

U1386A IH-1A

Expedition 339: Mediterranean Outflow

U1386A IH1A

507

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
0--	2.5Y 4/2	Silt	Medium sand				5cm: Silty mud Calcareous ooze	NN	1/Dec/2011
10--									
15--	2.5Y 4/1	Silt	Medium sand	Mottled (Massive)	BI:2		Integral contact Major lithology (in this case)	NN	1/Dec/2011
20--									
30--	Undisturbed						<ul style="list-style-type: none"> - Color: 2.5Y 4/1 - Av. grain size: - Max. grain size: - Sedimentary structure: Massive (Mottled) - Bioturbation Index: 2 (Sparse) - Thickness: Very thick bedded - 90% (\leftrightarrow 10% Minor lithology) - Shell fragments - Black patches (Organic matter) 	NN	1/Dec/2011
40--									
50--	Undisturbed						100cm: Nannofossil ooze with mud	NN	1/Dec/2011
60--									
70--	Undisturbed							NN	1/Dec/2011
80--									
90--	Undisturbed							NN	1/Dec/2011
100--									
110--	Undisturbed							NN	1/Dec/2011
120--									
130--	Undisturbed							NN	1/Dec/2011
140--									
150--	Undisturbed							NN	1/Dec/2011

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	1/Dec/2011
-- 10 --								Major lithology (continued from 1A)		
-- 20 --								-22 shell		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --								-69 shell fragments		
-- 80 --										
-- 90 --										
-- 92 --								burrow filled with sandy silt		
-- 95 --										
-- 100 --										
-- 106 --								isolated burrows filled with sandy silt & shell fragments		
-- 110 --										
118								Bioturbated contact		
-- 120 --		2.5Y 4/1	sandy silt	Medium sand	Massive (Mottled)	BI: 2 (Sparse)		Minor lithology		
-- 130 --	Undisturbed						130: SS	<ul style="list-style-type: none"> - Color: - Av. Grain size: - Max. Grain size: - Sedimentary structure: Massive (Mottled) - BI: 2 (Sparse) → mud walled burrows - Thickness: Medium bedded - 10% (↔ Major lithology) - Shell fragments 	130 cm: Sandy mud calcareous ooze	↓ Sandy mud w/ biogenic carbonate
-- 138 --							138: SS	Sharp & irregular contact		
-- 140 --		5Y 4/2	Silt	Medium sand	Massive (Mottled)	BI: 2 (Sparse)		Major lithology		
144	Undisturbed									formed by erosion?
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					NN	1/Dec/2011
-- 0 --										
								Major lithology (continued from 2A)		
								2 } burrow		
								8.5 } burrow		
-- 10 --								10 } burrow		
								12 --- shell fragments		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								47 shell fragments		
-- 60 --										
65										
-- 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--									NN	1/Dec/21
								Major lithology (continued from 3A)		
--10--								12 shell fragments		
13										
--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 --		5y 2/4	mud					Forams present Shells fragments present		
-- 10 --					massive			Thin litho: mud (in section 1A: 100%)		
-- 20 --						By-2 sparse		bedding thickness: very thick		total core
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										total core

MAJOR LITHOLOGY: mud
total core: 100%

MINOR LITHOLOGY: sandy mud
total core: ~20%

Expedition 339: Mediterranean Outflow

U13861

ZH

2A

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

MAJOR LITHOLOGY:

mucl

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		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
75						SS 75		75cm: SILTY MUD NANNOFOSSIL CORE Nanno silty mud		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --								120:] layer with shells 120:] fragments		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U 138 A

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4A

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
65										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BZE = sparse

BZ = 3 segments

55

65

BZE = sparse

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0								Same as above		
5	undist.	5Y						Minor litho		
10		2/4						sandy mud		
15					massive			shell fragments present		
20						BZ=2 sparse		(bedding thickness total cm: thick)		
25								15 cm: MUDDY NANNOFOSSIL Ooze → Nannofossil sandy mud		
30								contact: gradational		
33		same			massive			Major litho: mud		
40	incl.							shell fragments present		
50										
60										
70										
74		same				BZ = 2/3 ht		contact: incline (erosive)		
80					massive			Minor litho: sandy mud		
90	undist.							shell fragments		
100						BZ=2 sparse				
101		same			hetero			contact: incline (erosive)		
110								Major litho		
120	undist.							Shell fragments		
130										
136		same				BZ=3 slush ht		contact: incline (erosive)		
140	undist.				massive			Minor litho		
145								Shell fragments		
148	undist.									
150						BZ=2 sparse		Major litho		

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY: sandy mud

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								Same as above		
-- 10 --								Rain litho		
-- 20 --								contact: gradual		
-- 25 --	5y 4/1		silty mud		unconsol			Rain litho		
-- 30 --								Shell fragments		
-- 40 --										
-- 50 --										
-- 60 --								60 cm: Silty mud nanofossil ooze		
-- 65 --										Nanofossil silty mud
-- 70 --								70: Pebbles shell		
-- 80 --	5y 4/1		mud		unconsol			contact: indurated (erosive)		
-- 85 --								Rain litho		
-- 90 --								color contact		
92	5y 4/2		mud		unconsol			Major light litho		
-- 100 --								Shell fragments		
-- 105 --								contact: indurated (erosive)		
112	5y 4/2							light litho		
-- 115 --								minor		
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.						
-0--	5y 4/2	Silty mud					Tannoz litho Shell fragments		
-10--									
-20--									
21 24 -30--							27 29] layer with shell fragments		
37							3300 - Nonfossil Silty Mud		
-40--	5y 4/2	mud			BZ - 36/37		contact: gradational Tajis litho few shell fragments		
-50--									
56							contact: inclined		
-60--	5y 4/2	Silty mud			BZ - 38		Tinn litho		
-63									
-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	silty mud							Minor litho: shell fragments
-- 10 --										
-- 20 --					massive	B1-3				
28										contact: gradational
-- 30 --		same	mud							Major litho
-- 40 --					massive	B1-2				
45										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY: silty mud

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

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY: silty mud

overlap: sandy mud % = 15%

total core = 75%

% = 10%

Expedition 339: Mediterranean Outflow

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3 H 2 A

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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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1386 A 3H 3A

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 30/1/10
			Avg.	Max.						
-- 0 --		Same	mud		massive			Plagin litho (same as above)		
-- 10 --						B1=2				
-- 20 --										
-- 30 --										
-- 40 --										
63		Same	silty mud		massive	B1=2		Taroz litho shell fragments	contact = gradational	
-- 50 --										
-- 60 --										
63		Same	sandy mud		massive	B2=3		Overlap shell fragments	contact = irregular (cherty)	
-- 70 --								Mottled with GLE 1 10y/3		
-- 77 --										
-- 80 --	Undis.	Same	silty mud		massive	B2=2		Plagin litho	contact = irregular	
81		Same	mud		massive	B2=2		Plagin litho	contact = gradational	
-- 90 --										
94		Same	silty mud		massive	B2=2		Plagin litho	contact = gradational	
96									contact = gradational	
-- 100 --		5y 4/1	mud		massive	B2=2		Plagin litho		
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
146		Same	silty mud		Same	Same		Plagin litho	contact = gradational	
-- 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--							thin litho		
4	5y 4/1	Sandy mud		massive			same as above contact = gradational		
--10--					BY=3		Overlap shell fragments		
19						1955	Sandy silt w/ biogenic Silty sand carbonate		
--20--									
28	5y 4/1	Silty mud		massive	BY=2		contact = irregular (erosion) thin litho		
--30--									
39	5y 4/1	Sandy mud		massive	BY=2		Overlap 40 = shell fragment contact = irregular (erosion)		
--40--									
41	5y 4/1	Silty mud					Thin litho shell fragments		
--50--									
--60--									
63	5y 4/1	mud					contact = inclined (erosion?) Thin litho shell fragments		
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
133	5y 4/1	Silty mud					contact = inclined Thin litho 141 shell fragments		
--140--									
--150--									

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY: silty mud (overlap = sandy mud)

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
--0--								LR	30/11/11
9									
--10--									
11									
	5y 4/1								
--20--									
--30--									
32									
	5y 4/1								
--40--									
--50--									
--60--									
--70--									
--80--									
85									
	same								
--90--									
95									
	same								
--100--									
--110--									
117									
	same								
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY: silty ooze overlap = sandy mud

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					UZ	30/11/11
--0--	5y 411	mud					Layer litho throughout the section. Shell fragments		
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70--									
75	Unclear					75SS	Heterogeneous sed mud		
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY: mud

MINOR LITHOLOGY:

IW

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		5Y 4/1							U12	30/11/11
-- 10 --						B1 = 2		Same as above Shell fragment		
-- 20 --					massive					
-- 30 --	und.									
-- 40 --										
43	und.	5Y 4/1	Silty mud		massive	B1 = 2		Thin litho Contact: gradational		
44										
-- 50 --		5Y 4/2	sandy mud		massive	B1 = 3		Overlap Contact: irregular		
-- 60 --										
61										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 A 3H CC

Expedition 339: Mediterranean Outflow



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								CVZ	30/11/11
--0--	5y 4/1	sandy mud		massive	BT=0		shell fragments overlap ③		
--10--							contact: inclined		
17	5y 4/1	silty mud		massive	BT=2		shell fragments throughout the section ②		
--20--									
--30--									
--40--									
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
132	5y 4/1	sandy mud		massive	BT=3		contact: irregular shell fragments overlap ③		
--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	mud		massive	BJ=2		Thin litho ①		
--10--										
--20--										
--30--										
--40--	undis. turbid									
45								-45 } shell fragments abundant		
--50--										
51										
--60--										
68								-68: shell fragment		
--70--										
71	undis.	5y 4/1	sandy mud		massive	BJ=3		Contact: irregular shell fragments overlap		
79								contact: irregular ③		
--80--										
82			silty mud		massive	BJ=2		②		
88								-88 > shell fragments		
--90--										
--100--	undis.									
--110--										
--120--										
--130--										
--140--										
143	undis.		mud		massive	BJ=2		contact: gradual		
--150--								①		

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 4/2	mud		massive	3J=2		(1) Shells fragments throughout the section		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
66							-66 Shell fragment			
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
147							contact: irregular			
-- 150 --			Sandy mud				(3)			

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --		clay	med. sand		2		① NANNO NUD layers with more (burrows?) sands: 14 cm 30-43 cm 51 cm 67 cm		
-- 10 --	SY 4/2				↓				
-- 20 --									
-- 30 --		clay	medium sand	bioturb. contact			28		
-- 40 --									
-- 50 --	SY 4/2								
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --				bioturb. contact mottled			95 shell fragments 107		
-- 120 --	SY 4/2	very fine sand	medium sand				bioturbated sandy bed → shell fragments → micras ③ SILTY SAND w/ bio carbonate		
-- 130 --				mottled bioturb. contact			134		
-- 140 --	SY 4/2	clay	med. sand				① NANNO NUD		
-- 150 --		clay	medium sand				146 ② CALC. SILTY NUD		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --		clay	medium sand		2 ↓		② CALC. SILTY MUD		
-- 10 --	SY 4/1								
-- 20 --									
-- 30 --									
-- 35 --				bioturb. contact			③ SILTY SAND with biogenic calc.		
-- 40 --							bioturbated sand bed - shell fragment - top mottled		
-- 50 --	SY 4/1	very fine sand	medium sand			SS	55 cm Calcareous silty mud sand with biogenic carbonate		
-- 60 --									
-- 68 --				bioturb. contact			② CALC. SILTY MUD		
-- 70 --	SY	clay	medium sand				layers with more sand:		
-- 80 --	4/1						burrows 71-75 cm 83 cm 96-98 cm 121-129 cm		
-- 82 --							132-142 cm 145-148 cm		
-- 90 --	SY 4/1						① SAND MUD		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

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Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 01/12/11
		Avg.	Max.						
-- 0 --		clay	m. sand	massive	2 ←		① NANNO MUD		
-- 10 --	S4 4/4						18 shell fragment		
-- 20 --									
-- 30 --							34 cm shell fragment		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --							105 cm small patches with more sand (burrows?) 115 cm		
-- 110 --									
-- 120 --									
-- 130 --							136-139 cm a large patch with more sand and shell fragments		
-- 140 --									
-- 150 --									

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386 A

447A

55

01/12/11

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	5Y 4/1	clay	m. sand	in situ	2		① NANO NUD	ED	01/12/11
-- 10 --									
-- 20 --									
-- 30 --							26 cm small patch more sand (burrows?)		
-- 40 --							43 cm small patch with more sand (burrows?)		
-- 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	01/12/11
-- 0 --	SY 412				2		① NANNO NUD		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --							<p><u>CORE SUMMARY</u></p> <p>NANNOFOSSIL NUD, CALCAREOUS SILTY NUD and SILTY SAND WITH BIOGENIC CARBONATE.</p> <p>Dark gray.</p> <p>NI background alternating with mottled CSN and SSWC beds</p> <p>gradational, irregular and bioturbated contacts.</p> <p>Slight to sparse bioturbation.</p> <p>5 SILTY SANDS with biogenic carbonate beds.</p> <p>Shell fragments abundant.</p>		
-- 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	01/12/11
-- 0 --	SY 4/2	clay	medium sand		2		① mud		
-- 10 --									
-- 20 --									
-- 30 --							32 shell fragm		
-- 40 --									
-- 50 --						SS	52 cm Nanofossil Mud		
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --	SY 4/2	clay	medium sand (fine)	gradational contact			92 cm		② silty mud
-- 100 --									
-- 110 --						SS	110 cm Calcareous SILTY MUD		
-- 120 --									
-- 130 --	SY 4/2	very fine sand	medium sand (fine)	bioturb. contact			125 cm		③ mottled bed with more sand and shell fragment
-- 140 --									
-- 150 --									continue to next section.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
--0--	SY 4/1	very fine sand	medium sand (fine)		2 ↓		continue ③ sandy bed (mottled) - shell fragment		
--10--			fine sand						
--20--									
--30--									
--40--									
--50--	SY 4/1	clay	medium sand (fine)	bioturb. contact			- 44 cm ② silty mud mottled - 59 shell fragment		
--60--									
--70--							- 73 shell fragment		
--80--							- 78 shell fragment		
--90--							- 82-86 cm: burrow filled with more sand (black)		
--100--	SY 4/1	clay	medium sand	gradational contact			- 98 cm ① mud		
--110--							- 110 cm: greenish layer, discontinuous, coarser (fine sand)		
--120--									
--130--									
--140--									
--150--							- 147 shell fragment		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
--0--	S4 4/1	clay	med. sand	massive	2 ↓		① mud section	all along the	
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

C 86 SH 4A

356

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	01/12/11
-- 0 --		SY 41A	clay	silt		2 ↓		① mud all along the section fine sand-filled burrows		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								48 shell fragment		
-- 60 --								58 shell fragment		
-- 70 --								75 shell fragment		
-- 80 --										
-- 90 --								92 shell fragment		
-- 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: 01/12/11
		Avg.	Max.						
-- 0 --	SY 4/1	clay	med. sand	massive	no ↓		① NUD.		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 45 --		clay	medium sand (braun) fine sand	bioturb. contact			45 SILTY NUD mottled ② shell frags		
-- 50 --									
-- 55 --									
-- 60 --		very fine sand	medium sand (braun) fine sand	bioturb. contact			56 ③ MUDDY SAND mottled shell frags		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --		clay	medium sand (braun) fine sand	sharp contact			drilling disturbance? 110 ② SILTY NUD mottled 116 shell frag 110-151cm = vertical giant burrow filled with fine sand particles		
-- 120 --									
-- 130 --							131 shell frag		
-- 135 --		clay	med. sand	gradational contact			135 NUD		
-- 140 --							138 shell frag		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	SY 4/2	clay	med. sand.	massive	Z ←		① NUD		
-- 10 --							8-15 cm 18-20 cm 20-23 cm] large burrows filled with fine sand		
-- 20 --							small burrows (rounded)		
-- 30 --							-31 shell fragment		
-- 40 --							-38 shell fragment		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --							-79 pyrite grain		
-- 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: 01/12/11
			Avg.	Max.						
-- 0 --		Sy 4/2	clay	med. sand		2 ←		① nvd		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

33-35cm: py. burrow

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	01/12/11
-- 0 --		sy 4/1	clay	med. sand.		2 ←		qud		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

CORE SUMMARY
 NANNOFOSSIL MUD, CALCAREOUS SILTY MUD,
 CALCAREOUS SILTY SAND.
 Background: NANNOFOSSIL MUD (dark grey)
 alternating with dark gray CALCAREOUS
 SILTY MUD and CALCAREOUS SILTY SAND (mottled)
 CSS is always preceded and followed
 by CSF.
 2 sandy beds (Sections 1,2,5)
 shell fragments. Burrows more
 recognisable.
 sand-filled burrows.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 01/12/11
		Avg.	Max.						
--0--	5Y 4/2	clay	m. sand (forams)	massive	2 ↓		① calc. mud shell frags		
--10--	↓								
--20--							23 cm: bivalve shell fragment (1cm)		
--30--									
--40--									
--50--		clay	m. sand (forams)	gradat. contact			46 ② calc. SILTY MUD shell frags		
--60--									
--70--				bioturb. contact			66 68 cm: crack ③ SILTY SAND /w biogenic carbonate 69 ① calc. MUD		
--80--				massive					
--90--				biot. contact			88 calc. ② SILTY MUD with shell frags SS 94 cm: Silty MUD Calcareous		
--100--				biot. contact			98 ① calc. MUD		
--110--				massive					
--120--									
--130--									
--140--							136 crack 142 crack		
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					EJ	01/12/11
-- 0 --	SY 4/1	clay	m. sand		2 ↓		① calc. mud		
-- 10 --									
-- 20 --									
-- 30 --				massive					
-- 40 --							SS - 41 cm Calcareous mud		
-- 50 --									
-- 60 --	SY 4/1	clay	m. sand	irregular contact			60 ② calc. silty mud with shell frags		
-- 70 --									
-- 80 --									
-- 90 --							51 : crack		
-- 100 --									
-- 110 --				biotu contact			105 ① calc. mud		
-- 120 --				massive					
-- 130 --									
-- 140 --									
-- 150 --				biot. contact			146 ② calc. silty mud		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 01/12/11
		Avg.	Max.						
-- 0 --					2 ↓		CALC. ② SILTY MUD		
-- 10 --	SY L/A						(obs more reddish all along the section)		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --				gradat. contact			47 CALC. ① MUD		
-- 60 --							55 56 / shell frags		
-- 70 --	SY L/A			massive			71-72 : sand-filled burrow		
-- 80 --									
-- 90 --									
-- 100 --				biot. contact			101 CALC. ② SILTY MUD with shell frags		
-- 110 --				biot. contact			116 CALC. ① MUD		
-- 120 --				massive					
-- 130 --									
-- 140 --				biot. contact			143 CALC. ② SILTY MUD		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	S4 4/1				2 ↓		1 cm CALC. ① MUD		
-- 10 --							(color more reddish all along the section)		
-- 20 --									
-- 30 --				massive					
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --				irregular			93 CALC. ② SILTY MUD in 3 discontinuous layers		
-- 80 --				irregular			81 CALC. ② MUD		
-- 90 --									
-- 100 --				massive					
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A^{6A} 6A

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --						2 ↓		① calc. nod	ED	01/12/11
-- 10 --		54 4/1						-10 shell fragment		
-- 20 --					massive					
-- 30 --								-32 shell fragment		
-- 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	01/12/01
-- 0 --	SY				2		CALC. ① MUD		
-- 10 --	4/1						3 cm } discontinuous more 9 cm } silty layers 21 cm } (burrows?)		
-- 20 --				massive					
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --							<u>CORE SUMMARY</u> CALCAREOUS MUD, CALCAREOUS SILTY MUD and SILTY SAND WITH BIOGENIC CARBONATE. Background: dark gray CALC. MUD alternating with CALC. S.S. and ss w/ BC beds (mottled). gradational and bioturbated (irregular) contacts and one erosional contact. Bioturbations rare. 2 SILTY SAND w/ BC beds (sections 1 & 2) Shell frags abundant. Many burrows filled with ooid particles.		
-- 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	01/12/11
-- 0 --	Sy 4/1	clay	m. sand (frags)	massive	2 ↓		① ^{NANO} NUD dark gray 7 cm: py. burrow		
-- 10 --									
-- 20 --							26 cm: py. burrow		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							67 cm: py. shell frag		
-- 80 --						SS	82 cm Nannofossil MUD		
-- 90 --									
-- 100 --							106-109 cm: discontinuous layers with more sand/silt		
-- 110 --									
-- 120 --							119 cm: py. burrow		
-- 130 --									
-- 140 --							140 cm: py. burrow		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --				massive			① NANO MUD		
				gradat. contact	2 ↓		② CALC. SILTY MUD with shell frags with black color		
-- 10 --	SY 4/2								
-- 20 --				bioturb. contact			19		
							22: pyrite		
							① NANO MUD		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --	SY 4/2			massive					
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --							110: sand and shell-filled burrow		
-- 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	01/12/11
-- 0 --	Sy 4/1			massive	2 ↓		① MANNING MUD		
-- 10 --									
-- 20 --									
-- 30 --							-29 shell fragment		
-- 40 --							-42 shell fragment		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --							-137 : pyrite		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A.

4
7H 3A

53

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
--0--	5Y 4/2			massive	2 ↓		① NANNO MUD dark gray		
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70--									
--80--									
--90--									
--100--							SS - 96 cm Namofossil MUD		
--110--									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386A

7H5A

55A

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	21/12/11
-- 0 --	SY 4/2			massive	2 ↓		① dark gray NANNO MUD		
-- 10 --									
-- 20 --									
-- 30 --							28 shell fragment		
-- 40 --									
-- 50 --									
-- 60 --							58 shell fragment		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --							97 shell fragment		
-- 110 --									
-- 120 --									
-- 130 --							127 shell fragment		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	S4 4/1			massive	2 ↓		① NANNO NUD dark gray		
-- 10 --							7 cm 18 cm 43 cm 78 cm		small sand-filled patches (burrows?)
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							70 shell fragment		
-- 80 --							77 shell fragment		
-- 90 --							87-88 cm: discontinuous layer with more sand		
-- 100 --							shell fragment		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --	S4 4/1			gradat. contact			137 ② CALC. SILTY NUD shell fragments		
-- 150 --									

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	54 4/12				2 ↓		② CALC. SILTY MUD with shell mottled black specks		
-- 5 --				bioturb. contact			③ SILTY SAND with shell mottled black specks on top		
-- 10 --									
-- 20 --						SS	20 cm Sandy silt w/ biogenic carbonate		
-- 30 --				bioturb. contact			33 CALC. ② SILTY MUD with large sand-filled patches (burrows)		
-- 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	01/12/11
-- 0 --		54								
		4/5								
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

② ^{CALC.} SILTY MUD with shell

CORE SUMMARY
 NANNO FOSSIL MUD, CALCAREOUS SILTY MUD and SILTY SAND WITH BIOGENIC CARBONATE.
 Dark gray.
 Background: dark gray NM with alternating mottled CSN and one mottled SSWBC.
 gradational, bioturbated contacts
 - Pyritized burrows
 - shell frags abundant
 - sand-filled burrows

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	SY 4/1	very fine sand	m. sand		2 ↓		③ SILTY SAND w/ biogenic carbonate with shell frags mottled		
-- 10 --									
-- 20 --	SY 4/2	clay	m. sand	sharp contact			② calc. SILTY MUD mottled sand-filled burrows		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --	SY 4/2						54 shell frags		
-- 70 --									
-- 80 --	SY 4/2	clay	m. sand	gradat. contact			① MAMMO. MUD		
-- 90 --									
-- 100 --									
-- 110 --	SY 4/2			waste			sand-filled burrows		
-- 120 --									
-- 130 --	SY 4/2						105 shell frags		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	S4 4/2	clay	m. sand clear	massive	2 ↓		① CALC. NOD		
-- 10 --									
-- 20 --									
-- 30 --							26 large burrow filled with black silt / very fine sand (organic matter, monosulfur)		
-- 40 --							42 crack		
-- 50 --							shell fragment		
-- 60 --							62 crack		
-- 70 --							73: silt-filled burrow		
-- 80 --							83: silt-filled burrow		
-- 90 --							85 crack		
-- 100 --							100 crack		
-- 110 --									
-- 120 --							121 crack		
-- 130 --							135 crack		
-- 140 --							142 crack		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	Sy 4/2			massive	Z ↓		① CALC. NUD		
-- 10 --				grad. contact					
-- 20 --							② CALC. SILTY NUD		
-- 30 --				grad. contact					
-- 40 --				massive			① CALC. NUD (with a little bit more silt)		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --				inclined contact					
-- 130 --				inclined contact					
-- 140 --				massive					
-- 150 --									

16

33

88-89 cm: shell fragment (tube)

SS
124
125
129
② SILTY NUD with shell fragment + sponge spicules
CALCAREOUS SILTY NUD (opaques, forams)
① CALC. NUD

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	01/12/11
-- 0 --		S4 4/1			massive	2 ↓		① CALC. NUD		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								SS - S3 NANNOFOSSIL NUD		
-- 60 --										
-- 70 --										
-- 80 --								- 75-76 black sand-filled burrow - 80 black sand-filled burrow		
-- 90 --								- 86 shell fragment - 87 black sand-filled burrow - 90		
-- 100 --								- 94 shell fragment - 96 black sand-filled burrow - 98 shell fragment		
-- 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	01/12/11
-- 0 --		S4 4/1			massive	2 ↓		① CALC. MUD		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

32 py

39 py

92-94 lighter bed, color contact

89-90cm: fine sand discontinuous layer
 92-97cm: slightly coarser patch (discontinuous) ↳ burrow?

106 vertical burrow?
 112 slightly coarser-filled

129-130: sand-filled burrows

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A -

8H6A.

563

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	01/12/11
-- 0 --		SY 4/2			massive	2 ↓		① calc. nod		
-- 10 --										
-- 20 --										
-- 30 --								-28-27 cm: vertical burrows		
-- 40 --										
-- 50 --										
-- 60 --								-62 shell fragment		
-- 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: 01/12/11
			Avg.	Max.						
-- 0 --		5y 4/2			massive	2 ↓		① calc. mud		
-- 10 --								② silty mud		
								15 shell fragment		
-- 20 --										
								8-61 cm: sub-horizontal cracks a little bit more silt		
-- 30 --										
-- 40 --										
								4555 - Calcareous SILTY MUD		
-- 50 --										
-- 60 --										
								65 shell fragment		
-- 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: 01/12/11
		Avg.	Max.						
-- 0 --	54 4/2				2 ↓		(2) calc. silty mud		
-- 10 --									
-- 20 --							17-18 cm coarse particles - filled burrow?		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --							<u>CORE SUMMARY</u>		
-- 70 --							NANNOFOSSIL MUD, CALCAREOUS SILTY MUD and SILTY SAND w/ BIOGENIC CARBONATE.		
-- 80 --							Dark gray Background; dark gray mottled with alternating mottled csn and one mottled ss wbc.		
-- 90 --							Sharp, gradational, inclined contacts Bioturbation sparse.		
-- 100 --							- shell frags abundant - sandy filled burrows net		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 01/12/11
		Avg.	Max.						
-- 0 --	5Y 4/2				2 ↓		(2) CALC. SILTY MUD - shell fragment		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --				biot. contact					
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	54 4/2			sharp contact	2 ↓		3 ③ SILTY SAND ② CALC. SILTY MUD		
-- 10 --				biot. contact			11 ① NANNO MUD - sand-filled burrow		
-- 20 --									
-- 30 --							34 sand-filled burrow		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --							83-84 sand-filled burrow		
-- 90 --									
-- 100 --							102 shell fragment		
-- 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--		SY 4/1				2 ↓		(1) NANNO MUD	ED	21/12/11
--10--										
--20--										
--30--										
--40--										
--50--										
--60--										
--70--										
--80--							SS	80 Nanno fossil Mud		
--90--								88 py.		
--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	01/12/11
-- 0 --							① NANNO TUD		
-- 10 --	SY G12				2 ↓				
-- 20 --									
-- 30 --				gradat. contact			27		
-- 40 --							② CALC. SILTY TUD mottled shell frags		
-- 50 --									
-- 60 --				biot. contact			60		
-- 70 --						SS	66 crack 68 ③ SILTY SAND w/ biogenic calcareous carbonate mottled Sandy silt - shell frags		
-- 80 --									
-- 90 --							88 crack		
-- 100 --									
-- 110 --							107 crack		
-- 120 --							123 crack		
-- 130 --							130 crack		
-- 140 --							138 = echiocidium spina frag 139 crack		
-- 150 --				sharp contact			145 crack 151		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --									
				gradat. contact	2 ↓		② CALC. SILTY MUD		
-- 10 --							① NANNO MUD		
-- 20 --							18 sand-filled large burrows		
							22		
-- 30 --									
-- 40 --							41 shell frmt		
-- 50 --									
-- 60 --							56 shell frmt		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --							102 shell frmt		
-- 110 --				gradat. contact			110		
							② CALC. SILTY MUD		
							- sand-filled burrows		
-- 120 --									
-- 130 --									
				gradat. contact			135		
							① NANNO MUD		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 01/12/11
			Avg.	Max.						
-- 0 --		S4				2				
		4/1				↓		5 slab fragment		
-- 10 --		↓						① NANNO TUB		
								silt and sand - filled burrow		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --								71) greenish lamina (color band)		
								73)		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --								122 cold branch coral fragment		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	S4 4/2 — 6				2 ↓		① NANNO TUD		
-- 10 --							vertical burrow, shell-filled at the bottom		
-- 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	01/12/11
-- 0 --	SY 4/4				2 ↓		- 2 shell frags		
-- 10 --							① NANNO MUD		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

CORE SUMMARY

NANNO MUD, CALC. SILTY MUD and SILTY SAND w/ BIOGENIC CARBONATE. Background: dark gray mottled alternating with mottled csn and one mottled ss w/ bc beds. bioturbated and gradational contacts, one sharp contact.

- shell frags abundant
- sand-filled burrows
- pyrite grains
- echinoderm spore frmt (section 4) and cold branch coral frmt (section 6)

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	Sy 412			massive	2 ↓		① NANNO MUD		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --							42 crack		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

102 } vertical burrow
 107 } vertical burrow
 110 } vertical burrow
 111 }
 112 }

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	59 4/2			massive	2 ↓		① NANNO MUD		
-- 10 --									
-- 20 --									
-- 30 --									
-- 34 --				gradat contact			② CALC. SILTY MUD with large sand and shell-filled burrows mottled		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --				biot. contact			③ SILTY SAND w/ biogenic carbonate mottled - shell frags		
-- 93 --									
-- 100 --									
-- 110 --						SS			
-- 115 --									
-- 120 --									
-- 126 --							crack		
-- 130 --									
-- 139 --				biot. contact			② CALC. SILTY MUD mottled		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
--0--	5y 4/2				2 ↓		(2) calc. silty mud		
--10--									
--20--							23 large oblique burrows		
--30--				gradat contact			26	(1) NANNO MUD	
--40--				massive			42-45 large silt-filled burrows		
--50--							50-51 large sand and shell fragment-filled burrows		
--60--							ss shell fragment		
--70--									
--80--									
--90--							92 shell fragment		
--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	01/12/11
-- 0 --	5Y 4/1			massive	2 ↓		① NANNO MUD		
-- 10 --									
-- 20 --				gradat. contact			16 crack 18		
-- 30 --									
-- 40 --				sharp contact			29 crack 36 37 crack		
-- 50 --				biot. contact			45		
-- 60 --							52 crack 54		
-- 70 --				gradat. contact			65 crack		
-- 80 --									
-- 90 --				massive			85 shell fragment		
-- 100 --							99 crack		
-- 110 --							113 shell fragment		
-- 120 --						SS	120		
-- 130 --							129 vertical sand-filled burrow 131		
-- 140 --							133 shell fragment + crack		
-- 150 --							151 shell fragment		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	S4				2		5 crack		
	4/2				↓		9 crack		
-- 10 --	↓						14 crack		
-- 20 --									
-- 26 --							26 crack		
-- 29 --							29 crack		
							33-34: shell frags - filled burrow + crack (large)		
-- 40 --							41 crack		
							44 crack		
-- 50 --				massive			① NANNO NUD a little bit coarser at the top → more shell frags		
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --							91 shell frags		
-- 100 --							98 crack 102 shell frags		
-- 110 --							108 shell frags		
-- 120 --							121 crack		
	124			biot. contact			125 124 crack		② CALC. SILTY NUD
-- 130 --				sharp contact			129 131 shell frags		
	129						134 crack		① NANNO NUD
-- 140 --				massive			140 crack		
-- 150 --							151-152: shell frags - filled burrow		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --				biot. contact sharp contact	2 ↓		① NANNO MUD ② CALC. SILTY MUD		
-- 10 --	54 4/2						① NANNO MUD with a little bit more silt (more shell frags)		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --				massive					
-- 60 --							56) thick shell frags - filled burrow 58)		
-- 70 --							62) shell frags - filled burrow 64) (foliated shell type?)		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --							107 shell frag		
-- 120 --							121 shell frag		
-- 130 --									
-- 140 --									
-- 150 --							147) cracks 149)		

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	01/12/11
-- 0 --								① NANNO MUD		
		Sy			massive	2 ↓				
-- 10 --		h/s						14) shell frags. filled burrow (foliated shell type?)		
-- 20 --								20 crack		
					biot. contact			25		
-- 30 --								28 shell frags		
								② CALC. SILTY MUD with abundant shell frags		
-- 40 --										
					biotur. contact			51		
-- 50 --								① NANNO MUD		
-- 60 --					massive					
-- 70 --								73) sand-filled burrow 75)		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

10HCC A
10HCC B
10HCC C

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --	5Y 4/2			massive	2 ↓		2) ① NANNO MUD 6) patch more sandy + feces-like fgmt (1.5cm)		
-- 10 --							Some sand-filled burrows (large)		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

CORE SUMMARY

NANNO MUD, CALC, SILTY MUD,
SILTY SAND w/ biogenic carbonate.

Background: dark gray NN
alternating with dark gray
mottled CSM and 2 dark gray mottled
SSWBC beds.

gradational, bioturbated and
sharp contacts.

Bioturbation sparse

- some vertical burrows

- some large sand and shell-filled burrows
(shell fragments are often different)

- shell fragments

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

PAL

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
--0--	5Y 4/2				2 ↓		② CALC. SILTY MUD with shell frags mottled		
--10--				gradat. contact					
--20--				massive			① NANNO MUD		
--30--							-32 shell frags		
--40--							-38 shell frags - filled burrow		
--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	01/12/11
-- 0 --	S4 light				2 ↓		① NANNO NUD micrite		
-- 10 --									
-- 20 --									
-- 30 --							30 shell frags		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --							85 crack 88 90 shell frags		
-- 100 --							95 crack 98		
-- 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	01/12/11
-- 0 --		54				2				
-- 10 --		4/1						-13 otolith		
-- 20 --					maxile			① NANNO MUD		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --								-107 shell fragment		
-- 120 --										
-- 123 --					gradat. contact			123		
-- 130 --								② CALC. SILTY MUD shell fragments		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	01/22/11
-- 0 --		54				2		(2) CALC. SILTY MUD mottled		
-- 10 --		4/2				6				
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 55 --					gradat. contact			55		
-- 60 --					massive			58) gastropod shell (6mm) 59) ① NAMMO MUD		
-- 65 --								63 shell fragment		
-- 70 --										
-- 74 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

FLOW-IN (destroyed)

IN

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 01/12/11
			Avg.	Max.						
-- 0 --		54 4/2				2 6				
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 54 --										
-- 60 --					mosaic			① NANNO TUB with slab frags sand-filled burrows		
-- 64 --								64 crack		
-- 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: 01/12/11
			Avg.	Max.						
-- 0 --		S4			massive	Z		① NANNO MUD		
	?	4/2				↓		shell frags		
-- 10 --										
-- 20 --										
-- 30 --								<u>CORE SUMMARY</u>		
								NANNO MUD & CALC. SILTY MUD		
-- 40 --								Background: dark gray M		
								alternating with dark gray mottled		
								CSN.		
								Important disturbance (fouling)		
-- 50 --								in sections 6 and 7.		
								gradational & bioturbated contacts		
								- abundant shell frags		
-- 60 --								- sand-filled burrows		
								shell frags		
								- 1 otolith (Section 5, 12 cm)		
-- 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	01/12/11
-- 0 --	5Y 4/2				2 ↓		② CALC. SILTY MUD mottled		
-- 10 --				bioturb. contact			13 shell frags 16		
-- 20 --							① NANNO MUD		
-- 30 --				massive					
-- 40 --									
-- 50 --				gradat. contact			53		
-- 60 --							② CALC. SILTY MUD with shell frags mottled		
-- 70 --							72 shell frags		
-- 80 --				biotur. contact			82 shell frags 84		
-- 90 --				massive			① NANNO MUD with shell frags		
-- 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	01/12/11
-- 0 --	SY 4/2			massive	2 ↓		① NANNO MUD		
-- 10 --				gradat. contact			② CALC. SILTY MUD mottled		
				bioturb. contact			③ SILTY SAND w/ biogenic carbonate mottled		
-- 20 --				sharp contact			② CALC. SILTY MUD mottled		
				biot. contact			③ SILTY SAND w/ biogenic carbonate		
-- 30 --				biot. contact			② CALC. SILTY MUD mottled		
				biot. contact			① NANNO MUD		
-- 40 --									
-- 50 --									
-- 60 --				massive			58) sand-filled burrows 61) + shell frags		
-- 70 --									
-- 80 --									
-- 90 --				gradat. contact			90 CALC. ② SILTY SAND mottled		
-- 100 --									
-- 110 --				gradat. contact			113 ① NANNO MUD		
-- 120 --				massive					
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --							①		
	5Y				2				
	4/2				↓				
-- 10 --							② CALC. SILTY MUD mottled		
-- 20 --									
-- 30 --									
-- 40 --				bioturb. contact					
							③ SILTY SAND w/ biogenic carbonate mottled		
-- 50 --									
				bioturb. contact					
-- 60 --							① NANNO MUD		
-- 70 --									
							71 crack		
-- 80 --									
							87 crack		
-- 90 --									
	VOID								
-- 100 --									
							93-95: gas expansion		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
				gradat. contact					
-- 150 --									
							② CALC. SILTY MUD		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 01/12/11
			Avg.	Max.						
-- 0 --		54				2				
		4/2				↓				
-- 10 --		↓								
-- 20 --										
-- 30 --										
-- 40 --										
					massive					
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --					gradat. contact					
-- 140 --					bioturb. contact					
-- 150 --										

① NANNO MUD

17 shell frags

61 shell frags

66 black sand-filled burrow

96 shell frags

124

② CALC. SILTY MUD mottled

140

③ SILTY SAND w/ biogenic carbonate

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 01/12/11
			Avg.	Max.						
-- 0 --		SY 4/2			margin	2 ↓		① NANNO MUD		
-- 10 --								- 14 shell fgmt		
-- 20 --								- 20 crack		
-- 30 --										
-- 40 --								- 38 sand-filled burrow		
-- 50 --								- 51-52 sand and shell fgmt-filled burrow		
-- 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	01/12/11
-- 0 --								① NANNO NUD		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								<u>CORE SUMMARY</u>		
-- 60 --								NANNO NUD, CALC. SILTY NUD and SILTY SAND w/ biogenic carbonate		
-- 70 --								Background: dark gray NT alternating with dark gray mottled ss and 3 dark gray mottled sswbc ^{beds} (10 to 40cm thick) coarsening up at base of sswbc bed.		
-- 80 --								bioturbated, gradational		
-- 90 --								- abundant shell fossils - sand-filled burrows - some voids and cracks due to gas expansion - py. burrow		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386A-1317-1A

Expedition 339: Mediterranean Outflow

U1386A

13H1A

598.

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
- 0 --	SY 4/2				2 ↓		① NANNO NUD		
- 10 --									
- 20 --									
- 30 --									
- 40 --				massive					
- 50 --									
- 60 --									
- 70 --							67 py. burrow		
- 75 --						75 SS			
- 80 --									
- 90 --									
- 100 --							97 shell frags		
- 110 --									
- 120 --									
- 130 --				gradat. contact			125		
- 140 --							② CALC. SILTY NUD with shell frags		
- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	01/12/11
-- 0 --				sharp contact	2		3 (2)		
					↓		(1)		
-- 10 --				gradat. contact			8		
				gradat. contact			9 echinoderm fossils		
							13 (2)		
-- 20 --	Sy						(1) NANNO FOS		
	4/2								
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
							62 shell fossils		
-- 70 --									
-- 80 --									
-- 90 --									
							94) shale fossils		
-- 100 --							95)		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 2/12/11
		Avg.	Max.						
-- 0 --	5y				2		① Normal mud		
	4/1			massive	↓				
-- 10 --									
-- 20 --									
-- 30 --									
39							39: shell fragments		
-- 40 --									
-- 50 --									
53							contact: gradational		
-- 60 --							② Calcareous silty mud shell fragments Polished with GLEY 1 5 Gy/4		
-- 70 --							contact: gradational		
71									
78							shell fragments		
-- 80 --							Shell fragments ↓		
-- 90 --									
-- 100 --									
106							contact: gradational		
-- 110 --							②		
113							contact: gradational		
-- 120 --									
-- 130 --									
136							136 > shell fragment		
137							137		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386A 13H4A.

601



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		5y 4/1			massive	2 ↓		(1)	02	2/14/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
123										
126										
-- 130 --										
-- 140 --										
144					massive					
-- 150 --										

123 > shell fragments
126

contacts gradational

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 2/12/14
		Avg.	Max.						
-- 0 --							(2)		
9	blue as above				↓ 2		contact: irregular		
-- 10 --	↓			massive	↓ 2		(1) shell fragments		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
63									
64									
-- 70 --							63 > shell fragments		
-- 80 --									
-- 90 --									
-- 100 --							contact: gradational		
				massive	↓ 2		(2) Calcareous silty mud Flokked with clay 15Gy/14 shell fragments		↑ fine-sained upwards
-- 110 --									
18									
-- 120 --							contact: irregular		coarse in the bottom
				massive	↓ 2		(1) Non-mucous		
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

01386A

BH CC

605

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	same			no info	2		(7)	CR	2/12/11
-- 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.						
	59 4/1							CLZ	2/12/11
--0--									
--10--									
19									
--20--							① Nano wack		
							shell fragments throughout the section		
--30--									
				massive ↓	BI-2 space				
39									
--40--							-39 crack		
--50--									
53									
--60--									
69									
--70--									
78									
--80--									
--90--									
--100--									
--110--									
115									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386A 14H 2A

6^m

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					LR	2/12/11
-- 0 --	5y 4/1			medium	BI = 2 space		① ↓ shell fragments		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
89 -- 90 --							- shell fragment (89)		
99 -- 100 --							- 99: shell fragments		
108 -- 110 --							- 108 > shell fragments		
111 -- 120 --							- 111 >		
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		5y			laminar	B1-2		① Nonno mud	C12	2/12/11
9		4/1						9 } coral branches 12 } 15 shell fragments		
--10--	und.									
12										
15										
--20--								contact: gradational		
23		same			laminar	B1-2		② Calcareous silty mud		
--30--										
40	cracks									
46								46 shell fragments		
48								contact: gradational		
--50--		same			laminar	B1-2		③ shell fragments		
50	und.									
--60--										
61								61 crack		
--70--										
73								73: crack		
75							75SS	Muddy nonno ooze		
--80--										
87								87 crack		
--90--										
--100--										
109								109 crack		
--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 --		5 y			mainly	B1 = 2		①	CR	2/12/11
-- 10 -- 11 12		4 y ↓				shells		-11 > coral branch few shell fragments		
-- 20 --										
-- 30 --										
38 -- 40 -- 41					mainly	B1 = 2		② shell fragments		
-- 50 --	Crack						-50 SS	Silty sand w biogenic carbonate		
59 -- 60 --					mainly	B2 = 2		contact: gradational -60 shell fragment ⑦		
-- 70 --										
-- 80 --										
86 -- 90 --					mainly	B1 = 2		② contact: gradational		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A 14H 5A



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		5y							C12	2/12/11
		4/1			massive	B ₁ = 2		(2)		coarser
-- 10 --										↓
-- 20 --										
-- 30 --										
-- 40 --										fine-sailed downward
-- 50 --								59 shell fragment		↓
59								contact: gradational		
-- 60 --					massive	B ₂ = 2		(1)		
68								68 shell fragment		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	5y 411			massive	37 = 2		cracks ↑ ↓ 37 ↓ 50 = Py burrow ↓ 80 → shell fragment ↑ cracks ↓ 115	CPZ	2/12/11
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A 14H CCA

612



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		5y							CR	2/12/11
		411			muam	B1: 2		(1) Mono mud		
-- 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 --		GLY 1 10y 4/1			massive	B1-2 space		(7) Nanno nodule	02	2/12/11
-- 10 --										
16								16: shell fragments		
-- 20 --										
-- 30 --										
-- 40 --										
49										
-- 50 --	dist									
55										
-- 60 --		GLY 1 10y 4/1			massive	B1-2		(7) Nanno nodule		
64								64: shell fragments		
-- 70 --										
71								71: Py burrow		
-- 80 --										
-- 90 --										
-- 100 --										
101								101: shell fragments		
-- 110 --										
109								109: shell fragment		
-- 120 --										
137								137 > shell fragments		
138								138 > shell fragments		
-- 140 --										
143								143 shell fragments		
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	OLEY 7 10y 4/1			massive	BI 2		(1) Nanno mica Mottled with 5y 4/1	CR	2/12/11
-- 10 --									
-- 20 --									
29 -- 30 --							29: Py burrow		
-- 40 --									
-- 50 --									
56 -- 60 --							56: Py burrow		
66 -- 70 --							66 shells fragments		
-- 80 --									
86 87 -- 90 --							86 > Shells fragments 87 >		
91 -- 100 --							91: cracks		
106 107 -- 110 --							106: cracks 107: Shell fragments Tortoise fragments		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					(12)	2/12/11
-- 0 --	Same as above			main	B1 = 2		① Nano med - crack Forams present		
8									
-- 10 --									
-- 20 --									
-- 30 --									
32									
-- 40 --									
-- 50 --									
69									
-- 70 --									
73									
76									
77									
-- 80 --									
-- 90 --									
95									
-- 100 --									
-- 110 --									
114									
-- 120 --									
-- 130 --									
132									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U 1386 15 H 5A

517

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		Same as above			mainly	B ₁ = 2		① Nano mud Forams present	CR	2/12/11
-- 10 --										
-- 20 --										
23								23 shell fragment		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
75								Calcareous silty mud		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

01386 1511 7A 519



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		Same as above			wash	B1 2		each -6 shell fragment Forams present	C12	2/12/11
-- 8 --										
-- 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 --								(1) Same as above		
-- 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.					CR	2/12/11
--0--	5y 4/1			massive	BB		① Nano med Forams present		
	GLEYS			↓	↓				
--10--	10y 4/1								
--20--	↓								
--30--									
--40--									
--50--									
--55--									
--60--	5y 4/1								
--70--	↓								
--80--									
--90--									
--100--									
--110--									
114									
--120--							-114: B burrow		
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386A 16H 2A

622

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 -- und. ↓	5y 4/1			massive ↓	BZ=2		① Nanno Raco Forams present ↓		
-- 10 --									
-- 20 --									
-- 30 -- 31	5y 4/1								
-- 40 --	mottled with 2.5y								
-- 50 --	4/1								
-- 60 --									
-- 70 -- 72	5y 4/1 ↓						-71: Shell fragments		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 -- 131	5y 4/1 mottled with 2.5y 4/1								
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		5y 4/1			massive	B1=2		(1) Nano mud Forams present		
--10--		woolbed with 25y 4/1								
--20--		↓								
26								-26: Shell fragment		
--30--										
--40--										
--50--										
51								-51: Shell fragments		
58								-58: shell fragments		
--60--										
62								-62: contact gradational		
--70--		5y 4/1 woolbed with 25y 4/1			massive	B1=2		(2) Forams present		
--80--								-74: crack		
--90--										
91								-91 > Shell fragments		
94		5y 4/1						-94 > Shell fragments		
98								-98 - shell fragments		
--100--		↓						-103: crack		
--110--										
114								-114: shell fragment		
117								contact: gradational		
--120--		5y 4/1			massive	B1=2		(1)		
--130--										
--140--								-140: shell fragment		
--150--										

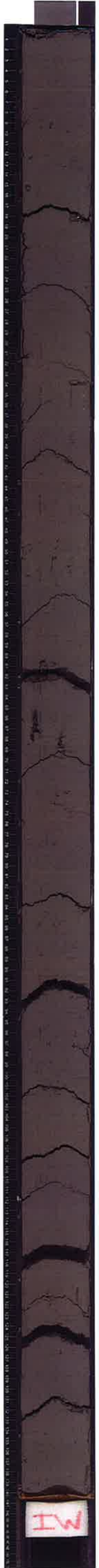
MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

01386A (6H 4A)

624



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		5g 4/1								
6							455	① Same as above contact: gradational		
-- 10 --		5g 4/1			leaner	B1 2		② Shell fragments		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
54										
		6LEy1 20y 4/1			leaner	B1 2		① Contact: gradational shell fragments +		
65								65 > B ₂ boundary		
68										
-- 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 20g 4/1			massive	B2 =2		(1) Same as above	C12	2/12/11
-- 10 --										
-- 20 --										
-- 30 --										
31								30 31 > shell frag.		
-- 40 --										
-- 50 --								contact: gradational		
		5g 4/1			granular	B1 =2		(2) ↓		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
92										
-- 100 --								97: shell frag		
102								102: shell frag		
						108 SS		Collocoreous silty med		
-- 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 --								(2) Same as above	CRZ	2/12/11
-- 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 --	AS ABOVE						① AS ABOVE		
-- 10 --									
-- 20 --									
-- 30 -- -- 32 --							Colour change contact (sharp)		
-- 40 --	16YR 4/1			Massive	Slight		① Forams present		
-- 50 --							With a GLEY 3/1 mottle		
-- 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						AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
45								Gradational colour change		
-- 50 --		GREY 1043 ₁						①		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
97								Gradational contact		
-- 100 --								②		
-- 110 --		GREY 1043 ₁			Massive	Slight		Shell fragments forams present		
-- 120 --										
-- 130 --										
133								Gradational contact		
-- 140 --		GREY 1044 ₁			Massive	Slight		③ forams present		
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	5	AS ABOVE						AS ABOVE Grain size change (sharp)		
-- 10 --		grey 1044 ₁			Massive	Slight		(2) ferrous present.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

68
↑ Crackling
↓
77

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1380A 17H 4A

630

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:



	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 @ 25	
-- 30 --									- Shell fragment @ 28	
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --									- Shell fragment @ 67	
-- 80 --									- Shell fragment @ 77	
-- 90 --										
-- 100 --										
-- 110 --									↑ 107 Void ↓ 110	
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386A 17H CCA

632



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		<i>AS ABOVE</i>						<i>AS ABOVE</i>		
-- 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 --										
	AS ABOVE							AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
						SS@ 75		Calcareous mud		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 125 --								Gradational grain size change (contact)		
-- 130 --	No	GLY 1 4/1			Massive Slight			(2) Calcareous silty mud		
-- 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 --										
-- 22 --								Gradational grain size change		
-- 30 --	NO	CLAY 10/4, 1			Massive	Slight		③ Silty sand Forams present - Shell fragments @ 40 & @ 41		
-- 40 --										
-- 50 --								Gradational grain size change		
-- 60 --	NO	CLAY 10/4, 1			Massive	Slight		② Silty mud. Forams & shell fragments present		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1326 4 18 H 4A

(15)

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 --										
-- 34 --								Gradational grain size change (contact)		
								③ silty sand.		
-- 40 --		GLY 1044			Massive	slight				
-- 50 --										
-- 60 --	no									
-- 70 --										
							CSO 75	Ca carbonate silty mud		
-- 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						AS ABOVE		
-- 10 --									
-- 20 --									
-- 27 --							Gradational grain size change		
-- 30 --							② silty mud		
-- 40 --	NO GREY/2 10Y4/1			massive	slight				
-- 50 --									
-- 58 --							Gradational grain size change		
-- 60 --							Coral fragments ① mud.		
-- 70 --	NO GREY/2 10Y4/1			Massive	slight				
-- 80 --							Forams present		
-- 90 --							Shell fragments present		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

IW

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

V1386A 18H CCA

639



	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:

640

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	No GLEY 2 10/4/1			Massive	Slight		① Mud. forams present Shell fragments present.		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --						ss at 100	calcareous silty mud		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

-- 0 --	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 10 --		AS ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --								Gradational colour change (bioturbated)		
-- 80 --	NO	5G49 ₁			Massive	Slight		① ^{still} mud calcareous silty mud		
-- 90 --								Ferams present Small shell fragments present		
-- 100 --								→ Sect 1		
-- 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 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --							Forams present		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 87 --							Gradational colour change contact (bioturbated) (1) mud		
-- 90 --	NW			Massive	Slight		Small shell fragments present		
-- 100 --	GREY 10y 4, 1						Forams present		
-- 101 --							-101 VOID		
-- 102 --							-102 VOID		
-- 103 --							-103 VOID		
-- 110 --									
-- 120 --									
-- 130 --							Vertical cracking on the left upto 2cm from edge of core	for core D11 boxes @ 127-132	
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	AS ABOVE						AS ABOVE		
-- 7 --							Gradational grain size change		
-- 10 --	Grey / 2 10y 4/1						(2) Silty mud. forams present.		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --							Gradational grain size change		
-- 112 --	Grey / 2 10y 4/1						(1) Mud. forams present.		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386A 194 5A

644

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-0-- AS	ABOVE							AS ABOVE		
-5--								Grain size change		
--10--	NO	grey 10Y4/1			Massive	slight		(2) silty mud Shell fragment @ 6cm Lunans present.		
--20--										
--30--										
--40--										
--50--										
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A 19H CCA



	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 --										

644
645

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

646

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
	shchig	grey to yellow			massive	slight		① Mud		
-- 10 --	10									
-- 20 --								- shell fragment @ 21		
-- 30 --										
-- 40 --	43									
-- 50 --										
-- 60 --	58									
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth (cm)	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 --								GAS EXPANSION 90cm - cracks > 1cm 135cm		
-- 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 --								GAS EXPANSION cracks > 1cm		
-- 40 --										
-- 50 --	GAS EXPANSION									
-- 60 --										
-- 70 --										
-- 80 --										
27								Grain size change (gradational)		
-- 90 --	NO							② Silty mud		
-- 100 --		CLAY 6/4 1			Massive	slight		Small shell fragments Forams 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							AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --	Gas Exp									
-- 40 --										
-- 50 --	VOID									
-- 60 --										
-- 70 --										
-- 80 --	Gas exp									
-- 90 --										
-- 100 --										
-- 110 --	Gas exp									
-- 120 --										
-- 130 --		grey 10Y4/1			massive slight			Gradational grain size change ① Mud. forams present		
-- 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 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

forams 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 --	GAS Exp	AS ABOVE						AS ABOVE Gas expansion ~ 1cm x 4 0-17cm.				
-- 10 --												
-- 20 --												
-- 30 --												
-- 40 --												
-- 50 --												
-- 60 --												
-- 70 --												
-- 80 --										1cm Gas Exp 73-78		
-- 90 --												
-- 100 --												
-- 110 --												
-- 120 --												
-- 130 --												
-- 140 --												
-- 150 --												



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow



Depth (cm)	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0										
0-10								AS ABOVE		
10-20								GAS Expansion cracks throughout the section up to 1.5m		
20-30										
30-40										
40-50										
50-60										
60-70										
70-80										
80-90										
90-100										
100-110										
110-120										
120-130										
130-135										
135-138										
138-140										
140-150										
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 --	AS ABOVE						AS ABOVE		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

655



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	NO	GREY 10YA,			Massive	Slight		① Mud Forams present		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A 2/H 2A

656

	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:

657

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							AS ABOVE		
-- 10 --	AS ABOVE						① Mud.		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --							Gradational grain size change		
-- 130 --	Loss - bucket?	GREY					② silty mud.		
-- 140 --		1044					brams present.		
-- 150 --							Shell fragments present.		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --									
-- 7 --							gradational grain size change		
-- 10 --							① Silty mud Forams present		
	GREY 10/4 ₁			Massive	Slight				
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
						SS@ 75	Calcareous mud		
-- 80 --									
-- 90 --									
-- 100 --							Shell fragments @ 104		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A 21H 5A

659

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --								AS ABOVE		
-- 20 --								①		
-- 30 --	CASX 32							Forams present.		
-- 40 --								Small shell fragments @ 54		
-- 50 --										
-- 60 --										
-- 70 --	BS CASX									
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A 21H CCA

660

V1386A 21H CCA
10/1/2004
10:00:00



	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:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --									
-- 10 --									
-- 16 --									
-- 19 --									
-- 20 --									
-- 21 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



FALL IN

19-20-21 GAS XP

GAS Expansion crack 19-21 cm

GREY 10Y4/1

MASSIVE

slight

① Mud

ferans present

Basket for 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 --	AS ABOVE							AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --	Disturb									
-- 40 --										
-- 50 --										
-- 60 --										
-- 67 --	Disturb							Gradational grain size change ② silty mud forams present		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

SS 121 - Calcareous silty 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						AS ABOVE		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --							Gradational grain size change ① Mud forams present		
-- 42 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	Bisect								
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Gradational grain size change
① Mud
forams present

113
SS — Nanno fossil mud

Bisect

AS ABOVE

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386 A 22x 4A

664



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

AS ABOVE

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U13364

22 X CCA

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

PAL

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --	CLAY 10Y 4/1						① NANNO TUD		
-- 10 --									
-- 20 --	BASIC								
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386A

23 X 2A

(667)

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --								① NANNO MUD		
-- 10 --								As above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --	BISCUIT									
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

32
85 — Nannofossil Mud

129 py burrow

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

.386 A.

23X3A.

61

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	02/12/11
-- 0 --								① NANNO 100		
-- 10 --								As above		
-- 20 --								still fine		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BASALT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --								① NANNO TUB		
-- 10 --								As above		
-- 20 --								shell frags silt-filled burrows		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --	BISCUIT									
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386A

23X 5A

671
570

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --							① NANNO NUD		
-- 10 --							As above		
-- 20 --							shell frnt		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

- 96-97: py. grains

- 142 py. burrows

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	02/12/11
-- 0 --								① NANNO MUD		
-- 10 --										
-- 20 --										
-- 23 --					gradat. contact			② CALC. SILTY MUD		
-- 30 --								many shell frags mottled py. grains		
-- 40 --					gradat. contact					
-- 40 --								① NANNO MUD		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 132 --								echinoderm spine frag		
-- 140 --										
-- 150 --										

BISCUIT

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386 A

23X7A

673.
672.

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --								3 cm crack		
-- 10 --								① NANNO NUD as above		
-- 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:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --							① NANNO NUB		
-- 10 --							as above		
-- 20 --							shell frags		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

-129) sandy layer with pyrite
 -130) (discontinuous)

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --							(1) NANNO FUD As above		
-- 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: ED	Date: 02/14/11
			Avg.	Max.						
-- 0 --										
-- 10 --								⊙ NANNO TUD		
-- 20 --								As above		
-- 30 --								Some shell frags		
-- 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: 02/12/11
		Avg.	Max.						
-- 0 --									
-- 10 --							① NANNO MUD As above shell frags		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	BISCUIT								
-- 90 --						-92 SS	Nanno Mud		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --							many chondite-like burrows sediment slightly darker toward the base (although it is the same color index)		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --							① NANNO MUD as above		
-- 10 --									
-- 20 --							23 shell fragment		
-- 30 --									
-- 40 --							41-42 cm: black silt/sand-filled burrows		
-- 50 --							51 dark silt/sand-filled burrows		
-- 60 --							54		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
								102 SS - Nanno mud	
-- 110 --							grad. contact	112-113 shell fragment	
-- 120 --								① NANNO MUD with more silt	
-- 130 --							grad. contact	126 shell fragments	
-- 140 --								① NANNO MUD as above	
-- 150 --									

BISCUIT

SLIGHTLY

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									ED	02/12/11
-- 10 --								① NANNO MUD As above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --					grad. contact					
-- 90 --					grad. contact					
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BISCUIT SLIGHTLY

75) NANNO MUD with more silt
80)

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

UNIVERSITY OF
MICHIGAN

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --							① NANNO AND As above		
-- 10 --							9 coarser layer 11		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT
SLIGHTLY

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --	SLIGHTLY BIOTURB						② CALC. SILTY MUD		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386A-26X-1A
Expedition 339: Mediterranean Outflow

1386 A.

26X1A

682

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --							① NANNO TUD		
-- 10 --							As above		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 81 --							py. burrow		
-- 82 --									
-- 83 --									
-- 84 --							py. burrow		
-- 85 --									
-- 86 --									
-- 87 --									
-- 88 --									
-- 89 --									
-- 90 --									
-- 91 --									
-- 92 --									
-- 93 --									
-- 94 --									
-- 95 --									
-- 96 --									
-- 97 --									
-- 98 --									
-- 99 --									
-- 100 --									
-- 101 --									
-- 102 --									
-- 103 --									
-- 104 --									
-- 105 --									
-- 106 --									
-- 107 --									
-- 108 --									
-- 109 --									
-- 110 --									
-- 111 --									
-- 112 --									
-- 113 --									
-- 114 --									
-- 115 --									
-- 116 --									
-- 117 --									
-- 118 --									
-- 119 --									
-- 120 --									
-- 121 --									
-- 122 --									
-- 123 --									
-- 124 --									
-- 125 --									
-- 126 --									
-- 127 --									
-- 128 --									
-- 129 --									
-- 130 --									
-- 131 --									
-- 132 --									
-- 133 --									
-- 134 --									
-- 135 --									
-- 136 --									
-- 137 --									
-- 138 --									
-- 139 --									
-- 140 --									
-- 141 --									
-- 142 --									
-- 143 --									
-- 144 --									
-- 145 --									
-- 146 --									
-- 147 --									
-- 148 --									
-- 149 --									
-- 150 --									

BISCUIT

81-82 py. burrow (long wide!)
84-85 py. burrow

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	02/12/11
-- 0 --										
								2 black sand-filled vertical burrow		
-- 10 --								10		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BISCUIT

2
black sand-filled vertical burrow

10

① NANNO MUD
as above

- sand/silt-filled burrows
- few shell frags

grad. contact

96

② CALC. SILTY MUD
mottled

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386A 26X3A

587

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	02/12/11
0										
10										
18					biot. contact			② silty mud mottled		
20										
26					sharp contact			② silty mud with sand filled burrows mottled		
26			very fine sand	coarse	sharp contact			③ SILTY SAND + greater % fine clay (28-29 cm)		
30					erosional contact	SS		Calcareous silty sand (glauconitic?) disturbed?		
40								② silty mud with some plate fragment		
50										
60										
70										
70		BISCUIT								
80										
90										
90		SLIGHTLY								
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	02/12/11
- 0 --							② CALC. SILTY MUD - with frequent shell frags - some sand-filled burrows		
- 10 --									
- 20 --									
- 30 --									
- 40 --									
- 50 --									
- 60 --									
- 70 --									
- 80 --									
- 90 --									
- 100 --				grad. contact			96		
- 110 --							① NANNO MUD		
- 120 --									
- 130 --									
- 140 --									
- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --							① NANNO TUB		
-- 10 --							- some shell frags		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT
SLIGHTLY

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

11386 A 26 x 6A

7



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
--0--							(1) NANNO MUD		
--10--				grad contact		12	(2) SILTY MUD mottled		
--20--				biot. contact		22	(3) SILTY SAND mottled		
--30--				biot. contact		27 SS 29	Calcareous sandy silt (2) SILTY MUD mottled		
--40--									
--50--									
--60--				grad. contact		59	(1) NANNO MUD some shell frags		
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--150--									

BISCUIT

SLIGHTLY

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --									
-- 10 --							① NANNO NUD As above		
-- 20 --							some shell frags		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

SLIGHTLY BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1385 A 26 X CC

689



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --	<i>slightly bioturb</i>							⊕ SANDY MUD as above		
-- 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	02/12/11
							② CALC. SILTY MUD		
				biot. contact			mottled		
							some shell frags		
							③ SILTY SAND		
				biot. contact					
							② CALC. SILTY MUD		

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
							② CALC. SILTY mud mottled coarsening upward some shell frags		
				grad contact			① NANNO mud		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --	<i>BISCUIT</i>									
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

① NANNO TUD

-- 110 shell frmt

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	02/12/11
-- 0 --								① NANNO MUD		
-- 10 --								Some shell frags all along the section		
-- 20 --										
-- 30 --										
-- 40 --					grad. contact			40		
-- 50 --								① CALC. SILTY MUD		
-- 60 --										
-- 63 --					grad. contact			63		
-- 70 --								① NANNO MUD		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BISQUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --									
-- 10 --							① NANNO FUD -12 with some shell frags crack		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							-66 py. grains		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

01386A.

27X 5

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --										
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



BISCUIT

① NANNO FOD

Some scatter shell frags

88)
91) VOID

121)
132) VOID

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

27X 7A
U1386A
2002/12/11



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --								① NANNO NUD		
-- 10 --								13 15 cracks		
-- 20 --								24 crack		
-- 30 --								28 crack		
-- 40 --								34 crack		
-- 50 --								43 "		
-- 60 --								46 "		
-- 70 --								49 51 void		
-- 80 --								55 56 void		
-- 90 --								62 crack		
-- 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 --							① NANNO ROD	ED	02/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386A-28X-1A

Expedition 339: Mediterranean Outflow

U1386A

28X 1A.

018



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --										
-- 10 --								(1) NANNO NUD with scatter shell frags -13 cracks		
-- 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: 02/12/11
		Avg.	Max.						
-- 0 --							① NANNO MUD with scatter shell frags		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --				grad. contact					
-- 120 --							② SILTY MUD mottled		
-- 130 --									
-- 140 --									
-- 150 --									

B I S C U I T

-- 111 --

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --							(2) calc. silty mud		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --				grad. contact					



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --							① NANNO (UD)		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --				grad. contact			37	② CALC. SILTY (UD) mottled	
-- 45 --				biot. contact			43	③ SILTY SAND mottled	
-- 50 --									
-- 55 --				biot. contact			57	② CALC. SILTY (UD) mottled	
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --				biot. contact			91	③ SILTY SAND mottled	
-- 100 --						SS	101 cu 102 shell fragment	Calcareous SILTY MUD	
-- 110 --				biot. contact			109	② SILTY (UD) mottled	
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISSCUT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
							② SILTY MUD mottled		
							shell frags all along the section		
				grad. contact					
							① NANNO MUD		
							sand-filled burrows		
				grad. contact					
							② SILTY MUD mottled		
				biot. contact					
				biot. contact			③ SILTY SAND mottled		
				grad. contact			② SILTY MUD		
							① NANNO MUD		

BIOTURB

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --										
								① NANNO MUD		
-- 10 --										
-- 20 --								some shell frags		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --					grad contact		62			
-- 70 --	BISCUIT							② SILTY MUD mottled		
-- 80 --										
-- 90 --										
-- 100 --					grad contact		103			
-- 110 --								③ NANNO MUD		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --							① NANNO MUD		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --				biot. contact			105 ————— ② SILTY MUD 112 crack mottled		
-- 120 --				grad. contact			126 ————— ① NANNO MUD		
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --										
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BISCUIT

① NANNO NUD

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386A-29X-1A

U1386A

Expedition 339: Mediterranean Outflow

29X 1A

706

U1386A-29X-1A



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --							① NANNO TUD		
-- 10 --				massive	3		-14 crack		
-- 20 --									
-- 30 --							-28 crack		
-- 40 --	BISCUIT								
-- 50 --									
-- 60 --				bust. contact			-58		
-- 70 --							② SILTY TUD mottled		
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386A

Expedition 339: Mediterranean Outflow

29X2A

207

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--	BISCUIT								ED	02/12/11
--10--						3 ↓		(3) SILTY SAND mottled		
--20--							SS-16	Calcareous Silty mud Some shell frags all along the section		
--30--										
--40--						biot. contact			38	
--50--						massive		(1) NANNO MUD with very large sand-filled burrows or drilling disturbance??		
--60--										
--70--						biot. contact			65	
--80--								(3) SILTY SAND mottled		
--90--						sharp contact			88	
--100--						massive		(1) NANNO MUD		
--110--										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1385A

Expedition 339: Mediterranean Outflow

29x3A

708



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --					massive	3		① NANNO MUD		
-- 10 --						↓				
-- 20 --								some shell frags all along the section		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --	BISCUIT									
-- 80 --								84 crack		
-- 90 --								83 crack		
-- 95 --					grad. contact			95		
-- 100 --								② SILTY MUD mottled		
-- 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	02/12/11
					3 ↓		② SILTY MUD mottled Some shell frags all along the section		
				grad. contact		26			
				massive			① NANNO MUD		
				gradat. contact		52			
						59	② SILTY MUD py. grain mottled		
							ss shell frag		
				gradat. contact		110			
				massive			① NANNO MUD		

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

IR-1000-01-24
1000-01-24
1000-01-24



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									ED	02/12/11
-- 10 --					massive	3 ↓		① NANNO TUD -9 -10 crack		
-- 20 --								shell frags all along the section		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --								-117 -118 crack		
-- 130 --								-128 crack		
-- 140 --										
-- 150 --										

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --				massive	3 ↓		① NANNO NUD		
-- 10 --									
-- 20 --									
-- 30 --							34 crack		
-- 40 --							43 crack		
-- 50 --							57 crack		
-- 60 --							67 crack		
-- 70 --							74 py. grain		
-- 80 --									
-- 90 --							95 crack		
-- 100 --									
-- 110 --							112 VOID 117		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/2/11
		Avg.	Max.						
-- 0 --					3		① NANNO 700		
-- 10 --				massive	↓				
-- 20 --									
-- 30 --									
-- 40 --							43 shell frags		
-- 50 --									
-- 53 --							53		
-- 55 --							55	VOID	
-- 60 --									
-- 67 --							67 shell frags		
-- 70 --									
-- 80 --									
-- 89 --							89 shell frags		
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386A.

29x ~~3~~ CC

i.3

Expedition 339: Mediterranean Outflow

339-U1386A-01-CCA
 17x17x17
 17x17x17

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --				massive	3		① NANNO MUD		
-- 10 --					↓		some shell frags all along the section		
-- 20 --				grad. contact			② SILTY MUD mottled		
-- 30 --				grad. contact					
-- 40 --				biot. contact			② SILTY MUD mottled		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

17AL

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --	BISCUIT					3 ↓		③ SILTY SAND mottled		
-- 10 --										
-- 20 --						biot. contact massive		20	① NANNO NUD	
-- 26 --						biot. contact		26		
-- 30 --									② SILTY NUD mottled	
-- 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.					ED	02/14/11
0										
5						3		(2) SILTY MUD mottled		
10										
20										
30										
40										
50					gradat. contact					
60					massive					
70										
80					gradat. contact					
90										
100					biot. contact					
110										
120					biot. contact					
130										
140					biot. contact massive biot. contact					
150										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	02/12/11
-- 0 --										
						3		② SILTY MUD mottled		
-- 10 --					biot. contact massive			① NANNO MUD		
-- 20 --					biot. contact			② SILTY MUD mottled		
-- 30 --								coarsening upward		
-- 40 --										
-- 50 --										
					gradat. contact massive			① NANNO MUD		
-- 60 --										
-- 70 --								few shell frags all along the section		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

B / S C U I T

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --									
-- 10 --				massive	↓		① NANNO MUD 9cm crack		
-- 20 --							23 shell fragment		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --						SS 144	Nannofossil mud		

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --				massive	3 ↓		① NANNO NUD		
-- 10 --									
-- 20 --									
-- 30 --							32-33 shell frags		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --				gradat. contact					
-- 74 --							② SILTY MUD mottled		
-- 80 --									
-- 90 --				biot. contact					
-- 92 --							③ SILTY SAND mottled		
-- 100 --							shell frags		
-- 110 --						SS	④ Calcareous sandy silt		
-- 120 --									
-- 130 --				biot. contact					
-- 130 --							⑤ SILTY MUD mottled		
-- 140 --							shell frags		
-- 150 --									

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:	
			Avg.	Max.					ED	02/12/11	
-- 0 --	BISCUIT					3		② SILTY MUD mottled			
-- 10 --						4					
-- 20 --											
-- 30 --											
-- 40 --											
-- 50 --											
-- 60 --									60 crack		
-- 70 --									69 crack		
-- 80 --											
-- 90 --						biot. contact			89		
-- 100 --									③ SILTY SAND mottled		
-- 110 --									102 (shell fgm 5) crack		
-- 120 --											
-- 130 --						biot. contact			132		
-- 140 --									② SILTY MUD mottled		
-- 150 --					gradat. contact massive			148			
								① NANNO MUD			

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --										
-- 10 --					massive	3 ↓		(1) NANNO MUD few shell frags		
-- 20 --										
-- 30 --								28 crack		
-- 40 --								41 void 42		
-- 50 --	BISCUIT							47 crack		
-- 60 --								61 crack		
-- 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 --									ED	02/12/11
-- 10 --					mosaic	↓		① NANNO TUD		
-- 20 --										
-- 30 --										
-- 40 --								34 } VOID 34 }		
-- 50 --	BISCUIT							44 } VOID 44 }		
-- 60 --								58 crack 62 crack		
-- 70 --										
-- 80 --								75 py. burrow		
-- 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: 02/12/11
		Avg.	Max.						
-- 0 --				massive	3 ↓		① NANNO MUD		
-- 10 --									
-- 20 --							27 shell fragm		
-- 30 --									
-- 40 --				gradat. contact			38		
-- 50 --							② 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.					ED	02/12/11
-- 0 --					3 ↓		② SILTY MUD mottled		
-- 10 --	BISCUIT								
-- 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	02/12/11
-- 0 --					3 5		② SILTY NUD mottled		
-- 10 --									
-- 20 --				gradat. contact					18
-- 30 --				massive			① NANNO NUD with more silt		
-- 40 --							few shell frags all along the section		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --				gradat. contact			② SILTY NUD mottled		118
-- 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 --							3 (2) SILTY MUD mottled		
				massive	↓		(1) NANNO MUD		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --							-35 shell fragment		
-- 50 --							-50 shell fragment		
-- 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:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --				grad. contact	3		① NANNO NUD ② SILTY NUD mottled		
-- 10 --					↓				
-- 20 --									
-- 30 --							28 shell fragment		
-- 40 --									
-- 50 --							50 py. grain		
-- 60 --									
-- 70 --									
-- 80 --							82 py. grain		
-- 90 --									
-- 100 --							99 sand-filled large burrow? 102		
-- 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.					ED	02/12/11
-- 0 --				massive			② SILTY mud mottled		
-- 10 --							few shell fragments all along the section		
-- 20 --									
-- 30 --									
-- 40 --							37 crack		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

37 crack

54 crack

123 / void
125 / void

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

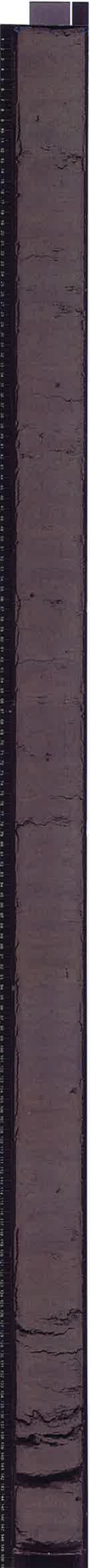
Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/14/11
		Avg.	Max.						
-- 0 --							② SILTY MUD mottled		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 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: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --								(2) SILTY MUD mottled		
-- 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: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --					grad. contact			② SILTY MUD		mottled
-- 10 --					massive			① NANNO MUD		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

DEPARTMENT OF OCEANOGRAPHY



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --									
					2		4 shell found		
-- 10 --					↓		① NANNO 700		
-- 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	02/12/11
					2 ↓		② SILTY MUD mottled		
				biot. contact			③ SILTY SAND mottled		
				biot. contact			② SILTY MUD mottled		



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date
		Avg.	Max.					ED	02/12/11
							③ SILTY SAND mottled		
				biot. contact	3 ↓				
							② SILTY MUD mottled		
				bioturb contact					
							③ SILTY SAND mottled		
				biot. contact					
							② SILTY MUD mottled		
							shell frags all along the section		
				biot. contact					
							③ SILTY SAND mottled		
				biot. contact					
							② SILTY MUD mottled		
				massive			① NANNO MUD		
				grad contact					
							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	02/12/11
-- 0 --										
-- 10 --						3 ↓		③ SILTY SAND mottled		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 122 --								echinoderm spine fragment		
-- 124 --					biot. contact					
-- 130 --								② SILTY MUD mottled		
-- 140 --										
-- 146 --					gradat. contact					
-- 150 --					massive			① NANNO MUD		

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --										
-- 10 --					massive			① NANNO TUB		
-- 20 --								few shell frags all along the section		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BISCUIT

-89 py. burrow

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					ED	02/12/11
-- 0 --						3		① NANNO TUD		
-- 10 --						↓		few shell frags all along the section		
-- 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: 02/12/11
			Avg.	Max.						
-- 0 --					massive	3		① NAMMO NUB		
-- 10 --						↓		few shell frags all along the sections		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BISCUIT

M

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --					amorphous	?		(1) NANNO MUD few shell frags all along the section		
-- 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:	Date:
		Avg.	Max.					ED	02/12/11
-- 0 --							① NANNO MUD		
-- 10 --							② SILTY MUD mottled		
-- 20 --							③ SILTY SAND mottled		
-- 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: 02/12/11
			Avg.	Max.						
-- 0 --										
-- 10 --					massive	3 ↓		① NANNO RUD		
-- 20 --								Some shell frags all along the section		
-- 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:	Date:
			Avg.	Max.					ED	02/12/11
-- 0 --	BISCUIT				massive	3 ↓		① NANNO NUD		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --								35: nice entire gastropod		
-- 50 --						biot. contact		50		
-- 60 --									② SILTY NUD mottled	
-- 70 --						biot. contact		72		
-- 80 --									① NANNO NUD	
-- 90 --						massive			87 shell frags	
-- 100 --										
-- 110 --						gradat. contact		110		
-- 120 --									② SILTY NUD mottled	
-- 130 --										
-- 140 --						biot. contact		137		
-- 150 --								② SILTY SAND mottled some shell frags		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
			Avg.	Max.						
-- 0 --						3 ↓		③ SILTY SAND mottled		
-- 10 --										
-- 20 --										
-- 30 --					biot. contact		30			
-- 40 --								② SILTY MUD mottled		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --					gradat. contact		100			
-- 110 --					massive			① NANNO MUD		
-- 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.					ED	02/12/11
-- 0 --					3 ↓				
-- 10 --				massive			8 py. burrows ① NANNO TUD		
-- 20 --									
-- 30 --									
-- 40 --							35 } fine sand - filled burrows 43		
-- 50 --									
-- 60 --							55 } fine sand - filled burrows 64		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

BISCUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --					massive	2 ↓		① NANNO TUD	ED	02/12/11
-- 10 --								some shell frags all along the section		
-- 20 --										
-- 30 --										
-- 40 --								-40 shell frag		
-- 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:	Date:
			Avg.	Max.					ED	02/12/11
-- 0 --						3 ↓		① NANNO TUB		
-- 10 --					massive					
-- 20 --								26 shell fragment		
-- 30 --										
-- 40 --								46 shell fragment		
-- 50 --										
-- 60 --								61 gastropod shell fragment		
-- 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: 02/12/11
			Avg.	Max.						
-- 0 --					massive	3 ↓		① NANNO NUD		
-- 10 --								few shell frags all along the section		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

BISSUIT

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ED	Date: 02/12/11
		Avg.	Max.						
-- 0 --									
				massive	3		① NANNO NUD		
-- 10 --									
-- 20 --									
-- 30 --	BISCUIT			gradat contact					
-- 40 --							② SILTY NUD mottled		
-- 50 --							few shell frags all along the section		
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

V1836A-34X-1A

Expedition 339: Mediterranean Outflow

V1386A 34X 2A 1A

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		GLY1 4, 10Y						Type 1: Nano mud.	NN	8/Dec/21
--10--										
--20--										
--30--										
--40--								43 Shell fragments		
--50--										
--60--	60				Gradational Contact			Type 2: Silty clay		
--70--										
--80--								78 Shell fragments		
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

Biscuit

756
755



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth (cm)	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0								NN	3/12/01	
17					Sedimental contact					
20							Type 1: Nano mud			
34-41							Shell fragments			
59							Faam patch			
78.5							Shell fragments			
143					Inclined contact & Bioturbated?					
150							Type 2: Silty clay			



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					NN	3/Dec/2011
-0--								Type 2: Silty clay		
								6 } Burrow		
-10--										
								19 } Foam patches		
-20--								20 } Foam patches		
-30--								30 Shell fragments		
-40--	Biscuit									
-50--										
					Gradational contact			Type 1: Nonhomod		
-60--										
-70--										
-80--										
-90--										
-100--								97 Py. Burrow		
-110--								Shell fragments		
-120--	Biscuit									
-130--										
-140--										
-150--										





Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/Dec/2011
-- 10 --								Type 1: Nano mud (continued from 3A)		
-- 20 --										
-- 30 --								31] Shell fragments		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --								67 Shell fragment		
-- 80 --	Biscuit							88 SS Nano mud		
-- 90 --								89 Shell fragments		
-- 100 --								92		
-- 110 --										
-- 120 --										
-- 130 --					Gradational contact			Type 2: Silty clay		
-- 140 --								132 Foham patches		
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/22/2011
								Type 2: Silty clay (continued from 4A)		
-- 10 --										
-- 20 --								20 shell fragments		
-- 30 --										
-- 40 --		Biscuit								
-- 50 --										
-- 60 --										
66					Gradational contact					
-- 70 --								Type 1: Name-mud		
-- 80 --								74.5 Foramin patch		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --		Biscuit						117 shell fragments		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					NN	3/Dec/2011
-- 0 --								Type 1: Nonno mud (continued from 5A) Shell fragments		
-- 10 --										
-- 20 --										
-- 30 --								24 Finesand along with a crack (dipil?) (or burrow?)		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --								65 } 70 } Foram patches		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --								129 Foram patches		
-- 140 --										
-- 150 --										



Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386 34X 7A

7C

283-1000-01-7A
10/10/2004
1000-01-7A



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/Dec/2011
-- 10 --								Type 1 : Nano mud (continued from 6A)		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

-33 Foram patch

-43 Shell fragments

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Type 1: Nano-brud (continued from 74)	NN	3/Dec/2011
-- 10 --									
-- 20 --							(18) (19) Shell fragments		
-- 30 --									
-- 40 --							36 Shell fragments		
-- 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.						
	GREY 4/10Y						Type 1 = Nano mud	NN	3/Dec/2011
							16 ↓ intense drilling disturbance ↓ 25		
	Biscuit						75 sandy patch (diapik?) ⇒ probably barren diapik "biscuit band" mud sandy patch		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					NN	3/Dec/2011
-- 0 --							Type 1 : Nanbo mud (continued from 1A)		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							-66 Shell fragments		
-- 80 --	Biscuit								
-- 90 --									
-- 100 --									
-- 110 --							-110] shell fragments (filling a burrow?) -112]		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U 386 35X 3A

765

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					NN	3/Dec/24
-- 0 --								Type 1: Nanno mud (continued from 2A)		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



Biscuit

-80 ss

Biogenic silty mud — some biosiliceous microfossils

-112 shell fragments

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/Dec/2011
-- 10 --								Type 1: Nanno-mud (continued from 3A)		
-- 20 --								-17 Foramin patch		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --		Biscuit								
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --								-147 shell fragment		



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								Type 1: Nano mud (continued from 4A)	NN	3/Dec/2011
-- 10 --										
-- 20 --								20 } intense drilling disturbance ↓ 29		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

08102424
10/10/2011
10:00:00

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/Dec/2011
								Type: Nannomud (continued from 5A) - 8 Shell fragments		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
55	— Priscuit							- 51 Shell fragments.		
-- 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 --								Type 1: Nano mud (continued from 6 f1)	N N	3/dec/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V15:6 A 35x Cc 079



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					NN	3/Dec/2011
-- 0 --							Type 1: Nonhomud		Continued from 7A)
-- 10 --							8 foram patch		
-- 20 --									
-- 30 --									
-- 40 --	Biscuit						36 shell fragments		
-- 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.					NN	3/Dec/2011
	Grey 4/10Y						Type 1: Nano mud		
	Biscuit								

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								NN	3/20/2011	
								Type 1: Nano mud (continued from 1A)		
-- 10 --										
										13 shell fragments
-- 20 --										
-- 30 --										
-- 40 --										
										45 Py burrow
-- 50 --										48
-- 60 --										
-- 70 --										
										76 burrow
-- 80 --										80
										"biscuit band"
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
										121 shell fragments
-- 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 --									NN	3/20/2011
								Type 1: Nanno mud (continued from 2A)		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --								30 shell fragments		
-- 50 --										
-- 60 --								61 shell fragments		
-- 65 --										
-- 70 --										
-- 75 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuit

64 GLEY 1 4/110Y
 65 GLEY 1 4/110Y
 66 GLEY 1 4/110Y
 67 GLEY 1 4/110Y
 68 GLEY 1 4/110Y
 69 GLEY 1 4/110Y
 70 GLEY 1 4/110Y
 71 GLEY 1 4/110Y
 72 GLEY 1 4/110Y
 73 GLEY 1 4/110Y
 74 GLEY 1 4/110Y
 75 GLEY 1 4/110Y
 76 GLEY 1 4/110Y
 77 GLEY 1 4/110Y
 78 GLEY 1 4/110Y
 79 GLEY 1 4/110Y
 80 GLEY 1 4/110Y
 81 GLEY 1 4/110Y
 82 GLEY 1 4/110Y
 83 GLEY 1 4/110Y
 84 GLEY 1 4/110Y
 85 GLEY 1 4/110Y
 86 GLEY 1 4/110Y
 87 GLEY 1 4/110Y
 88 GLEY 1 4/110Y
 89 GLEY 1 4/110Y
 90 GLEY 1 4/110Y
 91 GLEY 1 4/110Y
 92 GLEY 1 4/110Y
 93 GLEY 1 4/110Y
 94 GLEY 1 4/110Y
 95 GLEY 1 4/110Y
 96 GLEY 1 4/110Y
 97 GLEY 1 4/110Y
 98 GLEY 1 4/110Y
 99 GLEY 1 4/110Y
 100 GLEY 1 4/110Y
 101 GLEY 1 4/110Y
 102 GLEY 1 4/110Y
 103 GLEY 1 4/110Y
 104 GLEY 1 4/110Y
 105 GLEY 1 4/110Y
 106 GLEY 1 4/110Y
 107 GLEY 1 4/110Y
 108 GLEY 1 4/110Y
 109 GLEY 1 4/110Y
 110 GLEY 1 4/110Y
 111 GLEY 1 4/110Y
 112 GLEY 1 4/110Y
 113 GLEY 1 4/110Y
 114 GLEY 1 4/110Y
 115 GLEY 1 4/110Y
 116 GLEY 1 4/110Y
 117 GLEY 1 4/110Y
 118 GLEY 1 4/110Y
 119 GLEY 1 4/110Y
 120 GLEY 1 4/110Y
 121 GLEY 1 4/110Y
 122 GLEY 1 4/110Y
 123 GLEY 1 4/110Y
 124 GLEY 1 4/110Y
 125 GLEY 1 4/110Y
 126 GLEY 1 4/110Y
 127 GLEY 1 4/110Y
 128 GLEY 1 4/110Y
 129 GLEY 1 4/110Y
 130 GLEY 1 4/110Y
 131 GLEY 1 4/110Y
 132 GLEY 1 4/110Y
 133 GLEY 1 4/110Y
 134 GLEY 1 4/110Y
 135 GLEY 1 4/110Y
 136 GLEY 1 4/110Y
 137 GLEY 1 4/110Y
 138 GLEY 1 4/110Y
 139 GLEY 1 4/110Y
 140 GLEY 1 4/110Y
 141 GLEY 1 4/110Y
 142 GLEY 1 4/110Y
 143 GLEY 1 4/110Y
 144 GLEY 1 4/110Y
 145 GLEY 1 4/110Y
 146 GLEY 1 4/110Y
 147 GLEY 1 4/110Y
 148 GLEY 1 4/110Y
 149 GLEY 1 4/110Y
 150 GLEY 1 4/110Y

gradual change

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

SEALED OFF
BY: [unclear]
DATE: [unclear]


Depth (cm)	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0								NN	3/Dec/2011	
0-10								Type 1: Nano mud (continued from 3A)		
20								18 Foram patches		
44-47								Shell fragments		
75								75SS Silty mud w/ microfossils		
123								Stratigraphical continuity		
123-136								Type 2: Silty clay		
136								136 Foram patch		
148-149								<div style="border: 1px solid black; padding: 5px; display: inline-block;"> sharp 148 silty mud 149 coarser layer sharp? </div> 148-149 coarser layer 149		
150										end of section

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



01/01/2011 11:11:11

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/Dec/2011
								Type 2: silty clay (continued from 4A)		
-- 10 --										
-- 20 --								17 18 ⁺ broken 		
-- 30 --								29 shell fragments		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --								108 shell fragments		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biccuti

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0									NN	3/Dec/2011
0-10								Type 2: Silty clay (continued from 5A)		
10-20								14 shell fragments		
20-30										
30-40										
40-50										
50-60								52 ↓ shell fragments 56		
60-70										
70-80										
80-90										
90-100										
100-110										
110-120										
120-130										
130-140										
140-150										



Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					N N	3/04/2011
-- 0 --								Type 2: Silty Clay (continued from 6A)		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 55 --								55 Foram patch		
-- 60 --	Biscuit									
-- 70 --										
-- 80 --										
-- 85 --								85 Shell fragments		
-- 90 --										
-- 100 --										
105					Gradational contact			103 Foram patch		
-- 110 --								Type 1: Nano mud burrow-filled with shell fragments		
-- 115 --								115 burrow-filled with shell fragments		
-- 120 --										
121.5										
-- 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										
10										
20										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

Type: Nano mud (continued from 7A)
14 shell fragments with forams (burrow)
17 VOID
22

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth (cm)	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0								NN	03/Dec/2011	
0-10							Type 1: Nano mud (continued from 8A)			
10-20							Foram patch & shell fragments			
20-30							Foram patch			
30-31.5							burrow(?) filled with shells & forams.			
31.5-41	Biscuit									
41-49							PALEO			
49-150										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

780

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--		GLY1 A/10Y						Type 1: Nanns-mud	U U	3 Dec/11
--10--								-9 Foram patch		
--20--										
--30--										
--40--										
--50--										
--60--								-59 shell fragments -64 Py burrow		
--70--										
--80--										
--90--										
--100--										
--110--										
--120--								-114 Foram patch		
--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 --									NN	3/Dec/2011
-- 10 --								Type 1: Nano mud (continued from 1A)		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --								76 Foram patch		
-- 90 --										
-- 100 --								100 Foram patch		
-- 110 --										
-- 120 --										
-- 130 --								130 Shell fragments		
-- 140 --										
-- 150 --										



Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: NN	Date: 3/Dec/2011
			Avg.	Max.						
0								Type 2: Silty clay		
8					Gradational contact			Type 1: Nanno? mud		
10										
20										
30										
40										
43					Bioturbated contact			Type 2: Silty clay		
50										
60										
65								65 Foram patch		
70										
79					Gradational contact			Erased Sandy site w/ biogenic forams		
80	Biscuit							Type 1: Nanno? mud		
90										
100										
110										
119								119 shell fragments		
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 --									NN	3/Dec/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 113 --										
-- 116 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



Biscuit

49
↓
Shell fragments
60

Void

119 shell fragments

140 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.						
								NN	3/Dec/2011
-0-- 3				Sharp? contact		2	Type 2: Silty clay → shell fragments Type 1: Nano? mud		
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70--									
--80--									
89 --90--									
--100-- 101									
--110--									
--120--									
--130--									
--140--									
--150--									



Discuit

34 shell fragments

59 Forams patch

VOID

99 Forams patch

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1381 A 37 x A


Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								NN	3/Dec/2011	
							Typel: Nano mud (continued from 6A)			
-- 10 --							12 Foram patch			
-- 20 --							20 Shell fragments			
-- 30 --							35 Foram patch			
-- 40 --							42 Foram patch			
-- 50 --										
55										
-- 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:	Date:
		Avg.	Max.						
	GREY 4/10Y						Type 1 : Nano mud	NN	3/Dec/2011
							-22 Py burrow		
							-64 -63 Furan rich		
							-88 Shell fragments -87		
							-130 Foram patch		
							-143 -144 burrow filled with silt & shell fragments		



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: NN	Date: 3/20/2011
			Avg.	Max.						
-- 0 --								Type 1: Nano mud (continued from 1A) shell fragments		
-- 10 --										
-- 20 --										
-- 30 --								28 Shell fragments		
-- 40 --										
-- 50 --										
-- 60 --								58 Foraminifera (burrow fill)		
-- 70 --										
-- 80 --								78 Shell fragments		
-- 90 --										
-- 100 --	Biscuit							102 Py burrow		
104					Gradational contact			Type 2: Silty clay		
-- 110 --										
-- 120 --										
-- 130 --								132 shell fragments		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386 A

3B X 3A

70

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/Dec/2011
								Type: 2 silty clay		
-- 10 --										
-- 20 --										
-- 30 --								-30 Shell		
-- 40 --								-40 Shell fragments		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
	Biscuit									
-- 100 --										
								-103 Shell fragments		
-- 110 --										
-- 120 --										
-- 130 --										
								-136 Shell fragments		
-- 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 --								NN	3 Dec 2011	
-- 10 --							Type 2: Silty clay (continued from 3A)			
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --							46 shell fragments			
-- 60 --							void			
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --							106 ↓ Shell fragments 111			
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --							42 Fibrous patch			



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--									NN	7/Dec/2011
--10-- 12					Gradational contact			Type 2: silty clay (continued from 4A)		
--20--								Type 1: Nano mud		
--30--								26 shell fragments		
--40--										
--50--										
--60--										
--70--								6645		
--80--								Sandy silt w biogenic carbonate		
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

Biscuit (but intensity is low)



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

I W sampling

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
								NIN	3/Dec/2011	
--0--	Biscuit (low intensity)							Type 1: Nano mud (continued from SA)		
--10--										
--20--										
--30--										
--40--										
--50--										
--60--										
--69--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

Type 1: Nano mud (continued from SA)

27 Foram patch (filling burrow)

38 Shell fragments

58 Foram patch

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 --	Biscuit (low integrity)							Type 1: Nano mud (continued from A) 6 shell fragments	N N	3/Dec/2011
-- 10 --										
-- 20 --										
-- 30 --										
33										
35.5										
-- 40 --								Below sampling		
-- 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.					NN	3/Dec/2011
--0--		GREY #10Y						Type 1: Nanno mud - 5 shell fragments		
--10--										
--20--										
--30--										
--40--										
--50--										
--60--								-62 Foram patch		
--70--										
--80--								-81 Foram patch		
--90--		Biscuit								
--100--								-97 -98 -103 } Foram patch		
--110--										
--120--										
--130--										
--140--										
--150--								- Foram patch		

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	3/Dec/2011	Type 1: Nanno mud (continued from LA)
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 128 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuit

36 Foram patch

60 Foram patch

92 Foram patch

Gradational contact

142 Foram patch

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	3/Dec/2011	Type 2: Silty clay
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										Silty clay
-- 60 --										
-- 70 --	Biscuit									↑ fringing upward
-- 80 --										(sandy) silt
-- 90 --										
-- 100 --										
-- 110 --										erosional?
119										sharp contact
-- 120 --										122 - burrows filled by silty clay
										Type 1: Normal
-- 130 --										129 - P ₂ burrow
-- 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 --								NN	3/Dec/2011	Type 1: Nano mud (continued from 3A)
-- 10 --										
-- 20 --										
-- 30 --										28 Shell fragments
-- 40 --										
-- 50 --										47 Shell fragments
-- 60 --										
-- 70 --										66 Foram patch
-- 80 --	Biscuit									175SS
-- 90 --										
-- 100 --										
-- 110 --										108 Foram patch 113.5 Foram patch
-- 120 --										
-- 130 --										
-- 140 --										136.5 Foram patch
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1326A

395A

799

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/04/2011
-- 10 --								Type 1: Nano mud (continued from 4A)		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								48 Foram patch		
-- 60 --								54 Py burrow		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --								118 Shell fragments		
-- 130 --										
-- 140 --										
145										
-- 150 --										

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1336A

39X 6A

800

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	3/Dec/2011
-- 10 --								Type I: Nanno mud (continued from 5A)		
-- 20 --										
-- 30 --								→ 28 Shell fragments		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --								→ 64 Foram patch → 75cm Nanno mud		
-- 90 --										
-- 100 --								→ 111 Foram patch		
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuit

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	3/Dec/2011	
-- 0 --								Type 1 = Nano mud (continued from 6A)		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --	Biscuit									
-- 50 --										
54										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Foram patch

47 Py burrow

Biscuit

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 --	Biscuit							NN	3/Dec/2011	
-- 10 --							Type 1: Nanno mud (continued from 1/2)			
-- 20 --							17 Foram patch			
-- 30 --							23 Foram patch			
-- 40 --							32 Foram patch			
40										
48.5										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY: