

| Depth   | Drilling disturb. | Color     | Grain-size |      | Sed. struct. / contact | Bioturb. | Samples | Comments | Logged by: | Date:   |
|---------|-------------------|-----------|------------|------|------------------------|----------|---------|----------|------------|---|
|         |                   |           | Avg.       | Max. |                        |          |         |          |            |   |
| --0--   |                   | 5y<br>4/1 | mud        |      |                        |          |         | CR       | 30/11/11   | Major litho: mud (bedding thick with in total core very thick)                    |
| --10--  |                   |           |            |      |                        |          |         |          |            |   |
| 12      |                   |           |            |      |                        |          |         |          |            |   |
| --20--  | undist.           |           |            |      | massive                |          |         |          |            | -12 bivalve shell fragment  |
| 28      |                   |           |            |      |                        |          |         |          |            |   |
| --30--  | undist.           | 5y<br>4/1 | silty mud  |      | massive                |          |         |          |            | contact: gradual<br>Minor litho: silty mud<br>shell fragments                     |
| 37      |                   |           |            |      |                        |          |         |          |            |   |
| --40--  | undist.           | 5y<br>4/1 | sandy mud  |      | massive                |          |         |          |            | contact: gradual<br>overlap: sandy mud<br>→ Rottled with 2 5y 3/1 shell fragments |
| --50--  |                   |           |            |      |                        |          |         |          |            |   |
| 58      |                   |           |            |      |                        |          |         |          |            |   |
| --60--  | undist.           | 5y<br>4/2 | mud        |      | massive                |          |         |          |            | contact: inclined (conic)<br>Major litho: mud<br>Shell fragments                  |
| --70--  |                   |           |            |      |                        |          |         |          |            |   |
| --80--  |                   |           |            |      |                        |          |         |          |            |   |
| --90--  |                   |           |            |      |                        |          |         |          |            |   |
| --100-- |                   |           |            |      |                        |          |         |          |            |   |
| --110-- |                   |           |            |      |                        |          |         |          |            |   |
| --120-- |                   |           |            |      |                        |          |         |          |            |   |
| --130-- |                   |           |            |      |                        |          |         |          |            |   |
| --140-- |                   |           |            |      |                        |          |         |          |            |   |
| 147     |                   |           |            |      |                        |          |         |          |            |   |
| --150-- |                   |           |            |      |                        |          |         |          |            |   |

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY: silty mud

overlap: sandy mud % = 15%

total core = 75%

% = 10%

Expedition 339: Mediterranean Outflow

U 36 A

3 H

2 A

|           | Drilling disturb. | Color  | Grain-size |      | Sed. struct. / contact | Bioturb.        | Samples | Comments                            | Logged by:         | Date: |
|-----------|-------------------|--------|------------|------|------------------------|-----------------|---------|-------------------------------------|--------------------|-------|
|           |                   |        | Avg.       | Max. |                        |                 |         |                                     |                    |       |
| -- 0 --   |                   |        |            |      |                        |                 |         | Major litho<br>→ Same as above      |                    |       |
| -- 10 --  |                   |        |            |      | massive                |                 |         | shell fragments                     |                    |       |
| -- 20 --  |                   |        |            |      |                        |                 |         |                                     |                    |       |
| -- 30 --  |                   |        |            |      |                        | B3 <sub>2</sub> |         |                                     |                    |       |
| -- 40 --  |                   |        |            |      |                        | spars           |         |                                     |                    |       |
| -- 50 --  | undis.            |        |            |      |                        |                 |         |                                     |                    |       |
| -- 60 --  |                   |        |            |      |                        |                 |         |                                     |                    |       |
| 67        | undis             | 5y 4/1 | sandy mud  |      | massive                | B3 <sub>3</sub> |         | Overlap<br>matched with GLE 1 10y/3 | contact = color    |       |
| -- 70 --  |                   |        |            |      |                        |                 |         |                                     |                    |       |
| 73        | undis             | 5y 4/1 | mud        |      | massive                | B3 <sub>2</sub> |         | Major litho<br>shell fragments      | contact = color    |       |
| -- 80 --  |                   |        |            |      |                        | spars           |         |                                     |                    |       |
| -- 90 --  |                   |        |            |      |                        |                 |         |                                     |                    |       |
| -- 100 -- | undis.            |        |            |      |                        |                 |         |                                     |                    |       |
| -- 110 -- |                   |        |            |      |                        |                 |         |                                     |                    |       |
| 116       |                   |        | sandy mud  |      | massive                |                 |         | Overlap (same as above)             | contact = color    |       |
| 110       |                   |        |            |      |                        |                 |         | Major litho<br>(same as above)      | contact = color    |       |
| -- 120 -- |                   |        |            |      |                        |                 |         |                                     |                    |       |
| 129       |                   |        | sandy mud  |      | massive                |                 |         | Overlap                             | contact = standard |       |
| -- 130 -- |                   |        |            |      |                        |                 |         |                                     |                    |       |
| 134       |                   |        |            |      |                        |                 |         | Major litho                         | contact = standard |       |
| -- 140 -- |                   |        |            |      |                        |                 |         |                                     |                    |       |
| 141       |                   |        |            |      |                        |                 |         | Major litho                         | cont standard      |       |
| -- 150 -- |                   |        |            |      |                        |                 |         |                                     |                    |       |

