



| Drilling disturb. | Color           | Grain-size |                        | Sed. struct. / contact                   | Bioturb. | Samples | Comments  | Logged by: | Date:       |
|-------------------|-----------------|------------|------------------------|--|----------|---------|---|------------|-------------|
|                   |                 | Avg.       | Max.                   |  |          |         |   |            |             |
|                   | GLEYS<br>RDY4/1 | Clay       | Medium Sand<br>(foram) | Massive<br>(or faint<br>lamination<br>?) | PT. 2    |         | Type I: Mud<br>} Foram present<br>(to the bottom of this section) | NN         | 14/Dec/2011 |
| --0--             |                 |            |                        |  |          |         |   |            |             |
| --10--            |                 |            |                        |  |          |         |   |            |             |
| --20--            |                 |            |                        |  |          |         |   |            |             |
| --30--            |                 |            |                        |  |          |         |   |            |             |
| --40--            |                 |            |                        |  |          |         | 39 Shell fragments  |            |             |
| --50--            |                 |            |                        |  |          |         |   |            |             |
| --60--            |                 |            |                        |  |          |         |   |            |             |
| --70--            |                 |            |                        |  |          |         |   |            |             |
| --80--            |                 |            |                        |  |          |         |   |            |             |
| --90--            |                 |            |                        |  |          |         |   |            |             |
| --100--           |                 |            |                        |  |          |         |   |            |             |
| --110--           |                 |            |                        |  |          |         |   |            |             |
| --120--           |                 |            |                        |  |          |         |   |            |             |
| --130--           |                 |            |                        |  |          |         |   |            |             |
| --140--           |                 |            |                        |  |          |         |   |            |             |
| --150--           |                 |            |                        |  |          |         |   |            |             |

Under for bed

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

| Depth   | Drilling disturb. | Color            | Grain-size |                   | Sed. struct. / contact | Bioturb. | Samples | Comments   | Logged by: | Date:       |
|---------|-------------------|------------------|------------|-------------------|------------------------|----------|---------|--|------------|-------------|
|         |                   |                  | Avg.       | Max.              |                        |          |         |  |            |             |
| --0--   |                   |                  |            |                   |                        |          |         |  | N U        | 14/Dec/2011 |
|         |                   |                  |            |                   | Gradational contact    |          |         | Type 1: Mud continued from 1A<br>3 shell fragments               |            |             |
| --10--  |                   | GLE Y1<br>10Y4/1 | Silt       | Very fine sand    | Massive?               | BI: 1    |         | Type 2: Silty mud  |            |             |
| 16      |                   | GLE Y1<br>10Y4/1 | Fine sand  | Medium sand       | Massive?               | BI: 1    | 1955    | Type 3: Silty sand<br><b>19 cm: Mud with biogenic carbonate.</b> |            |             |
| --20--  |                   | GLE Y1<br>10Y4/1 | Mud        | Very fine sand    | Sharp contact?         | BI: 3    |         | Type 1: Mud<br>Foram present                                     |            |             |
| --30--  |                   |                  |            | (in burrows)      |                        |          |         |  |            |             |
| --40--  |                   |                  |            |                   |                        |          |         |  |            |             |
| --50--  |                   |                  |            |                   |                        |          |         |  |            |             |
| --60--  | Undisturbed       |                  |            |                   |                        |          |         |  |            |             |
| --70--  |                   |                  |            |                   |                        |          |         |  |            |             |
| --80--  |                   |                  |            |                   |                        |          |         |  |            |             |
| --90--  |                   | GLE Y1<br>10Y4/1 | Silt       | Very fine sand    | Bioturbated contact    | BI: 3    |         | Type 2: Silty mud  |            |             |
| 96      |                   | GLE Y1<br>10Y4/1 | Clay       | fine sand (Foram) | Bioturbated contact    | BI: 3    |         | Type 1: Mud<br>Foram present                                     |            |             |
| --100-- |                   |                  |            |                   |                        |          |         |  |            |             |
| --110-- |                   |                  |            |                   |                        |          |         |  |            |             |
| --120-- |                   |                  |            |                   |                        |          |         |  |            |             |
| --130-- |                   |                  |            |                   |                        |          |         |  |            |             |
| --140-- |                   |                  |            |                   |                        |          |         |  |            |             |
| --150-- |                   |                  |            |                   |                        |          |         |  |            |             |

↑ Fining upward (turbidite?)

Undisturbed

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387C

18R

3A

1899

| Drilling disturb. | Color          | Grain-size |      | Sed. struct. / contact | Bioturb. | Samples | Comments                | Logged by: | Date:             |
|-------------------|----------------|------------|------|------------------------|----------|---------|-------------------------|------------|-------------------|
|                   |                | Avg.       | Max. |                        |          |         |                         |            |                   |
|                   |                |            |      |                        |          |         |                         | NN         | 14/Dec/2011       |
| -0--              |                |            |      |                        |          |         | Type 1: Mud             |            | Continued from 2A |
|                   |                |            |      |                        |          |         | ↓ P <sub>2</sub> burrow |            |                   |
| -10--             |                |            |      |                        |          |         | Foram present           |            |                   |
| -20--             |                |            |      |                        |          |         |                         |            |                   |
| -30--             |                |            |      |                        |          |         |                         |            |                   |
| -40--             |                |            |      |                        |          |         |                         |            |                   |
| -50--             |                |            |      |                        |          |         |                         |            |                   |
| -60--             |                |            |      |                        |          |         |                         |            |                   |
| -70--             |                |            |      |                        |          |         |                         |            |                   |
| -80--             |                |            |      |                        |          | 75SS    | 75 Shell fragments      |            |                   |
| -90--             |                |            |      |                        |          |         |                         |            |                   |
| -100--            |                |            |      |                        |          |         |                         |            |                   |
| -110--            |                |            |      |                        |          |         |                         |            |                   |
| -120--            |                |            |      |                        |          |         |                         |            |                   |
| -130--            |                |            |      |                        |          |         |                         |            |                   |
| -140--            |                |            |      |                        |          |         |                         |            |                   |
| -146              |                |            |      |                        |          |         |                         |            |                   |
| -150--            | GLEY<br>10Y4/1 | Silt       | Silt | Massive                | BI-3     |         | Type 2: Silty mud       |            |                   |

75 cm: Mud with biogenic carbonate

Stretching

Bioturbated contact

135 P<sub>2</sub> burrow

Type 2: Silty mud

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

|         | Drilling disturb. | Color           | Grain-size |                      | Sed. struct. / contact      | Bioturb. | Samples | Comments                           | Logged by: | Date:             |
|---------|-------------------|-----------------|------------|----------------------|-----------------------------|----------|---------|------------------------------------|------------|-------------------|
|         |                   |                 | Avg.       | Max.                 |                             |          |         |                                    | N N        | 14/Dec/2011       |
| --0--   |                   |                 |            |                      |                             |          |         | Type 2: Silty mud                  |            | continued from 3A |
| 6       |                   | GLEYS<br>10Y4/1 | Clay       | Fine sand<br>(Foram) | 6<br>Bioturbated<br>Contact |          |         | Type 1: Mud                        |            |                   |
| --10--  |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| --20--  |                   |                 |            |                      | Massive Bi: 2               |          |         |                                    |            |                   |
| --30--  |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| --40--  |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| --50--  | Stretching        |                 |            |                      |                             |          |         | 50 Py burrow                       |            |                   |
| --60--  |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| 61      |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| --70--  |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| --80--  |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| --90--  |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| 98      |                   |                 |            |                      |                             |          |         | 94 Py burrow                       |            |                   |
| --100-- |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| --110-- | Stretching        |                 |            |                      |                             |          |         |                                    |            |                   |
| --120-- |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| 125     |                   |                 |            |                      |                             |          |         | 125 Py burrow with shell fragments |            |                   |
| --130-- |                   |                 |            |                      |                             |          |         |                                    |            |                   |
| --140-- |                   |                 |            |                      | Gradational<br>contact      |          |         | 140 shell fragments                |            |                   |
| 143     |                   | GLEYS<br>10Y4/1 | Silt       | fine sand            | Massive                     | Bi: 2    |         | Type 2: Silty mud                  |            |                   |
| --150-- |                   |                 |            |                      |                             |          |         |                                    |            |                   |

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





| Drilling disturb. | Color         | Grain-size |                   | Sed. struct. / contact | Bioturb. | Samples | Comments                                | Logged by: NN | Date: 14/Dec/11 |
|-------------------|---------------|------------|-------------------|------------------------|----------|---------|---|---------------|-----------------|
|                   |               | Avg.       | Max.              |                        |          |         |   |               |                 |
| --0--             |               |            |                   |                        |          |         | Type 2: Silty mud                       |               |                 |
| --10--            |               |            |                   |                        |          |         | 12 Shell fragments                      |               |                 |
| --20--            |               |            |                   |                        |          |         |   |               |                 |
| --30--            |               |            |                   |                        |          |         |   |               |                 |
| --34--            |               |            |                   | Sharp contact          |          | 32SS    | 32cm: Silty mud with biogenic carbonate |               |                 |
| --40--            | GREY / 10Y4/1 | Clay       | Fine sand (Foram) | Massive                |          |         | Type 1: Mud                             |               |                 |
| --50--            |               |            |                   |                        |          |         | Foram present                           |               |                 |
| --60--            |               |            |                   |                        |          |         | ↓<br>(to the end of this section)       |               |                 |
| --70--            |               |            |                   |                        |          |         |   |               |                 |
| --80--            |               |            |                   |                        |          |         | 81 Py burrow                            |               |                 |
| --90--            |               |            |                   |                        |          |         |   |               |                 |
| --100--           |               |            |                   |                        |          |         |   |               |                 |
| --110--           |               |            |                   |                        |          |         |   |               |                 |
| --120--           |               |            |                   |                        |          |         | 107<br>] Py burrow<br>118               |               |                 |
| --130--           |               |            |                   |                        |          |         |   |               |                 |
| --140--           |               |            |                   |                        |          |         |   |               |                 |
| --150--           |               |            |                   |                        |          |         | 143<br>144 ] Py burrow                  |               |                 |

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

|           | Drilling disturb. | Color | Grain-size |      | Sed. struct. / contact | Bioturb. | Samples | Comments          | Logged by:               | Date:       |
|-----------|-------------------|-------|------------|------|------------------------|----------|---------|-------------------|--------------------------|-------------|
|           |                   |       | Avg.       | Max. |                        |          |         |                   | NN                       | 14/Dec/2011 |
| -- 0 --   |                   |       |            |      |                        |          |         | Type 1: Mud       | continued from 5A        |             |
| -- 10 --  |                   |       |            |      |                        |          |         | -7<br>-15         | Py burrows               |             |
| -- 20 --  |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 30 --  |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 40 --  |                   |       |            |      |                        |          |         | -39               | Py burrow                |             |
| -- 50 --  |                   |       |            |      |                        |          |         | -47<br>-49        | 7<br>Py burrows          |             |
| -- 60 --  |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 70 --  |                   |       |            |      |                        |          |         | -69<br>-76        |                          |             |
| -- 80 --  |                   |       |            |      |                        |          |         | -78<br>-79<br>-83 | Py burrow<br>↓ Py burrow |             |
| -- 90 --  |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 100 -- |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 110 -- |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 120 -- |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 130 -- |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 140 -- |                   |       |            |      |                        |          |         |                   |                          |             |
| -- 150 -- |                   |       |            |      |                        |          |         |                   |                          |             |

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

0387C 18R 7A  
 10/23/01  
 10/23/01

|           | Drilling disturb. | Color  | Grain-size |      | Sed. struct. / contact | Bioturb. | Samples | Comments                      | Logged by: | Date:                                  |
|-----------|-------------------|--------|------------|------|------------------------|----------|---------|-------------------------------|------------|--|
|           |                   |        | Avg.       | Max. |                        |          |         |                               | NN         | 4/20/11                                |
| -- 0 --   |                   |        |            |      |                        |          |         | Type 1: Mud continued from 6A |            |  |
| -- 10 --  |                   |        |            |      |                        |          |         | -11<br>-13 ↓ Py burrow        |            |  |
| -- 20 --  |                   |        |            |      |                        |          |         |                               |            |  |
| -- 30 --  |                   |        |            |      |                        |          |         | -30 Shell fraction            |            |  |
| -- 40 --  |                   |        |            |      |                        |          |         | -36 Py burrow                 |            |  |
| -- 50 --  |                   |        |            |      |                        |          |         | -40 ↓                         |            |  |
| 54.5      |                   |        |            |      |                        |          |         |                               |            |  |
| 56.5      |                   | GLY1   | Silt       | Silt | Massive?               | 2?       |         |                               |            | Type 2: Silty mud.                     |
| 57.5      |                   | 107471 |            |      |                        |          |         |                               |            | Type 3: Silty sand (see detail in CCA) |
| -- 60 --  |                   |        |            |      |                        |          |         |                               |            |  |
| -- 70 --  |                   |        |            |      |                        |          |         |                               |            |  |
| -- 80 --  |                   |        |            |      |                        |          |         |                               |            |  |
| -- 90 --  |                   |        |            |      |                        |          |         |                               |            |  |
| -- 100 -- |                   |        |            |      |                        |          |         |                               |            |  |
| -- 110 -- |                   |        |            |      |                        |          |         |                               |            |  |
| -- 120 -- |                   |        |            |      |                        |          |         |                               |            |  |
| -- 130 -- |                   |        |            |      |                        |          |         |                               |            |  |
| -- 140 -- |                   |        |            |      |                        |          |         |                               |            |  |
| -- 150 -- |                   |        |            |      |                        |          |         |                               |            |  |

Gradational contact



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



| Drilling disturb. | Color           | Grain-size |             | Sed. struct. / contact | Bioturb. | Samples | Comments  | Logged by: | Date:      |
|-------------------|-----------------|------------|-------------|------------------------|----------|---------|---|------------|------------|
|                   |                 | Avg.       | Max.        |                        |          |         |   |            |            |
| - 0 --            | GLEYS<br>10Y4/1 | Fine Sand  | Medium Sand | Faint laminae          | BT: 3    |         | Type 3: Silty sand<br>Shell fragments<br>Paleo - sample | IV IV      | 4/Dec/2011 |
| 8                 |                 |            |             |                        |          |         |   |            |            |
| - 10 --           |                 |            |             |                        |          |         |   |            |            |
| 13                |                 |            |             |                        |          |         |   |            |            |
| - 20 --           |                 |            |             |                        |          |         |   |            |            |
| - 30 --           |                 |            |             |                        |          |         |   |            |            |
| - 40 --           |                 |            |             |                        |          |         |   |            |            |
| - 50 --           |                 |            |             |                        |          |         |   |            |            |
| - 60 --           |                 |            |             |                        |          |         |   |            |            |
| - 70 --           |                 |            |             |                        |          |         |   |            |            |
| - 80 --           |                 |            |             |                        |          |         |   |            |            |
| - 90 --           |                 |            |             |                        |          |         |   |            |            |
| - 100 --          |                 |            |             |                        |          |         |   |            |            |
| - 110 --          |                 |            |             |                        |          |         |   |            |            |
| - 120 --          |                 |            |             |                        |          |         |   |            |            |
| - 130 --          |                 |            |             |                        |          |         |   |            |            |
| - 140 --          |                 |            |             |                        |          |         |   |            |            |
| - 150 --          |                 |            |             |                        |          |         |   |            |            |

4 mud filled burrows

MAJOR LITHOLOGY:

MINOR LITHOLOGY: