# US JGOFS EQUATORIAL PACIFIC PROCESS STUDY 

## BENTHIC LEG

R/V THOMAS G. THOMPSON TT013

OCTOBER 30, 1992 - DECEMBER 13, 1992 PAPEETE, TAHITI TO HONOLULU, HI

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This document is the draft cruise report of the benthic leg of the US JGOFS Equatorial Pacific Process Study aboard R/V Thomas G. Thompson. The document was supplied to cruise participants when they left the cruise and has not been verified. A formal cruise report will be completed post-cruise.

The document contains the following sections:

| I. | $\begin{array}{l}\text { Sequential listing of all stations } \\ \text { II. }\end{array}$ |
| :--- | :--- |
|  | $\begin{array}{l}\quad \text { Stations occupied }\end{array}$ |
| Area map |  |$\}$

## A note on Station Numbers

Stations were numbered sequentially from the beginning of the cruise. Each deployment of a piece of sampling gear was assigned a station number whether the deployment was successful or not. Separate recoveries, such as lander recoveries were not assigned station numbers..

Stations will be referred to in subsequent literature with the cruise number, the station number, and an identifier that indicates the type of station. The identifiers are as follows:

## MC multicore

GC gravity core
BC box core
PC piston core
TW trigger weight core for piston core
C camera tow
H hydrocast
L lander
PT plankton tow
Thus, station TT013-43C is a camera tow that was the 43 rd station on the cruise.
In some cases, samplers provided multiple samples. For example, the multicorer can recover up to 8 cores. In the following cruise report the individual
samples from such deployments are noted and their distribution among investigators is recorded, but the individual samples have not been assigned a unique identifier to go with the station number.

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## TT013 - US JGOFS BENTHIC LEG STATIONS

| STATION | AREA | ACTIVITY | DATE <br> (GMT) | TIME (GMT) | $\begin{aligned} & \text { TIME } \\ & \text { (LOCAL) } \end{aligned}$ | LATITUDE (- = SOUTH) | LONGITUD <br> WEST | DEPTH <br> (uncorr. m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 12 S | Lander | 11/02/92 | 04:00 | 17:00 | -11.9502 | 134.9503 | 4200 |
| 2 | 12 S | Hydrocast | 11/03/92 | 09:28 | 23:28 | -11.5965 | 134.9498 | 4284 |
| 3 | 12 S | Piston Core | 11/03/92 | 14:30 | 04:30 | -11.9970 | 134.9552 | 4272 |
| 4 | 12 S | Multicore | 11/03/92 | 23:00 | 13:00 | -11.9973 | 134.9522 | 4280 |
| 5 | 12 S | Plankton Tow | 11/03/92 | 23:15 | 13:15 | -11.9967 | 134.9505 | 0 |
| 6 | 12 S | Spade Core | 11/04/92 | 04:02 | 16:02 | -11.9985 | 134.9543 | 4280 |
| 7 | 12 S | Hydrocast | 11/04/92 | 06:44 | 20:44 | -11.9598 | 134.9518 | 0 |
| 8 | 12 S | Plankton Tow | 11/04/92 | 07:35 | 21:35 | -11.9558 | 134.9544 | 0 |
| 9 | 12 S | Camera Tow | 11/04/92 | 10:45 | 00:45 | -11.9888 | 134.9393 | 4381 |
| 10 | 12 S | Multicore | 11/04/92 | 19:35 | 09:35 | -12.0032 | 134.9483 | 4280 |
| 11 | 12 S | Plankton Tow | 11/04/92 | 23:45 | 13:45 | -11.9500 | 134.9500 | 0 |
| 12 | 5 S | Lander | 11/06/92 | 22:09 | 12:09 | -4.9322 | 139.7323 | 4223 |
| 13 | 5 S | Lander | 11/06/92 | 00:04 | 14:04 | -4.9317 | 139.7429 | 4212 |
| 14 | 2 S | Lander | 11/07/92 | 20:00 | 10:00 | -1.8297 | 139.7195 | 4354 |
| 15 | 2 S | Lander | 11/07/92 | 21:27 | 11:27 | -1.8385 | 139.7217 | 4351 |
| 16 | 2 S | Hydrocast | 11/07/92 | 22:39 | 12:30 | -1.8308 | 139.6968 | 4357 |
| 17 | 2 S | Plankton Tow | 11/07/92 | 23:06 | 13:06 | -1.8289 | 139.6987 | 0 |
| 18 | 2 S | Piston Core | 11/08/92 | 02:51 | 16:51 | -1.8395 | 139.7137 | 4354 |
| 19 | 2 S | Multicore | 11/08/92 | 09:22 | 23:22 | -1.8680 | 139.7157 | 4376 |
| 20 | 2 S | Spade Core | 11/08/92 | 14:00 | 04:00 | -1.8665 | 139.7178 | 4372 |
| 21 | 2 S | Hydrocast | 11/08/92 | 16:00 | 06:00 | -1.8122 | 139.7218 | 0 |
| 22 | 2 S | Plankton Tow | 11/08/92 | 17:00 | 07:00 | -1.8057 | 139.7170 | 0 |

TT013 - US JGOFS BENTHIC LEG STATIONS


| 23 | 2 S | Multicore | $11 / 08 / 92$ | $19: 52$ | $09: 52$ | -1.8670 | 139.8008 | 4380 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 24 | 2 S | Camera Tow | $11 / 09 / 92$ | $03: 18$ | $13: 18$ | -1.8667 | 139.7437 | 4379 |
| 25 | 2 S | Plankton Tow | $11 / 08 / 92$ | $07: 25$ | $21: 25$ | -1.8672 | 139.6496 | 0 |
| 26 | 3 S | Piston Core | $11 / 08 / 92$ | $16: 25$ | $06: 25$ | -2.8883 | 139.8367 | 4502 |
| 27 | 3 S | Multicore | $11 / 09 / 92$ | $23: 35$ | $13: 35$ | -2.8853 | 139.8317 | 4513 |
| 28 | 3 S | Plankton Tow | $11 / 09 / 92$ | $22: 30$ | $12: 30$ | -2.8837 | 139.8318 | 0 |
| 29 | 4 S | Piston Core | $11 / 10 / 92$ | $10: 15$ | $00: 15$ | -4.2023 | 139.7920 | 4486 |
| 30 | 4 S | Plankton Tow | $11 / 10 / 92$ | $11: 07$ | $01: 07$ | -4.1993 | 139.7905 | 0 |
| 31 | 5 S | Hydrocast | $11 / 10 / 92$ | $19: 25$ | $09: 25$ | -4.9662 | 139.7425 | 4239 |
| 32 | 5 S | Piston Core | $11 / 10 / 92$ | $23: 38$ | $13: 38$ | -4.9605 | 139.7436 | 4236 |
| 33 | 5 S | Plankton Tow | $11 / 11 / 92$ | $00: 55$ | $14: 55$ | -4.9507 | 139.7398 | 0 |
| 34 | 5 S | Multicore | $11 / 11 / 92$ | $06: 27$ | $20: 27$ | -4.9738 | 139.7373 | 4256 |
| 35 | 5 S | Spade Core | $11 / 11 / 92$ | $11: 00$ | $01: 00$ | -4.9725 | 139.7367 | 4239 |
| 36 | 5 S | Hydrocast | $11 / 11 / 92$ | $13: 37$ | $03: 37$ | -4.9563 | 139.7735 | 4271 |
| 37 | 5 S | Plankton Tow | $11 / 11 / 92$ | $17: 40$ | $07: 40$ | -4.9373 | 139.7562 | 200 |
| 38 | 5 S | Hydrocast | $11 / 11 / 92$ | $18: 21$ | $08: 21$ | -4.9340 | 139.7590 | 0 |
| 39 | 5 S | Multicore | $11 / 11 / 92$ | $19: 17$ | $09: 17$ | -4.9762 | 139.7372 | 4294 |
| 40 | 5 S | Camera Tow | $11 / 12 / 92$ | $01: 45$ | $15: 45$ | -4.9783 | 139.7317 | 4256 |
| 41 | 5 S | Multicore | $11 / 12 / 92$ | $11: 07$ | $01: 07$ | -4.9733 | 139.7433 | 4264 |
| 42 | 5 S | Plankton Tow | $11 / 12 / 92$ | $13: 01$ | $03: 01$ | -4.9667 | 139.7385 | 0 |
| 43 | 5 S | Camera Tow | $11 / 12 / 92$ | $03: 52$ | $17: 52$ | -49750 | 139.7150 | 4197 |
| 44 | 2 S | Multicore | $11 / 14 / 92$ | $02: 24$ | $16: 24$ | -1 | 139.7151 | 4338 |

TT013 - US JGOFS BENTHIC LEG STATIONS
$\left.\begin{array}{lllllllll}\text { STATION } & \text { AREA } & \text { ACTIVITY } & \begin{array}{c}\text { DATE } \\ \text { (GMT) }\end{array} & \begin{array}{c}\text { TIME } \\ (\text { (GMT) }\end{array} & \begin{array}{c}\text { TIME } \\ \text { (LOCAL) }\end{array} & \begin{array}{c}\text { LATITUDE } \\ (-=\text { SOUTH) }\end{array} & \begin{array}{c}\text { LONGITUDE } \\ \text { WEST }\end{array} & \text { DEPTH } \\ \text { (uncorr. m) }\end{array}\right)$

## TT013 - US JGOFS BENTHIC LEG STATIONS

$\left.\begin{array}{lclllllll}\text { STATION } & \text { AREA } & \text { ACTIVITY } & \begin{array}{c}\text { DATE } \\ \text { (GMT) }\end{array} & \begin{array}{c}\text { TIME } \\ (\text { (GMT) }\end{array} & \begin{array}{c}\text { TIME } \\ (\text { LOCAL })\end{array} & \begin{array}{c}\text { LATITUDE } \\ (-=\text { SOUTH) }\end{array} & \begin{array}{c}\text { LONGITUDE } \\ \text { WEST }\end{array} \\ \text { (uncorr. m) }\end{array}\right)$

TT013 - US JGOFS BENTHIC LEG STATIONS

| STATION | AREA | ACTIVITY | DATE (GMT) | TIME <br> (GMT) | $\begin{aligned} & \text { TIME } \\ & \text { (LOCAL) } \end{aligned}$ | LATITUDE (- = SOUTH) | LONGITUDE WEST | $\begin{aligned} & \text { E DEPTH } \\ & \text { (uncorr. } \mathrm{m} \text { ) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 | 1 N | Piston Core | 11/23/92 | 19:13 | 09:13 | 0.8140 | 139.9192 | 4412 |
| 90 | 1 N | Plankton Tow | 11/23/92 | 19:13 | 09:13 | 0.8140 | 139.9192 | 0 |
| 91 | 2 N | Spade Core | 11/24/92 | 09:46 | 23:46 | 2.0633 | 140.1317 | 4408 |
| 92 | 2 N | Hydrocast | 11/24/92 | 12:34 | 02:34 | 2.0565 | 140.1463 | 0 |
| 93 | 2 N | Multicore | 11/24/92 | 15:08 | 05:08 | 2.0550 | 140.1433 | 4411 |
| 94 | 2 N | Plankton Tow | 11/24/92 | 17:14 | 07:14 | 2.0453 | 140.1205 | 0 |
| 95 | 2 N | Spade Core | 11/24/92 | 20:16 | 10:16 | 2.0518 | 140.1445 | 4414 |
| 96 | 2 N | Piston Core | 11/24/92 | 23:21 | 13:21 | 2.0652 | 140.1493 | 4417 |
| 97 | 2 N | Multicore | 11/25/92 | 04:24 | 18:24 | 2.0500 | 140.1433 | 4413 |
| 98 | 2 N | Multicore | 11/25/92 | 12:20 | 02:20 | 2.0583 | 130.1433 | 4413 |
| 99 | 5 N | Lander | 11/26/92 | 19:10 | 09:10 | 5.0803 | 139.7341 | 4430 |
| 100 | 5 N | Lander | 11/26/92 | 01:04 | 11:04 | . 5.0735 | 139.7253 | 4430 |
| 101 | 5 N | Lander | 11/26/92 | 02:36 | 12:36 | 5.0825 | 139.7188 | 4426 |
| 102 | 5 N | Hydrocast | 11/27/92 | 07:00 | 19:00 | 5.1162 | 139.7330 | 4373 |
| 103 | 5 N | Spade Core | 11/27/92 | 12:41 | 02:41 | 5.0667 | 139.6483 | 4447 |
| 104 | 5 N | Multicore | 11/27/92 | 17:42 | 07:42 | 5.0783 | 139.6367 | 4416 |
| 105 | 5 N | Piston Core | 11/27/92 | 22:00 | 12:00 | 5.0780 | 139.6270 | 4410 |
| 106 | 5 N | Plankton Tow | 11/27/92 | 22:51 | 12:51 | 5.0750 | 139.6215 | - 0 |
| 107 | 5 N | Spade Core | 11/28/92 | 06:01 | 20:01 | 5.0833 | 139.6500 | 4446 |
| 108 | 5 N | Multicore | 11/28/92 | 10:48 | 00:48 | 5.0702 | 139.6363 | 4422 |
| 109 | 5 N | Plankton Tow | 11/28/92 | 13:54 | 03:54 | 5.0595 | 139.6168 | 0 |
| 110 | 5 N | Camera Tow | 11/28/92 | 1815:00 | 08.15 | 5.0700 | 139.6700 | 4452 |

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| STATION | AREA | ACTIVITY | DATE <br> (GMT) | TIME <br> (GMT) | TIME (LOCAL) | $\begin{aligned} & \text { LATITUDE } \\ & (-=\text { SOUTH }) \end{aligned}$ | LONGITUDE <br> WEST | E DEPTH <br> (uncorr. m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 111 | 5 N | Spade Core | 11/29/92 | 01:34 | 15:34 | 5.0737 | 139.6483 | 4424 |
| 112 | 5 N | Multicore | 11/29/92 | 05:34 | 19:34 | 5.0783 | 139.6383 | 4418 |
| 113 | 4 N | Multicore | 11/29/92 | 18:27 | 08:27 | 4.0413 | 139.8508 | 4431 |
| 114 | 4 N | Piston Core | 11/29/92 | 22:31 | 12:31 | 4.0433 | 139.8508 | 4432 |
| 115 | 4 N | Plankton Tow | 11/29/92 | 22:56 | 12:56 | 4.0422 | 139.8540 | 0 |
| 116 | 5 N | Spade Core | 11/30/892 | 10:42 | 00:42 | 5.0800 | 139.6417 | 4320 |
| 117 | 5 N | Multicore | 11/30/92 | 15:33 | 05:33 | 5.0717 | 139.6383 | 4333 |
| 118 | 5 N | Plankton Tow | 11/30/92 | 17:26 | 07:26 | 5.0658 | 139.6377 | 0 |
| 119 | 5 N | Hydrocast | 11/30/92 | 18:34 | 08:34 | 5.1070 | 139.6335 | 4295 |
| 120 | 5 N | Hydrocast | 11/30/92 | 22:30 | 12:30 | 5.0818 | 139.7410 | 0 |
| 121 | 5 N | Spade Core | 12/01/92 | 04:33 | 18:33 | 5.0700 | 139.6467 | 4372 |
| 122 | 5 N | Multicore | 12/01/92 | 08:53 | 22:53 | 5.0833 | 139.6400 | 4349 |
| 123 | 5 N | Plankton Tow | 12/01/92 | 11:33 | 01:33 | 5.0895 | 139.6457 | 0 |
| 124 | 5 N | Multicore | 12/01/92 | 21:38 | 11:38 | 5.0787 | 139.6362 | 4347 |
| 125 | 5 N | Multicore | 12/02/92 | 03:09 | 17:09 | 5.0817 | 139.6317 | 4340 |
| 126 | 5 N | Multicore | 12/02/92 | 08:52 | 22:52 | 5.0815 | 139.6315 | 4342 |
| 127 | 5 N | Multicore | 12/02/92 | 15:51 | 05:51 | 5.0800 | 139.6137 | 4342 |
| 128 | 9 N | Lander | 12/03/92 | 21:34 | 09:34 | 9.0217 | 139.8675 | 4970 |
| 129 | 9 N | Lander | 12/03/92 | 23:34 | 01:34 | 9.0233 | 139.8612 | 4982 |
| 130 | 9 N | Lander | 12/04/92 | 00:53 | 02:53 | 9.0252 | 139.8605 | 4990 |
| 131 | 9 N | Spade Core | 12/04/92 | 02:02 | 16:02 | 8.9300 | 139.8700 | 4986 |
| 132 | 9 N | Multicore | 12/04/92 | 08:41 | 22:41 | 8.9247 | 139.8598 | 4992 |

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| STATION | AREA | ACTIVITY | DATE <br> (GMT) | TIME (GMT) | $\begin{aligned} & \text { TIME } \\ & \text { (LOCAL) } \end{aligned}$ | LATITUDE (- = SOUTH) | LONGITUDE WEST | $\begin{aligned} & \text { E DEPTH } \\ & \text { (uncorr. } \mathrm{m} \text { ) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 133 | 9 N | Piston Core | 12/04/92 | 12:45 | 02:45 | 8.9512 | 139.8708 | 4990 |
| 134 | 9 N | Spade Core | 12/04/92 | 21:03 | 11:03 | 8.9340 | 139.8592 | 4981 |
| 135 | 9 N | Multicore | 12/05/92 | 02:14 | 16:14 | 8.9250 | 139.8650 | 4994 |
| 136 | 9 N | Camera Tow | 12/05/92 | 09:03 | 23:03 | 8.9100 | 139.8712 | 5012 |
| 137 | 9 N | Spade Core | 12/05/92 | 17:25 | 07:25 | 5.9217 | 139.8667 | 4989 |
| 138 | 9 N | Plankton Tow | 12/04/92 | 16:05 | 06:05 | 8.9233 | 139.8697 | 0 |
| 139 | 9 N | Multicore | 12/05/92 | 22:17 | 12:17 | 8.9212 | 139.8540 | 4995 |
| 140 | 9 N | Plankton Tow | 12/05/92 | 23:00 | 13:00 | 8.9227 | 139.8545 | 0 |
| 141 | 9 N | Hydrocast | 12/06/92 | 01:31 | 15:31 | 8.9412 | 139.8877 | 4950 |
| 142 | 9 N | Plankton Tow | 12/06/92 | 05:27 | 19:27 | 8.9650 | 139.8670 | 0 |
| 143 | 9 N | Multicore | 12/06/92 | 09:36 | 23:36 | 8.9250 | 139.8697 | 4993 |
| 144 | 9 N | Spade Core | 12/06/92 | 16:14 | 06:14 | 8.9300 | 139.8716 | 4991 |
| 145 | 9 N | Plankton Tow | 12/06/92 | 18:41 | 08:41 | 8.9478 | 139.8638 | 0 |
| 146 | 9 N | Hydrocast | 12/06/92 | 19:47 | 09:47 | 8.9433 | 139.8658 | 0 |
| 147 | 9 N | Multicore | 12/06/92 | 22:51 | 12:51 | 8.9273 | 139.8657 | 4992 |
| 148 | 9 N | Multicore | 12/07/92 | 08:38 | 20:38 | 8.9267 | 139.8717 | 4991 |
| 149 | 9 N | Multicore | 12/07/92 | 12:47 | 22:47 | 8.9283 | 139.8633 | 4993 |
| 150 | 9 N | Plankton Tow | 12/07/92 | 12:04 | 02:04 | 8.9277 | 139.8618 | - 0 |
| 151 | 9 N | Hydrocast | 12/07/92 | 16:16 | 06:16 | 8.9072 | 139.8738 | 5010 |
| 152 | 9 N | Spade Core | 12/07/92 | 22:11 | 12:11 | 8.9187 | 139.8617 | 5005 |
| 153 | 9 N | Multicore | 12/08/92 | 04:21 | 18:21 | 8.9258 | 139.8643 | 5000 |
| 154 | 9 N | Spade Core | 12/08/92 | 07:46 | 21:46 | 8.9242 | 139.9727 | 5002 |

$12^{\circ}$ S AREA STATIONS

| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Lander | $11 / 2 / 92$ | $04: 00: 00$ | $17: 00: 00$ | -11.9502 | 134.9503 |
| 2 | Hydrocast | $11 / 3 / 92$ | $09: 28: 00$ | $23: 28: 00$ | -11.5965 | 134.9498 |
| 3 | Piston Core | $11 / 3 / 92$ | $14: 30: 00$ | $04: 30: 00$ | -11.997 | 134.9552 |
| 4 | Multicore | $11 / 3 / 92$ | $23: 00: 00$ | $13: 00: 00$ | -11.9973 | 134.9522 |
| 5 | Plankton Tow | $11 / 3 / 92$ | $23: 15: 00$ | $13: 15: 00$ | -11.9967 | 134.9505 |
| 6 | Spade Core | $11 / 4 / 92$ | $04: 02: 00$ | $16: 02: 00$ | -11.9985 | 134.9543 |
| 7 | Hydrocast | $11 / 4 / 92$ | $06: 44: 00$ | $20: 44: 00$ | -11.9598 | 134.9518 |
| 8 | Plankton Tow | $11 / 4 / 92$ | $07: 35: 00$ | $21: 35: 00$ | -11.9558 | 134.9544 |
| 9 | Camera Tow | $11 / 4 / 92$ | $10: 45: 00$ | $00: 45: 00$ | -11.9888 | 134.9393 |
| 10 | Multicore | $11 / 4 / 92$ | $19: 35: 00$ | $09: 35: 00$ | -12.0032 | 134.9483 |
| 11 | Plankton Tow | $11 / 4 / 92$ | $23: 45: 00$ | $13: 45: 00$ | -11.95 | 134.95 |



| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 12 | Lander | $11 / 6 / 92$ | $22: 09: 50$ | $12: 09: 50$ | -4.9322 | 139.7323 |
| 13 | Lander | $11 / 6 / 92$ | $00: 04: 00$ | $14: 04: 00$ | -4.9317 | 139.7429 |
| 31 | Hydrocast | $11 / 10 / 92$ | $19: 25: 00$ | $09: 25: 00$ | -4.9662 | 139.7425 |
| 32 | Piston Core | $11 / 10 / 92$ | $23: 38: 00$ | $13: 38: 00$ | -4.9605 | 139.7436 |
| 33 | Plankton Tow | $11 / 11 / 92$ | $00: 55: 00$ | $14: 55: 00$ | -4.9507 | 139.7398 |
| 34 | Multicore | $11 / 11 / 92$ | $06: 27: 00$ | $20: 27: 00$ | -4.9738 | 139.7373 |
| 35 | Spade Core | $11 / 11 / 92$ | $11: 00: 00$ | $01: 00: 00$ | -4.9725 | 139.7367 |
| 36 | Hydrocast | $11 / 11 / 92$ | $13: 37: 00$ | $03: 37: 00$ | -4.9563 | 139.7735 |
| 37 | Plankton Tow | $11 / 11 / 92$ | $17: 40: 00$ | $07: 40: 00$ | -4.9373 | 139.7562 |
| 38 | Hydrocast | $11 / 11 / 92$ | $18: 21: 00$ | $08: 21: 00$ | -4.934 | 139.759 |
| 39 | Multicore | $11 / 11 / 92$ | $19: 17: 00$ | $09: 17: 00$ | -4.9762 | 139.7372 |
| 40 | Camera Tow | $11 / 12 / 92$ | $01: 45: 00$ | $15: 45: 00$ | -4.9783 | 139.7317 |
| 41 | Multicore | $11 / 12 / 92$ | $11: 07: 00$ | $01: 07: 00$ | -4.9733 | 139.7433 |
| 42 | Plankton Tow | $11 / 12 / 92$ | $13: 01: 00$ | $03: 01: 00$ | -4.9667 | 139.7385 |
| 43 | Camera Tow | $11 / 12 / 92$ | $03: 52: 00$ | $17: 52: 00$ | -4.975 | 139.715 |



| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 29 | Piston Core | $11 / 10 / 92$ | $10: 15: 00$ | $00: 15: 00$ | -4.2023 | 139.792 |
| 30 | Plankton Tow | $11 / 10 / 92$ | $11: 07: 00$ | $01: 07: 00$ | -4.1993 | 139.7905 |



| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 26 | Piston Core | $11 / 8 / 92$ | $16: 25: 00$ | $06: 25: 00$ | -2.8883 | 139.8367 |
| 27 | Multicore | $11 / 9 / 92$ | $23: 35: 00$ | $13: 35: 00$ | -2.8853 | 139.8317 |
|  | Plankton Tow | $11 / 9 / 92$ | $22: 30: 00$ | $12: 30: 00$ | -2.8837 | 139.8318 |


$2^{\circ} \mathrm{S}$ AREA STATIONS

| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 14 | Lander | $11 / 7 / 92$ | $20: 00: 00$ | $10: 00: 00$ | -1.8297 | 139.7195 |
| 15 | Lander | $11 / 7 / 92$ | $21: 27: 00$ | $11: 27: 00$ | -1.8385 | 139.7217 |
| 16 | Hydrocast | $11 / 7 / 92$ | $22: 39: 30$ | $12: 30: 30$ | -1.8308 | 139.6968 |
| 17 | Plankton Tow | $11 / 7 / 92$ | $23: 06: 00$ | $13: 06: 00$ | -1.8289 | 139.6987 |
| 18 | Piston Core | $11 / 8 / 92$ | $02: 51: 00$ | $16: 51: 00$ | -1.8395 | 139.7137 |
| 19 | Multicore | $11 / 8 / 92$ | $09: 22: 00$ | $23: 22: 00$ | -1.868 | 139.7157 |
| 20 | Spade Core | $11 / 8 / 92$ | $14: 00: 00$ | $04: 00: 00$ | -1.8665 | 139.7178 |
| 21 | Hydrocast | $11 / 8 / 92$ | $16: 00: 00$ | $06: 00: 00$ | -1.8122 | 139.7218 |
| 22 | Plankton Tow | $11 / 8 / 92$ | $17: 00: 00$ | $07: 00: 00$ | -1.8057 | 139.717 |
| 23 | Multicore | $11 / 8 / 92$ | $19: 52: 00$ | $09: 52: 00$ | -1.867 | 139.8008 |
| 24 | Camera Tow | $11 / 9 / 92$ | $03: 18: 00$ | $13: 18: 00$ | -1.8667 | 139.7437 |
| 25 | Plankton Tow | $11 / 8 / 92$ | $07: 25: 00$ | $21: 25: 00$ | -1.8672 | 139.6496 |
| 44 | Multicore | $11 / 14 / 92$ | $02: 24: 00$ | $16: 24: 00$ | -1.8667 | 139.7151 |

AET THO: 3 ISS STATION

$2^{\circ} 5$ AREA

| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 61 | Piston Core | $11 / 17 / 92$ | $21: 21: 00$ | $11: 21: 00$ | -0.864 | 139.8307 |
| 62 | Plankton Tow | $11 / 17 / 92$ | $22: 15: 00$ | $12: 15: 00$ | -0.8644 | 139.832 |
| 63 | Multicore | $11 / 18 / 92$ | $07: 15: 00$ | $21: 15: 00$ | -0.8655 | 139.8317 |
| 64 | Plankton Tow | $11 / 18 / 92$ | $07: 00: 00$ | $21: 00: 00$ | -0.8657 | 139.8318 |



| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 | Lander | 11/14/92 | 19:13:00 | 09:13:00 | 0.0666 | 139.7575 |
| 46 | Lander | 11/14/92 | 20:25:00 | 10:25:00 | 0.0757 | 139.7612 |
| 47 | Lander | 11/14/92 | 22:01:00 | 12:01:00 | 0.0762 | 139.7472 |
| 48 | Multicore | 11/13/92 | 13:47:00 | 03:47:00 | 0.12 | 139.735 |
| 49 | Hydrocast | 11/15/92 | 15:45:00 | 05:45:00 | 0.1018 | 139.7452 |
| 50 | Spade Core | 11/15/92 | 21:29:00 | 11:29:00 | 0.1 | 139.7317 |
| 51 | Plankton Tow | 11/15/92 | 19:53:00 | 09:53:00 | 0.0968 | 139.7333 |
| 52 | Piston Core | 11/16/92 | 00:41:00 | 14:41:00 | 0.0993 | 139.7373 |
| 53 | Camera Tow | 11/16/92 | 08:27:00 | 20:27:00 | 0.105 | 139.74 |
| 54 | Plankton Tow | 11/16/92 | 12:37:00 | 02:37:00 | 0.0732 | 139.662 |
| 55 | Spade Core | 11/16/92 | 14:20:00 | 04:20:00 | 0.1158 | 139.734 |
| 56 | Hydrocast | 11/16/92 | 18:44:00 | 08:44:00 | 0.127 | 139.7007 |
| 57 | Hydrocast | 11/16/92 | 20:57:00 | 10:57:00 | 0.1437 | 139.6912 |
| 58 | Multicore | 11/17/92 | 00:00:00 | 00:00:00 | 0.11 | 139.7233 |
| 59 | Spade Core | 11/16/92 | 06:41:00 | 20:41:00 | 0.1103 | 139.7327 |
| 60 | Plankton Tow | 11/17/92 | 06:02:00 | 20:02:00 | 0.1083 | 139.732 |
| 65 | Spade Core | 11/18/92 | 15:54:00 | 05:54:00 | 0.1067 | 139.735 |
| 66 | Multicore | 11/18/92 | 20:07:00 | 10:07:00 | 0.1027 | 139.733 |
| 67 | Plankton Tow | 11/18/92 | 22:07:00 | 12:07:00 | 0.1082 | 139.7309 |
| 68 | Camera Tow | 11/19/92 | 01:00:00 | 14:00:00 | 0.105 | 139.74 |
| 69 | Multicore | 11/19/92 | 09:36:00 | 23:36:00 | 0.1117 | 139.7233 |
| 70 | Spade Core | 11/19/92 | 16:26:00 | 06:26:00 | 0.1144 | 139.7228 |
| 71 | Multicore | 11/19/92 | 22:07:00 | 12:07:00 | 0.1144 | 139.75 |
| 72 | Piston Core | 11/20/92 | 03:56:00 | 17:56:00 | 0.1137 | 139.4015 |



| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 87 | Plankton Tow | $11 / 22 / 92$ | $13: 02: 00$ | $03: 02: 00$ | 0.816 | 139.919 |
| 88 | Multicore | $11 / 23 / 92$ | $15: 30: 00$ | $05: 30: 00$ | 0.815 | 139.9167 |
| 89 | Piston Core | $11 / 23 / 92$ | $19: 13: 00$ | $09: 13: 00$ | 0.814 | 139.9192 |
| 90 | Plankton Tow | $11 / 23 / 92$ | $19: 13: 00$ | $09: 13: 00$ | 0.814 | 139.9192 |



| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 73 | Lander | $11 / 20 / 92$ | $21: 55: 00$ | $11: 55: 00$ | 2.0297 | 140.1995 |
| 74 | Lander | $11 / 21 / 92$ | $00: 41: 00$ | $14: 04: 00$ | 2.0283 | 140.1832 |
| 75 | Lander | $11 / 21 / 92$ | $01: 49: 00$ | $15: 49: 00$ | 2.0365 | 140.194 |
| 76 | Spade Core | $11 / 21 / 92$ | $06: 49: 00$ | $20: 49: 00$ | 2.0657 | 140.149 |
| 77 | Multicore | $11 / 21 / 92$ | $11: 17: 00$ | $01: 17: 00$ | 2.0573 | 140.1425 |
| 78 | Plankton Tow | $11 / 21 / 92$ | $14: 00: 00$ | $04: 00: 00$ | 2.0417 | 140.1085 |
| 79 | Camera Tow | $11 / 21 / 92$ | $18: 05: 00$ | $08: 05: 00$ | 2.5 | 140.113 |
| 80 | Spade Core | $11 / 22 / 92$ | $02: 11: 00$ | $16: 11: 00$ | 2.0667 | 140.1317 |
| 81 | Plankton Tow | $11 / 22 / 92$ | $00: 21: 00$ | $14: 21: 00$ | 2.061 | 140.1452 |
| 82 | Multicore | $11 / 22 / 92$ | $07: 05: 00$ | $21: 05: 00$ | 2.0633 | 140.15 |
| 83 | Piston Core | $11 / 22 / 92$ | $10: 58: 00$ | $23: 58: 00$ | 2.067 | 140.1467 |
| 84 | Plankton Tow | $11 / 22 / 92$ | $12: 03: 00$ | $02: 03: 00$ | 2.0703 | 140.1482 |
| 85 | Hydrocast | $11 / 22 / 92$ | $18: 01: 00$ | $08: 01: 00$ | 2.0278 | 140.1227 |
| 86 | Spade Core | $11 / 22 / 92$ | $23: 14: 00$ | $13: 14: 00$ | 2.066 | 140.1343 |
| 91 | Spade Core | $11 / 24 / 92$ | $09: 46: 00$ | $23: 46: 00$ | 2.0633 | 140.1317 |
| 92 | Hydrocast | $11 / 24 / 92$ | $12: 34: 00$ | $02: 34: 00$ | 2.0565 | 140.1463 |
| 93 | Multicore | $11 / 24 / 92$ | $15: 08: 00$ | $05: 08: 00$ | 2.055 | 140.1433 |
| 94 | Plankton Tow | $11 / 24 / 92$ | $17: 14: 00$ | $07: 14: 00$ | 2.0453 | 140.1205 |
| 95 | Spade Core | $11 / 24 / 92$ | $20: 16: 00$ | $10: 16: 00$ | 2.0518 | 140.1445 |
| 96 | Piston Core | $11 / 24 / 92$ | $23: 21: 00$ | $13: 21: 00$ | 2.0652 | 140.1493 |
| 97 | Multicore | $11 / 25 / 92$ | $04: 24: 00$ | $18: 24: 00$ | 2.05 | 140.1433 |
| 98 | Multicore | $11 / 25 / 92$ | $12: 20: 00$ | $02: 20: 00$ | 2.0583 | 130.1433 |
|  |  |  |  |  |  |  |



| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Multicore | $11 / 29 / 92$ | $18: 27: 00$ | $08: 27: 00$ | 4.0413 | 139.8508 |
| 114 | Piston Core | $11 / 29 / 92$ | $22: 31: 00$ | $12: 31: 00$ | 4.0433 | 139.8508 |
| 115 | Plankton Tow | $11 / 29 / 92$ | $22: 56: 00$ | $12: 56: 00$ | 4.0422 | 139.854 |



| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 99 | Lander | 11/26/92 | 19:10:00 | 09:10:00 | 5.0803 | 139.7341 |
| 100 | Lander | 11/26/92 | 01:04:00 | 11:04:00 | 5.0735 | 139.7253 |
| 101 | Lander | 11/26/92 | 02:36:00 | 12:36:00 | 5.0825 | 139.7188 |
| 102 | Hydrocast | 11/27/92 | 07:00:00 | 19:00:00 | 5.1162 | 139.733 |
| 103 | Spade Core | 11/27/92 | 12:41:00 | 02:41:00 | 5.0667 | 139.6483 |
| 104 | Multicore | 11/27/92 | 17:42:00 | 07:42:00 | 5.0783 | 139.6367 |
| 105 | Piston Core | 11/27/92 | 22:00:00 | 12:00:00 | 5.078 | 139.627 |
| 106 | Plankton Tow | 11/27/92 | 22:51:00 | 12:51:00 | 5.075 | 139.6215 |
| 107 | Spade Core | 11/28/92 | 06:01:00 | 20:01:00 | 5.0833 | 139.65 |
| 108 | Multicore | 11/28/92 | 10:48:00 | 00:48:00 | 5.0702 | 139.6363 |
| 109 | Plankton Tow | 11/28/92 | 13:54:00 | 03:54:00 | 5.0595 | 139.6168 |
| 110 | Camera Tow | 11/28/92 | 1815:00:00 | 08:15:00 | 5.07 | 139.67 |
| 111 | Spade Core | 11/29/92 | 01:34:00 | 15:34:00 | 5.0737 | 139.6483 |
| 112 | Multicore | 11/29/92. | 05:34:00 | 19:34:00 | 5.0783 | 139.6383 |
| 116 | Spade Core | 11/30/92 | 10:42:00 | 00:42:00 | 5.08 | 139.6417 |
| 117 | Multicore | 11/30/92 | 15:33:00 | 05:33:00 | 5.0717 | 139.6383 |
| 118 | Plankton Tow | 11/30/92 | 17:26:00 | 07:26:00 | 5.0658 | 139.6377 |
| 119 | Hydrocast | 11/30/92 | 18:34:00 | 08:34:00 | 5.107 | 139.6335 |
| 120 | Hydrocast | 11/30/92 | 22:30:00 | 12:30:00 | 5.0818 | 139.741 |
| 121 | Spade Core | 12/1/92 | 04:33:00 | 18:33:00 | 5.07 | 139.6467 |
| 122 | Multicore | 12/1/92 | 08:53:00 | 22:53:00 | 5.0833 | 139.64 |
| 123 | Plankton Tow | 12/1/92 | 11:33:00 | 01:33:00 | 5.0895 | 139.645 |
| 124 | Multicore | 12/1/92 | 21:38:00 | 11:38:00 | 5.0787 | 139.6362 |
| 125 | Multicore | 12/2/92 | 03:09:00 | 17:09:00 | 5.0817 | 139.6317 |
| 126 | Multicore | 12/2/92 | 08:52:00 | 22:52:00 | 5.0815 | 139.6315 |
| 127 | Multicore | 12/2/92 | 15:51:00 | 05:51:00 | 5.08 | 139.6137 |


$9^{\circ} \mathrm{N}$ AREA STATIONS

| Station | Activity | Date GMT | Time GMT | Local Time | Latitude | Longitude |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 128 | Lander | 12/3/92 | 21:34:00 | 09:34:00 | 9.0217 | 139.8675 |
| 129 | Lander | 12/3/92 | 23:34:00 | 01:34:00 | 9.0233 | 139.8612 |
| 130 | Lander | 12/4/92 | 00:53:00 | 02:53:00 | 9.0252 | 139.8605 |
| 131 | Spade Core | 12/4/92 | 02:02:00 | 16:02:00 | 8.93 | 139.87 |
| 132 | Multicore | 12/4/92 | 08:41:00 | 22:41:00 | 8.9247 | 139.8598 |
| 133 | Piston Core | 12/4/92 | 12:45:00 | 02:45:00 | 8.9512 | 139.8708 |
| 134 | Spade Core | 12/4/92 | 21:03:00 | 11:03:00 | 8.934 | 139.8592 |
| 135 | Multicore | 12/5/92 | 02:14:00 | 16:14:00 | 8.925 | 139.865 |
| 136 | Camera Tow | 12/5/92 | 09:03:00 | 23:03:00 | 8.91 | 139.8712 |
| 137 | Spade Core | 12/5/92 | 17:25:00 | 07:25:00 | 5.9217 | 139.8667 |
| 138 | Plankton Tow | 12/4/92 | 16:05:00 | 06:05:00 | 8.9233 | 139.8697 |
| 139 | Multicore | 12/5/92 | 22:17:00 | 12:17:00 | 8.9212 | 139.854 |
| 140 | Plankton Tow | 12/5/92 | 23:00:00 | 13:00:00 | 8.9227 | 139.8545 |
| 141 | Hydrocast | 12/6/92 | 01:31:00 | 15:31:00 | 8.9412 | 139.8877 |
| 142 | Plankton Tow | 12/6/92 | 05:27:00 | 19:27:00 | 8.965 | 139.867 |
| 143 | Multicore | 12/6/92 | 09:36:00 | 23:36:00 | 8.925 | 139.8697 |
| 144 | Spade Core | 12/6/92 | 16:14:00 | 06:14:00 | 8.93 | 139.871 |
| 145 | Plankton Tow | 12/6/92 | 18:41:00 | 08:41:00 | 8.9478 | 139.8638 |
| 146 | Hydrocast | 12/6/92 | 19:47:00 | 09:47:00 | 8.9433 | 139.8658 |
| 147 | Multicore | 12/6/92 | 22:51:00 | 12:51:00 | 8.9273 | 139.8657 |
| 148 | Multicore | 12/7/92 | 08:38:00 | 20:38:00 | 8.9267 | 139.8717 |
| 149 | Multicore | 12/7/92 | 12:47:00 | 22:47:00 | 8.9283 | 139.8633 |
| 150 | Plankton Tow | 12/7/92 | 12:04:00 | 02:04:00 | 8.9277 | 139.8618 |
| 151 | Hydrocast | 12/7/92 | 16:16:00 | 06:16:00 | 8.9072 | 139.8738 |
| 152 | Spade Core | 12/7/92 | 22:11:00 | 12:11:00 | 8.9187 | 139.8617 |
| 153 | Multicore | 12/8/92 | 04:21:00 | 18:21:00 | 8.9258 | 139.8643 |



## TT013 LANDER DEPLOYMENTS

STATION: 1
AREA: $\quad 12 \mathrm{~S}$
$\begin{array}{lllll}\text { LATITUDE: } & -11.9502 & \text { LONGITUDE: 134.9503 } & \text { DEPTH: } & 4200 \\ \text { DATE: } & 11 / 02 / 92 & \text { TIME (GMT): 04:00:00 } & & \end{array}$
DEPLOYMENT LENGTH: 44:01 INCUBATION LENGTH: 32:00
COMMENTS:
Three chambers successful

STATION: 12
AREA: 5 S
LATITUDE: -4.9322 LONGITUDE: 139.7323 DEPTH: 4229
DATE: 11/06/92 TIME (GMT): 22:09:50
DEPLOYMENT LENGTH: 139:52 INCUBATION LENGTH: 126:30
COMMENTS:
No samples drawn; valve malfunction

STATION: 13
AREA: 5 S
LATITUDE: -4.9317 LONGITUDE: 139.7429 DEPTH: 4212
DATE: 11/06/92 TIME (GMT): 00:04:00
DEPLOYMENT LENGTH: 139:57 INCUBATION LENGTH: 125:20
COMMENTS:
No working chamber, gasket malfunction

## TT013 LANDER DEPLOYMENTS

STATION: 14
AREA: 2 S
LATITUDE: -1.8297 LONGITUDE: 139.7195 DEPTH: 4254
DATE: 11/07/92 TIME (GMT): 20:00:00
DEPLOYMENT LENGTH: 144:58 INCUBATION LENGTH: 127:30
COMMENTS:
Three chambers worked

STATION: 15
AREA: 2 S
LATITUDE: -1.8385 LONGITUDE: 139.7217 DEPTH: 4351
DATE: 11/07/92 TIME (GMT): 21:27:00
DEPLOYMENT LENGTH: 147: 28 INCUBATION LENGTH: 129:30
COMMENTS:
Three chambers worked

## STATION: 45

AREA: Equator
LATITUDE: 0.0666 LONGITUDE: 139.7575 DEPTH: 4321
DATE: 11/14/92 TIME (GMT): 19:13:00
DEPLOYMENT LENGTH: 115:46 INCUBATION LENGTH: 101:05
COMMENTS:
Three chambers worked

## TT013 LANDER DEPLOYMENTS

STATION: 46
AREA: Equator
LATITUDE: 0.0757 LONGITUDE: 139.7612 DEPTH: 4310
DATE: 11/14/92 TIME (GMT): 20:25:00
DEPLOYMENT LENGTH: 120:26 INCUBATION LENGTH: 105:00
COMMENTS:
Three chambers worked

STATION: 47
AREA: Equator
LATITUDE: 0.0762 LONGITUDE: 139.7472 DEPTH: 4316
DATE: 11/14/92 TIME (GMT): 22:01:00
DEPLOYMENT LENGTH: 124:37 INCUBATION LENGTH: 108:30
COMMENTS:
Three chambers worked

STATION: 73
AREA: 2 N
LATITUDE: 2.0297 LONGITUDE: 140.1995 DEPTH: 4421
DATE: 11/20/92 TIME (GMT): 21:55:00
DEPLOYMENT LENGTH: 114:12 INCUBATION LENGTH: 100:00
COMMENTS:
Two chambers worked

## TT013 LANDER DEPLOYMENTS

STATION: 74
AREA: 2 N
LATITUDE: 2.0283 LONGITUDE: 140.1832 DEPTH: 4409
DATE: 11/21/92 TIME (GMT): 00:41:00
DEPLOYMENT LENGTH: 114:58 INCUBATION LENGTH: 100:30
COMMENTS:
Three chambers worked

STATION: 75
AREA: 2 N
LATITUDE: 2.0365 LONGITUDE: 140.1940 DEPTH: 4410
DATE: 11/21/92 TIME (GMT): 01:49:00
DEPLOYMENT LENGTH: 116:21 INCUBATION LENGTH: 101:00
COMMENTS:
Three chambers worked

STATION: 99
AREA: 5 N
LATITUDE: 5.0803
LONGITUDE: 139.7341 DEPTH: 4440
DATE: 11/26/92 TIME (GMT): 19:10:00
DEPLOYMENT LENGTH: 00:00 INCUBATION LENGTH: 86:00
COMMENTS:
Three chambers worked

TT013 LANDER DEPLOYMENTS

STATION: 100
AREA: 5 N
LATITUDE: 5.0735 LONGITUDE: 139.7253 DEPTH: 4430
DATE: 11/26/92 TIME (GMT): 01:04:00
DEPLOYMENT LENGTH: 00:00 INCUBATION LENGTH: 97:00
COMMENTS:
Three chambers worked

STATION: 101
AREA: 5 N
LATITUDE: 5.0825 LONGITUDE: 139.7188 DEPTH: 4426
DATE: 11/26/92 TIME (GMT): 02:36:00
DEPLOYMENT LENGTH: 00:00 INCUBATION LENGTH: 98:00
COMMENTS:
Three chambers worked

STATION: 128
AREA: 9 N
LATITUDE: 9.0217 LONGITUDE: 139.8675 DEPTH: 4970
DATE: 12/03/92 TIME (GMT): 21:34:00
DEPLOYMENT LENGTH: 00:00 INCUBATION LENGTH: 00:00
COMMENTS:
Lander not recovered.

## TT013 LANDER DEPLOYMENTS

STATION: 129
AREA: 9 N
LATITUDE: 9.0233
DATE: 12/03/92 TIME (GMT): 23:34:00
DEPLOYMENT LENGTH: 00:00 INCUBATION LENGTH: 00:00
COMMENTS:
Lander not recovered.

STATION: 130
AREA: 9 N
LATITUDE: 9.0252 LONGITUDE: 139.8605 DEPTH: 4990
DATE: 12/04/92 TIME (GMT): 00:53:00
DEPLOYMENT LENGTH: 00:00 INCUBATION LENGTH: 00:00
COMMENTS:
Lander not recovered.

## NOTES ON MULTICORE LOGS:

The multicore logs included in this section were compiled from the original operations log and from the descriptions provided by Susan Garner of the University of Hawaii group. The lengths provided by Garner were measured on the cores while plugs were still inserted into the base of the cores. The lengths indicated on these descriptions are the lengths after removal of the plugs and are generally one to two centimeters less than those listed on original descriptions by Garner.

Complete descriptions of the cores taken the the original descriptions are included as an appendix to the report.

STATION 19

AREA: 2 S
LATITUDE: -1.8680 LONGITUDE: 139.7157 DEPTH (m): 4376 NUMBER TUBES WITH SEDIMENT: 7

| LENGTH |  | QUALITY | DISTRIBUTION | SAMPLE USE |
| :---: | :---: | :---: | :---: | :---: |
| TUBE 1: | 31 | good | Dobbs | microbiology |
| TUBE 2: | 30 | good, water clear, surface even | Berelson | porewater/whole core squeezer |
| TUBE 3: | 33 | excellent, water very clear, phytodetr. | Kastner | porewater/centrifuge |
| TUBE 4: | 32 | excellent, water very clear, phytodetr. and flocs | Hedges | organic chemistry |
| TUBE 5: | 33 | excellent, water very clear, phytodetr and flocs | Demaster/Kadko | biol. comp.; short lived radionuclides |
| TUBE 6: | 0 | PVC, empty |  |  |
| TUBE 7: | 32 | good, water clear, much floc and phytodetr. | Demaster/Kadko | short lived radionuclides, biol. |
| TUBE 8: | 16 | gap, surface good, short core | Anderson | radionuclides, thorium |

## STATION <br> 23

AREA: 2 S
LATITUDE: -1.8670 LONGITUDE: 139.8008 DEPTH (m): 4380 NUMBER TUBES WITH SEDIMENT: 7

| LENGTH (cm) | QUALITY |  |
| :--- | ---: | :--- |
| TUBE 1: | 20 | good, water clear to slightly turbid, small amt of |
| floc |  |  |
| TUBE 2: | 29 | good, water clear, floc balls |, | TUBE 3: | 0 | PVC, empty |
| :--- | ---: | :--- |
| TUBE 4: | 32 | good, water clear, some floc balls |
| TUBE 5: | 27 | good, water slightly turbid, |
| TUBE 6: | 33 | good, water slightly turbid, xenophyophore on |
| TUBE 7: | 0 | surface. |
| good |  |  |

DISTRIBUTION
Leinen
Berelson

| Kastner | porewater/centrifuge |
| :--- | :--- |
| Hedges | organic chemistry |
| Demaster/Kadko | biol. comp.; long lived radionuclides |
| Dobbs | microbiology |
| Smith | phaeopigments |

STATION
AREA:
3 S
LATITUDE: -2.8853 LONGITUDE: 139.8317 DEPTH (m): 4513 NUMBER TUBES WITH SEDIMENT: 7

LENGTH (cm)
TUBE 1: 31
TUBE 2: 33
TUBE 3: 18
TUBE 4: 32
TUBE 5: 30
TUBE 6: 0
TUBE 7: 32
TUBE 8: 32

QUALITY
excellent, water very clear, loose flocs and phytodetr.
excellent, water very clear, much loose phytodetr
water very clear, gap at bottom, phytodetr on surface
good, water clear, phytodetr on surface
excellent, water very clear, loose floc material on surface
0 PVC, empty
2 excellent, water very clear, surface even, much - Smith phytodetr on surface
excellent, water very clear, much loose phytodetr Anderson

SAMPLE USE
phaeopigments, radionuclides porewater/whole core squeezer paleo
porewater/centrifuge
biol. comp.; long lived radionuclides
phaeopigments
pore water

STATION
34
AREA:
5 S
LATITUDE: -4.9738 LONGITUDE: 139.7373 DEPTH (m): 4256 NUMBER TUBES WITH SEDIMENT: 7

LENGTH (cm)
TUBE 1: 14
TUBE 2: 26 good to very good, water clear to slightly turbid, surface relief $=2 \mathrm{~cm}$, some large clumps of
TUBE 3: 26 good, water somewhat turbid, surface relief $=1 / 2$ cm , some loose flocculant material
TUBE 4: 25 very good, water clear, surface level, little loose flocculant material
TUBE 5: 30 excellent, water very clear, surface level, some pale green loose flocculant material on surface very good, clear water, flocs on surface QUALITY
short, water drained

TUBE 6:
TUBE 7:
TUBE 8:
32 loose flocculant material on surface
TUBE 8: 0 empty

DISTRIBUTION
Smith/Demaster
Berelson
Leinen
Kastner
Demaster

## MULTICORES

## STATION 39

## AREA: <br> 5 S

LATITUDE: -4.9762 LONGITUDE: 139.7372 DEPTH $(\mathrm{m}): 4294$ NUMBER TUBES WITH SEDIMENT: 7

LENGTH (cm)
TUBE 1: 24
TUBE 2: 25
TUBE 3: 0
TUBE 4: 27
TUBE 5: 28
TUBE 6: 30
TUBE 7: 0
TUBE 8:
32

QUALITY
excellent, water very clear, no flocs at sed surfaci good, water clear, no loose sed. or flocs on sed surface
no water, PVC tube with core catcher, disturbed excellent, water very clear excellent, water very clear, surface even, no flocs excellent, water very clear, slight slant to surface, no flocs
empty
2 excellent, water very clear, surface flat, a few mucous balls

DISTRIBUTION
Hedges
Hedges
Leinen
Dobbs
Kastner
Smith

Berelson
Berelson

SAMPLE USE organic chemistry organic chemistry paleo microbiology porewater/centr phaeopigments porewater/whole core squeezer

## STATION <br> 41

## AREA: <br> 5 S

LATITUDE: -4.9733 LONGITUDE: 139.7433 DEPTH (m): 4264
NUMBER TUBES WITH SEDIMENT:

LENGTH (cm)
TUBE 1: 0 empty
TUBE 2: 25 good, water slightly turbid, slight slat to surface;
TUBE 3: 0 many mucous balls
TUBE 3: 0 empty
TUBE 4: 26
TUBE 5: 26
TUBE 6:
TUBE 7:
TUBE 8:
QUALITY
good, water slightly turbid, surface even, some

DISTRIBUTION
SAMPLE USE

Hedges
organic chemistry

Leinen
Smith
Demaster/Kadko
Demaster/Kadko
Demaster/Kadko
paleo
phaeopigments
biol. comp., short lived radionuclides, gamma emitters biol comp.; short lived radionulcides, gamma emitters biol. comp.; short lived radionuclides, gamma emitters

## MULTICORES

STATION
AREA: 2 S
LATITUDE: -1.8667 LONGITUDE: 139.7151 DEPTH ${ }_{f}(\mathrm{~m}): 4338$ NUMBER TUBES WITH SEDIMENT: 0

| LENGTH (cm) | QUALITY | DISTRIBUTION | SAMPLE USE |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| TUBE 1: | 0 | empty |  |  |
| TUBE 2: | 0 | empty |  |  |
| TUBE 3: | 0 | empty |  |  |
| TUBE 4: | 0 | empty |  |  |
| TUBE 5: | 0 | empty |  |  |
| TUBE 6: | 0 | empty |  |  |
| TUBE 7: | 0 | empty |  |  |
| TUBE 8: | 0 | empty |  |  |

## STATION 48

AREA: Equator
LATITUDE: 0.1200 LONGITUDE: 139.7350 DEPTH (m): 4315 NUMBER TUBES WITH SEDIMENT: 7

LENGTH (cm)
TUBE 1: 0 empty

| TUBE 2: | 25 | excellent, very clear, 1 cm surface slant, | Kastner | porewater/centrifuge |
| :--- | :--- | :--- | :--- | :--- |
| TUBE 3: | 26 | abundant green phytodetritus on surface <br> excellent, water very clear, phytodetritus on <br> surface, 1 cm surface slant | Smith | phaeopigments |
| TUBE 4: | 23 | excellent, clear water, 2-3 mm phytodetritus on <br> surface, good interface | Dobbs/Anderson | microbiology; radionuclides |
| TUBE 5: | 26 | excellent, clear water, 2-3 mm phytodetritus on <br> surface, good interface <br> excellent, clear water, $2-3 \mathrm{~mm}$ phytodetritus on <br> surface, good interface | Demaster/Kadko | Demaster/Kadkobiol. comp.; short lived <br> radionuclides <br> biol. comp.; short lived <br> radionuclides <br> organic chemistry |
| TUBE 6: | 27 | TUBE 7: | 26 | excellent, very clear water, surface even, some <br> phytodetritus on surface <br> excellent, very clear water, abundant <br> phytodetritus on surface |
| TUBE 8: | 28 | Hedges | Berelson | porewater/whole core squeezer |

LENGTH (cm)
TUBE 1: 32
TUBE 2:32

TUBE 3: 28
TUBE 4:
33

TUBE 7: 34
TUBE 8: 0 emptyexcellent, very clear water, even surface, heavyphytodetritus on surface excellent, water very clear, surface even abundant phytodetritus
TUBE 5: 30 excellent, water very clear, surface covered with phytodetritus
TUBE 6: 33 excellent, water very clear, surface covered with phytodetritus, 0.5 cm slant surface excellent, water very clear, phytodetritus in low points of surface

QUALITY
excellent, water very clear, even surface, much phytodetritus excellent, very clear water, abundant .

DISTRIBUTION
Demaster/Kadko
Berelson
Dobbs
Kastner
Leinen
Smith
Hedges
or

SAMPLE USE
biol. comp.; short lived radionuclides porewater/whole core squeezer microbiology
porewater/centrifuge
paleo
phaeopigments
organic chemistry

## STATION <br> 63

## AREA: <br> 1 S

## LATITUDE: -0.8655 LONGITUDE: 139.8317 DEPTH (m): 4276

 NUMBER TUBES WITH SEDIMENT: 6
## LENGTH (cm)

TUBE 1: 0 empty
TUBE 2: 19 good, water somewhat turbid, surface even, a few phytodetritus balls on surface
TUBE 3: 15 fair, water turbid, surface very even, some loose phytodetritus
TUBE 4: 15 good, water slightly turbid, surface slant of 1/2 cm , some look phytodetritus
TUBE 5: 18 good, water somewhat turbid, suface level, much loose phytodetritus
TUBE 6: 17 excellent, water clear, surface slightly slanted, some phytodetritus on surface
TUBE 7: 17 excellent, water very clear, surface level, much
TUBE 8: $\quad 0 \begin{aligned} & \text { phytodetritus on surface } \\ & \text { empty }\end{aligned}$
TUBE 8: 0 empty

Berelson
DISTRIBUTION

Leinen
Leinen
Kastner
Leinen
Kastner
porewater/whole core squeezer paleo
paleo
porewater/centrifuge
paleo
Ba phases

## STATION

AREA: Equator
LATITUDE: 0.1027 LONGITUDE: 139.7330 NUMBER TUBES WITH SEDIMENT: 7

## LENGTH (cm)

QUALITY
excellent, water very clear, surface slant $1 / 2 \mathrm{~cm}$, much phytodetritus on surface
TUBE 2: 32
TUBE 3: 33
TUBE 4: 33
TUBE 5: 32
TUBE 6: 31
TUBE 7: 29
TUBE 8: 0 very good, water clear, abundant phytodetritus, $I$ cm mounds on surface empty

DISTRIBUTION
Smith
Demaster/Kadko
Demaster/Kadko
Dobbs/Demaster
Hedges
Hedges
Leinen

DEPTH (m): 4309 $t$

SAMPLE USE
phaeopigments
biol comp., short-lived radionuclides, gamma emitters biol. comp., short-lived radionuclides, gamma em rs microbiology/biol. comp. organic chemistry organic chemistry
paleo

## STATION 69

## AREA: Equator

## LATITUDE: 0.1117 LONGITUDE: 139.7233 DEPTH (m): 4307 NUMBER TUBES WITH SEDIMENT: 8

TUBE 2: $31 \begin{aligned} & \text { with xenophyophores and ? tubes } \\ & \text { excellent, water very clear, surface level, much }\end{aligned}$
TUBE 3: 28 exceptionally clear water, much phytodetritus,
TUBE 4: $31 \quad \begin{aligned} & \text { surface relief }=0.5 \mathrm{~cm} \\ & \text { very good, water clear, slightly uneven surface, }\end{aligned}$ TUBE 5: $31 \begin{aligned} & \text { much pht ,odetritus } \\ & \text { excellent, water very clear, slightly uneven }\end{aligned}$ surface, much phytodetritus
TUBE 6: 29 excellent, water very clear, surface level, much
TUBE 7: $31 \begin{aligned} & \text { phytodetritus } \\ & \text { excellent, water very clear, surface slightly }\end{aligned}$
TUBE 8: 29 uneven $=1 / 2 \mathrm{~cm}$, much phytodetritus, piece of phytodetritus, xenophyophore $(2.5 \mathrm{~cm})$, surface

DISTRIBUTION
Leinen
Anderson
Dobbs
Demaster/Kadko
Hedges
Smith
Hedges
Kastner Ba phases

SAMPLE USE
paleo
porewater/trace metal profiles
microbiology
biol. comp., long-lived radionuclides organic chemistry phaeopigments organic chemistry

STATION 71

AREA: Equator
LATITUDE: 0.1144 LONGITUDE: 139.7500 DEPTH (m): 4304 NUMBER TUBES WITH SEDIMENT: 8

| LENGT |  | QUALITY | DISTRIBUTION | SAMPLE USE |
| :---: | :---: | :---: | :---: | :---: |
| TUBE 1: | 31 | excellent, water very clear, much phytodetritus | Hedges | organic chemistry |
| TUBE 2: | 31 | excellent, water very clear, surface level, much green phytodetritus | Smith | macrofauna |
| TUBE 3: | 30 | fair, water turbid, surface level, much phytodetritus | Dobbs/Demaster | microbiology, biol. comp., long-lived radionuclides |
| TUBE 4: | 34 | excellent, water very clear, 1.5 cm mound on surface, much phytodetritus on surface | Smith | phaeopigments |
| TUBE 5: | 32 | very good, water clear, surface level, some phytodetritus | Anderson | Th/Pa ratios |
| TUBE 6: | 27 | excellent, water very clear, surface with 1 cm relief, much green phytodetritus | Demaster/Kadko | biol. comp., short-lived radionuclides |
| TUBE 7: | 33 | excellent, water very clear, surface relief $=1 \mathrm{~cm}$, much green phytodetritus | Demaster/Kadko | biol. comp., short-lived radionuclides |
| TUBE 8: | 29 | excellent, water very clear, surface level, much green phytodetritus | Dobbs/Leinen | microbiology/paleo |

## STATION 77

## AREA:

## LATITUDE: 2.0573 LONGITUDE: 140.1425 DEPTH (m): 4412 NUMBER TUBES WITH SEDIMENT: 8

QUALITY
DISTRIBUTION
TUBE 1: 11 water drained, short core, disturbed
TUBE 2: 20 good, water slightly turbid, surface slant $=1 \mathrm{~cm}$,

| Hedges | organic chemistry |
| :--- | :--- |
| Smith | phaeopigments |
| Anderson | Th $/$ Pa ratios |

TUBE 4: 33 fair, water slightly turbid, surface slant $=1 \mathrm{~cm}$, some loose phytodetritus
TUBE 5: 33 very good, water clear, surface level, much phytodetritus
TUBE 6: 32 very good, water clear, surface level, much loose phytodetritus
TUBE 7: 31 very good, water clear, surface level, some greenish brown phytodetritus
TUBE 8: 30 very good, water clear, surface level, much phytodetritus, large xenophyophore

Berelson
Demaster/Kadko
Demaster/Kadko
Berelson

SAMPLE USE

Th/Pa ratios
porewater/whole core squeezer
biol. comp., short-lived radionuclides biol. comp., short-lived radionuclides porewater/centrifuge

## STATION 82

AREA: 2 N

## LATITUDE: 2.0633 LONGITUDE: 140.1500

 NUMBER TUBES WITH SEDIMENT: 8TUBE 8: 28 good, water slightly turbid, surface level, some

LENGTH (cm)
TUBE 1: $\quad 30$

TUBE 2: 32
TUBE 3: 32
TUBE 4: 28
TUBE 5: 30
TUBE 6: 23
TUBE 7: 34

QUALITY
excellent, water very clear to approx. 5 cm , some resuspended sediment, surface relief $=7 \mathrm{~mm}$ very good, water clear, surface level, much phytodetritus
32 excellent, water very clear, surface leve, much phytodetritus very good, water clear, surface relief $=2 \mathrm{~cm}$, somt phytodetritus phytodetritus very good, water clear, surface relief $=1 \mathrm{~cm}$, somt phytodetritus
good, water slightly turbid, surface level, some phytodetritus phytodetritus

DISTRIBUTION
Dobbs
Berelson
Smith
Kastner
Demaster/Kadko
Leinen
Hedges
Berelson

## SAMPLE USE

microbiology
porewater/whole core squeezer
phaeopigments
Ba phases
biol. comp., short-lived radionuclides paleo
organic chemistry
porewater/centrifuge

## STATION <br> 88

AREA:
1 N

LATITUDE: 0.8150 LONGITUDE: 139.9167 DEPTH (m): 4415 NUMBER TUBES WITH SEDIMENT:

LENGTH (cm)
TUBE 1: 21
TUBE 2: 28
TUBE 3: 32
TUBE 4: 31
TUBE 5: 30
TUBE 6: 31
TUBE 7: 32
TUBE 8: 29

QUALITY
good, water somewhat turbid, surface level, possible resuspension, a few mucous balls good, water slightly turbid, surface level, some loose flocs
good, water slightly turbid, surface relief $=2 \mathrm{~cm}$, little loose material on surface, xenophyphore on good, water slightly turbid, surface level, some llose flocculant material good, water somewhat turbid, surface level, some loose flocculant material good, water somewhat turbid, slight surface relief, some loose flocculant material good, water slightly turbid, surface slant $=1 \mathrm{~cm}$, much loose brown flocculant material
29 good, water somewhat turbid, surface relief $=1 / 2$ cm , few mucous balls on surface, piece of

DISTRIBUTION
Smith
Berelson
Leinen
Leinen
Kastner
Demaster/Kadko
Leinen
Berelson

SAMPLE USE
meiofauna
porewater/whole core squarif
porewater
paleo
Ba phases
biol. comp., long-lived radionuclides paleo
porewater/centrifuge

## STATION

AREA:
2 N
LATITUDE: 2.0550 LONGITUDE: 140.1433 DEPTH (m): 4411 NUMBER TUBES WITH SEDIMENT: 8

LENGTH (cm)
TUBE 1: 18
TUBE 2: 29
TUBE 3: 33
TUBE 4: 35
TUBE 5: 33
TUBE 6: 31
TUBE 7: 35
TUBE 8: 33
greenish phytodetritus, xenophyophore (?) on excellent, water very clear, surface level, much greenish phytodetritus ( $=4 \mathrm{~mm}$ )

QUALITY
excellent, water very clear, core somewhat short, much green phytodetritus on surface very good, water clear, surface leve, much green phytodetritus on surface ( $=4 \mathrm{~mm}$ ) excellent, water very clear, surface level, 4.5 mm green phvtodetritus excellent, water very clear, surface level, much phytodetritus excellent, water very clear, surface level, much excellent, water very clearn, much phytodetritus ${ }^{*}$
excellent, water very clear, surface relief $=7 \mathrm{~mm}$, much greenish phytodetritus, small sponge (?)

DISTRIBUTION
Dobbs
Hedges
Demaster/Kadko
Demaster/Kadko
Hedges
Leinen
Demaster/Kadko
Smith

## STATION <br> 97

## AREA: <br> 2 N

LATITUDE: 2.0500 LONGITUDE: 140.1433 DEPTH (m): 4413
NUMBER TUBES WITH SEDIMENT: 5

## LENGTH (cm)

QUALITY

TUBE 2: 0 empty
TUBE 3: 0 empty
TUBE 4: 33 very good, water clear, surface relief $=1 / 2 \mathrm{~cm}$, much greenish phytodetritus
TUBE 5: 31 excellent, water very clear, surface slant $=1 \mathrm{~cm}$, much phytodetritus
TUBE 6: 31 excellent, water very clear, surface level, much phvtodtritus
TUBE 7: 30 very good, water clear, surface relief $=1 \mathrm{~cm}$, some phytodetritus
TUBE 8: 31 excellent, water very clear, suface leve, much phytodetritus

```
TUBE 1: 0 empty
```

| Anderson | porewater/Re,Mo,U |
| :--- | :--- |
| Dobbs/Demaster | microbiology/biol. comp. |
| Smith | phaeopigments |
| Leinen | paleo |
| Demaster/Kadko | biol. comp., long lived radionuclides |

Anderson
Dobbs/Demaster microbiology/biol. comp.
Smith
Leinen
Demaster/Kadko biol. comp., long lived radionuclides

SAMPLE USE

AREA:

# LATITUDE: 2.0583 LONGITUDE: 130.1433 DEPTH (m): 4413 

NUMBER TUBES WITH SEDIMENT:

LENGTH (cm)
TUBE 1: 31
TUBE 2: 32
TUBE 3: 31
TUBE 4:
TUBE 5: 31
TUBE 6:
29
TUBE 7:
TUBE 8:
TUBE 6. 29

QUALITY
very good, water clear, surface slant $=1 \mathrm{~cm}$, much phytodetritus
very good, water clear, surface relief $=1 / 2 \mathrm{~cm}$, much brownish green phytodetritus very good, water clear, surface leve, large xenophvophore on surface, some phytodetritus very good, water clear, surface relief $=1.5 \mathrm{~cm}$, some phytodetritus (greenish brown) surface with small xenophyophore, enophyoohore, some excellent, water very clear, surface level, surface relief $=05 . \mathrm{cm}$, some phytodetritus on surface very good, water clear, surface leve, much phytodetritus on surface
0 empty

DISTRIBUTION
Smith
Demaster
Smith
Hedges
Dobbs/Smith
Demaster
Kadko

SAMPLE USE
phaeopigments
biol. comp., short-lived radionuclides meiofauna
organic chemistry microbiology/macrofauna
biol. comp., short-lived radionuclides biol. comp., long-lived radionuclides

## STATION <br> 104

AREA: 5 N
LATITUDE: 5.0783 LONGITUDE: 139.6367 DEPTH (m): 4416 NUMBER TUBES WITH SEDIMENT:

LENGTH (cm)
TUBE 1:
34
TUBE 2: 34
TUBE 3: 33
TUBE 4: 29
TUBE 5: $\quad 30$
TUBE 6: 30
TUBE 7: 31
TUBE 8: 15

QUALITY
good, water slightly turbid, surface level, some loose flocculant material good, water slightly turbid, surface leve, a few mucous balls on surface good, water slightly turbid, surface relief $=2 \mathrm{~cm}$, some mucous balls on surface good, water slightly turbid, surface level, a few mucous balls on surface very good, water clear, surface has a mound covering $2 / 3$ of surface, mucous balls on surface good to very good, water slightly turbid to clear, surface level, xenophyophore on surface, brown good, water slightly turbid, surface relief $=1.5 \mathrm{~cm}$, large xenophyophore on surface, loose brown good, water somewhat turbid, surface level

DISTRIBUTION
Smith
Berelson
Demaster/Kadko
Berelson
Kastner
Hedges
Leinen

Dobbs/McManus microbiology/silicate experiments
SAMPLE USE
phaeopigments porewater, whole core squeezer
biol. comp./ long lived radioisotopes porewater/centrifuge

Ba phases
organic chemistry
paleo
STATION ..... 108
AREA: ..... 5 N
LATITUDE: 5.0702 LONGITUDE: 139.6363 DEPTH (m): ..... 4422
NUMBER TUBES WITH SEDIMENT: ..... 4
LENGTH (cm)
TUBE 1: 30
TUBE 2: ..... 28
TUBE 3: ..... 29
TUBE 4: ..... 32
TUBE 5:0 empty
TUBE 6: 0 empty
TUBE 7: 0 empty
TUBE 8: 0 empty
QUALITY
excellent, water very clear, surface level, loose brown material on surface
very good, water clear, surface level, 2 small burrow holes in surface, loose mucous balls on excellent, water very clear, surface level, clump o greenish material on surface excellent, water very clear, surface level, much paleo greenish to brown phytodetritus along

## DISTRIBUTION

Berelson
Berelson
Smith
Demaster
biol. comp./long lived radioisotopes

STATION 112
AREA: $\quad 5 \mathrm{~N}$
LATITUDE: 5.0783 LONGITUDE: 139.6383 DEPTH (m): 4418 NUMBER TUBES WITH SEDIMENT: 8
LENGTH (cm)

TUBE 1: 32
TUBE 2: 33
TUBE 3: $\quad 30$
TUBE 4: 32
TUBE 5: 30
TUBE 6: 31
TUBE 7: 32
TUBE 8: 31

QUALITY
excellent, water very clear, surface leve, a few mucous balls on surface
very good, water clear, surface relief $=1 \mathrm{~cm}$, somt phytodetritus/mucous balls on surface good to very good, water clear to slightly turbid, surface relief $=1 \mathrm{~cm}$, some mucous balls on good to very good, water clear to slightly turbid, surface level, much brownish phytodetritus on good to very good, water somewhat turbid, surface relief $=1 / 2 \mathrm{~cm}$
very good, water clear, surface releif $=1 / 2 \mathrm{~cm}$, some loose flocculant material on surface good to very good, water clear to slightly turbid, surface level, some loose flocculant material on very good, water clear, surface relief $=1 \mathrm{~cm}$, smal burrow holes in surface,

DISTRIBUTION
Demaster
Smith
Demaster
Hedges
Dobbs
Anderson
Hedges
Leinen

SAMPLE USE
short lived radioisotopes
phaeopigments
biol. comp./short lived radioisotopes organic chemistry microbiology
trace metal profiles ( $\mathrm{Re}, \mathrm{Mo}, \mathrm{U}$ ), pore waters organic chemistry
paleo
STATION 113
AREA: 4 N

LATITUDE: 4.0413 LONGITUDE: 139.8508 DEPTH (m): 4431
NUMBER TUBES WITH SEDIMENT: 8

LENGTH (cm)
QUALITY

TUBE 1: 15 fair, water turbid, surface elvel, a few mucous balls on surface
TUBE 2: 29 good to very good, water clear to slightly turbid, surface level, a few mucous balls
TUBE 3: 29 excellent, water very clear, surface relief $=2 \mathrm{~cm}$, some mucous balls
TUBE 4: 30 very good, water clear, surface relief complex but low $=1 \mathrm{~cm}$
TUBE 5: 31 very good, water clear, surface slant $=1 \mathrm{~cm}$, some brown loose flocculant material
TUBE 6: 31
31 good to very good, water clear to slightly turbid, surface slant $=1.5 \mathrm{~cm}$, some loose flocculant
TUBE 7: 34 good to very good, water clear to slightly turbid,
TUBE 8: 34 fair, water turbid, surface level, 10 cm gap in core

DISTRIBUTION
Smith
Berelson
Leinen
Leinen
Leinen
Demaster
Berelson
Smith

SAMPLE USE meiofauna
porewater/whole core squeezer
paleo
paleo
paleo
biol. comp./long lived radioisotopes porewater/centrifuge
macrofauna

STATION 117
AREA: $\quad 5 \mathrm{~N}$
LATITUDE: 5.0717 LONGITUDE: 139.6383 DEPTH (m): 4333
NUMBER TUBES WITH SEDIMENT: 2

LENGTH (cm)
QUALITY
DISTRIBUTION
SAMPLE USE
TUBE 1: 0 empty
TUBE 2: 14 poor, sediment disturbed, tube drained along
TUBE 3: $\quad$ side
TUBE 4: $\quad 9$ poor, water turbid, surface uneven and slumped to side
TUBE 5: 0 empty
TUBE 6: 14 poor, water drained along side, surface even
TUBE 7: 15 fair, water turbid, surface slant $=1 / 2 \mathrm{~cm}$
TUBE 8: 14 fair, water turbid, surface level, a few mucous
meiofauna balls on surface

Demaster
Smith

| LENGTH |  | QUALITY | DISTRIBUTION | SAMPLE USE |
| :---: | :---: | :---: | :---: | :---: |
| TUBE 1: | 33 | good, water somewhat turbid, surface level, a few | Hedges | organic chemistry |
| TUBE 2: | 28 | fair, water somewhat surface, surface level, no flocs | Kadko | biol. comp./short lived radioisotopes |
| TUBE 3: | 31 | good, water somewhat turbid, surface level, resedimentation 6 mm on one side? | Leinen | paleo |
| TUBE 4: | 31 | fair, water turbid, surface relief $=1 \mathrm{~cm}$, a few mucous balls on surface | Smith | phaeopigments |
| TUBE 5: | 30 | good, water somewhat turbid, surface level, a few mucous balls on surface | Hedges | organic chemistry |
| TUBE 6; | 25 | good, water somewhat turbid, surface level, large burrow holes in surface | Kadko | biol. comp./short lived radioisotopes |
| TUBE 7: | 32 | good, water somewhat turbid, surface slants slightly, large vertical burrow | Dobbs | microbiology |
| TUBE 8: | 0 | empty |  |  |

## STATION <br> 124

AREA: $\quad 5 \mathrm{~N}$
LATITUDE: 5.0787 LONGITUDE: 139.6362 DEPTH (m): 4347
NUMBER TUBES WITH SEDIMENT: 0

LENGTH (cm)
QUALITY
DISTRIBUTION
SAMPLE USE
TUBE 1: 0 empty
TUBE 2: 0 empty
TUBE 3: 0 empty
TUBE 4: 0 empty
TUBE 5: 0 empty
TUBE 6: 0 empty
TUBE 7: 0 empty
TUBE 8: 0 empty

STATION 125
AREA: $\quad 5 \mathrm{~N}$
LATITUDE: 5.0817 LONGITUDE: 139.6317 DEPTH (m): 4340 NUMBER TUBES WITH SEDIMENT: 0

```
LENGTH (cm) QUALITY DISTRIBUTION SAMPLE USE
TUBE 1: 0 empty
TUBE 2: 0 empty
TUBE 3: 0 empty
TUBE 4: 0 empty
TUBE 5: 0 empty
TUBE 6: 0 empty
TUBE 7: 0 empty
TUBE 8: 0 empty
```

STATION 126
AREA: 5 N
LATITUDE: 5.0815 LONGITUDE: 139.6315 DEPTH (m): 4342 NUMBER TUBES WITH SEDIMENT: 0

```
LENGTH (cm)
QUALITY
TUBE 1: }0\mathrm{ empty
TUBE 2: 0 empty
TUBE 3: 0 empty
TUBE 4: 0 empty
TUBE 5: 0 empty
TUBE 6: 0 empty
TUBE 7: 0 empty
TUBE 8: 0 empty
```


## STATION <br> 127

AREA: $\quad 5 \mathrm{~N}$

## LATITUDE: 5.0800 LONGITUDE: 139.6137 DEPTH (m): 4342 NUMBER TUBES WITH SEDIMENT: 8

LENGTH (cm)
TUBE 1: 27
TUBE 2: 31
TUBE 3:
TUBE 4: 31
TUBE 5: 29
TUBE 6: 32
TUBE 7: 33
TUBE 8: 34
32

2

QUALITY
very good, water clear, surface level, much green phytodetritus along sides
very good, water clear, surface level, much pale green phytodetritus on surface
excellent, water very clear, surface releif $=1 \mathrm{~cm}$, some phvtodetritus excellent, water very clear, surface releive $=1.5$ cm , some phytodetritus excellent, water clear, surface slant $=2 \mathrm{~cm}$, phytodetritus on surface excellent, water very clear, surface slant $=2 \mathrm{~cm}$, much phytodetritus on surface, branching foram excellent, water very clear, surface elvel, much pale greenish phytodetritus along sides very good, water clear, surface level, greenish brown phytodetritus on surface

DISTRIBUTION
Smith
Demaster
Hedges
Demaster
Dobbs/Anderson
Smith
Hedges
Anderson

## SAMPLE USE

phaeopigments
biol. comp./short-lived radioisotopes/gamma emittor organic chemistry
biol. comp./short lived radioisotopes/gamma emitters microbiology/Th, Pa, Be ratios phaeopigments organic chemistry

Th/Pa/Be ratios

STATION
132
AREA: $\quad 9 \mathrm{~N}$

## LATITUDE: 8.9247 LONGITUDE: 139.8598 DEPTH (m): 4992 NUMBER TUBES WITH SEDIMENT: 6

LENGTH (cm)
TUBE 1: 0 empty
TUBE 2: 19
TUBE 3: 26
TUBE 4: 27
TUBE 5: 28
TUBE 6: 28
TUBE 7: 28
TUBE 8: 0 cm empty

QUALITY
good, water somewhat turbid, surface relief $=1$
very good, water clear, surface level, $3 \times 1 \mathrm{~cm}$ nodule, loose brown flocculant material on very good, water clear, surface level
good, water slightly turbid, surface relief $=1 \mathrm{~cm}$ good, water slightly turbid, surface level,
good, water slightly turbid, surface slant $=1 \mathrm{~cm}$; nodule entrained downcore appears to have

DISTRIBUTION

Dobbs
Hedges
Berelson
Smith
Berelson
Demaster/Kadko
biol. comp./ long lived radioisotopes


## MULTICORES

STATION
143
AREA: 9 N
LATITUDE: 8.9250 LONGITUDE: 139.8697 DEPTH (m): 4993 NUMBER TUBES WITH SEDIMENT: 8

LENGTH (cm)
TUBE 1: 35

TUBE 5: 35
TUBE 6: 36
TUBE 7: 33
TUBE 8: 36

TUBE 2: 37 very good, water clear, surface relief $=1 / 2 \mathrm{~cm}$, some clumps of loose borwn material
TUBE 3: 34 very good, water clear, surface level, some clumps of brown material on surface
TUBE 4: 37 very good, water clear, surface level, some loose brown flocculant material
very good, water clear, surface level, large holothurian coprolite on surface, some loose
6 very good, water clear, surface level, 2 small nodules on surface, some clumps of brown very good, water clear, surface level, smooth, some loose brown material on surface

## QUALITY

 very good, water clear, surface level, some loose brown material on surfaceDISTRIBUTION
Smith
Hedges
Smith
Anderson
Demaster
Hedges
Kadko
Kastner
r

SAMPLE USE
phaeopigments organic chemistry phaeopigments
$\mathrm{Re}, \mathrm{Mo}, \mathrm{U}$
biol. comp./long lived radioisotopes organic chemistry
biol, comp./long lived radioisotopes
Ba phases

## STATION <br> 147

AREA:
9 N
LATITUDE: 8.9273 LONGITUDE: 139.8657 DEPTH (m): 4992
NUMBER TUBES WITH SEDIMENT: 1

LENGTH (cm)
TUBE 1: 0 empty
TUBE 2: 0 empty
TUBE 3: 0 empty
TUBE 4: 12 fair, water clear to slightly turbid, surface level,
TUBE 5: 0 empty
TUBE 6: 0 empty
TUBE 7: 0 empty
TUBE 8: 0 empty

QUALITY
DISTRIBUTION
SAMPLE USE

# LATITUDE: 8.9267 LONGITUDE: 139.8717 DEPTH (m): 4991 

 NUMBER TUBES WITH SEDIMENT: 7| LENGTH (cm) |  | QUALITY | DISTRIBUTION | SAMPLE USE |
| :---: | :---: | :---: | :---: | :---: |
| TUBE 1: | 28 | very good, water clear, suface relief $=2 \mathrm{~cm}$, small | Demaster/Kadko |  |
| TUBE 2: | 34 | Mn nodule very good, water clear, surfac slant $=1 \mathrm{~cm}$ | Hedges | organic chemistry |
| TUBE 3: | 26 | very good, water clear, forams on surface, some vertical burrows | Dobbs | microbiology |
| TUBE 4: | 34 | good to very good, water clear to slightly turbid, surface leve, clump of agglutinated forams (?) on | Demaster | biol. comp./short lived radioisotopes |
| TUBE 5: | 33 | good to very good, water clear to slightly turbid, surface slant $=1 \mathrm{~cm}$ | Smith | phaeopigments |
| TUBE 6: | 33 | very good, water clear, surface level, a few small clumps on surface | Demaster | biol. comp./short lived radioisotopes |
| TUBE 7: | 31 | very good, water clear, surface level, some loose brown material on surface | Leinen | paleo |
| TUBE 8: | 0 | empty |  |  |

## STATION <br> 149

AREA: $\quad 9 \mathrm{~N}$
LATITUDE: 8.9283 LONGITUDE: 139.8633 DEPTH (m): 4993 NUMBER TUBES WITH SEDIMENT: 8

LENGTH (cm)
TUBE 1: 25
TUBE 2: 37
TUBE 3: 38
TUBE 4: 36
TUBE 5: 34
TUBE 6: $\quad 38$
TUBE 7: 37
TUBE 8: 38

QUALITY
good, water slightly turbid, surface slant $=1 / 2 \mathrm{~cm}$ some small clumps on surface good, water somewhat turbid, surface with slight relief, a few clumps on surface good, water somewhat turbid, surface level, som $\epsilon$ small clumps of forams (?) on surface good, water somewhat turbid, surface slant $=1$ $\mathrm{cm}, 2.5 \mathrm{~cm}$ Mn nodule on surface, good, water somewhat turbid, surface with cavity on one side, surface relief $=1.5 \mathrm{~cm}$ good, water somewhat turbid, surface slant $=1$ cm , a few small clumps on surface good, water somewhat turbid, surface relief $=1$ cm , some 5 mm clumps of forams(?) on surface good, water somewhat turbid, surface slant $=1$ cm , a few small 3 mm clumps on surface

DISTRIBUTION
Hedges
Hedges
Smith
Kadko
Leinen
Kadko
Smith
Demaster

## SAMPLE USE

organic chemistry
organic chemistry
phaeopigments
biol. comp./short lived radioisotopes paleo
biol. comp./short lived radioisotopes phaeopigments
biol. comp./long lived radioisotopes

STATION 153
AREA: $\quad 9 \mathrm{~N}$
LATITUDE: 8.9258 LONGITUDE: 139.8643 DEPTH (m): 5000 NUMBER TUBES WITH SEDIMENT: 8

LENGTH (cm)

QUALITY
TUBE 1: 30 good, water somewhat turbid, surface level,

TUBE 2: 37
TUBE 3: 35 good, water somewhat turbid, surface slant $=1$ cm
TUBE 4: 37 good, water somewhat turbid, surface level, smooth, one clump of brown material on surface
TUBE 5: 35
TUBE 6: 33
TUBE 7: 33 good, water somewhat turbid, surface slant =1 cm , surface smooth, possible resuspension
TUBE 8: 36 good, water slightly turbid, surface slant $=1.5 \mathrm{~cm}$

DISTRIBUTION
Hedges
Demaster
Demaster
Hedges
Anderson
Smith
Demaster
Dobbs/Hedges

SAMPLE USE
organic chemistry
biol. comp./short lived radioisotopes
biol. comp./short lived radioisotopes organic chemistry

Th/Pa/Be ratios
phaeopigments
biol. comp./short lived radioisotopes microbiology/organic chemistry

## NOTES ON SPADE CORE LOGS

The Spade Core (box core) sample log incuded in this section was compiled from several sources: the original sample distribution log kept by Susan Garner of the University of Hawaii group, and the notes of individual sample recipients. The lengths listed are the lengths of sediment sampled or curated, not necessary the total length of sediment cored by the Spade Corer.

Note: The abbreviation RIL stands for long-lived radionuclides. The abbreviation RIS stands for short-lived radionuclides.

## TT013 SPADE CORES

STATION: 20
AREA: 2 S
LATITUDE: -1.8665 LONGITUDE: 139.7178

| SAMPLE <br> TYPE | LENGTH <br> $(\mathrm{cm})$ | SAMPLE <br> DISTRIBUTION | SAMPLE <br> USE |
| :--- | :---: | :--- | :--- |
| $10 \times 20$ slab | 11 | Smith | x-radiography |
| $10 \times 20$ slab | 13 | Leinen | x-radiography |
| $10 \times 20 \mathrm{~cm}$ | 16 | Demaster | 14C |
| $10 \times 10 \mathrm{~cm}$ | 16 | Demaster | 14C |
| $41 / 2^{\prime \prime}$ tube | 18 | Leinen | paleo, subcore 1 |
| $41 / 2^{\prime \prime}$ tube | 17 | Leinen | paleo, subcore 2 |
| $41 / 2^{\prime \prime}$ tube | 18 | Leinen | paleo, subcore 3 |
| $4 "$ tube | 18 | Kastner/Payton | Ba phases |
| $4 "$ tube | 0 | Anderson/Colodne | Th, radionuclides |
| $10 \times 10 \mathrm{~cm}$ | 16 | Demaster | 14C |
| $10 \times 10 \mathrm{~cm}$ | 16 | Demaster | biogenic components |
| $10 \times 10 \mathrm{~cm}$ | 16 | Demaster | long radionuclides |
| $10 \times 10 \mathrm{~cm}$ | 15 | Demaster | gamma emitters |

Comments:
very pale brownish white sediment

## TT013 SPADE CORES

STATION: 35
AREA: 5 S
LATITUDE: -4.9725 LONGITUDE: 139.7367

| SAMPLE <br> TYPE | LENGTH <br> $(\mathrm{cm})$ | SAMPLE <br> DISTRIBUTION | SAMPLE <br> USE |
| :--- | :---: | :--- | :--- |
| $10 \times 30 \mathrm{~cm}$ | 15 | Smith | x-radiography |
| $10 \times 30 \mathrm{~cm}$ | 15 | Leinen | x-radiography |
| $10 \times 20 \mathrm{~cm}$ | 22 | Demaster | 14C |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | macrofauna |
| $3^{\prime \prime}$ tube | 5 | Hedges | organic chemistry |
| $41 / 2^{\prime \prime}$ tube | 23 | Leinen | paleo, subcore 1 |
| $41 / 2^{\prime \prime}$ tube | 25 | Leinen | paleo, subcore 2 |
| $4^{\prime \prime}$ tube | 22 | Payton/Kastner | Ba-phases |
| $4^{\prime \prime}$ tube | 0 | Anderson | pore waters |
| $10 \times 10 \mathrm{~cm}$ | 22 | Demaster | 14C |
| $10 \times 10 \mathrm{~cm}$ | 22 | Demaster | biogenic components |
| $10 \times 10 \mathrm{~cm}$ | 22 | Demaster | long radioisotopes |
| $10 \times 10 \mathrm{~cm}$ | 19 | Demaster | gamma emitters |
| Comments: |  |  |  |
| water in some sections, not in main section |  |  |  |

## TT013 SPADE CORES

STATION: 50
AREA: Equator

LATITUDE: 0.1000 LONGITUDE: 139.7317

| SAMPLE <br> TYPE | LENGTH <br> $(\mathrm{cm})$ | SAMPLE <br> DISTRIBUTION | SAMPLE <br> USE |
| :--- | :---: | :--- | :--- |
| $10 \times 30 \mathrm{~cm}$ | 13 | Smith | x-radiography |
| $10 \times 10 \mathrm{~cm}$ | 20 | Hedges | organic chemistry |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | meiofauna |
| $10 \times 20 \mathrm{~cm}$ | 20 | Demaster | 14C |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

Comments:
CRS 205

## TT013 SPADE CORES

STATION: 55
AREA: Equator
LATITUDE: 0.1158 LONGITUDE: 139.7340

| SAMPLE TYPE | $\begin{aligned} & \text { LENGTH } \\ & (\mathrm{cm}) \end{aligned}$ | $\begin{gathered} \text { SAMPLE } \\ \text { DISTRIBUTION } \end{gathered}$ | $\begin{aligned} & \text { SAMPLE } \\ & \text { USE } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| $10 \times 20 \mathrm{~cm}$ | 24 | Demaster | 14 C |
| $10 \times 10 \mathrm{~cm}$ | 24 | Demaster | 14C |
| $10 \times 30 \mathrm{~cm}$ slal | 19 | Smith | x-radiography |
| $10 \times 10 \mathrm{~cm}$ | 5 | Hedges | organic chemistry |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

Comments:
CRS-207

## TT013 SPADE CORES

| STATION: | 59 |  |  |
| :---: | :---: | :---: | :---: |
| AREA: | Equator |  |  |
| LATITUDE: | 0.1103 | LONGITUDE: 13 | 9.7327 |
| SAMPLE TYPE | $\begin{gathered} \text { LENGTH } \\ (\mathrm{cm}) \end{gathered}$ | SAMPLE DISTRIBUTION | $\begin{gathered} \text { SAMPLE } \\ \text { USE } \end{gathered}$ |
| $10 \times 20 \mathrm{~cm}$ | 14 | Demaster/Kadko | biol. comp.; RIL |
| $10 \times 30 \mathrm{~cm}$ | 14 | Leinen | X-radiography |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | meiofauna |
| 4 " tube | 14 | Kastner | Ba-phases |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

Comments:
CRS 209

## TT013 SPADE CORES

STATION: 65
AREA: Equator
LATITUDE: 0.1067 LONGITUDE: 139.7350

| SAMPLE TYPE | $\begin{aligned} & \text { LENGTH } \\ & (\mathrm{cm}) \end{aligned}$ | $\begin{gathered} \text { SAMPLE } \\ \text { DISTRIBUTION } \end{gathered}$ | $\begin{gathered} \text { SAMPLE } \\ \text { USE } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| $10 \times 10 \mathrm{~cm}$ | 0 | Demaster/Kadko | biol. comp.; RIL |
| $10 \times 10 \mathrm{~cm}$ | 0 | Hedges | organic chemistry |
| $10 \times 30 \mathrm{~cm}$ | 0 | Smith | x-radiography |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | meiofauna |
| bulk | 0 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

## Comments:

CRS 211

## TT013 SPADE CORES



## Comments:

excellent interface, burrows in upper 2 cm , horizontal burrows
concentrated around 2 cm

## TT013 SPADE CORES



Comments:
very good interface, numberous horizontal burrows at $1.5-2.0 \mathrm{~cm}$, green patches in upper $2-3 \mathrm{~cm}$ (phytodetritus?), white burrow infills at $14-15 \mathrm{~cm}$; possible arborescent foram on surface

## TT013 SPADE CORES

STATION: 80

AREA: 2 N
LATITUDE: 2.0667
LONGITUDE: 140.1317

| SAMPLE <br> TYPE | LENGTH <br> $(\mathrm{cm})$ | SAMPLE <br> DISTRIBUTION | SAMPLE <br> USE |
| :--- | :---: | :--- | :--- |
| $10 \times 30 \mathrm{~cm}$ | 11 | Smith | x-radiography |
| $10 \times 20 \mathrm{~cm}$ | 16 | Demaster/Kadko | 14 C |
| $10 \times 10 \mathrm{~cm}$ | 16 | Demaster/Kadko | 14 C |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | meiofauna |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
| Comments: | 0 |  |  |
| some phytodetritus on surface, interface has several 1-2 mm burrow |  |  |  |
| openings, several large foraminifers |  |  |  |

## TT013 SPADE CORES



Comments:
fair interface, few burrows

## TT013 SPADE CORES

STATION: 91
AREA: 2 N
LATITUDE: 2.0633 LONGITUDE: 140.1317

| SAMPLE TYPE | $\begin{aligned} & \text { LENGTH } \\ & (\mathrm{cm}) \end{aligned}$ | $\begin{gathered} \text { SAMPLE } \\ \text { DISTRIBUTION } \end{gathered}$ | SAMPLE USE |
| :---: | :---: | :---: | :---: |
| $10 \times 30 \mathrm{~cm}$ | 13 | Leinen | x-radiography |
| $10 \times 20 \mathrm{~cm}$ | 19 | Demaster/Kadko | biol. comp., RIS |
| $10 \times 10 \mathrm{~cm}$ | 19 | Demaster/Kadko | biol. comp. |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | meiofauna |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

## Comments:

good interace, many vertical burrows in upper 2 cm ; hortizontal burrows concentrated in upper $2-3 \mathrm{~cm}$, phytodetritus covers about $50 \%$ of intervals, mixed into upper cm , but not in burrows

## TT013 SPADE CORES

STATION: 95
AREA: 2 N
LATITUDE: 2.0518 LONGITUDE: 140.1445

| SAMPLE TYPE | $\begin{aligned} & \text { LENGTH } \\ & (\mathrm{cm}) \end{aligned}$ | $\begin{gathered} \text { SAMPLE } \\ \text { DISTRIBUTION } \end{gathered}$ | SAMPLE USE |
| :---: | :---: | :---: | :---: |
| $10 \times 30 \mathrm{~cm}$ | 11 | Smith | x-radiography |
| $10 \times 20 \mathrm{~cm}$ | 19 | Demaster/Kadko | gamma emitters |
| $10 \times 10 \mathrm{~cm}$ | 5 | Hedges | organic chemistry |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

## Comments:

sloppy interface; vertical tubes about 1-2 mm in diam extend down to 5
cm , possible feeding void at 3 cm depth

## TT013 SPADE CORES



Comments:

## TT013 SPADE CORES

| STATION: | 107 |  |  |
| :---: | :---: | :---: | :---: |
| AREA: | 5 N |  |  |
| LATITUDE: | 5.0833 | LONGITUDE: 13 | . 6500 |
| SAMPLE TYPE | $\begin{gathered} \text { LENGTH } \\ (\mathrm{cm}) \end{gathered}$ | SAMPLE DISTRIBUTION | SAMPLE USE |
| $10 \times 30 \mathrm{~cm}$ | 13 | Smith | x-radiography |
| $10 \times 20 \mathrm{~cm}$ | 19 | Demaster/Kadko | 14C |
| $10 \times 10 \mathrm{~cm}$ | 19 | Demaster/Kadko | 14 C |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | meiofauna |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

Comments:

# TT013 SPADE CORES 



Comments:

## TT013 SPADE CORES

STATION: 116
AREA: 5 N
LATITUDE: 5.0800 LONGITUDE: 139.6417

| SAMPLE TYPE | $\begin{aligned} & \text { LENGTH } \\ & (\mathrm{cm}) \end{aligned}$ | $\begin{gathered} \text { SAMPLE } \\ \text { DISTRIBUTION } \end{gathered}$ | SAMPLE USE |
| :---: | :---: | :---: | :---: |
| $10 \times 30 \mathrm{~cm}$ | 14 | Smith | x-radiography |
| $10 \times 20 \mathrm{~cm}$ | 18 | Demaster/Kadko | biol. comp./RIS |
| $10 \times 10 \mathrm{~cm}$ | 5 | Hedges | organic chemistry |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | meiofauna |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

Comments:

## TT013 SPADE CORES



Comments:

## TT013 SPADE CORES

STATION: 131
AREA: 9 N
LATITUDE: 8.9300 LONGITUDE: 139.8700

| SAMPLE TYPE | $\begin{gathered} \text { LENGTH } \\ (\mathrm{cm}) \end{gathered}$ | $\begin{gathered} \text { SAMPLE } \\ \text { DISTRIBUTION } \end{gathered}$ | SAMPLE USE |
| :---: | :---: | :---: | :---: |
| $10 \times 30 \mathrm{~cm}$ | 18 | Smith | x-radiography |
| $10 \times 20 \mathrm{~cm}$ | 26 | Demaster/Kadko | 14 C |
| $10 \times 10 \mathrm{~cm}$ | 5 | Hedges | organic chemistry |
| $10 \times 10 \mathrm{~cm}$ | 10 | Smith | meiofauna |
| bulk | 10 | Smith | macrofauna |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |
|  | 0 |  |  |

Comments:

## TT013 SPADE CORES



Comments:
very soupy interface

## TT013 SPADE CORES



## Comments:

not useable, top sediment missing

## TT013 SPADE CORES



## Comments:

extremely clear topwater

## TT013 SPADE CORES



Comments:
core missing top sediment except along one side

## TT013 SPADE CORES



Comments:

## TT013 SPADE CORES



Comments:

STATION: 3
AREA: 12 S
LATITUDE: -11.9970 LONGITUDE: 134.9552
DEPTH (m): 4272

Trigger Core Length (cm): 198
$\operatorname{Sec} 1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
150
48

## Comments:

Sec $1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
Sec 3 (cm):
Sec $4(\mathrm{~cm})$ :
Sec $5(\mathrm{~cm})$ :
Sec 6 (cm):
Sec $7(\mathrm{~cm})$ :
Sec $8(\mathrm{~cm})$ :
Sec 9 (cm):
Sec $10(\mathrm{~cm})$ :
Sec $11(\mathrm{~cm})$ :

150
150
150
143
150
150
70
0
0 Cum. (cm):
0 Cum. (cm):
0 Cum. (cm):

No. Sections: 7
Cum. (cm): $\quad 150$
Cum. (cm): $\quad 300$
Cum. (cm): $\quad 450$
Cum. (cm): 593
Cum. (cm): $\quad 743$
Cum. (cm): 893
Cum. $(\mathrm{cm}): \quad 963$
Cum. (cm): $\quad 0$
0
0
0
0

## Area Description:

Area is a bench about 0.4 nm in E-W dimension; trending N/S.
3.5 KHz shows a transparent layers about $10-12 \mathrm{~m}$ thick, underlain by a layered interval at least 80 m thick

## Sediment Notes:

Core catcher sample is dark chocolate brown with very fine texture; top of core is lighter brown.

STATION: 18
AREA: 2 S
LATITUDE: -1.8395 LONGITUDE: 139.7137
DEPTH (m): 4354

Trigger Core Length (cm): 244
$\operatorname{Sec} 1(\mathrm{~cm})$ :
150
Sec $2(\mathrm{~cm}): \quad 94$ Cum. $(\mathrm{cm})$ :
Comments:

Piston Core Length (cm): 1295
Sec $1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
Sec 3 (cm):
Sec 4 (cm):
Sec 5 (cm):
Sec 6 (cm):
Sec $7(\mathrm{~cm})$ :
Sec $8(\mathrm{~cm})$ :
Sec $9(\mathrm{~cm})$ :
Sec 10 (cm):
Sec 11 (cm):

150
146
150
150
150
145
150
150
104
0 Cum. (cm):
0 Cum. (cm):
Cum. (cm):

Cum. (cm):
Cum. (cm):
Cum. (cm):

No. Sections: 9
150
Cum. (cm): 296
446
596
746
Cum. (cm): 891
Cum. (cm): 1041
Cum. (cm): 1191
Cum. (cm): 1295
Cum. (cm): 0

No. Sections: 2
150
244

STATION: 26
AREA: 3 S
LATITUDE: -2.8883 LONGITUDE: 139.8367

Trigger Core Length (cm): 224
Sec 1 (cm)
Sec $2(\mathrm{~cm})$ :
150
74
Comments:

Piston Core Length (cm): 0
Sec 1 (cm):
Sec $2(\mathrm{~cm})$ :
Sec 3 (cm):
Sec 4 (cm):
Sec 5 (cm):
Sec 6 (cm):
Sec $7(\mathrm{~cm})$ :
Sec 8 (cm):
Sec $9(\mathrm{~cm})$ :
Sec $10(\mathrm{~cm})$ :
Sec 11 (cm):

150
144
150
150
150
145
150
150
57
0
0

Cum. (cm):
Cum. (cm):

No. Sections: 2
150
224

Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):

No. Sections: 9

$$
150
$$2944445947448891039118912460

0

## Area Description:

Area of roughly 6 km of flat-lying sediments with internal reflectors. Sediment thickness is greater than 90 m .

## Sediment Notes:

Uppermost sediments are light grayish brown, fine-grained with abundant forams. Deeper sediments grade to medium brown. Sediment is abundantly burrowed.

STATION: 29
AREA: 4 S
LATITUDE: -4.2023 LONGITUDE: 139.7920
DEPTH (m): 4486

Trigger Core Length (cm): 135
$\mathrm{Sec} 1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :

## Comments:

No. Sections: 1
135

Piston Core Length (cm): 1143
Sec $1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
$\mathrm{Sec} 3(\mathrm{~cm})$ :
Sec $4(\mathrm{~cm})$ :
Sec 5 (cm):
Sec 6 (cm):
Sec $7(\mathrm{~cm})$ :
Sec 8 (cm):
Sec 9 (cm):
Sec 10 (cm):
Sec $11(\mathrm{~cm})$ :

150
146
150
150
150
133
150
114
0 Cum. (cm):
0 Cum. (cm):
0 Cum. (cm):
Cum. (cm):

Cum. (cm):
Cum. (cm):
Cum. (cm):

No. Sections: 8
150
Cum. (cm): 296
446
596
746
Cum. (cm): $\quad 879$
Cum. (cm): 1029
Cum. (cm): $\quad 1143$
Cum. $(\mathrm{cm}): \quad 0$
Cum. (cm): 0
Cum. $(\mathrm{cm}): \quad 0$

## Area Description:

Area is a bench about 1 nm in E-W direction, gently dipping to the south. To the west is a basin about 4 nm across bounded on the west by a seamount complex. To the east is another small bench about 50 m higher.

## Sediment Notes:

Surface sediments are foram-rich ooze that is light brown. Sediments about 4 m depth are dark brown, core catcher sediments are medium brown and abundantly burrowed with light brown sediment.

STATION: 32
AREA: 5 S
LATITUDE: -4.9605 LONGITUDE: 139.7436
DEPTH (m): 4236

Trigger Core Length (cm):
$\sec 1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
Comments:

244
Cum. (cm):
Cum. (cm):

No. Sections: 2
150
94

## Piston Core Length (cm): 1366

Sec $1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
Sec 3 (cm):
Sec $4(\mathrm{~cm})$ :
Sec 5 (cm):
Sec $6(\mathrm{~cm})$ :
Sec $7(\mathrm{~cm})$ :
Sec 8 (cm):
Sec 9 (cm):
Sec $10(\mathrm{~cm})$ :
Sec $11(\mathrm{~cm})$ :

150
147
150
150
150
143
150
150
150
26
0 Cum. (cm):
Cum. (cm):

No. Sections: 10
150
Cum. (cm): 297
497
Cum. (cm): 597
Cum. (cm): $\quad 747$
Cum. (cm): 890
Cum. (cm): 1040
Cum. (cm): $\quad 1190$
Cum. (cm): $\quad 1340$
Cum. (cm): $\quad 1366$1366

## Area Description:

Area is a small basin about 2 nm in $\mathrm{E}-\mathrm{W}$ dimension between abyssal hill ridges with about 100 m of relief. N-S dimension of the basin is about 4 nm . Acoustic records show a thin transparent layer (about 5 m ) over layered sediment.

## Sediment Notes:

STATION: 52
AREA: Equator
LATITUDE: 0.0993
LONGITUDE: 139.7373
DEPTH (m): 4327

Trigger Core Length (cm): 334

| Sec 1 (cm): | 150 | Cum. $(\mathrm{cm}):$ | 150 |
| :--- | :--- | :--- | :--- |
| Sec 2 $(\mathrm{cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 150 |

Comments:
Trigger core sediment extended beyond liner into weightstand. Excess sediment was forced into section of liner from the top. Sediment in this third section is extremely disturbed and the top of the sediment column may be missing.

Piston Core Length (cm): 1483
Sec $1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
Sec 3 (cm):
Sec $4(\mathrm{~cm})$ :
Sec $5(\mathrm{~cm})$ :
Sec $6(\mathrm{~cm})$ :
Sec $7(\mathrm{~cm})$ :
Sec $8(\mathrm{~cm})$ :
Sec $9(\mathrm{~cm})$ :
Sec $10(\mathrm{~cm})$ :
Sec 11 (cm):

151
150
151
143
150
151
150
102
149
126
61

Cum. (cm):
Cum. (cm):
Cum. (cm): 452
Cum. (cm): 595
Cum. (cm): 745
Cum. (cm):896
Cum. (cm): ..... 2046
Cum. (cm): ..... 1148
Cum. (cm): ..... 1297
Cum. (cm): ..... 1423
Cum. (cm): ..... 1484

## Area Description:

Area is a plain about $6 \mathrm{~km} \times 5 \mathrm{~km}$ with a low abyssal hill to the west. 3.5 kHz shows many internal reflectors.

## Sediment Notes:

Break in core between Sec 8 and 9. Bottom 10 cm of $\operatorname{Sec} 9$ disturbed, some sediment lost. Top of Sec 8 disturbed. Top 10 cm of $\operatorname{Sec} 11$ disturbed. Top 5 cm of $\operatorname{Sec} 11$ fell out of liner, collected in bag.

STATION: 61
AREA: 1 S
LATITUDE: -0.8640 LONGITUDE: 139.8307
DEPTH (m): 4276

Trigger Core Length (cm): 215
$\operatorname{Sec} 1(\mathrm{~cm}): \quad 150$
$\mathrm{Sec} 2(\mathrm{~cm}): \quad 65$
Comments:

Cum. (cm):
Cum. (cm):

No. Sections: 2

Piston Core Length (cm): 1559
Sec $1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
Sec 3 (cm):
Sec $4(\mathrm{~cm})$ :
Sec $5(\mathrm{~cm})$ :
Sec $6(\mathrm{~cm})$ :
Sec $7(\mathrm{~cm})$ :
Sec 8 (cm):
Sec 9 (cm):
Sec $10(\mathrm{~cm})$ :
Sec $11(\mathrm{~cm})$ :

Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm): 1187
Cum. (cm): 1337
Cum. (cm):
Cum. (cm):

No. Sections: 1114329344359374389310431187133714871559

## Area Description:

Coring site is a flat laying region of about 2 km within surveyed area. Surveyed area is about 10 km across and has gentle region dip to east. Entire area has even sediment drape with many internal reflectors.

## Sediment Notes:

Sediment at base is very pale grayish green (nearly white) with burrows filled with very pale gray sediment; Sections 7 and 8 contain pale olive burrows in white sediment; Sections 9 and above are very pale brown.

## TT013 PISTON CORE

STATION: 72
AREA: Equator
LONGITUDE: 139.4015
DEPTH (m): 4298

Trigger Core Length (cm): 300

| Sec $1(\mathrm{~cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 150 |
| :--- | :--- | :--- | :--- |
| Sec 2 $(\mathrm{cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 300 |

## Comments:

Trigger corer full. Sediment extended about 3 cm above the top of the liner. Topmost sediment recovered in a plastic bag.

| Piston Core Length (cm): | 1603 | No. Sections: 11 |  |
| :--- | :---: | :---: | :---: |
| Sec $1(\mathrm{~cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 150 |
| Sec 2 (cm): | 150 | Cum. $(\mathrm{cm}):$ | 300 |
| Sec 3(cm): | 150 | Cum. $(\mathrm{cm}):$ | 450 |
| Sec $4(\mathrm{~cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 600 |
| Sec $5(\mathrm{~cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 750 |
| Sec $6(\mathrm{~cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 900 |
| Sec 7 $(\mathrm{cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 1050 |
| Sec $8(\mathrm{~cm}):$ | 145 | Cum. $(\mathrm{cm}):$ | 1195 |
| Sec $9(\mathrm{~cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 1345 |
| Sec $10(\mathrm{~cm}):$ | 150 | Cum. $(\mathrm{cm}):$ | 1495 |
| Sec $11(\mathrm{~cm}):$ | 108 | Cum. $(\mathrm{cm}):$ | 1603 |

## Area Description:

A broad sedimented plain with a N/S trending abyssal hill to the west. Relief in coring site is about 40 m in 2 km .3 .5 KHz shows flat-lying sediments with many internal reflectors.

## Sediment Notes:

Sediment in core catcher is very pale grayish green-almost white-with fine dark gray pyrite in burrows; sediment about half way up core turns to very pale brown fine grained nanno ooze with forams.

STATION: 83
AREA: 2 N
LATITUDE: 2.0670
LONGITUDE: 140.1467

Trigger Core Length (cm): 0
Sec $1(\mathrm{~cm}): \quad 0 \quad$ Cum. $(\mathrm{cm})$ :
Sec $2(\mathrm{~cm}): \quad 0 \quad$ Cum. $(\mathrm{cm})$ :

No. Sections: 0
0
0

## Comments:

Core catcher failed. Lost all sediment from trigger core.

Piston Core Length (cm): 1484
Sec $1(\mathrm{~cm})$ :
Sec $2(\mathrm{~cm})$ :
Sec 3 (cm):
Sec $4(\mathrm{~cm})$ :
Sec 5 (cm):
Sec 6 (cm):
$\operatorname{Sec} 7(\mathrm{~cm})$ :
Sec $8(\mathrm{~cm})$ :
Sec $9(\mathrm{~cm})$ :
Sec 10 (cm):
Sec 11 (cm):

150
150
150
144
151 150
150
143
150
146
0

Cum. (cm):
No. Sections: 10

Cum. (cm): $\quad 300$
Cum. (cm): 450
Cum. (cm): 594
Cum. (cm): 745
Cum. (cm): 895
Cum. (cm): 1045
Cum. (cm): 1188
Cum. (cm): 1338
Cum. (cm): 1484
Cum. (cm):

```150
```30045059474589510451188133814840

\section*{Area Description:}

Area is a 4 km very shallow ( \(<20 \mathrm{~m}\) ) depression flanked by a 80 m low ridge to the east. 3.5 KHz records show thick sediment cover with many internal reflectors.

\section*{Sediment Notes:}

Sediments are very paleo yellowish brown to yellowish brown foraminifer nannofossil oozes. The sediments are abundantly burrowed. The uppermost section was highly disturbed.

STATION: 89
AREA: 1 N
LATITUDE: 0.8140
LONGITUDE: 139.9192
DEPTH (m): 4412

Trigger Core Length (cm): 300
\begin{tabular}{llll} 
Sec \(1(\mathrm{~cm}):\) & 150 & Cum. \((\mathrm{cm}):\) & 150 \\
Sec 2(cm): & 150 & Cum. \((\mathrm{cm}):\) & 300
\end{tabular}

150

\section*{Comments:}

Sec \(1(\mathrm{~cm})\) :
Sec \(2(\mathrm{~cm})\) :
Sec 3 (cm):
Sec \(4(\mathrm{~cm})\) :
Sec 5 (cm):
Sec \(6(\mathrm{~cm})\) :
Sec 7 (cm):
Sec \(8(\mathrm{~cm})\) :
Sec 9 (cm):
Sec \(10(\mathrm{~cm})\) :
Sec 11 (cm):

150
150
150
142
150
150
150
145
150
143
0

1480
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):

No. Sections: 10
150
300
450
592
742
892
1042
1187
1337
1480

\section*{Area Description:}

Area is a bench at \(\sim 4410 \mathrm{~m}\) trending NE/SW, Bench is about 2 km wide. To the west is a sediment-covered ridge with about 80 m relief. To the east is a deeper bench at \(\sim 4450 \mathrm{~m}\). Seamounts with 200 m relief about 8 km to the north.

\section*{Sediment Notes:}

Sediment in core catcher is very pale brown, almost white, nannofossil ooze with abundant foraminifers. Sediment at sections breaks upcore increases in non-biogenic content and becomes light brown.

\section*{TT013 PISTON CORE}

STATION: 96
AREA: 2 N
LATITUDE: 2.0652 LONGITUDE: 140.1493
DEPTH (m): 4417

Trigger Core Length (cm): 168

Sec 1 (cm):
Sec \(2(\mathrm{~cm})\) :
150
18
Comments:
Gravity core only to replace trigger core lost at Station 83. Sediment is pale brown.

Piston Core Length (cm): 0
Sec 1 (cm):
Sec \(2(\mathrm{~cm})\) :
Sec 3 (cm):
Sec \(4(\mathrm{~cm})\) :
Sec 5 (cm):
Sec 6 (cm):
Sec 7 (cm):
Sec \(8(\mathrm{~cm})\) :
Sec 9 (cm):
Sec \(10(\mathrm{~cm})\) :
Sec 11 (cm):

0 Cum. (cm):
0 Cum. (cm):
0 Cum. (cm):
0 Cum. (cm):
0 Cum. (cm):
0 Cum. (cm):
0 Cum. (cm):
0 Cum. (cm): 0
0 Cum. (cm): 0
0 Cum. (cm): 0
0 Cum. (cm): 0

No. Sections: 000000000000

\section*{Area Description:}

Sediment Notes:

STATION: 105
AREA: 5 N
LATITUDE: 5.0780
LONGITUDE: 139.6270
DEPTH (m): 4410

Trigger Core Length (cm): 224
Sec \(1(\mathrm{~cm}): \quad 150\)
Sec \(2(\mathrm{~cm}): \quad 74\)
Comments:

Piston Core Length (cm):
\(\mathrm{Sec} 1(\mathrm{~cm})\) :
Sec \(2(\mathrm{~cm})\) :
Sec 3 (cm):
Sec \(4(\mathrm{~cm})\) :
Sec \(5(\mathrm{~cm})\) :
Sec \(6(\mathrm{~cm})\) :
Sec \(7(\mathrm{~cm})\) :
Sec \(8(\mathrm{~cm})\) :
Sec 9 (cm):
Sec \(10(\mathrm{~cm})\) :
Sec \(11(\mathrm{~cm})\) :

150
149
150
101
150
54
36
0
0
0
0 Cum. (cm):
Cum. (cm):

Cum. (cm):
Cum. (cm):

No. Sections: 7
150
Cum. (cm): 299
Cum. (cm): 449
Cum. (cm): 550
700
754
Cum. (cm): \(\quad 790\)
Cum. \((\mathrm{cm}): \quad 0\)
Cum. (cm): 0
Cum. (cm): 0
Cum. (cm): 0

\section*{Area Description:}

Area is a broad sediment-covered plain with less than 100 m of relief in twelve n miles. Immediate area has gentle slope of about 20 m in two n miles. 3.5 KHz record shows many internal reflectors.

\section*{Sediment Notes:}

Sediment is very pale yellowish brown to pale yellowish brown nannofossil ooze with abundant foraminifera. Darker intervals show many burrows. Breaks in core between sections 3, 4, 5, 6 , and 7.

STATION: 114
AREA: 4 N
LATITUDE: 4.0433 LONGITUDE: 139.8508

Trigger Core Length (cm): 288
\begin{tabular}{llll} 
Sec \(1(\mathrm{~cm}):\) & 150 & Cum. \((\mathrm{cm}):\) & 150 \\
Sec 2 \((\mathrm{cm}):\) & 138 & Cum. \((\mathrm{cm}):\) & 288
\end{tabular}

\section*{Comments:}
Piston Core Length (cm): 1308
Sec \(1(\mathrm{~cm})\) :

Sec \(2(\mathrm{~cm}): \quad 149\)
Sec \(3(\mathrm{~cm}): \quad 150\)
Sec \(4(\mathrm{~cm}): \quad 150\)
Sec \(5(\mathrm{~cm})\) :
Sec 6 (cm):
Sec 7 (cm):
Sec 8 (cm):
Sec 9 (cm):
Sec \(10(\mathrm{~cm})\) :
Sec \(11(\mathrm{~cm})\) :

149

150
146
150
150
114
0
0

Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm):
Cum. (cm): 1044
Cum. (cm): 1194
Cum. (cm):
Cum. (cm):
Cum. (cm):

No. Sections: 91492984485987488941044119413080

0

\section*{Area Description:}

Area is very gently sloping sediment-covered abyssal hill topography. Area has about 20 m relief in 2 km .3 .5 KHz record shows many internal reflectors.

\section*{Sediment Notes:}

Sediments are yellowish brown to very pale yellowish brown. Pale sediments are nannofossil ooze with foraminifera. Brown sediments are richer in foraminifer. Darker intervals have abundant burrows.

STATION: 133
AREA: 9 N
LATITUDE: 8.9512 LONGITUDE: 139.8708
DEPTH (m): 4990

Trigger Core Length (cm): 220
\(\operatorname{Sec} 1(\mathrm{~cm})\) :
Sec \(2(\mathrm{~cm})\) :

\section*{Comments:}
Piston Core Length (cm): 1340
\(\mathrm{Sec} 1(\mathrm{~cm})\) :
Sec \(2(\mathrm{~cm})\) :
Sec 3 (cm):
Sec \(4(\mathrm{~cm})\) :
Sec \(5(\mathrm{~cm})\) :
Sec 6 (cm):
Sec \(7(\mathrm{~cm})\) :
Sec 8 (cm):
Sec 9 (cm):
Sec 10 (cm):
Sec \(11(\mathrm{~cm})\) :

\section*{Area Description:}

Target area is a small basin about 1 km E-W by 2 km N-S. The basin is about 40 m deeper than a ridge on which it is located. 3.5 KHz record shows about 40 m of transparent sediment over basement (?). Area is generally rugged topography with many

\section*{Sediment Notes:}

Sediment in core catcher are chocolate brown crumbly clays. Section breaks further up the core show abundant mottling and burrows of lighter colored sediment. Some lighter colored intervals at core breaks are light brown.

\section*{TT013 HYDROCASTS}
STATION: 2

AREA: 12 S
LATITUDE: -11.5965
DATE: 11/03/92 TIME (GMT): 09:28
LOCAL TIME: 23:28
DEPTH 1: 835 DEPTH 6: 4329
DEPTH 2: 1500
DEPTH 7: 0
DEPTH 3: 2200 DEPTH 8: 0
DEPTH 4: 2900 DEPTH 9: 0
DEPTH 5: 3600 DEPTH 10: 0
COMMENTS:
Bottle depths inferred from decibar readings, last bottle 25 m above bottom

STATION: 7
AREA: 12 S
LATITUDE: -11.959
DATE: 11/04/92 TIME (GMT): 06:44
LOCAL TIME: 20:44
DEPTH 1: \(0 \quad\) DEPTH 6: 120
DEPTH 2: 20 DEPTH 7: 150
DEPTH 3: 40 DEPTH 8: 200
DEPTH 4: 60 DEPTH 9: 350
DEPTH 5: 90 DEPTH 10: 0
COMMENTS:
Samples taken for Dr. C. Jeandel, plankton, thorium

\section*{TT013 HYDROCASTS}

STATION: 16
AREA: 2 S
LATITUDE: -1.830
DATE: 11/07/92 TIME (GMT): 22:39
LOCAL TIME: 12:30
DEPTH 1: 835 DEPTH 6: 4332
DEPTH 2: 1500 DEPTH 7: 0
DEPTH 3: 2200 DEPTH 8: 0
DEPTH 4: 2900 DEPTH 9: 0
DEPTH 5: 3600 DEPTH 10: 0

\section*{COMMENTS:}

Depths inferred from decibars, last bottle 25 m above bottom; three bottled leaked

STATION: 21
AREA: 2 S
LATITUDE: -1.8122 LONGITUDE: 139.7218
DATE: 11/08/92 TIME (GMT): 16:00
LOCAL TIME: 06:00
DEPTH 1: 0
DEPTH 6:
120
DEPTH 2
20
DEPTH 7:
150
DEPTH 3:
DEPTH 4:
DEPTH 5:
40
DEPTH 8: 200

DEPTH 9: 350
DEPTH 10: 500

\section*{COMMENTS:}
\(0-500 \mathrm{~m}\) for plankton, thorium analysis

\section*{TT013 HYDROCASTS}
\begin{tabular}{ll} 
STATION: & 31 \\
AREA: & 5 S
\end{tabular}

LATITUDE: -4.9662
DATE: \(11 / 10 / 92\) TIME (GMT): 19:25
LOCAL TIME: 09:25

DEPTH 1:

835

DEPTH 2:
DEPTH 3: 2200
DEPTH 4: 2900
DEPTH 5: 3600
COMMENTS:
depth from decibars, last bottle 25 m above bottom, three bottles did not close properly

STATION: ..... 36
AREA: ..... 5 S
LATITUDE: -4.9563LOCAL TIME: 03:37
DEPTH 1: ..... 1500
DEPTH 6: ..... 0
DEPTH 2: ..... 2200DEPTH 3:29004352LONGITUDE:
DATE: 11/11/92 TIME (GMT): 13:3703:37
3600
DEPTH 4:

DEPTH 5:139.7735

\section*{COMMENTS:}
last bottle 25 m above bottom; depths from decibars, previous cast missed at least three depths, this replaces them

\section*{TT013 HYDROCASTS}

depths from millibars, last bottle 25 m above bottom; three bottles did not close properly

\section*{TT013 HYDROCASTS}


First cast missed three depths; this cast replaces them

\section*{TT013 HYDROCASTS}

STATION: 85
AREA: 2 N
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
LATITUDE \\
DATE:
\end{tabular}} & 2.0278 & \multicolumn{2}{|l|}{LONGITUDE:} & \multirow[t]{3}{*}{140.1227} \\
\hline & 11/22/92 & TIME (GMT) : & 18:01 & \\
\hline & & LOCAL TIME: & 08:01 & \\
\hline DEPTH 1: & 835 & DEPTH 6: & & 4383 \\
\hline DEPTH 2: & 1500 & DEPTH 7: & & 0 \\
\hline DEPTH 3: & 2200 & DEPTH 8: & & 0 \\
\hline DEPTH 4: & 2900 & DEPTH 9: & & 0 \\
\hline DEPTH 5: & 3600 & DEPTH 10: & & 0 \\
\hline
\end{tabular}

\section*{COMMENTS:}
depths from millibars, last bottle 25 m above bottom

STATION: 92
AREA: 2 N

LATITUDE: 2.0565
DATE: 11/24/92 TIME (GMT): 12:34
LOCAL TIME: 02:34
0 DEPTH 6:
120
DEPTH 7: 150
DEPTH 8: 200
DEPTH 9: 350
DEPTH 10: 545

COMMENTS:
shallow cast for plankton, thorium, C. Jeandel

\section*{TT013 HYDROCASTS}
\begin{tabular}{|c|c|c|c|c|}
\hline STATION: & 102 & & & \\
\hline AREA: & 5 N & & & \\
\hline LATITUDE: & 5.1162 & LONGIT & UDE: & 139.7330 \\
\hline DATE: & 11/27/92 & TIME (GMT): & 07:00 & \\
\hline & & LOCAL TIME: & 19:00 & \\
\hline DEPTH 1: & 835 & DEPTH 6: & & 4348 \\
\hline DEPTH 2: & 1500 & DEPTH 7: & & 0 \\
\hline DEPTH 3: & 2200 & DEPTH 8: & & 0 \\
\hline DEPTH 4: & 2900 & DEPTH 9: & & 0 \\
\hline DEPTH 5: & 3600 & DEPTH 10: & & 0 \\
\hline COMMENTS: & & & & \\
\hline
\end{tabular}
depths from millibars, last bottle 25 m above bottom; three bottles leaked

STATION: 119
AREA: \(\quad 5 \mathrm{~N}\)
LATITUDE: 5.1070
DATE: 11/30/92 TIME (GMT): 18:34
LOCAL TIME: 08:34
DEPTH 1: 835 DEPTH 6: 0
DEPTH 2: 2900 DEPTH 7: 0
DEPTH 3: 4270 DEPTH 8: 0
DEPTH 4: \(0 \quad\) DEPTH 9: 0
DEPTH 5: 0 DEPTH 10: 0
COMMENTS:
reprise of Sta 102 to get samples at depths where bottles leaked or did not close

\section*{TT013 HYDROCASTS}

STATION: 120
AREA: \(\quad 5 \mathrm{~N}\)
LATITUDE: 5.0818 LONGITUDE: 139.7410
DATE: 11/30/92 TIME (GMT): 22:30
LOCAL TIME: 12:30
DEPTH 1: 0
DEPTH 6: 120
DEPTH 2: 20
DEPTH 3: 40
DEPTH 7:
150
DEPTH 8: 200
DEPTH 9: 0
DEPTH 10: 0
COMMENTS:
shallow cast for plankton

STATION: 141
AREA: 9 N
LATITUDE: 8.9412
DATE: 12/06/92 TIME (GMT): 01:31
LOCAL TIME: 15:31
DEPTH 1: 835
DEPTH 2: 1400
DEPTH 6: 4925
DEPTH 7:
DEPTH 3: 2300
DEPTH 8:
0
DEPTH 4: 3200 DEPTH 9: 0
DEPTH 5: 4100
DEPTH 10: 0
COMMENTS:
bottles at 835 and 3200 m did not trip

\section*{TT013 HYDROCASTS}

STATION: 146
AREA: 9 N
LATITUDE: 8.9433 LONGITUDE: 139.8658
DATE: 12/06/92 TIME (GMT): 19:47
LOCAL TIME: 09:47
DEPTH 1: \(0 \quad\) DEPTH 6: 120
DEPTH 2: 20 DEPTH 7: 150
DEPTH 3: 40 DEPTH 8: 200
DEPTH 4: 60 DEPTH 9: 0
DEPTH 5:
90
DEPTH 10:
0

\section*{COMMENTS:}
shallow cast for plankton

STATION: 151
AREA: \(9 \mathbf{N}\)
LATITUDE: 8.9072
DATE: 12/07/92 TIME (GMT): 16:16
LOCAL TIME: 06:16
\begin{tabular}{lrll} 
DEPTH 1: & 0 & DEPTH 6: & 0 \\
DEPTH 2: & 3200 & DEPTH 7: & 0 \\
DEPTH 3: & 0 & DEPTH 8: & 0 \\
DEPTH 4: & 0 & DEPTH 9: & 0 \\
DEPTH 5: & 0 & DEPTH 10: & 0
\end{tabular}

COMMENTS:
rerun of Sta 141 to get 3200 m sample

\section*{TT013 CAMERA TOWS}
STATION: 9

AREA: 12 S

BEGINNING LATITUDE: -11.9888 BEGINNING TIME:
BEGINNING LONGITUDE: 134.9393
BEGINNING DEPTH (m): 4381

ENDING LATITUDE: \(\mathbf{- 1 2 . 0 1 5 8}\)
ENDING LONGITUDE: 134.9425
ENDING DEPTH (m): 4347
COMMENTS:
pictures dark

STATION: 24
AREA: 2 S

BEGINNING LATITUDE: -1.8667 BEGINNING TIME:
BEGINNING LONGITUDE: 139.7437
BEGINNING DEPTH (m): 4379

ENDING LATITUDE: -1.8663
ENDING LONGITUDE: 139.7118
ENDING DEPTH (m): 4300

10:45:00
BEGINNING DATE:
11/04/92
ENDING TIME:

03:18:00
BEGINNING DATE:
11/09/92
ENDING TIME:

\section*{COMMENTS:}

CRS-195; Test photos good, Phytodetritus evident at sediment-water surface

\section*{TT013 CAMERA TOWS}
STATION: ..... 40
AREA: ..... 5 S
BEGINNING LATITUDE: -4.9783
BEGINNING LONGITUDE: 139.7317

\[
\text { BEGINNING DEPTH (m): } 4256
\]
\[
\text { ENDING LATITUDE: } \quad-5.0033
\]

ENDING LONGITUDE:139.7217
ENDING DEPTH (m): ..... 4246
COMMENTS:CRS-200; sled landed upside down; no photos
STATION: ..... 43
AREA: ..... 5 S
BEGINNING LATITUDE: \(\mathbf{- 4 . 9 7 5 0}\)
BEGINNING LONGITUDE: ..... 139.9750
BEGINNING DEPTH (m): ..... 4197
ENDING LATITUDE: ..... -4.9700
ENDING LONGITUDE: ..... 139.6933
ENDING DEPTH (m): ..... 4183
COMMENTS:test strips look good; little phytodetritus

\section*{TT013 CAMERA TOWS}
TATION: ..... 53
AREA: Equator

BEGINNING LATITUDE: 0.1050
BEGINNING LONGITUDE: 139.7400
BEGINNING DEPTH (m): 4318

ENDING LATITUDE: 0.0967
ENDING LONGITUDE: 139.6850
ENDING DEPTH (m):
COMMENTS:
CRS-206

STATION: 68
AREA: Equator
\begin{tabular}{lll} 
BEGINNING LATITUDE: & 0.1050 & BEGINNING TIME: \\
BEGINNING LONGITUDE: & 139.7400 & \(01: 00: 00\) \\
BEGINNING DEPTH (m): & 4308 & \begin{tabular}{l} 
BEGINNING DATE: \\
\\
\\
ENDING LATITUDE:
\end{tabular} \\
11/19/92 \\
ENDING LONGITUDE: & \(\mathbf{0 . 0 9 5 0}\) & ENDING TIME: \\
ENDING DEPTH (m): & 4316 & \\
COMMENTS: & & \\
"Bat Sled" modifications worked! & &
\end{tabular}

BEGINNING TIME: 08:27:00
BEGINNING DATE: 11/16/92
ENDING TIME:

4320

\section*{TT013 CAMERA TOWS}
```

STATION: 79
AREA: 2 N

```
BEGINNING LATITUDE: 2.5000

BEGINNING LONGITUDE: 140.1130
BEGINNING DEPTH (m): 4402

ENDING LATITUDE:
ENDING LONGITUDE:
ENDING DEPTH (m):
2.0450
140.09004381

BEGINNING TIME:
18:05:00
BEGINNING DATE:
11/21/92
ENDING TIME:
```

COMMENTS:
capacitor exploded in strobe; strobe pressure house lens shattered; pictures good
STATION: 110
AREA: 5 N

| BEGINNING LATITUDE: | 5.0700 | BEGINNING TIME: |
| :--- | :--- | :--- |
| BEGINNING LONGITUDE: | 139.6700 | $1815: 00: 00$ |
| BEGINNING DEPTH $(\mathrm{m}):$ | 4452 | BEGINNING DATE: |
|  |  | $11 / 28 / 92$ |
| ENDING LATITUDE: | 5.0817 | ENDING TIME: |
| ENDING LONGITUDE: | 139.6583 |  |
| ENDING DEPTH (m): | 4440 |  |

COMMENTS:
good photographs, repaired strobe worked

```

\section*{TT013 CAMERA TOWS}
\begin{tabular}{lll} 
STATION: 136 & & \\
AREA: 9 N \\
& & \\
BEGINNING LATITUDE: & 8.9100 & BEGINNING TIME: \\
BEGINNING LONGITUDE: & 139.8712 & \(09: 03: 00\) \\
BEGINNING DEPTH (m): & 5012 & BEGINNING DATE: \\
& & \(12 / 05 / 92\) \\
& 8.9300 & ENDING TIME: \\
ENDING LATITUDE: & 139.8650 & \\
ENDING LONGITUDE: & 4993 & \\
ENDING DEPTH (m): & &
\end{tabular}

\section*{COMMENTS:}
excellent photographs, fewer burrows than sites near the Equator

\section*{TT013 PLANKTON TOWS}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline STATION & AREA & TOW TYPE & DATE (GMT) & \begin{tabular}{l}
TIME \\
(GMT)
\end{tabular} & \[
\begin{aligned}
& \text { TIME } \\
& \text { (LOCAL) }
\end{aligned}
\] & \[
\begin{aligned}
& \text { LATITUDE } \\
& (-=\text { SOUTH })
\end{aligned}
\] & \[
\begin{aligned}
& \text { LONGITUDE } \\
& (+=\text { WEST })
\end{aligned}
\] \\
\hline 5 & 12 S & Horizontal & 11/03/92 & 23:15 & 13:15 & -11.9967 & 134.9505 \\
\hline 8 & 12 S & Vertical & 11/04/92 & 07:35 & 21:35 & -11.9558 & 134.9544 \\
\hline 11 & 12 S & Vertical & 11/04/92 & 23:45 & 13:45 & -11.9500 & 134.9500 \\
\hline 17 & 2 S & Horizontal & 11/07/92 & 23:06 & 13:06 & -1.8289 & 139.6987 \\
\hline 22 & 2 S & Vertical & 11/08/92 & 17:00 & 07:00 & -1.8057 & 139.7170 \\
\hline 25 & 2 S & Vertical & 11/08/92 & 07:25 & 21:25 & -1.8672 & 139.6496 \\
\hline 28 & 3 S & Horizontal & 11/09/92 & 22:30 & 12:30 & -2.8837 & 139.8318 \\
\hline 30 & 4 S & Horizontal & 11/10/92 & 11:07 & 01:07 & -4.1993 & 139.7905 \\
\hline 33 & 5 S & Horizontal & 11/11/92 & 00:55 & 14:55 & -4.9507 & 139.7398 \\
\hline 37 & 5 S & Vertical & 11/11/92 & 17:40 & 07:40 & -4.9373 & 139.7562 \\
\hline 42 & 5 S & Vertical & 11/12/92 & 13:01 & 03:01 & -4.9667 & 139.7385 \\
\hline 51 & Equator & Horizontal & 11/15/92 & 19:53 & 09:53 & 0.0968 & 139.771 \\
\hline 54 & Equator & Vertical & 11/16/92 & 12:37 & 02:37 & 0.0732 & 139.6620 \\
\hline 60 & Equator & Horizontal & 11/17/92 & 06:02 & 20:02 & 0.1083 & 139.7320 \\
\hline 62 & 1 S & Horizontal & 11/17/92 & 22:15 & 12:15 & -0.8644 & 139.8320 \\
\hline 64 & 1 S & Horizontal & 11/18/92 & 07:00 & 21:00 & -0.8657 & 139.8318 \\
\hline 67 & Equator & Vertical & 11/18/92 & 22:07 & 12:07 & 0.1082 & 139.7309 \\
\hline 78 & 2 N & Vertical & 11/21/92 & 14:00 & 04:00 & 2.0417 & 140.1085 \\
\hline 81 & 2 N & Horizontal & 11/22/92 & 00:21 & 14:21 & 2.0610 & 140.1452 \\
\hline 84 & 2 N & Horizontal & 11/22/92 & 12:03 & 02:03 & 2.0703 & 140.1482 \\
\hline 87 & 1 N & Vertical & 11/22/92 & 13:02 & 03:02 & 0.8160 & 139.9190 \\
\hline 90 & 1 N & Horizontal & 11/23/92 & 19:13 & 09:13 & 0.8140 & 139.9192 \\
\hline 94 & 2 N & Vertical & 11/24/92 & 17:14 & 07:14 & 2.0453 & 140.1205 \\
\hline 106 & 5 N & Horizontal & 11/27/92 & 22:51 & 12:51 & 5.0750 & 139.6215 \\
\hline
\end{tabular}

\section*{TT013 PLANKTON TOWS}
\begin{tabular}{llllcccc} 
STATION AREA & TOW TYPE & \begin{tabular}{c} 
DATE \\
\((\) GMT \()\)
\end{tabular} & \begin{tabular}{c} 
TIME \\
\((\) GMT \()\)
\end{tabular} & \begin{tabular}{c} 
TIME \\
\((\) LOCAL \()\)
\end{tabular} & \begin{tabular}{c} 
LATITUDE \\
\((-=\) SOUTH)
\end{tabular} & \begin{tabular}{l} 
LONGITUDE \\
\((+=\) WEST)
\end{tabular} \\
109 & 5 N & Vertical & \(11 / 28 / 92\) & \(13: 54\) & \(03: 54\) & 5.0595 & 139.6168 \\
115 & 4 N & Horizontal & \(11 / 29 / 92\) & \(22: 56\) & \(12: 56\) & 4.0422 & 139.8540 \\
118 & 5 N & Vertical & \(11 / 30 / 92\) & \(17: 26\) & \(07: 26\) & 5.0658 & 139.6377 \\
123 & 5 N & Horizontal & \(12 / 01 / 92\) & \(11: 33\) & \(01: 33\) & 5.0895 & 139.6457 \\
138 & 9 N & Horizontal & \(12 / 04 / 92\) & \(16: 05\) & \(06: 05\) & 8.9233 & 139.8697 \\
140 & 9 N & Horizontal \(12 / 05 / 92\) & \(23: 00\) & \(13: 00\) & 8.9227 & 139.8545 \\
142 & 9 N & Vertical & \(12 / 06 / 92\) & \(05: 27\) & \(19: 27\) & 8.9650 & 139.8670 \\
145 & 9 N & Vertical & \(12 / 06 / 92\) & \(18: 41\) & \(08: 41\) & 8.9478 & 139.8638 \\
150 & 9 N & Horizontal & \(12 / 07 / 92\) & \(12: 04\) & \(02: 04\) & 8.9277 & 139.8618
\end{tabular}

DISTRIBUTION of CORES
```

C1 microbiology
2 not used
3 pore water
4 paleo
5 microbiology
6
7
8

```

DESCRIPTION of CORES
C1 TW clear to slightly turbid. Surface with slight bump in center. Good sediment/water interface. White forams in upper 2 cm . Total 30 cm .

TW somewhat turbid. Surface slanted 2 cm . Surface smooth. Some Globigerina on surface. A few small clumps, 1 cm diameter. Reworked section \(5-7 \mathrm{~cm}\) thick - many burrows, paler sediment. Globigerina in burrow traces. When processed, a major burrow "blew up" into core, rendering mud and TW useless for anything. Top 7 cm thick, middle 20 cm , bottom 10 cm . Total mid \(35-36 \mathrm{~cm}\).

TW turbid. Surface even, smooth, small ridge near one side, 3 cm long. Top \(5-7 \mathrm{~cm}\) heavily reworked - burrow traces all through it. Some burrows with many Globigerina in them. Top 7 cm thick, middle 16 cm , bottom 12 cm streaky. Total 38 cm .

Gray PVC tube. TW somewhat turbid. Rest not visible. When tube was taken down, there appears to be evidence of borrows on surface. Many white burrows. Total mud 20 cm .

TW turbid. Surface with dip, with filled sediment. Burrow hole at 2.5 cm down, 1 cm wide. Re-worked area 5 cm thick. Not so many burrows as in C3 and C2. Top mud 5 cm thick, middle 21 cm , bottom 7 cm . Total \(32-33 \mathrm{~cm}\).

Gray PVC tube. TW somewhat turbid. Nothing else visible. Mud not used because core slipped when attempts were made to exchange stopper for end cap.

TW turbid. surface uneven - slid on one side . Not much separation between layers, except bottom dark mud. Possible burrow at 3 cm down. Top mud - no change, middle 21 cm , bottom 7 cm . Total mud \(31.5-34 \mathrm{~cm}\).

TW somewhat turbid. Surface broken a little, slanted 1.5 cm . Continuous red to bottom. Many cm-scale burrows. Re-worked section \(2-6 \mathrm{~cm}\) thick. Many burrow traces, paler mud mixed with red mud. Top 6 cm thick, middle 21 cm , bottom 13 cm . Total mud 37 cm .

\section*{DISTRIBUTION of CORES}
\begin{tabular}{rl} 
Cl & radionuclides \\
2 & whole core squeeze \\
3 & centrifuge \\
4 & radionuclides \\
5 & macrofauna \\
6 & paleo \\
7 & radionuclides \\
8 & microbiology \& radionuclides Thorium
\end{tabular}

DESCRIPTION of CORES
C1 TW very clear. surface somewhat uneven. Dip in center. Nodule along one side in another dip. Nodule 2.5 cm long. underneath nodule is darker brown than elsewhere. Many \(f c\) on surface. Top mud not re-worked, even red-brown cc followed by a paler layer, mixed with darker mud, then dark on bottom. Top mud 11 cm thick, middle 12 cm , bottom 13 cm . Total mud \(34-35.5 \mathrm{~cm}\).

C2
Tw clear. Surface even, slight slant. Surface with light flocculent layer with many Globigerina. Burrow trace, exiting to surface, from 1.5 cm down, and fainter traces to 5 cm down, filled with forams. Top 8 cm thick, middle 12 cm , bottom 15 cm . Total mud 37 cm .

TW very clear. Surface very even. Surface smooth, with light covering of detritus, some loose flocculence, and many white forams. Hole on one side, 3.5 cm long, 2 cm deep. - maybe was a nodule. Burrow traces at \(1.5,3.5,9.5 \mathrm{~cm}\) down. Top 7.5 cm thick, middle 11 cm , bottom 17 cm . Total mud 37 cm .

TW clear, very slightly turbid. Surface mostly even. Surface with very light flocculent layer, and only a few forams. Nodule on surface, 3 cm long, 2 cm wide, 7 mm high. Mud underneath darker brown. Dip on side, 3.5 cm wide, 1 cm deep, with darker mud underneath - either displaced nodule, or possible burrow exit. Burrow traces at \(4 \mathrm{~cm} \& 4.5 \mathrm{~cm}\) down. Top 9.5 cm thick, middle 14 cm , bottom 12 cm . Total 37 cm .

TW very clear. Surface even. Surface mostly smooth. A fov small dips along side. Burrow exiting to surface, many trasy coming up to exit from a very large burrow hole, 3.5 cm down 5 cm long, 0.5 cm high. Traces filled with Globigerina. Another trace at 4.5 cm down. \(2 \mathrm{dips}, 3 \mathrm{~cm} \& 4 \mathrm{~cm}\) long at surface, 1 cm deep. Top 5 cm thick, middle 11 cm , bottom 17 cm . Total mud 36 cm . Additional notes on C5 : Many many forams - comprising most of "sediment" retained on 0.3 mm screen. No animal was found that might have made the big burrow. All down through the core to at least 5 cm above base, are many burrows with soft, wetter mud lining them. No other signs of animals, just burrows. Mud, after top few cm , is evenly soft down through core tube length, though pale mud seems to be a little softer than dark chocolate mud, and with more forams, especially near bottom of core tube (near 38 cm and deeper). Nodule at bottom of core tube, at base.

C6 PVC tube. TW very clear. Nodule on surface, 2 cm diameter. Surface smooth. Total mud 36 cm .

C7
TW very clear. Surface even. Nodule sitting on surface, 4 Cm long \(x 3.5 \mathrm{~cm}\) wide, 1 cm above surface. Nodule seems to \(h\) some brown mats on it. Rest of surface covered with flocculen material, with Globigerina caught up in the detrital pieces. Burrow hole at 4 cm down. Top 9 cm thick, middle 12 cm , bottom 17 cm . Total mud 39 cm .

TW clear. Gap at bottom, about 10 cm . Very possibly from nodule caught on edge, not allowing it to close properly, since nodules were present in other core tubes.

\section*{DISTRIBUTION of CORES}

\section*{DESCRIPTION of CORES}

C1 TW clear. Surface flat. Burrow in surface down to 1 cm . Possible light green flocculent material. Burrow hole 2.5 cm long ?cm down. Sediment very white carbonataes. Total 31 cm .

C2 TW clear. Surface even, slight dip. Surface smooth, slight bit flocculant material. Very subtle layering. Top layer even pale beige 9 cm thick. Middle, slightly grayer, 16 cm thick. Bormer streaky with brownish mud, beige mud, and paler mud 6 cm thick. Total mud \(30-31 \mathrm{~cm}\).

C3 TW very clear. Surface with mound or ridge running along surface, 2.5 cm wide, \(1 / 2 \mathrm{~cm}\) high. Much greenish phytodetritus in hollows. Some worked down into sediment 1.6 cm . Burrow ?hole 2.5 cm down. Top layer with some variability, beige \(6-9 \mathrm{~cm}\) thick. Narrow yellowish layer 9 cm down, 1.5 cm thick. Middle beige with paler mottling 16 cm thick. Bottom 5 cm thick. Total 33 cm .

C4 TW very clear. surface with ridge - same as in C3, \(1 / 2 \mathrm{~cm}\) high, 2.5 cm wide. Rest of surface somewhat uneven, with phytodetritus balls and flocculance caught in hollows. Burrow at 3 cm down. Another burrow trace 6 cm down. Top layer beige, even color, \(6-7 \mathrm{~cm}\) thick. Middle beige with paler mottling 20 cm thick. Bottom mot white, beige, green-brown, 7 cm thick. Total \(32-34 \mathrm{~cm}\).

C5 TW very clear. Surface with a few dips and bumps. One clump 2 cm diameter, 5 mm high. Phytodetritus and flocculance, loose, on surface. One small clump worked down 4 mm into sediment. Burrow hole at 9 cm down, with traces from it exiting to surface at a low mound. Top layer even color, 10 cm thick. Middle mostly even beige, with a few small paler mottles. Bottom greenish brown mud, 4 cm thick. Total 33 cm .

Gray PVC tube. EMPTY.
C7 TW clear. Surface mostly even, with some unevenness. Lots of loose flocculant material, pale greenish - phytodetritus? Possible flat xeno?? Burrow trace at 9 cm down. Top layer very even color, 11 cm thick. Middle beige with paler mottling 14 cm thick. Bottom 5 cm thick, greenish brown \& beige \& white. Total 32.5 cm .

TW clear. Core tube with gap -10 cm wide, 10 cm from bottom. Slid to base after from MC frame. Surface pretty even. some phytodetritus. Top layer even beige color 9 cm thick. Total 16 cm .
EQPAC MC 4 CRS 194 TTO13-23 8 NOV. 1992
```

DISTRIBUTION of CORES
Cl paleo
2 pore water - whole core squeeze
3 NO GOOD
4 pore water - centrifuge
5 organics
6 microbiology/radionuclides
7 microbiology
8 phaeopigments

```

\section*{DESCRIPTION of CORES}

C1 TW clear to slightly turbid. Surface even, smooth, with a little phytodet. loose material. Burrow hole at 1.5 cm down. Top mud even color beige with some paler mottles. Total 22.5 cm .

C2 TW clear. Surface even. Surface smooth. A few mucous phytodet. balls. A few small clumps, \(<0.5 \mathrm{~cm}\) diameter. Top mud very even in color, pale beige 13 cm thick. Middle mud 13 cm thick, mottled with paler mud. Lower greenish brown, beige, pale 5 cm thick. Total 29 cm .

C3 Gray PVC tube. Mud present on sides inside, implying that it slipped out before arm could close it.

C4 TW clear. Surface with a few dips, difference of 5 mm height. Some phytodet. mucous balls on surface. Top layer even beige 8 cm thick. Middle mostly beige, some paler mottling 5 cm thick. Lower greenish mud mixed with beige and paler mud 5 cm thick. Total 32.5 cm .

C5 TW slightly turbid. surface fairly even, slight dip on one side. A little phytodet. present. Mud clump in center 2 cm long, 1 cm wide, 8 mm high. Top layer even beige 10 cm thick. Middle beige and pale 12 cm thick. Bottom only slightly darker, 4 cm thick. Total 27 cm .

TW only slightly turbid. surface with some dips. Xeno in cent 8 mm high, 1 cm wide at top. Another possible Xeno near edge, 7 mm high. Some phytodet. Burrow exit to surface from 2 cm down. Top even beige 12 cm thick. Middle a little mottled beige \& pale 12 cm thick. bottom greenish, grayish, beige \& pale mottled 7 cm thick. Total 33 cm .

C7 TW clear to slightly turbid. Surface with elevated mound? \(3-4 \mathrm{~mm}\) high running width of surface. Large clump of ? 8 mm diameter. Some green phytodet. Polychaete tube on surface 2 cm diameter. Burrow from it down into sediment to 1.5 cm . Total

C8 TW very clear. Surface even but with valleys. Some clumps 1 cm diam. Possible agglutinated foram near edge 1.2 cm long, 4 mm high. Lots of phytodet, especially in hollows and along edge. Some worked down into sediment, 1.5 cm . Possible burrow traces and exits where phytodet worked in. Burrow hole at 3 cm down. Top layer even belge 11 cm thick. Middle mostly beige, some paler mottling 13 cm thick. Bottom greenish, grayish, beige, and pale mud mottled 7 cm thick. Total 3.5 cm .

\section*{DISTRIBUTION of CORES}
```

C1 radionuclides
2 pore water - whole core squeezer
3 paleo
4 pore water - centrifuge
5 radionuclides
NO GOOD
phaeopigments
pore water - ReMoU

```

DESCRIPTION of CORES
C1 TW very clear. Surface with 1.5 cm slant. Surface covered wit loose flocculent phytodet. material 6mm thick. Burrow trac \(4,13 \mathrm{~cm}\) down, possibly also 23 cm down. 2 small burrow hole 3.5 cm down. A little phytodet worked into sediment 7 mm down in 2 places. Top mud even gray beige 9 cm thick. Middle mottled paler 7 cm thick. Bottom yellowish beige 7 cm thick. Total 31-32cm.

TW very clear. Surface even, surface smooth. Much phytodet loose on surface. Possible burrow trace 5.5 cm down, exiting to surface with some phytodet worked down 1 cm . Most of mud even beige/gray, down 21 cm . below is layer of beige, pale brown, and paler mud mottled. Total 33 cm .

TW very clear. Gap at base 2 cm wide. Surface even, with loose phytodet on surface. Top mud even color gray beige, 11 cm thick. Lower mottled paler. Total 20 cm .

TW clear. Surface even. Surface smooth, with much phytodet on surface. Some worked 1 cm down into sediment in places. Small burrow hole and exit to surface from 2 cm down. Top mud even gray beige color 18 cm thick. Below, very little mottling paler mud 11 cm thick. Bottom even color yellowish beige thick. Total 32.5 cm .

TW very clear. Surface even. Lots of loose flocculent phytodet, some dark green clumps 3 mm diameter. Burrow hole at 3 cm down, 2 cm wide, 6 mm high. Top mud even beige gray color 15 cm thick. Middle some paler mottling, 10 cm thick. Bottom even yellowish beige. Total 30 cm .

Gray PVC tube. Empty - no mud on inside.

TW very clear. Surface even, covered with much loose phytodet material, greenish, some darker clumps. Burrow trace 5 mm down. Top nud even beige gray color 26 cm thick. Bottom slightly yellower beige. Total 32.5 cm .
\begin{tabular}{rl} 
C1 & \multicolumn{1}{c}{ NO GOOD } \\
2 & radionuclides (long term) \\
3 & organics \\
4 & radionuclides \\
5 & pore water - whole core squeeze \\
6 & microbiology \\
7 & pore water - centrifuge \\
8 & NO GOOD
\end{tabular}

DESCRIPTION of CORES
C1 TW drained off, probably from a very large burrow system present on one side . Short core : 14 cm mud.

TW very clear. Surface mostly even. Some loose flocculent material on surface, pale greenish. Burrow hole at 3.5 cm down. Top brownish beige, fading imperceptibly into paler beige, with one pale patch 18 cm down, 6 cm long, 4 cm high. Bottom yellowish beige 8 cm thick. Total 30 cm .

TW clear. Surface flat. A little phytodet.? Mound near one side. Burrow hole at 2 cm down. Total 22.5 cm .

TW clear. Surface with dip along one side 1 cm difference. Two clumps on surface, one 2 cm long, 1.2 cm high, other 1 cm long X 1.2 cm high. Some loose flocculence but not greenish. Burrow trace vertical \(5.5-10 \mathrm{~cm}\) down. Top mud even gray beige 26.5 cm . Lower slightly yellower beige. Total \(31-31.8 \mathrm{~cm}\).

Empty - no mud present.
    2 organics
3 paleo
4 microbiology
5 pore water - centrifuge
    phaeopigments
        NO GOOD
    pore water - whole core squeeze

DESCRIPTION of CORES
C1 TW very clear. Surface with some slants of 1.2 cm . Surface smooth. No loose flocculent material. Tube on surface 1 cm long. Faint burrow traces to surface from 9 cm down. Top mud even brownish beige 10 cm thick. Middle paler, even, 12 cm . Bottom slightly browner 3 cm thick. Total 24 cm .

C2 TW clear. Low mound on surface with burrow exit, 8 mm 3.5 cm long. No loose material on surface. Top beige brownis.. even color 8 cm thick. Middle paler grayish beige, even, 16 cm thick. Bottom yellowish beige 5 cm . Total 24 cm .

Gray PVC tube with "mud catcher." No TW. Total mud 17 cm .
C4 TW clear. Surface with 2 low mounds, 2 cm diameter. Hole 2 mm diameter on surface; also tube, with borrow hole from it down to 1.5 cm . Total 26.5 cm .

C5 TW very clear. Surface even. No phytodet. material on surface. Lots of small burrow holes on surface, some tracks also. very faint possible burrow trace at 10 cm . Top mud even brownish beige 6 cm thick. Middle even color, paler beige 13 cm . Bottom slight mottling beige and paler. Total 28 cm .

C6 TW very clear. Surface with mounded mud along one side, 5 cm into center, 9 cm long, 12 cm high. Some dark ?forams next to mound. Small tube on surface. A few burrow holes exiting to surface. Burrow trace 8 cm down. Top even yellowish brown mud 10 cm thick. Middle even beige 17 cm thick. Bottom mottles, pretty even color. Total 30 cm .

Empty - trip wire for camera caught on MC arm and kept it open.

TW very clear. Surface even. Only a few mucous balls on surface. Small burrow hole in center. Possible burrow hole (obscured by band) at 2.5 cm down. Top layer yellowish beige 5 cm thick. Middle uniform gray beige 16 cm . Bottom mottled slightly yellowish and beige. Total 32 cm .

\section*{DISTRIBUTION of CORES}
\begin{tabular}{rl} 
C1 & \multicolumn{1}{c}{ NO GOOD } \\
2 & organics \\
3 & \multicolumn{1}{c}{ NO GOOD } \\
4 & radionuclides \\
5 & phaeopigments \\
6 & radionuclides \\
7 & radionuclides \\
8 & paleo
\end{tabular}

DESCRIPTION of CORES
C1 Empty except for 1 cm mud on base.

Empty

TW slightly turbid. Surface slant \(1 / 2 \mathrm{~cm}\). some loose flocculent phytodet. material. Small burrow trace with forams in it 1 cm down. Top mud shades imperceptibly into middle paler mud, 24 cm thick. Bottom brownish beige. Total 28.5 cm .

DISTRIBUTION of CORES
```

C1
2
3
4
5
6
7
8

```

DESCRIPTION of CORES

\section*{C1 EMPTY}

C2 TW very clear. Surface slanted 1 cm . Much pale to darker greer phytodet. on surface. Some phytodet. worked into sediment sher down. Burrow trace 7 cm down. At surface above is burron exit trace with phytodet. and forams. Top mud even gray beige 14 cm thick. Bottom mostly white with some beige mottling. Total 25 cm .

C3 TW very clear. Surface with 1 cm slant. Surface covered with phytodet., pale and darkish green. Some worked into sediment 4 mm . Burrow trace from surface 2 cm down. Top even gray beige color 13 cm thick. Bottom evenly mottled pale and beige. Total \(26-27 \mathrm{~cm}\).

TW ? Surface with relief of 1 cm . Possible green phytodet. Total ?

TW very clear. Surface mostly even. Dip on one side 1.5 cm . Much phytodet. loose on surface - pale to darkish green. Large burrow hole in surface 1 cm diameter, \(1 / 2 \mathrm{~cm}\) in from side. Burrow trace 6.5 cm down, near hole. Top mud more variable in depth - even gray beige \(8-16 \mathrm{~cm}\) down. Bottom mottled paisr. Total 26.5 cm .

TW very clear. Surface mostly even. Much phytodet. in hollows on surface, pale to darkish green. Some phytodet. worked into sediment 3 mm . Burrow trace system from surface down to 3 cm . Burrow trace 10 cm down. Top mud mostly even gray beige (one paler spot), 12 cm thick. Bottom mottled paler and beige. Total 27 cm .

TW very clear. Surface even. Some phytodet. on surface. Small burrow hole on surface. Burrow hole 4 cm down. Burrow traces \(3,5,12 \mathrm{~cm}\) down. More burrow traces \(3,4,5 \mathrm{~cm}\) down. A little phytodet. worked 8 mm into sediment. Top mud even gray beige 15 cm thick. Bottom mottled pale \& beige. Total 26 cm .

TW very clear. Surface mostly even, dip on one side, 1.5 cm . Much pale green phytodet. on surface, esp. in hollows. Phytodet. worked 80 mm into sediment in one place. Top mud even gray beige 15 cm . Bottom mottled paler. Total 27.5 cm .

\section*{DISTRIBUTION of CORES}
\begin{tabular}{rl} 
C1 & radionuclides \\
2 & pore water - whole core squeeze \\
3 & microbiology \\
4 & pore water - centrifuge \\
5 & paleo \\
6 & phaeopigments \\
7 & organics \\
8 & NO GOOD
\end{tabular}

DESCRIPTION of CORES
TW very clear. Surface even. Surface covered with heavy phytodet. Burrow holes (3) at 6 mm to 1 cm down, in a line. Another larger hole at 5.5 cm . Top mud even gray beige 13 cm thick. Middle mottled pale \& beige 15 cm . Burrow mostly brownish beige with pale \& beige mottling 5.5 cm . Total 32 cm .

TW very clear. Surface even. Surface covered with phytodet., greenish fluff. Very small burrow hole in center. Burrow holes at 40 mm and 1 cm , to surface. Top even gray beige 22 cm . Middle mottled beige and pale 9 cm . Bottom heavy mottling of brown, pale, and beige 5 cm . Total 31.5 cm .

C3 TW very clear. Surface with 5 mm relief. Center flat. Burrow hole on surface, down to 5 cm . ?Fish bone \(1 \mathrm{~cm} 10 n g\) at 3 cm down. Much phytodet. covering surface. Total 28 cm .

TW very clear. Surface even. Surface covered with greenish brown phytodet. Surface with small hole near center. B traces \(2,3,6 \mathrm{~cm}\) down. Top 17 cm thick, even beige except fo big paler mottle 7 cm down, 4 cm wide, 5 cm high. Middle paler and beige mottling 13 cm . Bottom mostly brown with beige and paler mottles, and with vertical streaks as in C6. Total 33 cm .

TW very clear. Surface with small dips of \(1 / 2 \mathrm{~cm}\). Surface covered with phytodet, loose greenish fluff. A few small holes in surface. Burrow trace from surface to 2 cm down. One unusual vertical streak of yellowish mud 14 cm long, \(1 / 2 \mathrm{~cm}\) wide. Top mud even gray brown 13 cm thick. Middle mottled pale and beige 15 cm . Bottom evenly mottled pale, brown, and beige. Total 33 cm .

TW very clear. Surface with \(11 / 2 \mathrm{~cm}\) slant. Surface covered with greenish brownish phytodet. A little phytodet. worked into sediment 5 mm down, 6 mm wide. Burrow trace at 6.5 cm down. Top mud even gray beige 15 cm thick. Middle mottled pale and beige 12 cm . Bottom brown, pale, beige mottled. At base, vertical white streak 1 cm wide, 10 cm 10 ng . Total 33.5 cm .

TW very clear. Surface with some dips \(1 / 2 \mathrm{~cm}\) difference. Surface with phytodet. in dips and valleys. A few small holes in surface. Burrow trace from surface to 1 cm down. Top mud even beige 12 cm thick. Middle mottled beige and pale 13 cm . Bottom brownish mottled with pale and beige. 2 white vertical adjacent streaks from base. Total 33.5 cm .

DISTRIBUTION of CORES
\begin{tabular}{rl} 
C1 & \multicolumn{1}{c}{ NO GOOD } \\
2 & pore water - whole core squeeze \\
3 & paleo \\
4 & paleo \\
5 & pore water - centrifuge \\
6 & paleo \\
7 & barite \\
8 & NO GOOD
\end{tabular}

DESCRIPTION of CORES
C1 EMPTY - slight bit of mud on base.
C2 TW somewhat turbid. Surface even. A few phytodet. bal surface, pale greenish. Some worked into sediment 6 mm . Burrow holes at \(3 \& 3.5 \mathrm{~cm}\). Top mud even beige 9 cm . Bottom mottled beige and paler. Total 18.5 cm .

C3 TW turbid. Surface very even. Some greenish brown loose phytodet. on surface. Whole tube seems to be a burrow system. Large hole 4 cm down, 2.5 cm long, 6 mm high. Another hole plus trace at 3.5 cm down. Some phytodet. worked into sediment \(1.3 c \mathrm{~m}\) . Large trace system filled with forams 0.5 cm down, 2 cm wide, 5.5 cm long. Top even beige 11 cm thick. Bottom slight mottling. Total 18 cm .

C4 TW clear to slightly turbid. Surface with dip of \(1 / 2 \mathrm{~cm}\). Surface with some greenish phytodet., esp. on sides and in hollows. White tube-like structure on surface, 4 cm long, coming out of sediment and going back in. Top mud gray beige even color 12 cm thick. Bottom evenly mottled gray and total 20 cm .

TW slightly turbid. Surface even. Surface with much loose phytodet. near side and in valleys. Burrow system exiting to surface from 2 cm down. 2 streaks of pistachio greenish mud, one from 7 cm down to \(10 \mathrm{~cm}, 5 \mathrm{~mm}\) wide; other 14 to 17.5 cm down, 5 mm wide. Top mud even gray beige 11 cm thick. Bottom mottled beige and pale. Total 20 cm .

TW very clear. Surface with some dips and hollows. Mostly even. Surface covered with greenish brown phytodet. Some worked into sediment 5 mm . Tiny burrow hole at 11 cm down. Burrow hole at 2.5 cm down. Another plus trace exiting to surface from 1 cm down. Top mud even gray beige 12 cm thick. Bottom mostly beige, some pale mottling. Total 20.5 cm .
\begin{tabular}{ll}
5 & organics \\
6 & organics \\
7 & paleo \\
8 & NO GOOD
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW very clear. Surface slight slant \(1 / 2 \mathrm{~cm}\). Much phytodet. on surface, greenish brown. Burrow trace at 5.5 cm with finer foramfilled traces above. One bit of phytodet. worked into sediment 4 mm . Top even gray beige 11 cm thick. Bottom beige with some pale mottling. Total 18 cm .

C2 TW very clear. Surface with some dips and mounds 1.5 cm difference Much phytodet. on surface. Some worked into sediment 4 mm . Tor even gray beige 17 cm thick. Middle lightly mottled beige and 13 cm . Bottom much dark brown mottled with pale and beige. Total 1132.5 cm .

C3 TW very clear. Surface mostly even with some dips. Surface covered with much greenish phytodet. Much worked into sediment 1.2 cm . Burrow traces at \(2.5,2 \mathrm{~cm}\) down. Top even brownish beige 13 cm thick. Middle mostly beige with some paler mottling. Bottom with a band of dark greenish brown mud 27 cm down, 2.5 cm wide. Below streaky mottling. Total \(32.5-33.5 \mathrm{~cm}\).

C4 TW very clear. Surface with mound of paler mud with 3 small burrow holes exiting to surface. Other holes to surface. Much greenish phytodet. loose on surface. Some phytodet. worked down 1 cm . Burrow traces at \(1.5,1.5,2 \mathrm{~cm}\) down. 2 black horizontal streaky areas, one 6 cm down other 3 to 7 cm down. Top mud even beige 11 cm thick. Middle mottled beige \& paler. Bottom mottled brawn \& beige \& pale. Total \(32-33.5 \mathrm{~cm}\).

C5 TW clear. Surface with dips and mounds, 1.5 cm difference. Much greenish phytodet. loose on surface. Two burrow holes at 6 cm divwith adjoining traces with forams inside. Possible burrow trac 20 cm down. Top mud 11 cm thick, mostly even gray beige with one pate patch at one of the burrow holes. Middle 14 cm thick, mostly beige, some paler mottling. Bottom dark brown mottled with pale and beige. Total \(31.5-32.5 \mathrm{~cm}\).

TW very clear. Surface with some dips, \(1 / 2 \mathrm{~cm}\) difference. Much greenish phytodet. on surface. Some mounds on surface \(1 / 2 \mathrm{~cm}\) high. Some phytodet. worked 7 mm into sediment. Top mud even brown beige 14 cm thick. Middle mostly beige, some paler mottling 13 cm . Bottom greenish brown with streaky beige \& pale mottling . Total 30-
\(31 / 2 \mathrm{~cm}\).

C7 TW clear. Surface with mound 1 cm high with Xeno sitting on top and lots of phytodet. captured underneath Xeno \((8 \mathrm{~cm}\) long, 4 cm high, \(1 / 2 \mathrm{~cm}\) thick). Rest of surface with some phytodet; some worked into sediment 4 mm . Burrow hole at 3.5 cm down, 2 cm wide, 1 cm high. Top mud mostly even brown beige with some paler mottling 12 cm . Bottom streaky vertical mottling brown, beige, \& pale. Total \(31-33 \mathrm{~cm}\).

DISTRIBUTION of CORES
\begin{tabular}{rlll} 
C1 & paleo & 5 & organics \\
2 & trace metals (ReMoU) & 6 & phaeopigments \\
3 & microbiology & 7 & organics \\
4 & radionuclides & 8 & barite
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW clear. Surface mostly even. Some topography with Xenos, 2 tubes, and forams. Burrow hole exiting in surface in small mound. Much phytodet. on surface. Burrow hole at \(4,7 \mathrm{~cm}\) down. Top mud even brownish beige 13 cm thick. Middle beige \& pale mottled 15 cm . Bottom brown, beige, \& pale mottling, some vertical streaks. Total 3031.5 cm .

C2 TW very clear. Surface even. Surface covered with much greenish phytodet. Bushy branching foram on surface 1.5 cm wide, \(1 \mathrm{~cm} \mathrm{~h}:=11\) Top mud even brownish beige 14 cm . Middle mostly beige, some pald mottling, 11 cm thick. Bottom mostly greenish brown with beige \& paler mottling. Pistachio streak from base, 13 cm long, 2 cm wide at base, tapering. Total \(30.5-31.5 \mathrm{~cm}\).

C3 TW clear. Surface level, low. Much green flocculent material on surface. At 5 mm down is 5 mm diameter patch of phytodet. 5 mm hole in surface, as burrow down to 6 cm . Low mound on surface. Total 26.5 cm .

C4 TW clear. Some dips and mounds on surface. Surface with much greenish phytodet. A few pieces worked 3 mm into sediment. Top mud even brownish beige 13 cm thick. Middle mottled beige and pale 11 cm . Bottom mostly gray-brown with beige and pale mottling, some vertical white streaking (one 8 cm long, 1 cm wide). Total 31.5 cm .

C5 TW very clear. Surface mostly even, some low dips. Surface covered with much greenish phytodet. Two small holes in surface. Burrow hole 2 cm down. Burrow trace 3 cm down. Top mud even brownish-beige 13 cm thick. Middle mostly beige, some pale mottles, 12 cm thick. Bottom mostly dark brown, some beige mottling. Total \(31-32 \mathrm{~cm}\).

C6 TW very clear. Surface even. Surface covered with much greenish phytodet. Burrow on surface near side. Burrow hole at 4.5 cm Burrow trace from 1.5 cm down, exit to surface. Top even brow beige 8 cm thick. Middle mostly beige, some paler mottles, 18 cm Base evenly beige, pale, brown mottling 3 cm . Total 29 cm .

C7 TW very clear. Surface with dips and valleys and mounds. Difference of \(1 / 2 \mathrm{~cm}\). Surface covered with much phytodet. Some phytodet. worked 1 cm into sediment. Broken pieces on ?Xeno along one edge. Top mud even brownish beige 7 cm thick. Middle mottled mostly beige with paler mud, 18 cm . Bottom evenly mottled brown, beige \& pale. Total \(31.5-32 \mathrm{~cm}\).

C8 TW clear. Surface even. Surface covered with mich phytodet. Large Xeno on surface 2.5 cm high, 3 cm wide, 3 mm thick. Burrow holes at 6.5 \& 6.5 cm . Burrow system and holes at \(3-5 \mathrm{~cm}\). Top mud even brownish beige 12 cm . Bottom mostly beige, some paler mottles, a few brown mottles near base. Total \(30-31.5 \mathrm{~cm}\).
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C1 organics
microbiology/meiofauna
radionuclides
phaeopigments
radionuclides - long term
radionuclides
radionuclides
microbiology/paleo

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DESCRIPTION of CORES

C1

TW very clear. Surface covered with much green phytodet phytodet. worked 5 mm into sediment. Small burrow hole in surface. Burrow trace exiting to surface from 4 cm down. Top mud even brownish beige 12 cm thick. Middle mostly beige, some paler mottles 11 cm . Bottom gray-brown mud with beige and pale mottling. 2 vertical white streaks from base \(11 \mathrm{~cm} u p, 1.3\) and 3 cm wide at base. Total 31.5 cm .

TW very clear. Surface even. Covered with much green fresh phytodet. Worm tube near one edge 2 cm high, 1 cm wide. phytodet. worked into sediment in 3 places, 1 cm down, wide. Some small holes on surface. Top mud even brownish beige 10 cm thick. Middle mostly grayish beige with paler mottling 16 cm thick. Bottom gray-brown with beige and pale mottles and vertical streaking 6 cm . Total \(30.5-31.5 \mathrm{~cm}\).

TW turbid. Surface even. Surface covered with much phytodet. Burrow hole at 10 cm . Trace from 3 cm down. Large burrow hole filled with full green phytodet. 5 cm wide, 5 cm high. Green portion 2 cm diameter. Top mud even brownish beige 9 cm thick. Middle mostly beige, some paler mottles 25 cm thick. Bottom gray-brown, beige, \& pale mottling. Some white vertical streaks. Total 30 cm .

TW very clear. Surface with mound on one side 1.5 cm high. ?Agglutinated foram on surface 1.6 cm long. 1 cm high. Much green phytodet covering surface 5 mm thick. Some worked 5 mm down into sediment. Burrow trace system exiting to surface from 2.5 cm down. Burrow hole at 9.5 cm down. Top even brownis beige 12 cm thick. Middle beige with pale mottling \(16 \mathrm{~cm} t\) Band of gray-brown mud with paler streaks, 27 cm down thick. Below beige and pale mottling. Total \(33.5-35 \mathrm{~cm}\).

C5

TW clear. Surface even. Surface with some phytodet. A few small holes in surface and some pale mounded material. Burrow trace from 1 cm down exiting to surface and filled with forams - Burrow holes together at \(2,2.5,4 \mathrm{~cm}\) down. Top ever brownish-beige 13 cm thick. Middle mostly beige with some paler mottling 14 cm thick. Bottom gray-brown mud with mottles and vertical streaks beige and pale. Total 32 cm .

TW very clear. Surface mostly even. Dip of 1 cm above a burrow hole 2.5 cm down. Much green phytodet., some dark green on surface, esp. collected in dips. Many small holes in surface. Some paler reworked sediment on surface. Tube sticking up surface 1 cm high, 4 mm wide. Top mud even brownish-beige thick. Middle beige, some paler mottling 10 cm . Bottom gza. beige with paler mottling. Total 27 cm .

TW very clear. Surface mostly even, some dips of 1 cm . Surface covered with much fresh green phytodet. Small holes in surface. Small ?foram sticking up \(1 / 2 \mathrm{~cm}\) near edge. Top mud even brownish-beige 12 cm . Middle mostly beige, paler streaks running up from base, a few mottles, 10 cm thick. Band 4 cm wide of gray-brown mud with white vertical streaks. Below, beige with bases of vertical streaks. Total \(32.5-33 \mathrm{~cm}\).

TW ?clear. Some phytodet. Total ?
\begin{tabular}{ll} 
Cl & \multicolumn{1}{c}{ NO GOOD } \\
2 & organics \\
3 & phaeopigments \\
4 & radionuclides - long term \\
5 & pore water - whole core squeeze \\
6 & radionuclides \\
7 & radionuclides \\
8 & pore water - centrifuge
\end{tabular}

DESCRIPTION of CORES
C1
Short. Water drained out. 11 cm even color beige-brown mud.
C2
TW slightly turbid. Surface even, slight slant of \(1 / 2 \mathrm{~cm}\) phytodet. on surface. Burrow trace from surface 2.5 cm Top mud mostly even color beige-brown, 2 pale patches, 13 cm thick. Middle mostly brownish with a few pale mottles, 12 cm thick. Bottom even pale mud 3 cm . Total 20.5 cm .

C3 TW clear. Surface slanted 1 cm . Much loose phytodet. fluff, brownish green. Burrow hole 3 cm down. Burrow trace from surface to 2 cm down. Top mud even beige-brown 15 cm thick. Middle evenly mottled beige, brownish, pale, 14 cm . Bottom even pale mud 8 cm . Total \(33-34 \mathrm{~cm}\).

TW slightly turbid. Surface slant of 1 cm . Surface with some loose phytodet. on surface. Burrow trace with some phytodet. inside, 2 cm down, 1.5 cm long. Some dark green mucous balls. Top mud even beige-brown 12 cm thick. Middle grayish brown, beige \& pale mottling 15 cm . Bottom even pale mud 8 cm . Total \(33-34 \mathrm{~cm}\).

TW clear. Surface even. Surface with much phytodet. Short burrow traces from surface to \(1 / 2 \mathrm{~cm}\) down, with forams in trace. Top mud even beige-brown 13cm thick. Middle gray-brown with beige mottling 16 cm . Bottom even mostly, pale carbonate mud. Total 33 cm .

TW clear. Surface, even. Much loose phytodet. on surface, greenish brown. Some worked down into sediment 4 mm . Top mud even beige-brown 13 cm thick. Middle gray-beige, beige, \& pale mottled 16 cm . Bottom even pale mud 3 cm . Total 32 cm .

TW clear. Surface even. Surface with some greenish brown phytodet. Some worked down 6 mm into sediment. Top mud even beige-brown 16 cm thick. Middle mostly beige, some paler mottles, 10 cm . Bottom even pale mud 2 cm thick. One patch of white mud 5 cm up from base, 4 cm wide. Total 30.5 cm .

TW clear. Surface even. Very large undulating Xeno on surface 3 cm high, 7 cm long, 4 cm wide. Much phytodet. on surface, greenish. Burrow hole at 1.5 cm down. A little bit of phytodet. worked into sediment 5 mm . Top mud even beige-brown 11 cm . Middle evenly mottled beige and paler, 17 cm . Bottom pale mud. Total 34 cm .

\section*{DISTRIBUTION of CORES}
\begin{tabular}{lll} 
C1 & microbiology & 5 \\
2 & pore water - whole core squeeze & 6 \\
3 & phaeopigments & 7 \\
4 & barite & 8
\end{tabular}
radionuclides
paleo
organics
pore water -
centrifuge

\section*{DESCRIPTION of CORES}

C1 TW clear. Surface with 7 mm depression near side. Lots of flocculent material, esp. in depression. Patches of carbonates starting at 16 cm down. Total 30 cm .

TW clear. Surface even. Surface with much phytodet.,
greenish. Some worked 3 mm into sediment. Burrow hole at down. Top mud even color beige-brown 14 cm thick. Middle graybeige and beige mottled 12 cm thick. Bottom pale, even color, 7 cm . Total 32 cm .

C3 TW very clear. Surface even. Covered with much greenish phytodet. One small hole in surface, in center of mound 1 cm diameter. Burrow trace from surface, with forams and phytodet. 8 mm down. Top mud even beige-brown color 13 cm thick. Middle gray-beige, beige, pale mud mottled evenly 14 cm thick. Bottom pale mud, even, 5 cm . Total 32.5 cm .

TW clear. Surface with dip on one side, 2 cm lower - exit of burrow. Some loose phytodet. on surface. One small tube sticking up 5 mm from surface. Top mud mostly even beige-brown, with 2 pale spots in layer, 13 cm thick. Middle mottles gray, gray-beige, and pale mud 13 cm . bottom pale, mostly even color 8 cm . Total \(30-34 \mathrm{~cm}\).

TW clear. Surface even. Surface covered with much greenish phytodet. 4 mm thick. Middle gray-beige and beige streaked, 11 cm thick. Bottom pale, with some beige mottles. Total 30 cm .

TW clear. Surface with dip of 1 cm , with tube or tube-like foram sticking 2 cm up from surface. Some loose greenish phytodet. A little worked into sediment. A few stick forams 0.5 cm out of surface. Top mud even beige-brown 12 cm thick. Middle gray-brown even color with some beige and pale mottling. Bottom mottled pale and beige 4 cm . Total 26 cm .

TW slightly turbid. Surface even. Some brownish phytodet. on surface. One area of phytodet. worked 1 cm down into sediment, 3 cm wide. Top mud even beige-brown 17 cm thick. Middle evenly mottled gray-beige, beige, and white 10 cm thick. Bottom pale, even color 3 cm . Total 34.5 cm .

TW slightly turbid. Surface mostly even. Only a few mucous balls loose on surface. Burrow traces at \(1 \mathrm{~cm} \& 3 \mathrm{~cm}\) down. Top mud even color, beige-brown 15 cm thick. Middle evenly mottled gray-beige and beige 15 cm . Bottom pale mud, mostly even, a few beige mottles 6 cm thick. Total \(31-31.5 \mathrm{~cm}\).

DISTRIBUTION of CORES
\begin{tabular}{rl} 
C1 & meiofauna \\
2 & pore water - whole core squeeze \\
3 & paleo \\
4 & paleo \\
5 & barite \\
6 & radionuclides \\
7 & paleo \\
8 & pore water - centrifuge
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW somewhat turbid. Surface even, smooth, possibly re-suspended \& resettled. A few mucous ball. One clump Icm diameter. Burrow trace from surface to 2 cm down. Top mud even beige-brown 13 cm thick. Bottom mottled pale and beige. Total 21 cm .

C2 TW slightly turbid. Surface even. Surface with some loose flocculent material, brownish. Burrow hole at 13 cm down. Small trace at \(1 / 2 \mathrm{~cm}\) down. Top mud even beige-brown 13 cm . Middle mottled gray-beige and pale 11 cm . Bottom streaky gray, beige and pale. Total 28 cm .

C3 TW slightly turbid. Surface uneven - mounds \& valleys, difference of 2 cm . Very little loose material on surface, brownish. One Xeno/foram 7 mm high. Burrow hole to surface from 1 cm down. Burrow traces at \(8,11 \mathrm{~cm}\) down. Top mud even beige-brown 14 cm thick. Middle mottled gray, pale, beige 14 cm . Bottom pale, some beige mottling 3 cm . Total \(34-36 \mathrm{~cm}\).

C4 TW slightly turbid. Surface mostly even, some low microstructure, valleys. Some brown loose flocculent material. Burrow hole at 3.5 cm down. Top mud beige-brown, even color 12 cm thick. Middle mottled gray, pale. white, beige, 17 cm . Bottom pale 2 cm . Total \(33-34 \mathrm{~cm}\).

C5 TW somewhat turbid. Surface even. Some brownish loose flocculent material on surface. Burrow holes at 5 and 9 cm down. Top mud even color beige-brown 14 cm thick. Bottom evenly mottled gray, beige, pale. Total 33 cm .

C6 TW slightly turbid. Surface with some low topography. Surface with a little loose brown material. One larger loose clump 1 cm diameter Parts of surface look re-suspended with a layer 5 mm thick, darker, some forams mixed in. Burrow holes at 2 and 4 cm down. Top mud even beige-brown 14 cm thick. bottom mottled beige, gray, pale. Total 3132 cm .

C7 TW slightly turbid. Surface with 1 cm slant. Surface with much loose brown flocculent material. Burrow trace from surface to 1 cm down. More traces at 1.2 and 7 cm down. Top mud even color beige-brown 17 cm thick. Middle mottled gray, brown, beige pale 15 cm . Bottom pale/white 2 cm . Total \(33.5-35 \mathrm{~cm}\).

C8 TW somewhat turbid. Surface with some dips of \(1 / 2 \mathrm{~cm}\). At one dip is piece of Xeno/foram sticking out of mud with dark mud around it. Only a few mucous balls on surface. Burrow trace at 11.5 cm down. Top mud mostly even beige-brown 15 cm thick. Bottom mottled gray, beige, pale. Total \(31-31.7 \mathrm{~cm}\).
\begin{tabular}{rl} 
C1 & microbiology \\
2 & organics \\
3 & radionuclides \\
4 & radionuclides
\end{tabular}

5 organics
2 organics
6
7
8
DESCRIPTION of CORES
C1 TW very clear. Surface with 5 mm slope. Lots of green phytodet Burrow down to 3 cm .

C2 TW clear. Surface even. Much greenish phytodet. covering surface 4 mm depth. Top mud even color beige-brown 13 cm thick. Middle fine streaking mostly gray mud, some beige 12 cm . Bottom pale even color 2 cm . Total 29 cm .

C3 TW very clear. Surface even except for small mound 5 mm high of pale mud, 3 cm diameter. Surface covered with \(4-5 \mathrm{~mm}\) greenish phytodec Small burrow hole in surface. Top mud even light brown 15 cm thi Middle gray, beige, pale streaked and mottled 13 cm . Bottom pale and white mottled, mostly pale 5 cm . Total 33.5 cm .

C4 TW very clear. Surface mostly even, some low dips and mounds. Some small burrow holes in surface. Much phytodet covering surface. Some phytodet. worked down 5 mm . Stick foram \(1 / 2 \mathrm{~cm}\) high. Burrow traces parallel just 5 mm under surface with forams \& some phytodet 10 cm along side. Burrow traces 2.5 and 11 cm down. Top mud even light brown 13 cm . Middle mottled gray,beige 11 cm . Band of white mud at 24 cm down, 3 cm thick. Bottom pale, some white and beige mottles 6 cm . Total 35 cm .

C5 TW very clear. Surface mostly even, some low topography, dips and mounds. Surface with much greenish phytodet. ?Xeno 3 cm high, flat 1.5 cm widest. Small tube near edge. 2 burrow traces at 11 cm down. Top mud even light brown 14 cm thick. Middle mostly gray \& beige mottled and streaked 16 cm . Bottom pale mud, mottled with white 4 cm . Total 33 cm .

C6 TW very clear. Surface mostly even; some low topography with mounds. Surface covered with fresh greenish phytodet. 4 mm th little worked into sediment 6 mm . Burrow trace with forams 20 surface from 1.5 cm down. Top mud light brown, even color 13 cm thick. Middle mostly gray, some beige \& pale mottling and streaking 13 cm . Bottom mostly even pale 5 cm . Total \(33-33.5 \mathrm{~cm}\).

C7 TW very clear. Surface with much phytodet. around sides. Some worked into sediment \(1 \mathrm{~cm}, 1 \mathrm{~cm}, 6 \mathrm{~mm}, 4 \mathrm{~mm}\). Burrow hole in surface. Top mud light brown, even color 16 cm . Middle gray, beige streaked 11 cm . Partial band, or huge old filled burrow, white mud, 25 cm down, 15 cm long, 2 cm wide. Bottom 5 cm thick, even pale mud. Total 35 cm .
\(C 8\) TW very clear. Surface even except for mound 3.5 cm wide, 7 mm high, with hole in center, of pale mud like bottom layer. Possible ?sponge or tube sticking up out of mud 1 cm long, 7 mm high. Surface covered with much fresh greenish phytodet. some worked into sediment 6 mm . Burrow trace from surface, with forams inside, to 1 cm down. Top mud even beige-brown 19 cm . Middle gray, beige mottles \& streaked 11 cm . Bottom pale, mostly even colored, some white \& beige mottles. Total 33 cm .

\section*{DISTRIBUTION of CORES}
\begin{tabular}{rl} 
C1 & \multicolumn{1}{c}{ NO GOOD } \\
2 & NO GOOD \\
3 & NO GOOD \\
4 & trace metals - ReMoU \\
5 & microbiology/radionuclides \\
6 & phaeopigments \\
7 & paleo \\
8 & radionuclides
\end{tabular}

DESCRIPTION of CORES
C1 EMPTY
C2 EMPTY
C3 EMPTY
C4 TW clear. Surface with some dips and mounds, \(1 / 2 \mathrm{~cm}\) difference. Surface with much greenish phytodet. along sides and in hollows. Small mound of paler mud 3 cm diameter. Bushy foram, ?agglutinated, 1 cm high, 6 cm wide at top. Burrow trace 2.5 cm down. Top mud even light brown 13 cm thick. Middle mottled gray-beige, beige, and pale 14 cm . Bottom pale mud mottled with beige 6 cm . Total \(33.5-34 \mathrm{~cm}\).

TW very clear. Surface even except for low mound 1 cm
(Phytodet. "fluff" removed by Dobbs). Some burrow traces \(1 / 2 \mathrm{~cm}\) parallel under surface. Top mostly even color light brown, 11 cm thick, with some dark gray streaky patches. Middle mottled beige, pale, grayish 13 cm thick. Bottom pale. Total 31 cm .

C6 TW very clear. Surface mostly even, some low topography. Surface with much phytodet. esp on sides. One big dark green clump \(2.5 \mathrm{~cm} x\) lcm. Burrow hole on surface with pale mud surrounding. Burrow trace from surface filled with forams 1.5 cm down. Below at 3 cm down is larger burrow trace. Trace at 7 mm down. Top mud even color light brown 14 cm thick. Middle gray, gray-beige, beige mottling 14 cm . Bottom white even color 6 cm thick. Total \(31.5-32 \mathrm{~cm}\).

TW very clear. Surface even. Surface with much phytodet. EsF along sides, but also covering surface. Some dark phytodet. balls. Vertical burrow trace from 1 to 3.5 cm down. Trace adjacent at 3.5 cm down. \(Y\)-shaped trace from surface to 1.5 cm down. Trace at 10 cm down. Top mud mostly even light brown 12 cm thick. Middle mostly gray-beige, with beige and pale mottling 12 cm thick. Bottom pale and beige mottled. Total 31.5 cm .

\section*{DISTRIBUTION of CORES}
\begin{tabular}{rl} 
C1 & phaeopigments \\
2 & radionuclides \\
3 & meiofauna \\
4 & organics \\
5 & macrofauna \\
6 & radionuclides \\
7 & radionuclides
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW clear. Surface mostly even, slant of 1 cm . Much brownis green phytodet. covering surface. A little worked inca sediment 6 mm . Burrow hole at 3.5 cm down; foram-filled trace above it exiting to surface from 1 cm down. Top mud even light brown 12 cm thick. Upper middle mostly gray \(5-8 \mathrm{~cm}\) thick. Lower middle mottled mostly beige and pale 5 cm thick. Bottom pale, some white patches 5 cm . Total \(32.5-33.5 \mathrm{~cm}\).

C2 TW clear. Surface mostly even, a little low topography \(1 / 2 \mathrm{~cm}\) high. Surface covered with much brownish green phytodet. Some phytodet. worked down 1 cm . Burrow hole at 4 cm down. Top mud even beige-brown llcm thick. Upper middle streaky beige and gray 10 cm . Lower middle mostly beige, some pale mottles, 9 cm. Bottom pale and white mottled 5 cm . Total \(31.5-32.5 \mathrm{~cm}\).

C3 TW clear. Surface even. Large Xeno (brain-1ike) on surface 5 cm long, 3 cm high, 4.5 cm wide. Large burrow mound, under and adjacent to Xeno, with 4 holes, and pale sediment around it. Xeno burrow mound 3.5 cm wide, 1 cm high. Some greenish phytodet. esp along edges and in hollows, esp near Xeno. Top mud even light brown 13 cm thick. Upper middle even gray-beige 5 cm thick. Lower middle even mottled beige, pale, gray-beige 10 cm . Bottom even pale 4 cm . Total 31.5 cm .

C4 TW clear. Surface mounded on one side from large burrow holes below. Mound 1.5 cm high, 10 cm along side. Mound covering half of surface. Some greenish brown phytodet. on surface. 3 burrow holes: a. 3 cm down, 1.3 cm high, 1.2 cm long b. 5.5 cm down, 1.3 cm long, 9 mm high c. 8 cm down, 2.5 cm long, 6 mm high. Trace at 9.5 cm down. Top mud even light brown 11 cm thick. Middle mottled beige, gray-beige, pale 14 cm . Bottom pale and white 4 cm . Total \(32-33.5 \mathrm{~cm}\).

TW very clear. Surface with big depression with burrow hole in center and large burrow holes 3 cm down below it. Surface with 3 cm difference in height. Little phytodet. on surface. Small Xeno in center of depression. Top mud mostly even light brown, but one side with much pale mottled reworked patches 12 cm thick. Middle mottled gray, beige, pale, gray-beige 13 cm . Bottom even pale 5 cm . Total \(28.5-31.5 \mathrm{~cm}\).

TW clear. Surface even. Much brownish green phytodet. on surface, esp near edges \& in hollows. A few small mounds on surface \(1 / 2 \mathrm{~cm}\) high. Burrow trace at surface with phytodet worked in \(1 / 5 \mathrm{~cm}\) wide, 5 mm deep. Trace at 2 cm down. Top mostly even light brown, a few pale mottles 13 cm . Middle evenly mottled gray, beige, pale 15 cm . Bottom pale 3 cm . Total 33.5 cm .

C8
TW very clear. Surface even mostly. Small mound of pale sediment 6 cm along one side, 5 mm high. Clump in center - Xeno? agglutinated foram? Much phytodet. along sides. Burrow traces at \(6 \& 7.5 \mathrm{~cm}\) down. Top mud even light brown 13 cm thick. Middi* streaky gray, beige, pale with some pale mottles 11 cm . Bottom pale \& white mottled 3 cm . Total 29.5 cm .

EMPTY

\section*{DISTRIBUTION of CORES}
\begin{tabular}{rl} 
C1 & phaeopigments \\
2 & pore water - whole core squeeze \\
3 & radionuclides \\
4 & pore water - centrifuge \\
5 & barite \\
6 & organics \\
7 & paleo \\
8 & microbiology/silicate temperature exp.
\end{tabular}

DESCRIPTION of CORES
C1 TW slightly turbid. Surface even. With some loose brown flocculant material. Some burrow traces from surface to 1 cm down. One piece phytodet. worked into sediment 3 mm . Top mud even color coffee au'lait brown 8 cm thick. Upper middle mottled brownish \& beige 7 cm . Lower middle even pale beige 12 cm . Bottom pale brown, some white mottles. Total 34 cm .

C2 TW slightly turbid. Surface mostly even. A few loose mucous balls. Burrow trace 6 mm down. Top mud even light brown 10 cm thick. Middle pale beige with some white patches, 16 cm thick. Bottom pale brown even color 9 cm . Total 34 cm .

C3 TW slightly turbid. Surface even. Some loose brownish mucous balls. Sediment mound/clump 2 cm diameter, \(4 m \mathrm{~m}\) high. Burrow trace at 5 cm down. Top mud even light brown 8 cm thick. Upper mud mottled brownish, beige, pale, 8 cm . Lower middle pale beige 10 cm . Bottom even pale brown. Total 33 cm .

C4 TW slightly turbid. Surface even. A few loose mucous balls. burrow hole at 3.5 cm down, with trace leading 2 cm towards surface. Trace at 3 cm down. Large burrow hole with system going down into core. Hole is 7 cm down, 2.5 cm long, 1 cm high; system runs to 14 cm below hole. Much pale mud (leading up to surface) around trace \& hole. Top mud light brown except for burrow patches, 8 cm thick. Upper middle mottled brownish, beige, pale, 7 cm . Lower middle even pale 10 cm . Burrow pale brown even color 5 cm . Total 29.5 cm .

TW clear to slightly turbid. Surface with large mound, covering \(2 / 3\) of surface, of browner coarser sediment than rest of surface. Small tube 4 mm high. A few mucous balls. Burrow trace to surface, foram-filled, from lcm down. Burrow hole at 3.5 cm , with foram-filled trace down 5 cm below. Trace at 6.5 cm down. Top mud even brown 8 cm thick. Upper middle mottled beige \& brownish 8 cm . Lower middle even pale 12 cm . Bottom mottled beige, pale, white 5 cm . Total \(30.5-31.5 \mathrm{~cm}\).

C6

C7
TW slightly turbid. Surface with dips and mounds 1.5 cm difference. Large Xeno on surface, \({ }^{5} 5 \mathrm{~cm}\) long, 2.5 cm high, 8 mm wide. Some loose brown flocculent material. Burrow hole at 1.5 cm down. Top mud even coffee-brown 11 cm thick. Middl mostly pale beige, some white mottles 12 cm . Bottom even pale brown 7 cm . Total 32.5 cm .

\section*{DISTRIBUTION of CORES}
\begin{tabular}{rl} 
C1 & pore water - centrifuge \\
2 & pore water - whole core squeeze \\
3 & phaeopigments \\
4 & radionuclides \\
5 & NO GOOD \\
6 & NO GOOD \\
7 & NO GOOD \\
8 & NO GOOD
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW very clear. Surface even. A little loose brownish material on surface. One clump 8 mm diameter - ?foram. Burrow t=1 2.5 cm down. Top mud even coffee brown 6 cm thick. Upper mostly coffee brown, some pale mottles 5 cm . Lower mottled pale beige \& white 15 cm . Bottom light beige, mostiy even. Total 30 cm .

TW very clear. Surface mostly even, but with clump \(8 \pi m\) greenish material. Large hole on surface with much pa. re-worked from sediment near bottom of core tube. Top mud even light brown 6 cm thick. Upper middle mottled brownish, beige, pale 8 cm . Lower middle pale gray and beige with white mottles 9 cm . Bottom light beige 4 cm . Total 29.5 cm .

C4 TW very clear. Surface even, Much pale greenish brown phytodet. along sides and in hollows. A few small holes in surface. Top mud even light brown 8 cm thick. Upper middle mottled and streaked beige, light brown, pale 6 cm . Lower middle pale beige, almost white, even color 12 cm . Bottom even beige 6 cm . Total 32.5 cm .

EMPTY

EMPTY

EMPTY

\section*{DISTRIBUTION of CORES}
\begin{tabular}{rl} 
C1 & radionuclides \\
2 & phaeopigments \\
3 & radionuclides \\
4 & organics \\
5 & microbiology \\
6 & trace metals - ReMoU \\
7 & organics \\
8 & paleo
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW very clear. surface even. A few mucous balls on surfa Foram-filled burrow trace, vertical from 1.5 cm down to Top even coffee-brown color 7 cm thick. Upper middle mottled beige, pale, light brown 4 cm . Mid-middle ash white to pale beige 11 cm . Lower middle mottled pale beige, white, beige 8 cm . Bottom brownish and beige mottled 3 cm . Total 32 cm .

C2 TW clear. Surface with mound on one side 1 cm high. Some phytodet. and mucous balls on surface. Burrow trace from surface to 6 mm down. Small hole on surface. Top mud even light brown 7 cm thick. Middle mostly pale ash color, a few white mottles 23 cm . Bottom brownish and white mottled 3 cm . Total \(32.5-33.5 \mathrm{~cm}\).

TW clear to slightly turbid. Surface with mound through middle 5 cm wide, 1 cm high. Some mucous balls on surface. Top an coffee-brown color 7 cm thick. Upper middle mottled beige brownish 5 cm . Lower middle ash-beige, even color, a few whic patches near base 13 cm . Bottom even pale brown. Total \(30-31 \mathrm{~cm}\).

TW clear to slightly turbid. Surface even. Surface with much brownish green phytodet. along sides. Burrow hole at 9.5 cm down, trace at 5 cm . Top mud even light brown 5 cm thick. Middle mostly pale, some beige and white mottles and streaks 19 cm , with 2 round pale patches 2 cm and 3 cm diameter. Bottom brownish and white mottles 5 cm . Total 32.5 cm .

TW

TW clear. Surface mostly even. Mound along one side \(1 / 2 \mathrm{~cm}\) high. Some loose greenish brown flocculent material along sides. Hole in surface. Burrow trace system with forams and phytodet. just 1 cm under surface, 2.5 cm long. Burrow hole at 2 cm down, under system. Top mud even coffee-brown 7 cm thick. Upper middle mottled beige and pale 7 cm . Lower ash-beige mostly even 12 cm . Bottom yellowish brown and white mottles 5 cm . Total \(31.5-32 \mathrm{~cm}\).

TW clear to slightly turbid. Surface mostly even, some mounds. Some loose flocculent material on surface, esp along sides. Loose brown "thing" (?worm) on surface. Top mud even coffeebrown 9 cm thick. Middle mostly ash-beige, some beige \& pale mottles and streaks at top and bottom 16 cm . Bottom brownish and white mottles 3 cm . Total \(32-33 \mathrm{~cm}\).

TW clear. Surface with some mounds, 1 cm difference. Large burrow hole in surface 1.2 cm long. Another small hole nearby. Foram-filled burrow trace from surface mound to 3 cm down. Top mud light brown, even color 8 cm thick. Upper middle beige and pale mottled 7 cm . Lower middle ash-white, pale beige, a few white patches, 14 cm (ash-white is a band near upper end I from surface, 5 cm thick). Bottom brownish and beige mott. 3 cm . Total \(33.5-34.5 \mathrm{~cm}\).

\section*{DISTRIBUTION of SAMPLES}
\begin{tabular}{rl} 
C1 & meiofauna \\
2 & pore water whole core squeeze \\
3 & paleo \\
4 & paleo \\
5 & paleo \\
6 & radionuclides \\
7 & pore water - centrifuge \\
8 & macrofauna
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW turbid. Surface even. A few mucous balls on surface. Foran filled burrow trace from surface, puffing a little sed when core moved, 1 cm down. Some holes in surface. Top m coffee-brown 11 cm thick. Bottom mostly brown, some puee mottles. Total 15 cm .

C2 TW clear to slightly turbid. Surface even. A few mucous balls. Four burrow holes in surface. Large burrow hole 3 cm down, 4.5 cm long, 5 mm high. Burrow traces at \(2.5 \& 5 \mathrm{~cm}\) down. Top mud even coffee-brown 9cm. Middle gray with some white mottling, esp. band 5 mm thick near top of middle, 11 cm thick. Bottom mottled beige and pale, mostly pale. Total 29 cm .

TW very clear. Surface mounded up on one side from mound 2 cm high. 2 small holes in surface. Burrow hole from surface to 1 cm down. Some loose mucous balls. Burrow trace from surface to 4.5 cm down. Holes at 1.5 cm down. Top mud mostly even coffee-brown 12 cm . Middle even gray 6 cm . Bottom mottled beige, pale and light brown 12 cm . Total \(30-32.5 \mathrm{~cm}\).

TW clear. Surface with much topography, mounds \& valleys. Burrow hole in center of one of depressions, lcm deep. Heavily burrowed - series of 4 holes around core tube at 4 cm down 5.5 cm long, 7 mm high. Foram-filled burrow trace from su 9 cm down, 1 cm wide at surface. Top mud even gray-brown Upper middle grayish brown, streaky with beige 7 cm thick. Lower mottled beige \& pale 10 cm . Bottom mostly even pale beige 2 cm . Total \(31.5-32 \mathrm{~cm}\).

TW clear. Surface with slant of 1 cm because of mounds on sides. Some brown loose flocculent material. 3 holes in surface. Burrow trace from surface to 1.5 cm down. Many white forams scattered on surface. Burrow trace at 7 cm down. Top mud even coffee-brown 13 cm . Middle mostly gray near top, rest mottled beige \& pale, becoming paler deeper 16 cm . Bottom pale beige 2 cm . Total \(33.5-34.5 \mathrm{~cm}\).

TW clear to slightly turbid. Surface slant of 1.5 cm from mound (of lighter sediment) on side, with 2 holes in mound. Some loose brown flocculent material. 2 burrow holes at 4 cm down, one 1 cm long, 6 mm high; other 1 cm long, 4 mm high. Top mud even coffee-brown 13 cm thick. Middle grayish streaky with beige 7 cm . Bottom mottled beige and pale. Total \(30-31.5 \mathrm{~cm}\).

C7 TW clear to slightly turbid. Surface mostly even. Some loose brown flocculent material on surface. Foram-filled burrow trace 6 mm down. Burrow hole 4 cm dowrf, 1.3 cm long. Another hole at 5 cm down. Top mud even coffee-brown 15 cm thick. Middle gray streaky with beige 6 cm . Bottom mottled beige, pale, light brown 13 cm . Total 34.5 cm .

C8
TW turbid. Surface even. There was gap of apprx. 10 cm from 9 cm down. Very heavily burrowed near surface to 2.5 cm down, probably at gap, and continuously below gap for 10 cm . Extensive foram-filled trace area 4 cm wide, 6 cm deep. Top mud even coffee-brown 10 cm thick. Middle even gray-brown 8 cm . Bottom mottled beige, pale, light brown 9 cm . Total without gap 24 cm . With gap total was apprx. 34 cm long.
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C1 NO GOOD
2 NO GOOD
3 NO GOOD
4 NO GOOD
5 NO GOOD
6 meiofauna
7 gamma count (radionuclides)
DESCRIPTION of CORES
C1 EMPTY
C2 TW drained. surface was eve, except at one side whers drained. Top mud gray-brown streaks and mottles. Total -
EMPTY
C4 TW turbid. Surface uneven and slumped to one side, where there is big gap (gaps) to base. Possibly from burrow? Top mud graybrown 6 cm thick. Bottom mottled beige, pale, brown. Total 912 cm .
EMPTY
TW turbid. Surface even. A few mucous balls on surface. Bubbles were ascending as core tube was still on MC frame. Possible burrow trace at 5 cm . Top mud gray-brown 5 cm thick. Bottom mottled beige and pale. Total 14.5 cm .

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\begin{tabular}{rl} 
C1 & organics \\
2 & radionuclides \\
3 & paleo \\
4 & phaeopigments \\
5 & organics \\
6 & radionuclides \\
7 & microbiology \\
8 & NO GOOD
\end{tabular}

DESCRIPTION of CORES
C1 TW somewhat turbid. Surface even but slanted \(1 / 2 \mathrm{~cm}\). Surface smooth. A few mucous balls. Top mud gray-brown 8 cm thith Upper middle streaked and mottled brown and beige 7 cm middle ash-gray with some pale mottles 15 cm . Bottom \(\mathrm{b} . \mathrm{fl}_{\mathrm{e}}\). Total 33 cm .

C2 TW turbid. Surface even, smooth. No sign of flocculent material. Top mud even gray-brown 7 cm thick. Upper middle beige and gray-brown mottled 4 cm . Lower middle ash-gray, some pale mottles 11 cm . Bottom mostly beige, one white patch 5 cm . Total 28.5 cm .

TW somewhat turbid. Surface even, smooth. Re-sedimentation ot 6 mm on part of surface. Top mud even gray-brown 8 cm Middle mostly ash-gray 15 cm , some white patches at lower end of layer. Bottom mostly beige 7 cm . Total 33 cm .

TW turbid. Surface with mound along one side lom high. Surface smooth; a few mucous balls. A number of small burrow holes clustered 1 cm under surface. Top mud even gray-brown 8 cm thick. Middle ash-gray, a few white patches 17 cm . Bottom beige, with white mottles at base 9 cm . Total \(31.5-33 \mathrm{~cm}\).

TW somewhat turbid. Surface even. A few loose mucous balls. stick foram. Possible tube 1.2 cm out of mud, 5 cm wide, with burrow system underneath to 11 cm . Top mud even gray-brown 10 cm thick. Middle mostly ash-gray except at burrow system brown mud is brought down and white mud is brought up Bottom beige and white mottled 5 cm . Total 30 cm .

TW somewhat turbid. Surface even. Some large burrow holes on surface. Some loose flocculent material.Foram-filled burrow trace from surface to 2 cm down. Another foram-filled trace 1.5 cm down, 2 cm long. Top mud even gray-brown 7 cm . Bottom mottled beige, pale, gray. Total 25 cm .

\section*{DISTRIBUTION of CORES}

C1 phaeopigments
2 radionuclides
3 organics
4 radionuclides
5 microbiology/????
6
7
8
phaeopigments
organics
radionuclides - long term

\section*{DESCRIPTION of CORES}

C1 TW clear. surface even. Much greenish phytodet. along sides. Burrow hole at 6.5 cm down, with foram-filled trace lead' down from surface. Branched ?foram along side, 1 cm hign mud even coffee-brown 7 cm thick. Upper middle mostly coffes brown, some beige mottles and streaks. Lower middle pale beige 8 cm . Bottom beige 8 cm . Total 27 cm .

TW clear. Surface mostly even. Much pale greenish phytodet. covering surface. Burrow trace foram-filled from surface to 1 cm down. Top mud even gray-brown 11 cm thick. Upper middle mottled and streaked mostly beige with pale 4 cm . Lower middle mostly pale gray-beige, with pale and white mottles 9 cm . Bottom beige with white mottles (round 2 cm diameter) 7 cm . Total 31.5 cm .

TW very clear. Surface with mound (same as in C4) 1cm high, 3.5 cm wide, 10 cm long. A little phytodet. along sides. A little worked 4 mm into sediment. Burrow hole at 3 cm down. Foram-filled trace from surface to 2 cm down. Top mud even coffee-brown 12 cm thick. Top layer streaking with beige into upper middle 5 cm . Lower middle ash-gray 9 cm . Bottom beige, white patches, pale mottles 10 cm . One round white patch 3.5 cm diameter. Total \(32-32.5 \mathrm{~cm}\).

TW very clear. Surface with long mound 1 cm high, 4 cm wide, 11 cm long. 2 holes in surface (one at small mound 1.5 cm diameter). Some phytodet., esp. on sides and in valleys. Burrow hole at 2.5 and 3 cm down. Top mud even coffee-brown 10 cm thick. Upper middle beige and brown streaked and mottled 7 cm . Lower middle pale beige 11 cm . Bottom beige with white burrow mottles 7 cm . Total \(31.5-32.5 \mathrm{~cm}\).

TW clear. Surface slanted 3 cm (probably same mound as in C6). (phytodet. removed by Dobbs). Burrow trace system foram-filled from surface ( 4 cm wide) to 6 cm down. Burrow traces at 9 and 11 cm down. Top even coffee-brown 9 cm . Upper middle evenly mottled brown, beige, \& pale 5 cm . Lower mostly pale beige 10 cm . Bottom beige 5 cm . Total \(29.5-31.5 \mathrm{~cm}\).

TW very clear. Surface slanted 2 cm . Much phytodet. covering surface. Branching foram 1 cm high; 1 tube or sponge 5 mm high, 3 mm wide. Chunk of phytodet. and forams worked into sediment 7 cm deep and 1 cm wide at surface. Top mud even gray-brown 10 cm . Upper middle 7 cm mottled brown and beige. Lower middle pale ash-beige 8 cm . Bottom mostly beige, some pale mottles 6 cm . Total \(32 \cdot 5-34.5 \mathrm{~cm}\).

TW very clear. Surface even except for mound 5 mm high, 2.5 cm wide, 4.5 cm long. Much pale greenish phytodet. along sides and in hollows; some worked 7 mm into sediment in 3 places. Foramfilled burrow trace system to small hole from surface to 3 cm down. Another foram-filled trace from surface to 3 cm down Hole at 3 cm down. Top mud even coffee-brown 10 cm thick. Mi even ash-beige 16 cm . Bottom beige 7 cm with large white bands 2 cm wide. Total 33.5 cm .

TW clear. Surface even. Surface covered with greenish brown phytodet. fluff. Small mound on surface \(1 / 2 \mathrm{~cm}\) high. Foramfilled burrow trace \(1 / 2 \mathrm{~cm}\) wide under surface. (Small sponge 2 cm long, and small nodule 1 cm diameter found at apprx. 1 cm down). Top mud even coffee-brown 10 cm thick. Top mud streaking into middle, pale beige 15 cm . Bottom mottled beige 9 cm , with white filled burrows 2 cm diameter. Total 34.5 cm .

DISTRIBUTION of CORES
\begin{tabular}{rl} 
C1 & \multicolumn{1}{c}{ NO GOOD } \\
2 & microbiology \\
3 & organics \\
4 & pore water - whole core squeeze \\
5 & phaeopigments \\
6 & pore water - centrifuge \\
7 & radionuclides \\
8 & NO GOOD
\end{tabular}

\section*{DESCRIPTION of CORES}

\section*{C1 EMPTY}

C2
C3 TW clear. Surface mostly even. Nodule on surface 3 cm long, 1.5 cm wide. Surface with loose brown flocculent material (not phytodet.). Extensive burrow system on 2 sides from surface to base and from 8 cm to 22 cm down. Top mud even gray-brown 9 cm thick. Middle mottled gray-brown and coffee beige 12 cm . Bottom coffee-beige and brownish 5 cm . Total 26 cm .

TW clear. Surface even. Surface loose, but smooth. Burrow system from surface to 6 cm down, 5 cm along side. Anothe: burrow trace system parallel to surface 2 cm down. Top mud even gray-brown 10 cm thick. Middle mottled coffee-beige and graybrown 15 cm . Bottom even coffee-beige 1 cm . Total 27.5 cm .

C5
TW slightly turbid. Surface with large burrow depression on one side, 5 cm across, 1 cm into surface, 3 cm down from surface. Filled in trace continues down to 13 cm . Bits of black near bottom of trace. Another hole parallel to surface 5 cm down, 3.5 cm long. Other traces scattered around core tube. Top mud even gray-brown 9 cm thick. Middle coffee-beige and gray-brown 14 cm . Bottom even coffee-beige 4 cm . Total 28 cm .

TW slightly turbid. Surface even. Surface sediment very loose. A few clumps. No sign of phytodet. Burrow trace at 4 cm . Top mud even gray-brown 13 cm thick. Middle mottled gray-brown and coffee-beige 13 cm . Bottom even coffee-beige 3 cm . Total 28.5 cm .

TW slightly turbid. Surface slanted 1 cm . Surface smooth, no phytodet. Huge burrow holes and traces \#1: 6 cm down, 2.5 cm wide, 3 cm high; \#2: 2 cm down, \(5-8 \mathrm{~cm}\) high, 12 cm long. System 3 cm down, 2 cm high, 7 cm long. Top mud even gray-brown 11 cm thick. Middle mottled coffee-beige and gray-brown 13 cm . Bottom coffee-beige 3 cm . Total \(27.5-28.5 \mathrm{~cm}\).
\begin{tabular}{rl} 
C1 & \multicolumn{1}{c}{ NO GOOD } \\
2 & pore water - whole core squeeze \\
3 & paleo \\
4 & macrofauna \\
5 & (radionuclides archive) \\
6 & pore water - centrifuge \\
7 & NO GOOD \\
8 & NO GOOD
\end{tabular}

\section*{DESCRIPTION of CORES}

EMPTY
TW turbid. Surface even, smooth, maybe resedimentation \(\quad\). surface. Burrow trace at 4 cm down. Top mud even gray-brown 10 cm thick. Middle coffee-beige with gray-brown mottles, small near top, large ( 3 cm diameter) near bottom. Bottom even coffee-beige 2 cm . Total 30 cm .

TW somewhat turbid. Surface uneven, difference of 3 cm slumped on one side, with slumping lines underneath, or burrow traces, down to 7 cm . Possible ?nodule at 7 cm down. Burrow trace at 5 cm down. Top mud mostly even gray-brown, more variable in length and coloring than usual, \(7-12 \mathrm{~cm}\) thick. Middle with dark streaky band at top, rest coffee-beige with gray-brown mottles 18 cm . Total \(26-29 \mathrm{~cm}\).

TW somewhat turbid. Surface with big hole on one side, 8 cm along surface, 2 cm down, 2 cm into center of surface. Large Xeno on surface ("fungus" type) 4 cm long, plate-like. Burrow trace at 5.5 cm down. Burrow hole at 14 cm down. Top mud even gray-brown except for beige patch under Xeno, 6 cm long, by 3 cm deep. Middle coffee-beige and gray-brown, fine mottling at top, only a few scattered gray-brown mottles lower. Upper mottles 7 cm thick, lower mottles 10 cm . Bottom even coffeebeige 2 cm . Total 28.5 cm .

TW somewhat turbid. Surface with big cavity on one side long, 3 cm deep, 4 cm into center of surface. Possibly was nodule sitting there. Underneath are burrow traces or slumping lines, to 4 cm down, going 9 cm up diagonally towards surface, to 2 cm below surface. Other side of core tube with extensive burrow traces from 8 to 22 cm down. Top mud even gray-brown 10 cm thick. Middle mottled gray-brown and coffee-beige 11 cm . Bottom coffee-brown 3 cm . Total \(25-28 \mathrm{~cm}\).

TW somewhat turbid. Surface even. A few loose clumps 1 cm diameter. Surface very soft and soupy. Burrow trace at 3 cm , 7 cm , and 2.5 cm down. Top mud even gray-brown 11 cm thick. Middle coffee-beige with streaks and mottles of gray-brown 10 cm . Bottom mostly beige, some big (2cm diameter) gray-brown mottles 11 cm . Total 30.5 cm .
\begin{tabular}{rl} 
C1 & phaeopigments \\
2 & organics \\
3 & phaeopigments \\
4 & trace metals - ReMoU \\
5 & radionuclides \\
6 & organics \\
7 & radionuclides \\
8 & barite
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW very clear. Surface even. Clump - ?agglutinated foram - or surface, 4 mm high, 6 mm diameter. Burrow trace from \(2, \equiv\) 5.5 cm down. System running 9 cm along side, surface \(t\) down. Hole at 8 cm down. Small holes at \(1.5,2,3.5\) and \(4 . \ldots .4\) down. Large trace 5 to 8 cm down. Top mud even gray-brown 9 cm thick. Middle mottled pale, beige, brown, some black, some streaks 10 cm . Bottom mostly black, beige mottles 2 cm diameter 17 cm thick. Total 35 cm .

C2 TW clear. Depression on surface of \(1 / 2 \mathrm{~cm}\) deep, rest even. Some clumps lcm long; loose brown material dusting surface. Burrow holes at \(1.5,4\), and 10 cm down. Top mud even gray-brown 10 cm thick. Middle streaked beige, pale, brown, gray, 10 cm . Bottou mostly black, streaked with beige 17 cm . Total 37 cm .

TW clear. Surface even. Some clumps 1 cm diameter ?forams. Some loose brown detrital material. Burrow traces at 4, 5, 6, and 8 cm down. Hole at 2 cm down. System at 3 cm down, 4 cm along side. Top mud even gray-brown 9 cm thick. Middle streaked, some mottles beige, pale, brown, black, 10 cm . Bottom mostly black, some beige and pale 13 cm . Total 34 cm .

TW clear. Surface even, except low depression in surface with burrow hole. Some loose brown flocculent material. White clump 1 cm diameter of carbonate sediment on surface. Many burrow traces at a maximum of 6 cm down. Large system at 4 cm down, 5 cm long. Top mud even gray-brown 7 cm thick. Middle mottled and beige and brown 12 cm . Bottom mostly black mangane with pale and beige mottles 22 cm . Total 37.5 cm .

TW clear. Surface even. Surface with large coprolite Holothurian fecal pellet, spiraled, about \(7 \mathrm{~cm} 10 \mathrm{ng}, 2 \mathrm{~cm}\) wide, 1.5 cm high. Some loose brown material on surface. Burrow system just under surface to 1 cm down, 10 cm along side. Another system 7 cm down. Top mud gray-brown 8 cm thick. Middie mottled beige and pale 10 cm . Bottom black manganese mud mottled with beige 22 cm . Total 35 cm .

MC 35 contd.

C6

C7

C8

TW clear. Surface mostly even, 2 nodules on surface \(1.5 \times 2 \mathrm{~cm}\), and \(7 \mathrm{~mm} \times 1.4 \mathrm{~cm}\). Small one has ?foram growing on it. Some small holes in surface. Some clumps ?forams on surface, also tube 5 mm long. Burrow trace diagonal from surface to 3.5 cm down, 7 cm long. Top mud even gray-brown 7 cm thick. Middle mottled and streaked beige, pale, brown, black \(10-12 \mathrm{~cm}\). Bottom black, with beige and pale mottles and streaks 21 cm . Tota 36 cm .

7 TW clear. Surface even, smooth, some loose brown material on surface. Large burrow hole in surface 1 cm long, 5 mm wide. Burrow trace parallel to surface to 2.5 cm down, 7 cm along side, exiting to surface. Top mud even gray-brown \(10-12 \mathrm{~cm}\) thick. Middle streaked beige, pale and brown 5 cm , with some beige streaks going 8 cm down into bottom. Bottom mostly black, streaked with pale 17 cm . Total 33 cm .

TW clear. Surface even, smooth. Some loose brown material on surface. Burrow traces at \(1,2.5\), and 6 cm down. Burrow hole at 3 cm down. Top mud even gray-brown 11 cm thick. Middle mottled beige and brown 4 cm . Bottom mostly black, a few pale mottles and streaks 22 cm . Total 36.5 cm .

DISTRIBUTION of CORES
\begin{tabular}{rr}
\(C 1\) & NO GOOD \\
2 & NO GOOD \\
3 & NO GOOD \\
4 & NO GOOD \\
5 & NO GOOD \\
6 & NO GOOD \\
7 & NO GOOD \\
8 & NO GOOD
\end{tabular}

DESCRIPTION of CORES
C1 EMPTY

C2 A few bits of mud in bottom.

C3 EMPTY

C4 TW clear to slightly turbid. Surface even, smooth - posstbiy re-suspended. A few small brown clumps. Burrow hole at 4 down. Top mud even coffee-brown 9 cm thick. at very bottoim is yellowish beige sediment 1 cm . Total 10.5 cm .

C5 EMPTY

C6 Apprx. 1 cm mud on base. Mud is yellowish beige, crunchy, not soft coffee-beige surface mud.

C7
EMPTY

C8 A few bits of mud on base.
\begin{tabular}{cl} 
DISTRIBUTION & of CORES \\
C1 & radionuclides - long term \\
2 & organics \\
3 & microbiology \\
4 & radionuclides \\
5 & phaeopigments \\
6 & radionuclides \\
7 & paleo \\
8 & No GOOD
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW clear. Surface with nodule \(2.5 \mathrm{~cm}^{\text {c }}\) diameter, with depression of 2 cm deep, 5 cm long, adjacent to nodule. Some sediment piled on nodule. Burrow holes at 5 cm and 5 cm down. Burrow trace at 3 cm down. Top mud even gray-brown 9 cm thick. Bottom even pale beige. Total \(28-29.5 \mathrm{~cm}\).

TW clear. Surface slant of 1 cm . Burrow trace from surface to 1.5 cm down, 2 cm long. Burrow holes at 3.5 and 6.5 cm down. Top mud mostly even gray-brown with wedge of coffee-brown and paler brown, 10 cm thick. Middle mostly even pale beige, some browner small patches 18 cm . Bottom greenish beige streaked and mottled with beige 10 cm . Total \(33.5-34.5 \mathrm{~cm}\).

TW clear to slightly turbid. Surface even. Clump ?agglutinated foram - near side, 1.5 cm long, \(1 / 2 \mathrm{~cm}\) wide, 8 mm high. Large burrow trace system from surface to 4 cm down, 10 cm along side. Filled trace surface to 2 cm down, wedge-shape, with slightly paler mud in center and gray mud surrounding. Top mud even gray-brown 10 cm thick. Middle mostly even pale beige 17 cm . Bottom beige and greenish beige 10 cm . Total 34.5 cm .

C5 TW clear to slightly turbid. Surface mostly even, some slant 1 cm . Two forams sticking up 3mm. Piece of yellow ?paint flake? on surface 4 mm long. Extensive burrow system surface to 4 cm down, 9 cm along side. More traces at \(1.5,2\), and 3 cm down. Top mud even gray-brown \(6.5-9 \mathrm{~cm}\) thick. Middle mostly pale beige, some gray-brwon streaks 19 cm . Bottom mostly beige, some greenish beige mixed, 9 cm . Total \(33.5-34.5 \mathrm{~cm}\).

TW clear. Surface even. Some small clumps 4mm diameter surface. Burrow system 1.5 to 3 cm down, 3 cm along side mud even gray-brown 9 cm thick. Middle pale beige, some brown streaks near top, 18 cm . Bottom half beige, half streaky greenish brown 8 cm . Total 33 cm .

TW clear. Surface even. Clump -?foram - along side 1 cm diameter. Some loose brown material. Burrow hole at 1.5 cm down, 1.5 cm long, exiting to surface. Burrow trace at 1.5 cm down. Top mud even gray-brown 9 cm thick. Middle even pale beige 22 cm . Bottom beige with greenish beige mud half/half. Total 34.5 cm .
\begin{tabular}{rl} 
C1 & organics \\
2 & organics \\
3 & phaeopigments \\
4 & radionuclides \\
5 & paleo \\
6 & radionuclides \\
7 & phaeopigments \\
8 & radionuclides
\end{tabular}

DESCRIPTION of CORES
TW slightly turbid. Surface with slant of \(1 / 2 \mathrm{~cm}\) plus mound 1.2 cm on high side. Some small clumps on surface. Burrow hole 5 cm down, 3 cm long. Other holes 2.5 and 5 cm down. Top mud ever gray-brown 8 cm thick. Middle gray-brown and beige mot (more gray-brown at top, more beige at bottom). Mud stre inside of core tube above surface show that the mud siid at least 5 cm in core tube. Total \(25-26 \mathrm{~cm}\).

TW somewhat turbid. Surface with some mounds and dips. A few clumps <1cm diameter on surface. Burrow holes at 3, 3.5, 5, 12 , and 10 cm down. Large hole at 10 cm down, 4 cm long, 5 mm high. Top mud even coffee-brown 10 cm thick. Upper middle streaked \& mottled gray-brown and coffee-beige 10 cm . Lower middle mostly beige, some gray-brown mottles, 13 cm thick. Bottom coffee-beige 6 cm . Total \(37.5-38 \mathrm{~cm}\).

TW somewhat turbid. Surface even. With small clumps - ?forams. Burrow system 4 cm down, 7 cm along side. More holes at 1,2 , and 4.5 cm down. Low mound on surface 6 mm high, 4.5 cm long, 2 m wide. Top mud even coffee-brown 9cm thick. Middle montien gray-brown and beige 15 cm . Bottom even beige 13 cm . Total 38 cm .

TW somewhat turbid. 1 cm slant to surface. Nodule on surface, 2.5 cm long, Clump ?forams 8 mm long on surface. Burrow trace system surface to 4 cm down, 6 cm along side. More traces 2, 3, 4.5 , and 6 cm down. Trace filled with gray mud from surface to 2 cm down. Top mud even coffee-brown 10 cm thick. Middle beige and gray-brown mottled 17 cm (with just gray-brown at top for 3 cm ). Bottom even beige 10 cm . Total \(36-37 \mathrm{~cm}\).

TW somewhat turbid. Surface with depression along side, probably dislodged nodule; depression 6 cm long, 2 cm deep. Mound adjacent to depression, along side, 1.5 cm high. Burrow system under nodule depression, 1 to 2.5 cm down, 4 cm along side. Large hole 8.5 cm down, 1.5 cm high, 7.5 cm long. Traces at \(2,2,4.5\), and 4.5 cm down. Top mud even coffee-brown 9 mp thick. Middle mottled gray-brown and beige 14 cm . Bottom beige 15 cm . Total \(36-38.5 \mathrm{~cm}\).

C6

TW somewhat turbid. Surface with slant and some dips 1 cm difference. A few small clumps 5 mm diameter - ?forams. Burrow hole at 7 cm down, 3 cm long. Another at 3.5 cm down. Large hole 8 cm down, 1.5 cm high, 2 cm long. Top mud even coffee-brown 10 cm thick. Middle mottled gray-brown and coffee-beige 16 cm , with gray-brown streaking at top. Bottom coffee-beige 12 cm . Total \(37.5-39 \mathrm{~cm}\).

TW slightly turbid. Surface with some mounds along side 1 cm high. Some 5 mm clumps - ?forams. Burrow system surface to 4 cm down, 7 cm along side. Another system 2 to 6 cm down, 6 cm along side, with one hole 3.5 cm long. Tráces at 1 and 3.5 cm down. Another trace at 22 cm down; another vertical trace 26 to 330 m down. Top mud even coffee-brown 9 cm thick. Middle grayat top, fine mottling, then clumpy mottling with beige Bottom mostly coffee-beige with a few gray-brown patches. Total 36.5-37.5cm.

TW somewhat turbid. Surface with 1 cm slant. A few small 3 mm clumps. Burrow hole at 3 cm down. Traces at \(2,5.5\), and 6 cm down. Top mud even coffee-brown 10 cm thick. Middle gray-brown and coffee-beige mottling 15 cm . Bottom even coffee-beige 13 cm . Total 38-39cm.
\begin{tabular}{rl} 
C1 & organics \\
2 & radionuclides \\
3 & radionuclides \\
4 & organics \\
5 & radionuclides - long term \\
6 & phaeopigments \\
7 & radionuclides \\
8 & microbiology/barite
\end{tabular}

\section*{DESCRIPTION of CORES}

C1 TW somewhat turbid. Surface even, smooth. Possible re-suspension. No sign of flocculent material or slurp. Burrow traces at 6 and 10 cm down. Top mud even gray-brown 12 cm thick. Middle mottled and streaked evenly light beige and gray-brown 8 cm . Bottom even light beige 4 cm . Total 30 cm .

C2 TW somewhat turbid. Surface even, smooth. Possible re-suspension? Burrow traces at \(3,3,5,5\) and 16 cm down. Burrow hole at 22 cm down, 1 cm long, 8 mm high. Hole at 21 cm down, 8 mm long, 6 mm high. Top mud even gray-brown 13 cm thick. Middle mottled coffee-beige and graybrown 12 cm . Bottom even coffee-beige 13 cm . Total 37 cm .

C3 TW somewhat turbid. Surface slant 1 cm - one side slumped a little above a burrow system. System 2 to 3.5 cm down, 6 cm along side. small clumps on surface, \(1 / 2 \mathrm{~cm}\) diameter. Top mud even coffee-brow 9 cm thick. Upper middle evenly streaked and mottled coffee-beige and gray-brown 6 cm . Lower middle mostly coffee-beige, some graybrown mottles 8 cm . Bottom even coffee-beige 12 cm . Total \(35-36 \mathrm{~cm}\).

C4 TW somewhat turbid. Surface even, smooth. One clump on surface 1 cm diameter. Two small burrow holes in surface. Some extensive burrow systems. One 2 cm down, 10 cm along side. One \(15-21 \mathrm{~cm}\) down, 3 cm along side. Another from surface, with holes and traces to 33 cm down. Top mud even coffee-brown 8 cm thick. Middle even mottles coffee-beige and gray-brown 13 cm . Bottom even coffee-beige 14 cm . Total 37 cm .

C5 TW somewhat turbid. Surface with mound on one side, with depression adjacent. Mound 2 cm high. Depression \(1 / 2 \mathrm{~cm}\) deep, above large burrow trace system. Clump lcm diameter on surface. Core tube heavily burrowed, traces go down to 29 cm . Some holes 2 cm long. Top mud even coffee-brown 8 cm thick. Middle coffee-beige and gray-brown 17 cm . Bottom mostly even coffee-beige 12 cm . Total \(34.5-36.5 \mathrm{~cm}\).

C6 TW somewhat turbid. Surface slanted 1.5 cm . Surface with 2 small clumps \(1 / 2 \mathrm{~cm}\) diameter. Burrow trace at 1 cm . Top mud even coffeebrown 8 cm . Upper middle streaky and mottled coffee-beige 7 cm . Lower middle mostly coffee-beige with gray-brown mottles 9 cm . Bottom even coffee-beige 9 cm . Total \(33-34.5 \mathrm{~cm}\).

C7 TW somewhat turbid. Surface with slant of 1 cm , high point above a burrow exit. Surface smooth, possible re-suspension. Burrow trace surface to 3 cm down. Other traces in band 1 cm under surface, 4 cm along side. Trace at 7 cm down. Top mud even coffee-brown 8 cm thick. Middle coffee-beige and gray-brown mottles 13 cm . Bottom mostly coffee-beige 11 cm . Total \(33.5-34.5 \mathrm{~cm}\).```