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386 A 3H 3A

|           | Drilling disturb. | Color     | Grain-size |      | Sed. struct. / contact | Bioturb. | Samples | Comments   | Logged by: CR                | Date: 30/1/10 |
|-----------|-------------------|-----------|------------|------|------------------------|----------|---------|--|------------------------------|---------------|
|           |                   |           | Avg.       | Max. |                        |          |         |  |                              |               |
| -- 0 --   |                   | Same      | mud        |      | massive                |          |         | Plagin litho<br>(same as above)                        |                              |               |
| -- 10 --  |                   |           |            |      |                        | B1=2     |         |  |                              |               |
| -- 20 --  |                   |           |            |      |                        |          |         |  |                              |               |
| -- 30 --  |                   |           |            |      |                        |          |         |  |                              |               |
| -- 40 --  |                   |           |            |      |                        |          |         |  |                              |               |
| 43        |                   | Same      | silty mud  |      | massive                | B1=2     |         | Tinos litho<br>shell fragments                         | contact = gradational        |               |
| -- 50 --  |                   |           |            |      |                        |          |         |  |                              |               |
| -- 60 --  |                   |           |            |      |                        |          |         |  |                              |               |
| 63        |                   | Same      | sandy mud  |      | massive                | B2=3     |         | Overlap<br>shell fragments<br>Mottled with GLE 1 10y/3 | contact = irregular (cherty) |               |
| -- 70 --  |                   |           |            |      |                        |          |         |  |                              |               |
| 77        |                   | Same      | silty mud  |      | massive                | B2=2     |         | Tinos litho  | contact = irregular          |               |
| -- 80 --  |                   |           |            |      |                        |          |         |  |                              |               |
| 81        | Undis.            | Same      | mud        |      | massive                | B2=2     |         | Plagin litho   | contact = gradational        |               |
| -- 90 --  |                   |           |            |      |                        |          |         |  |                              |               |
| 94        |                   | Same      | silty mud  |      | massive                | B2=2     |         | Tinos litho  | contact = gradational        |               |
| 96        |                   |           |            |      |                        |          |         |  | contact = gradational        |               |
| -- 100 -- |                   | 5y<br>4/1 | mud        |      | massive                | B2=2     |         | Plagin litho   |                              |               |
| -- 110 -- |                   |           |            |      |                        |          |         |  |                              |               |
| -- 120 -- |                   |           |            |      |                        |          |         |  |                              |               |
| -- 130 -- |                   |           |            |      |                        |          |         |  |                              |               |
| -- 140 -- |                   |           |            |      |                        |          |         |  |                              |               |
| 146       |                   | Same      | silty mud  |      | Same                   | Same     |         | Tinos litho  | contact = gradational        |               |
| -- 150 -- |                   |           |            |      |                        |          |         |  |                              |               |

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386A 3H 4A

| Drilling disturb. | Color     | Grain-size   |      | Sed. struct. / contact | Bioturb. | Samples | Comments  | Logged by: | Date: |
|-------------------|-----------|--------------|------|------------------------|----------|---------|---|------------|-------|
|                   |           | Avg.         | Max. |                        |          |         |   |            |       |
| --0--             |           |              |      |                        |          |         | thin litho  |            |       |
| 4                 | 5y<br>4/1 | Sandy<br>mud |      | massive                |          |         | same as above contact = gradational                             |            |       |
| --10--            |           |              |      |                        | BY=3     |         | Overlap<br>shell fragments                                      |            |       |
| 19                |           |              |      |                        |          | 1955    | Sandy silt w/ biogenic<br>silty sand carbonate                  |            |       |
| --20--            |           |              |      |                        |          |         |   |            |       |
| 28                | 5y<br>4/1 | Silty<br>mud |      | massive                | BY=2     |         | contact = irregular (erosion)<br>thin litho                     |            |       |
| --30--            |           |              |      |                        |          |         |   |            |       |
| 39                | 5y<br>4/1 | Sandy<br>mud |      | massive                | BY=2     |         | Overlap<br>40 = shell fragment<br>contact = irregular (erosion) |            |       |
| --40--            |           |              |      |                        |          |         |   |            |       |
| 41                | 5y<br>4/1 | Silty<br>mud |      |                        |          |         | Thin litho<br>shell fragments                                   |            |       |
| --50--            |           |              |      |                        |          |         |   |            |       |
| --60--            |           |              |      |                        |          |         |   |            |       |
| 63                | 5y<br>4/1 | mud          |      |                        |          |         | contact = inclined (erosion?)<br>Thin litho<br>shell fragments  |            |       |
| --70--            |           |              |      |                        |          |         |   |            |       |
| --80--            |           |              |      |                        |          |         |   |            |       |
| --90--            |           |              |      |                        |          |         |   |            |       |
| --100--           |           |              |      |                        |          |         |   |            |       |
| --110--           |           |              |      |                        |          |         |   |            |       |
| --120--           |           |              |      |                        |          |         |   |            |       |
| 133               | 5y<br>4/1 | Silty<br>mud |      |                        |          |         | contact = inclined<br>Thin litho<br>141 shell fragments         |            |       |
| --140--           |           |              |      |                        |          |         |   |            |       |
| --150--           |           |              |      |                        |          |         |   |            |       |

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY: silty mud (overlap = sandy mud)

Expedition 339: Mediterranean Outflow

| Depth        | Drilling disturb. | Color  | Grain-size |      | Sed. struct. / contact | Bioturb. | Samples | Comments   | Logged by: | Date:    |
|--------------|-------------------|--------|------------|------|------------------------|----------|---------|--|------------|----------|
|              |                   |        | Avg.       | Max. |                        |          |         |  |            |          |
| --0--        | Umolis            |        | silty mud  |      | matrix                 | BI=2     |         | rotted with 2.5y 3/1 shells fragments              | LR         | 30/11/11 |
| 9            |                   |        |            |      |                        |          |         |  |            |          |
| --10--<br>11 | Umolis            |        | sandy mud  |      |                        | BI=2     |         | overlap rotted with GLEY 2.5y 3/1                  |            |          |
|              |                   | 5y 4/1 | mud        |      |                        |          |         | margin litho                                       |            |          |
| --20--       | Umolis            |        |            |      | matrix                 | BI=2     |         |  |            |          |
| --30--<br>32 |                   |        |            |      |                        |          |         | contact: bioturbated                               |            |          |
| --40--       |                   | 5y 4/1 | silty mud  |      | matrix                 |          |         | Thinor litho                                       |            |          |
| --50--       | Umolis            |        |            |      |                        | BI=2     |         |  |            |          |
| --60--       |                   |        |            |      |                        |          |         |  |            |          |
| --70--       |                   |        |            |      |                        |          |         |  |            |          |
| --80--       |                   |        |            |      |                        |          |         |  |            |          |
| 85           |                   |        |            |      |                        |          |         | contact: gradual                                   |            |          |
| --90--       | Umolis            | same   | sandy mud  |      | matrix                 | BI=2     |         | overlap rotted with GLEY 2.5y 3/1 shells fragments |            |          |
| 95           |                   |        |            |      |                        |          |         | contact: gradual                                   |            |          |
| --100--      | Umolis            | same   | silty mud  |      | matrix                 | BI=2     |         | Thinor litho<br>shell fragments                    |            |          |
| --110--      |                   |        |            |      |                        |          |         |  |            |          |
| 117          |                   |        |            |      |                        |          |         | contact: gradual                                   |            |          |
| --120--      |                   | same   |            |      | matrix                 | BI=2     |         | -120 shell fragment (shell)                        |            |          |
|              |                   |        | mud        |      |                        |          |         | margin litho                                       |            |          |
| --130--      | Umolis            |        |            |      |                        |          |         |  |            |          |
| --140--      |                   |        |            |      |                        |          |         |  |            |          |
| --150--      |                   |        |            |      |                        |          |         |  |            |          |

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY: silty ooze overlap = sandy mud

Expedition 339: Mediterranean Outflow

|         | Drilling disturb. | Color | Grain-size |      | Sed. struct. / contact | Bioturb. | Samples | Comments | Logged by: | Date:    |
|---------|-------------------|-------|------------|------|------------------------|----------|---------|----------|------------|----------|
|         |                   |       | Avg.       | Max. |                        |          |         |          | UZ         | 30/11/11 |
| --0--   |                   | 5y    | mud        |      |                        |          |         |          |            |          |
|         | 1                 | 411   |            |      | mud sink               | BI=2     |         |          |            |          |
| --10--  |                   |       |            |      |                        |          |         |          |            |          |
| --20--  |                   |       |            |      |                        |          |         |          |            |          |
| --30--  |                   |       |            |      |                        |          |         |          |            |          |
| --40--  |                   |       |            |      |                        |          |         |          |            |          |
| --50--  |                   |       |            |      |                        |          |         |          |            |          |
| --60--  |                   |       |            |      |                        |          |         |          |            |          |
| --70--  |                   |       |            |      |                        |          |         |          |            |          |
| 75      | Unclear           |       |            |      |                        |          |         |          |            |          |
| --80--  |                   |       |            |      |                        |          |         |          |            |          |
| --90--  |                   |       |            |      |                        |          |         |          |            |          |
| --100-- |                   |       |            |      |                        |          |         |          |            |          |
| --110-- |                   |       |            |      |                        |          |         |          |            |          |
| --120-- |                   |       |            |      |                        |          |         |          |            |          |
| --130-- |                   |       |            |      |                        |          |         |          |            |          |
| --140-- |                   |       |            |      |                        |          |         |          |            |          |
| --150-- |                   |       |            |      |                        |          |         |          |            |          |

75SS Homogous ~~sed~~ mud

IW

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

|           | Drilling disturb. | Color     | Grain-size   |      | Sed. struct. / contact | Bioturb. | Samples | Comments                        | Logged by: | Date:                |
|-----------|-------------------|-----------|--------------|------|------------------------|----------|---------|---------------------------------|------------|----------------------|
|           |                   |           | Avg.         | Max. |                        |          |         |                                 |            |                      |
| -- 0 --   |                   | 5Y<br>4/1 |              |      |                        |          |         | Same as above<br>Shell fragment | U12        | 30/11/11             |
| -- 10 --  |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 20 --  |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 30 --  | und.              |           |              |      |                        |          |         |                                 |            |                      |
| -- 40 --  |                   |           |              |      |                        |          |         |                                 |            |                      |
| 43        | und.              | 5Y<br>4/1 | Silty<br>mud |      | massive                |          |         | Thin litho                      |            | Contact: gradational |
| 44        |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 50 --  |                   | 5Y<br>4/2 | sandy<br>mud |      | massive                |          |         | Overlap                         |            | Contact: irregular   |
| -- 60 --  |                   |           |              |      |                        |          |         |                                 |            |                      |
| 61        |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 70 --  |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 80 --  |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 90 --  |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 100 -- |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 110 -- |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 120 -- |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 130 -- |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 140 -- |                   |           |              |      |                        |          |         |                                 |            |                      |
| -- 150 -- |                   |           |              |      |                        |          |         |                                 |            |                      |

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow



|           | Drilling disturb. | Color      | Grain-size   |      | Sed. struct. / contact | Bioturb. | Samples | Comments | Logged by: | Date:    |
|-----------|-------------------|------------|--------------|------|------------------------|----------|---------|----------|------------|----------|
|           |                   |            | Avg.         | Max. |                        |          |         |          |            |          |
| -- 0 --   |                   | 5 y<br>411 | silty<br>mud |      |                        |          |         |          | CE         | 20/10/11 |
| -- 10 --  |                   |            |              |      | regular                | BI=2     |         |          |            |          |
| -- 20 --  |                   |            |              |      |                        |          |         |          |            |          |
| -- 30 --  |                   |            |              |      |                        |          |         | CS       |            |          |
| -- 40 --  |                   |            |              |      |                        |          |         |          |            |          |
| -- 50 --  |                   |            |              |      |                        |          |         |          |            |          |
| -- 60 --  |                   |            |              |      |                        |          |         |          |            |          |
| -- 70 --  |                   |            |              |      |                        |          |         |          |            |          |
| -- 80 --  |                   |            |              |      |                        |          |         |          |            |          |
| -- 90 --  |                   |            |              |      |                        |          |         |          |            |          |
| -- 100 -- |                   |            |              |      |                        |          |         |          |            |          |
| -- 110 -- |                   |            |              |      |                        |          |         |          |            |          |
| -- 120 -- |                   |            |              |      |                        |          |         |          |            |          |
| -- 130 -- |                   |            |              |      |                        |          |         |          |            |          |
| -- 140 -- |                   |            |              |      |                        |          |         |          |            |          |
| -- 150 -- |                   |            |              |      |                        |          |         |          |            |          |

MAJOR LITHOLOGY:

MINOR LITHOLOGY: