

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								CR	3/12/11
-- 0 --	5Y 4/1				BI=2		(2) Shell fragments		
-- 2 --									
-- 10 --									
-- 20 --									
-- 26 --							Contact: sharp		
-- 30 --	5Y 4/1				BI=2		(1) few shell fragments		
-- 40 --									
-- 50 --									
-- 60 --									
-- 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: <i>OR</i>	Date: 3/12/11
		Avg.	Max.						
-- 0 --	5y 4/1			<i>massive</i>	B12		① Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
87							contact: gradual		
-- 90 --	5y 4/1			<i>massive</i>	B12		② Shell fragments		
-- 100 --									
107							contact: gradual		
-- 110 --	5y 4/1			<i>massive</i>	B11 ↑ abundant		③ Shell fragments (more abundant than above)		
-- 120 --									
121							contact: irregular		
-- 130 --	5y 4/1				B12 = 2		④ few shell fragments and of minor abundance		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									(R)	3/12/11
-- 10 --								① Same as above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
59										
-- 60 --		5g 4/1			massive	B2 =2		② contact: gradational shell fragments were abundant here above		
-- 70 --										
72										
-- 70 --		5g 4/1			massive	B4 =2		① contact: irregular		
78										
-- 80 --		5g 4/1			massive	B1 =2		② contact: gradational shell fragments		
86										
-- 90 --		5g 4/1				B1 =2		③ contact: irregular		
93										
-- 100 --								-97: Shell fragment		
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

144A

206

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CR	3/12/11
-- 10 --								① ↓ Same as above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
101										
105										
-- 110 --										
115										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

101 Shell fragment
 105
 115 shell fragments
 ↓
 shell fragment face

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 B

145A

807

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 3/12/11
			Avg.	Max.						
-- 0 --										
-- 10 --								① Same as above shell fragments: rare		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --								SS75 Silt with biogenic carbonate.		
-- 90 --										
-- 100 --										
105										
-- 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 --								① same as above	CR	3/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --	dist. soft	5y			Mudstone	31 1	②		CRZ	3/12/11
-- 10 --		4/1								
16								contact: irregular		
-- 20 --		5y			Mudstone	31 2	①			
25		4/1								
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
117										
-- 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.						
	5y 4/1			massive	BZ=2		① shell fragments present	CR	3/12/11
--0--									
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70--									
--80--									
84							-84: shell fragment		
--90--									
--100--									
--110--									
--120--	5y 4/1			massive	BZ=2		contact: gradabasal ② shell fragments were abundant than above		
--130--									
--140--							-140: shell frag.		
143	5y 4/1			massive	BZ=2		①		
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:	
			Avg.	Max.							
0	Cores ↓	5y 4/1			Laminar ↓	B2 =2		①	CR	3/12/11	
10											
20											
30											
40											
50											
60											
70											
80											
95								contact: nodular			
100		5y 4/1			Laminar	B1 =2		② -98: sea urchin spicule			
108									-108 sea urchin spicule		Shell fragments ↑
113									-113 sea urchin spicule		
117									-117 sea urchin spicule		
120											
130								contact: irregular			
137					Laminar	B2 =2		①			
140		5y 4/1									
150											

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 3/12/11
			Avg.	Max.						
--0--		5y 417								
--10--										
15										
--20--										
24										
28										
--30--										
--40--										
49										
--50--										
--60--										
--70--										
72										
--80--										
82										
88										
--90--										
92										
--100--										
104										
106										
--110--										
110										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

① Same as above

② contact gradational

shell fragments
- 24 black spots
- 28 black spots

① contact irregular

② contact irregular

82
88 SS shell fragments
92

fine-grained downwards

104 SS
106
110 SS
110
① sea urchin spicules

contact gradational

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Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0		5y						(12)	3/12/11	
10	und ↓	411 ↓			manip ↓	31 -2				
34							contact: gradational - black spots		(2)	
41							Shell fragments - 41 black spot			
61							contact: irregular		(1)	
78							- 78 shell fragment			
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 --	Cncd. ↓	5y 411			Mudstone	BZ =2		① ↓	C12	3/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --	und	5y 411			Mud	B7 = 2		①	CR	3/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
67										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

-64: black shot

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--	und.	5y 4/1			main	B1 =2	①	few shell fragments	CR	3/12/11
--10--										
16										
--20--										
--30--										
--40--										
48										
--50--										
--60--										
--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.						
	5y 4/1			massive	B1 =2		① Shell fragments	CRZ	3/12/11
									↓ waxer downward
19 --20--							-19: shell fragment		
29							contact: gradational		
--30--	6LEy1 10y 4/1			massive	B2:2		② Shell fragments more abundant than above		
--40-- 41							-41: black spot (brown?)		
46							contact: irregular		
--50--	5y 4/1			massive	B1 =2		① few shell fragments		
--60--									
--70--									
--80--									
--90--									
--100-- 103							-103 gastropoda shell (small)		
--110--									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: C12	Date: 3/12/11
			Avg.	Max.						
--0--		5y 411			medium	31 =2		① ----- Shell fragments ↓		
--10--	und									
--20--										
24										
28	und									
--30--										
--40--	und									
--50--										
--60--										
65										
--70--										
--80--										
--90--										
--100--										
--110--										
111										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		GLS 1 109			laminar	B1 = 2		(1) Shell fragments		
-- 10 --	used ↓	4/1								
-- 20 --										
-- 30 --										
36 -								-36 shell fragments		
-- 40 --										
46 -								-46 shell fragment		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
113 -								-Py burrow		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

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Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							① same as above	(12)	3/12/11
-- 10 --									
-- 20 --									
-- 30 --							contact: gradational		
31	OLEY 10y 4/1			massive ↓	B1 =2		② shell frag.		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									⊕ below shells frag. "Laje"
-- 110 --									
116							114 → shell fragments "Laje" 116 → contact: irregular to gradational		
-- 120 --	5y 4/1			massive ↓	B1 =2		③ shell frag.		
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CR	3/12/11
								① Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
59								contact: gradational		
-- 40 --		5y 4/1						②		
-- 50 --										
-- 60 --										
62								-62 > shell frag. concentration		
63								-63 >		
69								contact: gradational		
-- 70 --		5y 4/1						① shell frag.		
-- 80 --										
-- 90 --										
95								-95 shell frag.		
-- 100 --										
-- 110 --										
-- 120 --										
124										
-- 130 --		GLY1 10y 4/1								
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 3/12/11
		Avg.	Max.						
--0--	grey			medium	B1-2		① ↓ • Forams present • Shell frags.		
	10g			↓	↓				
--10--	grey								
--20--									
	und.								
--30--									
38							-38: shell frag.		
--40--	grey								
	und.								
45	grey					45SS			
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
--110--									
115						115SS			
--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 --		5y 411			Mudstone	BZ =2		① small shell frags Forams present	GR	3/12/11
-- 10 --										
-- 20 --										
-- 30 --										
36		5y 411			Mudstone	B1 =2		② shell frags		
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --		(G.E.) 1							UR	3/12/11
1		dy			massive	81		(2) shell frags		
3						= 2		- 7 > black spot		
-- 10 --	undist	4/1								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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--	grey 10y 4/1 ↓			massive	B1		(2)	C12	3/12/11
--10--									↓ fine downwards
--20--							contact gradual		
24	sand				B1 =2		(1)		
--30--									
--40--							43: shell frag		
43									
--50--									
--60--									
67							67: shell frag		
--70--	sand			massive	B1 =2		(2) -67: block shoe (bunco?) shell frag		
--80--									
--90--									
--100--									
--110--							contact: irregular		
113	sand				B2		(1) shell frag		
--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: CFZ	Date: 3/12/11
			Avg.	Max.						
-- 0 --	und.	OLEY1 109 4/1			medium	BI = 2		①		
-- 10 --		OLEY1 109 4/1								
-- 24 --	und.	59 4/1 ↓			medium	BI = 2		① shell frag		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
96 --										-96: Py burrow
-- 100 --										
-- 110 --										-110: Shell frag.
-- 120 --										
-- 130 --										
-- 140 --										-140: Py burrow
-- 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 --		5Y							ORZ	3/12/11
	↓	4Y			↓	Bt = 2		① ↓		
-- 10 --	↓	↓			↓	↓				
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
126										
127										
-- 130 --										
-- 140 --										
-- 150 --										

-126 > B bottom

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 --		5y 4/1							C12	3/12/11
-- 10 --	und				massive	B1 =2		① Same as above		
-- 20 --										
-- 30 --										
34								contact: gradational		
-- 40 --	und	5y 4/1			massive	B1 =2		② shell frag. black spots (bones?)		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
94								(see on clin) - 94: echinoderme fragment		
-- 100 --								contact: gradational		
101										
-- 110 --	und	OLEY1 10y 4/1			massive	B2 =2		③ shell frag. (more abundant than above) larger fragments		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --								- at the end: shell frag.		

↓
Locu set

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: C12	Date: 3/12/11
			Avg.	Max.						
-- 0 --	und							③ same as above		
-- 10 --	und	OLEY1 105 4/1			mark	B1 =2 B2 =2		contact: gradual ② shell frag.		
-- 20 --										
-- 30 --										
33								33	} burrow?	
37								37		
-- 40 --										
-- 50 --	und	59 4/1			mark	B1 =2		contact: gradual ①		
-- 60 --										
63								63	} burrow?	
67								67		
-- 70 --										Small frags. (few)
-- 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 --									AR	3/12/11
								① Same as above		
-- 10 --										
19								-18: shell frag		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								contact: irregular		
51		OLEY ₁			leamic	BZ		② - 52 > shell frag		
		10y				=2		- 56		
-- 60 --		4/1								
-- 70 --										
-- 80 --								contact: gradational		
71		OLEY ₁			leamic	BZ		①		
-- 80 --		10y				=2				
		y								
-- 90 --		4/1								
-- 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 --									CR	3/12/11
								(1) Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
35								-35: shells frags.		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 B 4H CCA

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date.
			Avg.	Max.						
-- 0 --								(7) ↓	C12	3/12/11
-- 10 --										
19 -- 20 --								-18 silt frags.		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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: yasu	Date: 3/DEC/2011
		Avg.	Max.						
-- 0 --	10Y5/1	Clay	Medium sand.	Massive.	3		① NANNO MUD some shell frags. all along the section		
-- 10 --									
-- 20 --									
-- 30 --				Bio. C					
-- 32 --	As above	Clay	M.S		3		② SILTY MUD Mottled.		
-- 38 --				Bio. C.					
-- 40 --		Clay	M.S	Massive.	3		① NANNO MUD -48 shell frags.		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --				Grad. / Bio. C			-118 shell frags.		
-- 124 --		Clay	M.S.	Bio. C.	3		② SILTY MUD Mottled.		
-- 125 --		V.F.S	M.S		3		③ SILTY SAND		
-- 130 --									
-- 140 --									
-- 150 --							-147 shell frag		

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--	Same as above	V.F.S.	M.S.		3		③ Same as above	Yasm	3/DEC/2011
--10--									
--20--								① 17 Bivalve shell fragments.	
--30--							More shell fragments in working half (15-18cm) ↳ gastropods / bivalves		
--40--									
--50--				Grad. / Bio.C			Shell fragments. (pyre.)		
--50--		Clay	M.S.				50 ② SILTY MUD		
--60--									
--70--							Coarsening upward. Mottled.		
--80--									
--90--				Bio.C					
--93--		Clay	M.S.	Massive.			93 ① NANNO MUD		
--100--							93-97: mottled.		
--110--							108-111: mottled.		
--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 --		Same as above.	clay	Medium sand	Massive	2			yaen	3/DEC/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

58
 ↓
 63
 Condlrites Mottled.

138 shell fragm. φ 1.5cm

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Marr	Date: 3/Dec/2011
		Avg.	Max.						
-- 0 --	Some ox above.	clay	Medium s.	massive	3		① NANNO MUD 0-5 condrites. 7-9 shell frags. 26 shell fragm. 32-33 condrites		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --				Gradational contact					
-- 70 --	saa	silt	Medium s.		3		② SILTY MUD Mottled.		
-- 80 --				Gradational contact					
-- 90 --	saa	Very fine sand	Medium s.		3		③ SILTY SAND		
-- 100 --		Fine sand.							
-- 110 --	saa	clay	Medium s.	Erosional/ bioturbated contact	3		① NANNO MUD 102-131: sand-filled condrites (burrow)		
-- 120 --									
-- 130 --	saa	clay	Med. s.		3		② SILTY SAND		
-- 140 --									134 ↑ condrites ↓ 143
-- 150 --	saa	clay			3		① NANNO MUD		
	saa	clay	Med.		3		② SILTY MUD		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Yasun	Date: 3/DEC/2011
		Avg.	Max.						
-- 0 --		clay	Medium sand		3		② SILTY MUD Mottled		
-- 10 --							Shell fragments		
-- 20 --									
-- 30 --							30.5 ~ 31 very fine sand layer		
-- 40 --									
-- 50 --							54-55 = shell fragments		
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --							↑ more sandy part. ↓		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: mas	Date: 3/DEC/2011
		Avg.	Max.						
--0--	5AA.	clay	Medium s.		3		① NANNO MUD Mottled Shell frags.		
--10--		clay	Medium s.				② SILTY MUD Mottled / Shell frags.		
--20--		clay	Medium s.				① NANNO MUD Mottled / Shell frags.		
--30--							-33 pyricred burrow		
--40--									
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
--110--									
--120--		clay	Medium				② SILTY MUD Mottled / shell frags.		
--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 --		S.A.A.	clay	Medium s.		3	② SILTY MUD mottled	masu	3 / Dec / 2011	
-- 10 --							- 13-15 pyritized burrow			
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --							- 48 plant fragment (L=1.5cm)			
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	S.A.A.	Clay	Medium	Bio. C	3		② SILTY MUD mottled / shell frags.	masu	3/DEC/2011
		V.P.S.	s.						
-- 10 --				Bio. C					
		Clay	Medium		3		② SILTY MUD mottled / shell frags.		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masm	Date: 31 Dec / 2011
		Avg.	Max.						
0									
Flow-in disturbance									
10	10YR 5/1	Clay	Medium S.		3		② SILTY MUD mottled. echinoderm spine frags. shell frags. all along the section		
20									
30									
40									
46-48							more sandy layer (sandy side)		
50				Bio. cont.					
54	10YR 6/1	Clay	Medium S.	Massive	same as above		① NANNO. MUD		
60									
70									
80									
90									
100									
105				Bio. cont.					
110	10YR 5/1	Clay	Medium S.				② SILTY MUD mottled. echinoderm spine.		
112									
117									more sandy layer
120									
130									
140									
150									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		10YR 5/1	Clay	Medium s.		3		② SILTY MUD <i>shell frag. all along the section</i>		
--10--								<i>mottled</i>		
--20--										
--30--										
--40--								42~46: pyritized burrows		
--50--	undisturbance		Clay	Medium	massive			48 echinoderm spine.	49	
--55--								① NANNO MUD		
--60--				Clay	Medium				② SILTY MUD	58
--70--								<i>Mottled</i>		
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--145--					bio. c.					
--148--			Clay	Medium s.	massive			144		
--150--								① NANNO MUD		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Yasm	Date: 3/DEC/2011
		Avg.	Max.						
-- 0 --	Some as above	Clay	Medium s.	sharp c.	2		As above		
-- 10 --		Clay	Medium s.		3		① ②	SILTY MUD mottled. small shell frags. all along the section	
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	undisturbance								
-- 90 --									
-- 100 --									
-- 110 --	↓	Clay	medium s.	gradational massive	3		① ②	① ②	① ②
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --		Clay	Medium		3		① ②	① ②	① ②

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: yasu	Date: 3/Dec/201
		Avg.	Max.						
--0--	10YR5/1	Clay	Medium		3		② SILTY MUD Mottled		
--10--									
--20--									
--30--									
--40--									
--44--				Bro.C.					
--50--	10Y5/1	Clay	Medium	massive	3		① NANNO MUD <u>Small shell fragments all along the section</u>		
--60--									
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--144--				Bro.C.					
--150--	10Y5/1	Clay	Medium		3		② SILTY MUD Mottled.		

undisturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y 5/1	Clay	Medium sand		3		⊙ SILTY MUD 2-3 pyritized burrow	YASU	3/DEC/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								55-53 pyritized burrow		
-- 60 --										
-- 70 --	undisturbance									
-- 80 --		10Y 5/1	Clay	medium sand	Bo.C. massive	3		78 ⊙ NANNO. mud		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y5/1	clay	Medium s.				① NANNO MUD small shell fragments. all along the section	YASU	3/DEC/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

undisturbance

-- 54 -- shell fragments.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

386B

6HCC

849



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y6/1	clay	Medium	massive	Z		DIAMOND MUD	yash	3/DEC/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

undisturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					masu	3/DEC/2011
--0--	10YR 5/1	clay	Medium sand	massive	2		① MANNING MUD small shell fragments all along the section		
--10--									
--20--	10YR 4/1								
--30--									
--40--									
--50--							51 shell fragments		
--60--	10YR 5/1							57-87: mottled	
--70--									
--80--									
--90--									
--100--	10YR 5/1	clay	Medium sand	str. c			103 ② SILTY MUD		
--110--									
--120--		clay	Medium sand				118 ↑ more silty layer ↓ 134		
--130--									
--140--		clay	Medium sand						
--150--	10YR 5/1	clay	Medium sand				152 ① MANNING MUD		

Disturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: maen	Date: 3/DEC/2011
		Avg.	Max.						
-- 0 --	10YR5/1	clay	Medium sand	massive	2		① MANN MUD small shell fragments all along the section mottled		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --	10YR5/1	clay	M.S	bio. c	3		49 ② SILTY MUD		
-- 60 --							= 63-65 pyritized silt/sand w/ shell frags.		
-- 70 --									
-- 80 --	10YR5/1	v.f. sand	M.S	bio. c	3		80 ③ SILTY SAND		
-- 90 --	10YR5/1	clay	M.S	bio. c	3		88 ② SILTY MUD		
-- 100 --							-99 discontinuous fine-grained sand layer (thickness: < 1cm)		
-- 110 --									
-- 120 --							-107 shell fragments		
-- 130 --									
-- 140 --									
-- 150 --							-146 sulfur speck		

Disturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masm	Date: 3/DEC/2011
		Avg.	Max.						
--0--	10Y5/1	clay	Medium		2		② SILTY MUD small shell fragments all along the section		
--10--	10Y5/1	clay		Bio. C			- 7 sulfur specks. - 8		
--20--				massive	2		① NANNO MUD		
--30--									
--40--									
--50--									
--60--									
--70--									
--80--	Disturbance								
--90--									
--100--									
--110--									
--120--		clay	M.S.	Geo. C.			116 ② SILTY MUD		
--130--							possible flow in channel w/ shell frag.		
--135--		clay	M.S.	Bio. C. massive			131 ② sand-filled burrow I think ②		
--140--							① NANNO MUD		
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct./ contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
--0--	10Y4/1	Clay	Med. s.				② SILTY mud small shell fragments all along the sec.	masm	3/DEC/2011
--10--	10Y4/1	Clay	Medium s.	Bio. c	3		① normal mud		
--20--	change						mottled		
--30--									
--40--									
--50--	10Y5/1						54 φ 8cm greenish silty mottle.		
--60--									
--70--	5G4/1	Clay	Medium	Bio. c			68 ③ SILTY mud		
--80--	Disturbance						mottled		
--90--									
--100--									
--110--	5G4/1			Bio. c			inclined pyritized sand-filled layer w/ shell frags.		
--120--		Clay	M.S.	massive			① normal mud		
--130--							mottled		
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: nsw	Date: 3/DEC/2011
		Avg.	Max.						
-- 0 --	logY 4/1	clay	m.s.	massive	3		① NANO MUD		
-- 10 --							Small shell fragment all along the section.		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --	change								
-- 80 --									
-- 90 --	Disturbance								
-- 100 --							Large-sized burrow [length: > 24cm width: > 4cm		
-- 110 --									
-- 120 --									
-- 130 --	10Y4/1								
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y4/1	clay	M.S.	mesne	2		① MANNO MUD small shell fragm. 2.2. section	Moser	3/DEC/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



Disturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 7HCC

857



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					Mason	3/DEC/2011
-- 0 --		10Y4/1	Clay	M.S.	massive	3		① NANNO mud		
-- 10 --								small shell fragments		
-- 20 --								a.a. section		
-- 30 --	Disturbance									
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --	Fall-in (C) disturbance								Masn	3/Dec/2011
-- 10 --		10Y4/1	clay	M.S.	massive	2		② silty mud small shell frag. all along the sec.		
-- 20 --								↓ SSFAAS		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --	Crinoid disturbance									
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --		10YR5/1								

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Mason	Date: 3/DEC/2011
			Avg.	Max.						
-- 0 --		10YR 5/1	Clay	M.S.	massive	2		② SILTY MUD SSFAAS.		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

undisturbed

-- 53 -- shell frags.

-- 125 -- of sand with shell fragment - filled burrow ϕ 1cm

10YR 4/1

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386B 8H3A 860

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	10Y4/1	clay	Medium	massive	2		◎ SILTY MUD SSFAAS	masu	3/DEC/2011
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

undisturbed

- 44 shell frags.

- shell frags.

- 44 coral branch fragments

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 --	10Y4/1	clay	Medium sand		3		② SILTY MUD	Mason	3/DEC/2011
-- 10 --							<u>SSFAAS</u>		
-- 20 --									
-- 30 --									
-- 40 --	10Y4/1	clay	Medium sand	Gradational Bioturbation c.			③ SANDY SILT		42
-- 50 --				very slightly particulate lamination (?)					
-- 60 --				Bio. c					
-- 70 --	10Y4/1	clay	Medium sand				② SILTY MUD		63
-- 80 --	undisturbed						63-70 mottled		
-- 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: MASU	Date: 3/DEC/2011
		Avg.	Max.						
-- 0 --	10Y4/1	Clay	Medium		3		SSFAAS		
-- 10 --				Bio. C.					
	10Y4/1	Clay	Medium	massive	3		① NANO MUD		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
							-115 pyrited shell		
-- 120 --									
-- 130 --									
-- 140 --									
	10YR 4/1								
-- 150 --									

massive to lamination

change

✓

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 --		10Y4/1	Clay	Medium		3			yasn	3/DEC/2011
-- 10 --								① NANNO MUD <u>SSFAAS</u>		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --	undisturbed									
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --					gradacion c.					
-- 120 --		10Y5/1	Clay	Medium		3		② SILTY MUD		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386B 8H7A 864

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y4/1	clay	M.S		3		② SILTY MUD Mottled	yash	3/DEC/2011
-- 10 --										
-- 20 --			v.f.s	M.S		3		③ SILTY SAND Mottled.		
-- 30 --										
-- 40 --										
-- 50 --			clay	Medium sand		3		④ SILTY MUD Mottled		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		Same as above	silt & v.f. sand	medium	medium	3		yasu	3/DEC/201	
-- 10 --							③ silty sand. sand-filled burrow all along the section. Mottled.			
-- 20 --							- 18 thin sand layer - 24-25 thin sand layer			
-- 30 --	vel						- 28 Bivalve (Maculacea)			
-- 40 --							239 U1386 B 8HCC A 28 29 PAL SPCM 3477711			
-- 50 --										
-- 60 --										
-- 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--	VOID								Maer	3/DEC/2011
		3 10Y5/1	Clay	Medium	massive	2		① NANNO MUD Small shell fragments all along the section (SSFAAS)		
--10--										
--20--										
--30--										
--40--										
--50--										
--60--										
	undisturbed				gradational c.					
--65--		↓	Clay	Medium			2	② SILTY MUD Mottled		
--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: <i>nam</i>	Date: <i>3/15/2011</i>
		Avg.	Max.						
-- 0 --	VOID								
	5GT4/1	Clay	Medium	Bio. C	Z		② Same as above		
	5GT4/1	Clay	Medium	massive	Z		① NANNO MUD		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --	change. ↓ 10YR5/1						↓ color change		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10YR5/1	Clay	Medium	massive	2		① NANNO MUD <u>SSFAAS</u>	Yaman	3/DEC/2011
-- 10 --										
-- 20 --										
-- 30 --								=26-27 pyritized burrow		
-- 40 --										
-- 50 --										
-- 60 --	UD									
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

QH4A

83

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Maen	Date: 3/dec/2011
		Avg.	Max.						
-- 0 --	10YR4/1	clay	Medium sand	massive	2		DIAMANO MUD <u>SSFAAS</u>		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --	UD						echinoderm spine		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --	10YR4/1								

UD

echinoderm spine

change

10YR4/1

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Moen	Date: 3/DEC/2011
		Avg.	Max.						
	10Y4/1	clay	Medium	massive	2		① NANNO MUD SSFAAS		
				Grad. c.					
	10YR5/1	clay	Medium		2		② SILTY MUD		
				Grad. c.					
	10Y4/1	V.F.S.	Medium				③ SILTY SAND		
				Bio. c.					
	10Y4/1	V.F.S.	Medium				④ SILTY MUD		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

↘

↑ Gas expansion

24

91

150



Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: Maen	Date: 3/Dec/2011
		Avg.	Max.						
-- 0 --	10Y5/1	Clay	Medium		3		② SILTY MUD - 5 crack - 8 crack - 15 crack		
-- 10 --									
-- 20 --									
-- 30 --	10Y5/1	Clay	Medium	Bio. C	3		① NANNO MUD		
-- 40 --									
-- 50 --									
-- 60 --	UD								
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --							- 117 crack		
-- 130 --									
-- 140 --									
-- 150 --	10Y4/1	Clay	Medium	Grad. C	3		② SILTY MUD		

SSFAAS

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MAM	Date: 3/DEC/2011
		Avg.	Max.						
-- 0 --	10Y1/4	Clay	Medium sand.		3		② SILTY MUD <u>SSFAAS</u>		
-- 10 --									
-- 20 --	10Y4/1	Very fine sand	Medium	Bio. C.	3		③ SILTY SAND Mottled.		
-- 30 --		site							
-- 30 --	10Y4/1	Clay	Medium	Bio. C.	3		① MANNO MUD 39 Sand-filled mottle 45 echioderm spine		
-- 40 --									
-- 50 --									
-- 60 --	UB								
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 100 --	10Y4/1	Clay	Medium	Grad. C.	3		② SILTY MUD		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

QH8A

3

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Maer	Date: 3/DEC/2011	
			Avg.	Max.							
-- 0 --		10Y4/1	clay	Medium sand	massive	3		② SILTY MUD SSFAAS			
-- 10 --	↑ cracks ↓										
-- 20 --											
-- 30 --									-28 echinoderm spine.		
-- 40 --											
-- 50 --											
-- 60 --											
-- 70 --											
-- 80 --											
-- 90 --											
-- 100 --											
-- 110 --											
-- 120 --											
-- 130 --											
-- 140 --											
-- 150 --											

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386

QHCC A

4

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									MAN	3/5/2011
-- 10 --	GD				AS			above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MAM	Date: 3/DEC/2011
		Avg.	Max.						
0-2	10Y4/1			maine ↓	B1 =2 ↓		(1) ↓		
8-10									
30-31									
49-50							49 shell frag. 50 shell frag.		
53-54							53. Spiral shell		
53-54							<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 339 U1386B 10H1A 53-54 PAL SPC13478121 </div> → to close up photo		
60-66							60 shell frag		
66-70							66: black silt (barney) shells frag.		
78-80							78 shell frag		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

10H2A

876

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	und ↓	10g			mic	B1 =2	① →	AK	3/DEC/2011	
-- 10 --		411 ↓								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --							50 shell frag.			
-- 60 --										
-- 70 --										
-- 80 --										
82 -- 90 --							82 90 > shell frag.			
-- 100 --										
-- 110 --										
115 -- 120 --							115 shell frag.			
-- 130 --										
-- 140 --										
144 145 -- 150 --							144 145 > shell frag.			

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					OR	3/DEC/2011
--0--	und	10 g 4/1			well mixed	31 =2		① Shell fragments		
--10--										
--20--										
--30--										
--40--										
48 49 --50--								48 49 > shell frag.		
--60--										
--70--										
--80--										
--90--										
--100--										
106 108 --110--								106 108 > shell frag.		
116 118 --120--								116 118 > bivalve shells frag.		
--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 --		10g 4/1			medium	BY = 2		(1) 7	CR	3/DEC/2011
-- 10 --										
18								-18 shell frag.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
124 125								-124 -125 shell frag.		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

1045A

879

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: yasu	Date: 3/DEC/2011
			Avg.	Max.						
-- 0 --								① Same as above shell frag ↓		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
136								136 shell frag		
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: YASU	Date: 3/20/01	
		Avg.	Max.							
-- 0 --							① Same as above shell frag. less abundant than in lower section -20 B burrow			
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
77								77 > burrow fill with Forams shell frag.		
77										
-- 80 --										
81										
-- 90 --										
-- 100 --										
107										
-- 110 --							-107: B burrow			
-- 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 --									MASU	3/DEC/2011
-- 10 --								① Same as above Forams present		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
55 --								ss: P. boninensis		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							⑨ Same as above Termites present filling burrows at <u>11</u> and <u>20</u> cm		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

10/2008/01/01

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		(GLCY) 1			massive	B1 = 2		① shell frag. conc	CR	4/12/11
-- 10 --		10y 4/1								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10y			main ↓	BI -2	① Same as above few shell frag.	02	4/12/11	
-- 10 --		4/1								
-- 20 --	4/10	5y					-18 -19 > shell frag			
-- 22 --										
-- 24 --	4/1	4/1					-29: shell frag			
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CRZ	4/12/11
-- 10 --	CANCELED							(1) Sawd on above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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--	Dis. in flow								(12)	4/12/11
5		5y			medium	B1 =2		① few shell frags.		
--10--	und.	1/11			↓	↓				
--20--		↓								
--30--										
--40--										
--50--										
--60--										
--70--										
74								contact: gradational		
--80--								②		↓ increase shell frags.
85								contact: gradational		
--90--								③		
--100--								101 bivalve shells (two)		
103								103 bival shell		
--110--								contact: gradational		
								②		↓ decrease shell frags.
--120--								contact: gradational		
								①		
139								139		
--140--								140 > shell frags.		
--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 --		5g							02	4/12/11
-- 10 --	4mφ	411			no m. u. ↓	BI 2		① Same as above		
-- 20 --	1.5									
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --		10g						→ gradual color change		
-- 130 --		41								
134										
-- 140 --								139 > shell frags. 140		
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10y							CR2	4/12/11
-- 10 --	incl	4/1			Massive ↓	Bz = 2 ↓		→ Shell fragments (0-2 cm)		(7)
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --	incl							51 50 > wide		
-- 60 --										
-- 70 --										
76		10y						contact: gradational		(2)
-- 80 --		3/1								
84		10y						contact: irregular		(1)
-- 90 --	incl	3/1								
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --		10y								
-- 140 --		4/1								
-- 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 --	und ↓	10y			same ↓	B1 = 2 ↓	①		CRZ	4/12/11
-- 10 --		411								
-- 20 --										
-- 30 --										
35										
-- 40 --										
43										
-- 50 --										
-- 60 --										
62		5y								
-- 70 --		411								
-- 80 --										
-- 90 --										
-- 100 --										
	wid									
-- 110 --										
116										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

-35 P_g burrow

-43 P_g burrow

-116 shell frag.

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 --	end ↓	5y 4/1			massive ↓	67 2 ↓		(-1)	CRZ	4/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
98										
-- 100 --								98: Py band		
109								contact: gradational		
-- 110 --		5y 4/2						(2) shell frags.		
-- 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--		5g								
		4g			leaving ↓	BT =2		(3) Shell frags		4/12/11
--10--		↓								
--20--										
25										
--30--										
31										
--40--										
--50--										
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

Contact: gradational

Shell frags

leaving
↓

BT
=2

25

Contact: irregular (erosive)

31

(1)

few shell frags.

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 --								Same as above	CR2	4/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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--									(12)	4/12/11
2	no ↓	5y			fragments ↓	B1 = 2		⑦		
2		4/1						7		
--10--		↓						10		shell fragments
--20--										
--30--										contact: gradual
								35	②	
--40--								55		40: Pg burrow
--50--										
50										contact: gradual
--60--										①
--70--										
--80--										
86										86: shell frags
--90--										
--100--										102: shell frags
113		5y								contact: gradual
--110--		4/2								②
--120--										
124										121: Pg burrow
--130--		5y								contact: gradual
		4/1								①
--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--		5y 4/1			massive	BI =2		(1)	CR	4/12/11
--10--	und ↓	↓								
--20--										
--30--										
--40--										
45								-45 Forams (filling burrow)		
48								-48: Py burrow		
--50--										
--60--										
--70--	inflw Dis									
73										
75								-75: Scaphopoda shell		
--80--										
85										
87								-85 > Scaphopoda shell		
--90--								-87 >		
--100--										
--110--										
116								-116 shell frag.		
--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 --									CR	4/12/11
5	und ↓	5y 4/1			massive ↓	B ↓		(1) -5 Forams (filling burrow)		
-- 10 --										
-- 20 --										
-- 30 --								- gradual color change		
		10y								
-- 40 --		4/1 ↓								
-- 50 --										
-- 60 --								-60: shell frag.		
-- 70 --										
78						75 SS		-78: shell frag.		
-- 80 --										
-- 90 --										
96								-96: Forams (on burrow)		
-- 100 --										
-- 110 --										
112								-112: Py burrow		
-- 120 --										
128								-128 shell frag.		
-- 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 --	und	10 y 4/1			und ↓	Bite ↓		① ↓ few shell frags	CR2	4/12/11
-- 10 --										
-- 20 --										
-- 30 --										
32								32: Py burrow		
-- 40 --										
-- 50 --								50: shell frag.		
-- 60 --										
-- 70 --										
-- 80 --										
88										
-- 90 --	und									
92										
-- 100 --	und									
-- 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 --		10g 4/1			massive ↓	B1 = 2 ↓		(1)	CR	4/12/11
-- 10 --	↓									
16								(2)		
-- 20 --		10g 4/1								
-- 30 --										
-- 40 --										
49										
-- 50 --	↓									
52		10g 4/1						(1)		
-- 60 --										
61										
63										
-- 70 --										
-- 80 --										
85										
-- 90 --										
90										
-- 90 --										
92										
-- 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 --		10y								
	und	4/1			laminar	B ₁ 2		(1) - 7 shell frag. - 10 shell frag.	C12	4/12/11
-- 10 --										
-- 20 --										
28										
-- 30 --										
-- 40 --	und									
-- 50 --										
-- 60 --										
-- 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.					CR	4/12/11
-- 0 --		10y			medium	B1		(1)		
		411				= 2				
-- 10 --										
-- 20 --										
27								-27: shells frags.		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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--									CR	4/12/11
4	dist. inter	OLE 1 10g 4/1			Massive	BI = 2		① ↓		
--10--					↓	↓				
16		↓								
--20--	und									
--30--										
37								-37: Py burrow		
--40--										
--50--										
--60--										
63								-63 shell frags.		
67								-67 shell frags.		
--70--										
75								-75 shell frags.		
--80--										
--90--										
93								-93 shell frag.		
--100--										
--110--										
--120--										
121								-121: Py burrow		
126								-126: Py burrow		
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 4/12/11
		Avg.	Max.						
0	109 911 ↓			massive ↓	BI = 2 ↓		① ↓		
10									
20									
30									
32									
37									-37: Forams (in burrows)
40									
50									
59									-59: Py burrow
60									
70									
71									-70 -71 > Forams (in burrows)
80									
90									
95									-95: shell frag.
100									-100 shells frags. Py burrow
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 --	↓	10g 411			massive ↓	B1 =2 ↓		(1) ↓	CR	4/12/11
-- 10 --		↓								
18								- 18: Forams (filling burrow)		
-- 20 --										
-- 30 --										
-- 40 --										
45								- 45 Forams (filling burrow)		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
99										
-- 100 --								- 99 - 101 > shell frags		
101										
-- 110 --										
-- 120 --								- 120: Forams (filling burrow)		
124								- 124: shell frags.		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 B 14H 4A

899

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	CDQ 4	GLY 1 10g 411 ↓			MOG 14 ↓	BY = 2 ↓		① 7	OR	4/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
95										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
132										
136										
-- 140 --										
-- 150 --										

95 shell frag.

132 shell frag.

136 shell frag.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

14H

64

901

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--	und ↓	grey 10g 4/1			und ↓	B1 "2 ↓		(1) ↓	OR	4/12/11
--10--										
--20--										
--30--										
33 -								-33 Py burrow		
--40--										
--50--										
--60--										
--70--										
--80--										
89 -								-89 > Py burrow		
--90--								-90 > Py burrow		
96 -								-96 Py burrow		
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386E

144

FA + All ie
no core cal

962

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					CR	4/12/11
-- 0 --								(1) Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
35								-35: shell frags.		
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --	No	grey 104%			massive	slight		① fine mud - Forams present		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

15H

2A

905

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	AS ABOVE							AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

- Burrow @ 37

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386^R

15M 3A

96

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	AS ABOVE							AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
	AS	Red						AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --								□ Void. 116-117 GMS expansion cracks.		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B (5H SA

908

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --	AS ABOVE							AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --								AS ABOVE		
-- 10 --	AS	above								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

15H 7A

910

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								AS ABOVE		
-- 10 --		AS ABOVE								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --								- Coral fragment @ 90-92		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --								-120 -122 Gas Expansion Crack		
-- 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 --								AS ABOVE		
-- 10 --		AS ABOVE								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --	AS	ABOVE						AS ABOVE		
-- 20 --										
-- 25 --								Gradational colour contact change		
-- 30 --	NO	GREY 10/4			Massive	Slight		① fine mud forams present		
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --		AS						AS ABOVE		
-- 10 --		AS ABOVE								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --								GAS expansion cracking		
-- 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--										
	AS ABOVE							AS ABOVE		
--10--										
--20--										
--30--								Gradational color change contact		
					Massive Slight			① fine mud. Forams present.		
--40--		2.54 3/1								
--50--										
--60--										
--70--										
--80--								GAS Expansion cracking.		
--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 --										
-- 10 --								AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

AS ABOVE

AS ABOVE

Gas expansion cracking

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 --	AS	ABOVE						AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --		AS ABOVE						HS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --	NO	GLEY / 1044 /			Massive	Slight		① Fine mud Forams present.		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

- 92
Void.
- 94

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 --										
-- 10 --										
-- 17 --								Gradational grain size change		
-- 20 --	NO	GREY 2 10Y4/1			Massive	slight		(2) Silty mud.		
-- 30 --										
-- 40 --										
-- 50 --								- 55 sea urchin spine		
-- 60 --								Grain size contact (gradational)		
-- 68 --	NO	GREY 3 10Y4/1			Massive	slight	SS 65	(3) Muddy - fine sand.		
-- 70 --								Gradational grain size change		
-- 80 --	NO	GREY 2 10Y4/1			Massive	slight		(2) Silty mud Forams present		
-- 90 --										
-- 100 --										
-- 110 --								- Sea urchin spines @ 108-110		
-- 120 --								Gradational grain size contact.		
-- 130 --	NO	GREY 2 10Y4/1			Massive	slight		(1) Fine mud Forams present		
-- 140 --										
-- 150 --										

VOID

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 --										
-- 10 --	AS	HBK						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --	As Above							As Above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --	AS	ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --								Shell fragments (crushed gastropod)		
-- 105 --								100-105		
-- 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 --										
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 95 --								Gradational grain size contact		
-- 100 --		CLAY 1044 1			massive silt			(2) silty mud. Fossils present		
-- 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 --							AS ABOVE		
-- 10 --	AS ABOVE								
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							66 small shell fragments		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --							112 Sea urchin spine		
-- 120 --									
-- 130 --							130 } void 135 }		
-- 140 --	Flow						A139 Flow ↓		
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

174 CC

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
- 7 -		AS ABOVE						AS ABOVE		
-- 10 --	Masse									
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
	Fall In							Fall in		
-- 10 --										
	grey 10y4/1				Massive			② Silty mud. Forams present.		
-- 20 --										
-- 30 --										
								Inclined contact		
-- 40 --										
	grey 10y4/1				Massive			① Fine mud. Forams present		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

158
VOID
74

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 --										
-- 10 --		AS ASUM						AS ABOVE		
-- 15 --								-15 VOID		
-- 17 --								-17		
-- 20 --										
-- 26 --								-26 VOID		
-- 27 --								-27		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 97 --								Gradational grain size contact		
-- 100 --								(2) silty mud		
-- 110 --								Forams present		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Massive
Dipnet

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 --	AS	ABOVE						AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Small shell fragments present

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 --								Grain size contact @ 0		
	76	GREY 10Y 4/1			Massive light			① Fine mud 76 Forams present		
-- 10 --	Loss of core							Loss of core		
-- 20 --										
-- 30 --	31							31 Void 33		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

250-1000-1000-1000



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --	AS ABOVE							AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --	Fall in							Fall in		
18										
-- 20 --										
-- 30 --		GLAY 10% 1/1			Massive	slight		① Fine mud forams present		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Basket - whole core

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 --										
-- 10 --								AS ABOVE		
-- 20 --	AS ABOVE									
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --								shell fragments present @ 64		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --								↑ Burrow 2141		
-- 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 --								AS ABOVE		
-- 10 --		AS ABOVE								
-- 20 --								Forams present		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --								Shell fragment (brachiopod)		
								↓ 123		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1336B

19X 2/1

934

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								AS ABOVE		
	AS ABOVE							AS ABOVE		
-- 10 --								Gradational grain size contact		
		GLAY 10/4, 1/1			Massive	slight		(2) silty mud		
-- 20 --								Fossils present		
-- 30 --										
-- 40 --	fishy									
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
	bone	clay 10/4, 1/1			massive	slight		(1) fine mud		
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

111386 B 19X SA

936

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --		HS ABOVE						HS ABOVE		
-- 20 --								Forams present.		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

SCIENCE FOR THE PLANET



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --								AS ABOVE		
-- 20 --								AS ABOVE		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --		As Above						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

AS ABOVE

AS ABOVE



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 --										
-- 10 --		AS ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --	AS ABOVE							AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
- 75 -								Gradational grain size change		
-- 80 --		9LEV1 10Y4/1			Massive	Slight		② Silty mud Forams + Small shell fragments present		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
- 148 -								Gradational grain size change		
-- 150 --		9LEV1 10Y4/1			Massive	Slight		① Mud		

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 --								AS ABOVE		
-- 10 --	AS ABOVE									
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

V1386 B 21X 6A

945

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



AS ABOVE

AS ABOVE

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U-386B 21x CCA

946

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --		AS ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --	fall in							fall in		
16										
-- 20 --	binnet							AS ABOVE		
-- 30 --		AS ABOVE								
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
125								Gradational grain size contact		
-- 130 --		CLAY 10/4			Massive	Slight		(2) Silty mud (very fine) Forams present		
-- 140 --										
145								Gradational grain size contact		
-- 150 --		CLAY 10/4			Massive	Slight		(1) Mud Forams present		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U 1386B 22X 2A

948

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	AS	ABOVE						AS ABOVE		
-- 10 --										
-- 20 --								Shell Fragments present		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U 1386B 22 X 3A

949

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --	AS	AS ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --								AS ABOVE		
-- 10 --		AS ABOVE								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --								Gradational grain size contact		
-- 80 --		CLAY 104%						Very slight increase in silt ② Forams present		
-- 90 --										
-- 100 --										
-- 110 --										
-- 117 --								Gradational gain size contact		
-- 120 --								① Mud forams present		
-- 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 --										
-- 10 --		AS ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
-- 10 --		AS ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

11386 B 22 X 9A

953

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --	AS	ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

V 1386 B 22X CGA

954

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --	AS							AS		
-- 20 --	ABOUT							ABOUT		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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 --										
6	Fill in									
-- 10 --	Bidet	CLAY 2 10/4/1			Massive	slight		① MUD ↓ with tears		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

~~U1386B~~ U1386B 23X 2A

956

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

AS ABOVE

AS ABOVE



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U13863 23X 3A

952

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --	AS ABOVE							AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

1) 1386B 23X 4A

958

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



AS ABOVE

AS ABOVE

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 23X SA 959

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

AS ABOVE

AS ABOVE

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --								AS ABOVE		
-- 20 --										
-- 30 --										
-- 34 --								Gradational grain size change		
-- 40 --					Massive	Slight		(2) Silty mud. Forams present		
-- 50 --										
-- 52 --					Massive	Slight		Gradational grain size change		
-- 60 --								(1) Mud		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

~~U1386B~~ U1386B 23X CCF (961)



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --	AS ABOVE				AS ABOVE					
-- 20 --	AS ABOVE									
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 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.						
	10Y5/1	clay	Medium		2		② SILTY MUD Small shell frags. all along the section	MCAN	4/DEC/2011
-- 0 --									
-- 10 --									
-- 20 --	Biscuit								
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Maer	Date: 4 Dec 2011
		Avg.	Max.						
	10Y5/1	Clay	Medium	massive	3		② SILTY MUD Small Shell Fragments. All Along the Section (SSFAAS)		
	10Y5/1	Clay	M.S.	Gradational Contact ↓ massive	3		① NANO MUD -52 Shell frags.		



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 --		10Y5/1	clay	Medium	massive	3		① NANNO MUD	mas	4/DEC/2011
-- 10 --								<u>SSFAAS</u>		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --	Biscuit									
-- 90 --						3				
-- 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 --		10Y5/1	clay	Med	massive	3		① NANNO MUD shell fragments through the section	Mason	4 DEC 2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --						3				
-- 80 --	Biscuit									
-- 90 --										
-- 100 --										
-- 110 --								109 shell fragm. 110 spiral shell		
-- 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: JK	Date: Dec 4
			Avg.	Max.						
-- 0 --		10Y 5/1	clay	Med sand		3		① Nano Mud - Small shell fragments throughout the section - Black spots pyrite?		
-- 10 --										
-- 20 --										
-- 30 --	Bis cuit									
-- 40 --										
-- 50 --										
-- 56 --		56			grad					
-- 60 --		10Y 5/1				3		② Calcareous silty mud - Shell fragments -- few - Black spots (more than above)		
-- 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: JK	Date: Dec 4
			Avg.	Max.						
-- 0 --			Clay	Med Sand		3		② Calcareous silty mud - Small shell fragments (few) - Black spots (pyrite)		
-- 10 --		10Y 5/1								
-- 20 --	Biscuit									
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --						3				
-- 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--	Bis Cuit	10x 5/1	clay	M Sand foram		3		② Calcareous Silty mud - Small shell fragments through the sec - Black spots (py)	JK	Dec 4
--10--										
--20--										
--30--						3				
--40--										
--50--	47 void									
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--	Bis cut	10Y 5/1	clay	Med Sand forams		3		① Vanna Mud - Shell fragments - Black Spots	JK	Dec 4
--10--										
--20--										
--30--										
--40--					G.C					
--40--		10Y 5/1				8		② Calcareous Silty Mud - Shell fragments - Black Spots		
--50--										
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:								
		Avg.	Max.														
Bis Cuit	10Y 5/1	Cly	M. sand foram	G.C	3		② Calcareous Silty Mud - Shell fragments — few - Black spots	JK	Dec 4								
	10Y 5/1	Silt	Med sand	G.C	2	62 55 Calcareous silty mud Sandy silt	③ Calcareous Sandy Silt - Shell fragments — common - Black spots										
				G.C													
		Cly	M. Sand (foram)	G.C	2		② Calc. Si. Mud - Shell fragments — few - Bl. spots										
				G.C													
							end of ②										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 3 25X4A 782



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		10Y 5/1	Clay	M. sand foram	Massive	2		① Nano. Mud - Shell fragments - Black spots	JK	Dec 4
--10--										
--20--										
--30--										
--40--										
--50--										
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--					G.C			end of ①		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B

4
25x3/4 A

1793

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: JK	Date: Dec 4
		Avg.	Max.						
--0--	10Y 5/1	Clay	M. Sand foram	Massive	2		② Calc. Silty Mud - shell fragments - few - black spots		
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
--110--	10Y 5/1	Silt	M. Sand	GC	2	SS 117 Calcareous Silt/Silty Mud	③ Sandy silt - shell fragments - common - Bl. spots		
--120--									
--130--	10Y5/1	Clay	M. Sand foram	GC	2		② Calc. Silty Mud - shell fragments - few - Bl. spots		
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386 B

25x6A

7/89

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Bis cuit	10Y 5/1	clay	msand foram		2		② Calc. Silty Mud - shell frag - few - Bl. spots	JK	Dec 4
-- 10 --										
-- 20 --					Massive					
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --						2				
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					JK	Dec 4
-- 0 --	Bin cut	1D5 5/1	Clay	Med Sand fawn	Massive	2		② Calc. Silty Mud - Shell fragments — few - Black spots	JK	Dec 4
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --						2				
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --		Clay	MSand foram	Massive	2		② Calc. silty clay - Black spots - Shell fragments — few	JK	Dec 9
-- 10 --									
-- 20 --									
-- 30 --									
	31 Void								
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Big cut	5GY 5/1	Clay	Med Sand forams	Massive	2		① Nanno Mud - shell fragments - more few - black spots - py-burrows	JK	dec 4
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B

26x2A

78

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Big cut	5GY 5/1	clay	M. sand forams		2		① Nanno Mud slightly silt-rich (forams?) - shell fragments - are few - py-burrows - Black spots	JK	dec 4
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --						2				
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Bis cuit	5GY 5/1	Clay	Med Sand		2		① Nanno Mud slightly silt-rich more forams? - shell fragments - are few - py-burrow - black spots	JK	Dec 4
-- 10 --					massive					
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --						2				
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --						2				
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386 B

26X 4A

91



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					JK	dec 4
-- 0 --	Bis cuit	5GY 5/1	clay	Med Sand foram	Massive	2		① Nanno fossil Mud slightly silt-rich (forams?) - Shell fragments — few - Py-burrows - Black spots		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --						2				
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --						2				
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B

26X5A

9.0



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Biscuit	5GY 5/1	clay	M. Sand foram	Massive	2		① Nanno fossil Mud slightly silt-rich (forams?) - Shell fragments — few - Black spots	JK	deck
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --						2				
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					JK	dec 9
--0--	↑	5GY 5/1	Clay	med Sand				<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> ⚠ Caution disturbed Fallen Liner from the </div> Major 80% — ① Minor 20% — ② - Shell fragments — few - Black spots - py burrow		
--10--					?	2				
--20--										
--30--										
--40--										
--50--										
--60--						2				
--70--										
--80--										
--90--										
--100--										
--110--						2				
--120--										
--130--										
--140--										
--150--	↓									



Heavy disturbance order & direction are not correct

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	5Gr 5/1	clay	Med Sand foram		2		<div style="border: 1px solid black; padding: 5px; width: fit-content;"> ⚠ Caution This section was fallen from the liner </div>	JK	dec 4
-- 0 --									
-- 10 --							Same as above		
-- 20 --							Major — 80% ①		
-- 30 --							Minor — 20% ②		
-- 40 --									
-- 50 --					2				
-- 60 --									
-- 70 --									
-- 80 --							So		
-- 90 --							Major 76% ②		
-- 100 --							Minor 30% ③		
-- 110 --					2				
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Order & Direction are NOT correct

Heavy disturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386.B 26x C C 984

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Bis. core	5GY 5/1				2	SS 5cm	③ Calcareous sandy silt - Shell fragments — common - Pyritized burrows Calcareous sandy silt	JK	dec 4
-- 10 --					Bioturb Contact					
-- 20 --		5GY 5/1				2	② Calcareous silty mud - Shell fragments — common - Black spots			
-- 30 --	28 void									
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	5GY 5/1	clay	M Sand foram				① Nanno Mud - Shell fragments - Black spots - Py-burrows	JK	dec4
-- 0 --									
-- 10 --				Massive	2				
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --	Biscuit								
-- 80 --					2				
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B

27X 2A

18/86

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					JK	Dec 4
--0--	5GY 5/1	Clay	Med Sand (foram)				① Nanno Mud same as above		
--10--									
--20--					2				
--30--									
--40--									
--50--									
--60--	Bisquit			G.C					
--63--		10Y 5/1						②	
--70--					2				
--80--	10Y 5/1			G.C					
--83--		Silt	M. sand				③ Calcareous sandy silt Shells - common		
--90--					2				
--100--	10Y 5/1			G.C					
--103--		Clay	M. Sand (foram)				④		
--110--					2				
--120--									
--130--									
--135--	5GY 5/1			G.C					
--138--		Silt	M. Sand				⑤ Calcareous sandy silt		
--140--					2				
--150--				G.C					

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: JK	Date: dec 4
		Avg.	Max.						
--0--	5GY 5/1	clay	Med Sand				(2)		
--10--					2				
--20--									
--30--									
--40--				G.C			40		
	10Y5/1	Silt	Med Sand				(3) Calcareous Sandy Silt		
--50--					2				
--60--				G.C			60		
	5GY 5/1	clay	Med Sand foram		2		(2)		
--70--									
--80--				G.C			77		
	10Y 5/1	Silt	Med Sand		2		(3) Calcareous Shells — common		
--90--									
--100--				G.C			95		
	5GY 5/1	clay	Med Sand (foram)				(2)		
--110--					2				
--120--									
--130--				G.C			130		
	5GY 5/1	clay	Med Sand (foram)				(1)		
--140--					2				
--150--									

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					JK	dec 4
-- 0 --		5GY 5/1	clay	M. Sand forams		2		① Nano Mud		
-- 10 --								- Shells — few - Black spots - Py-burrows		
-- 20 --										
-- 30 --										
-- 34 --					G.C			34		
-- 40 --		10Y 5/1	clay	M. Sand forams		2		② Calc. silty Mud		
-- 50 --								- Shells — few - Black spots - Py-burrows		
-- 60 --										
-- 70 --	Biscuit									
-- 80 --										
-- 90 --										
-- 96 --					G.C			96		
-- 100 --		10Y 5/1	Silt	M. Sand	* Irregular contact	2	100 ⁵⁵	③ Calcareous Sandy Silt		
-- 101 --		10Y 5/1	clay	M. Sand forams		2		Shells — common	calcareous silty mud	
-- 110 --								② Calcareous Silty Mud		
-- 111 --								- Shells — few		
-- 110 --		5GY 5/1	clay	M. Sand forams	G.C	2		109		
-- 120 --								① Nano Mud		
-- 130 --								- Shells — few		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

* biscuit?

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					Jr	dec 4
--0--	Biscuit	5GY 5/1	clay	M. Snd foram		2		① Nanno Mud as above		
--10--										
--20--										
--30--					G.C					
--32--		10Y 5/1	clay	M. Snd foram		2		② Calcareous Silty Mud		
--40--					G.C					
--43--		10Y 5/1 (slightly reddish)	S. H	M. Snd		2		③ Calcareous Sandy Silt shells — common		
--50--										
--60--										
--70--	Biscuit									
--73--							73 95	calcareous silty mud		
--80--		10Y 5/1	clay	M. Snd foram	Irregular* contact	2		② Calcareous Silty Mud		
--90--										
--100--										
--110--					G.C					
--113--		5GY 5/1	clay	M. Snd foram		2		① Nanno Mud		
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

* Potentially formed by biscuit



	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--	Dis cut	5GY 5/1	clay	M Sand foram.		2		① Nanno Mud - Shell fragments — few - Black patches - Py-burrows	JK	dec 4
--10--										
--20--										
--30--										
--40--										
--50--										
--60--										
--70--	Dis cut					2				
--80--										
--90--								Nanno fossil MUD		
--100--										
--110--										
--120--										
--130--										
--140--						2				
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	5/1	Clay	Med Sand foran		2		① Nano Mud as above		
	10Y 5/1	Clay	Med Sand foran	G.C.			② Calcareous silty Mud Shells - common		
	10Y 5/1	Silt	Med Sand	G.C.			③ Calcareous Sandy Silt Shells - common		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Bit cut	10Y 5/1	Clay	Med Sand		2		③ Calcareous sandy silt	JF	dec 4
-- 10 --								Shells - common		
-- 20 --										
-- 30 --										
-- 40 --	43 void									
-- 50 --	48									
-- 60 --										
-- 70 --										
-- 80 --	Biremit									
-- 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 --	Bis cut	10Y 5/1 slightly reddish	Clay	M. Snd foram	Massive	Sparse 2		② Calcareous Silty Mud Slightly reddish - Shell fragments — few - Black spots	JK	Dec 4				
-- 10 --											-- 20 --	-- 30 --	-- 40 --	-- 50 --
	Biscuit					2								

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 --		clay	M. Snd foram		Sparse 2		② Calcareous Silty Mud - Shell fragments — few - Black Spots	Jk	dec 4
-- 10 --									
-- 20 --				Massive					
-- 30 --	10Y 5/1 Slightly reddish								
-- 40 --					2				
-- 50 --									
-- 60 --						PAL 57 58	Shell sample		
-- 70 --									
-- 80 --	Biscuit								
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --					2				
-- 130 --									
-- 140 --									
-- 150 --				G.C			End of ②		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

28X3A

995

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		5GY 5/1	Clay	M. Snd foram	Massive	2		① Nanno Mud - Shells few - Black spots	Jic	dec 4
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 63 --						2	63 88	Nanno mud		
-- 70 --										
-- 80 --	Biscuit									
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --						2				
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Jk	Date: dec 4
		Avg.	Max.						
--0--	10Y 5/1 (slightly reddish)	Clay	Med Snd (foram)	Massive	2		⊙ Nano Mud - Shells — few - Black spots		
--10--									
--20--									
--30--									
--40--						1 As	Nano Mud (slightly sand & silt-rich)		
--50--									
--60--					2				
--70--									
--80--	biscuit								
--90--									
--100--									
--110--									
--120--					2				
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

28X5A

997

Expedition 339: Mediterranean Outflow

SCHEUCHER
KOLMANN
KORNER

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	50Y 5/1	clay	Med Sand forams		2		① Nanno Mud - Shell fragments — few - Py-burrows - Black spots	Jk	dec 4
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --	10Y 5/1								
-- 110 --									
-- 120 --					2				
-- 130 --									
-- 140 --									
-- 150 --									

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 B

28
28 x 6A

998'

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					JK	dec 4
-- 0 --	5GY 5/1	clay	Med Snd foram	Massive	2		① Nano Mud - Shell fragments — few - Py. burrows - Black spots		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	Biscuit				2				
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --	5GY 5/1			G.C			② Calcareous Silty Mud - Shell fragments - Black spots		
-- 130 --									
-- 140 --					2				
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 B

24 X CC
28

1000'

Expedition 339: Mediterranean Outflow



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: Jt	Date: Dec 4
		Avg.	Max.						
-- 0 --	10Y 5/1						② Calcareous Silty Mud		
-- 10 --	Biscuit								
-- 20 --	24								
-- 30 --	VOID								
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 B - 29X - 1A
 Expedition 339: Mediterranean Outflow

U1386 B

29X 1A

001

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 04/12/11
		Avg.	Max.						
0--					2 ↓		(2) SILTY MUD		
10--									
20--	GLEYS ADY SIS ↓						-16 shell frags -22 shell frags		
30--									
40--									
50--									
60--				gradat. contact			-54 -64 sand-filled burrows -76 shell frags		
70--									
80--				massive			(1) NANNO MUD		
90--									
100--							-105 py. burrow		
110--									
120--									
130--									
140--									
150--									

B I S C U I T

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U13868

99x 9A

02

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									ED	04/12/11
-- 10 --		GREY 10Y S1L			massive	2 ↓		① NAMMO MUD		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --								104 py. grains 109 py. grains		
-- 120 --								113 SS Nammo mud		
-- 130 --								131 shell frags		
-- 140 --										
-- 150 --										

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 29X3A

563

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
	CLEY1 104 S/d ↓				2 ↓		-2 shell frags ① NANNO NUD		
				massive					
							-31 shell frags		
				gradat. contact			-51		
							② SILTY NUD mottled		
	BISCUIT						-90 shell frags		
				bioturb. contact			-111		
						SS 117	③ SILTY SAND with shell frags mottled Calcareous Sandy silt		
							-137 -139	VOID	

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 29X4A

004

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		GREY 10Y 8/2				2 ↓			ED	04/12/11
-- 10 --					bioturb. contact					
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --					bioturb. contact					
-- 140 --										
-- 150 --										



BISCUIT

③ SILTY SAND with shell frags mottled
inverse grading (coarsening upwards)

② SILTY mud mottled

-37 shell frag
-40 shell frag

-78 shell frag

-92 shell frag

③ SILTY SAND mottled
shell frags abundant

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386 B

99X 5A

05

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
	CLAY			biot. contact	2 6		(3) SILTY SAND mottled		
	10Y 5/2						(2) SILTY MUD mottled few shell frags		
	BISCUIT			gradat. contact			(1) SANDY MUD		
				massive					

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

SI-MNH-28-REV. 4-64



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	GREY 10Y 5/12			massive	2 ↓		① NANNOS NUD very few shell frags all along the section	ED	04/12/11
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 04/12/11
		Avg.	Max.						
-- 0 --	CLAY 1 10Y S/A				2 ↓		→ crack (2) SILTY MUD mottled		
-- 10 --							→ 17 shell frags		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --							48 } crushed shell 51 }		
-- 60 --									
-- 70 --							→ 73 shell frags		
-- 80 --									
-- 90 --									
-- 100 --							→ 96 sand-filled burrow		
-- 110 --									
-- 120 --							→ 126 py. grain		
-- 130 --									
-- 140 --							→ 144 py. grain		
-- 150 --									



B I S C W I T

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
	grey grey silt				2 ↓		(2) SILTY MUD		
							-38 ursin spine fgmt -39 very big benthic foram? pyritized		
				biot. contact		59	(3) SANDY SILT mottled		
							-76 py. grain -76 shell fgmt		
				gradat. contact		109	(2) SILTY MUD mottled		

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
	grey silt				2 ↓		② SILTY MUD		
							-17 py - grains		
				gradat. contact			35		
							① NANO MUD		
							-75 shell fragm		
							-83 py grain		
				gradat. contact			91		
							② SILTY MUD		
							-104 sand-filled burrow		

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
	CLAY 1				2				
	104				↓				
-- 10 --	5/A						13 py. grain		
-- 20 --							② SILTY MUD		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							69 shell fragment		
-- 80 --				gradat. contact			80		
-- 90 --							① NANNO MUD		
-- 100 --				massive			103 py. grain		
-- 110 --									
-- 120 --							119 py. grain		
-- 130 --							131 shell fragment		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 04/12/11
			Avg.	Max.						
-- 0 --					grad. contact	2 ↓		③ SILTY MUD		
-- 10 --								① NANNO MUD		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

49 } VOID
51 }

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B

30X ~~FA~~.CC

105

BRIDGE 2004A
REVISION 1
01/20/04



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		GLY1 10Y S12			massive	2 G		⊕ NANNO NUD	ED	04/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
-- 0 --	CLAY 104 S/A				2 ↓		Section crashed on the deck → continuity? (49- end of section)		
-- 10 --									
-- 20 --							② SILTY MUD		
-- 30 --				gradat. contact			30		
-- 33 --							shell frags		
-- 40 --				massive			① NANNO MUD		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --							100 shell frags		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B

3/x2A

10

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
	CLAY 10Y 5/1			massive	2 ↓		① NANNO NUD		
							43 shell frags		
							71 py. burrow		
							78 gastropd shell (3mm) 82 shell frags		
							97-98] sand-filled burrow		
							130 shell frags		
							134 shell frags		
							146 py. grain		

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
-- 0 --	GREY 10Y 5/14				Z ↓				
-- 10 --									
-- 20 --							20 py. sand-filled burrow		
-- 30 --							29 many shell frags (burrow filled?)		
-- 40 --				massive			① NANNO TUD		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --							90 shell frags		
-- 100 --				gradat. contact			100	② SILTY TUD mottled	
-- 110 --									
-- 120 --				biot. contact			119	③ SILTY SAND mottled	
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386 B

31x4A

19

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	04/12/11
-- 0 --										
		grey				2 ↓		(3) SILTY SAND mottled coarsening-up		
-- 10 --		grey silt								
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 65 --					gradat. contact					
-- 70 --								(2) SILTY mud mottled with shell frags		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
								123 shell frags		
-- 130 --										
-- 140 --										
-- 150 --										

BISCUIT

65

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
-- 0 --					2				
-- 10 --				massive	↓		① NANNO nD		
-- 20 --							19 py.		
-- 30 --							29 py.		
-- 40 --									
-- 50 --							48 shell front		
-- 60 --									
-- 70 --									
-- 80 --							26 py.		
-- 90 --									
-- 100 --							102 shell front		
-- 110 --									
-- 120 --							114 gastropod shell		
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 04/12/11
		Avg.	Max.						
-- 0 --	grey			massive	2 ↓		① NANNO 70D		
-- 10 --	S/A								
-- 20 --									
-- 30 --									
-- 40 --							36 shell frags		
-- 50 --							42 shell frags		
-- 60 --							50 shell frags		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --							100 shell frags		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386 B

31x cc

023



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								ED	04/12/11
				massive	2		① NANNO 700		
-- 10 --									
-- 20 --									
-- 30 --	Biscuit								
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 04/12/11
		Avg.	Max.						
-- 0 --					19				
-- 10 --				massive	↓		① NANNO TUD		
-- 20 --							-22 shell frags		
-- 30 --							-33 shell frags		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --							-107 pyritized sand-filled burrow		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

B / S C U I T

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U106B

32x 3A

26

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --					2 ↓			ED	04/12/11
-- 10 --				massive			① NANO 900		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 04/12/11
		Avg.	Max.						
-- 0 --					2 ↓		② SILTY mud		
-- 10 --									
-- 20 --				gradat. contact					
-- 30 --				massive			③ NANNO mud		
-- 40 --							few shell frags all along the section		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U86 B

39 x 5A

28

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 04/12/11
		Avg.	Max.						
-- 0 --									
-- 10 --					2 ↓		① NANNO 700 few shell frags all along the section		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISSUIT

-- 85 sand-filled burrow

-- 125 main spine fragment

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	04/12/11
-- 0 --	11				2 ↓		(2) SILTY MUD mottled		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --							-34 py. burrow (nice!) -36 shell frags		
-- 50 --									
-- 60 --							-63 py. sand-filled burrow -68 py. sand-filled burrow		
-- 70 --									
-- 80 --									
-- 90 --				gradat. contact			-93 crack		
-- 100 --				massive			(1) NANNO MUD		
-- 110 --									
-- 120 --							-121 crack -124 shell frags -126 py. sand-filled burrow		
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

386 B

32 x 7 A

030



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	04/12/11
-- 0 --										
-- 10 --					massive	2 ↓		① NANNO mud		
-- 20 --										
-- 30 --										
-- 40 --								36 crack		
-- 50 --										
-- 60 --								64 crack		
-- 70 --	BISCUIT				gradat. contact			70 72 crack		
-- 80 --								② SILTY mud mottled		
-- 82 --								82 crack		
-- 87 --								87 shell frags		
-- 91 --								91 } void		
-- 93 --								93 } void		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386 B

32 x CC

031



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 04/12/11
			Avg.	Max.						
-- 0 --		4				2 ↓		② SILTY mud mottled		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	discut	GLEY 10y 411			massive	B1 =2		① Forams present	CL	5/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
75										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

-ss shell frag.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR	5/12/11
-- 0 --	sand						(1)		
-- 10 --				Mudstone	B7 -2				
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							-70: Py burrow		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							(1) Same as above	012	5/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --						80 SS			
-- 90 --									
-- 100 -- lot							Py burrow		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

1035

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							(1) Same as above Forams present	WL	5/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

2000-01-18
10:25:00
1036

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								UC	5/12/11
6							① same as above - 6 Py burrow		
-- 10 --									
16							16 } shell frag.		
-- 20 --									
21							21 } shell frag.		
-- 30 --									
33							contact - gradational		
-- 40 --	same			wavy	B3 = 2		② shell frags		
-- 50 --									
-- 60 --						65 SS			
65									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B

33X#ACC

1037



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							(2) Same as above	WZ	5/12/11
-- 10 -- 12 --							-12 sea urchin spicule		
-- 20 -- 25 --							-25 shell frags.		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 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 --		6LEJ ₁ 105 411			unam.e	81 1/2		(7)	A2	5/12/11
-- 10 --	50cm x									
-- 20 --	↙									
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1380B 34X #A2A



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							(1) Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							-70: Py burrow		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1368 B 34X 3A

1040

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR	5/12/11
-- 0 --							(1) Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V 1386 B 3AX 4A (104)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					AVZ	5/12/11
-0-- 3-							-3 Py burrow (1) Same as above		
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70-- 72-							-72 - shell frags.		
--80--									
--90--									
--100-- 104-							-104 shell frags.		
--110--									
--120--									
--130--									
136-							-136: Py b.		
--140--									
145-							-145 Py b.		
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 3AX 5A

(1042)



	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					UR	5/12/11
-- 0 --								(1) Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B

34X

6A

1043



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					OR	5/12/11
-- 0 --							① Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
44 46							> shell frags.		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 5/12/11
		Avg.	Max.						
-- 0 --							① Same as above		
-- 10 --									
13 --							13 shell frags.		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
69 --							69 shell frags.		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 34X CCA (1045)



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR2	5/12/14
-- 0 --							① Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 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.					WZ	5/12/11		
--0--	biscuit	grey 10y 4/1			massive	B1 2	①					
--10--												
--20--												
--30--												
--40--												
45											-45	Foreauis
46											-46	
--50--												
--60--												
61											-60	shell frags
--70--												
--80--												
--90--											-50	Foreauis
--100--												
--110--												
--120--												
--130--												
--140--												
--150--												

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

339 V886B 35X 2A

(1047)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
--0-- <i>same</i>	<i>tan</i>			<i>massive</i>	<i>B1 =2</i>		<i>(1)</i>	<i>VR</i>	<i>5/12/11</i>
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70--									
<i>75</i>							<i>contacts gradual</i>		
--80-- <i>same</i>	<i>tan</i>			<i>massive</i>	<i>B1 =2</i>		<i>(2)</i>		
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0									UR	5/12/11
10	same							(2) same as above -10 Py b.		
61								-61 Forams		
63								-63 Forams		
103								-103 shell frags		
125								Contact gradual		
130								(1) Forams		
138								-138 shell frags.		
140								-140 > shell frags.		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 35X 4A

(1049)

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:	
			Avg.	Max.							
-- 0 --									CR	5/12/14	
-- 10 --	same							① same above			
-- 20 --											
-- 30 --											
-- 40 --											
42 -											
-- 50 --									-47: Forams		
-- 60 --											
-- 70 --											
-- 80 --											
-- 90 --											
-- 100 --											
-- 110 --											
-- 120 --											
-- 130 --											
-- 140 --		GLE41 10g 4/1			unsharp ↓	B# =2		contact = gradation ②			
-- 150 --											

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 35X 5A

(1050)

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CV2	5/12/11
-- 10 --								(2) same as above		
-- 20 --										
-- 30 --										
-- 40 --										
44								-44 shell frag.		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --								contact: good lateral		
		6251			medium	B1		(1)		
		105				= 2				
-- 90 --		417								
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
133										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Scum ↓	Scum ↓			Scum ↓	Scum ↓		① Scum on above	GR	5/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								contact: gradational		
-- 60 --								2 slate frags		
65								contact: gradational		
-- 70 --								③		
-- 80 --										
82										-82: slate frags.
-- 90 --										
-- 100 --										
-- 110 --										-90: coral branch
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: <i>AK</i>	Date: 5/12/11
		Avg.	Max.						
-- 0 --							(3) same as above		
-- 10 --									
-- 20 --									
24 -							-24: shell frags		
-- 30 --									
-- 40 --									
46 -							-46: shell frags		
-- 50 --									
-- 60 --							contact: gradual		
62 -							(2)		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 35X CCA 1053



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								(2) same as above	GZ	5/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0		grey			massive	1		CR	5/12/11	
10	disturb	grey			↓	2				
22							contact: bedded			
37							shell frags			
71							contact: irregular			
109							contact: irregular			
129							contact: irregular			

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 36X 2A

1055

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	↓ Jawc	↓ Sand			↓ Sand	↓ Sand		(2) Shell frags.	CR	5/12/11
-- 10 --										
14								(1) contact: irregular		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
55								contact: irregular		
-- 60 --								(3)		
-- 70 --										
-- 80 --										
-- 90 --										↓ finez
-- 100 --										
104								contact: gradual		
-- 110 --								(1)		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 36X 3A

1056

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	same	same			same			(1)	C12	5/12/14
-- 10 --										
-- 20 --										
-- 30 --										
31								contact: gradual		
								(3)		
-- 40 --								Shell frags.		↓ loosen
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
										76 SS
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 36X 4A

(1057)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 5/12/11
		Avg.	Max.						
-- 0 --	same ↓			same ↓			② ↓ Fine downwards		
-- 10 --									
							① contact: podabival		
-- 20 --							① Forams present		
-- 30 --									
-- 40 --	flow ↓								
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --							- 90: Py b.		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 36X 5A

1058



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								(1) same as above	CK	5/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
54								54 Py b.		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							① same as above	CR	5/12/11
-- 10 --									
-- 20 --									
-- 30 --									
34 -							-34 Py b.		
-- 40 --									
43 -							- Py b. shell frags.		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							① same as above	CR	5/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
46							contact: gradual		
-- 50 --				sand	sand		② -47 P ₃ b.		
									↓ wash
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 36X CCF

1061



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	Sand			sand	sand		(3)	CR	5/12/14
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

DEPARTMENT OF THE ARMY



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		GLY 1 10Y 4/1						(Not so dense) <u>Type 1: Nanno mud</u>	NN	5/Dec/2011
--10--										
--20--										
--30--										
--40--										
--50--										
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

Biscuits

24 shell fragments
29
40
42
47
52
62 Shell fragments
66
67
73
75
80

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

41x 2A

1096

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								NN	5/Dec/2011
							Type 1: Nanno mud continued from 1A		
							8-10] shell fragments		
							33] shell fragments		
							37-38] foram patches		
							61-64] shell fragments		
							77SS		
							87 Py burrow		
							111 foram rich		
							121 foram		
							138-140] shell fragments		

Biscuits

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

SEITE 2011 12 05 11 12

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/Dec/2011
								Type I: <u>Nonno mud</u>		
-- 10 --								11 shell fragments		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

heavily deformed

Gradual change to GLEY
ROY 3/1

discu:ts

122 shell fragments

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--		Grey 10Y 3/1						Typel : Nanno mud continued from 3A	NP	5/Dec/2011
--10--								≈ 13 Densed (compacted)		
--20--								↓ ≈ 90 cm		
--30--										
--40--										
--50--										
--60--										
--70--										
--80--										
--90--		Biscuits						91 shell fragments		
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

41X 5A

1899

Expedition 339: Mediterranean Outflow

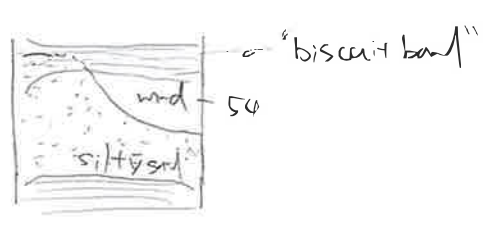
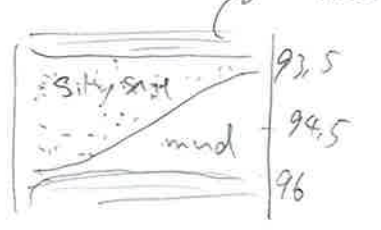


	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		GLCY1 10Y3/1						Type 1: Nano mud	NN	5/Dec/2011
-- 10 --										
-- 20 --										
-- 25 --		Gradual change								
-- 30 --		GLCY1 10Y4/1								
-- 40 --										
-- 50 --								-48 Shell fragments		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --	Biscuits									
-- 100 --										
-- 110 --										
-- 120 --										
129										
-- 130 --		GLCY1 10Y4/1			Gradational contact			Type 3: Silty sand		
-- 140 --								-137 } Shell fragments -143 }		
-- 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.						
								NN	5/02/2011
-- 0 --							Type 3: Silty sand continued from 97		
-- 10 --									
-- 20 --									
25				Gradational contact			Type 1: Nano mud		
-- 30 --							↳ 28 py burrow		
-- 40 --									
-- 50 --									
54				Sharp Inclined Contact			Type 3: Silty sand		
-- 60 --									
-- 70 --									
-- 80 --							76SS Sandy silt w/ biogenic carbonate		
							79 shell fragments		
-- 90 --							87 89		
94.5				(erosion?) Inclined contact					
-- 100 --							Type 1: Nano mud		
							99		
-- 110 --							110 Foram patch		
-- 120 --									
126				Gradational contact			Type 2: Silty clay		
-- 130 --							137-138cm CaCO3 19%		
-- 140 --									
-- 150 --									

Biscuits

GLEYS
(044)

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/Dec/2011
-- 10 --								Type 2: Silty clay continued from 6A)		
-- 20 --										
-- 30 --										
-- 40 --										
49 -- 50 --	Biscuits				Gradational contact			Type 1: Nano mud		
-- 60 --										
62 -- 65 --								VOID		
68 -- 70 --										
-- 80 --								15 shell fragments		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

41x CCA

1/02

Expedition 339: Mediterranean Outflow

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0								NN	5/Dec/2011	
0-10							Type 1: Nanno mud continued from 7A Dense (to the bottom of this section) (compacted)			
10-20							24 shell fragments			
20-30										
30-40	Biscuits									
40-50										
50-60										
60-62										
62-65										
65-67								Paleo-sample		
67-150										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U13 86B- 37x- 1A

Expedition 339: Mediterranean Outflow

U13 86B 37x 1A

1062



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Silty clay 4	20 y 4/11			Mainly	B1 =2	(1)		GR	5/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					UR	5/12/11
-- 0 --							① same as above		
-- 10 --									
15							! contact: gradual		
-- 20 --	same			same	same		③		↓ coarse
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 5/12/11
			Avg.	Max.						
-- 0 --	Sand ↓	Sand ↓			Sand ↓	Sand ↓		(3)		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
67										
-- 70 --										
75								contact - gradation		↓ fine downward ds
-- 80 --								(2)		
-- 90 --										
95										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

11386B 37X 4A

065

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	✓ None	Sandy			Sandy			① Foraminifera present	CR	5/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	SLLU	SLLU			SLLU	SLLU		① SLLU as above Forams present	CR	5/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U/368 B 37 X 6 A (1067)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: C12	Date: 5/12/14
		Avg.	Max.						
0--	grey			well	well		(1) ↓		
10--	grey 56y 417								
20--									
30--									
35--								-35 Py b.	
40--									
45--								-45 stream present	
50--									
60--									
70--									
80--									
90--								(1) more dense than above color change ↓	
100--									
110--									
120--									
130--									
140--									
150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 37X 7A

1068



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CR	5/12/11
								(1) Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V 1386 B 37X 8A

069



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CR	5/12/10
								① Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386B 37X CUA

1670



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							(1) Same as above	CR2	5/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B - 38X - 1A

U1386B 38X 1A

Expedition 339: Mediterranean Outflow

(1071)

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		GREY								
	↓	10y			MONOTONIC ↓	BZ 2		(1) Forams present	CR	5/12/11
-- 10 --	↓	411								
-- 20 --										
-- 30 --										
-- 40 --										
42								contact: gradational		
-- 50 --								(2)		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
102								contact: gradational		
-- 110 --								(3)		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



↓
coarse

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

(1072)

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Samp ↓	Samp ↓			Samp ↓	Samp ↓		(3)	02	5/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
49								contact: irregular		
-- 50 --								(7)		
-- 60 --										
-- 70 --										
-- 80 --								-80: shell frags.		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
136								-136: Py b.		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR	5/12/11
-- 0 --							(1) ↓ Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 -- 53							-53 Forams		
-- 60 --									
-- 70 -- 71							-71 Forams		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --							-110: Forams		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 38X4A 1074

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR2	Date: 5/12/11
			Avg.	Max.						
-- 0 --								(1) Same as above ↓		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
44								44 B b1		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
96								96 : Foules		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U13865 38X 5A

1075

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR	5/12/11
-- 0 --							① Same as above		
+									
-- 10 --							-7 Forams		
-- 20 --							-20 Forams		
25 -							-25 Forams		
-- 30 --									
33 -							-33 shell frag.		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
116 -									
-- 120 --							-116 Py b.		
-- 130 --									
130 -									
-- 140 --							-138 Forams		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B 38X 6A (1076)



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					02	5/12/11
-- 0 --							(1) Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
134 -									
-- 140 --							-134 Forams 137-138cm 29% CaCO ₃		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B

38X

~~C/A~~ 7A



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							(1) Same as above	CR	5/12/11
-- 10 --									
-- 20 --									
-- 30 -- 32							32 Follows		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

1098

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

1078



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					CR	5/12/14
-- 0 --								(1) Same as above		
-- 10 --								mod dense than above (on like section GA-CC-B of 37X)		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		GLEYS 10Y4/1						Type 1: Nano mud	NN	5/Dec/2011
-- 10 --										
-- 20 --								Foram patch		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

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 --									NN	5/Dec/2011
-- 10 --								Type 1: Nano mud (continued from 1A)		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --								-59 Py burrow		
-- 70 --								-69 Shell fragments		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --								-118 Foraminifera		
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 B

39X 3A

1081

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								Type 1: Nano mud (continued from 3A)	NN	5/20/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

-75 SS

-83 Py burrow

-116 Foraminifera

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/Dec/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Type 1: Nannomud (continued from 3A)

48 } shell fragments
↓
51 }

69.5 Foram patch

Biscuits

117 shell fragments

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 --									N N	5/Dec/2011
-- 10 --										
-- 20 --		Grey 10T & 1			Gradual contact		-20 SS	Type 2: Silty clay		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --					Gradual contact			Type 1: Nano mud 1/2 foram filled burrow		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

-65 shell

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 B

39 X 6 A

1084

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Type 1: Nano mud (continued from 5A)	NN	5/Dec/2011
-- 10 --									
-- 20 --							18 shell fragments		
28				Gradational					
-- 30 --				Gradational contact			Type 2: Silty clay		
	GLEY 1 10Y4/1								
-- 40 --									
-- 50 --									
-- 60 --									
65				Gradational					
-- 70 --				Gradational contact			Type 1: Nano mud		
	GLEY 1 10Y4/1								
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --							119 ↓ 121 Foramin patches		
-- 130 --									
							137-138cm 26% CaCO ₃		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

39x 7A

1085

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/Dec/2011
								Hard mud (continued from 64)		
-- 10 --										
								15 shell fragments		
-- 20 --										
-- 30 --										
-- 40 --								37 shell fragments		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
115										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

(BS-2) sparse

98 Trace fossil (Cnidaria)
99

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B 39x CCA

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									UN	5/Dec/21
-- 10 --								Typel: Nanno mud (continued from 7A)		
-- 20 --										
-- 30 --								-29 Shell fragments		
-- 40 --										
-- 50 --								-50 Foram patches		
55										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

PAL

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

(081)

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		GLY/1 10Y 4/1						Type 1: Nano mud	N N	5 Dec 2011
--10--										
--20--										
--30--										
--40--										
--50--										
--60--										
--70--										
--80--								75 shell fragments		
--90--										
--100--										
--110--										
118					Gradational contact			Type 2: Silty clay		
--120--										
--130--										
--140--								132 Foram patches		
--150--								147 Foram patches		

Biscuits



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--		GLE Y1 10Y 4/1							N U	5/Dec/2011
--10--								Type 2: Silt + clay (continued from 14)		
15					Gradational contact					
--20--		GLE Y1 10Y 4/1						Type 1: Nano mud - 21 Foram patches		
--30--										
--40--										
47					Gradational contact					
--50--		GLE Y1 10Y 4/1						Type 2: Silty clay		
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
137					Gradational contact					
--140--								Type 1: Nano mud		
--150--										

Biscuits

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 --									NU	5/Dec/2011
								Nanno mud (continued from 2A)		
-- 10 --										
-- 20 --										
-- 30 --										
35					Gradational contact			Type 3: Silty sand		
-- 40 --		GLY1 5GY5/1								
-- 50 --										
52					Gradational contact		48 SS	Type 1: Nanno mud		
-- 60 --		GLY1 10Y4/1								
-- 70 --										
-- 80 --										
-- 90 --										
94					Gradational contact			Type 3: Silty sand		
-- 100 --		GLY1 5GY4/1								
-- 110 --										
-- 120 --										
-- 130 --							26 SS	28 shell fragments		
-- 140 --										
-- 150 --										

Biscuits

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

40X4A

1090.1

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: N N	Date: 5/Dec/2011
			Avg.	Max.						
-- 0 --								Type 3: Silty sand (continued from 3A)		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 125 --					Erosional contact			partly bioturbated		
-- 130 --								Type 1: Nano mud		
-- 140 --								136 shell fragments		
-- 150 --										

biscuits

GLEY
1024/1

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1326B 40 X 5A

1091

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/Dec/2011
-- 10 --								Type I = Nano mud (continued from 4A)		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



Biscuits

↓ "Densed" (to the bottom of this section)

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NU	5/Dec/2011
-- 10 --								Type 1: Nano mud		continued from 5A
-- 20 --								↓ ↑ "Densed" (to the bottom of this section)		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --								96 shell fragments		
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

103-104 CaCO₃ 20%

IW sampling

M

1093

01/10/2011 10:17:00 AM
 10/10/2011 10:17:00 AM



Depth (cm)	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0								NN	5/Dec/2011	
10										
20										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

Biscuits

Type: Nanno mud continued from 6A
 "dense" (to the bottom of this section)
 ↓
 8 shell fragments

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

AX CCA

1094

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/Dec/2011
								Type 1: Nano mud continued from 17		
								↳ "Densed"		
-- 10 --										
-- 20 --										
-- 30 --										
34.5										
39										
-- 40 --								Paleo-sampling		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B - 42X - 1A

Expedition 339: Mediterranean Outflow

U1836B 42X 1A



1103



	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		GREY 10Y 4/1							NN	5/Dec/2011
--10--								Type 1: Nanno mud Densed (compacted) throughout this core Shell fragments		
--20--										
--30--										
--40--										
--50--										
--60--										
--70--	Biscuits							54 shell fragments 67 Foram rich 71		
--80--										
--90--										
95										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
							Type 1 = Nano mud (continued from 1A)	MN	5/Dec/2011
							Relatively coarse part. with rich foam		
							23 Py burrow? with forams (deformed)		
							28 shell fragments 		
							51 Foram (filling barrow) 		
							67 Shell fragments		
							Biscuits intensity is heavy		



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

42X 3A

1/05

Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/Dec/01
-- 10 --								<u>Type 1: Nanno mud continued from 2A</u>		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

biscuits

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Type 1: Nanno mud	NU	5/Dec/2011
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



Biscuits

72SS Biogenic mud (calcareous + siliceous) nanno diatoms & picules

99 foram patch

101 foram patch

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386 B 42X 5A

0107


Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/Dec/2011
-- 10 --								Type 1: Nannomud continued from 4A		
-- 20 --										
-- 30 --										
-- 40 --								- Foram patch		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

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 --								Type 1: Nanno mud continued from SA	NN	5/Dec/201
-- 10 --								4 Py burrow		
-- 20 --								20 Py burrow 		
-- 30 --								32 Foram patch		
-- 40 --										
-- 50 --										
-- 60 --								57 Shell fragments		
-- 70 --										
-- 80 --										
-- 90 --								90 Foram patch		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --								137-138cm 22% CaCO ₃		
-- 150 --										



Biscuits

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

30345-100-427A
10/2/2011
10:42 AM



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								Type 1: Nano mud (continued from GA)	NN	5/Dec/2011
-- 10 --										
-- 20 --								18 } Shell fragments 23 }		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --								57.5 Foram patch		
-- 70 --								} Biscuits intensity is heavy		
-- 80 --								75 shell fragments		
77.5								VOID		
82										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386B

42x

CCA

1106

Expedition 339: Mediterranean Outflow

DEPARTMENT OF THE ARMY
NAVY
NAVY



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	5/20/2011
-- 10 --								Typal: Nanno mud continued from 2A		
-- 20 --										
-- 30 --	Biscuits							-22 } shell fragments -29 }		
-- 40 --										
43.0										
48								Paleo - sampling		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	10Y5/1	V.F.S.	M.S.	massive	Z		SILTY SAND	yaer	5/DEC/2011
-- 10 --							Small shell fragments all along the section (SSFAAS)		
-- 20 --									
-- 30 --									
-- 40 --							39 shell fragments.		
-- 50 --									
-- 60 --	Biscuit								
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --	10Y5/1	Silt	M.S.	Grad. c.	Z		104 SANDY SILT		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MAM	Date: 5/DEC/2011
		Avg.	Max.						
-- 0 --							Same as above		
				Grad. c.					SSFAAS
	10Y4/1	clay	M.S.	massive	Z		5 mud		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --				Grad. c.			59		
	10Y4/1	clay	M.S.	massive	Z		SILTY MUD		
-- 70 --									
-- 80 --									
	Biscuit								
-- 90 --									
-- 100 --							103		
	10Y4/1	clay	M.S.	massive			mud		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MORU	5 / DEC / 2011
-- 0 --					~		Same as above	SSFAAS	
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 54 --	10x4/1	clay		Normal grading	/		[TURBIDITE (?)] ③ SILTY SAND		
-- 60 --		silt	F.S.						
-- 70 --		V.F.S.		sharp (?) c.	~		SS 72 SANDY SILT w/ biogenic carbonate		
-- 73.5 --									
-- 80 --	Biscuit	clay	M.S.	massive	~		SILTY MUD		
-- 90 --									
-- 100 --									
-- 106 --				Grad. c.					
-- 110 --	Same as above	clay	M.S.	massive	~		MUD		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					naam	5/DEC/2011
-- 0 --					2		Same as above SSFAAG		
-- 10 --							SS -18 nanofossil mud		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	Biscuit			Grad. C.					
		10Y4/1 clay	M.S.	massive	2		82 SILTY MUD		
-- 90 --									
-- 100 --				Grad. C.					
		Silt.	M.S.	massive	2		99 SANDY SILT.		
-- 110 --				Grad. C.					
		V.F.S.	V.C.S.	massive	2		109 VERY FINE SAND Very coarse-grained shell fragm.		
-- 120 --									
-- 130 --									
-- 140 --				Grad. C.					
		Silt.	M.S.	massive	2		144 SANDY SILT		
-- 150 --	Mouse-like disturb.								

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MAM	Date: 5/DEC/2011
		Avg.	Max.						
-- 0 --							Same as above.		
	10Y4/1	silt	M.S.	Grad. C.					
-- 10 --					2		SS -10 SILTY SAND SANDY SILT w/ biogenic carbonate		
-- 20 --									
-- 30 --									
-- 40 --									
	10Y4/1	clay	M.S.	Grad. C.					
-- 50 --					2		43 SILTY MUD		
-- 60 --									
	10Y4/1	clay	M.S.	Grad. C.					
-- 70 --					2		60 MUD		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MAM	Date: 5/DEC/2011
		Avg.	Max.						
-- 0 --							SSFAAS Same as above.		
-- 10 --									
-- 20 --									
-- 30 --		10Y3/1	F.S.	V.C.S.	?	Z	31 FINE SAND 32 MUD		
-- 40 --		10Y4/1	Clay	M.S.	massive	Z			
-- 50 --							49. shell fragment ϕ 1cm		
-- 60 --									
-- 70 --	Biscuit								
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --		10Y4/1	F.S.	M.S.	?	Z	119 FINE SAND 120 MUD		
-- 130 --		10Y4/1	Clay	M.S.	Grad. C.	Z			
			Clay	M.S.	Discontinuous	C. Z	128 SILTY MUD 132		
		↓ as above	SILT			Z	SILTY SAND 132-133 cm CaCO ₃ 23%		
-- 140 --									
-- 150 --									

M

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MAM	Date: 5/DEC/2011
		Avg.	Max.						
--0--	5G4/1	F.S.	v.c.s.	Parallel (?)	1	SS - 6	F. SAND SILTY SAND F. (Few.) w/ biogenic carbonate		
--10--	5G4/1	V.F.S.	M.S.	massive	2	9	M.S.		
--20--						SS - 18	SILTY SAND F. (Rare) w/ biogenic carbonate		
--30--	5G4/1	F.S.	v.c.s.	Parallel (?)	1	29	F.S. S.F. (Few)		
--40--	5G4/1	V.F.S.	M.S.	Parallel (?)	1	33	M.S. Shell fragm. (Rare)		
--50--	5G4/1	F.S.	v.c.s.	Parallel (?) Sharp C	1	49	F.S. Shell fragm. (Few)		
--60--	10Y4/1	clay	M.S.	massive	2	54	MUD.		
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--150--									

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y4/1	Clay	M. S.	massive	2		Same as above. SSFAAF	MAN	5/Dec/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MOMM	Date: 5/DEC/2011
		Avg.	Max.						
0-4	10Y4/1	Clay		Massive	Z				
26					Z		SILTY SAND		
30-35	10Y5/1	V.F.S. Fine sand					Few shell fragments		
74-79							Benthic Forams approx. Rate of 1mm		
93-95							shell fragment $\phi > 4$ cm		
118				Bio. C			MUD		
124-126	10Y4/1	Clay			Z		$\phi 2$ cm v.f. sand-filled burrow		
129-135							$\phi 6$ cm v.f. sand-filled burrow		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 5/DEC/2011
		Avg.	Max.						
-- 0 --	10Y4/1						Same As Above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --	Biscuit								
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

SS - 22 biogenic mud (calcareous + biosiliceous)



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386 B

44x3A

2/

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y4/1						Same As Above	MASU	5/DEC/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 5/DEC/2011
		Avg.	Max.						
-- 0 --		Clay	Medium	Massive	Z		Same As Above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	Biscuit								
-- 90 --									
-- 100 --									
-- 110 --									
-- 114 --		10Y4/1 Clay	Medium sand	Grad. C	Z		114 SILTY MUD		
-- 121 --		10Y3/1 Fine sand	Granule	Grad. C	Z		121 SILTY SAND		
-- 131 --		10Y4/1 Clay	Medium sand	Sharp C.	Z		131 MUD		
-- 134-135 --				Massive			134-135cm 23% CaCO ₃		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 5/DEC/2011
		Avg.	Max.						
-- 0 --	10Y4/1	Clay	M.S.	massive	2		Came as above.		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	Biscuit								
-- 90 --									
-- 100 --							-----95----- ↓ Small shell fragments below this horizon in the section		
-- 110 --									
-- 120 --		Clay	M.S.	Grad. C normal grading	2		119 SILTY MUD		
-- 130 --		V.F.S.	Granule	Grad. C normal grading	2		128 FINE SAND		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --		silt	M.S.				Silty mud		
-- 10 --		fine sand	M.S.				6 fine sand.		
-- 20 --	Biscuit						1A φ4 cm silt		
-- 30 --	✓	clay	M.S.				22 mud		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							Sandstone w/ calcareous cements		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386 B 45CC

125



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y4/1	Fine sand	Coarse pebble	massive	/		PEBBLY SAND	MAGU	5/DEC/2011
-- 10 --										
-- 20 --								Sandstone with calcareous cements		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386 B

46X 2A

127

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:	
		Avg.	Max.							
-- 0 --							Same As Above	masu	5/DEC/2011	
-- 10 --										
-- 20 --				Grad. c						
	10Y4/1	Clay	M. Sand		2		21 SILTY MUD			
	10Y4/1	Clay	M. Sand	? ↓ due to the disturb.	2		25 MUD			
-- 30 --										
-- 40 --				massive						
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --	Biscuit									
								77 SS — Nannofossil Mud		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U386B

46x3A

128

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masu	Date: 5/DEC/2011
		Avg.	Max.						
-- 0 --							Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 33 --						33 SS	Nannofossil Mud		
-- 40 --									
		10x4/1	Clay	M. Sand		2	41 SILTY MUD		
		10x4/1	Clay	M.S.	massive	2	44 MUD		
-- 50 --									
		10x4/1	Clay	M.S.			55-57 pyritized burrow ϕ 4cm		
-- 60 --							SILTY MUD		
							Shell fragments		
-- 70 --									
-- 80 --									
	Biscuit			Grad. c.					
		V. Fine Sand	F. Sand				86 SILTY SAND		
-- 90 --							88 SILTY MUD		
		clay	M.S.	Inclined contact		2			
		S.A.A							
-- 100 --		V.P.S.	M.S.				100 SILTY SAND		
		clay	M.S.			2	101 SILTY MUD		
				massive					
-- 110 --									
							117 sand-filled burrow		
-- 120 --									
				grad. c.			126 MUD		
		clay	M.S.			2			
-- 130 --									
		clay	M.S.	Grad. C.		2	131 SILTY MUD		
				Bio. C.			pyrite specs.		
-- 140 --							136 MUD		
		clay	M.S.			3			
							sand-filled burrows		
-- 150 --							141-142cm 16% CaCO ₃		

Very thin possible turbidite?

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 5/DEC/201
		Avg.	Max.						
-- 0 --							Same as above		
	1044/1	Clay	Medium sand	massive	2		SILTY MUD		
-- 10 --				Grad. C					
-- 20 --		Very fine sand Fine sand	Medium sand Very coarse sand	normal grading	2		FINE SAND (possible) turbidite		
-- 30 --		Clay	Medium sand	massive	2		SILTY MUD		
-- 40 --				Grad. C					
-- 50 --	Biscuit	Very fine sand	Medium sand	Discontinuous C.	2		SILTY SAND		
-- 60 --		Clay	M.S.	massive inclined C.	2		SILTY MUD		
		Fine S.	M.S.	Discontinuous C.	2		FINE SAND		
-- 70 --		Clay	M.S.	massive Grad. C.			SILTY MUD		
		Fine sand	M.S.	massive (?) Sharp			FINE SAND		
-- 80 --		Very fine sand	M.S.				SILTY SAND thin pyrite layers		
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

C 286B

46X5A

20

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	10Y3/1	Fine sand	Medium sand	massive (?)	2		FINE SAND	Yasu	5/20/11
-- 10 --									
-- 20 --									
-- 30 --	10Y5/1	Clay	M.S.	massive	2		28 MUD		
	10Y3/1	Fine sand	Medium sand	massive (?)	2		29 Calcareous Sandy silt		
							31 SS		
							33-34 clay-filled burrow? (ct. clast?)		
							FINE SAND		
-- 40 --	10Y5/1	Clay	M.S.	massive	2		39 SILTY MUD		
	10Y4/1	Fine sand	M.S.	massive (?)	2		42		
							FINE SAND		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

186B

46X CC

31



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	10Y3/1	Fine sand	Medium sand	massive	2		FINE SAND	msu.	5/DEC/2011
-- 10 --	Biscuit						few mica grains! (coarse-grained)		
-- 20 --							small shell fragments		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					F.	5/12/11
-- 0 --	Scoopy		clay					0-8		Scoopy mud.
-- 10 --								8-95		Silty mud.
-- 20 --		10Y 4/1	clay	msd.						Scatter pyrite grains.
-- 30 --										
-- 40 --										
-- 50 --					massive			2		SS -47 namnopsil mud
-- 60 --										
-- 70 --	B:swif									
-- 80 --										
-- 90 --										
-- 100 --		10Y 4/1	gradual							
-- 110 --		10Y 4/1	fsd. clay	msd.	massive			2		95-121. fine sand. without sedimentary structures
-- 120 --	121									
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									F.	5/12/11
-- 10 --								0-40 Same as above description.		
-- 20 --		10Y 4/1	fsd	msd		2				
-- 40 --	40		erosional contact							
-- 50 --	54	10Y 4/1	clay	msd.		2		40-54 silty md. slightly bioturbated 50cm 51cm 24% CaCO ₃		
-- 60 --		10Y 4/1	gradual contact							
-- 70 --	72							54-72. fine sand. without sedimentary structures.		
-- 80 --						2				
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386B

47X ~~1A~~ ^{CC}

1-4



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					F.	5/12/14
-- 0 --	10Y 4/1	fsd	msd	massive	2		0-7 Same as above.		
-- 10 --	10Y 4/1	clay	msd.	massive	2		7-16. silty mud.		
-- 20 --	21					AAL	16-21 AAL Sampling		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 5/DEC/2011
		Avg.	Max.						
--0--	N4/1	Clay	M.S.		2		MUD		
--10--	N3/1	Clay	M.S.	Grad. c	2		13 SILTY MUD		
--20--	N4/1	Very fine Sand	M.S.	Grad. c ↑ normal grading			18 SILTY SAND		
--30--	Biscuit	Clay	M.S.	Irregular. C.			28 MUD		
							SS 29cm Silty SAND w/ biogenic carbonate (possible) turbidite		
--40--									
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MOSU	Date: 5/DEC/2011
		Avg.	Max.						
--0--	N4/1	Clay	Medium sand	Massive	2		MUD		
--10--									
--20--	N4/1	Very fine sand	Fine sand	Massive	2		22 SILTY SAND		Normal grading
--30--				Irregular c.	1				
--40--	10Y4/1	Clay	M.S.	Massive	2		MUD		
--50--									
--60--									
--70--	10Y5/1	V.F.S.	V.F.S.	Grad. C. / massive / Sharp c.	?		66 67 V.F. SAND		
--80--	10Y5/1	Clay	M.S.	massive	2		MUD		
--90--									
--100--									
--110--	10Y5/1	Clay	M.S.	normal grading			112 SILTY MUD		
--120--				Grad. C.					
--130--	10Y5/1	Fine sand	M.S.	massive			125 FINE SAND		possible turbidite
--140--									
--150--									

Biscuit

Normal Grading

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --		F.S.	M.S.				Same as above	MASU	5/DEC/2011
-- 10 --									
-- 20 --	10Y5/1	Clay	M.S.	Sharp C. massive	2		15 mud Small shell fragms (few)		
-- 30 --									
-- 40 --	10Y5/1	Clay	M.S.	Grad. C. massive	2		34 SILTY MUD		
-- 50 --									
-- 52 --	10Y5/1	V.F.S.	M.S.	(Bio. C.?) unknown massive	2		52 SILTY SAND shell frag orient		
-- 54 --	10Y5/1	Clay	M.S.	massive	2		54 mud		
-- 60 --							62 sand-filled burrow		
-- 70 --				Unknown C. due to the disturb.					
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --	10Y5/1	Clay	M.S.	Grad. C. Massive	2		111 SILTY MUD		
-- 120 --	10Y4/1	V.F.S.	M.S.	unknown C. ?	2(?)		120 SILTY SAND		
-- 123 --	10Y5/1	Clay	M.S.	Massive	2		123 mud		
-- 130 --									
-- 140 --									
-- 150 --									

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 5/DEC/2011
			Avg.	Max.						
-- 0 --								Same as above		
-- 10 --										
-- 20 --					Grad. C					
-- 20 --		N4/11	Clay	M.S.	massive.			SILTY MUD Small shell fragments all along the section <u>SSFAAS</u>		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --								crack 70-72 cm		
-- 80 --	Biscuit									
-- 90 --							SS 84	Nannofossil Mud.		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					MASU	5/DEC/2011
-- 0 --										
-- 10 --								Same as above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --	Biscuit									
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --		10Y4g	clay	M.S.	Grad. c massive	2		115 MUD		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 5/DEC/2011
			Avg.	Max.						
-- 0 --								Same as above.		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --								pyrite specks		
-- 50 --										
-- 60 --		Biscuit								
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --								105-106cm 15% CaCO ₃ (duplicate measurement)		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	[CAUTION DISTURBED: OUT OF SEQUENCE] Biscuit	~4/1	Clay	M.S.	massive	2	MUD pyrite-filled ^{small} burrows	MASU	5/DEC/01	
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								MASU	5/DEC/2011
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --	10Y4/1	Clay	M.S.	massive	2		MUD		
-- 70 --	Discard								
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

[CAUTION
DISTURBED : OUF OF SEQUENCE]

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386 B

48 X.C.C

1143



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								MPSM	5/DEC/2011
-- 10 --							Same as above		
-- 20 --									
-- 30 --									
-- 40 --	Biscuit								
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masu	Date: 6/DEC/2011
		Avg.	Max.						
--0--									
--10--							Small plant fragments. all along the section		
--20--									
--30--									
--40--									
--50--	Mouse-like disturbance	N411	clay silt	massive	Z		CLAY		
--60--							62		
--70--	Mouse-like disturbance								
--80--							82		
--90--		N411	clay silt	massive	Z		CLAY		
				Sharp.C			94		
		N311	k.f.s. F.S.	Grad.C	/		96	SILTY SAND	
--100--		N311	clay silt	massive	Z			SILTY CLAY	
--110--	Biscuit								
--120--									
--130--				Grad.C			128		
--140--		clay		massive	Z			condrites	
				grad.C			143		
--150--		silt	M.S.	massive	/			SANDY SILT with medium-grained plane fragments.	

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MASU	6/DEC/2011
--0--	5Y5/1						S A A		
							3		
--10--		clay	silt	massive	2				
--20--									
--30--				Grad. C.					
							30		
--40--		silt	M.S.	Grad. C.	2				
							40		
--50--		fine sand	M.S.	Discontinuous C.	2				
							51		
--60--		clay	V.F.S	massive	2				
							68		
--70--									
							70		
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--150--									

Biscuit

Biscuit

contorted strata.

highly contorted by drilling disturbance.

Grad. C.

Grad. C.

Discontinuous C.

?

?

?

?

?

?

?

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386C

9R3A

1179

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					MASM	6/DEC/2011
-- 0 --										
-- 10 --								S.A.A.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386C

9R4A

1180



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								MASU	6/DEC/201
-- 10 --							↳ A A		
-- 20 --									
-- 30 --									
-- 40 --	Biscuit								
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386C

QR CC.

1181



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Biscuit								Masa	6/dec/201
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 5 DEC 2011
		Avg.	Max.						
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 64 --									
-- 70 --	10Y4/1	clay	clay (no foam)	massive	2		Mud		
-- 80 --									
-- 90 --				?					
-- 94 --		clay	silt	massive	2		94 SILTY MUD		
-- 98 --		V.F.S clay	V.F.S clay	?	2		98 SILTY SAND MUD		
-- 100 --									
-- 110 --				?					
-- 111 --		Fine sand	Medium sand	massive			111 SILTY SAND		
-- 120 --	SAA			?					
-- 121 --		clay	clay	massive	2		121 MUD		
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									MPSU	5/DEC/2011
-- 10 --								S.A.A.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --	Biscuit	10Y4/1	Clay	Silt	Grad. G			SILTY MUD		
-- 70 --					Grad. C	2				
-- 80 --		10Y3/1	Fine sand	M.S.	Normal grading		2	SILTY SAND		Normal Grading
-- 90 --		10Y4/1	Clay	clay	massive			MUD		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

116 SS Nannofossil Mud

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MPSM	Date: 5/DEC/2011
		Avg.	Max.						
--0--	10Y4/1	clay	clay	Normal grading (N.G.)			S.A. - 2		
--10--		clay	Silt	Grad. C ↑	2		9 SILTY MUD		
--20--		Very fine sand	Very fine sand	Grad. C			14 SILTY SAND		Normal Grading (possible) Turbidite
--30--									
--40--		Clay	Clay	(?) Sharp C. Grad. (?)			37 MUD		
--50--		V.F.S.	V.F.S.	↑ Erosional			41 SILTY SAND		N.G. (possible) TD
--60--		Clay	Clay				49 MUD		
--70--	Biscuit			?			72 SILTY SAND		
--80--		V.F.S.	V.F.S.	?			78 MUD		
--90--		Clay	Clay	massive					
--100--									
--110--									
--120--									
--130--		V.F.S.	V.F.S.	?			125 SILTY SAND		
--140--		Clay	Clay	massive			129 MUD		
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masu	Date: 5/DEC/2011
			Avg.	Max.						
-- 0 --										
-- 10 --								above		
-- 20 --								Same as		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Bitcut

Same as

above

51cm CaCO3 16%





	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masu	Date: 5/DEC/2011
			Avg.	Max.						
-- 0 --										
-- 10 --	Biscuit							Same as above 		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

