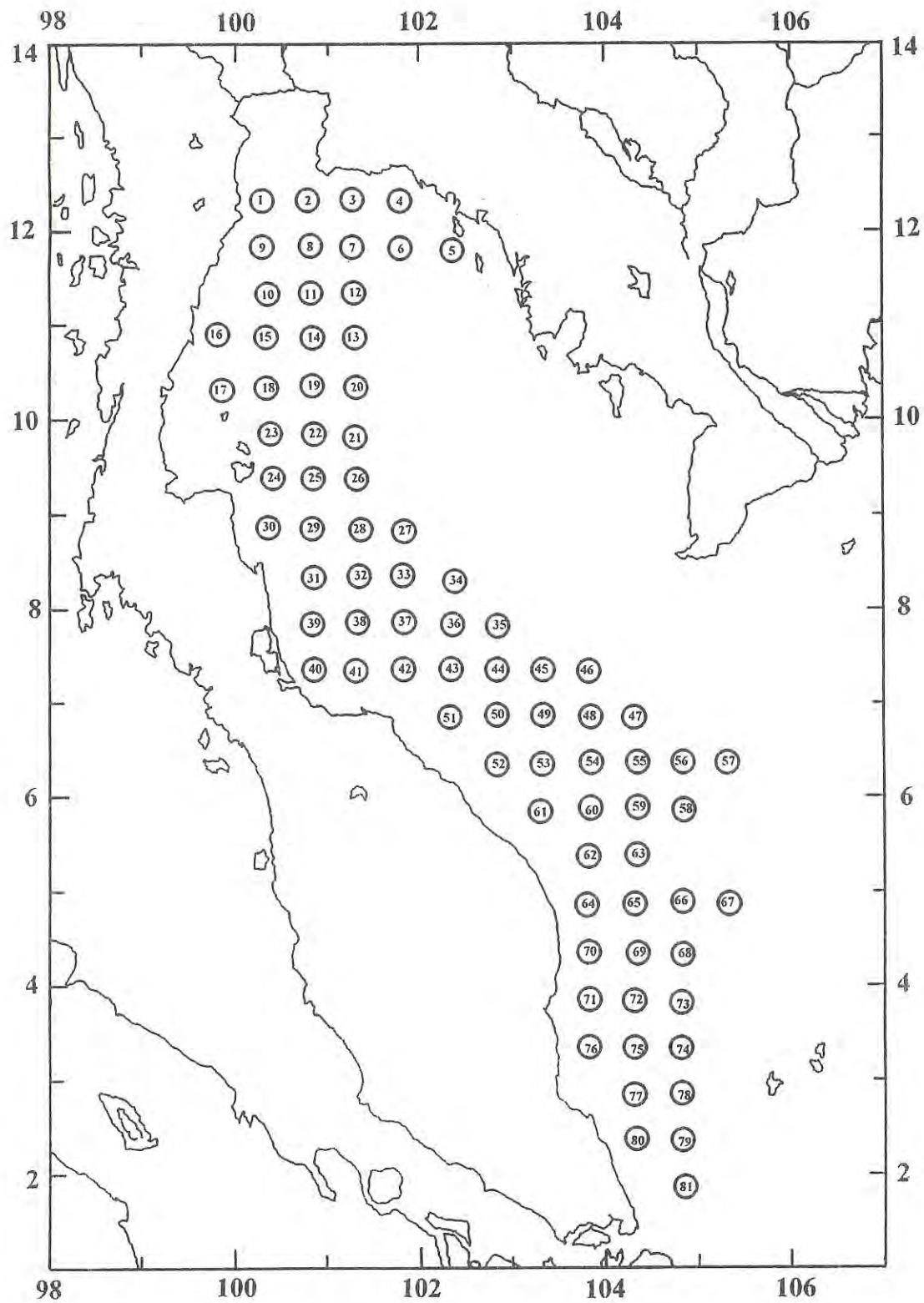
Oceanographic survey on bottom sediment characteristics has been conducted in the sea areas in the western part of the Gulf of Thailand and the Eastern Peninsular Malaysia as one research program under the collaborative research project between SEAFDEC's Training Department (TD) in Thailand and the Marine Fishery Resources Development and Management Department (MFRDMD) in Malaysia. This research program was carried out because of the interest in the nature of sea bottom in an area of which only few detail information exist. The information such as vertical distribution of different types of sediments, relationships among sediment physico-chemical processes, biological processes in the water column and other fishery resources were of primary interest.

The sediment samples surveyed in the Western Gulf of Thailand and Eastern Peninsular Malaysia during April 1996 were immediately recorded for their visible characteristics on board of M.V.SEAFDEC in core logging sheets by using general lithological symbols. The catalogue of core logging sheets here could thus be applicable to easily distinguish the vertical profiles of those bottom sediments. Such visible characteristics could also simply reflect both physico-chemical and biological compositions of bottom deposits in the designated areas.

Sampling Operation

The sediment sampler used in this research survey was a gravity corer which had been borrowed from Marine Science Department, Chulalongkorn University, Bangkok, Thailand. The corer consisted of core barrel, a hollow metal with *ca* 100 cm in length and 6 cm in diameter. The core barrel contained easily removable plastic liners (core tubes; 85 cm long and 5.2 in inner diameter) which fitted into a core barrel and retained the sediment sample. The piston mounted on the top of the core barrel was opened and allowed water to flow through the barrel during descent, but shut upon penetration of the sampler into the sediment. The tip was a core cutter for better penetration of the sampler and the stabilizing fins situated in the upper part to assure vertical descent of the corer.

During application, the gravity corer was lowered to the depth of about 2 m above the sediment surface. From that depth, it was let to sink freely to penetrate the bottom. In addition, sediment grab was applied instead of the corer in a few stations in which the bottom was mainly composed of sand and gravels that was unable to retrieve by the corer. At least two sediment cores were sampled from each sampling station. The map of sampling locations (of 81 stations) will be shown below.



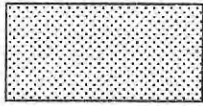
Sampling Locations

Records of Sediment Core Appearances

Prior to sub sampling, the appearances of the obtained sediment cores were recorded in the core logging sheets for the length of the cores, the consistency (for example described as soupy, soft, medium firm, firm, stiff, loose, packed), the texture (for example described as gravel, sand, silt clay, sandy clay, etc.), the presence of organic matter, shells and coarse fragments with description of their size and type, the sediment odor (for example odorless or chemical odor such as petroleum, sulfurous, or decaying organic odor), the appearance of oil, coal dust, or ash, the presence of carbonate and the occurrence of benthic fauna.

The cores were sub sampled as soon as possible after retrieval of the cores. After the overlying water was suctioned off, the sediment cores were extruded out of the liners and sub sampled into 2-cm interval for the upper 10 cm depth and 3-cm interval for the sediment depth of more than 10 cm. The data of chemical analyses of these sediment samples will be reported in detail elsewhere.

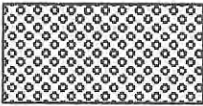
Lithological symbols used in core logging



FINE SAND



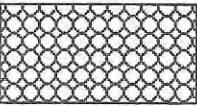
CLAY



MEDIUM SAND



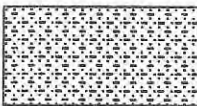
PEAT



COARSE SAND



WOOD FRAGMENTS



MUDDY SAND



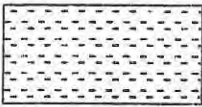
SHELL / SHELL HASH



SANDY MUD



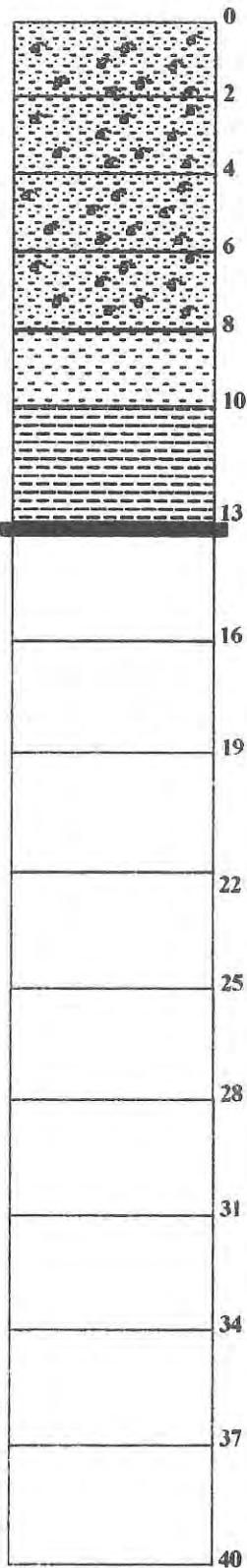
SHELL HORIZON



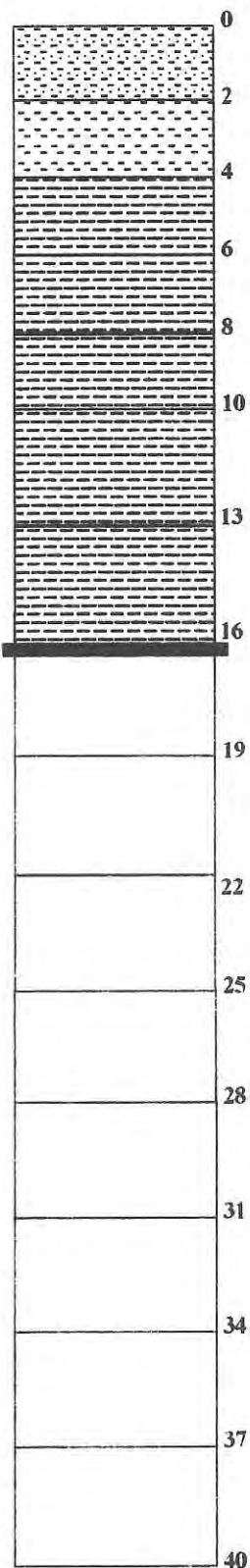
MUD



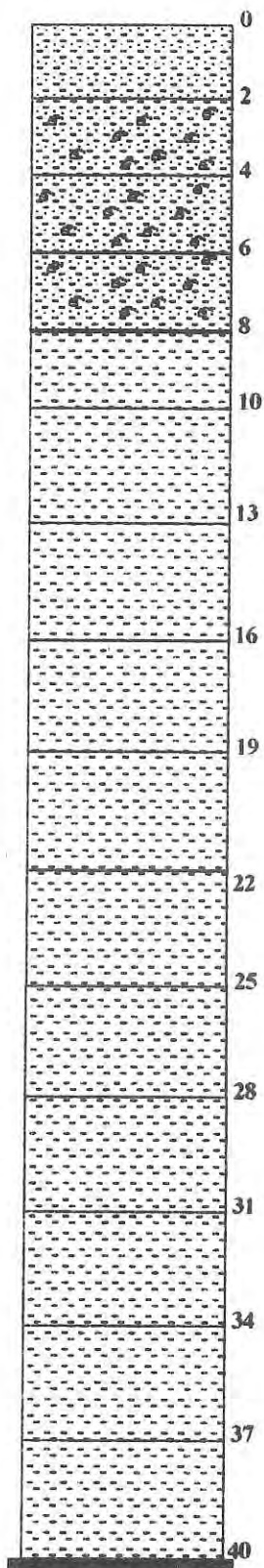
SEDIMENT MISSING



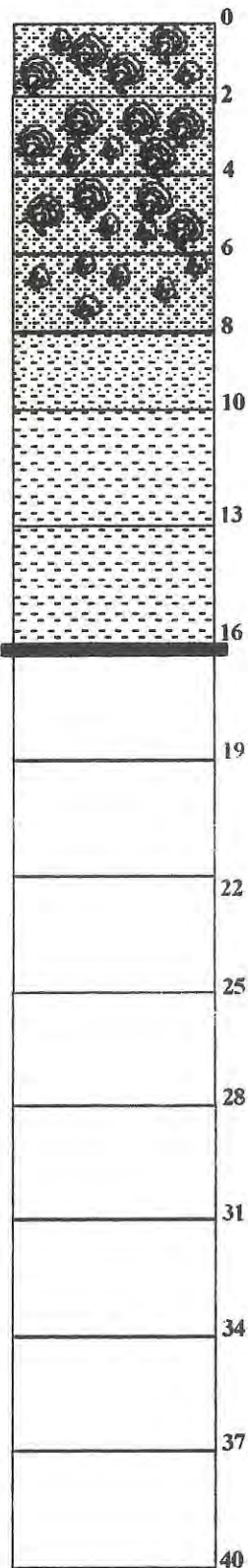
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 1 (12°19'24"N 100°16'40"E)
Date and time	: 24 April 1996 (8:00)
Weather condition	: fine
Water depth	: 31 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST1



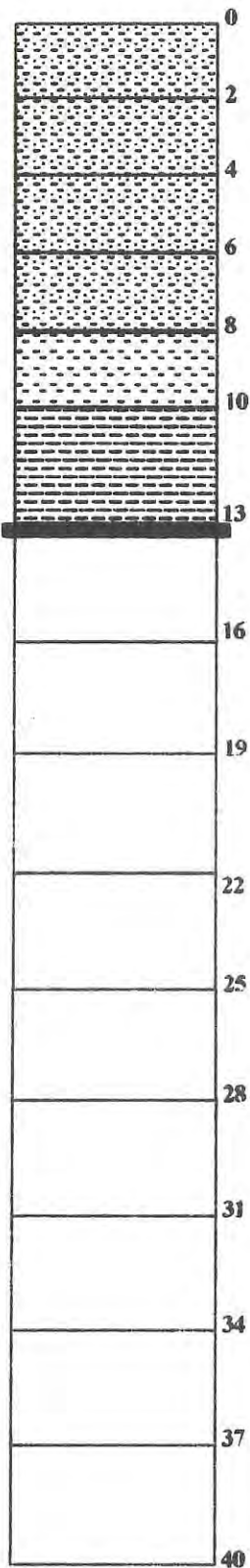
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 2 (12°19'42''N 100°46'00''E)
Date and time	: 24 April 1996 (14:00)
Weather condition	: very fine
Water depth	: 29 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST2



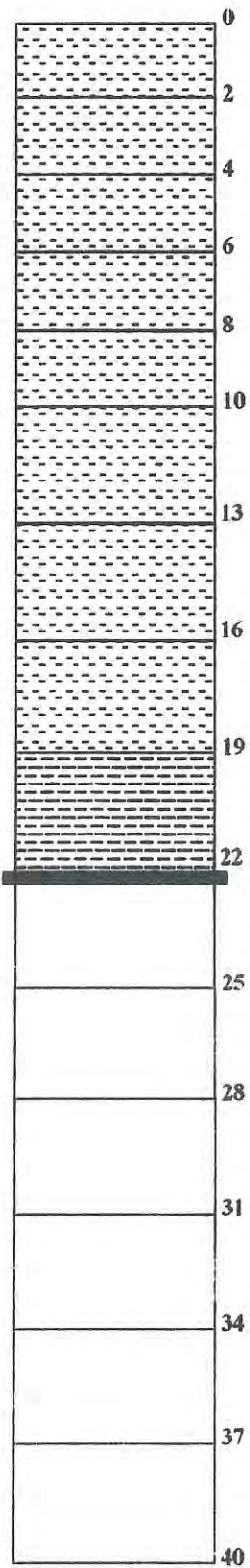
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 3 (12°19'24"N 101°15'30"E)
Date and time	: 24 April 1996 (17:10)
Weather condition	: fine
Water depth	: 33 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST3



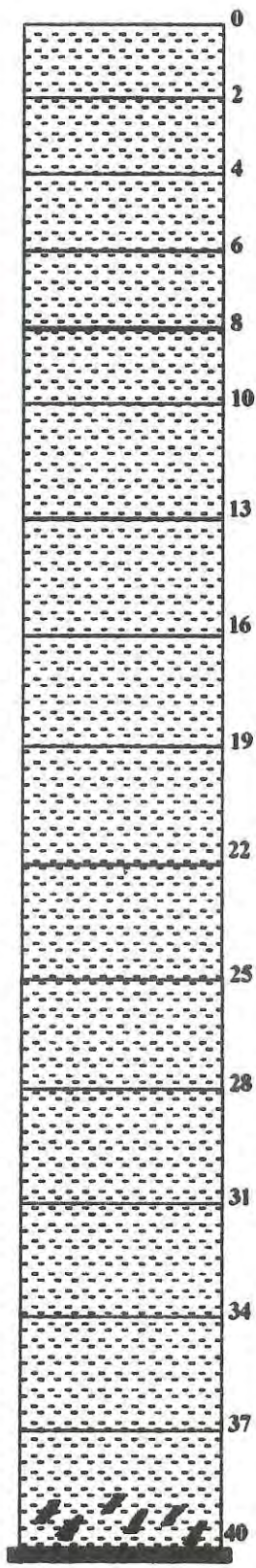
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 4 (12°19'12"N 101°44'54"E)
Date and time	: 24 April 1996 (22:00)
Weather condition	: night time
Water depth	: 28 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST4



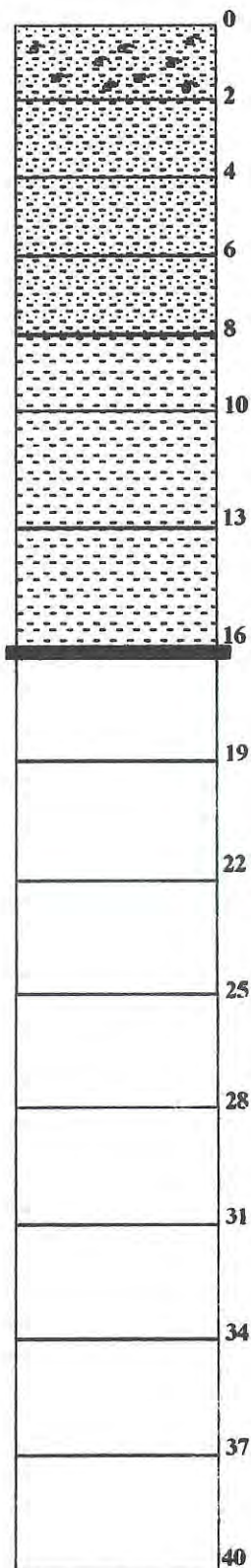
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 5 (11°49'48"N 102°14'12"E)
Date and time	: 25 April 1996 (7:00)
Weather condition	: fine
Water depth	: 36 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST5



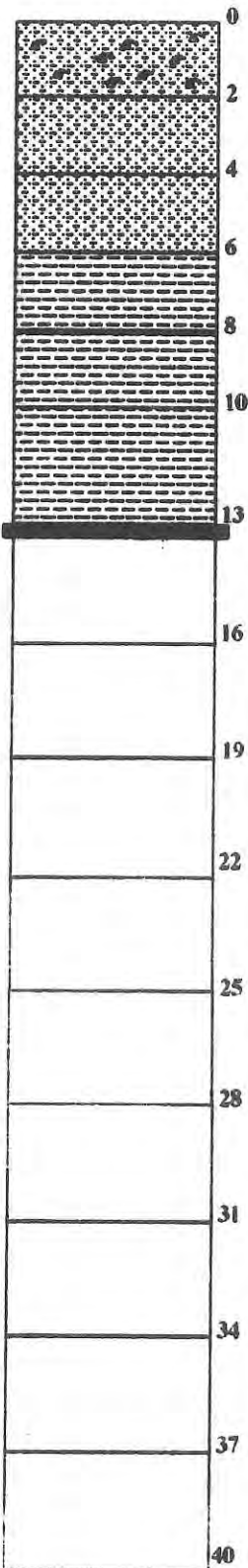
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 6 (11°48'54"N 101°45'60"E)
Date and time	: 25 April 1996 (12:00)
Weather condition	: fine
Water depth	: 52 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST6



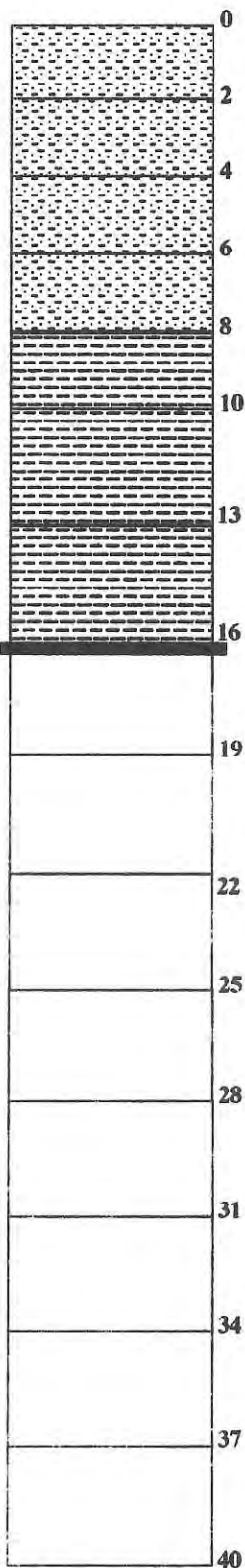
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 7 (11°48'48"N 101°15'36"E)
Date and time	: 25 April 1996 (16:00)
Weather condition	: very fine
Water depth	: 48 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST7



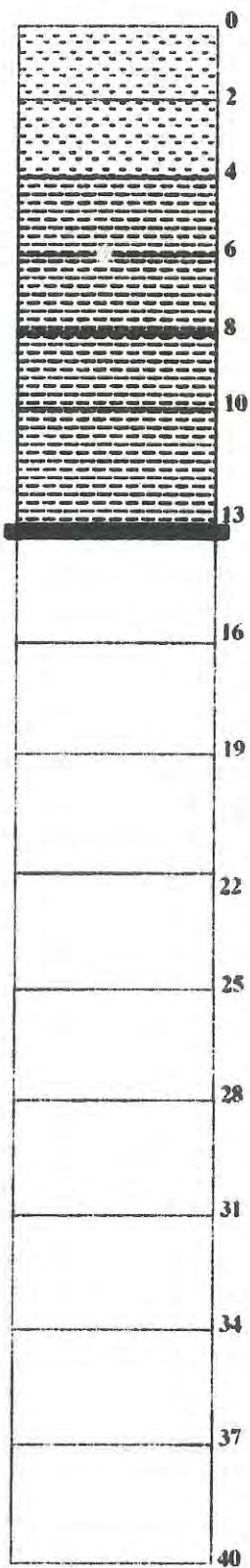
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 8 (11°50'12"N 100°45'42"E)
Date and time	: 25 April 1996 (20:30)
Weather condition	: night time, windy
Water depth	: 40 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST8



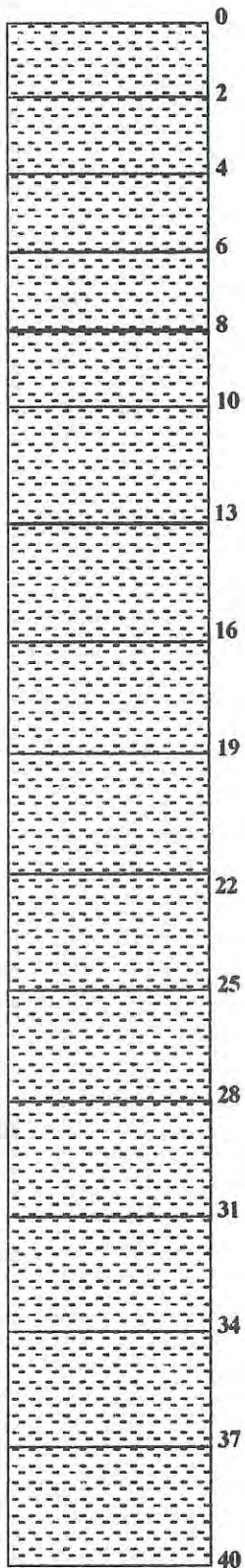
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 9 (11°49'30"N 100°14'54"E)
Date and time : 26 April 1996 (6:45)
Weather condition : cloudy
Water depth : 38 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST9



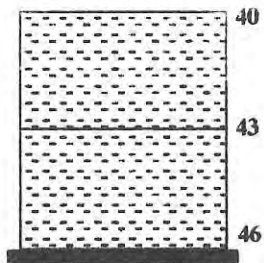
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 10 (11°21'00"N 100°15'18"E)
Date and time	: 26 April 1996 (11:20)
Weather condition	: fine
Water depth	: 49 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST10

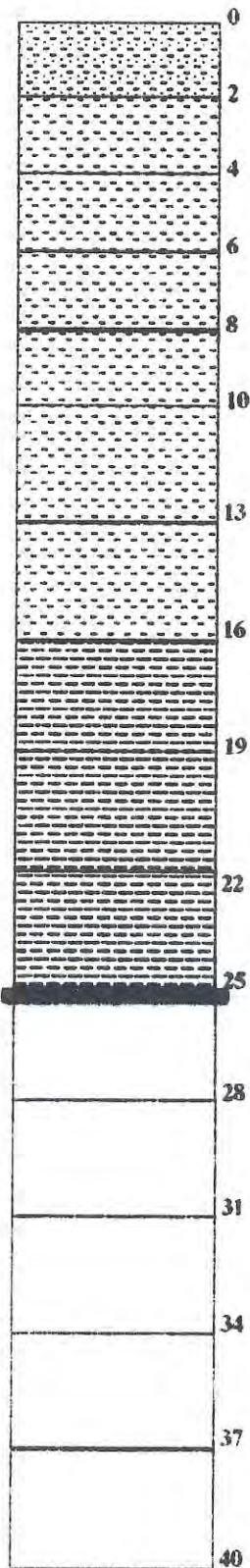


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 11 (11°20'00"N 100°46'32"E)
Date and time	: 26 April 1996 (16:00)
Weather condition	: cloudy
Water depth	: 53 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST11

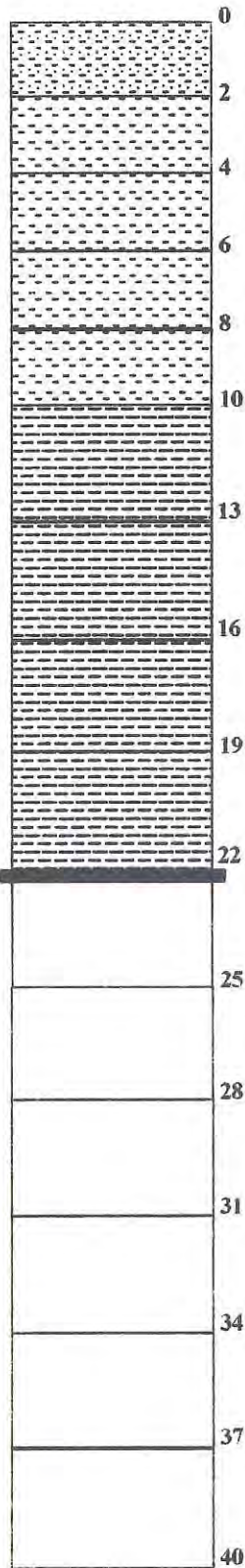


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 12 (11°19'30"N 101°15'30"E)
Date and time	: 26 April 1996 (20:20)
Weather condition	: night time
Water depth	: 62 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST12

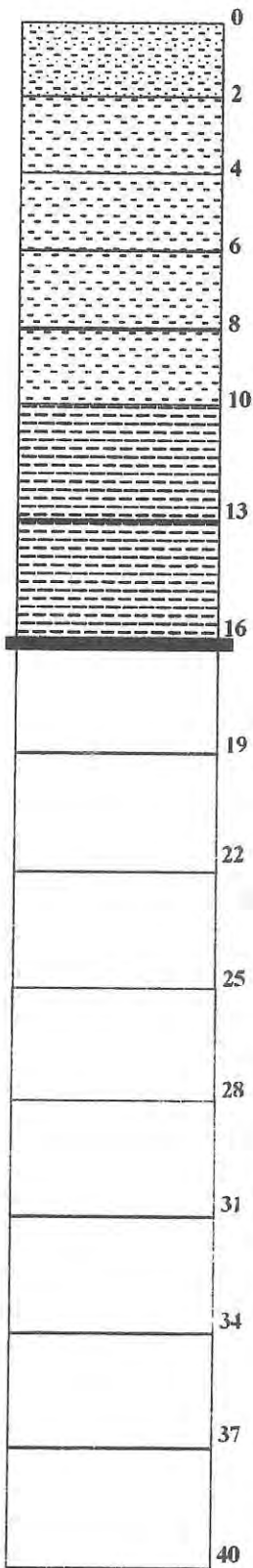




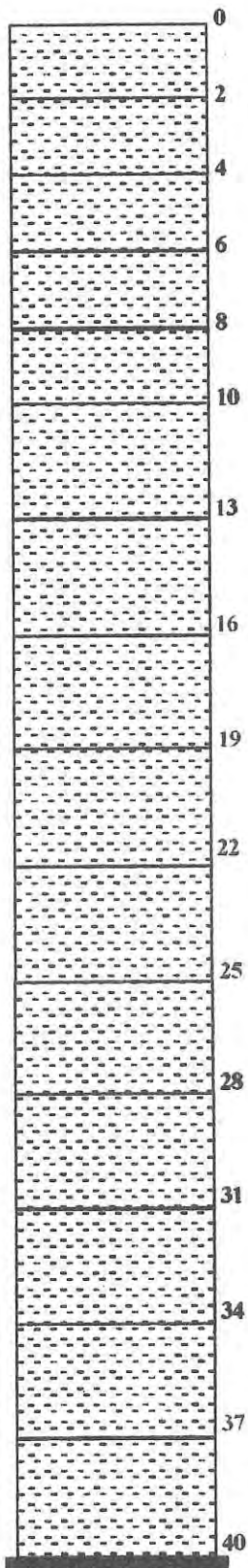
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 13 (10°50'40"N 101°16'18"E)
Date and time	: 27 April 1996 (6:45)
Weather condition	: clear sky, windy
Water depth	: 64 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST13



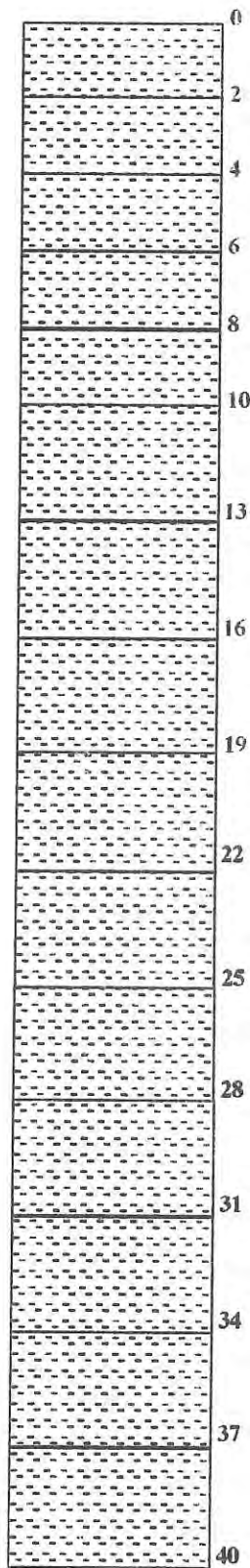
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 14 (10°50'42"N 100°44'54"E)
Date and time	: 27 April 1996 (11:40)
Weather condition	: raining, windy
Water depth	: 61 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST14



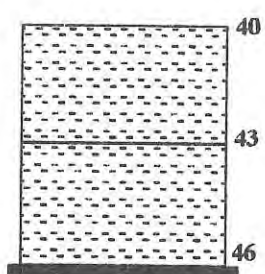
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 15 (10°50'10"N 100°16'50"E)
Date and time	: 27 April 1996 (16:40)
Weather condition	: windy
Water depth	: 56 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST15

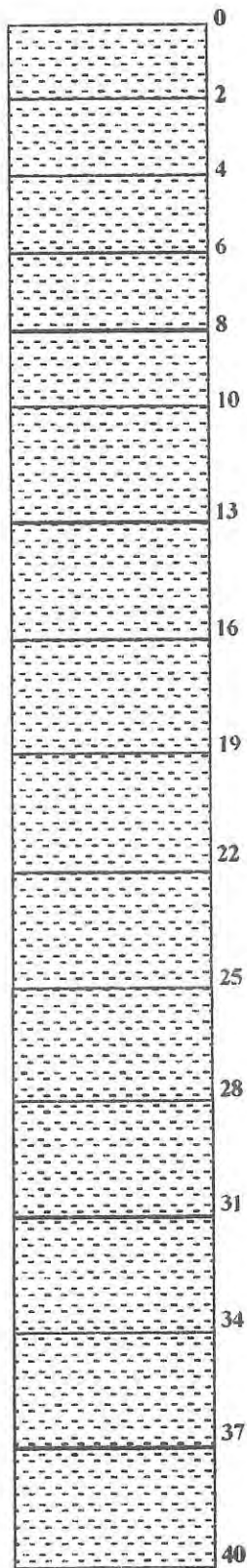


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 16 (10°50'30"N,99°46'70"E)
Date and time	: 27 April 1996 (20:30)
Weather condition	: night time, calmly
Water depth	: 50 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST16

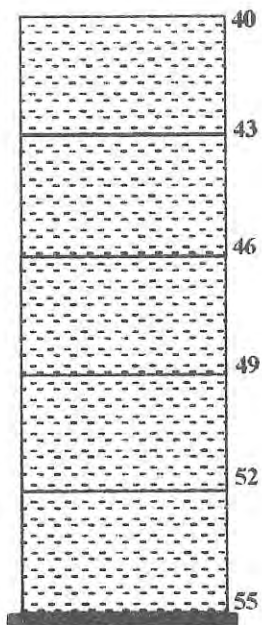


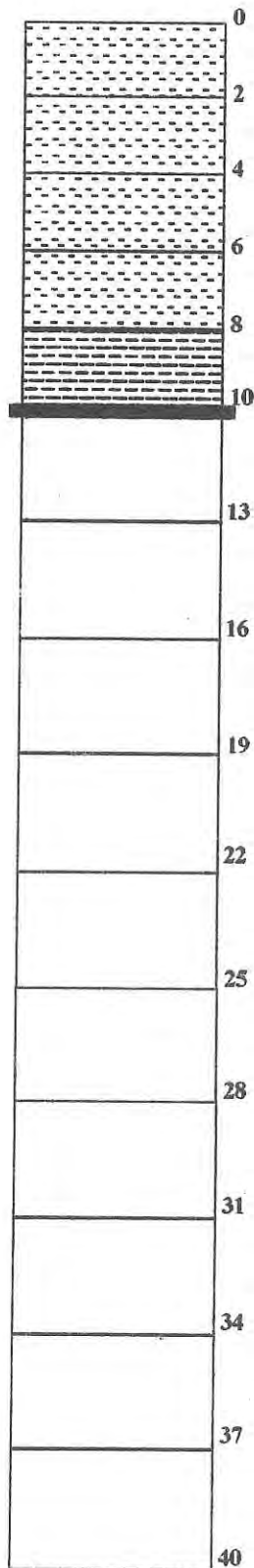
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 17 (10°19'20"N 99°45'30"E)
Date and time	: 28 April 1996 (7:00)
Weather condition	: fine
Water depth	: 47 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST17



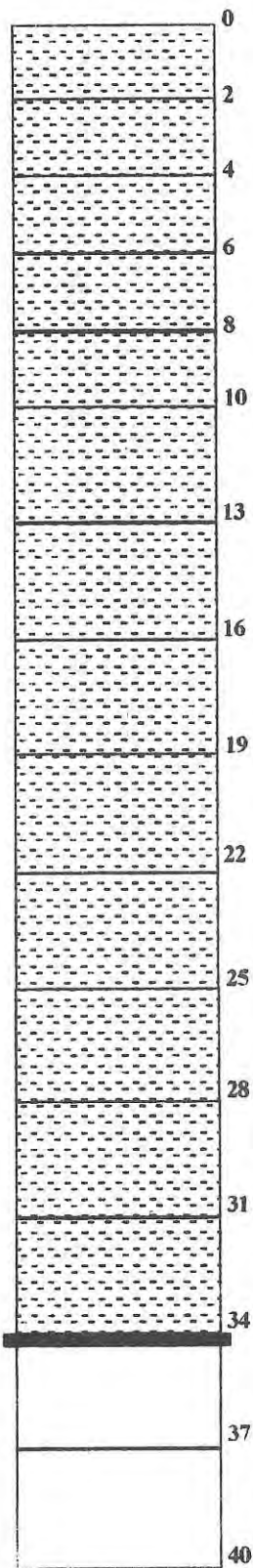


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 18 (10°19'45"N 101°15'58"E)
Date and time	: 28 April 1996 (11:20)
Weather condition	: fine
Water depth	: 63 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST18

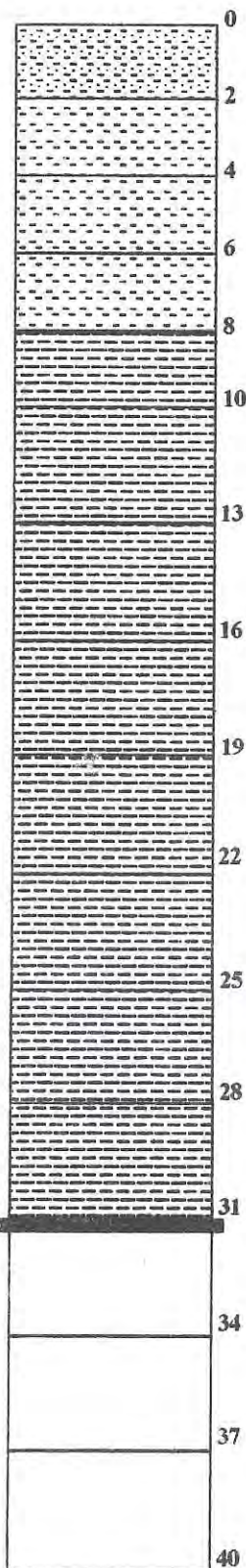




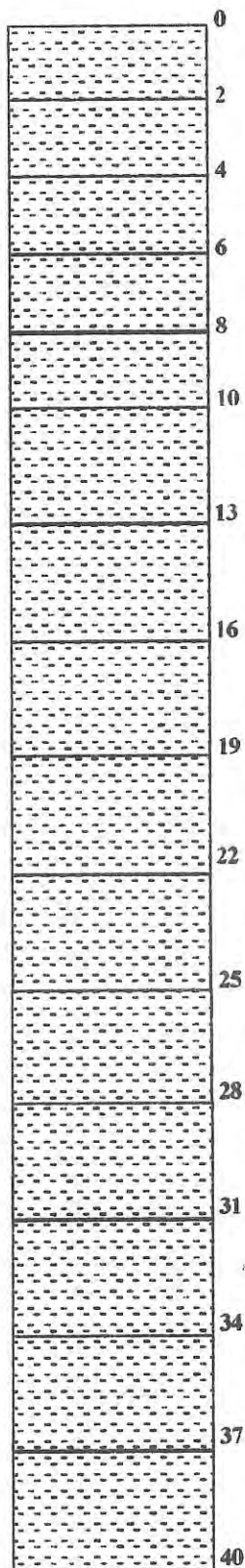
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 19 (10°20'00"N 100°46'31"E)
Date and time	: 28 April 1996 (16:00)
Weather condition	: fine
Water depth	: 65 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST19



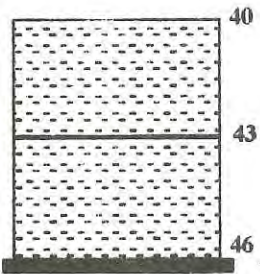
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 20 (10°20'70"N 101°16'70"E)
Date and time	: 28 April 1996 (19:30)
Weather condition	: night time
Water depth	: 71 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST20

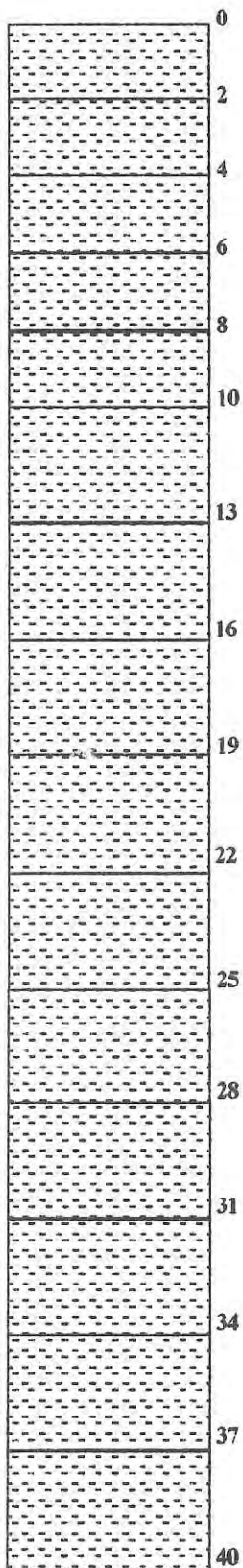


Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 21 (9°49'45"N 101°16'40"E)
Date and time : 29 April 1996 (7:00)
Weather condition : fine
Water depth : 71 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST21

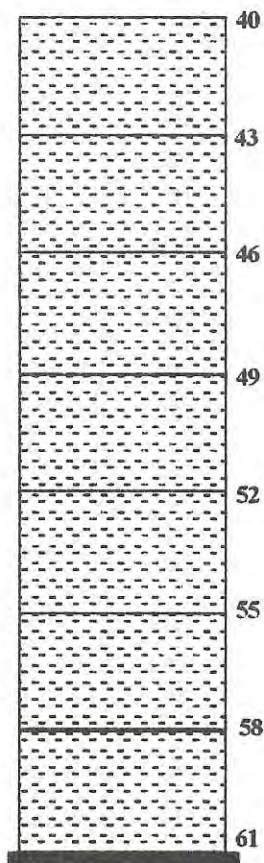


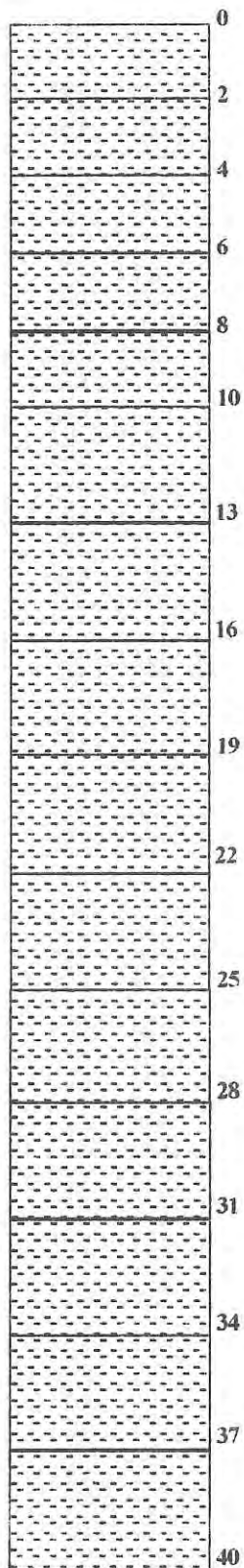
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 22 (9°49'70"N 100°44'50"E)
Date and time	: 29 April 1996 (11:00)
Weather condition	: fine
Water depth	: 60 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST22



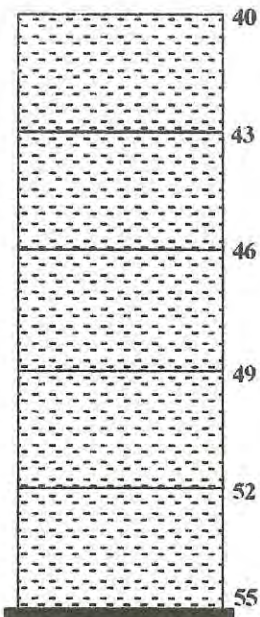


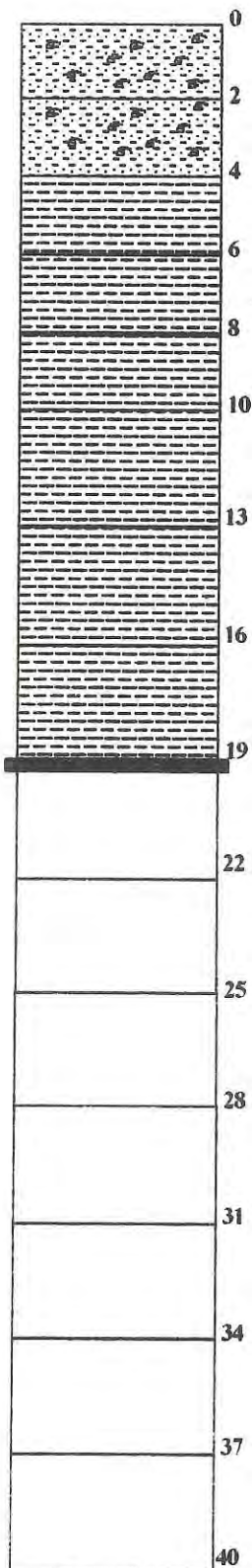
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 23 (9°49'40"N 100°15'32"E)
Date and time	: 29 April 1996 (15:00)
Weather condition	: fine
Water depth	: 34 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST23



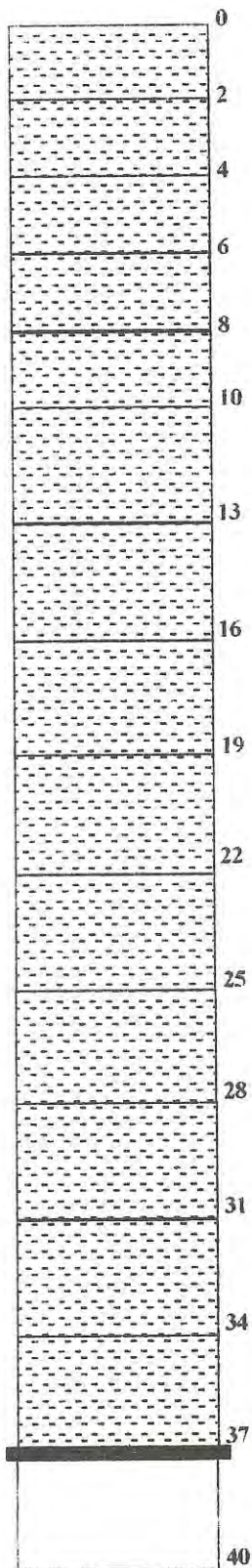


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 24 (9°20'40"N 100°15'59"E)
Date and time	: 29 April 1996 (19:30)
Weather condition	: night time
Water depth	: 30 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST24

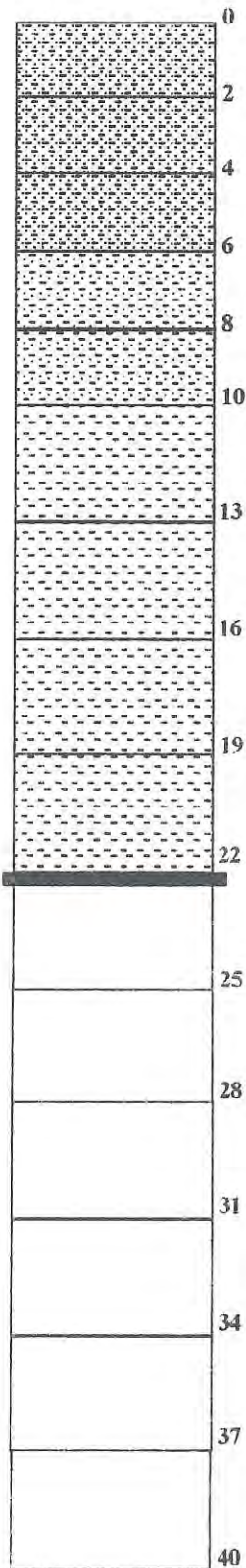




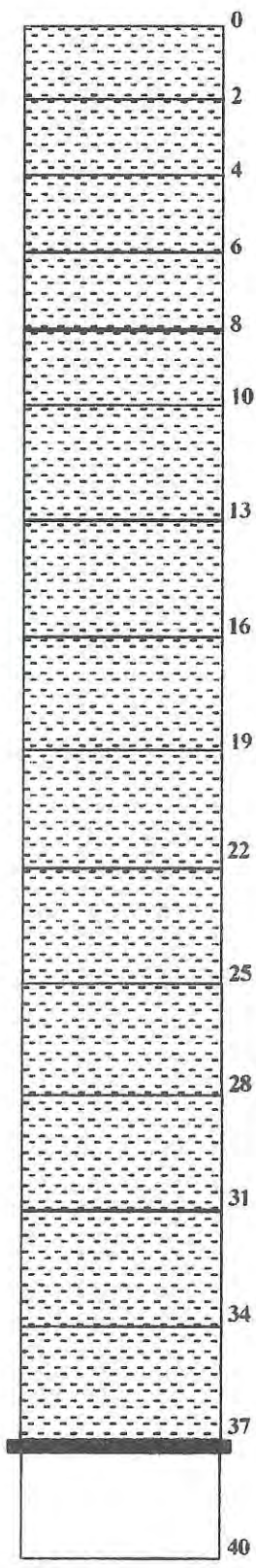
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 25 (9°20'00"N 100°45'55"E)
Date and time : 1 May 1996 (7:00)
Weather condition : cloudy, windy
Water depth : 43 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST25



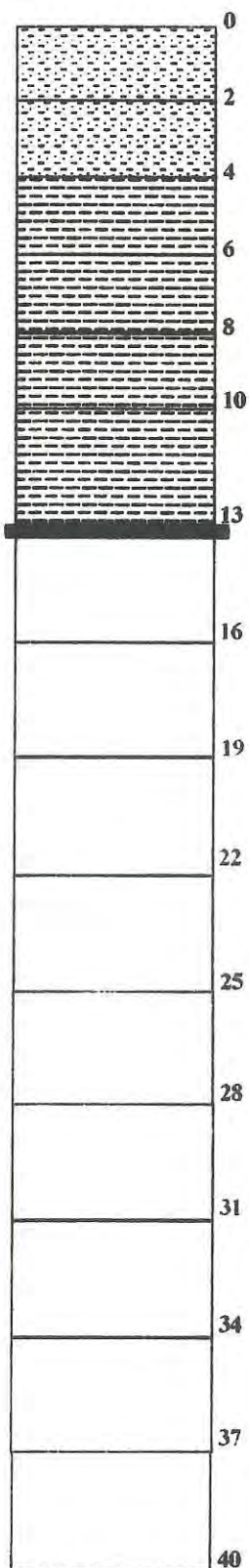
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 26 (9°19'50"N 101°15'40"E)
Date and time	: 1 May 1996 (11:30)
Weather condition	: windy
Water depth	: 67 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST26



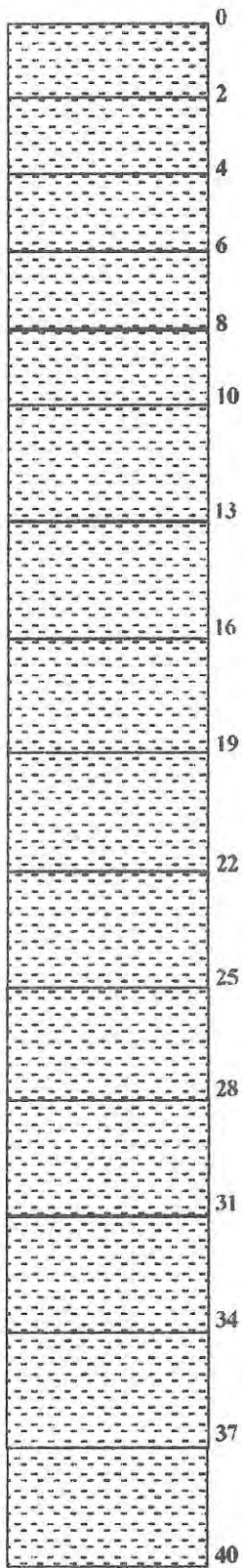
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 27 (8°49'30"N 101°45'36"E)
Date and time	: 2 May 1996 (22:30)
Weather condition	: night time
Water depth	: 78 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST27



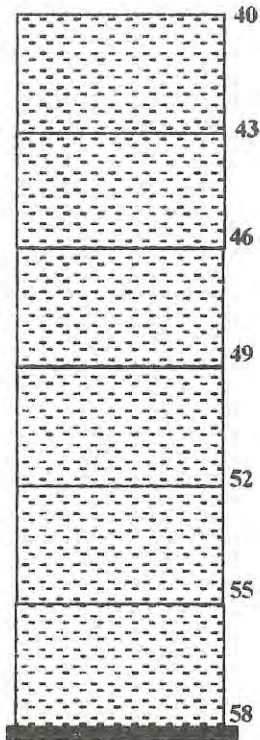
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 28 (8°49'15"N 101°15'40"E)
Date and time	: 1 May 1996 (16:00)
Weather condition	: windy, cloudy
Water depth	: 69 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST28

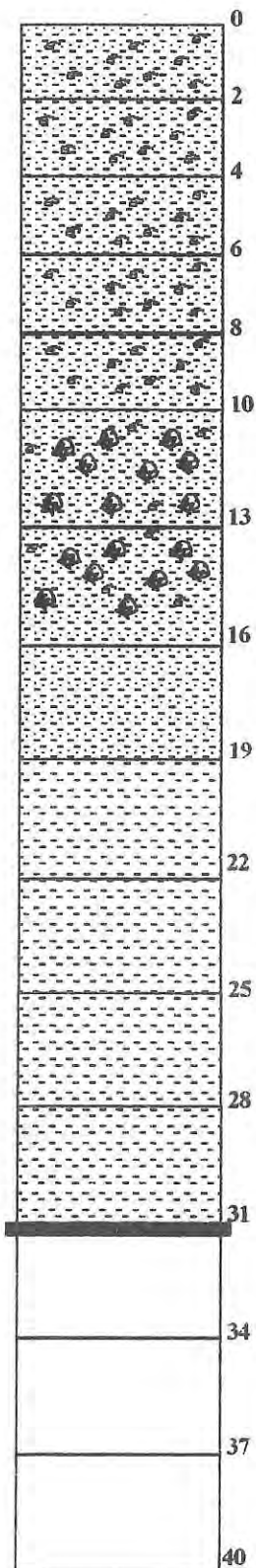


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 29 (8°49'15"N 100°44'50"E)
Date and time	: 1 May 1996 (21:30)
Weather condition	: night time
Water depth	: 32 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST29

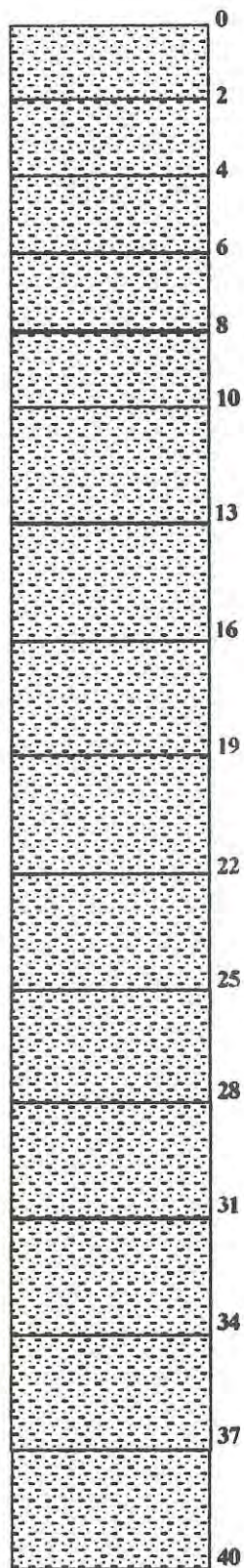


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 30 (8°50'20"N 100°15'50"E)
Date and time	: 2 May 1996 (7:00)
Weather condition	: cloudy
Water depth	: 25 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST30

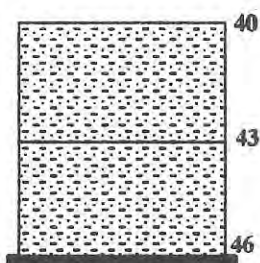


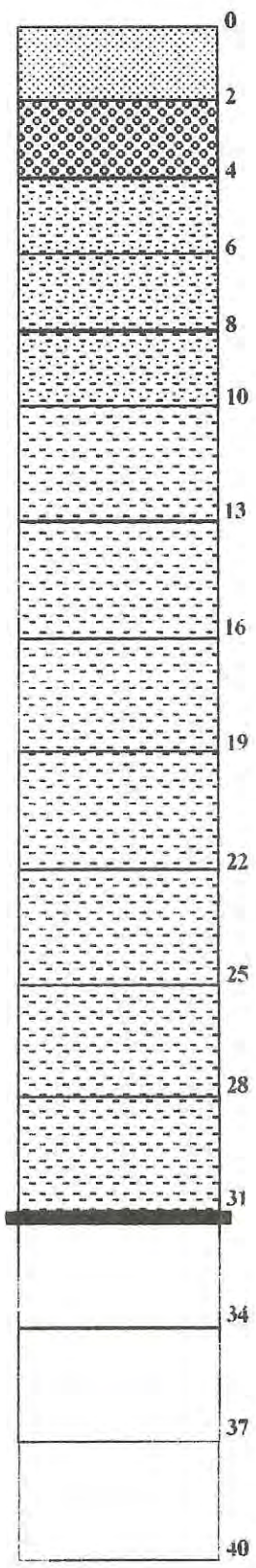


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 31 (8°19'00"N 100°45'30"E)
Date and time	: 2 May 1996 (12:00)
Weather condition	: fine
Water depth	: 32 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST31

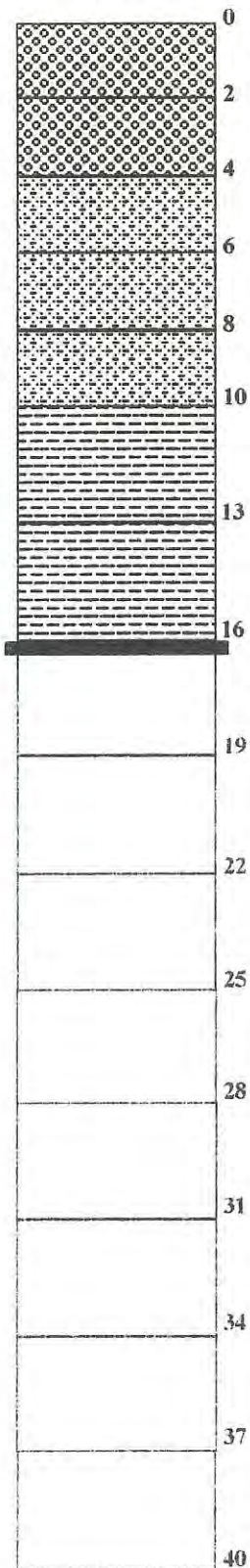


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 32 (8°18'50"N 100°16'80"E)
Date and time	: 2 May 1996 (16:00)
Weather condition	: fine
Water depth	: 55 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST32

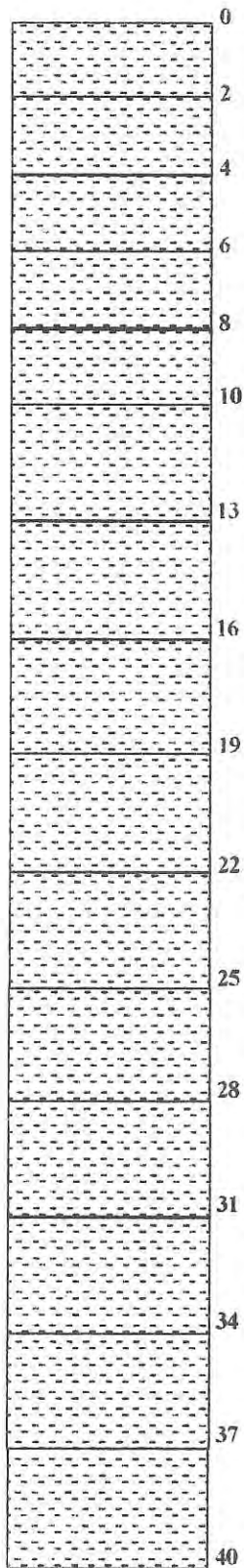




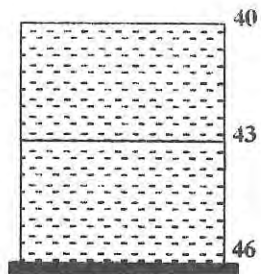
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 33 (8°49'45"N 101°46'00"E)
Date and time : 3 May 1996 (7:00)
Weather condition : fine
Water depth : 73 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST33

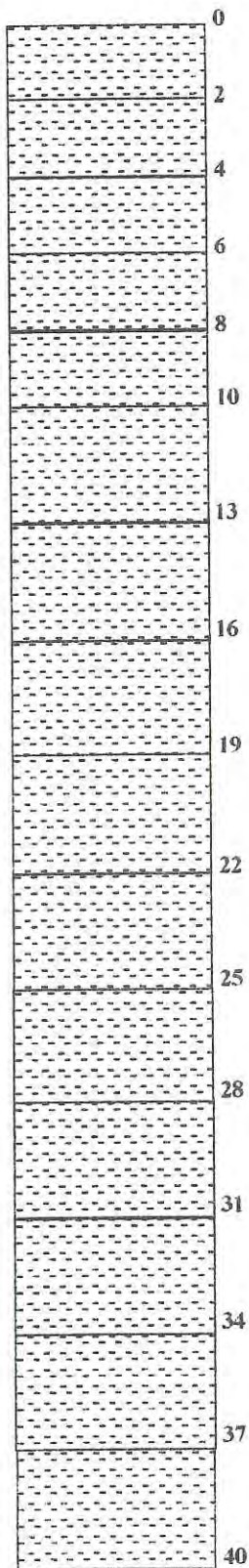


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 34 (8°19'32"N 102°14'25"E)
Date and time	: 3 May 1996 (11:00)
Weather condition	: fine
Water depth	: 78 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST34

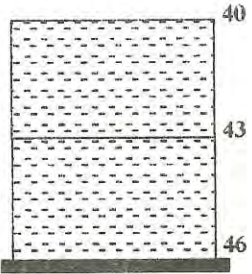


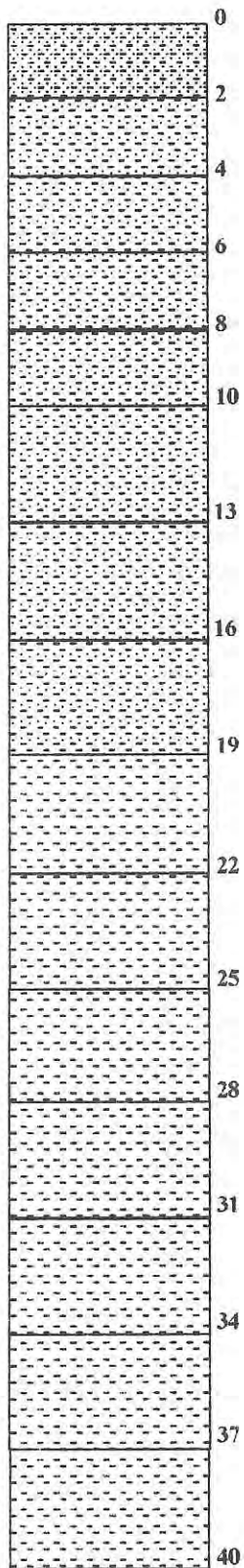
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 35 (7°49'55"N 102°44'40"E)
Date and time	: 3 May 1996 (16:30)
Weather condition	: fine
Water depth	: 73 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST35



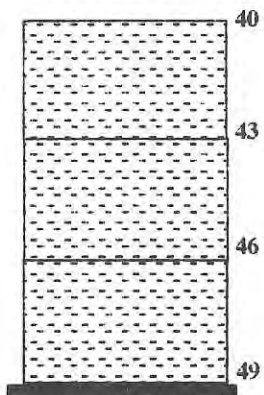


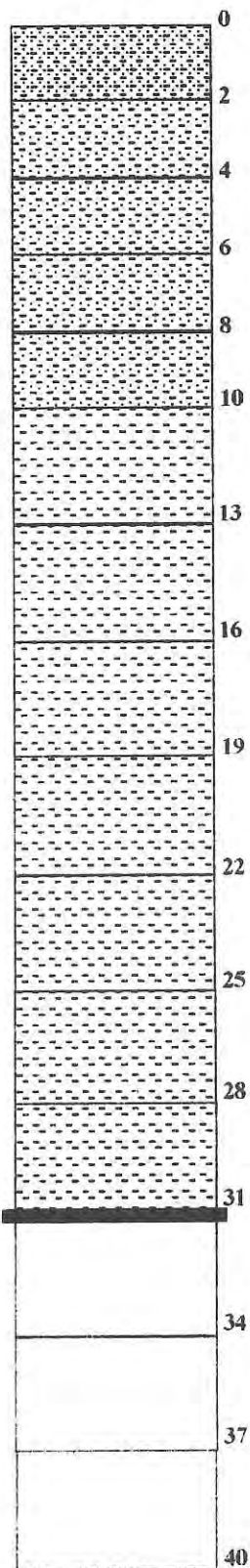
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 36 (7°51'30"N 102°14'50"E)
Date and time	: 3 May 1996 (21:00)
Weather condition	: night time
Water depth	: 74 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST36



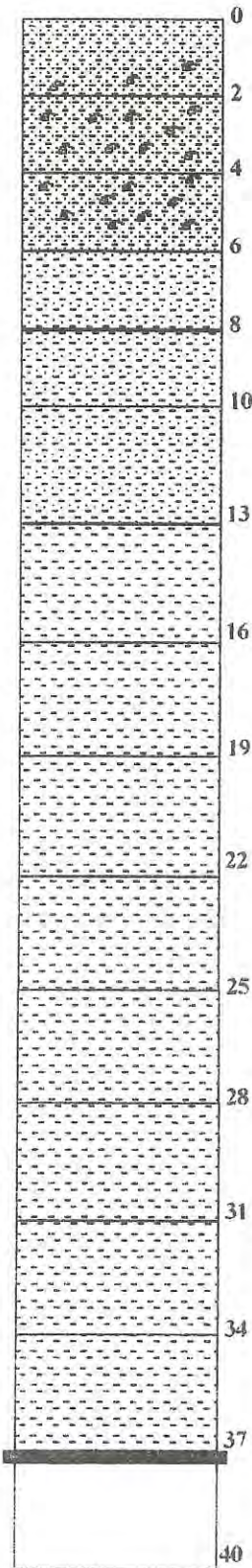


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 37 (7°50'59"N 101°45'20"E)
Date and time	: 4 May 1996 (6:30)
Weather condition	: cloudy
Water depth	: 62 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST37

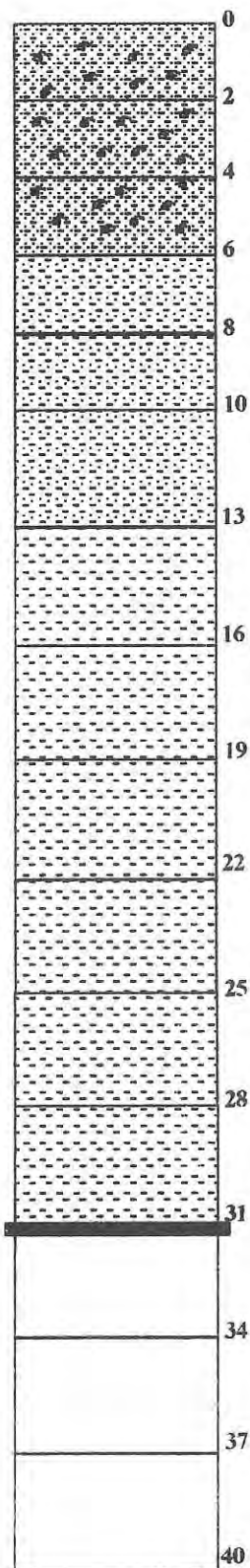




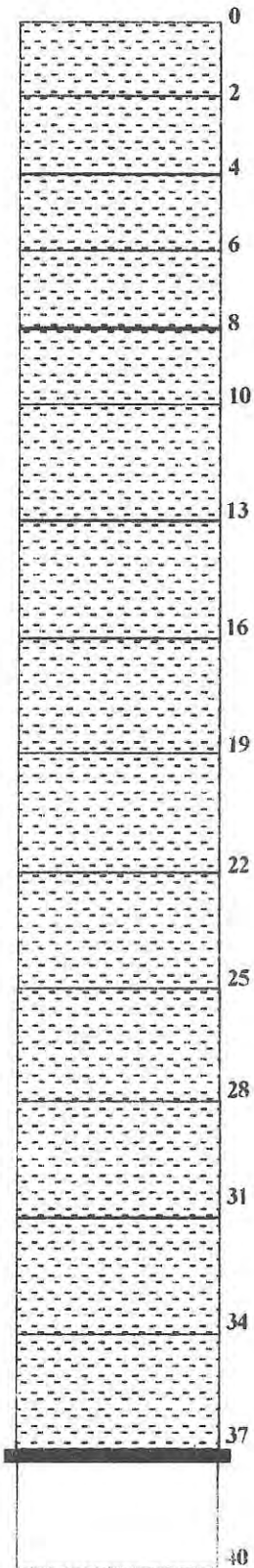
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 38 (7°50'10"N 101°15'35"E)
Date and time	: 4 May 1996 (10:30)
Weather condition	: cloudy
Water depth	: 50 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST38



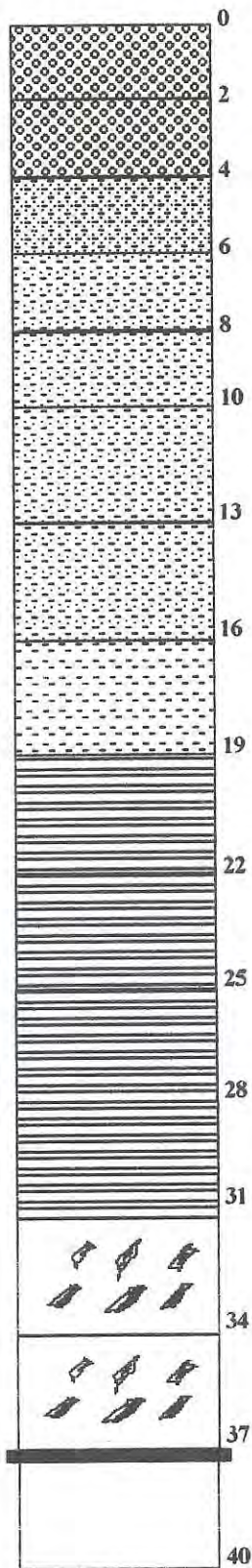
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 39 (7°51'25"N 100°44'37"E)
Date and time	: 4 May 1996 (15:00)
Weather condition	: rainy, cloudy
Water depth	: 27 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST39



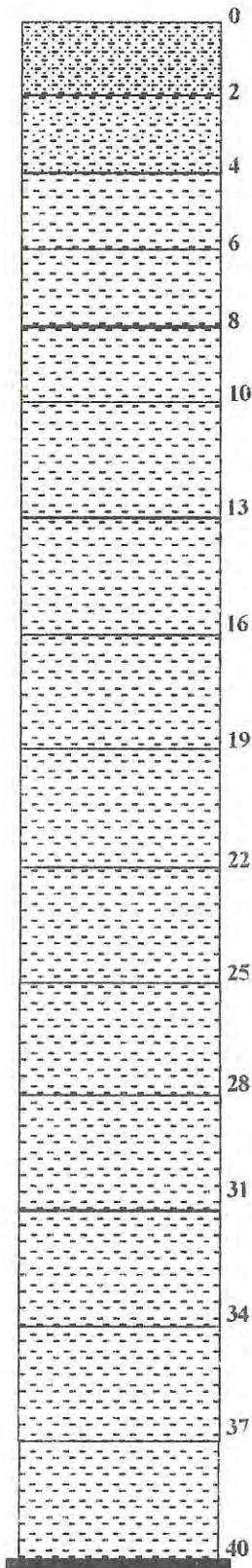
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 40 (7°19'60"N 100°44'22"E)
Date and time	: 4 May 1996 (19:00)
Weather condition	: night time
Water depth	: 22 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST40



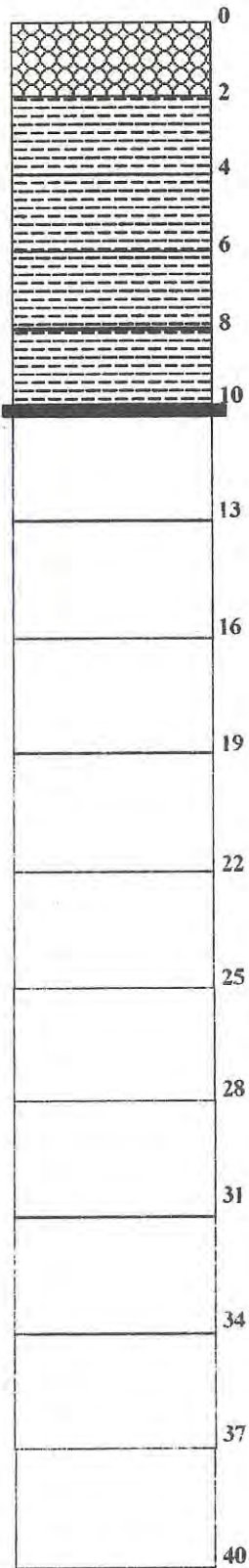
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 41 (7°19'30"N 101°16'30"E)
Date and time	: 6 May 1996 (7:00)
Weather condition	: cloudy
Water depth	: 43 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST41



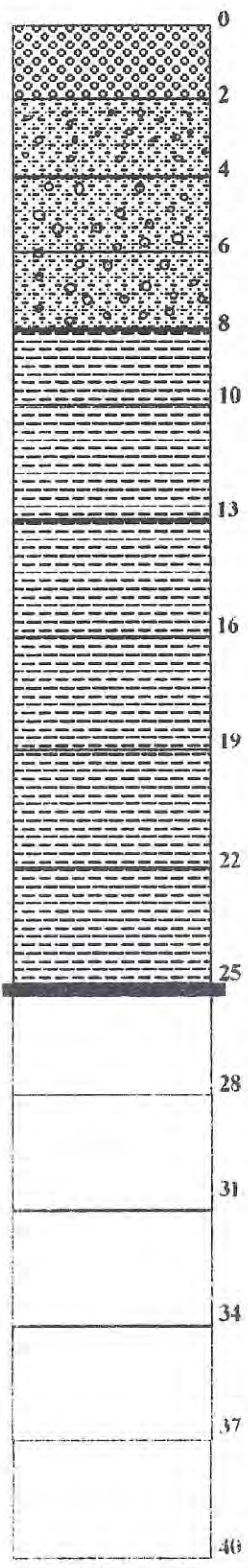
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 42 (7°20'45"N 101°45'40"E)
Date and time : 6 May 1996 (10:30)
Weather condition : fine
Water depth : 51 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST42



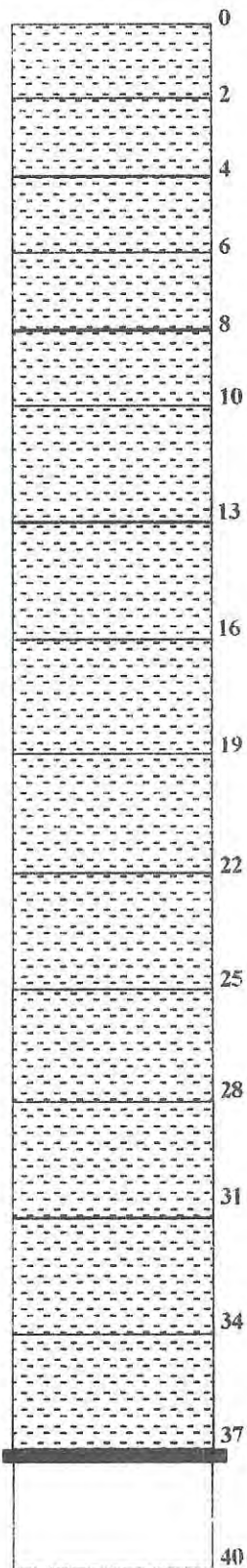
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 43 (7°20'50"N 102°15'50"E)
Date and time	: 6 May 1996 (15:00)
Weather condition	: fine
Water depth	: 52 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST43



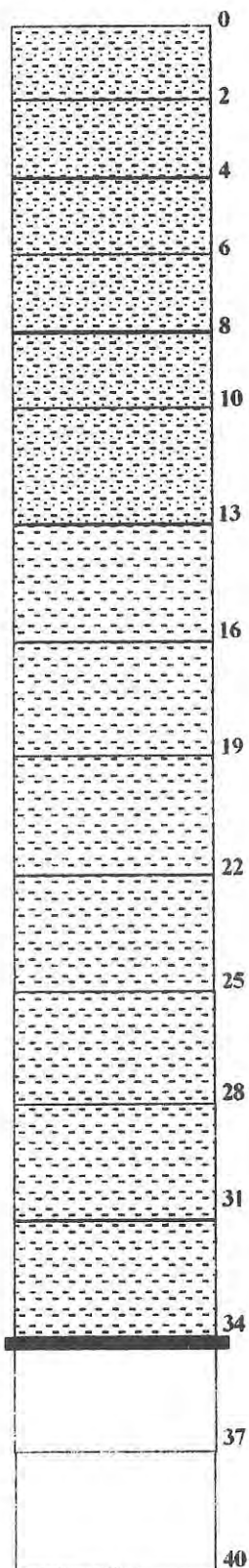
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 44 (7°19'30"N 102°40'00"E)
Date and time	: 6 May 1996 (19:30)
Weather condition	: night time
Water depth	: 54 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST44



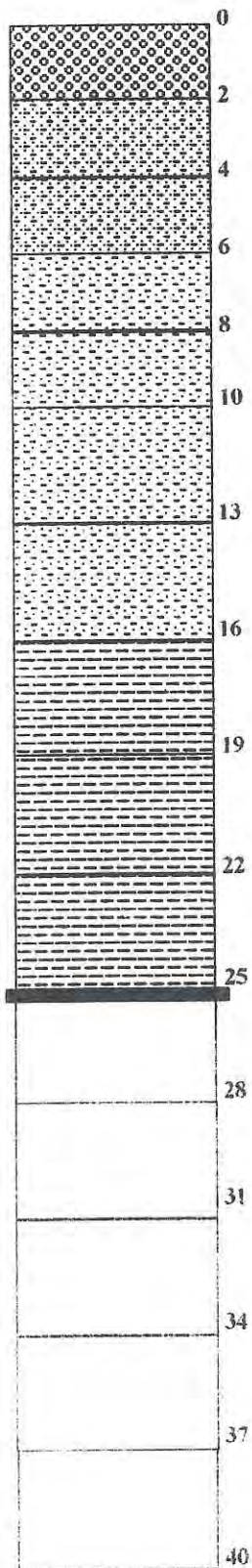
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 45 (7°20'10"N 103°15'50"E)
Date and time	: 7 May 1996 (7:00)
Weather condition	: cloudy
Water depth	: 56 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST45



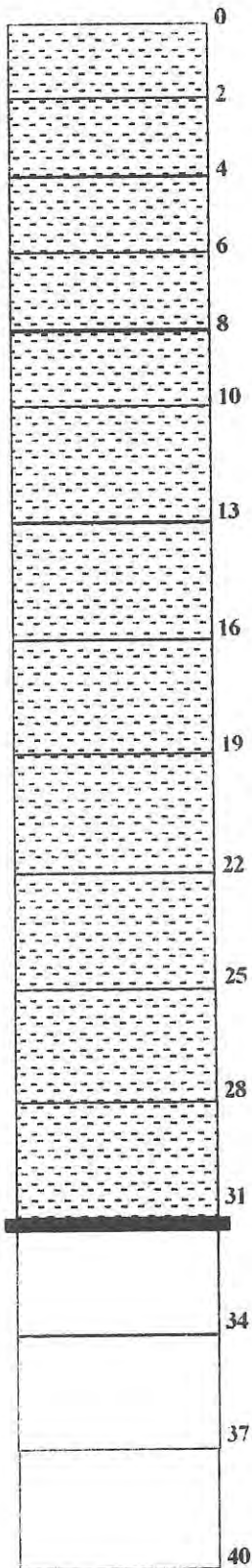
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 46 (7°18'50"N 103°46'20"E)
Date and time	: 7 May 1996 (10:30)
Weather condition	: fine
Water depth	: 53 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST46



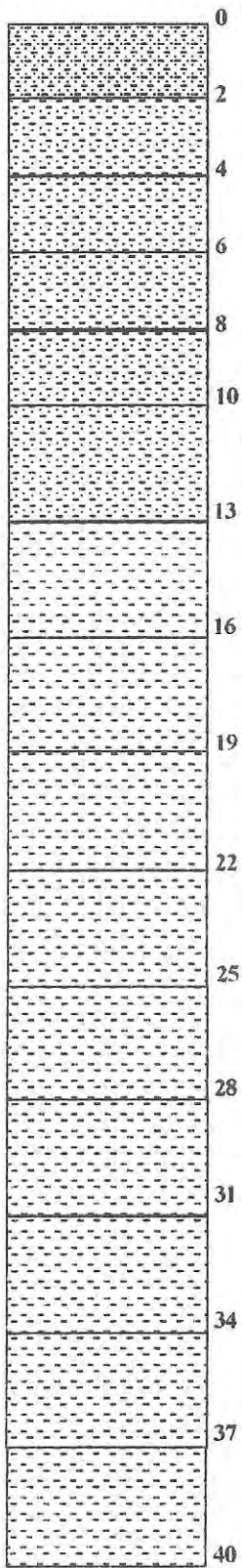
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 47 (6°50'20"N 104°16'28"E)
Date and time	: 7 May 1996 (16:30)
Weather condition	: fine
Water depth	: 60 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST47



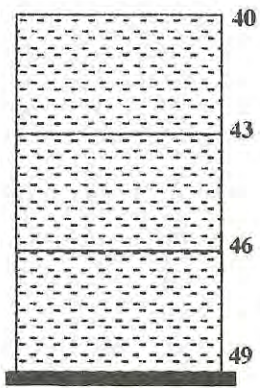
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 48 (6°48'43"N 103°44'37"E)
Date and time	: 7 May 1996 (20:30)
Weather condition	: night time
Water depth	: 56 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST48

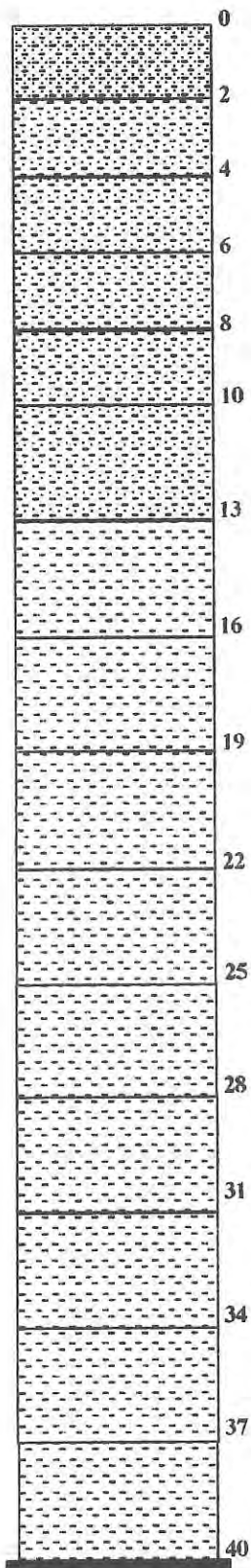


Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 49 (6°48'20"N 103°15'50"E)
Date and time	: 8 May 1996 (6:30)
Weather condition	: fine
Water depth	: 55 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST49



Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 50 (6°48'30"N 102°45'45"E)
Date and time	: 8 May 1996 (11:00)
Weather condition	: fine
Water depth	: 51 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST50





Survey area : Gulf of Thailand and East coast of Peninsular Malaysia

Location : Station 51 (6°50'36"N 102°15'30"E)

Date and time : 8 May 1996 (15:45)

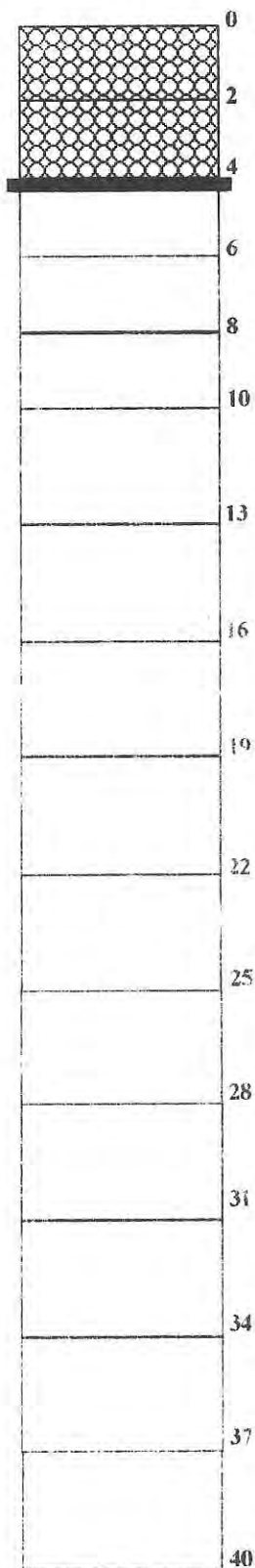
Weather condition : fine

Water depth : 51 m

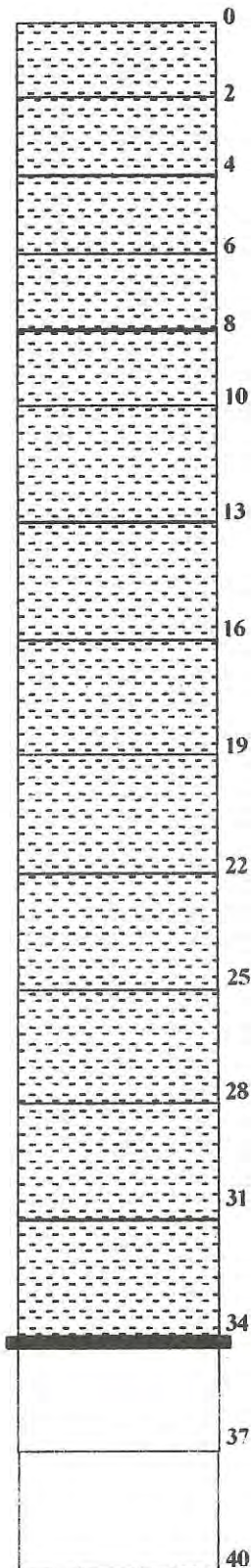
Sampling vessel : M.V. SEAFDEC

Sampling personnel : Charumas Chareonpanich

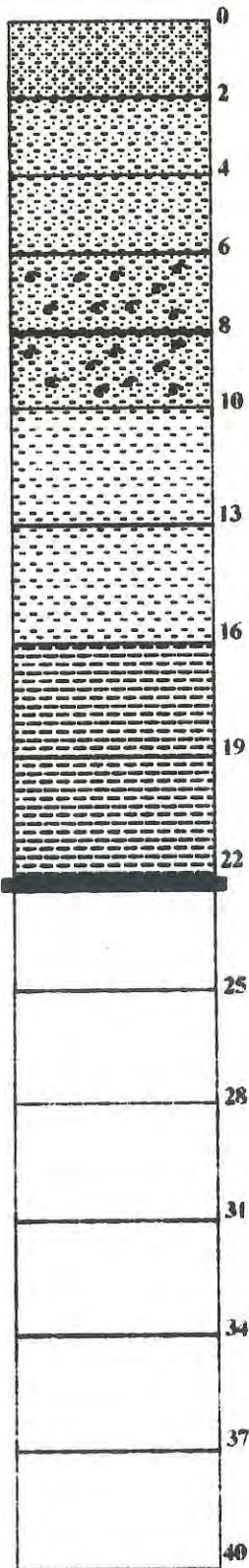
Field sample ID : C2ST51



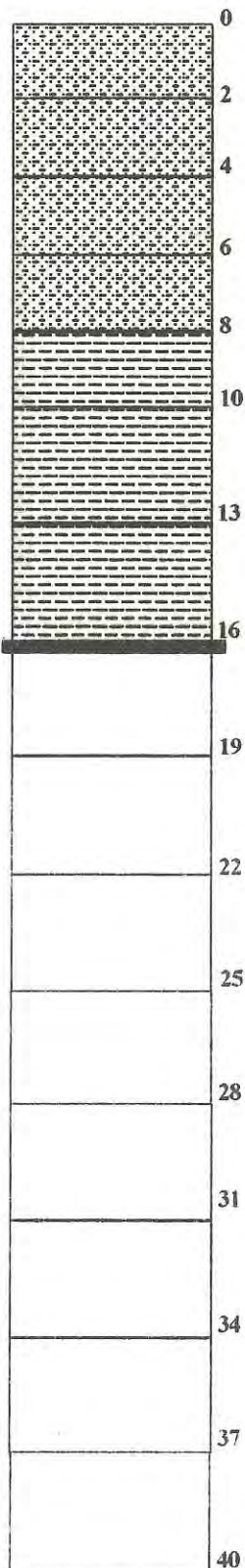
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 52 (6°20'24"N 102°45'58"E)
Date and time	: 8 May 1996 (21:30)
Weather condition	: night time
Water depth	: 53 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST52



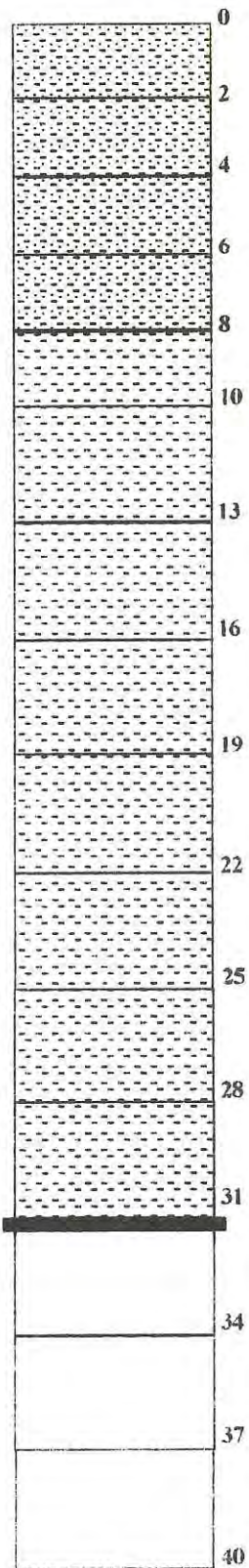
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 53 (6°18'40"N 103°16'30"E)
Date and time	: 9 May 1996 (6:30)
Weather condition	: fine, windy
Water depth	: 54 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST53



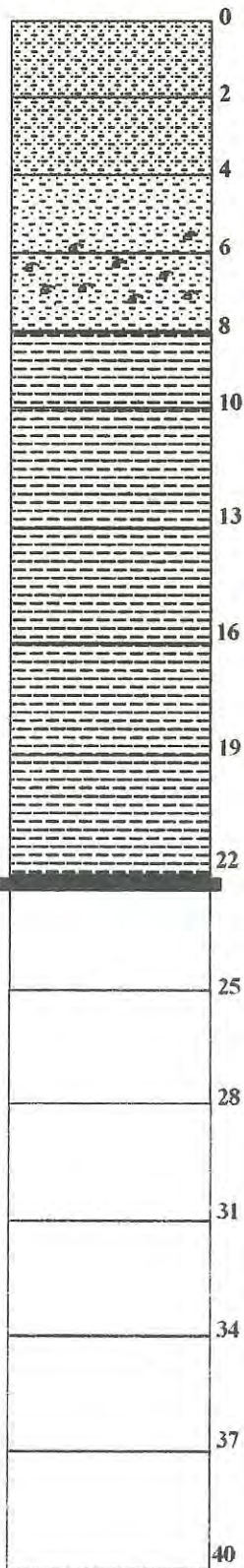
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 54 (6°20'30"N 103°46'17"E)
Date and time	: 9 May 1996 (10:30)
Weather condition	: fine
Water depth	: 63 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST54



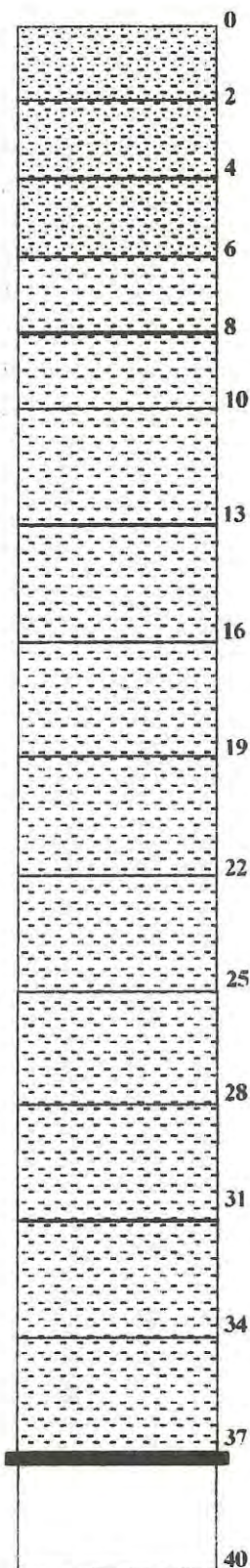
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 55 (6°20'12"N 104°16'30"E)
Date and time	: 9 May 1996 (15:30)
Weather condition	: fine
Water depth	: 63 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST55



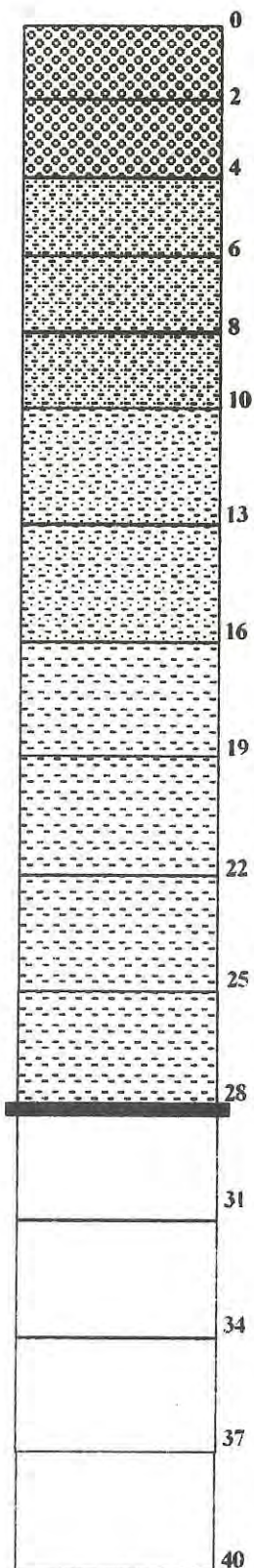
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 56 (6°20'21"N 104°46'13"E)
Date and time	: 9 May 1996 (19:30)
Weather condition	: night time
Water depth	: 59 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST56



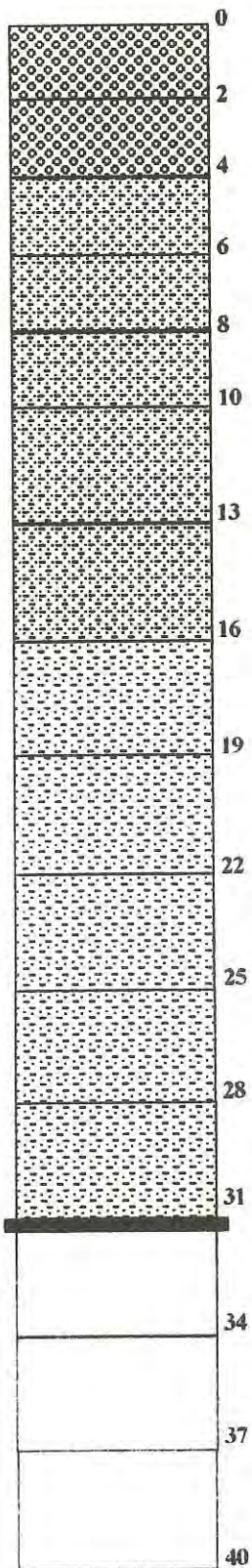
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 57 (6°20'27"N 105°16'55"E)
Date and time : 10 May 1996 (6:00)
Weather condition : fine
Water depth : 60 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST57



Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 58 (6°49'18"N 104°45'46"E)
Date and time	: 10 May 1996 (11:30)
Weather condition	: fine
Water depth	: 63 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST58



Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 59 (5°50'70"N 104°16'70"E)
Date and time	: 10 May 1996 (16:00)
Weather condition	: fine
Water depth	: 63 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST59



Survey area : Gulf of Thailand and East coast of Peninsular Malaysia

Location : Station 60 (5°49'43"N 103°46'70"E)

Date and time : 10 May 1996 (20:30)

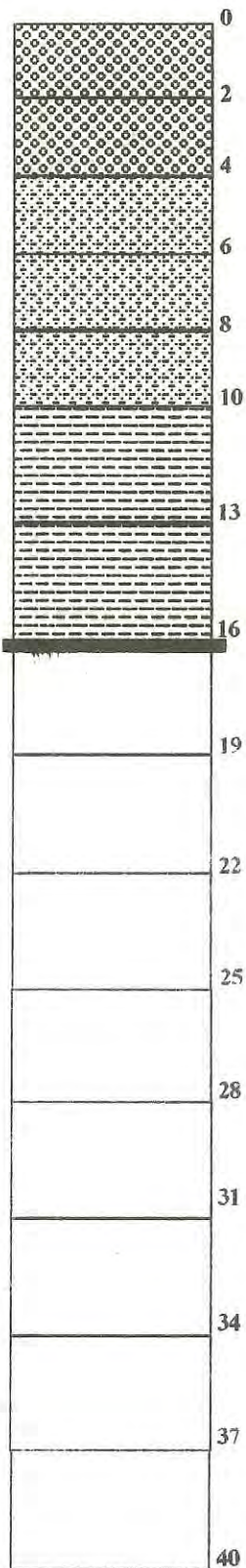
Weather condition : night time

Water depth : 59 m

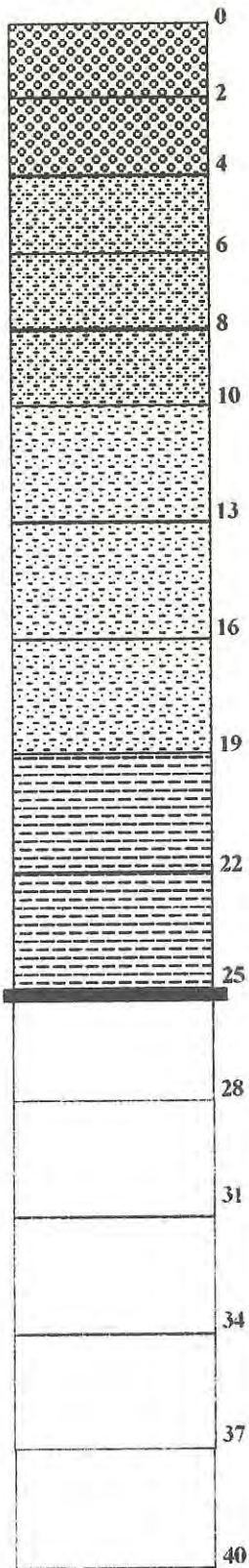
Sampling vessel : M.V. SEAFDEC

Sampling personnel : Charumas Chareonpanich

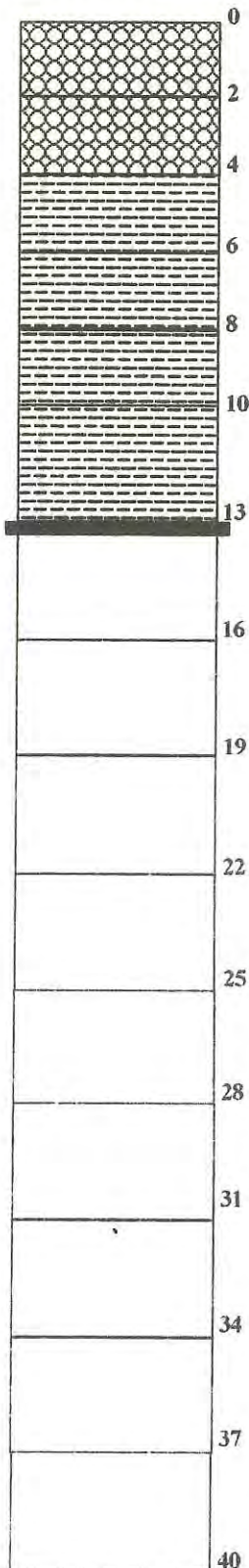
Field sample ID : C2ST60



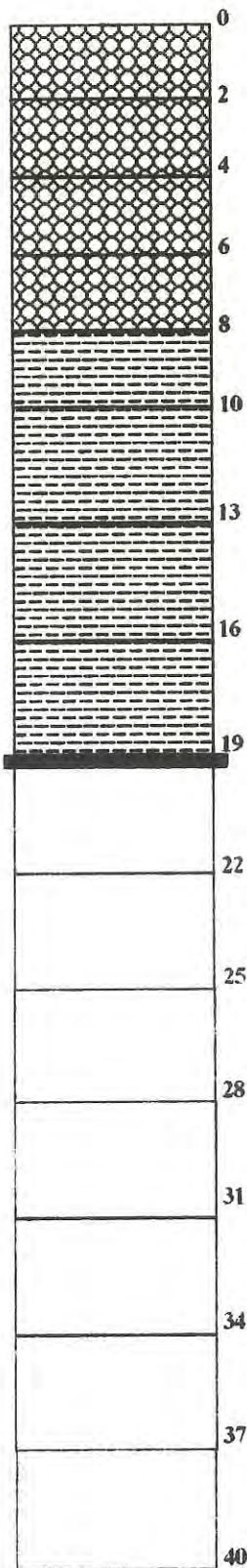
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 61 (5°50'54"N 103°16'48"E)
Date and time	: 12 May 1996 (7:00)
Weather condition	: cloudy
Water depth	: 39 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST61



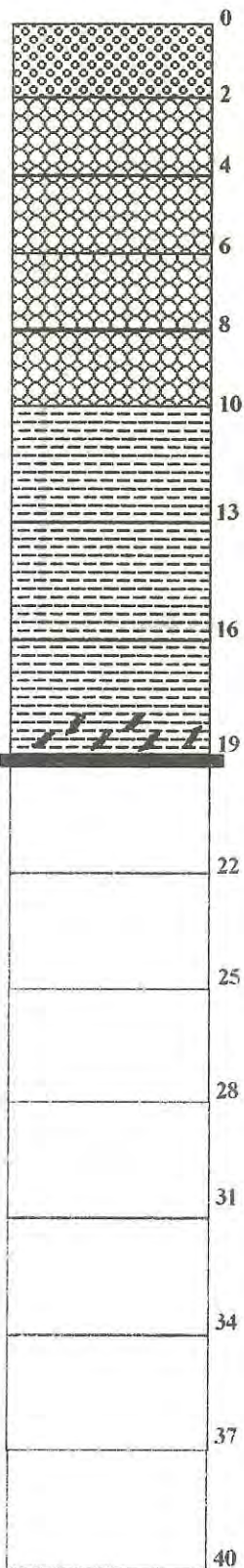
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 62 (5°19'22"N 103°46'11"E)
Date and time	: 12 May 1996 (12:30)
Weather condition	: fine
Water depth	: 60 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST62



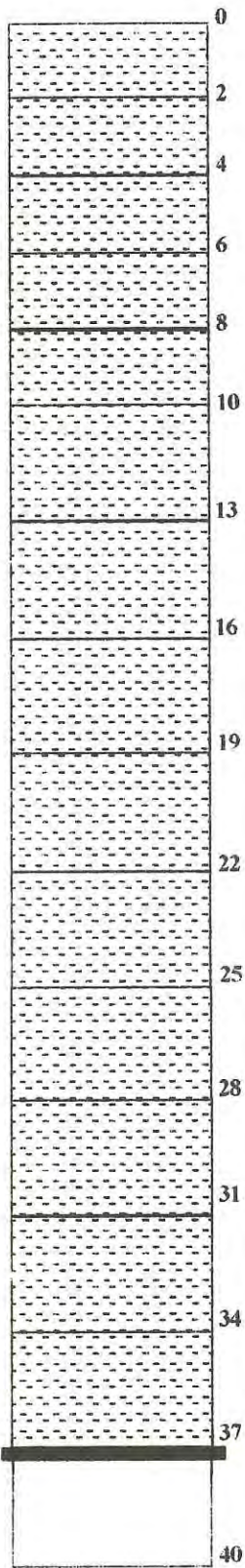
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 63 (5°19'30"N 104°16'40"E)
Date and time : 12 May 1996 (17:00)
Weather condition : fine
Water depth : 66 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST63



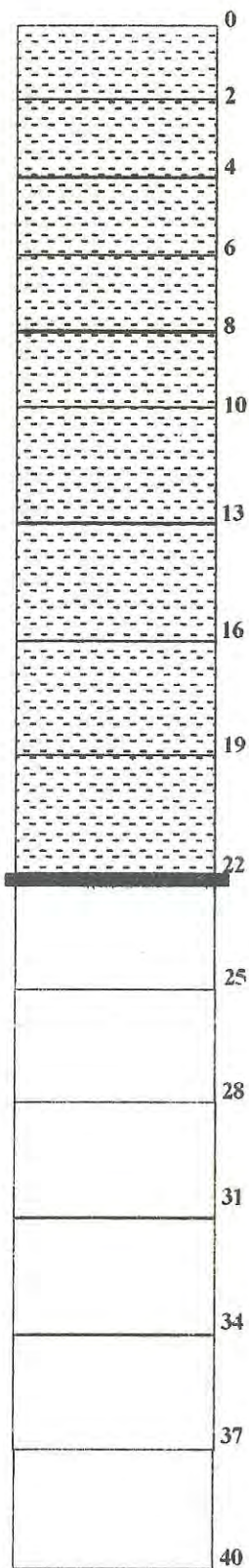
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 64 (4°50'12"N 103°45'48"E)
Date and time : 12 May 1996 (22:30)
Weather condition : night time
Water depth : 61 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST64



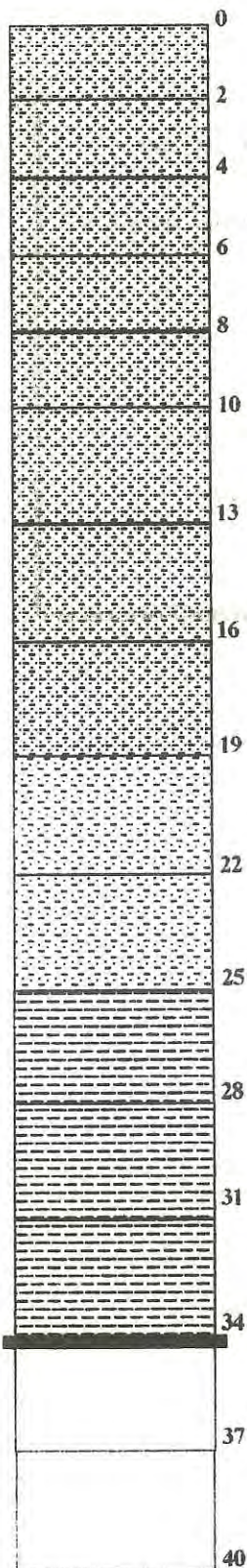
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 65 (4°49'56"N 104°16'13"E)
Date and time	: 13 May 1996 (10:30)
Weather condition	: fine
Water depth	: 65 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST65



Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 66 (4°49'10"N 104°46'27"E)
Date and time	: 13 May 1996 (14:00)
Weather condition	: cloudy, windy
Water depth	: 73 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST66



Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 67 (4°49'24"N 105°16'55"E)
Date and time	: 13 May 1996 (18:30)
Weather condition	: cloudy, windy
Water depth	: 77 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST67



Survey area : Gulf of Thailand and East coast of Peninsular Malaysia

Location : Station 68 (4°18'30"N 104°47'42"E)

Date and time : 14 May 1996 (6:30)

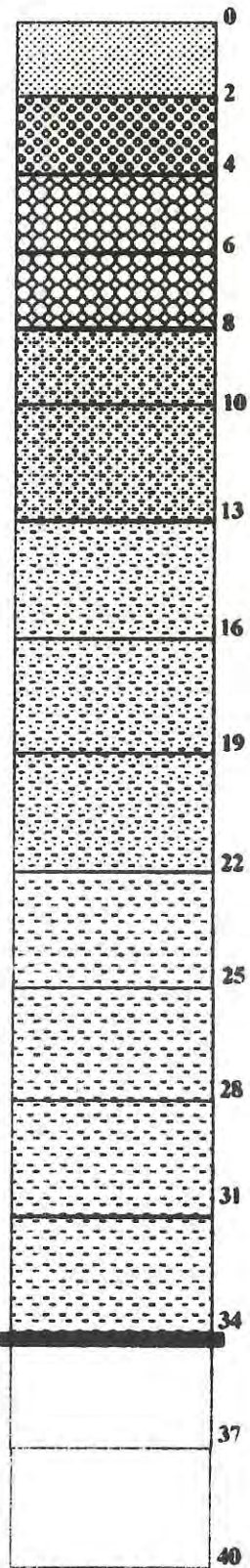
Weather condition : cloudy, windy

Water depth : 73 m

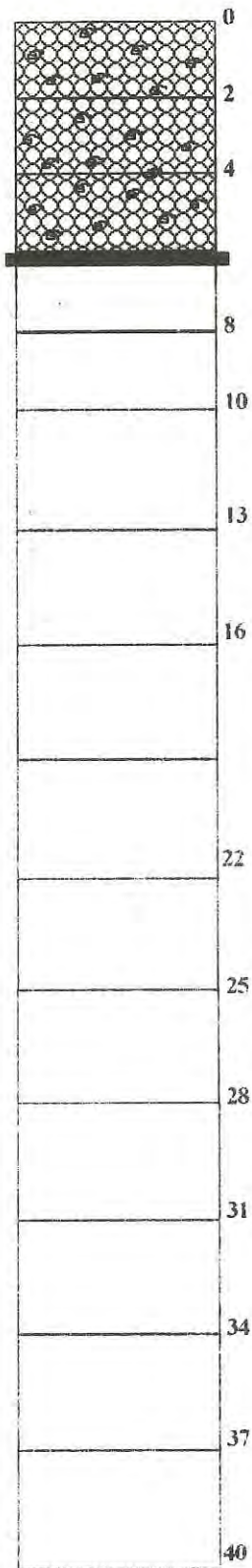
Sampling vessel : M.V. SEAFDEC

Sampling personnel : Charumas Chareonpanich

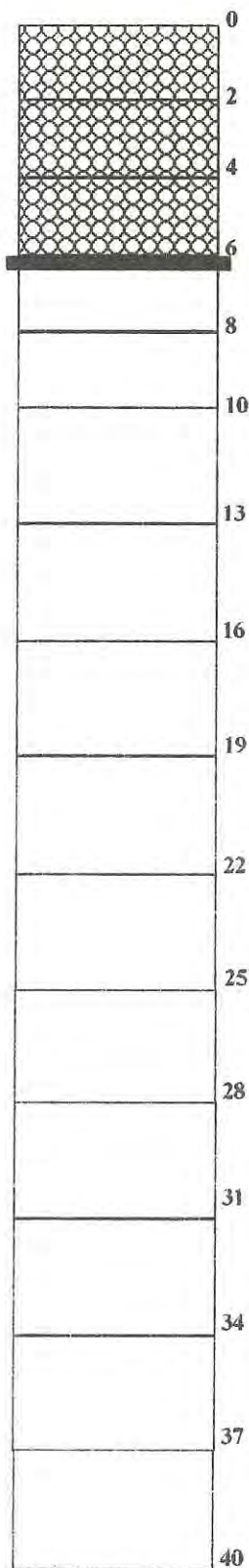
Field sample ID : C2ST68



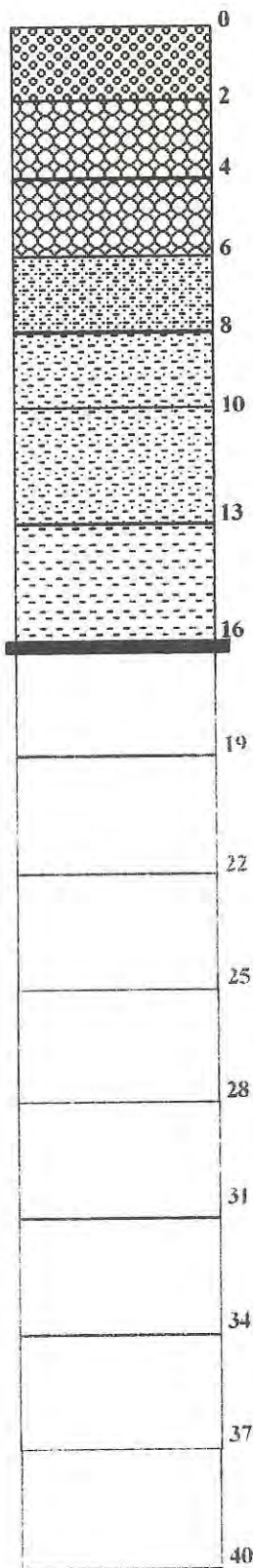
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 69 (4°19'10"N 104°15'20"E)
Date and time	: 14 May 1996 (11:00)
Weather condition	: cloudy, windy
Water depth	: 76 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST69



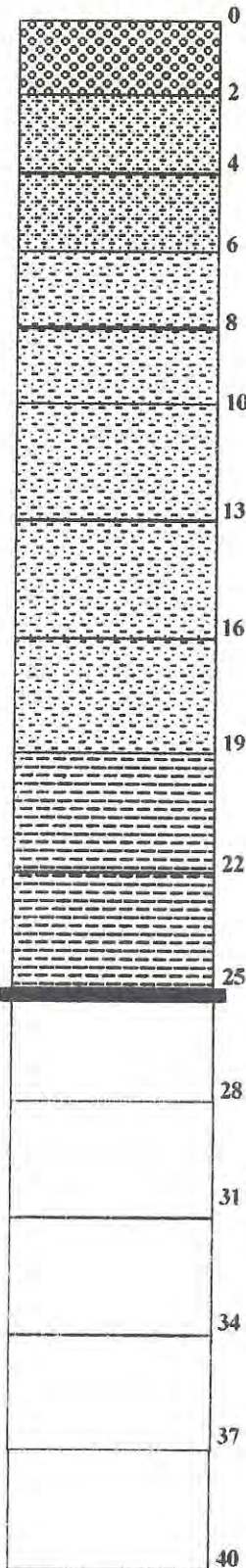
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 70 (4°19'2"N 104°44'28"E)
Date and time	: 14 May 1996 (15:30)
Weather condition	: fine
Water depth	: 39 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST70



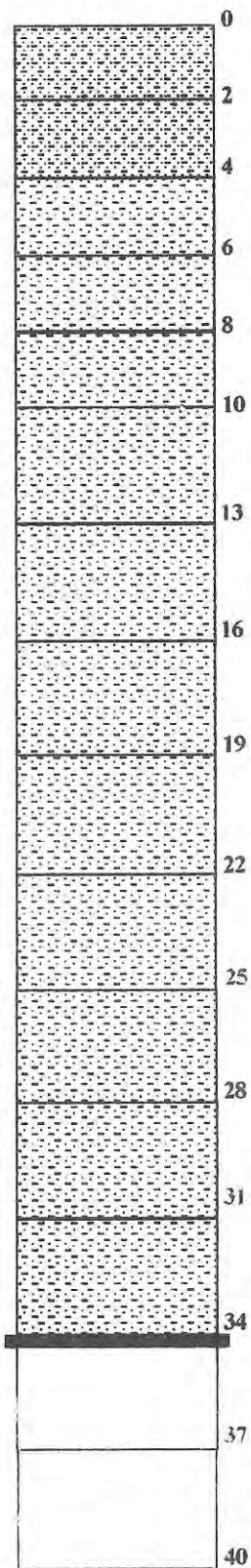
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 71 (3°49'12"N 103°44'50"E)
Date and time	: 14 May 1996 (19:30)
Weather condition	: night time
Water depth	: 34 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST71



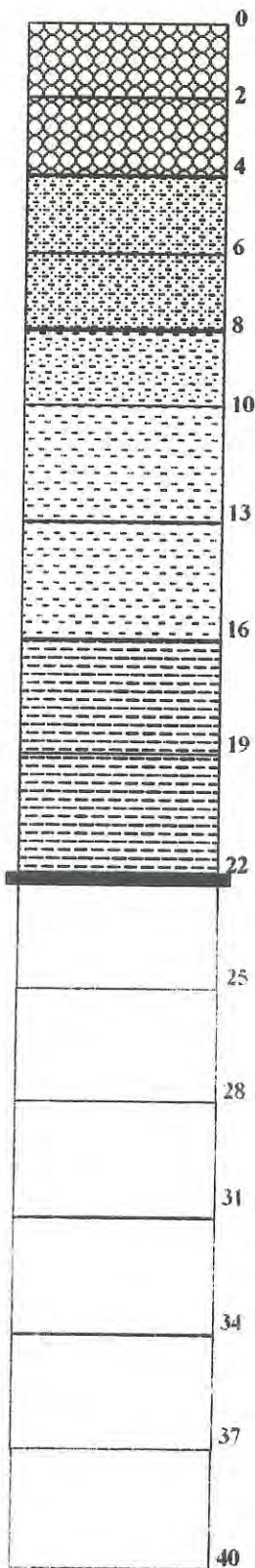
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 72 (3°50'52"N 104°14'37"E)
Date and time	: 15 May 1996 (6:30)
Weather condition	: early morning
Water depth	: 56 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST72



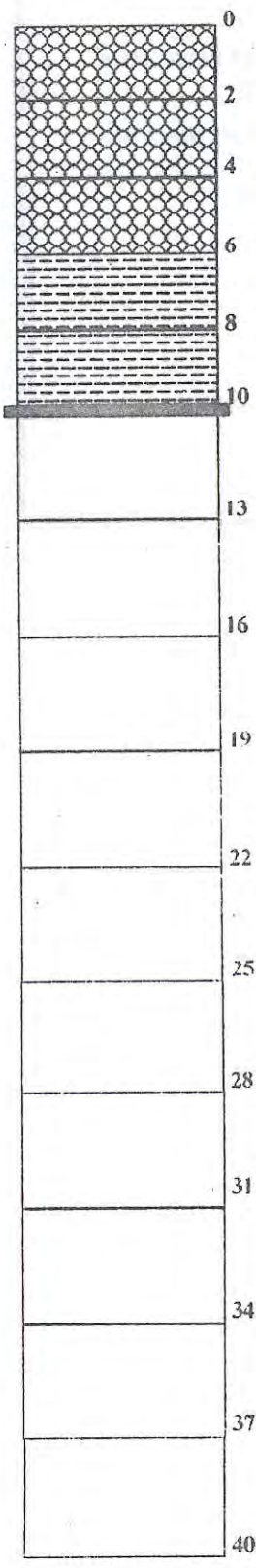
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 73 (3°49'37"N 104°46'30"E)
Date and time : 15 May 1996 (10:30)
Weather condition : fine, brightly
Water depth : 73 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST73



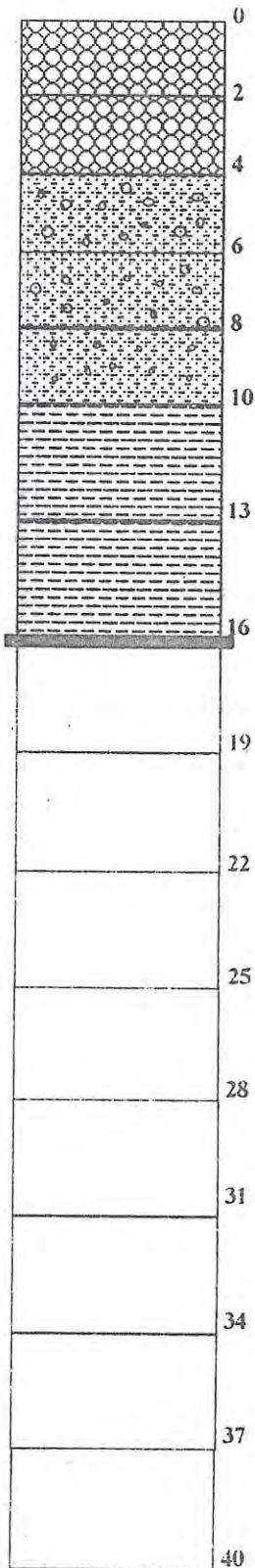
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 74 (3°19'00"N 104°45'40"E)
Date and time	: 15 May 1996 (15:00)
Weather condition	: fine, brightly
Water depth	: 69 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST74



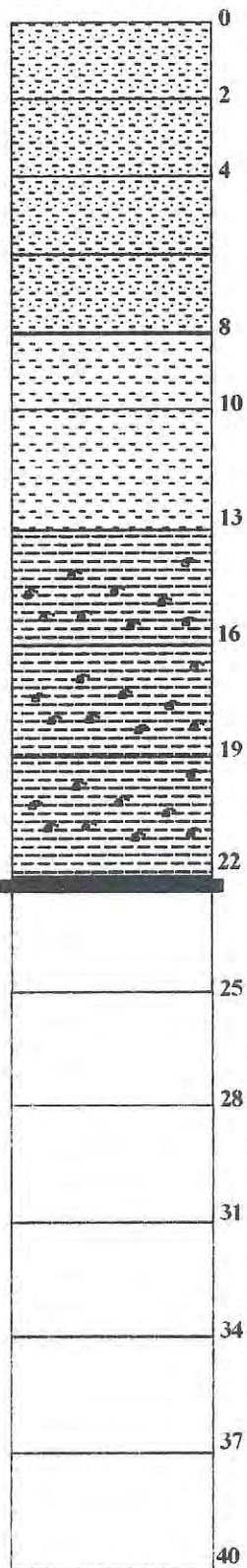
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 75 (3°19'42"N 104°15'50"E)
Date and time : 15 May 1996 (18:30)
Weather condition : cloudy
Water depth : 53 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST75



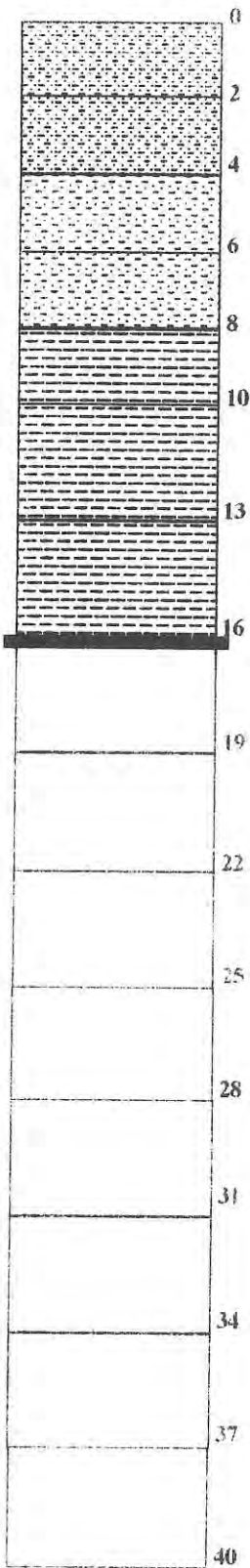
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 76 (3°20'44"N 104°42'46"E)
Date and time	: 16 May 1996 (5:30)
Weather condition	: early morning
Water depth	: 28 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST76



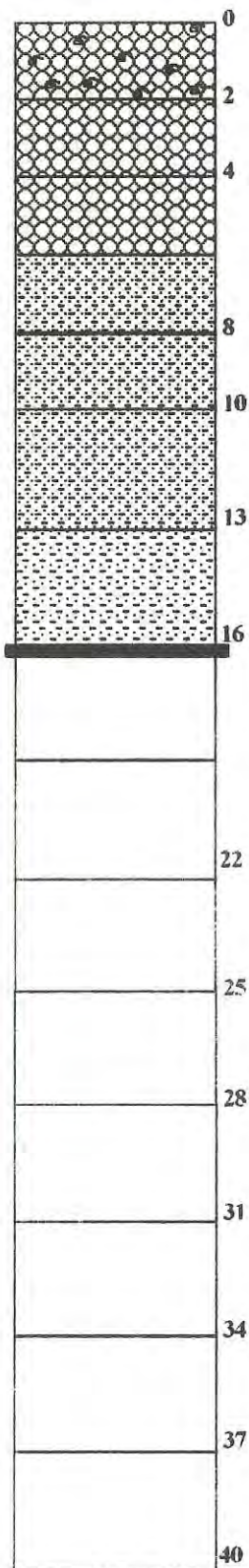
Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 77 (2°49'58"N 104°16'00"E)
Date and time	: 16 May 1996 (11:30)
Weather condition	: fine, brightly
Water depth	: 50 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST77



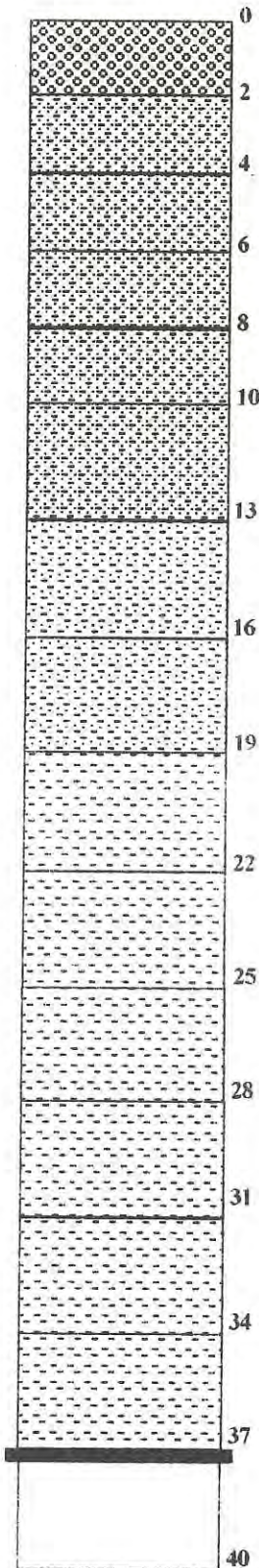
Survey area : Gulf of Thailand and East coast of Peninsular Malaysia
Location : Station 78 (2°49'12"N 104°46'50"E)
Date and time : 16 May 1996 (16:30)
Weather condition : fine
Water depth : 67 m
Sampling vessel : M.V. SEAFDEC
Sampling personnel : Charumas Chareonpanich
Field sample ID : C2ST78



Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 79 (2°19'70"N 104°45'49"E)
Date and time	: 16 May 1996 (21:00)
Weather condition	: night time
Water depth	: 64 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST79



Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 80 (2°22'32"N 104°12'18"E)
Date and time	: 17 May 1996 (5:30)
Weather condition	: windy, dark
Water depth	: 32 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST80



Survey area	: Gulf of Thailand and East coast of Peninsular Malaysia
Location	: Station 81 (1°50'00"N 104°46'50"E)
Date and time	: 17 May 1996 (12:00)
Weather condition	: fine, brightly
Water depth	: 55 m
Sampling vessel	: M.V. SEAFDEC
Sampling personnel	: Charumas Chareonpanich
Field sample ID	: C2ST81

Acknowledgments

The authors would like to thank and express our sincere gratitude to Dr. Yuttana Theaparoonrat (SEAFDEC; Training Department, Thailand) and Dr. Anond Snidvongs (Marine Science Department, Chulalongkorn University, Thailand) for their kind cooperation and invaluable advises throughout the research survey. Special thanks are also owed to Mr. Ku Kassim (Universiti Pertanian Malaysia, Malaysia), Mr. Kitsada Nornua (Kasetsart University, Thailand) and several personnel on board of the M.V. SEAFDEC as members responsible of the sediment sampling operation whose cooperation and technical assistance have been especially helpful.

